



Policy Brief

Latina/os and Tech: Toward a Holistic Approach for Diversifying Silicon Valley



UC Berkeley
Center for Latino Policy Research

By: Héctor Beltrán

September 2017

INTRODUCTION

The Silicon Valley continues to be championed as a model for technological innovation, where high revenue generation and “disruptive” technologies are attributed to a culture of competitive collaboration, lean methodologies, and colorblind meritocracy. At the same time, and especially since 2014 when major tech companies started to release [demographic data](#) of their workforce, the industry has been critiqued for its underlying structures that appear to promote patriarchy, racialization, and covert exploitation. As the Silicon Valley increasingly becomes less of a place and more of a protocol for how to work and live, academic inquiry has been guided by a desire to examine how hacking, responsible entrepreneurship, and tech startup ecosystems circulate and become re-assembled across race, gender, class, and nation. How can classic and emerging social science methods and theoretical frameworks help us think critically about the complex processes that undergird the Silicon Valley? How can policy be derived and driven by critical scholarship on the practices of the knowledge and information technology economy?

Guided by this line of inquiry, the [Latinos and Tech Initiative](#) (LTI) at the U.C. Berkeley [Center for Latino Policy Research](#) was founded in 2014 to contribute to and intervene in the mainstream “diversity in tech” discourse. LTI takes a critical perspective and decenters the dominant “bootstraps” narrative (which puts the onus of responsibility on underrepresented groups and individuals) and instead foregrounds the practices and structures that sustain the tech industry’s lack of diversity, especially the underrepresentation of historically racialized groups.

An [inaugural conference](#) organized in 2016 served as the main gathering point for the community involved with the initiative. The conference shed light on the following:

- (1) The current challenges and proposed solutions for increasing diversity in tech
- (2) Unpacking the “business case for diversity,” which rationalizes the need for increasing diversity in tech
- (3) Debunking the education-tech “pipeline” to explain the underrepresentation of minorities in tech

Diversity indexes are an important entry point for understanding the lack of representation of people of color in the industry. The “pipeline problem” tells us Black and Latina/o students earn 18% of computer science Bachelor’s degrees, hold 5% of technical jobs, and represent 1% of venture-backed tech company founders ([Code 2040 report](#)). The “business case for diversity” references economic sustainability and suggests that income inequality, racial segregation, and social separation actually have a deleterious impact on the sustainability of economic growth (Benner and Pastor 2014). Demographic data tells us that by 2020 California will be majority people of color, by 2030 the majority of the workforce in the U.S. will be people of color, and that by 2040 the entirety of the U.S. will be majority-minority (Pastor 2014).

At the core of this report are complementary (and many times divergent) voices that believe increasing diversity in tech has the potential to improve the livelihoods of families and communities of color.

Thus, California serves as a “preview” of what the U.S. can expect in terms of demographic change. The state has historically represented a place where migrants not only come to re-invent themselves but also come to re-produce forms of exploitation (Cornford 1999, Pitti 2003). As techno-social movements claim to be rooted in promoting economic, racial, and gender justice, LTI seeks to maintain a critical eye to investigate their potential to amplify or dampen these social injustices. We must change these patterns of underrepresentation while we critically scrutinize systemic issues central to the historical and social/cultural processes that create the representation issues in the first place.

In order to foster strategies for realizing this potential, this policy brief aims to:

- Provide students, leading professionals and organizers, community members of color and their allies, with language and concepts for organizing their efforts to increase diversity in tech
- Spotlight the contributions of people of color to the tech industry
- Help bridge the gap between academia, industry, and community-based activism



"Education-Tech Pipeline" panel at Diversity in Tech: Beyond Bootstraps conference.

PRODUCTIVE TENSIONS

Our research is informed by the assemblage of voices that came together at our workshops, conferences, and debrief sessions of the LTI; discussions that took place at public conferences addressing “diversity in tech”; analysis of scholarly writing and policy briefs that address systemic forms of inequality; and qualitative research (participant-observation, interviews) with community members who align themselves with initiatives aimed at empowering people of color in the tech domain.

We present the following “productive tensions” that emerged across our research spaces. We underscore they are productive because each tension provokes moments of introspection in which stakeholders must decide on a particular position to take in relation to concrete, personal, and political directions.

Community needs more capital and resources vs. “It’s not all about the money”

The education-tech “pipeline problem” arises in large part because of under-funding and under-resourcing of schools and programs. In order for students of color to have “equal opportunity” they need to have access to schools with adequate infrastructure (computer labs, advanced computer science classes, extracurricular activities) and there needs to be investment in startups with people of color as founders. At the same time, capital needs to be accompanied with commitment. Read: community service days are not sufficient.

Programs and volunteers need to be in it for the long-haul: working with students from an early age, providing mentorship along all stages of the pipeline, evaluating and incorporating feedback into programs, etc.

Helping your community vs. being “successful”

The focus on representation (increasing numbers of people of color) in Silicon Valley undermines the value of having local talent, stay local. In some studies, those individuals who decide to take advantage of local opportunities or even attend prestigious universities and return to their communities to start committed programs are somehow counted as part of the “pipeline problem.” In other words, joining a major tech company or even a Silicon Valley startup should not be the only measures of “success.”

“If they [youth] are successful and they graduate college and they get a job in Silicon Valley working for a major tech company, hooray for them, but it doesn’t do anything for our communities.” -Jacob Martinez, NEST

For programs such as [Digital Nest](#) in Watsonville, diversifying Silicon Valley is secondary to the well-being of their neighborhoods. As their founder and executive director Jacob Martinez states, “Yes, we want to diversify Silicon Valley, but for us it’s more important to keep our youth local and to have them build those communities from within so that they’re not again subject to gentrification, getting pushed out.” For Martinez, better school infrastructure and corresponding academic achievement starts with talented youth buying homes and shopping in Watsonville, thereby increasing the local tax base and the economic well-being of the community.

The onus should not be on talented young people to have to decide between their community and their “success.” Tech companies should provide the time and resources for employees, especially people of color with “insider’s knowledge,” to connect with community leaders in order to help develop these crucial programs.

The coder as empowered hero vs. the coder as new blue-collar worker in the knowledge economy

Narratives of the utopic potential of new technologies go hand in hand with narratives that promote the meritocratic ideals at the heart of Silicon Valley—that anybody, regardless of race, gender, class, nationality, or any social marker, can make it if they put in the work, and especially if they have “talent,” a common tech buzzword used to identify those who possess remarkable (sometimes innate) coding abilities. Together with tech’s enduring [great-man myth](#), it is no surprise that the coder emerges as an empowered figure with social mobility powers; coding bootcamps can purport to quickly give people the coding skills (and therefore access to well-paying middle-class jobs) that are the first steps to gaining access and fulfilling these imaginaries.

On the other hand, experts debate whether coding will become the next “[big blue collar job](#)” with the rise of the [new coding proletariat](#). In either case—whether the coder is an empowered hero or the coder is an “empowered” blue-collar worker—the fact is that for every new software engineering job there are multiple workers needed to keep tech campuses clean and safe, transport products and equipment, keep back offices and catered lunches flowing smoothly, and fill all the other jobs needed to support the coder of the future. Indeed, the “potential contract industries” who supply “non-tech” contracting services (e.g. food service, landscaping, security) to tech companies have grown 3 times as fast as the direct tech employment industry since 1990 ([Tech’s Invisible Workforce 2016](#)). While the average “direct tech employee” earns an average annual salary of \$113,000, the average blue-collar contract worker earns an annual salary of \$19,900. Unsurprisingly, this is below a livable wage in the Silicon Valley, where Black or Latina/o workers occupy 58% of contract worker roles and only 10% of direct tech work.

Whether an empowered coder superhero or an empowered blue-collar worker, the coding hero/worker, along with all Silicon Valley workers (“direct” and in supporting roles) deserves a living wage.

Segregation vs. Integration

Ethnic-themed university dorms, employee resource groups within tech companies, and practically any space (real or virtual) that allows people who share particular characteristics to congregate are subject to scrutiny. With people of color especially, accusations of “special treatment” and “self-segregation” quickly ensue. In some tech communities (the open-source community for example) there is a “geek” camaraderie amongst (mostly) white men who feel they have been discriminated against; they claim their communities are therefore already designed as safe spaces. Indeed, these “[oppression olympics](#)” dynamics (where one underprivileged group is pitted against another) only hinder coalition building amongst different groups with unique perspectives.

Culture, identity, and even nationality are always in flux; they are dynamic markers of social difference. Communities come together to negotiate the boundaries that define their very being in the world. In our interviews, it was clear that even within communities of color, tensions arise when negotiating what counts as “keeping one’s culture” vs. assimilating. Companies should respond by nurturing these group solidarities (and tensions) and providing opportunities for distinct groups to share time and space – connecting and building solidarities across these differences are the first steps to building necessary bridges that connect “other” communities. These shared spaces foster the possibilities for nuanced, intersectional perspectives to emerge.

Protect spaces for people from underrepresented groups to gather and support each other. Provide opportunities for these different groups to spend time with each other, learn from one another, and strategize together to build better/alternative futures. Encourage members of overrepresented groups to join these dialogues, if they are willing to let others lead.

Challenging yourself: “it’s up to you” vs. focusing on systemic issues

In the same way that the public expresses skepticism in regard to diversity related efforts, members of historically racialized groups voice caution in regard to programs that sometimes resemble self-help guides and protocols for empowering people of color. In our interviews, some participants felt that companies with explicit, institutionalized diversity protocols were “trying too hard” and that they should instead just “let people be.” These tensions arise when people of color are put in positions where they must learn diversity “language” that sometimes tells them how to be diverse or how to belong to a dominant “culture.”

The common narratives tell us that if we simply try harder, pay attention and follow the rules, we too can be successful. These practices replicate classic “culture of poverty” models in which folks from the Global South (and people of color) are praised for possessing “culture” but not the rationality and business-savviness of white males. Unsurprisingly, people doing the hard “work of diversity” (spending time working with grassroots efforts and people of color) are often ignored and silenced.

Prioritize social science courses within STEM majors. Corresponding courses provide useful theoretical frameworks and approaches for unpacking systemic, historical processes and critically analyzing communication models.

Inclusion vs. excellence

The previous tension falls in line with classic model minority schemes that tell members of racialized groups they are lacking the necessary skills or culture to succeed. Real “talent” will find a way to make it and to be successful. Tech further complicates this discourse, as nations frequently position scientists and engineers as forward-thinking, creative, non-complaining, and “modern.” See for example Irani’s (2015) work on how hackathons in India further perpetuate neoliberal modes of subject-making. That is, the promise of a nation’s

progress is tied to the promise of entrepreneurial engineers and scientists who promote a political agenda where citizens (especially young people) are asked to appropriate neoliberal discourses about taking initiative, being self-satisfied, not waiting for government, and being “socially conscious.”

Becoming competent in a craft and its corresponding community also means becoming proficient in the group's narratives. It's easy to get caught up in narratives of success that pit the good coder against the bad coder, the good entrepreneur against the bad entrepreneur, and the good migrant against the bad migrant, while losing sight of the “big picture.” When we attempted to translate discourse across different groups (tech, nonprofit, academia) it was clear that language and concepts simply didn't translate – there was a lack of familiarity with other groups' narratives.

“It's about this bigger picture and our overall relationship to tech, and what it means for the growing health of the Latino community in California.”

-Orson Aguilar, The Greenlining Institute

Listen and learn from leaders already doing the work of diversity in related movements, which aren't always specifically in tech or in your field. We need computer science students who read broadly across social science and humanities to unpack institutional racism, just like we need our humanities majors to take computation courses in order to unpack coding logics.

Latin Americans vs. Latinos

In one particular conference in the Bay Area that focused on Latina/o entrepreneurship it was striking to see the difference in discourse across two back-to-back panels: one that focused on U.S. Latina/os unpacked many of the complex diversity issues we have been outlining, while the other, discussing opportunities for people from Latin America, completely disregarded the warnings and proceeded to paint a purely meritocratic model from the Global South. At yet another conference, Latin Americans were pitted against U.S. Latina/os, with a panelist praising Latin Americans for “taking advantage” of the opportunities in Silicon Valley that U.S. Latina/os fail to capitalize, blaming them for lack of interest or even entrepreneurial abilities.

This last friction highlights the need to understand the complexity of Latinidad, of taking into account different experiences, hierarchies, racializations, and contexts for people who fall under the broader Latino/a category. Scholars have shown how similar processes happen in other domains. For example, in the advertising industry, U.S. Latina/os are treated as an under-educated consumer market that can be “tapped into” by foreign, light-skinned “creative types,” usually from privileged backgrounds in their own countries (Dávila 2001). This situation signals a worst-case scenario for us: intra-group rivalries and competition for limited opportunities in Silicon Valley.

The political economy that undergirds issues of transnationalism, hybrid identities, and coalition-building are discussed and analyzed thoroughly in relevant humanities and social science courses. Prioritize these courses as part of STEM curriculum.

The contrasts that we have used with the preposition “vs” to present these productive tensions are not meant to imply rivalries, but points of discussions and intersections where we can push further toward potential convergences, especially in the last example, with categorizations according to nationality or ethnic background.

Here, the anthropological concept of “friction,” the awkward, unequal, unstable, and creative qualities of interconnection across difference and the dualities and contradictions underlying these “sticky engagements” (Tsing 2005) can help orient us toward critically informed relevant policy.

POLICY RECOMMENDATIONS

The productive tensions we have highlighted run in parallel to and against existing logics used to promote frameworks for alleviating the tech industry’s diversity problem, namely, the “education-tech pipeline problem,” the “business case for diversity,” and the over-emphasis on “increasing representation” as the only valid way to demonstrate tech can be beneficial to those who have historically been on the wrong side of capitalistic accumulation. Our policy brief highlights voices of individuals who necessarily cross borders to imagine “diversity in tech” that takes into account education, housing, and complex identities. Indeed, the successful social/technological platforms that were presented at our conference ([Abogadazo](#), [Atipica](#), [Stanford Latino Entrepreneurship Initiative](#), [BeVisible](#)) were founded by leaders with professional backgrounds and activist origins in domains outside of “tech.”

Thus, the recommendations that emerged from the productive tensions we present can be read as guidelines for holistic approaches aimed toward creating a tech industry that hopes to remain innovative and relevant in a rapidly changing U.S. and that necessarily privileges the livelihood of communities of color.

Programs and volunteers need to be in it for the long-haul: working with students from an early age, providing mentorship along all stages of the pipeline, evaluating and incorporating feedback into programs, etc.

The onus should not be on talented young people to have to decide between their community and their “success.” Tech companies should provide the time and resources for employees, especially people of color with “insider’s knowledge,” to connect with community leaders in order to help develop these crucial programs.

Whether an empowered coder superhero or an empowered blue-collar worker, the coding hero/worker, along with all Silicon Valley workers (“direct” and in supporting roles) deserves a living wage.

Protect spaces for people from underrepresented groups to gather and support each other. Provide opportunities for these different groups to spend time with each other, learn from one another, and strategize together to build better/alternative futures. Encourage members of overrepresented groups to join these dialogues, if they are willing to let others lead.

Prioritize social science courses within STEM majors. Corresponding courses provide useful theoretical frameworks and approaches for unpacking systemic, historical processes and critically analyzing communication models.

Listen and learn from leaders already doing the work of diversity in related movements, which aren’t always specifically in tech or in your field. We need computer science students who read broadly across social science and humanities to unpack institutional racism, just like we need our humanities majors to take computation courses in order to unpack coding logics.

The political economy that undergirds issues of transnationalism, hybrid identities, and coalition-building are discussed and analyzed thoroughly in relevant humanities and social science courses. Prioritize these courses as part of STEM curriculum.

ACKNOWLEDGEMENTS

I thank Patricia Baquedano-López for assisting in the vision and development of this initiative. This brief would have not have been possible without the helpful insight of dedicated undergraduate researchers: Héctor Callejas, Diana Arteaga, Yesenia Luis, Chelsea Burroughs, and Ulises Serrano. Thank you Deborah Freedman Lustig for comments on various drafts of this brief and Daniela Rivero for design work.

Our “Diversity in Tech: Beyond Bootstraps” conference was funded by the Kapor Center for Social Impact, the Greenlining Institute, and the Berkeley Student Technology Fund.

ABOUT THE AUTHOR

Héctor Beltrán is a Ph.D. candidate in Anthropology at U.C. Berkeley with a B.S. in Computer Science and Engineering from M.I.T. His research focuses on the political economy of knowledge work, manifestations of hacking, and Latina/o formations.

Héctor is the founder of the Latina/os and Tech Initiative at the Center for Latino Policy Research. The initiative bridges dialogue between scholars from local universities, community workers, and representatives from the tech industry to help critically shape relevant policies aimed at increasing the number of people of color in tech.

REFERENCES

Code2040 Annual Report. <http://annualreport.code2040.org/>

Brenner, Chris, and Manuel Pastor. 2014. “Brother, Can You Spare Some Time? Sustaining Prosperity and Social Inclusion in America’s Metropolitan Regions.” *Urban Studies* 52(7): 1339-56.

Cornford, Daniel. 1999. “We all live more like brutes than humans”: Labor and Capital in the Gold Rush. *California History* 77:4, pg. 78-99.

Dávila, Arlene. 2001. *Latinos, Inc.: The Marketing and Making of a People*. Berkeley: University of California Press.

Irani, Lilly. 2015. “Hackathons and the Making of Entrepreneurial Citizenship.” *Science, Technology, & Human Values* 40(5): 799-824.

Pastor, Manuel. 2014. State of the Valley Keynote Address. State of the Valley Conference, Joint Venture Silicon Valley. Santa Clara Conventio Center, February 7th, 2014.

Pitti, Stephen J. 2003. *The Devil In Silicon Valley: Northern California, Race, and Mexican Americans*. Princeton: Princeton University Press

Tech’s Invisible Workforce. 2016. *Silicon Valley Rising*. <http://siliconvalleyrising.org/>

Tsing, Anna Lowenhaupt. 2005. *Friction: An Ethnography of Global Connection*. Princeton: Princeton University Press.