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The Contributions of Immigrants to American Culture

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Abstract

The standard account of American immigration focuses on the acculturation and assimilation of immigrants and their children to American society. This analysis typically ignores the significant contributions of immigrants to the creation of American culture through the performing arts, sciences, and other cultural pursuits. Immigrants and their children are not born with more creative talents than native-born citizens, but their selectivity and marginality may have pushed and pulled those with ability into high-risk career paths that reward creative work. The presence of large numbers of talented immigrants in Hollywood, academia, and the high-tech industries has pushed American institutions to be more meritocratic and open to innovation than they would be otherwise.

The lives of most immigrants are a dialectic between the memories of the world left behind and the day-to-day struggles of learning the ropes of a new society. Mastering a new language, living and working among strangers, and coping with the unfamiliar are only some of the challenges faced by immigrants. It is no wonder that nostalgia has a strong grip on the cultural pursuits of immigrants. Immigrant communities generally find comfort in familiar religious traditions and rituals, seek out newspapers and literature from the homeland, and celebrate holidays and special occasions with traditional music, dance, cuisine, and leisure-time pursuits.

Yet not all immigrants look solely to the past to find meaning or to express their longings. Some immigrants, and their children in particular, are inspired by the possibility for innovative expression in American arts, culture, and pastimes. The partially fictionalized biography of the popular entertainer Al Jolson captures this experience. Jolson's story was expressed, somewhat embellished, in the 1946 Oscar-winning film *The Jolson Story*, and was foretold in the 1927 film *The Jazz Singer*, in which Jolson plays the lead role.¹

Asa Yoelson, born in 1886 in Russia, immigrated to the United States as a child. He had a beautiful singing voice and was groomed to succeed his father as the cantor in a prominent synagogue. However, Asa was torn between family expectations and his desire to become a popular singer. After some hesitation, he left home to try his fortune as a singer in vaudeville and other venues. Within a few years, Asa Yoelson—who adopted the stage name Al Jolson—achieved fame as a popular singer and stage performer. During the 1920s and 1930s, he was the most highly paid entertainer in the country. The transition from Asa Yoelson, the dutiful son, to Al Jolson, famous entertainer, can be interpreted several ways. The Hollywood story of Jolson's life illustrates the popular belief that America is a land of opportunity for talented and hardworking immigrants: “Where else on earth could this sort of thing happen?” Another interpretation is the clash between immigrant generations—between the immigrant parents' belief in the obligation to maintain tradition and their Americanized children's desire for broader fulfillment. Although initially disowned by his father for leaving home and breaking with tradition, Asa/Al eventually reconciled with his family.

There is an even more important, and surprising, element to the Al Jolson story. How did an outsider, ethnically and culturally, become the cultural icon whose style set the standard for

twentieth-century popular musical performance? Jolson climbed to the top of the ladder of the American entertainment industry by redefining the role and image of a public performer.² He brought the expressionism and style of jazz to popular audiences, his singing connected with stage and film audiences through his dramatic emotional and physical performance, and he had stage runways built so that he could perform closer to the audience. The Jolson style did not represent assimilation, but rather the creation of a distinctive “American” genre of musical performance. Many iconic American popular singers of the twentieth century, including Bing Crosby, Tony Bennett, Judy Garland, Eddie Fisher, and Neil Diamond, report that Jolson's style was a formative influence on their careers.³

Al Jolson was not an exception. Immigrants, and especially the children and grandchildren of immigrants, have played a disproportionate role in the development of the American performing arts. They have also made fundamental contributions in many other realms of artistic, cultural, culinary, athletic, and scientific endeavor. Immigrants and their children are not born with more ability than anyone else. However, an immigrant (outsider) heritage may offer certain creative advantages to the miniscule fraction of persons possessing extraordinary talents. These advantages include: a resilience and determination to succeed, a curiosity and openness to innovation born of marginality, and an attraction to high-risk pursuits (because conventional careers are less open to them). The relative openness of American performing and cultural arts to outsiders might be explained by a variety of factors. The arrival of a very large pool of talented immigrants—some fleeing persecution, others seeking new cultural horizons—was a necessary condition. Of equal importance was the rapid growth of competitive entertainment, cultural, and scientific industries that fostered an emphasis on talent more so than pedigree.

In his book on the history of classical music in the United States, Joseph Horowitz describes the ecstatic reception of the 1893 New York premiere of Antonin Dvorak's *From the New World Symphony* (popularly known as the *New World Symphony*).⁴ Dvorak was already a well-known Czech composer in 1892 when he was invited to spend a few years in the United States to direct the National Conservatory of Music and to compose “American” music. In the late nineteenth century, as perhaps even today, American classical music was rigidly Eurocentric. Musical achievement, whether in composition or performance, was recognized only through imitation of the celebrated icons—mostly Europeans. During his short three-year tenure in the United States, Dvorak searched for authentic American voices and sounds. He found them in African American melodies and American Indian chants. In the *New World Symphony* and in other works composed in America, Dvorak added melodies from black spirituals, including “Swing Low, Sweet Chariot,” and American Indian tom-tom beats inspired by reading Longfellow's “Song of Hiawatha.” Dvorak's fusion of indigenous American music with classical performance met with popular acclaim, and the *New World Symphony* has become a recognized classic. Yet the musical establishment considered it to be a heresy, and Dvorak was labeled a “negrophile” for believing that indigenous musical traditions, particularly from the downtrodden, could be integrated with classical music. In his study of Dvorak, Horowitz argues that the controversy over the *New World Symphony* is part of a larger national discussion about American identity.⁵

Two aspects of Dvorak's contributions to American music are central to our discussion, and both originate from his “outsider” perspective. The first is his recognition of African American music as both culturally important and authentically American. After World War II, jazz was recognized as the major American contribution to the world of music, and it was enthusiastically embraced by American and international audiences. However, during the first half of the twentieth century, jazz and related African American musical traditions were relegated to the margins of American musical performance. Music, like all other aspects of American society, was deeply segregated. The popular tastes of the public and the

professional judgments of composers, performers, and critics dictated that most symphony halls, concert stages, dance halls, and theaters would never invite black performers or play music that was created by African Americans. Jazz, the blues, and other musical expressions of black America were created and supported in segregated institutions, most famously in night clubs in New Orleans, New York, and Chicago and in African American churches.

During Jim Crow segregation, only a small minority of white Americans recognized the originality of African American musical traditions, especially the vitality and improvisation of jazz. Popular tastes began to shift in the 1930s as some white band leaders, most notably Benny Goodman and Artie Shaw, began to draw inspiration from jazz and to integrate their bands. Both Shaw and Goodman were second-generation Jewish Americans who blended traditional European musical traditions with the excitement of jazz.⁶ Perhaps, as the children of immigrants and minorities, Shaw and Goodman were less blinded by the racial prejudices of the times and were more willing to defy taboos to follow their musical instincts. In his autobiography, Shaw wrote that he was drawn to jazz clubs in Chicago and New York just to listen and learn.

The other aspect of an outsider perspective, illustrated by Dvorak, is the blending of traditions in musical composition and performance. There are few genuine “inventions”—new discoveries in cultural performance, science, and other creative fields. More often, novelty arises from innovation—the transmission of ideas, insights, and techniques from one genre or specialization to another. The blending of culinary traditions has created a popular market for “fusion cuisine.” In the performing arts, successful innovation is a difficult balancing act. Audiences tend to prefer the familiar: music, drama, dance, and art that resonate with established tastes and that are reassuring rather than challenging. But occasionally, innovations in artistic performance are so brilliant that popular tastes do change. This appears to have been the case with the blending of European and jazz musical performance in the 1930s.

Artie Shaw's autobiography tells the origin story of his “Interlude in B Flat,” the composition that launched his career as a bandleader and composer.⁷ In 1936, Shaw was a well-regarded clarinetist in popular dance bands, but he did not yet have a national reputation. He was asked to perform a short interlude at a concert and was searching for something original. Drawing on his unique background performing Mozart and Brahms with string quartets and also playing swing (jazz) clarinet in dance bands, he assembled a small ensemble that blended classical strings with jazz. The performance literally stopped the show—the reaction was so overwhelming that Shaw and his ensemble had to repeat their performance before the audience would allow them to leave the stage. Shaw's national reputation was made overnight.

Although many “insiders” in the American performing and cultural arts can and do reach beyond established boundaries to make innovative contributions, outsiders are much more likely to do so. Every performing art develops its canon—works that define excellence and traditions that are to be studied, imitated, and performed. Knowledge, skill, and reputation gravitate toward cultural continuity; rewards as well as popular and critical acclaim are generally given to those who can reproduce canonical works with fidelity. Outsiders are less bound to convention. Their mixed culture and unique position tend to give them more possibilities for innovation. And because outsiders are already marginal, they have less status to lose by challenging convention.

Many immigrant composers and performers were, of course, also guardians of established traditions. In his account of European “artists in exile,” Horowitz describes how many immigrant composers, conductors, directors, and performers were able to continue their

creative work within the European canon because the American cultural establishment was so Eurocentric.⁸ The Russian revolution and, later, the rise of Nazi Germany exiled many of the most creative and talented European artists of the twentieth century. Some artists fled for their lives, but many others simply left because of their distaste for the oppressive regimes. Many, perhaps most, exiled artists embraced the freedoms and opportunities of American society, but they remained intellectually and creatively within the cultural worlds of their origins. Rudolf Serkin, for example, became a celebrated American concert pianist and played a founding role in several American musical institutions, including the famous Marlboro Festival near his farm in Vermont. But as a concert pianist, Serkin was self-consciously an upholder of tradition, the faithful reproduction of the German musical canon.

However, a number of exiled artists, following the example of Dvorak, looked to the United States as an opportunity to create new cultural forms. Rouben Mamoulian was one such innovator, arriving in the United States at age 26 to become the director of an opera company and the Eastman Theatre in Rochester, New York.⁹ Mamoulian was born into a cosmopolitan family and learned to speak Armenian, Russian, and Georgian as a youth in Tbilisi (then Tiflis). For several years, his family lived in Paris, where he attended school and learned French and other European languages. As a law student in Moscow, he acquired an ambition to become a director through his participation in productions of the Moscow Art Theatre.¹⁰ At age 24, he went to London, where he began directing Russian-language plays and soon was active in English theatrical productions. Two years later, he accepted the position to direct operas, operettas, and plays at the Eastman Theatre. He was drawn to the United States in part by his fascination with American culture, cultivated by reading Mark Twain, Bret Harte, and O. Henry and by hearing stories about Buffalo Bill and American cowboys.¹¹ A few years after moving to New York, Mamoulian directed an all-black cast in the 1927 Broadway production of *Porgy*, a play adapted from DuBose Heyward's novel focused on the lives of African Americans in Charlestown, South Carolina. Mamoulian later directed the 1935 Gershwin opera *Porgy and Bess*, as well as the original Broadway productions of *Oklahoma!*, *Carousel*, and many Hollywood films.

In addition to his extraordinary talents, Mamoulian's accomplishments may have been partially due to his outsider role as an immigrant. The New York Theatre Guild was intent on using black actors, not white actors in blackface, in the 1927 production of *Porgy*. Numerous established white directors declined to work with a black cast. In contrast, Mamoulian accepted the directorship and was determined to portray African American culture accurately and sympathetically.¹² He spent time in South Carolina and in Harlem to learn as much as possible about the realities of life in African American communities. In spite of the prejudices of the era, *Porgy* was a critical success and established Mamoulian's reputation and career.

Mamoulian also pioneered the modern Broadway musical form with the 1943 Broadway production of *Oklahoma!*¹³ In that show, Mamoulian created a fully integrated musical in which all elements (music, lyrics, choreography, set, costumes) were organized into a dramatic whole to advance the plot.¹⁴ His willingness to challenge convention was expressed in a 1983 interview with *The New York Times* that was later published in his obituary:

“You must trust your instinct, intuition and judgment. You must do something different.” He said he had lectured to film students around the country. “Too many of them,” he said, “slavishly follow authority. Some of the screen's best moments were realized because a director went against all reason, all logic. No matter how incredible a story seems, it can be made credible. If you feel an insane idea strongly enough, you've usually got something.”¹⁵

The disproportionate role of immigrants and their children in creating twentieth-century popular music is well known. Irving Berlin, who was born as Israel Baline in Russia, wrote “White Christmas,” “Easter Parade,” “God Bless America,” and numerous other standards. Many of the most highly regarded composers and playwrights of Broadway were the children of immigrants, including George and Ira Gershwin, Richard Rodgers, Lorenz Hart, Jerome Kern, Harold Arlen, and Leonard Bernstein.¹⁶ These composers and lyricists were largely second- and third-generation Jewish immigrants who were reared in ethnic enclaves; but their work has defined the quintessential American musical culture of the twentieth century. More than any other twentieth-century composer, George Gershwin (Jacob Gershowitz), the child of Jewish immigrants, moved easily between the worlds of classical, jazz, and popular music before his death at age 38. “Gershwin signified the best hope to challenge the ‘white’ Eurocentricity of American classical music,” Horowitz writes. “Comet-like, he illuminates the entire musical landscape.”¹⁷

Immigrants and their children have also been prominent in other realms of artistic achievement, including ballet and modern dance. George Balanchine, born Georgi Balanchivadze in Russia, founded the New York City Ballet in 1948 and choreographed eighteen Broadway shows and several Hollywood films.¹⁸ Balanchine felt that the United States offered a fresh canvas for experimentation with ballet and dance: “I wanted to go to America; I thought it would be more interesting there, something would happen, something different.”¹⁹ Inspired by images of Ginger Rogers and Fred Astaire in Hollywood films, Balanchine had a vision of a new American tradition of dance, and he has been credited with “Americanizing” ballet in the United States in the mid-twentieth century.²⁰ As with other immigrant artists, Balanchine was drawn to the United States because of the opportunities to create distinctly new cultural forms that could challenge prior traditions and convention.

Several other notable Broadway choreographers were second-generation immigrants, including Michael Kidd (Michael Greenwald), Jerome Robbins (Jerome Wilson Rabinowitz), and Helen Tamiris (Helen Becker). These three choreographers, all children of Russian immigrants, received one-third of all Tony Awards for choreography between 1947 and 1973.²¹ Kidd achieved fame for his choreography on Broadway (*Finian's Rainbow*, *Guys and Dolls*, *Can Can*, and many more) and in Hollywood musicals, including *Seven Brides for Seven Brothers* (1954).²² Robbins is perhaps best known for his choreography of gang fights in *West Side Story*; he received five Tony Awards and a host of other honors during his lifetime.²³

In the early twentieth century, the development of the film industry transformed the performing arts. Like many other new sectors of the industrial economy, the process was decentralized and chaotic. Hundreds, perhaps thousands, of new entrepreneurs tried to produce and market films to the American public. In addition to mastering the technology of production, would-be film entrepreneurs had to challenge the monopolistic claims of the Edison Trust (owned by Thomas Edison), develop creative content, and distribute the final product to thousands of movie houses around the country.

In this rough and tumble world, the Hollywood movie industry emerged after many years of trial and mostly error. It is somewhat surprising that the magnates, who created the “most American” entertainment industry and an enormously profitable sector, were first-generation Eastern European Jewish immigrants.²⁴ They were not successful because of their privileged social origins, connections to established elites, or familiarity with the performing arts. Rather, they were highly entrepreneurial risk-takers who claimed to know popular tastes from earlier experiences in retailing and marketing fashion to the American public. And they possessed larger-than-life egos, which allowed them to believe that they could succeed where so many others had failed.

In contrast to the management of the major Hollywood studios, the majority of the creative talent in the film industry – producers, screenwriters, directors, and actors—was native-born. Outsiders, it was thought, might be at a disadvantage in creating plausible stories and characters that would appeal to American audiences. This tendency was probably reinforced by attitudes of the movie moguls themselves, who were perhaps overly sensitive to their immigrant roots, and who wanted to avoid all signs of foreignness in Hollywood.²⁵ Given this context, it is somewhat surprising that immigrants and the children of immigrants were actually very successful in writing, producing, directing, and acting in American films and plays for most of the first half of the twentieth century.²⁶ The majority of Hollywood film directors who have won two or more Academy Awards were either immigrants or the children of immigrants.²⁷ Not only were immigrant directors highly overrepresented at the top of their profession, but many created images of American society that resonated as classic Americana.

The films of celebrated immigrant film director Frank Capra helped reinforce beliefs in the American dream. Capra was born in Italy in 1897 and came to the United States as a child. He won three Academy Awards for directing in the 1930s (*It Happened One Night* in 1934, *Mr. Deeds Goes to Town* in 1936, and *You Can't Take It with You* in 1938), but he is best remembered for *Mr. Smith Goes to Washington* (1939) and *It's a Wonderful Life* (1947). Capra's movies often reflect the decency of the common man and the triumph of good over greed and evil. A defining theme in his work is the goodness of the average American and small-town values.

William Wyler, who also received three Academy Awards for directing (*Mrs. Miniver* in 1942, *The Best Years of Our Lives* in 1946, and *Ben Hur* in 1959), was born in Germany and immigrated to the United States as a young man. He earned his directing spurs by turning out a large number of successful westerns in the 1920s, before focusing on more dramatic movies marked by a perfectionist pursuit of craft and technique.²⁸ Wyler's movies explore deep questions about American society and culture, such as the readjustment problems faced by veterans after World War II and how accusations of homosexuality could destroy careers and community. Wyler's portrayal of characters allowed the audience to understand and to empathize with complex human motives.

Billy Wilder was born in Austria in 1906. He began his career writing scripts for movies in Berlin before arriving in the United States in the early 1930s. He struggled at the margins of Hollywood for a number of years before his script-writing and directing led to popular and critical success. Wilder won two Academy Awards for directing (*The Lost Weekend* in 1945 and *The Apartment* in 1960), but he also wrote and directed a long series of very popular movies from the 1940s to the 1970s, including *Some Like it Hot* (1959), *Stalag 17* (1953), *Sunset Boulevard* (1950), *Double Indemnity* (1944), *Sabrina* (1954), and *The Fortune Cookie* (1966). The characters in Wilder's movies were rarely heroic; they struggled with real problems complicated by their all-too-human weaknesses. The sophisticated dialogue in Wilder's movies—marked by “sardonic humor” and “droll, biting wit”—gave little sign that the author learned English as a mature adult.²⁹

There is no consistent theme or style in the Hollywood movies created by immigrant writers and directors. Some images were very reassuring of the goodness of American values (for example, Capra), while others offered a more cynical view of human nature (for example, Wilder). Immigrant directors were entrusted to expose anti-Semitism among the upper-middle class (Elia Kazan in *Gentleman's Agreement* in 1947) and the absurdity of mental hospitals (Milos Forman in *One Flew Over the Cuckoo's Nest* in 1975). The overrepresentation of immigrants in Hollywood is partially due to the push factors in Europe that led to mass immigration in general, and to the exile of artists in particular. These same

forces led to overrepresentation of immigrants in other performing arts, including music and dance.

In some performing arts—for example, symphonic music, ballet, and Shakespearian theater—it is possible to reach the top by reproduction of the classical canon. The Hollywood film industry, along with modern dance, Broadway musicals, and popular music, is different; the genre first had to be created and then marketed to a mass American audience. Here, innovation was central to success. The American film industry was at the extreme end of the continuum of innovative performing arts. It was a new entertainment industry that experienced rapid growth in the early decades of the twentieth century. New industries are, by definition, high risk—even more so in the creation of a new art form. Trial and error was the only path to success, and many artists were competing to create films that would resonate with American audiences.

In spite of their outsider status, immigrants may have benefited from their marginality. A biographer of William Wyler (who received a record twelve Academy Award nominations for film directing), observed that Wyler was fascinated with America and things American, and as a foreigner he saw things from the point of view of an interested and sympathetic outsider.³⁰ Marginality is often considered to be a disadvantage. Migration, upward mobility, and intermarriage can bring people into new contexts where their mother tongue, religion, and cultural expectations are not the norm. The new experiences—cultural shock, feelings of loss, and uncertainty—are generally uncomfortable, at least until the new culture becomes familiar. Many immigrants, particularly those who arrive as adults, never really feel at home in the place of settlement. However, marginality can also stimulate creativity. Bilingual persons have more than multiple words for the same object—they often have multiple interpretations and multiple subjectivities about emotions, responses, and relationships. Similarly, persons who have been socialized in two or more cultures have broader imaginations about the range of human responses to love, death, family, and other aspects of life. Marginality, combined with extraordinary talent and strong artistic sensitivity, leads to greater openness to innovation.

Talent is a necessary condition for success in the arts, business, and most other professions, but it is not always sufficient. Being born into a family that provides high-quality education, as well as encouragement and social connections, certainly helps. Being in the right place at the right time—good luck—may be most important. In addition to talent, support, connections, and good luck, some personality traits, such as perseverance, can also make a difference. Success rarely comes easily, and most people who reach the top can recount years of rejection and adversity before their talents and contributions were recognized. For every person who is eventually recognized as a great artist, scientist, or athlete, there are probably many more comparably talented individuals who decided the low odds of success were simply not worth the sacrifices along the way.

Although the traits of persistence and determination to succeed are found in every community and social group, immigrant families appear to be more successful than others in passing along high motivation to their children. Immigrants, and long-distance internal migrants, are invariably selective relative to non-migrants.³¹ They expect that the economic, social, and psychological costs of leaving family and friends behind will be compensated by a better future. In many cases, the future is not measured by their careers alone, but also by the lives of their children. The children of immigrants are socialized with a deep awareness of the sacrifices made by their families to give them a good start in the new society. Immigrant parents push, cajole, encourage, and shame their children to study more, practice longer, and try harder than others. This appears to lead to higher levels of academic

achievement, but these parenting pressures may also lead to higher levels of depression and lower self-esteem.³²

Immigrant children are highly overrepresented in a variety of academic, mathematical, scientific, and musical competitions.³³ One notable recent achievement is the success first- and second-generation Indian immigrant children have had in the National Spelling Bee.³⁴ In a *New York Times* story about the craze among Indian immigrant families for their children's success in spelling bees, Joseph Berger notes that “immigrant strivers have always done astonishingly well in national academic contests, not to mention in school in general.”³⁵

In 2011, 70 percent of the forty finalists in the Intel Science Talent Search (known originally as the Westinghouse Awards) were immigrants or the children of immigrants.³⁶ Immigrants have also dominated the ranks of top chess players in the United States in recent years. The majority of the most highly-ranked players in the United States Chess Federation were born in countries of the former Soviet Union.³⁷

In addition to extraordinary talent, success in national competitions for chess and spelling bees requires almost superhuman investments of time and study. For the immigrant families of spelling bee champions, this means that almost all of family life is organized around coaching their precocious children. Assuming potential talent is distributed roughly equally among all groups, the higher representation of immigrants and the children of immigrants in these competitions is almost certainly due to a greater willingness of immigrant families to invest the time (and money) in training their children.

The difference between immigrant families and other families is also reflected in more mundane dimensions. Because of the strong push for success by their immigrant parents, the second generation is less likely to be “at risk” in American schools, especially if socioeconomic origins are held constant. Indeed, some recent research reports a “second generation advantage,” typified by higher grades, better conformity to school rules, lower high school drop-out rates, and greater likelihood of attending college.³⁸ Of course, not all immigrant children are doing well; there are immigrant youth gangs, immigrant children who have adopted anti-social attitudes, and many others who struggle with language, alienation, and fear of deportation.³⁹ On average, however, immigrant youth are doing much better than expected.⁴⁰

Another sign of immigrant striving is the recent increase in foreign-born players in the national pastime of baseball, including in the major leagues.⁴¹ In the late nineteenth century, foreign-born players composed about 10 to 15 percent of the rookie class—about the proportion of foreign-born in the general population. This figure dropped in the middle decades of the twentieth century as immigration declined. The figure rose in the 1960s and stabilized in the low teens until the 1990s, when the figure rose sharply to about 25 to 30 percent.⁴² Foreign-born baseball players, on average, are more likely to play in All-Star games than native-born players.⁴³ Foreign-born basketball players have also become more visible in American professional basketball.⁴⁴ To be sure, the participation of foreign-born athletes in American professional sports is as much a story of globalization as immigration. Many professional athletes are not immigrants in the classic sense. They are often recruited by American teams, and only live in the United States for the duration of the professional sports season. Nonetheless, there is a parallel between the growing presence of international athletes in American sports and the image of the striving outsider who struggles to reach the top.

The overlap between immigrant striving and international recruitment is also evident in many competitive American institutions, such as multinational firms, symphony orchestras, and universities. Market forces drive competition for talent. Audiences want to watch the best performances, and many organizations, both for-profit and nonprofit, are locked in intense competition for customers, research grants, and prestige. In less competitive environments, native-born administrators and managers would probably prefer to hire people like themselves—those with whom they share the same language, culture, and background. However, the desire for success generally trumps parochialism.

Scientific progress is the major source of modern economic growth, increasing longevity and other features of modern development that enhance the quality of life in the United States. American economic development has been fostered by government investment in scientific and technological innovation, but also by the migration of scientists from other countries as well the high levels of participation of immigrants and the children of immigrants in science and engineering.

Albert Einstein, perhaps the preeminent American scientist of the twentieth century, was a refugee from Nazi Germany. There are many other examples of distinguished scientists, researchers, academics, and entrepreneurs who arrived in the United States as students or pursued their talents in American universities and/or industry, including Enrico Fermi, Edward Teller, and Hans Bethe (the fathers of the atomic age), Elias Zerhouni (former director of the National Institutes of Health), and Andrew Grove, Jerry Yang, and Sergey Brin (the engineering entrepreneurs who led the American transition to the digital age). From 1990 to 2004, over one-third of U.S. scientists who received Nobel Prizes were foreign born.⁴⁵

The impact of immigration on the development of science in the United States is more than the story of a relatively open door for immigrants who are exceptionally talented scientists and engineers. Over the last four decades, American universities have played an important role in training immigrants and the children of immigrants to become scientists. Foreign students have become increasingly central to American higher education, particularly in graduate education in engineering and the sciences. After graduating with advanced degrees from American universities, many foreign students return to their home countries, though a significant share is attracted to employment opportunities in American universities, laboratories, and industries. Many of the foreign students who have become permanent residents or U.S. citizens go on to make important contributions to the development of American science and engineering.

In a recent overview of American-trained doctorates working in the sciences and engineering sectors in the United States (based on National Science Foundation surveys of doctorate recipients), Paula E. Stephan and Sharon G. Levin found that the share of non-citizens had increased from 8.5 percent in 1973 to almost 21 percent in 1997 (based on citizenship reported at the time of degree).⁴⁶ These figures underestimate the foreign-born contribution to American science because foreign students who naturalized before receiving their degrees were not counted, nor were foreign-trained scientists working in American universities, labs, and industry. A more inclusive measure of the birthplace of workers in scientific and engineering occupations, based on Current Population Survey data, shows that the foreign-born percent of working scientists and engineers increased from 14 percent in 1994 to 24 percent in 2006.⁴⁷

The role of foreign students in graduate-level science programs is even more striking. According to surveys conducted by the National Science Foundation, almost 46,000 doctoral degrees were earned in the United States in 2006—only a slight increase from 43,000 in

1997.⁴⁸ The share of doctoral degrees earned by American citizens during the decade declined from 66 percent to 59 percent. The presence of American citizens remains dominant in the fields of education, the humanities, and in psychology, where citizens represent 81 percent, 74 percent, and 83 percent of all doctorates, respectively, with only modest declines over the decade. However, in many scientific fields, the role of American citizens is secondary. In 2006, American citizens received only 41 percent of all doctoral degrees in mathematics and 40 percent in physics. The share of American citizens earning Ph.D.s in engineering from American universities declined from 45 percent in 1997 to 30 percent in 2006. Only 22 percent of the doctorates in electrical engineering in 2006 went to American citizens.

The opportunity to pursue graduate training at prestigious American universities, historically considered to be the best in the world, is a very attractive option for students in developing countries. International students, including the native-born children of immigrants, are generally very competitive in terms of their mathematical and scientific qualifications, as measured by GRE scores and similar tests. International students are also highly motivated and many do very well in the extremely competitive graduate programs at top American universities. As economists John Bound, Sarah Turner, and Patrick Walsh report, “We suspect that the resources of U.S. research universities are a lure for the best and brightest across the world.”⁴⁹

Foreign students, many of whom become American citizens, have clearly helped sustain excellence in American universities and in scientific research. Several studies have concluded that foreign-born scientists and engineers have made exceptional contributions to scientific progress, as measured by the number of patents awarded to U.S. universities, research centers, and firms.⁵⁰ Foreign-born scientists are overrepresented among members of elected honorary societies such as the National Academy of Engineering and National Academy of Sciences, and among the authors of highly cited academic papers.⁵¹ During the last decades of the twentieth century, immigrant entrepreneurs formed a significant contingent of all founders of U.S. hightechnology start-ups.⁵² A recent study estimates that one in four technology firms started in the United States between 1995 and 2005 was founded by foreign-born entrepreneurs.⁵³

More than any other aspect of culture, contemporary American cuisine combines traditions from almost every population on the planet. Historian Donna Gabaccia argues that traditional American cuisine is a Creole mix that reflects influences from the three major founding populations of indigenous American Indians, Europeans, and Africans.⁵⁴ Over the last century, immigrants from Germany, Italy, Greece, Lebanon, China, Japan, and India have all left distinctive culinary marks on what Americans eat in restaurants and in their homes. Ethnic foods have become American foods, and even American fast foods.

For many, the last refuge of American cooking, with no pretensions of foreign influences, is traditional hamburgers and hot dogs, preferably cooked outside on a charcoal grill. This belief in authentic American food has likely inspired the menus at presidential events, such as when President Nicolas Sarkozy of France visited President George W. Bush and his family at Kennebunkport in August 2007 and when the King and Queen of England visited President and Mrs. Roosevelt at the White House in 1939.⁵⁵ Alas, the classical American hot dog is probably the product of nineteenth-century German immigration. “Wiener” and “frankfurter,” synonyms for hot dogs, reflect the geographical origins of German sausage-makers: Vienna (Wien in German) and Frankfurt. Similarly, hamburger is the name for a native of the German city of Hamburg, which must have been the place of origin of the German sausage-makers who popularized chopped beef, formed into a cake and fried. Hamburgers, hot dogs, and other traditional American foods were popularized in the early

twentieth century in “diners,” a distinctive restaurant style resembling railroad cars. Diners were commonly run by Greeks and other immigrants who found a niche serving low-cost food to the American masses.⁵⁶

All other things being equal, most societies, communities, organizations, and cultures tend to resist change, especially from outside sources. The truism that “people prefer that which is familiar” is reinforced by persons with authority, power, and status, who generally shape cultural expectations to revere conformity more than innovation. This pattern, an “ideal type” to be sure, is especially common in traditional rural areas, among multigenerational families, and in religious and cultural organizations.

There are, of course, many exceptions to this pattern, especially during eras of rapid technological and social change, wartime, and other times of catastrophe. The simple proposition of cultural continuity helps explain the generally conservative nature of intergenerational socialization and the ubiquity of ethnocentrism—beliefs that value insiders and traditional culture more than outsiders. All other things being equal, immigrants would generally be isolated and stigmatized because their behaviors and beliefs are different and therefore challenge existing social arrangements and familiar cultural patterns.

But all other things have not been equal throughout American history. The United States has received about 75 million immigrants since record-keeping began in 1820. This open door was due to a confluence of interests, both external and internal. As modernization spread throughout the Old World during the eighteenth and nineteenth centuries, the (relatively) open frontier beckoned the landless and those seeking economic betterment. These patterns culminated in the early twentieth century, when more than one million immigrants arrived annually—a level that is only being rivaled by contemporary immigration rates. American economic and political institutions also gained from immigration. Immigrant settlement helped secure the frontier as well as provide labor for nation-building projects, including transportation networks of roads, canals, and railroads. During the era of industrialization, immigrant labor provided a disproportionate share of workers for the dirty and dangerous jobs in mining and manufacturing.⁵⁷

Despite its history as an immigrant society, the United States has rarely shown new arrivals a welcome reception. The conservative backlash against immigrants has been a perennial theme in American history. During the age of mass migration, the negative reaction against immigrants was not simply a response from the parochial masses, but also a project led by conservative intellectuals. Long before immigration restrictions were implemented in the 1920s, there was a particularly virulent campaign against the “new” immigrants from Eastern and Southern Europe. Most of these immigrants practiced Catholicism and Judaism—religious and cultural traditions that threatened the traditional ascendancy of white Protestants of English ancestry.

As most Northeastern and Midwestern cities became dominated by immigrants (both first and second generations) in the late nineteenth century, many elite old-stock American families and communities created barriers to protect their “aristocratic” status and privilege against newcomers.⁵⁸ Residential areas became “restricted,” college fraternities and sororities limited their membership, and many social clubs and societies only allowed those with the right pedigrees and connections to be admitted.⁵⁹ Barriers to employment for minorities, especially Jews, were part of the culture of corporate law firms and elite professions.⁶⁰ In the early twentieth century, many elite private universities were notorious for their quotas for Jewish students and their refusal to hire Jews and other minorities.⁶¹ In some cases, these quotas persisted until the 1960s.

Given this history, how were immigrants and their children able to make such impressive achievements in American science, arts, and culture? Part of the solution to this puzzle is that immigrants, and especially their children, were pulled into self-employment and new sectors of the economy where there was less discrimination. As noted above, prestigious organizations that celebrated tradition tended to be closed to outsiders. Yet the early twentieth century was an era of rapid demographic, economic, and technological change. This may have created more flexibility and openness.

The market for culture was greatly expanded as cities and urban populations grew and disposable income increased. A significant share of the urban population, the potential consumers of art and culture, was of immigrant stock. Perhaps most important, technological change and entrepreneurial innovation created the motion picture industry. In the 1920s, immigrant risk-takers, and Eastern European Jewish immigrants in particular, transformed the fledgling motion picture industry into the empires that eventually became the mega-studios in Hollywood. Although the new Hollywood moguls sought to create movies that appealed to mass audiences and ignored any hint of ethnicity or religion, their presence may have minimized traditional prejudices and discrimination in hiring. Commenting on vaudeville, not cinema, literary and social critic Irving Howe characterized the openness of the performing arts (and sports) to talented outsiders:

The [entertainment industry] brushed aside claims of rank and looked only for the immediate promise of talent. Just as blacks would later turn to baseball and basketball knowing that here at least their skin color counted for less than their skills, so in the early 1900s, young Jews broke into vaudeville because here too, people asked not, who are you? but, what can you do?⁶²

This openness is reinforced in fields and professions where talent and accomplishment are clearly visible and easily recognized. The most obvious example is sports, where athletic ability is directly measured in batting averages, passes completed, and free throw percentages. The links between athletic ability, games won, and fan attendance are sufficiently high to ensure that meritocracy (of ability and performance) is the primary principle of hiring in professional sports. This generalization might be challenged by the fact that Major League Baseball did not allow participation by African American players until 1947.⁶³ This critique has also been applied to capitalist markets, where competition has not necessarily reduced racial and ethnic discrimination in hiring and promotion. Sociologist Herbert Blumer noted that if customers and employees were prejudiced, firms that hired more qualified minorities over less qualified majority whites would not necessarily gain an economic advantage.⁶⁴ If all firms are less efficient because of non-meritocratic hiring, there is little economic penalty for discrimination. This was the situation in professional baseball prior to 1947, and perhaps in many other firms and professions. At most elite colleges prior to World War II, for example, there was little emphasis on earning high grades—a “Gentleman's C” was considered an appropriate goal for a well-rounded student.⁶⁵ Competition and clear measures of merit do not always lead institutions to search for the best talent through meritocratic processes of admission and hiring.

In spite of these tendencies, many American institutions became more open and meritocratic over the twentieth century. Baseball and other professional sports were integrated before most other institutions, including public schooling (both de jure and de facto). American professional sports have become more global, with growing participation of talented international players. This trend is driven, in large part, by competition. Sports fans want winning teams, and large audiences increase revenues. The owners and management of sports teams respond to market pressures by recruiting talented players from other countries. Similar processes are at work in universities and scientific organizations. More talented researchers generate more grants, more patents, and more commercial applications of

scientific discoveries. The global search for talented graduate students and researchers by elite American universities and research organizations is driven by competitive pressures that have accelerated in recent decades. Other fields where merit is relatively easy to measure, such as in classical music performance, have also become part of a global employment market.

There is similar competition for talented employees in many American corporations and businesses, but the degree of openness depends on the pace of technological change, market competition, and the ability to measure merit. Some traditional sectors, such as old mainline industries, may focus more on continuity, advertising, and efficiency than technological innovation. Other sectors, such as the electronic and computing industry, are at the forefront of technological innovation and international competition (for example, Silicon Valley). They are more likely to be meritocratic and willing to hire outsiders—immigrants and foreign students who have the necessary skills.

The same processes of innovation and competition have shaped the evolution of Hollywood, Broadway, and many other American performing and cultural arts. Audience preferences may have tended toward familiar cultural content, but there was undoubtedly strong market pressure for “quality,” however defined. There was also considerable room for innovation in artistic and cultural performance in a pluralistic society with relatively few cultural touchstones. Immigrants and their children played important roles in the development of culture and art in twentieth-century America, just as they have in science and academic institutions.

The presence of immigrants and their offspring has helped “push” American institutions in the direction of increasing openness and meritocracy. This has not always been a smooth or conflict-free process. When Jewish students appeared in large numbers in leading American universities in the early twentieth century, they were deemed “rate-busters” who upset the traditional college student culture, which emphasized leisure-time pursuits more than study and serious scholarly inquiry. The implementation of quotas to lower the numbers of Jewish students at Ivy League colleges soon followed.

The growing number of talented Jewish students, mostly second-generation immigrants, certainly raised the academic standards at those universities that did not discriminate. As universities began to compete for faculty and graduate students during the post-World War II era, the quota restrictions on student and faculty eventually disappeared.⁶⁶ Elite colleges and universities still retain legacies of non-merit-based admission systems, including programs to privilege the children of alumni, and there is also evidence that Asian American students have not been admitted in numbers proportional to their test scores; these current practices, however, are only a shadow of those of earlier times.⁶⁷ Universities are not completely meritocratic, but they have become more meritocratic with increasing competition and acceptance of talented “outsiders.”

Greater openness to hiring and promotion on the basis of merit has become an integral part of many American institutions. The reputation of the United States as a land of opportunity for those with ambition and ability—a theme in many Hollywood movies—made the country a beacon for prospective immigrants. In addition to raising the international stature of the United States, the participation of talented immigrants and their children has almost certainly made American scientific and cultural institutions more successful than they would have been in their absence.

For many Americans, there is a deep fear that immigrants will change American character and identity, presumably for the worse. These fears are often inchoate, perhaps because the definition of American identity is elusive. Unlike many other societies, the United States

does not have an identity tied to an ancient lineage. Given the two wars against the British in early American history (in 1776 and 1812), the founders of the American republic did not make English origins the defining trait of American identity. Being American was defined as acceptance of the Enlightenment ideas expressed in the founding documents of the Declaration of Independence, the Constitution, and the Bill of Rights.⁶⁸

Even though these ideals have been belied by the continuing stain of slavery, civic identity, rather than ancestry, has been the distinctive feature of American “peoplehood” from the very start. This trait combined with *jus soli* (birthright citizenship) has slowed, if not stopped, efforts to define Americans solely on the basis of ancestral origins.⁶⁹ Another reason for the broad definition of American identity is that the overwhelming majority of the American population, including white Americans, is descended from nineteenth- and twentieth-century immigrants. Demographic estimates suggest that less than one-third of the American population in the late twentieth century was descended from the eighteenth-century American population.⁷⁰

Yet there have been recurrent struggles to redefine American identity in terms of ancestry. The first naturalization law passed by Congress, in 1790, limited citizenship to whites. The broadening of American citizenship to include African Americans, American Indians, and Asian immigrants has been tumultuous. The short-lived but remarkably successful “Know-Nothing” political movement called itself the American Party to highlight the ancestral origins of its adherents. In the late nineteenth century, as new immigrants from Southern and Eastern Europe were pouring in, some old-stock Americans founded organizations such as the Sons of the American Revolution and Daughters of the American Revolution to celebrate their ancestral pedigrees and to distance themselves from recent immigrants. The national-origin quotas of the 1920s were a clear victory for those who feared dilution of the white English Protestant composition of the American population. Much of the current anti-immigrant movement also appears to be based on a definition of “Americanness” expressed through ancestry, language, and culture.

Although immigration has been a defining feature of American history, the impact of immigration on American culture is rarely addressed in the literature.⁷¹ The neglect might be partially due to the dominance of assimilation theory, which emphasizes the changes in the culture of immigrants, not the changes in American institutions and culture in response to immigration. Knowledge of the contributions of immigrants to American culture might help recapture the original definition of American identity as rooted in the civic ideals of the Revolutionary era.

The impact of immigration on American society and culture is a product of several forces, including the sheer size of the demographic influx extending over such a long period of time. The other key factor is immigrant selectivity, particularly on characteristics that are difficult to measure in censuses and surveys, such as motivation for success.⁷² Almost by definition, immigrants are risk-takers. All migrants, domestic as well as international, give up the comforts of home and familiarity to seek new opportunities. But international migrants are a special breed. Most have traveled long distances, faced bureaucratic barriers, and have sometimes even risked life and limb to reach their destinations. These characteristics mean that they will not be easily deterred from their goals. Of course, some migrants do return home. The ones that remain are generally those who have found a niche that allows them to live, work, and contribute to American society.

Perhaps the most important contribution that immigrants make to American society is their children. Many immigrants have made enormous sacrifices for their children's welfare, including the decision to settle in the United States. Immigrant parents often have to work in

menial jobs, multiple jobs, and in occupations well below the status they would have earned if they had remained at home. These sacrifices have meaning because immigrant parents believe that their children will have better educational and occupational opportunities in the United States than in their homelands. Immigrant parents push their children to excel by reminding them of their own sacrifices. These high expectations for the children of immigrants have a strong impact on academic and worldly success.⁷³ A large body of research shows that the children of immigrants do remarkably well in American schools. Holding constant their socioeconomic status, the second generation obtains higher grades in school and above-average results on standardized tests, is less likely to drop out of high school, and is more likely to go to college than the children of native-born Americans.⁷⁴

Immigrants and their children are overrepresented in a broad range of rare achievements, including as Nobel Prize winners, leading scientists, and top performing and creative artists. They have broadened our cultural outlook and have sometimes even defined American culture through literature, music, and art. Immigrants are, by definition, bicultural, and sometimes multicultural. They can navigate multiple languages and understand how people from different backgrounds think and respond. Some sociologists label this phenomenon *marginality*. The classic marginal man was supposed to be subject to psychological distress, never knowing if he really fit in or belonged to any society or culture. The flip side of marginality, however, is creativity.

Persons with multicultural backgrounds have multiple frames of reference; they can see more choices, possibilities, interpretations, and nuance than persons who are familiar with only one culture. When combined with great talent and determination, a multicultural perspective may allow for cultural innovation. For example, music that linked African American traditions, including jazz, with classical European traditions has been a specific innovation of outsiders, from Dvorak's *New World Symphony* to Gershwin's *Porgy and Bess*, as well as the integrated big bands of Artie Shaw and Benny Goodman.

Compared with other societies, the United States is generally regarded as unusually competitive, placing a high premium on progress and innovation. This dynamic characteristic may well arise from the presence of immigrants and their linked evolution with American institutions and identity. The size and selectivity of the immigrant community means that immigrants (and/or their children) are competing for entry into colleges, jobs, and access to prestigious positions and institutions. Not all institutions have been open to outsiders. In particular, high-status organizations often give preference to persons with the right connections and social pedigree. But institutions that opened their doors to talented outsiders—namely, immigrants and their children—eventually gained a competitive advantage. Over time, greater openness and meritocratic processes have helped shape the evolution of American institutions in the arts, sports, science, and some sectors of business. In turn, the participation of outsiders has reinforced a distinctive American character and culture that values not “who are you?” rather, “what can you do?”

Because immigrants have to work to learn the system, they are intensely curious about American culture. For the most talented, this tendency leads to a rich and expansive creativity that has left its imprint on American music, theater, dance, film, and many other realms of artistic endeavor. Finally, American institutions—schools, universities, businesses, sports teams, and even symphony orchestras—are meritocratic and seek talent wherever they can find it. The United States is a competitive society that values progress and success. This dynamic characteristic has been created partly through the presence of immigrants, who push the country toward valuing skills and ability over social pedigree.

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Biography

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References

1. Ruhlmann, William. [(accessed July 22, 2012)] Al Jolson Biography. AllMusic. <http://www.allmusic.com/artist/al-jolson-mn0000609215>
2. Stemple, Larry. *Showtime: A History of the Broadway Musical Theater*. W.W. Norton; New York: 2010. p. 152-153.
3. [(accessed July 26, 2012)] Al Jolson: Legacy and Influence. Wikipedia. http://en.wikipedia.org/wiki/Al_Jolson
4. Horowitz, Joseph. *Classical Music in America: A History of Its Rise and Fall*. W.W. Norton; New York: 2005. p. 5-10.p. 222-231.
5. Horowitz, Joseph. *Artists in Exile: How Refugees from Twentieth-Century War and Revolution Transformed the American Performing Arts*. HarperCollins; New York: 2008. p. 3
6. Firestone, Ross. *Swing, Swing, Swing: The Life and Times of Benny Goodman*. W.W. Norton; New York: 1993. Shaw, Artie. *The Trouble with Cinderella: An Outline of Identity*. Fithian Press; Santa Barbara, Calif.: 1992.
7. Shaw. *The Trouble with Cinderella*. p. 293-303.
8. Horowitz. *Artists in Exile*.
9. Spergel, Mark. *Reinventing Reality: The Art and Life of Rouben Mamoulian*. Scarecrow Press; Metuchen, N.J.: 1993. Horowitz. *Artists in Exile*. p. 342-365.
10. In or Of the Broadway Scene: Introducing the Young Russo-Armenian Who Staged an American Negro Play, and a Dancer from Philadelphia. *The New York Times*. Oct 30.1927
11. Margaret Case Harriman. Mr. Mamoulian, of Tiflis and `Oklahoma! *The New York Times*. Jul. 1943 25Spergel. *Reinventing Reality*.
12. Spergel. *Reinventing Reality*.
13. Stemple. *Showtime*. p. 300-312.
14. Flint, Robert B. Rouben Mamoulian, Broadway Director is Dead. *The New York Times*. Dec 6.1987
15. Ibid.
16. *Making Americans: Jews and the Broadway Musical*. Harvard University Press; Cambridge, Mass.: 2004. Richard Rodgers was the grandson of immigrants. See Andrea Most.
17. Horowitz. *Classical Music in America*. p. 470
18. Horowitz. *Artists in Exile*. p. 23-45.
19. Ibid. p. 30
20. Ibid. Taper, Bernard. *Balanchine: A Biography*. New York Times Book Co.; New York: 1984.
21. See the Tony Awards website, http://www.tonyawards.com/p/tonys_search
22. Tobias, Patricia Eliot. Michael Kidd, Choreographer, Dies. *The New York Times*. Dec 24.2007
23. Kisselgoff, Anna. Jerome Robbins, 79, Is Dead: Giant of Ballet and Broadway. *The New York Times*. Jul 30. 1998 http://www.tonyawards.com/p/tonys_search

24. Gabler, Neal. *An Empire of Their Own: How Jews Invented Hollywood*. Anchor Books; New York: 1988.
25. Ibid.
26. Buhle, Paul. *From the Lower East Side to Hollywood*. Verso; London: 2004. Horowitz, Artists in Exile. chap. 4. Philips, Gene D. *Exiles in Hollywood: Major European Film Directors in America*. Lehigh University Press; Bethlehem, Pa.: 1998. Winokur, Mark. *American Laughter: Immigrants, Ethnicity, and 1930s Hollywood Film*. Martins Press; New York: St.: 1996.
27. Hirschman, Charles. *Immigration and the American Century*. *Demography*. 2005; 42 Table 4.
28. Philips. *Exiles in Hollywood*. chap. 3
29. Ibid. chap. 6
30. Ibid. p. 87
31. Feliciano, Cynthia. Does Selective Migration Matter? Explaining Ethnic Disparities in Educational Attainment Among Immigrant Children. *International Migration Review*. 2005; 39:841–871. Feliciano, Cynthia. How Do Immigrants Compare to those Left Behind? *Demography*. 2005; 42:131–152. [PubMed: 15782899]
32. Kao, Grace. Psychological Well-Being and Educational Achievement Among Immigrant Youth. In: Hernandez, Donald, editor. *Children of Immigrants: Health, Adjustment, and Public Assistance*. National Academies Press; Washington, D.C.: 1999. p. 410-477. Bankston, Carl L.; Zhou, Min. Being Well vs. Doing Well: Self Esteem and School Performance Among Immigrant and Nonimmigrant Race and Ethnic Groups. *International Migration Review*. 2002; 36:389–415.
33. Andreescu, Titu; Gallian, Joseph A.; Kane, Jonathan M.; Mertz, Janet E. Cross-Cultural Analysis of Students with Exceptional Talent in Mathematical Problem Solving. *Notes of the American Mathematical Society*. 2008; 55(10):1248–1260. Cavanagh, Sean. Immigrants' Children Inhabit the Top Ranks of Math, Science Meets. *Education Week*. 2004; 23(43):14.
34. National Spelling Bee. Champions and Their Winning Words. <http://www.spellingbee.com/champions-and-their-winning-words#00s>
35. Berger, Joseph. Striving in America and in the Spelling Bee. *The New York Times*. Jun 5. 2005
36. Anderson, Stuart. *The Impact of the Children of Immigrants on Scientific Achievement in America*. National Foundation for American Policy; Arlington, Va.: 2011.
37. U.S. Chess Federation. [(accessed June 21, 2012)] Top Player Bios. <http://main.uschess.org/content/view/169/203/>
38. Ewert, Stephanie. Student Misbehavior During Senior Year. *Social Science Research*. 2009; 38:826–839. Hao, Lingxin; Bonstead-Bruns, Melissa. Parent-Child Differences in Educational Expectations and the Academic Achievement of Immigrant and Native Students. *Sociology of Education*. 1998; 71:175–198. Hirschman, Charles. The Educational Enrollment of Immigrant Youth: A Test of the Segmented-Hypothesis. *Demography*. 2001; 38:317–336. [PubMed: 11523261] Kao, Grace; Tienda, Marta. Optimism and Achievement: The Educational Performance of Immigrant Youth. *Social Science Quarterly*. 1995; 76:1–19. Kasinitz, Philip; Mollenkopf, John H.; Waters, Mary C.; Holdaway, Jennifer. *Inheriting the City: The Children of Immigrants Come of Age*. Russell Sage Foundation; New York: 2008. Pereira, Krista; Mullan Harris, Kathleen; Lee, Dohoon. *Making it in America: High School Completion by Immigrant and Native Youth*. *Demography*. 2006; 43(3):511–536. [PubMed: 17051825]
39. Portes, Alejandro; Rumbaut, Rubén. *Legacies: The Story of the Immigrant Second Generation*. University of California Press; Berkeley: 2001. Smith, Robert Courtney. *Mexican New York: Transnational Lives of New Immigrants*. University of California Press; Berkeley: 2006.
40. White, Michael; Glick, Jennifer E. *Achieving Anew: How New Immigrants Do in American Schools, Jobs, and Neighborhoods*. Russell Sage Foundation; New York: 2009.
41. Anderson, Stuart; Andrew, L. Brian *Coming to America: Immigrants, Baseball, and the Contributions of Foreign Born Players to America's Pastime*. National Foundation for American Policy; Arlington, Va.: 2006.
42. Lahman, Sean. [(accessed September 8, 2008)] The Baseball Archive. <http://baseball1.com/>
43. Anderson; Andrew. *Coming to America*.
44. National Basketball Association. *Fifteen Playoff Teams Feature One or More International Players*. http://www.nba.com/global/international_players_playoffs_2007.html, April 19, 2007

45. Wulf, William A. Foreign-Born Researchers Are Key to U.S. Prosperity and Security. The National Academies in Focus. Winter-Spring;2006 6Smith, James P.; Edmonston, Barry, editors. The New Americans: Economic, Demographic, and Fiscal Effects of Immigration. National Academies Press; Washington, D.C.: 1997. p. 384-385.
46. National Science Foundation. Division of Science Resources Statistics. Survey of Earned Doctorates, Doctorates Awarded 1997–2006. Table 3, http://www.nsf.gov/statistics/nsf09311/content.cfm?pub_id=3861&id=2Stephan, Paula E.; Levin, Sharon G. Foreign Scholars in the U.S.: Contributions and Costs. In: Stephan, Paula E.; Ehrenberg, Ronald G., editors. Science and the University. University of Wisconsin Press; Madison: 2007. p. 154
47. Sana, Mariano. Immigrants and Natives in U.S. Science and Engineering Occupations, 1994–2006. Demography. 2010; 47:801–820. [PubMed: 20879689]
48. National Science Foundation. Survey of Earned Doctorates, Doctorates Awarded 1997–2006. Table 3
49. Bound, John; Turner, Sarah; Walsh, Patrick. Population Studies Center Report 09-675. University of Michigan; Ann Arbor: 2009. Internationalization of U.S. Doctoral Education. 27, <http://www.psc.isr.umich.edu/pubs/pdf/tr09-675.pdf>
50. Chellaraj, Gnanaraj; Maskus, Keith; Mattoo, Aaditya. The Contribution of Skilled Immigration and International Graduate Students to U.S. Innovation. World Bank Policy Research Working Paper 3588. May. 2005 http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2005/05/15/000090341_20050515125129/Rendered/PDF/wps3588.pdf
51. Levin, Sharon G.; Stephan, Paula E. Are the Foreign Born a Source of Strength for U.S. Science? Science. 1999; 285:1213–1214. Stephan, Paula E.; Levin, Sharon G. Exceptional Contributions to U.S. Science by the Foreign-Born and Foreign-Educated. Population Research and Policy Review. 2001; 20:59–79. Stephan; Levin. Foreign Scholars in the U.S. p. 150-173.
52. Saxenian, AnnaLee. Silicon Valley's New Immigrant Entrepreneurs. In: Cornelius, Wayne; Espenshade, Thomas J.; Salehyan, Idean, editors. The International Migration of the Highly Skilled: Demand, Supply, and Development Consequences in Sending and Receiving Countries. Center for U.S. Mexican Studies, University of California, San Diego; San Diego: 2001. p. 197-234. McQuaid, Jim; Smith-Doerr, Laurel; Monti, Daniel J., Jr. Expanding Entrepreneurship: Female and Foreign-Born Founders of New England Biotechnology Firms. American Behavioral Scientist. 2010; 53:1045–1063.
53. Wadhwa, Vivek; Saxenian, AnnaLee; Rissing, Ben; Gereffi, Gary. America's Immigrant Entrepreneurs: Part I. Duke University Master of Engineering Management Program and UC Berkeley School of Information Research Paper; Jan 4. 2007 http://people.ischool.berkeley.edu/~anno/Papers/Americas_new_immigrant_entrepreneurs_I.pdf
54. Gabaccia, Donna R. We Are What We Eat: Ethnic Food and the Making of Americans. Harvard University Press; Cambridge, Mass.: 2000.
55. U.S. White House Office of the Press Secretary. [(accessed October 12, 2009)] President Bush Welcomes French President Sarkozy to Walker's Point. <http://georgewbushwhitehouse.archives.gov/news/releases/2007/08/200708111.html> Roosevelt, Franklin D.; Presidential Library and Museum. The Royal Visit: June 7 to 12, 1939. <http://docs.fdrlibrary.marist.edu/royalv.html>
56. Gabaccia. We Are What We Eat.
57. Hirschman, Charles; Mogford, Elizabeth. Immigration and the American Industrial Revolution from 1880 to 1920. Social Science Research. 2009; 38:897–920. [PubMed: 20160966]
58. Higham, John. Strangers in the Land: Patterns of American Nativism, 1860–1925. 2nd ed. Rutgers University Press; New Brunswick, N.J.: 1988.
59. Baltzell, E. Digby The Protestant Establishment: Aristocracy and Caste in America. Vintage Books; New York: 1964.
60. Auerbach, Jerald. Unequal Justice: Lawyers and Social Change in Modern America. Vol. chap. 2. Oxford University Press; New York: 1975.
61. Baltzell. The Protestant Establishment. p. 336 Karabel, Jerome. The Chosen: The Hidden History of Admission and Exclusion at Harvard, Yale, and Princeton. Houghton Mifflin; New York: 2005.

62. Howe, Irving. *World of Our Fathers: The Journey of Eastern European Jews to America and the Life They Found and Made*. Simon & Schuster; New York: 1976. p. 557. *Most Making Americans*. p. 7
63. Goldman, Steven. *Segregated Baseball: A Kaleidoscope Review*. *Negro Leagues Legacy*. 2009. http://mlb.mlb.com/mlb/history/mlb_negro_leagues_story.jsp?story=kaleidoscopic
64. Blumer, Herbert. *Industrialization and Race Relations*. In: Hunter, Guy, editor. *Industrialization and Race Relations: A Symposium*. Oxford University Press; London: 1964. p. 220-253.
65. Karabel, Jerome. *Status-Group Struggle, Organizational Interests, and the Limits of Institutional Autonomy: The Transformation of Harvard, Yale, and Princeton, 1918–1940*. *Theory and Society*. 1984; 13:1–40.
66. Karabel. *The Chosen*.
67. Espenshade, Thomas J.; Chung, Chang Y. *The Opportunity Cost of Admission Preferences at Elite Universities*. *Social Science Quarterly*. 2005; 86(2):293–305.
68. Gleason, Philip. *American Identity and Americanization*. In: Thernstrom, Stephen, editor. *Harvard Encyclopedia of American Ethnic Groups*. Harvard University Press; Cambridge, Mass.: 1980. p. 31-58. Vecoli, Rudolph. *The Significance of Immigration in the Formation of an American Identity*. *The History Teacher*. 1996; 30:9–27.
69. The Fourteenth Amendment to the Constitution (adopted in 1868) defines citizenship thus: “All persons born or naturalized in the United States, and subject to the jurisdiction thereof, are citizens of the United States and of the State wherein they reside.” Subsequent Supreme Court rulings have interpreted the citizenship clause to include the native-born children of foreign nationals.
70. Barry, Edmonston; Jeffrey, Passel, editors. *Immigration and Ethnicity: The Integration of America's Newest Arrivals*. Urban Institute Press; Washington, D.C.: 1994. p. 61. Gibson, Campbell. *The Contribution of Immigration to the Growth and Ethnic Diversity of the American Population*. *Proceedings of the American Philosophical Society*. 1992; 136:157–175.
71. Handlin, Oscar. *The Uprooted: The Epic Story of the Great Migrations that Made the American People*. 2nd ed. Little Brown; Boston: 1973.
72. Akee, Randall. *Who Leaves? Deciphering Immigrant Self Selection from a Developing Country*. *Economic Development and Cultural Change*. 2009; 58:323–344.
73. Hao; Bonstead-Bruns. *Parent-Child Differences in Educational Expectations and the Academic Achievement of Immigrant and Native Students*. p. 175-198.
74. Fuligni, Andrew J.; Witknow, Melissa. *The Postsecondary Educational Progress of Youth from Immigrant Families*. *Journal of Research on Adolescence*. 2004; 14:159–183. *Perreira; Harris; Lee. Making it in America*. p. 511-536.