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### Cover Page Footnote

To Professor Mary Kelsey, who has been an invaluable teacher and advisor with a seemingly unlimited amount of patience and encouragement. To Yuan, whose deep compassion and brilliant mind have carried me through the many iterations and challenges of this project. To my loving parents Kayla and Harry and to my radiant sister Skyla, who have given me infinite love and support. And finally, to my grandparents; walk in peace and joy wherever you are, I hope to make you proud. This project would not exist without all of you, whom I am dearly indebted to.

# Leaving the Tech Funnel: How Top Students Come to Reject “Prestigious Jobs”

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## **ABSTRACT**

Recent sociological literature has identified the career funneling effect as a cultural and institutional social process which constructs certain career pathways as “prestigious” and leads a disproportionate number of students from top universities to pursue these pathways. Yet, if these social forces are so strong, why do some students with the means to pursue these pathways consciously reject them in pursuit of alternative, less prestigious pathways? My analysis focuses on computer science students and the pathway into prestigious Big Tech companies, a relatively recent and understudied pathway for top students. Using a combination of formal in-depth interviews and informal discussions, I study the thoughts, experiences, aspirations, and understandings of computer science students at Tech University, a college with a nationally ranked top tier computer science department in order to understand why some students choose not to pursue careers in Big Tech. I identify countervailing institutional forces which play a role in mediating or shifting the trajectory of students away from these jobs widely considered to be “prestigious” among their peers. My findings indicate that a complex interplay of factors take place in which discourses beyond the walls of the university are translated and refracted within the university. Students interact with these discourses in a variety of ways based on their social positionality within the university as a multi-layered institution with a multitude of social groups and fields. A key contribution of this research is uncovering how legitimacy challenges against

Big Tech in the public sphere play a key role in affecting the career decision-making processes of some computer science students, dissuading them from the Big Tech pathway and leading them to pursue alternative opportunities. The interaction between the delegitimation of Big Tech and the legitimation of alternatives is a critical countervailing force to the career funneling effect.

*Keywords:* culture, social process, social construction, university, computer science

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## **INTRODUCTION**

Several key works have been published in the last decade about the “career funneling” effect taking place at elite universities. Scholars have emphasized the role of powerful structural and cultural factors within institutions that lead graduating students to disproportionately pursue “high status” jobs in the fields of consulting, finance, and law (Ho 2009; Rivera 2012; Binder et al. 2016). These studies raise a complementary unexplored question. If there are such powerful forces which lead some students to pursue so-called “prestigious” pathways, why do others reject these same paths? In particular, some scholars claim that Big Tech companies have emerged within the last decade as a new “high status” career pathway for students of top universities (Binder et al. 2016). Yet as a relatively recent topic of discussion, there remains a gap in sociologists’ understanding of how the properties of the “Big Tech pathway” stand in relation to that of other pathways. My study was a twofold inquiry into understanding the processes which lead some students to reject normalized pathways of prestige as well as evaluating the specificities of the “Big Tech pathway” as an emergent trajectory for students of top universities.

## **LITERATURE REVIEW**

The career funneling effect is the modern phenomenon in which a disproportionate number of graduates from elite universities desire and pursue a narrow set of out-of-college jobs including consulting, finance, law, and tech. The most comprehensive theorization of the career funneling effect comes from Binder and colleagues who adopt a cultural and institutional framework to examine the social construction of certain jobs as prestigious and desirable (2015). From their perspective, the campus environment exercises considerable influence over the career decision-making process of undergraduates at top universities. Students enter the university generally naïve about the specificities of career pathways, but the potent combination of competitive on-campus corporate recruitment seasons, internalized insecurities about maintaining status, and peer socialization processes lead students to develop an understanding of boundaries between “prestigious” desirable jobs as opposed to “ordinary” undesirable jobs. Following these conclusions, however, scholars are thus presented with an intriguing complementary question. If it is so that there exist powerful institutional and cultural forces which lead some students to pursue certain pathways of prestige, why do other students reject these very same pathways?

Certainly, in the career funnel, graduates of even the most elite universities may still face considerable barriers to entry which prevent them from successfully attaining their desired outcome. The recruitment processes of elite companies employ non-meritocratic or skill-based evaluations as recruiters heavily weigh “cultural fit” (Rivera 2012, 2015). Employers at prestigious companies tend to prefer candidates that they can personally identify with, which advantages individuals from similar upper-class backgrounds as themselves. In addition to cultural barriers, recruitment into elite tech companies often involve technical barriers as well. Compared to other “prestigious” positions, tech hiring often involves technical examinations and tests of ability which require preparation and quantifiable skill. Nevertheless, barriers to entry cannot

explain why some graduating students reject the prestige pathway altogether as a matter of personal choice rather than an inability to enter. The question remains why some students who have the means to pursue the career funnel choose not to. There exist several perspectives as to why this may be the case.

First, a Bourdieusian analysis would frame the career selection of elite students as a matter of status acquisition and class reproduction. This perspective emphasizes a multi-dimensional analysis of capital in which individuals can enhance their status through the pursuit of either economic capital or cultural capital (Bourdieu, 1987). While the career funnel into prestigious companies and positions represents a strategy leaning towards economic capital accumulation, alternative viable strategies exist through which individuals can maintain or improve their class position. The most prominent of these alternative strategies would be pursuing graduate school at top universities, gaining educational credentials and accumulating cultural capital. The key insight of Bourdieu is that different forms of capital can be converted into one another. Thus, the decision to reject the career funnel as a pathway of prestige would be reframed as a rejection of one strategy of capital accumulation for another in pursuit of class and status. Theorization along these lines would restate the question towards explaining variations in actor strategies of capital accumulation to which the concept of habitus, or the socially cultivated and internalized dispositions of seeing the world would highlight explanations emphasizing family, institutional, identity-based, and networked socialization processes (Bourdieu, 1977). While the Bourdieusian perspective illuminates the diversity of pathways that may exist towards class reproduction and improvement, it is limited in its capacity to explain the specificity of understandings and logics employed by those who reject the career funnel. Indeed, the emphasis on status fails to capture the complex ways in which individuals understand the meaning of work (Rosso et al. 2010, Weber 2011).

Furthermore, it does not provide a clear elaboration of why some students resist the powerful cultural and institutional pressures on campus environments to pursue a specific set of post-college careers. Ambiguity remains about the relative importance of pre-college compared to during-college factors and what the key mechanisms might be. A key theoretical gap lies in distinguishing between push and pull factors as it is unclear whether students develop negative attitudes towards the career funnel or develop positive attitudes toward alternatives.

Institutionalists help uncover the answer to some of these questions, examining the campus environment as a field which does not merely reflect the pre-college dispositions of students but instead generates new meanings and transforms understandings through institutionalized processes (Kaufman & Feldman 2004). While pathways through college— the organizations, extracurriculars, majors, course trajectories, and academic experiences one takes part in— are stratified by inequalities of capital (Armstrong & Hamilton 2013), these pathways have tremendous influence in shaping the beliefs and identities of students (Khan 2011, Binder & Wood 2013, Dodson 2014). From this perspective, the analysis is centered around the effects of specific meso-level fields and organizations nested within the university as a larger macro-level field (Fligstein & McAdam 2012). Thus, the social construction of prestigious jobs ought not to operate as a direct campus wide effect, but should instead be mediated in varying degrees through the specific logics of the corresponding campus fields and institutions that students participate in. To the extent that the social construction of prestige is a universal effect such that almost every student on campus is aware and recognizes those career trajectories classified as prestigious, the institutionalist perspective would lead to the hypothesis that students who reject the career funnel despite having the means to pursue it may do so due to their participation in specific on-campus fields with countervailing logics or constructions of prestige.

Although the predominant institutionalist perspective on the career funneling effect is one which privileges an intra-institutional analysis, it is limited in its capacity to explain the specific dynamics of the Big Tech pathway. Unlike the professional fields of consulting and law and perhaps to a greater extent than finance, Big Tech has faced a reckoning in the public discourse through the last half decade from politicians, media reporters, academics, activists, and online commentators. These actors have challenged the legitimacy of the business practices of Big Tech at both a company-specific as well as field level, drawing attention to issues of surveillance (Zuboff 2019), algorithmic discrimination (O’Neil 2017, Noble 2018), state and military contracts (Solon 2019, Dwoskin & Elizabeth 2019), anti-competitive behavior (Kang et al 2019), political interference (Granville 2018), sustainability issues (Garcia 2019), work conditions (Sainato 2020), and others. These macro-level challenges to tech companies have recently played out on college campuses, as students from numerous universities have initiated protests against specific tech companies for their contracts with the state organizations including ICE and the military (Hussain 2019).

To fill this gap, I draw on institutional scholarship but focus instead on processes of legitimation. I draw on Suchman’s classic definition of legitimacy as a “generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions” (Suchman 1995). Legitimacy is thus not an inherent property of an organization, but rather a property bestowed upon one by other actors in a field. Thus, legitimacy is socially constructed, contingent upon the determinations of others, and unstable. An organization that acts beyond the “range of acceptability” within a field faces legitimacy challenges, or questions and concerns directed at the organization about their practices (DiMaggio & Powell 1983, Deephouse 1999). To varying degrees, legitimacy challenges

against an organization lead other field actors to perceive an increased risk of association or exchange, thus reducing the resources and opportunities of organizations facing legitimacy challenges (Deepphouse 1999). The aforementioned criticisms and contestations directed at tech companies are legitimacy challenges which have rapidly diffused through the public sphere and impacted companies with symbolic and material consequences. Given the function of the university as a nexus or hub which connects multiple institutional domains (Stevens et al. 2008), I hypothesize that these legitimacy challenges within the field of tech play out in campus contexts both in conjunction with and mediated by institutional processes to impact the career funneling effect.

## **METHODS & CASE SELECTION**

My ambition was to understand the worldviews, perspectives, and logics of computer science students who purposefully dissented from the norm of recruiting for prestigious corporate tech companies. In order to study the subjective understandings of these students, I researched the career decision-making process of top computer science students through formal in-depth interviews and informal discussions. For my site, I selected a public university that ranked at the top for undergraduate computer science programs in the United States. I will refer to this college as Tech University. This university was selected due to its prevalence as a targeted recruitment site for large prestigious tech companies. Through the university's career center, countless tech companies pay thousands of dollars for access into the university ecosystem, recruiting students through workshops and info sessions as well as partnering with student organizations to host events. Additionally, Tech University is deeply connected with Silicon Valley as a center for research, entrepreneurship, and technological innovation. As a hub for tech and computer science, Tech University is representative of other universities with strong computer science programs.

Furthermore, its central position in the tech field suggests that the dynamics related to the construction of tech careers as prestigious ought to be particularly well-represented.

Given the powerful institutional forces at play, my focus was on understanding why some students turn away from and even deliberately refuse to recruit for “prestigious” tech companies. Over the course of four months, I studied the thoughts, experiences, and aspirations of computer science students on Western University’s campus through a combination of formal interviews and informal conversations. My interview sampling process was based on Small’s framework of analyzing each interview as a strategic “case” with specific elements and variables to explain (2009). As such, I was not looking to sample for representativeness, but rather to sample strategically in order to generate, test, and refine theories to understand why students leave the career funnel. I conducted ten in-depth interviews with computer science undergraduate students. A key specification of my recruitment process was to seek out students who had the perceived ability to succeed in getting a job at a prestigious tech company. My study was not focused on the consequences of the barriers to entry of prestigious companies, but instead reasons to reject the career funnel beyond limitations of ability. As a rough measure of capability, I sought out students who participated in tech or professional student organizations. During the interview, I confirmed this measure by asking about prior internship experiences, with internships at prestigious tech companies as a confirmation of ability. In order to speak with a mixed pool of students who chose to pursue big tech opportunities and those who decided against doing so, I relied on a combination of purposive sampling and snowball sampling. Purposive sampling led me to interview computer science students who had a higher likelihood of choosing not to pursue big tech jobs after graduation by seeking out members of student tech organizations with explicit socially oriented rather than professionally oriented missions. I first recruited participants through reaching out to

my social network and asking people if they knew anyone who had either finished recruiting for a job after college or were in the midst of the process of doing so. The majority of participants were fourth year computer science students, but third year computer science students were also well represented. Each interview followed a semi-structured format and lasted approximately 45 minutes to an hour. Interviews took place at public settings, usually either cafes or dessert shops. After each interview concluded, I spent the next 15 minutes writing up a memo based on observations I had made about the interview. After each interview, I went back to my list of interview questions and revised them for the next interview based on the areas which appeared to yield significant analytical insights and the areas which appeared to be less relevant. Some full transcripts of the interviews were written up within a week of the interview, but the majority were written up after I had finished all my formal interviews and concluded the data collection process.

## **CAMPUS CONTEXT & BACKGROUND**

### *The Campus Presence of Big Tech*

**Jeff:** Major players, people have already canonized this, in the current decade, and maybe one decade ago, it's basically the big software companies like Amazon, Facebook, Google... That's how people have kind of put these companies on a pedestal...

Among the computer science students of Tech University, there exists a general consensus that the tech career funnel into prestigious and high status jobs out of college largely revolves around recruitment into the software engineering, product management, and UI/UX divisions of a relatively well-defined set of "Big Tech" companies including but not limited to Google, Facebook, Apple, Microsoft, and Amazon. Many students who later chose not to pursue those companies were not only aware of the prestige but also held internships during college working for them. Recruiting for Big Tech was less of a specific conscious decision that individuals made than it was

a default, normalized path with a common sense understanding that people would pursue these opportunities. A key component of the normalization of the Big Tech pathway is the institutionalized presence of corporations on campus (Rivera 2015). On the campus environment, Big Tech companies had a deep presence in the student tech community. Through institutionalized corporate access programs priced at thousands of dollars, these companies had privileged access to the computer science students of the university. The privileges of membership included the ability to advertise, host on-campus recruiting events, establish a physical presence in department halls to speak with students, reserve campus rooms to host career meetings with students, participate in career fairs, and attend research events. Given the hefty membership price and recruitment infrastructure necessary to take advantage of these resources, Big Tech companies make up the overwhelming majority of Tech University's corporate access program. Beyond partnerships with the university, however, Big Tech companies hold a deep influence directly in the student community through their presence in student organizations. Tech University has a vibrant student ecosystem consisting of dozens of technology-related student organizations with a diverse set of missions including professional development, consulting, education/mentorship, research, competition, and more. Big Tech companies frequently participate in the efforts of these student organizations through both formal and informal means. Formally, they will provide funding and other resources to organizations in exchange for the opportunity to co-host an event with a student organization or become a sponsor. This is frequently done with tech student organizations that host large events like Hack-a-Thons, intense coding competitions which draw hundreds of participants from Tech University and from across the country, but companies also partner with other organizations to host small or medium sized events. Informally, the countless

alumni of Tech University who work at Big Tech companies will often participate in student organizations as members of career panels to provide advice to current students.

### *The Prestige of Big Tech*

The institutionalization of Big Tech companies on Tech University's campus is not sufficient by itself to normalize the Big Tech pathway without processes through which students construct positions at these companies as prestigious and desirable. There existed several rationales or justifications for why computer science students were drawn towards the Big Tech pathway. First, positions at Big Tech companies paid extremely well and provided financial security to their employees. Entry level salaries for software engineers from Tech University were frequently 6 figure sums, higher than the average base salary for investment bankers and consultants. Furthermore, Big Tech companies developed a reputation for providing their employees with a wide range of benefits including free meals and snacks, free gym membership, housing subsidies, relaxed workplace dress codes, and other benefits. Beyond the financial benefits, there was a cultural appeal of the perceived comfort that employment at a Big Tech company would provide as a lifestyle. On a practical level, students commonly perceived opportunities at Big Tech to be conducive to personal growth and development. One student, Jeff, was double majoring in computer science and business. He expressed an explicit desire to work for Google, Amazon, Facebook, or Microsoft. A key factor for him was the opportunities of accelerated personal growth and development that Big Tech could afford him.

**Jeff:** I think for me, [the biggest priority] would be the kind of personal and professional development that these opportunities afford me. If at any kind of company, at Amazon or Facebook, I'm able to learn a lot very quickly and perhaps learn the skills to manage larger teams and exert more influence that way, whatever allows me

to do more with myself faster. I think that's how I weigh different options.

The pathway of Big Tech is seen not just as a pathway into a set of companies, but also a pathway at these companies with expectations of future benefits and opportunities. These expectations result partially from the structure of mobility within Big Tech companies. Big Tech companies had a reputation among students for unlocking additional opportunities for future advancement and wealth at a speed which outpaced and with benefits that outranked what “normal” companies could provide. With that being said, the critical limitation is that these benefits are only conferred upon those who are able to successfully enter into the company through a rigorous and competitive application process. Students who get recruited into Big Tech companies for internships or full-time positions are often rewarded by their peers with respect, serving both as an indication of the prestige of these companies as well as a motivation for others to pursue these positions.

## **FINDINGS & DISCUSSION**

Given the symbolic prestige and the many material benefits of employment into Big Tech, why is it that some individuals choose not to pursue these opportunities? I argue that a key mechanism that leads students to reject the Big Tech pathway lies in the threefold interaction between field-level legitimacy challenges to Big Tech, intra-institutional mediation of legitimacy challenges, and individual-level imaginary. Macro-level contestations against tech in the public sphere by politicians, academics, activists, journalists, and other actors play out within the meso-level university through academia, social discourse, as well as through local expressions of conflict such as protest forms or challenges to existing norms. Individuals at a micro-level understand these phenomena based on their positionality within the university, that is, the fields and social networks

that they are emerged within which filter and shape the sorts of judgments that they make. Macro-level legitimacy challenges against Big Tech are translated in such a manner into micro-level reservations against the Big Tech pathway. This culminates into a decision to pursue alternative career pathways if these alternatives can be legitimated as viable possibilities in the subjective imaginary of the individual. In what follows, I will proceed to explicate each component this process.

### *Legitimacy Challenges in the University*

The legitimacy of Big Tech is challenged through particular fields within institutions. University courses serve as a key mechanism through which students come into contact with critiques of Big Tech. These courses develop what I call a critical perspective against Big Tech, or a view or belief that these companies are harmful to society. There are two prominent ways in which critical perspectives against Big Tech are developed. Direct inculcation involves explicit discourse connecting Big Tech companies with specific criticisms or social consequences. As tech has faced greater scrutiny and criticism, the academy devotes more attention to its social consequences. In courses discussing topics such as policing, political behavior, climate change, and surveillance, it is becoming more common for professors to include discussion of the implications of modern tech companies. In contrast, indirect inculcation involves the development of a critical perspective toward some social issue without the direct discussion of Big Tech. Indirect inculcation leads to a critical perspective towards Big Tech companies when a discursive link can be made between the social issues discussed in the courses and the actions of Big Tech companies. This was the case for a participant named Anna, a fourth-year student studying computer science and environmental sustainability. Her interest was in the intersection between computer science and sustainability practices. Although she had been considering working for a Big Tech company

after graduation in prior years, she said that she had developed a negative attitude about the business practices of these companies which had led her to reconsider. In her words, a key part of the development of this perspective was the role of an ethics course that she took for her sustainability program.

**Anna:** [In college] I started learning more about for example, environmental justice and like, environmental racism. And how there are deeper societal issues than just protecting the planet itself but like, protecting the disadvantaged communities affected by communities specifically.

**Interviewer:** And where did you learn about these things?

**Anna:** ...in my minor, there are some required categories of classes, and one of them I took was Environmental Philosophy and Ethics. So that one we talked about environmental justice and you know, how communities of color bear the environmental burden far more than wealthier white communities or perhaps Asian communities as well...

Although this course did not explicitly address the role of Big Tech companies, it connected her to critical discourse about social issues which she connected to the business practices of Big Tech. The connection stemmed from her field proximity to tech, as she was a member of a student organization with a mission towards promoting tech for the welfare of society and a membership base with a deeper awareness of issues within tech. Through indirect inculcation, she developed a discursive vocabulary to make sense of Big Tech companies in a critical perspective. Philosophy and ethics classes are particularly conducive for the development of critical social perspectives because they expose students to social and moral issues that students might otherwise not be aware of. Social theory classes appear to function in a similar importance.

Beyond classes and coursework, legitimacy challenges in the public sphere against tech have manifested in local forms in campus contexts. At Tech University, student organizations

protested against particular companies, the most notable of which was Palantir. These protests stemmed from Palantir's contract with ICE, or the United States Immigration and Customs Enforcement agency. The controversy began in the public sphere as news outlets reported that ICE used Palantir software in their efforts to identify, track, and deport undocumented immigrants. Palantir was widely criticized for their contract with ICE for this reason, with commentators vocalizing their opposition to ICE's immoral practices against immigrants and Palantir's complicity. This legitimacy challenge in the public sphere was translated on the campus environment in several ways. First, an academic conference hosted by Tech University decided to terminate their partnership with Palantir. Whereas Palantir had been a corporate sponsor of the program, providing financial resources, the legitimacy challenges against the company and the cost of being affiliated with it led the conference organizers to suspend their relations. Second, students on campus organized in the fall during Palantir's recruitment season in order to protest Palantir's corporate presence on Tech University's campus and their access to host recruitment events. These protests involved both computer science students as well as non-computer science students and were directed at the university, the computer science department, and student organizations which partnered with Palantir to host recruiting events. Ultimately, the computer science department hosted a forum of community members in order to discuss Palantir's payed access to the corporate recruitment program on campus, providing students the opportunity to vocalize their opposition to Palantir's presence.

Third, Palantir also attempted to partner with student organizations on campus in order to improve their publicity. Andy, a leader in a student organization noted in the tech community for their leadership in working with nonprofits, recounted an incident where Palantir seeked to partner with their organization to host a tech for social good event.

**Andy:** So Palantir was reaching out to us for [our organization]. And we were talking to them, we were like ok, maybe we'll do this, because they were offering us a sum of money and they were offering this event and we were like ok, but then we were like wait a second wait a second, it's Palantir. So we should definitely roll this back a little bit and think what's going on here and then we were like, ok, what if we can convince Palantir to do an open panel format where not just Palantir perspectives are shining through. We want people to actually engage with Palantir and be able to speak up against the work they're doing. Obviously this was not something that was in their best interests but we were trying to see, if they were so interested in having an open conversation with students about ethical engineering, then they should be willing to defend their viewpoints, but no. It was a recruiting event, so they just canceled on us.

Legitimacy challenges against Palantir manifested in the context of student organizations as members of an interconnected campus ecosystem of institutionalized corporate access. Through these student spaces, students engage with critical discourse against Big Tech companies and construct new meanings and understandings about these companies and the status of affiliating with them. While this occurrence took place within the leadership ranks of a specific organization, local manifestations of legitimacy challenges are often public contestations which spread rapidly through the campus community through network discourse, local reporting, and social media. A key event for many was the Cambridge Analytica incident, in which Facebook was reported to be complicit in a scandal in which Cambridge Analytica harvested the data of millions of users without consent for political advertising purposes.

**David:** ...the first time I heard about these tech company abuses was in the Cambridge Analytica scandal. At that point I realized the kind of impact that tech could have on our lives.

**Jeff:** there was less political discourse when I just entered college, before some of the, I guess, scandals and other Congress hearings became more prevalent.

Legitimation challenges against Big Tech companies often take the form of public spectacles which become part of the discourse. Although these challenges are often directed at specific companies, the sheer breadth and scope of the challenges mounted against large tech companies have transformed the discourse into taking on characteristics of field level legitimacy challenges. Indeed, the word “techlash” has emerged in recent years within mainstream media outlets as a characterization of public response against the scandals and shoddy business practices of Big Tech companies (Paul 2019; Scott 2019). Campus discourse at Tech University has reflected these trends, with participants discussing both their opposition to specific companies as well as to Big Tech as a category in general. Certain companies like Palantir and Facebook have faced greater challenges in the public sphere than other Big Tech companies and have a greater degree of students indicating reservations about recruiting for them. At the same time, the cumulative effect of the diverse and widespread legitimacy crises against Big Tech in the public sphere has amounted to the emergence of a discourse which has a de-legitimizing effect on the field.

#### *Legitimation of Alternatives*

Legitimacy challenges against Big Tech on campus are often insufficient to lead students to pursue alternative pathways to Big Tech. There exist two complementary processes which are necessary to concretize such a decision. First, negative personal experiences with Big Tech play a key role. Some negative experiences are relatively independent from legitimacy challenges and relate more to the unique experience of the individual. For example, Francis was a third-year student who was pursuing a career at either a socially oriented tech company or a small startup.

He deliberately did not want to recruit for a Big Tech company. For him, a key reason was a negative experience interning at a prestigious tech company. For his 12-week internship, he was put on a project which didn't have much work to do, and he ultimately finished his project by the 5<sup>th</sup> week.

**Francis:** I felt like the work I was doing wouldn't eventually help anyone, like, it wouldn't help the outside world for example. I felt like the work I was doing was really busy work...it wasn't fulfilling because I knew that our project was kind of going to be ignored, like there wasn't really any substantial impact that I think was going to happen... without having some sort of impact in this society and like the job you're going to do, there's no reason to do it almost.

He recalls this internship as a key turning point because it led to a sense of disillusionment with Big Tech companies and a heightened desire to apply his computer science training to work with a more direct social impact. The experience at this company opened him to the realization that he wanted to do something that would more directly benefit others and led him after the internship to get involved in a student tech organization which worked with nonprofits. For others, however, negative experiences at tech companies are directly related to legitimacy challenges directed at Big Tech. Kate was a leader of a student organization which developed software for nonprofit organizations and was passionate about studying the social impact of technology. During the summer of her junior year, she interned at a prestigious Big Tech company, working on what she considered to be one of the most socially conscious project teams. Yet, she felt a deep sense of discomfort during her internship.

**Anna:** ... there's just this huge weight at all times just because it's [Company] and they're compromising democracy, and uh, like, you get at [Company] a lot of apathy and complacency when you're at [Company] too because you know, everyone's comfortable, you

have these like, cushy big sofas and snacks everywhere, uh, and it's kind of like a facade that you put on. It's kind of eerie, if you ever visit the campus, it's like a creepy Disneyland.

**Interviewer:** I'm getting signals you don't like this Disneyland-

**Anna:** ...I think a lot of people do at first, but I think for me, like, breaking down the reasons why they would want to make it like that, they just want their workers to stay there as long as possible and bring their families there...I don't know. I think it's a little off putting, it was kind of eerie to me, but yeah. I think, I don't know.

Part of Anna's discomfort with this company stemmed from the specific business activities that the company was engaged in. While the company's actions were a major concern to her, she felt that the other employees did not seem to share those similar concerns or be visibly bothered by them. She also discusses feelings like she was being manipulated by the company, emphasizing that the company design and free amenities were off-putting because she saw them as a ploy to ensure the employees spend more time at the company. Her discomfort was a result of an interaction between her actual experience interning at the company and her past experiences and dispositions about the company itself. It represents an interaction between an already-existing critical consciousness and a personal experience.

Building off the negative feelings and experiences of Big Tech companies, students become more likely to pursue alternatives when these alternatives become perceived as legitimate and desirable possibilities. A key issue that many students described was the peer pressure that existed in their social networks of successfully applying for a "prestigious" position at a Big Tech firm. Peer influence was a powerful force which not only made certain jobs desirable but also implicitly closed off alternatives as not prestigious enough, financially unsustainable, or a poor use of one's skill and talents. Key to the formation of these ideas is the lack of information that students have about alternatives in the first place to either confirm or deny these suspicions.

Students construct beliefs about the value of “prestigious” positions at Big Tech firms largely due to the perceived desirability of these positions, but students are often not exposed to what alternatives entail from a financial or work perspective. The legitimization of alternatives is a crucial step to transitioning students from reluctantly recruiting for Big Tech companies to confidently pursuing alternatives. Benjamin’s experience reflects the significance of this legitimization process. Benjamin is a third-year computer science student with an interest in teaching and education. Although he devoted much of his undergraduate career to mentoring computer science students and even teaching his own coding class, he described how he had struggled with considering education as a career pathway instead of working for Big Tech companies which he perceived to be the “default” pathway out of college. Over time, however, working as a teacher became a legitimate pathway for him. A key moment in this process was validation by an institution that he respected and considered as prestigious.

**Benjamin:** For me, the moment where I felt comfortable that I wanted to spend some time actually teaching was, especially because teaching is kind of a profession that is looked down upon, it's not respected as much as it should be in this country, but the big moment for me was looking up the CZI, Chan Zuckerberg initiative, Facebook's social good arm, they have an education branch, I was reading bios of people who work there and almost all of them have experience teaching or doing work for a school district of some kind and I found myself amazed by these bios and the reason why I was amazed and respected them so much is because of their experience.

Exposure to the biographies of people working at the Chan Zuckerberg initiative was a critical moment for Benjamin because it legitimized the pathway of becoming a teacher for him. This process of legitimization occurred through institutional legitimacy. Similar to a market environment in which competitors view the practices of a leading organization in a field as

legitimate by merit of the organization's own legitimacy, Benjamin saw the credentials of CZI employees as legitimate because he respected the organization. From this, Benjamin came to see the pathway of becoming a teacher as not only a legitimate career path, but even a desirable one as these people which he deemed as role models of sorts had done it. Through legitimation processes stemming from role models and institutional leaders in the fields that students seek to enter which present alternatives to Big Tech as valid and desirable, computer science students may come to break off from peer-established pathways of prestige and status.

A key implication of my study is that norms which define certain behaviors, aspirations, and pathways as high status or prestigious are subject to change based on macro-level legitimacy challenges and their translation into micro-level decision-making processes. Here, the contested legitimacy of Big Tech companies led students to redefine post-college career possibilities. With that being said, outcomes are contingent upon the fields that students exist at within the university. Computer science students in business organizations as opposed to leftist political groups had very different perceptions of the legitimacy challenges that companies faced. The fields that students existed in at college are influenced significantly by pre-college socialization and conditions. High school socialization processes in particular appear to be significant in shaping student interests and values. Given that respondents in my study located the origins of their social interests in high school, whether it be climate change, education, or even computer science in general, it appears that studying processes of identity formation in high school may yield significant findings related to the social, economic, and political trajectories of students. Another significant implication of my study is that critical coursework alone is often not sufficient for turning students away from pursuing career opportunities which often conflict with the values taught in those courses or perhaps are the subject of critique themselves. This speaks to the apparent paradox that students

who study academic disciplines critical of power end up joining the ranks of those same incumbent forces. Without a second process in which alternatives are culturally and economically legitimated as both socially valuable and financially feasible in the mind of the student, it may prove to be difficult to mitigate the “career funneling” effect.

## CONCLUSION

In this paper I have sketched out an argument for how macro-level legitimacy challenges against Big Tech companies lead some students to reject the career funnel into “prestigious” Big Tech companies. Legitimacy challenges toward tech beyond the walls of the university find themselves taking shape in various discursive and social forms within the institution, through academia and through social life. As these legitimacy challenges are translated within the campus ecosystem, students with field positionality conducive to the reception of these challenges and who come to view other career pathways as legitimate alternatives will tend to reject the Big Tech pathway and leave the career funnel. With this being said, I do not hesitate to qualify these findings as neither exhaustive nor universal. The dynamics that I have outlined in this paper aim to demonstrate the interplay of structural forces which may affect the career decision-making processes of students. In doing so, I aim to bring in literature on legitimacy in order to make sense of how extra-institutional forces beyond the walls of the university may affect and play a role in the career funnel. The factors I have identified— resonance with legitimacy challenges against Big Tech, negative personal experiences with Big Tech, positive legitimation of alternatives— are not necessarily sharply bounded conditions of either necessity or sufficiency, but instead fluid and contingent themes which exist in the career funnel. Additional theorization on the career funneling effect may look towards researching the prevalence to which individuals opt out of the Big Tech pathway, as a key limitation of this study is its inability to quantitatively measure the phenomenon.

Additionally, a Bourdieusian extension of the study on tech career pathways would be to map out distinctions in meaning and structural stratifications among the pathways of Big Tech compared to academia, startups, and technical roles in industries that are not explicitly technological (e.g. software engineers for finance, law, consulting, manufacturing industries).

## APPENDIX: INTERVIEW QUESTIONS

### INTRODUCTION

- Tell me a little about yourself
  - What did you major in?

### CLASS & FAMILY BACKGROUND

- Where are you from?
  - In just a few words, what was it like growing up there?
- Do you have any siblings?
- What do your parents do for a living?

### TRANSITION TO COLLEGE/CHOOSING TECH

- How did you decide to go to [COLLEGE]?
- How did you decide you wanted to major in [MAJOR]?
- What sorts of jobs or internships have you had?

### CLUB

- What are the most important things to you that you're involved in on campus?
  - Tell me about the kind of work that [CLUB] does.
  - When did you join [CLUB]?
  - Walk me through how you chose to join [CLUB]
  - What is it like to be a part of [CLUB]?
  - How do you feel like your time in [CLUB] has impacted you?
    - Do you feel like you've changed from being in [CLUB]?

### CHOOSING A CAREER

- Describe to me the life you want to live after college.
  - What kind of work do you want to do?
- Where do you want to work?
- Are there any places you wouldn't want to work at?
- What are the most important factors in choosing a job after college?

### TECH AND SOCIETY

- How do you feel tech relates to social good?
- How do you feel about tech's impact on society today?
- Did you always feel this way?

### SOCIAL GOOD

- What does "social good" mean to you?
- Did you always think this way about what "social good" means?
- When do you feel like you came to this understanding?
- How do you feel tech relates to social good?

STATE/POLITICS

- Political culture at school?
- How politically involved would you say you are?
- How would you identify yourself politically?

Works Cited

- Armstrong, Elizabeth, and Laura Hamilton. 2013. *Paying for the Party: How College Maintains Inequality*. Cambridge, MA: Harvard University Press.
- Binder, Amy J., Daniel B. Davis, and Nick Bloom. 2016. "Career Funneling: How Elite Students Learn to Define and Desire "Prestigious" Jobs." *Sociology of Education* 89(1):20–39.
- Binder, Amy, and Kate Wood. 2013. *Becoming Right: How Campuses Shape Young Conservatives*. Princeton, NJ: Princeton University Press.
- Deephouse, David. 1999. "To Be Different, Or To Be the Same? It's a Question (And Theory) of Strategic Balance." *Strategic Management Journal* 20(2).
- DiMaggio, Paul, and Walter Powell. 1983. "The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields." *American Sociological Review* 48(2):15.
- Dodson, Kyle. 2014. "The Effect of College on Social and Political Attitudes and Civic Participation." in *Professors and Their Politics*, edited by Gross, N., Simmons, S. Baltimore: Johns Hopkins University Press.
- Fligstein, Neil, and Doug McAdam. 2012. *A Theory of Fields*. New York, United States: Oxford University Press.
- Garcia, Ahiza. 2019. "Amazon Workers Walk out to Protest Climate Change Inaction - CNN." Retrieved April 19, 2020 (<https://www.cnn.com/2019/09/20/tech/amazon-climate-strike-global-tech/index.html>).
- Granville, Kevin. 2018. "Facebook and Cambridge Analytica: What You Need to Know as Fallout Widens." *The New York Times*, March 19.
- Hussain, Suhauna. 2019. "Tech Recruiters Were Once Welcomed on Campus. Now They Face Protests." *Los Angeles Times*. Retrieved April 17, 2020

<https://www.latimes.com/business/technology/story/2019-12-07/students-protest-tech-companies-ice-contracts>).

Kang, Cecilia, David Streitfeld, and Annie Karni. 2019. "Antitrust Troubles Snowball for Tech Giants as Lawmakers Join In." *The New York Times*, June 3.

Kaufman, Peter, and Kenneth A. Feldman. 2004. "Forming Identities in College: A Sociological Approach." *Research in Higher Education* 45(5):463–96.

Khan, Shamus. 2011. *Privilege: The Making of an Adolescent Elite at St. Paul's School*. Princeton, NJ: Princeton University Press.

MacMillan, Douglas, and Elizabeth Dwoskin. n.d. "The War inside Palantir: Data-Mining Firm's Ties to ICE under Attack by Employees." *Washington Post*. Retrieved April 19, 2020 (<https://www.washingtonpost.com/business/2019/08/22/war-inside-palantir-data-mining-firms-ties-ice-under-attack-by-employees/>).

Noble, Safiya Umoja. 2018. *Algorithms of Oppression: How Search Engines Reinforce Racism*. New York: New York University Press.

O'Neil, Cathy. 2017. *Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy*. First paperback edition. New York, NY: Broadway Books.

Paul, Kari. 2019. "A Brutal Year: How the 'techlash' Caught up with Facebook, Google and Amazon." *The Guardian*, December 28.

Rosso, Brent D., Kathryn H. Dekas, and Amy Wrzesniewski. 2010. "On the Meaning of Work: A Theoretical Integration and Review." *Research in Organizational Behavior* 30:91–127.

Sainato, Michael. 2020. "'I'm Not a Robot': Amazon Workers Condemn Unsafe, Grueling Conditions at Warehouse." *The Guardian*, February 5.

- Scott, Mark. 2019. "In 2020, Global 'Techlash' Will Move from Words to Action." *POLITICO*. Retrieved April 19, 2020 (<https://www.politico.eu/article/tech-policy-competition-privacy-facebook-europe-techlash/>).
- Small, Mario Luis. 2009. "How Many Cases Do I Need?": On Science and the Logic of Case Selection in Field-Based Research." *Ethnography* 10(1):5–38.
- Solon, Olivia. 2019. "Google's Secret Censored Search Engine Triggers Protests." *NBC News*.
- Stevens, Mitchell L., Elizabeth A. Armstrong, and Richard Arum. 2008. "Sieve, Incubator, Temple, Hub: Empirical and Theoretical Advances in the Sociology of Higher Education." *Annual Review of Sociology* 34(1):127–51.
- Suchman, Mark C. 1995. "Managing Legitimacy: Strategic and Institutional Approaches." *The Academy of Management Review* 20(3):41.
- Weber, Max, and Stephen Kalberg. 2011. *The Protestant Ethic and the Spirit of Capitalism*. New York: Oxford University Press.
- Zuboff, Shoshana. 2019. *The Age of Surveillance Capitalism*. 1st ed. New York: PublicAffairs.