DISRUPTING STHLMTECH: AN ANTHROPOLOGICAL GUIDE TO STOCKHOLM'S INNOVATION ECOSYSTEM

BY

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DISSERTATION

Submitted in partial fulfillment of the requirements for
the degree of Doctor of Philosophy in Anthropology
in the Graduate School of
Binghamton University
State University of New York
2021

Accepted in partial fulfillment of the requirements for
the degree of Doctor of Philosophy in Anthropology
in the Graduate School of
Binghamton University
State University of New York
2021

May 19, 2021

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Abstract

In 2013, a group of entrepreneurs, investors, evangelists, and enthusiasts gathered at the Hilton Slussen in Stockholm and voted to create the hashtag #SthlmTech to describe the coalescing of Stockholm's innovation ecosystem around a collection of social networks and public and private organizations and infrastructures that professed to facilitate the creation of innovative businesses by entrepreneurs. In so doing, they joined a global network of ecosystems, including Silicon Valley, London, Beijing, Tel Aviv, Tokyo and hundreds more, that have responded to calls for innovation with support for entrepreneurship and venture capitalism.

With more billion-dollar unicorn startups per capita than anywhere but Silicon Valley, SthlmTech has gained an international reputation as a unicorn factory and as one of the most innovative places on Earth. SthlmTech is perceived as a neutral clockwork of experts, infrastructures, and organizations that facilitate "innovation" for positive social change. I spent twelve months conducting anthropological fieldwork in SthlmTech that consisted of participant-observation, collecting archival materials, and conducting interviews with startup founders, employees, investors, evangelists, ecosystem executives, state employees and bureaucrats, and other stakeholders. I asked, "What is innovation?" and found that ambiguity in the concept was the key to understanding growing concerns about the promises of innovation promoted by SthlmTech.

I propose that innovation ecosystems are not neutral platforms but rather curricular systems that via innovation culture generate standardized and optimized forms of innovation that accelerate and escalate venture capitalist forms of entrepreneurship—disarticulating and distributing VCs' values and logics beyond their purpose. Innovation culture takes advantage of the ambiguity in the concept of innovation to coopt the aspirations of entrepreneurs to generate positive change and via hype, education, and the guidance of experts redirect them toward other aims. I propose that innovation culture must

be identified and abandoned in order to disrupt SthlmTech for more flexible, diverse, collaborative, and impactful approaches to social change and innovation.

Dedication

This thesis is dedicated to Nicholas VandenBroek, my partner in all things.

Acknowledgements

This project and the career I plan to build upon it would not be possible without the support of my partner, family, friends, colleagues, mentors, and collaborators. This research was funded by the Thord-Gray Memorial Fund from the American-Scandinavian Foundation who made it possible to spend a year in Stockholm conducting fieldwork. I would, first, like to thank the many people from SthlmTech who were generous with their time, thoughts, and networks, making this research possible.

I would like to thank my advisor, Douglas Holmes, who guided me through the PhD with patience, encouragement, and insight. Without his generosity—from offering up his office when I did not have one to spending countless hours working through ideas to connecting me with other scholars across the discipline—this journey would have been far more arduous and far less inspired. I would also like to thank my committee members Joshua Reno and Ruth Van Dyke. I greatly benefited from their advice and mentorship. Josh challenged me to leave my comfort zones, read broadly, and be a generous scholar and colleague. Ruth inspired me to see the material in the ephemerality of the digital; taught me to never overlook the ways that inequality and power can be erased by theory; and to always be brave enough to challenge that erasure.

I would like to thank my colleagues at the department of social anthropology at Stockholm University where I was a visiting researcher throughout my fieldwork. I would like to thank them for their hospitality, sharing their inspirational work, and for keeping my spirits high while I was far from home by allowing me to join in on their dance parties and fun. Most of all, I would like to thank Anette Nyqvist, who wrote letters of recommendation, helped me get established in Stockholm, and mentored me throughout this project from its earliest ideas to its final write-up. Without Anette, her guidance, and her support, this project would have never made it to Stockholm or through fieldwork. I would also like to thank specifically Johan Nilsson, Hege Høyer Leivestad, Helena Wulff, Paula Uimonen, Mark

Graham, Johan Lindquist, Niina Vuolajärvi, Shahram Khosravi, Ulf Hannerz, and Raoul Galli who generously helped me work through ideas and problems, big and small, that emerged during fieldwork. To Lena Christiansson and Stefan Björkman, my hosts who opened their home and gardens to me, I extend my gratitude. Thank you for all the fikas, apples, and support and allowing me to rent such a lovely and cozy space in your home.

I would like to thank my Binghamton University colleagues. Specifically, Yakup Deniz Kahraman and Gabriella Hanley-Mott, who both read drafts of my work, who spent countless hours at chalkboards and over coffee discussing ideas and dreaming up a better future for anthropology with me. I would not be the anthropologist I am without them. Additionally, I would like to thank Laura Johnsen, Michelle Bongermino-Rose, Rae Jereza, Jessica Santos, Archana Mohan, Amanda Guitar, and Amy Robbins for their insights, feedback, and camaraderie.

I would like to thank my CASTAC colleagues, particularly Beth Reddy, Rebekah Cupitt, Nick Seaver, Baird Campbell, Emily Brooks, Patricia G. Lange, Ian Lowrie, Jordan Kraemer, Svetlana Borodina, and Naomi Zucker. This community of scholars has inspired me and been my academic home since they invited me into their ranks in 2013. I would also like to thank my collaborators, new and old, who through our conversations and collaborations have inspired many of the ideas in this dissertation, specifically Jeremy Trombley, Johannes Lenard, and Lora Koycheva. I would like to thank the mentors who helped shape me as an anthropologist throughout this anthropological journey, specifically Jan Brashler, Deana Weibel, Jeffrey Kaufmann, Bridget Hayden, Jim Flanagan, and Marie Danforth.

Lastly, I would like to thank my family. My mom's limitless love and support have made it possible to overcome all of the challenges of chasing a dream. My siblings, Kimberly Broomhall, Elizabeth Wright, Keith VandenBroek, and Heather Banonis patiently listened to me endlessly work through research problems no matter how bored they were. My in-laws offered endless support as their son and I sacrificed and worked to reach this goal. From GVSU to Stockholm and back to Michigan, Kate Budzynski has been ever present with

encouragement, coffee and friendship. Finally, more than anyone, my partner, Nicholas VandenBroek has made this research possible by taking care of me in every way, making sacrifices, and always being nearby with unending patience, love, and encouragement.

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ANT	Actor-Network Theory
CEO	Chief Executive Officer
CFO	Chief Financial Officer
CIO	Chief (Information or Innovation) Officer
CPO	Chief Product Officer
CTO	Chief Technology Officer
IIS	Internetstiftelsen i Sverige (Internet Foundation of Sweden)
IPO	Initial Public Offer
KTH	Kungliga Tekniska Högskolan (Swedish Royal Institute of Technology)
SEK	Swedish Kronor
SL	Storstockholms Lokaltrafik (Greater Stockholm Public Transporation Agency)
SSE	Stockholm School of Economics
SSES	Stockholm School of Entrepreneurship
SthlmTech	Stockholm Tech (Pronunciation, Never Written)
SUP46	Startup People Sweden (46 is the International Phone Code for Sweden)
USD	United States Dollar
VC	Venture Capital or Venture Capitalist
WELL	Whole Earth 'Lectronic Link

Chapter 1.

A Guide to SthlmTech

> Filled with case studies, expert advice, insights, interviews, local tips and useful addresses, the Startup Guide Stockholm is essential reading for anyone interested in starting up a business, whether they're new to the city, new to the startup scene or seasoned business people starting again. Stockholm, Sweden's vibrant capital city and cultural epicenter, sprawls over fourteen islands on the Baltic Sea coastline. The city is not only rich with traditions, colorful architecture and history, it's also a world-leading startup hub and the beating heart of the Nordic tech scene.
>
> —Startup Guide Stockholm, Volume 2 (Back Cover)

The October after I returned home from Stockholm where I had spent a year studying the city's innovation ecosystem, I met with Elias, a Stockholm-based entrepreneur, on Skype. We had met at an event in Stockholm in May but were never able to meet in person for a formal interview due to the summer holidays. When he logged in, I recognized the wall behind him and said, "Ah! SUP46! I miss working there!" We laughed and chatted about the café and he asked about my time behind the glass doors where only co-working members of SUP46 (Startup People of Sweden) and their guests could go. After a few minutes of catching up, he held up a gray paperback book with the words "Startup Guide Stockholm" on the front in a hip brush typeface and said, "I just got to reading this. Have you got one yet?"

*Figure 1.1 The Startup Guide Stockholm (Volume 2) book and the free journal that came with it titled "Fall in Love (*with the problem).*"

By this point, I had encountered many guidebooks, infographics, reports, and other media promoting Stockholm's innovation ecosystem. However, I had not yet seen this one. So, I said, "Nope. Not that one. What did you think of it?" He talked about how well designed it was and all the people featured in it that he had seen speak at events or knew personally. Then he said, "This would have been quite handy when I was just starting out. Now it is a bit nostalgic, like a history lesson. But, it gives a really good idea of who the main players are and how the ecosystem works." He held up the table of contents for me to see and then ran through the list describing his interactions and his friends' interactions with the various people profiled. Later that day, he emailed me asking for my mailing address, "If you're going to write about Stockholm you need one of these. I'll have one shipped to you."

In hundreds of cities around the world[1]—like Palo Alto, Austin, London, Tel Aviv, Shanghai, and Nairobi—this form of entrepreneurship is supported by innovation ecosystems[2] built by coalitions of private and public organizations—influenced by Silicon Valley but rooted in— and preceded by—local histories and practices. These ecosystems are commonly comprised of (1) infrastructures for circulating resources and stories; (2) curated expert roles and organizations for guiding entrepreneurs through the ecosystem's curriculum; and (3) a revolving community of entrepreneurs and their startup ventures. This research is based on fieldwork in SthlmTech[3]—Stockholm, Sweden's innovation ecosystem. SthlmTech is most well known for being the second largest producer of billion-dollar startups per capita in the world. With startups valued over a billion-dollars (USD)—commonly called unicorns—like Skype, Spotify, King, Mojang, Oatly, MySQL, Northvolt, among others, Stockholm is regularly ranked as one of the most innovative places on Earth.

In my data management system, I've come to classify documents like *Startup Guide Stockholm* (Hansen and van Uden 2018) as guides. They vary widely in form and style including literal guidebooks, organizations' annual reports, news articles constructed from government press kits, infographics and maps, oral histories, and "just-so" origin stories. Each provide pathways for entrepreneurial (or entrepreneur adjacent) journeys. They are many and often contradictory as they reflect their authors' politics, networks, and ambitions. Yet, I have grouped them together for the particular way that they guide people and materials through, around, and into SthlmTech. Guides "show a way" or "lead the way"

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[1] StartupBlink, a Swiss research startup started by Eli David and Roderick Warren, began tracking ecosystems in 2015 and by the time it published its 2020 rankings and map they had capped their tracking to the top one hundred country and one thousand city-level active ecosystems globally (StartupBlink n.d.).

[2] These ecosystems are commonly called innovation, startup, or entrepreneurial ecosystems. I use innovation throughout the text to focus on the innovative aspirations and motivations of SthlmTech. However, SthlmTech was described using all of the above modifiers dependent on the context and speaker.

[3] Pronounced as Stockholm Tech.

toward a goal. Many guide entrepreneurs through SthlmTech on a journey to turn an idea into a business in the pursuit of "innovation." Others guide investors into SthlmTech to support its startups. Some guide the city's citizens around SthlmTech to show off its achievements and rally their political support. Some guide people to trades that are needed to keep SthlmTech running. During my early navigation of SthlmTech, these guides shaped my own journeys within the ecosystem, as I used their stories, lists, descriptions, profiles, and interviews to find people to cold email for my first few rounds of recruitment. I also organized my sampling method across the ecosystem using the emic categories that organized the guides—such as startups, venture capital, business angels, co-working spaces, meetups, and so on.

Like my interview with Elias described above, many of my interviews and casual encounters included unprompted appearances of guides—brought along for the interview, fished out of desks to illustrate a point, brought up on a phone screen to show me, or told to me like an epic tale. The guides acted as an easy device to demonstrate one's movement through the ecosystem, one's achievements, and one's current positions within it. Thus, these guides and their categories often hovered in my mind when listening to entrepreneurs tell the story of their journey from idea to startup as they moved through and around the many organizations that make up SthlmTech. As they went along, I found myself jotting down the common categories in the margins of my notes as their stories progressed.

Dominique Persson, a 20-something entrepreneur, became enthralled with programming after a friend demoed for her a simple program he had written and walked her through the code. This inspired her to enroll in the computer science program at KTH Royal Institute of Technology.

✓*Educational Institutions*

She then applied to a government-industry partnership program that offered internships to aspiring technology entrepreneurs and obtained a position at Spotify, one of SthlmTech's most well-known billion-dollar unicorn startups.

✓*Government*
✓*Unicorn.*

Around this time, Dominique got the idea for her startup when she sought to purchase a pair of earrings that would not affect her severe nickel allergy. She was, in her words, "ballin' on a budget" as a student and so wanted to try them on in order to be sure of these expensive purchases. Unfortunately, this was not possible due to hygiene regulations. This experience combined with her experiences working at one of Stockholm's most successful unicorn startups, spurred her to build a business around software that allows customers to digitally try on products that were otherwise impossible to try on.

✓*Entrepreneur/Founder*
✓*Unicorn*
✓*Startup*

Figure 1.2 Photograph of Dominique Persson in attendance at my meetup "Thinking Through Futures" at GoTo 10.

When I first met Dominique, she was investigating ways of funding this startup at an event by the Stockholm Entrepreneurs Meetup group at the Norrsken Foundation's co-working

space Norrsken House. The event was hosted by its founder, entrepreneur evangelist Peter Fosso.

✓*Coworking Space*
✓*Meetup*
✓*Evangelist*

The meetup featured presentations and a panel discussion where we learned from and networked with people from various funding organizations and listened to three pitches that were evaluated by the funder panel.

✓*Venture Capital*
✓*Business Angel*
✓*Incubator*
✓*Pitch*

As an anthropologist, these guides are valuable as snapshot photographs that capture SthlmTech at a specific moment in time and from a particular situated position. Each guide reflects the authors' and their parent organizations' place in the many overlapping networks of SthlmTech and the politics, histories, and sociality that emerge at their intersections. That is, these guides are each a collection of "situated knowledge" (Haraway 1988). In seeking a feminist alternative from the absolute objectivity espoused by scientism and the radical subjectivity of postmodern social constructivism, Donna Haraway proposed a view of knowledge as partial, situated, and embodied. Rather than seeking to represent a universal position from which to make "rational knowledge claims," she instead proposed building such claims from a bricolage of multiple partial positions that are each understood as a particular "view from a body, always a complex, contradictory, structuring and structured body" (1988, 589). For SthlmTech's guides, this means not simply accepting each as simple descriptions of the ecosystem. Rather, in analysis, I have situated each within the bodies, organizations, materialities, politics, and histories that shape them. If a guide is like a photograph, then to understand it as situated knowledge one must contextualize the photograph with the camera that took it, the algorithms that processed the digital image, the body that held the device, the eye that looked through the lens, the person who chose

where to point it, that person's affiliations, aspirations, and obligations, and so on. As Haraway explained, there are no unmediated perspectives; "there are only highly specific visual possibilities, each with a wonderfully detailed, active, partial way of organizing worlds" (1988, 583).

This Guide

Immersed in guides from elegantly designed print guidebooks to the guiding rituals of hype-filled meetups, I found myself documenting my observations in terms of who is guided, who guides, how guidance is produced and practiced, and along what pathways and toward what ends SthlmTech's guides lead. Although this dissertation is filled with the stories of entrepreneurs, this is not an ethnography of entrepreneurs. An entrepreneur is not a person, or more specifically not a whole person; it is a role a person takes up and an identity a person wields and performs. Unlike other, more stable career paths and crafts, people's appropriation of the entrepreneur role and identity is fleeting, contingent, and capricious—taken up when useful or salient and abandoned or deemphasized when inconvenient—and almost always subservient to the needs of the venture. Thus, an ethnography of entrepreneurs would be difficult to capture, as its human subjects are not stable but always in a process of and under the ambition of becoming something else. Even the serial entrepreneur—who is defined by continually building startups—is not stable, as each new venture they adopt requires a new entrepreneur with new devotions, new aspirations, and new stories. Faced with the transience of entrepreneurs, I instead looked to guides to provide stability to this project's subject.

Imagine a field of grass where each entrepreneurs' journey is a walk across it. One could attempt to focus on the chaotic movement of entrepreneurs—where they entered, where they walked, where they ran, and where they exited—or one could focus on the field itself. While individual entrepreneurs may go anywhere in the field and many explore and improvise within their journeys, attention to the grassy field reveals the places where the

grass has returned to dirt from the repeated footfalls of entrepreneurs. One may notice paths with sturdy and visible barriers blocking easy access to the grass on either side. While in other areas, one may notice well-trodden paths across seemingly unfettered open space or frequented areas with no defined paths at all. For this project, I chose to focus on the field, how entrepreneurs were guided across it, and how that guidance shaped their journeys and outcomes. Specifically, it is an anthropological guidebook of SthlmTech—a guided tour of the field. But, rather than guide one on a journey to build a startup or invest in one, I seek to guide the reader to reflect on the pathways and how they came to exist and what guides them—especially those areas of the path where guiderails are taken-for-granted as natural or invisible and assumed not to exist.

The questions that have driven this research and thus have shaped this guide emerged in collaboration with the people I worked with in SthlmTech. This happened partially because the research question that was at the center of my PhD prospectus and research funding applications was based on planned fieldwork that unraveled as I arrived in Stockholm causing my actual fieldwork to be more improvised than intended. However, more influentially, my original research question was far broader and less urgent than the questions that preoccupied the people I was working with in SthlmTech. The questions that preoccupied them were more commonly focused first on their anxieties about the future: "Can the future be made better than we anticipate?" Second, they focused on their ambition to work toward a better future: "How can I make the future better?" And, third, they were concerned with the impacts—both positive and negative—of their labors to do so: "Is what I am doing having the impact I intended and what can I do to be more positively impactful?"

SthlmTech taps into these anxieties and ambitions by promising better futures generated by the guided path of innovation taken by entrepreneurs. With hype and unicorns, they tell stories of change, impact, and possibility. They tell stories of better futures generated by innovators with bold ideas and the resources to grow them. They illuminated accessible pathways with signs and helpers to guide them. These compelling

discourses answered the first two questions emphatically as yes and through innovation. Yet, my research found growing discontent with the ecosystem's curriculum as the change entrepreneurs were seeking became lost or diminished along the way. Entrepreneurs, and many other ecosystem stakeholders, held growing concerns about innovation's promise. However, SthlmTech lacked a venue for these kinds of reflexive and critical discussions leaving them fragmented and scattered. These concerns led me to ask: (1) What is innovation? (2) How does SthlmTech guide innovation? And, (3) does SthlmTech lead to the innovations it promises?

This guidebook will guide you through SthlmTech and along the way unsettle the path of innovation it prescribes. This is not a guide to belittle the ambitions of entrepreneurs or the other stakeholders of SthlmTech. Rather, I seek to provide anthropological insights into the questions that most concern them and that I am aligned with: can the future be better, what can we do to make it so, and are our efforts thus far positively contributing to that goal? As an academic it would be too easy to set myself apart from the people I worked with in SthlmTech with theory and critique that imagines the possibility of a utopian world—beyond capitalism and beyond the reach of neoliberalism, fascism, and other systems of oppression. However, from that position, any person's choice to engage in capitalist and neoliberal systems—particularly one as iconic as entrepreneurialism—can only be seen as either malicious or deluded. Instead, I have chosen to approach this project under the assumption that the entrepreneurs I worked with can no more escape the ills of our social structures than I can. Just as I have sought research, education, and teaching to undo these ills within the deeply problematic systems of academia that are themselves embedded within, and built from neoliberal capitalism, white supremacy, classism, sexism and other regimes of discrimination, the people of SthlmTech are seeking to build better futures for themselves and others using the skills and resources that are available to them.

The people that appear in this guidebook are not villains to be called out and corrected or sycophants to be saved from their delusions. Rather, they are collaborators who considered these issues alongside me and who, independent of this project, are concerned with and are actively working on these issues themselves. We did not always agree and I am certain that there are arguments and observations that appear in this guidebook that some of them will disagree with. However, I do not view them as antagonists to my anthropological heroine. Rather, I see our projects as parallel and in conversation. My approach is not to let entrepreneurs speak through my work with my critique and theoretical insights hovering above them but one of "lateral reasoning" (Maurer 2011) where my epistemic work is alongside theirs, offering insights from my own situated position and engaging with theirs.

The people that appear in this guidebook are not equivalent to the sample of people that participated in my fieldwork. I interviewed fifty-seven people and talked to, networked with, read about, listened to, and hung out with countless more as I moved through the ecosystem. Only a handful are profiled in this guide and others are only mentioned or quoted in passing. Like the guides that inspired this one, there were decisions made on whom to include and whom to exclude. While most guides made these decisions based on how best to promote SthlmTech or its various organizations and services, mine were driven by two criteria: first, protecting the privacy of individuals as they requested and second, how their stories could be used to illustrate my broader observations. During the informed consent process, I gave each participant the option of how they would like me to protect their privacy. The in-depth profiles included in this guide are all of people who asked that I use their real names and stories. This allowed me to tell more compelling and detailed stories without fear of deanonymizing individuals who wished to participate anonymously. This means, however, that these profiles by their nature are defined by the privilege of those profiled, as these individuals did not fear consequences for sharing their stories. This lack of fear was driven by a combination of the individual's security and power within SthlmTech

and what stories they chose to share with me—differently weighted depending on their particular situation. I have supplemented these profiles with quotations and insights from other participants to demonstrate common experiences and to contrast uncommon ones.

Any person introduced by both first and last name in the guide is not anonymous. Any person introduced by first name only has been anonymized with a pseudonym and by the removal of identifying details. Some individuals may appear under both their real name and a pseudonym or under multiple pseudonyms in order to protect their privacy as requested. However, there are no composite pseudonyms where multiple people are portrayed as a single person. All pseudonyms were chosen at random from Swedish baby name websites regardless of the individuals' ethnicity and citizenship. Naming was not used to convey ethnicity primarily to protect privacy. When relevant and safe to do so, ethnicity or citizenship is explicitly stated. Pseudonyms did respect individuals' choice of gender expression (i.e., masculine, feminine, or neither).

Innovation Culture

During my time in SthlmTech, I asked a lot of questions about innovation—its meaning, nature, variations, and contrasts. At first, my questions seemed strange to the people of SthlmTech—as one interviewee asked, "Is this entire interview going to be a vocabulary lesson?" This sentiment was rooted in the perception that innovation was an obvious concept with a common, natural, and constant meaning that had merely become an overused buzzword.

As an anthropologist, I knew that meanings do not simply exist as properties of words but are rather continually constructed through social meaning making practices. So, from my perspective, innovation's meaning could never be natural or constant. By asking these "vocabulary" questions, I sought to lead the people I spoke with to the same conclusion. That is, innovation is not simply a word with a definition but an idea with many meanings, attachments, complicities, and roles within SthlmTech.

From these conversations, I have developed the concept of innovation culture to describe how this ambiguity was mobilized for the acceleration, optimization and maximization of venture capitalist forms of entrepreneurship. In short, innovation culture is an informal strategy that collapses, and with a sleight of hand, slips seamless between different meanings of innovation to covertly—and often unconsciously—direct the ambitions, concerns, practices, and allegiances of entrepreneurs toward supporting the needs and aims of other ecosystem stakeholders, particularly powerful individuals and gate keepers like venture capital investors, evangelists, and state actors.

To explain how innovation culture works, I present the following seemingly nonsensical sentence that showcases the three most common forms of innovation that I observed in SthlmTech.

> *We will bring about innovation by creating an innovation—that's innovation.*

The second instance of innovation in the sentence is what I am calling innovation-as-invention. Innovation-as-invention is the technical and material production of novel businesses, products, services, designs, and markets. The first instance of innovation is innovation-as-change, meaning the ongoing and always emerging process of change within social life via shifts in social practice, meaning, or relations. The third instance is innovation-as-promise. Innovation-as-promise is a performative discourse of foresight and hope combined with a prescription for enacting those futures through invention and entrepreneurship. By swapping out innovation in the sentence for these synonyms, the multivocality of the word is plain to observe.

> *We will bring about social change by creating an invention—that's entrepreneurship's promise.*

Despite the clarity in this specific sentence, innovation culture thrives when the distinction becomes unclear or even invisible. For example, when the Swedish government published its "Innovation Strategy," which innovation was being referred to and having substantial resources dedicated to it? When a venture capitalist declared on the stage of the SthlmTech

meetup that he only invests in innovative startups, which meaning was driving his evaluative and investment processes? This ambiguity allows people to leverage the ambitions and hope that innovation inspires without being obligated to the specific outcomes, responsibilities, or practices that their underlying meanings imply.

Innovation culture, however, is not a nefarious plot propelled by shadowy figures. Rather, it is an outcome of how innovation ecosystems emerge and settle along lines of power—including control over resources and capital; skills in persuasion and rhetoric; and authority over knowledge and circulation. Exacerbating this emergent phenomenon is an overwhelming sense of urgency within the community to "get things done" that left little space for critical reflection in popular and public conversations. I met no one in SthlmTech motivated by wealth, fame, or power—but rather people who were driven by their desire to make some aspect of life better in small or big ways. These desires and the urgency behind them left little room to ponder the ecosystem's structural deficiencies. Instead, they were perceived as inevitable obstacles to negotiate with, navigate around, or undermine—but too entrenched to dismantle given the time and energies this would require and subtract from their own urgent work. Thus, the utility of naming and describing innovation culture is in the ways that doing so generates vocabulary and frameworks for discussing and recognizing it and its roles in innovation ecosystems—rather than for the callout potential of shaming those who must navigate it as they seek wellbeing for themselves and others.

In Part I of this guide, I will describe the context of this research and set the stage for the remainder of the text. This section covers the background and history of innovation ecosystems, startups and entrepreneurs generally and in SthlmTech specifically. This section also includes a further discussion of my approach to this research via multisited and collaborative methodologies.

Part II of this guide is an exploration of innovation-as-invention. Through discussions of meetups, evangelists, and angels, I will demonstrate how innovation-as-invention is generated through the entrepreneurial curriculum of SthlmTech. Part III covers

innovation-as-promise by exploring the role of hype, foresight, storytelling, and facts among venture capitalists, the state, and users of the ecosystem's hashtag. Part IV, first, describes the ways that innovation-as-change is used to sandbox innovation and excuse failure. Second, I present how new ways of thinking about innovation-as-change among entrepreneurs is creating space for new practices and collaborations. Finally, in the final chapter, I conclude the text with a reflection on innovation culture, a manifesto for a new innovation ecosystem, and a call for innovative anthropology.

Part I.

Setting the Stage

The city of Stockholm is an archipelago consisting of fourteen islands situated in Lake Mälaren where the lake meets the Baltic Sea. In most areas of the city, water is never far away. The sounds and smell of its brackish water were a constant backdrop to my time in the city and enjoying time walking along the many boardwalks was a favorite activity of mine. I lived just outside of the city on Lidingö island just up a hill from the Käppala station for the 21 train. Everyone told me it was a posh area and I was informed more than once that I lived on the same island as a member of the band ABBA. My studio apartment, while cozy and lovely, was not posh and rather reflected what I could afford to rent in the city on my modest fellowship.

At the time, it was the cheapest rental I could find that I could easily rent without a *personnummer* (Swedish identity number), which took me a month to acquire after arriving. Stockholm like many cities was experiencing a prolonged housing crisis—heavily exacerbated by the booming growth of the business community's demand for employees and founders—that made it nearly impossible to find first-hand leases. The Stockholm housing agency's (Bostadsförmedlingen) waiting list was, at the time I arrived in August 2017, a record 578,366 people and ten to twenty years long depending on city district (The Local 2017). Complaints about housing were frequent around SthlmTech especially for those actively recruiting employees who worried that high rents, long waiting lists, or commutes from the suburbs would discourage people from applying. "Solving" the housing crisis was a commonly discussed "opportunity" for innovation's attentions.

The city is divided into fourteen districts that do not correspond to its islands. Each district has its own character, architectural style, and reputation. During my time in Stockholm, I visited all of its districts while attending events, dinner parties, meetups, visiting offices, shops and museums, and on walks with friends and interlocutors or on my own. Each's atmosphere and attitude was reflected in the organizations that inhabited them. Like many Stockholmers, I did not navigate the city via a car. Rather, I walked; rode trains, buses, and ferries; and occasional borrowed a bike from the woman I rented from.

My time in Stockholm took me across the city to visit many offices, coworking spaces and other locations, such as SUP46, Slottet (The Castle), the Internet Foundation of Sweden and GoTo 10, Embassy House, Epicenter, Google Stockholm, KTH Royal Institute of Technology, Norrsken House, Open Lab, Sting, the Swedish Institute, the Stockholm School of Entrepreneurship, The Park, White Arkitekter, among others. My days navigating SthlmTech were defined by train rides, waiting in lobbies for meetings, touring offices, working in coworking spaces, and meeting for *fika* at cafés—especially Il Café on Drottninggaten and Drop Coffee and Coffice in Södermalm. When I was not meeting with SthlmTech's entrepreneurs and other stakeholders, I spent my time in coworking spaces with a sign taped to the back of my laptop explaining I was an anthropologist studying SthlmTech and inviting anyone to say "*Hej*!" I found the sign to be much more effective than accosting strangers to ask about their startups and had many fruitful conversations that began with a gesture at my sign and a question about my research or occasionally about what an anthropologist was.

My meetings were usually scheduled in advance over email and almost always involved a cup of coffee. Fika, a break to enjoy a cup of coffee, is a Swedish tradition. In the US, I was accustomed to grabbing my thermos of coffee in the morning and drinking it on the go, filling it up at coffee shops whenever I could. In Sweden, coffee was not something to be guzzled in haste while traveling. It was to be enjoyed slowly over good conversation, with a book, or while casually working in a café. So, most of my meetings began with standing in line to get coffee at a café or heading to the office coffee maker to grab a mug. The ubiquitous and frequent practice of fika meetings, made it easy to transition to casual interview conversations even when sitting in a board room. Not all of my interviews were conducted with such generous conditions. The busy schedules of the people I met with meant that conversations were squeezed into other activities, like walking to grab lunch, walking to the train at the end of an event, or running errands.

In the end, I spent twelve months "in the field." During this time, I attended fifty-one startup, tech, and entrepreneur focused events, conferences, and meetups; recorded fifty-seven formal interviews; collected 268 documents and website captures; spent three days a week for forty-eight weeks working in coworking spaces resulting in approximately 1,200 hours of participant-observation; and arranged and hosted a meetup. Through these activities, I collected data on thirty-one events organizations, seventy-nine startups, five incubators, eight coworking spaces and hubs, eleven education & research organizations, nine state agencies, three city agencies, five angels, twenty-three venture capital firms, nine unicorns, thirty corporations active in SthlmTech, and one awards and recognition foundation. Of these, I spent the bulk of my time with three events organizations, twelve startups, one incubator, three coworking spaces, one education organization, one state agency, one city agency, one angel, two venture capital firms, and one corporation.

Chapter 2.

Innovation Ecosystems

Business and economics literatures that span research on clusters, innovation systems, economic geography, social capital, and startup networks have produced many definitions of innovation, startup, technology, and entrepreneurial ecosystems that overlap only superficially, agreeing only that there are "certain attributes [that] exist outside the boundaries of a firm but within a region that contribute to the competitiveness of a new venture" (Spigel 2017, 51). Among the entrepreneurs and other stakeholders I spoke with, I found no more robust definitions with broad agreement. Even the ecosystem modifier (e.g., innovation, startup, technology, etc.) fluctuated by speaker and context with little differentiation, rendering them synonyms in most instances.

In describing the ecosystem, entrepreneurs focused on the financial, material, and intellectual assistance they receive within the geographic area. State employees and politicians focused on jobs, economic growth, smart city infrastructure, the social impacts of imagined future innovations, and the so-called "cultural" features of Sweden that promote innovation. Investors focused on their personal financial stakes in startups as well as on the impacts both social and financial that could be made locally and globally through rapid scaling of the production and consumption of technologies and their associated services.

Wikipedia defines a "startup ecosystem" as "formed by people, startups in their various stages, and various types of organizations in a location (physical or virtual), interacting as a system to create and scale new startup companies" (Wikipedia contributors 2019a). As a crowdsourced encyclopedia, Wikipedia is often a taken-for-granted standard of general consensus—although it is far from it (Jemielniak 2014). This particular taken-for-

granted definition—like all those I have encountered—reflect a situated position (Haraway 1988) that provides only a partial definition with caveats, emphases, and specificities that reflect the mandates, ambitions, or missions of those doing the defining. The Wikipedia entry was not created by a diverse, anonymous collective of Wikipedia contributors, as one often imagines when reading Wikipedia entries. Rather, this entry began as a project of Startup Commons ("Understanding Startup Ecosystems" 2014), who two years later turned the Wikipedia entry into a white paper that can be downloaded from their website in exchange for one's email address (Startup Commons 2016). Grow VC Group, Startup Common's parent organization, is "not a traditional venture capital company," ("Grow VC Group" 2019) however, their primary model of innovation is nearly indistinguishable from traditional VC: they invest in startup businesses and help them scale-up in order to profit from their exits. Thus, it is unsurprising to find that this organization's definition uses the "startup" modifier and explicitly includes the mission to "create *and scale* new startup companies" (Wikipedia contributors 2019a, emphasis added).

I have built my description of SthlmTech through the many and diverse descriptions of it. I begin with the premise that SthlmTech is not stable, singular, or simply "out there" to be passively and objectively observed. Rather, I argue, innovation ecosystems are dynamic and unruly assemblages of people, organizations, policies, infrastructures, values, discourses, and histories. So, instead of seeking to produce an objective definition of innovation ecosystems or description of SthlmTech, I have sought to capture and produce many partial descriptions, treating each as situated knowledge—like the brief Wikipedia example above—so as to learn from the social, material and political circumstances from which each emerges. In this way, SthlmTech is not only a place, a collection of organizations, a set of resources, an infrastructure, a history, an imagined future, an aspiration, a plan, a solution, or a "cursed ideology"—as one entrepreneur called it. But, it is all of these things and more.

Innovation ecosystems are fundamentally tied to place and seem from the outside to be coherent collections of people and organizations. The most well-known is, of course, Silicon Valley, located in the Santa Clara Valley between San Francisco and San Jose, California. Likewise, other ecosystems are defined by the city or region they reside in, such as London, Tel Aviv, New York, Shanghai, and Los Angeles. Within SthlmTech—and generally within the discourses of the ecosystem tracking, research and promotion—these "places" are generally seen as relatively stable, uncontested, and singular.

However, I am inclined to approach this place-ness though an anthropological lens, understanding that the physical space that is occupied by human activity is not to be taken for granted as the simple location of that activity (Low 2009). Rather, places—like cities, neighborhoods, innovation ecosystems, or fieldsites—are socially constructed, meaning that they are not *a priori* facts about a physical space but rather are made meaningful through the social acts of people. The making of a place must then necessarily be understood as caught up in the politics of its makers and is specific to the people and time of its making, ensuring that place is ever changing with social life (Rodman 1992). In the case of SthlmTech, this means that the ecosystem cannot be stable, uncontested or singular. The place-ness of SthlmTech is always changing and being contested as many stakeholders, infrastructures, policies, and discourses make claims to it. And, although SthlmTech is perceived as a singular place, these many, ongoing, simultaneous projects of its making mean that it can only ever be multiple.

In my research, I indeed found multiple overlapping ecosystems in Stockholm created through collaborations, affinities, and shared resources. The most commonly referenced was formed through the shared efforts of KTH Innovation, a department within KTH Royal Institute of Technology responsible for promoting "innovation" and entrepreneurship, headed by Lisa Ericsson, Sting headed by Pär Hedberg, STHLM Tech Meetup headed by Tyler Crowley, and the founding of SUP46. However, other lineages such as the formation of Kista north of the city as an entrepreneurial hub was grown from the

efforts of several of Sweden's largest corporations, notably Ericsson. Around the periphery, smaller and emerging networks created other "ecosystems," such as the one formed by the Internet Foundation of Sweden, its coworking space GoTo 10, and collaborators like Foo Café.

Ecosystem Categories

In guides, ecosystems are organized around specific categories of organizations and experts or "players" (see Table 2.1). For most of the people that I spoke to in SthlmTech, their conception of the ecosystem was merely this collection of organizations and experts.

Table 2.1 List of common ecosystem categories.

Type	Category	Description
Funding	Angels	Equity-based investors who invest their private funds, usually but not always at the seed level and often in networks with other angels.
Funding	Banks	Traditional business lenders.
Funding	Corporate Investors	Corporations that maintain funds for investments in businesses.
Funding	Seed Funding	Investment firms, grants, or individuals that specialize in the initial funding of a startup.
Funding	Venture Capital	Equity-based investment firms that invest other people's money that has been organized into a fund.
Promotion	Evangelists	Event hosts, social media influencers, "success stories," diplomats, and others dedicated to promotion.
Promotion	Media	News outlets, bloggers, and podcasters who publish media.
Promotion	Unicorns	Startups that have reached a billion dollar (USD) valuation prior to exiting and whose employees act as mentors, evangelists, and investors.
Promotion	Events & Meetups	Meetups, conferences, showcases, competitions, matchingmaking, and other events.
Support	Accelerators	Training programs aimed at growing an existing business.

Type	Category	Description
Support	Business Infrastructure	Organizations that provide support for business needs (e.g. offices, HR, talent recruitment, etc.)
Support	Coworking Spaces	Office or desk rental space shared with multiple startups.
Support	Education & Training Centers	Universities, colleges, schools, makerspaces, and training centers.
Support	Government	Public agencies that support the ecosystem with funding, promotion, training, or regulation.
Support	Hubs	Multiuse spaces that combine event hosting, coworking, and other programs.
Support	Incubators	Training programs aimed at transitioning from idea to investment ready business.
Support	Talent Pools	Universities or large corporations that educate, train, or generate experience for potential employees.

These categories were unstable as organizations frequently "re-defined what it means to be…" a particular category or re-defined themselves in order to exceed the expectations of the community. The CEO of SUP46 at the time of my fieldwork, Daniel Sonesson, used this tactic during our first meeting to explain that SUP46 was not a coworking space but rather a new category within SthlmTech, a hub—despite its nearly ubiquitous appearance in guides' coworking space sections, even those where SUP46 was a partner in its development.

> We are a startup hub, we are not a coworking space. That is something completely different and that sometimes people have problems with defining what that really is. And by meaning a startup hub, I refer to the fact that we are a home for connecting the most promising high tech startups with global scalability, ambition and potential—both ambition or potential are important—with the right people, we are helping them to grow, we are providing them with an opportunity and a competitive advantage to grow their company quicker. That is what we do.

This was not an inaccurate description of SUP46. During my time in Stockholm, I experienced SUP46 as a coworking space occupied by entrepreneur interlocutors, as a café where I worked, conducted interviews and had many fikas, as an event venue, as an educational facility, as a financial sponsor of other events and organizations, and its

founders, leaders, alumni, and members were entrepreneurs, startups, evangelists, unicorns, and so on. Either through reinvention or through practice, organizations frequently occupied space across multiple categories and the people that inhabited them far exceeded the definitions put upon them.

Additionally, the mandates, desires, motivations, politics, and expertise of the people and organizations that occupy these categories, far exceed what each category is for or even what most imagined the ecosystem itself was for. Isadora Hellegren, the project leader responsible for the coworking space GoTo 10, particularly felt the pull of differing mandates and goals. GoTo 10 like many coworking spaces had a members-only workspace, a public workspace, café, and event spaces. However, unlike many other co-working spaces, GoTo 10 was not a business aimed to profit from office space rentals, but a project of the Internetstiftelsen i Sverige (IIS, Internet Foundation of Sweden). Isadora was employed by IIS whose mission is to support a free and open internet and to manage Sweden's top-level domains .se and .nu. She managed GoTo 10 to support this mission by offering services meant to encourage projects that "will have a positive impact on the development of the internet or internet usage in Sweden" (GoTo 10 n.d.). However, as Isadora explained to me, the different mandates and goals of these organizations and their overlaps with multiple "ecosystems" in Stockholm complicate their simple classification as a coworking space in the SthlmTech ecosystem:

> Although GoTo10 is an initiative of the Foundation, they have different roles to play in this ecosystem. The Internet Foundation is a kind of solid foundation—private and independent—working very clearly toward a stable, secure, and open internet that is safe. [...] GoTo10 is just the platform for anyone to step on, to step up on, or to take up space and the foundation is not. It is very different. [...] GoTo10 is also part of the ecosystem of the coworking spaces. There's the startup world that's a whole world itself. [...] But, it is also supposed to be this portal to the other worlds. So, that we can open up exactly that dialogue between that world and the ones outside of it. So, we are trying right now to position ourselves right now in this ecosystem—or many of the ecosystems— [...] where people might want to come to get deeper knowledge or to have discussions about things—the tricky questions—that you might not be able to have in a certain building because it belongs to someone or certain other buildings because it belongs to someone else. [...] Then you can have it here. It's neutral, in that sense.

GoTo 10 was not unique in its commitments beyond SthlmTech and it was not alone in having its own motivations for participating within it. Entrepreneurs seeking to fight global climate change did not have the same goals and motivations as venture capitalists who have a fiduciary responsibility to grow their fund and government organizations seeking to build Stockholm and Sweden's economic power and reputation did not have the same concerns of the SthlmTech leadership who penned Stockholm's Startup Manifestos (Lidne et al. 2015, 2018). Although these categories of people and organizations are useful for grasping the surface level emic perspectives of the ecosystem and for initial navigation through it, it fails to capture the complexity of its functioning in practice.

It was tempting to imagine the ecosystem as a list of players each fitting neatly into categories that fulfill the specific needs of entrepreneurs. During a Skype call with Lisa Ericsson, founder of KTH Innovation, the department at KTH responsible for encouraging and providing support for entrepreneurship among the university's students and faculty, I asked, "What do you think an ecosystem is?" and she replied:

> I think for me it means that...the different players or entities... It is a good question, I've not really thought about this. It is just something that you say, 'This is our ecosystem.' And, usually it is just the map of the different players: the incubators, the funding agency, the innovation support department.

However, asking if it was "really that simple" or even just allowing a few moments of silence after answers like these often led to a more nuanced or conflicted response. With Lisa, who has spent many years building, supporting, and thinking about SthlmTech and how to support researchers within it, only a short pause gave her space to rethink her answer. She continued,

> But, I really think that it is actually more than that. It isn't just the list of the different players. It's a lot about what happens in-between and also a lot of the connections and collaborations and how they kind of co-create.

The people I talked to generally concluded after challenging them to reflect on their descriptions that breaking the ecosystem down to its constituent experts and organizations was not sufficient for capturing what the ecosystem is or what it does. These lists could not

account for what people in the ecosystem called “the secret sauce,” “the magic,” or the “in-between” that made SthlmTech different than other ecosystems and led to innovations.

Beyond Silicon Valley

> It has to do with history and identity. Early on when we started this work, people were saying Silicon Vikings, Silicon This, Silicon That. Right? It was sort of coming off of this Silicon Valley concept. So, we shifted that: We don't want to be the next Silicon Valley. We want to be the best possible Stockholm that we can be. Silicon Valley is the way it is for a very specific story. It is a unique story. [...] That is a story that is very unique to that geographic area. You can't replicate that. You shouldn't even try to replicate that. So, we shifted that around and said, 'What's Stockholm's story? What's Sweden's story?' and now that's interesting and so we built off of that. We wanted to be the very best Stockholm we could be and we have a very fascinating story that involves innovation and technology all the way back to Alfred Nobel.

William, a former government employee who worked on early ecosystem development projects, was here describing to me a common sentiment: SthlmTech is not Silicon Valley and neither is it the Silicon Valley of Sweden, even if it is often referred to as such in media. In order to understand SthlmTech I was told, one must recognize its rootedness within Stockholm specifically and Sweden generally. Innovation ecosystems are often popularly portrayed as communities with little or no entrepreneurship that were transformed via a flurry of policy writing, infrastructure building, marketing, and diplomacy into a replica of Silicon Valley—usually with some stereotypical flare from the region like “Silicon Valley but with fikas!” However, the discussions of Silicon names was not the beginning of SthlmTech but a late effort to name an already present phenomenon. When the name SthlmTech took root with the creation of the #SthlmTech hashtag in 2013, Stockholm was already home to many initiatives, projects, and organizations that had been defining and building the ecosystem for more than a decade and were built on a long history that came from within and directly shaped SthlmTech more so than California. Although Silicon Valley was certainly and still is an inspiration for many of SthlmTech’s developments, one cannot ignore the far more foundational local experimentation and place making efforts over time by the communities in Stockholm.

SthlmTech is often referred to in popular media as the "Silicon Valley of the Nordics." However, as William stated above, this was not the intention of its early advocates neither is it reflective of its history nor the people who operate within it. The imagined diffusion of Silicon Valley globally as copy and pasted ecosystems ignores both the specificities of local experimentation and labor leading to the founding of an ecosystem and the impossibility of recreating the outcomes of a specific time and place through simplified models.

In an unassuming garage at 367 Addison Avenue in Palo Alto, California, Hewlett-Packard was born and gave rise to a culture of innovation and investment in technology within the Bay Area called Silicon Valley—or so the story is told. A few months after returning from fieldwork in Stockholm, I visited this garage as part of a larger tour of Silicon Valley. In front of the house is a National Register of Historic Places plaque that reads,

> This garage is the birthplace of the world's first high-technology region, "Silicon Valley." The idea for such a region originated with Dr. Frederick Terman, a Stanford University professor who encouraged his students to start up their own electronics companies in the area instead of joining established firms in the East. The first two students to follow his advice were William R. Hewlett and David Packard, who in 1938 began developing their first product, an audio oscillator, in this garage.

Beyond encouraging his students, in 1953 the Stanford University professor, dean of engineering, and provost, organized the construction of the first space dedicated to what would become Silicon Valley: the Stanford Industrial Park. Terman sought to strengthen the bond between industry and higher education and used the Stanford Industrial Park to bring these parties together. This industry-academia bond became known as the Terman model.

Terman's successes led to cities seeking to replicate the regional growth seen in the Bay Area. Prominently, in the 1960s, Terman was hired to consult with business groups in New Jersey and Texas to build similar ecosystems. The New Jersey and Texas projects failed as did many other Silicon places that sought to transplant the Terman Silicon Valley recipe. They failed to take into account the specific socioeconomic circumstances of the region combined with the substantial military investment in Stanford University and the region during the early Cold War (Leslie and Kargon 1996). The desire of other localities to copy the

Terman-model of Silicon Valley in the 1960s through the 1990s suffered from their failure to engage the dynamic systems and local histories from which Silicon Valley emerged and the gap between these and their own local particularities.

Figure 2.1 The house and garage known as "The Birthplace of Silicon Valley" where Hewlett-Packard was founded.

The Terman model has largely receded because of these failures. However, startup ecosystems are plentiful today. In 2012, JF Gauthier and Marc Penzel founded Startup

Genome, a startup that aims to research ecosystems globally and provide "data-driven insights" and consultations to support ecosystem growth and development (Startup Genome 2019). As of 2020, they track ecosystems, including SthlmTech, across 170 countries (Startup Genome 2020). StartupBlink, a Swiss research startup started by Eli David and Roderick Warren, began tracking ecosystems in 2015 and by the time they published its 2020 rankings and map, they had capped its tracking to one hundred country-level and one thousand city-level ecosystems (StartupBlink n.d.). Between the failures of the Terman-model for development of ecosystems and the rapid proliferation of ecosystems today, innovation ecosystem development has shifted from one where Silicon Valley is abstracted as a model to be transplanted to one where local socioeconomic experiments are more inspired by than directly modeled after Silicon Valley (Kelman 2018; Irani 2019; Pfeilstetter 2017). It is under this trend of ecosystem development that SthlmTech was gathered, expanded, named, and presented as an ecosystem.

By starting with the argument that SthlmTech is not a Silicon Valley of X, I do so to acknowledge the great differences between the Bay Area of California and Stockholm and how this has dramatically affected the experiences of SthlmTech's entrepreneurs and other affiliated actors as well as how the ecosystem emerged in its current form. The most striking difference between the development of Silicon Valley and SthlmTech is the sociopolitical environment in which each was grown. While Silicon Valley has flourished amid deregulation, union-busting, tax animosity, and scarce and unpopular social welfare programs, SthlmTech grew from within Sweden and the EU's stricter market regulations, strong labor support, high taxes and support for them (Björklund Larsen 2018), and generous social welfare programs. Silicon Valley's "story," as William called it, is deeply embedded in the ethos of bootstrapping, risk-taking, entrepreneurial heroes that its environment demanded. SthlmTech, without the individualized precarity caused by U.S. policies and values, built its story on a different kind of entrepreneurial hero who, freed from the worries of subsistence, could tap into a supposedly innate creativity and innovative potential,

turning the Silicon Valley entrepreneur—and along with him the Silicon Valley myth of innovation's risk-taking requirements—on his head. Although the veneer of many entrepreneurial myths and values appear similar to those of Silicon Valley across these ecosystems, these are rarely direct transplants but rather the nexus of convergent evolution and hybridization (Irani 2019, 80). By examining SthlmTech in terms of the specificity of its history and context alongside the greater flows of people, technology, media, and ideology globally, I am decentering Silicon Valley as the authority on contemporary entrepreneurship and the values that surround it so that we may learn from alternative approaches like those presented here.

Chapter 3.

Startups & Entrepreneurs

Becoming an entrepreneur is "stupidly simple," Lana, a long-time entrepreneurial coach at one of Stockholm's incubators, explained to me:

> I mean, it is almost too easy. You want to be a startup founder? This is what you do: come up with an idea, get permits and register with the government, find funding—which is also stupidly simple to get around here—and BOOM [*she yells and gestures an explosion with her hands*] you're an entrepreneur. Who knows if you're a good one. But you are one. That's it. That is all it takes.

"Let's do it, shall we? Off the top of your head, do you have an idea?" Lana asked me. Early on in fieldwork, I found that having such an idea ready was helpful for attending workshops and discussions with mentors and educators. So, I gave her my elevator pitch based on the application I made for collaborative data analysis and management for this project.

> Inexpensive and flexible qualitative analysis software that fills two gaps in the market. One, built for collaboration with those being studied and not just other researchers. And, two, offers flexibility in analytic method instead of being hard-coded into a grounded theory analysis. I already have a prototype, Ethno.Space, which you are already familiar with [*we laughed*].

"That will do it!" she exclaimed as she reached behind her for a folder and pulled out a piece of paper. The paper was filled with empty boxes each labeled with the details one would need to create a basic business proposal. I encountered many of these during my fieldwork usually they were either the "Business Model Canvas" by Alex Osterwalder or the "Lean Canvas" by Ash Maurya or some locally developed variation. Lana and I filled in the boxes for problem, solution, unique value proposition, unfair advantage, customers, and so on. "Great!" she said, "that will do it. For the rest, let's pretend you're a Swedish citizen and you want to

make this a sole proprietorship"—meaning that my startup would be owned by me and not in partnership with anyone else, such as a co-founder or investor.

She then walked me through the next steps I would need to take as a Swede to create my startup. First, we browsed the Verksamt website—a website built by the Swedish Companies Registration Office, the Swedish Tax Agency, the Swedish Agency for Economic and Regional Growth and the Swedish Public Employment Agency to streamline government services for businesses—for what permissions, permits, and licenses I would need to obtain, such as notifying the Swedish Data Protection Authority of my intent to collect and store personal data. Second, I would need to register the business with Skatteverket (the Swedish tax agency) and Bolagsverket (the Swedish Companies Registration Office). Then, I would need to pay the registration fee (at the time of writing 1,400 SEK or approximately $160 USD).

"And, just like that! You're a founder!" Lana exclaimed. Of course, it would become much more complicated as investors, partners, and employees became involved, but the basic requirements were met. For the rest, there were ample resources available to me to move forward from events and meetups, incubators, and seed investors, to plentiful online documentation—such as Erik Byrenius' Startup Docs (now called Startup Tools) that provides free legal templates for founders and the Verksamt website that documents the government's requirements in detail. These processes were ubiquitously described during my time in SthlmTech as easy and cheap and were supported by usually free access to resources, education, and mentorship. The ease of creating a startup led to the knowledge required to find resources and contacts, follow bureaucratic obligations, and create the material and legal infrastructure of a business to be downplayed in favor of promoting entrepreneurs as innovators. I left this conversation with Lana feeling confident that I had not just missed something in my observations of what it took to become an entrepreneur in SthlmTech. However, the leap from this process to innovation was more obscure than ever.

What is a Startup?

The most common definition of a startup that I encountered during fieldwork was created by Steve Blank, a veteran serial entrepreneur from Silicon Valley and a prolific author and educator on innovation and entrepreneurship. He has argued that a startup is "an organization formed to search for a repeatable and scalable business model" where a business model "describes how your company creates, delivers and captures value" (Blank 2010). However, in a 2011 post on his website (Blank 2011a) and a 2013 post for a *Wall Street Journal* blog (Blank 2013), Blank revised his startup definition by splitting it into a taxonomy of six startup types: scalable (his original definition), lifestyle, small business, buyable, social, and "inside a large company." A lifestyle startup, he argued, is a self-employed individual doing work they are "passionate" about that allows them to live a particular lifestyle. A small business is funded by an individual's or family's personal savings and is intended to "feed the family" rather than scale to wealth and fame. Buyable startups are also not meant to scale, but to create products or services that can be purchased by larger companies usually for "millions not billions." Social startups are "driven to make a difference" and are not intended to make their founders wealthy. Lastly, Blank defined large-company startups as initiatives within large companies to find new business models as their existing models are always under "ever increasing external threats." In these posts and his other writings, it is quite clear that Blank prefers the scalable startup above others—particularly those that follow the "lean startup" methodology. In an opinion piece for *Xconomy*, he argued that "governments don't get startups" followed by the heading "Six Types of Startups—Pick One" under which he concludes

> A scalable startup ecosystems is the ultimate capitalist exercise. It is not an exercise in "fairness" or patronage. While it's a meritocracy, it takes equal parts of risk, greed, vision and obscene financial returns. And those can only thrive in a regional or national culture that supports an equal mix of all those. (Blank 2011b)

Steve Blank's observations and recommendations are not wholly without merit and his works' popularity is a testament to their plausibility and credibility among entrepreneurs.

However, as will become apparent through this guidebook, this popular perspective on startups is situated within a particular history and set of values that is deeply rooted in the histories and socialities surrounding Silicon Valley and venture capital. Blank's popular taxonomy of startups valorizes scaling, wealth generation, privatization, and the risk-taking, greedy, visionary archetype of the entrepreneur—even while admitting the high frequency of failure among scalable startups and how few startups fall within this category. While this perspective is popular within SthlmTech, it has not been transplanted from Silicon Valley to Stockholm intact and has not been adopted ubiquitously. Rather, the popularity of Blank's startup definition was generally used as a shortcut or a way to set aside a complicated topic to focus reflection elsewhere. Kel, an entrepreneur and occasional angel investor, explained to me:

> A startup is whatever it needs to be. It is a placeholder for what-I'm-doing-right-now. It legitimizes my work and gives me access to resources—an office, staff, capital, attention… If you need a definition, here's one: A startup is a business in search of a scalable and repeatable model. That's Steve Blank. You can Google him. But, that's really only useful if the startup wants to be a unicorn or move to California. I don't think most of these guys want to be unicorns. They want to save the planet. They want to build video games. They want to work somewhere besides Ericsson. They want to nerd out about AI or crypto. They want to build things people will use. They call themselves "entrepreneurs" with "startups" [*he made quotation marks with his fingers*] because it sounds better than unemployed with a dream [*he grinned widely and chuckled*]. So, a startup, if I must define it is a dream as a work-in-progress.

While I was provided with Steve Blank's definition far more than I heard one like Kel's, this latter description more accurately reflected my experiences with the entrepreneurs of SthlmTech. Thus, I have come to see startups as organizations that leverage the plentiful social, financial, and material resources of entrepreneurship in order to act as vehicles for the ambitions, anxieties, and dreams of their founders and stakeholders. By taking this approach, I hope to unsettle the centrality of both Silicon Valley and venture capital in the common Steve Blank definition. I would like to instead bring forward the motivations, ambitions, dreams, and anxieties of the people who do the work of entrepreneurship no matter the model or method they take up along the way. By so doing, I hope to demonstrate

that this is the real locus of radical thinking and innovative potential that is so often attributed to and obscured by neoliberal and venture capitalism.

What is an Entrepreneur?

Between 1728 and 1730, Richard Cantillon, a rather mysterious figure in Irish and French banking and business, penned *Essai sur la Nature du Commerce in Général* (Essay on the Nature of Trade in General) which is credited by historians of economics as the first theorization of the entrepreneur (A. E. Murphy 2015). It was published posthumously in 1755 and translated into English in 1931 by Henry Higgs. The first translation replaced the word entrepreneur with the literal translation of undertaker. However, later translations have used the original "entrepreneur" to reflect the ubiquitous modern adoption of the French loanword and its decent from Cantillon's theorization (A. E. Murphy 2015, xviii). Cantillon theorized that only "landlords and princes" live independently and all other men are either hired and paid wages or are entrepreneurs (Cantillon 2015, 21). He conceived of entrepreneurs as those who took risk by eschewing a guaranteed income (wages) in favor of potentially greater returns, relying solely on his own judgment and skills. Cantillon presented the farmer as an entrepreneur who without certainty of returns agrees to pay a set fee to lease land in hopes of selling goods grown on it for a profit that is dependent on uncertain and unpredictable social and environmental factors. The farmer's risk could lead to great profits or a debt to the landlord. This conception of entrepreneurs was a common baseline understanding among the people of SthlmTech as they imagined entrepreneurs to be developers, engineers, and other skilled workers who left their stable jobs at large companies like Ericsson or some other staple of Swedish industry for the risky job of starting up, leading to either great profits or failure.

In 1803, Jean-Baptiste Say, a French scholar of economics, published his *Traité d'économie politique ou simple exposition de la manière dont se forment, se distribuent et se composent les richesses* (A Treatise on Political Economy, or the Production, Distribution, and

Consumption of Wealth)—first published in English in 1821 (Say [1821] 1971). Say's entrepreneur was a risk taker like Cantillon's. However, he expanded the concept to be a more central economic figure who through a rare combination of skill, "judgment, perseverance, and a knowledge of the world," ([1821] 1971, 330) was a "master-agent" responsible for the creation of novel markets to meet consumer needs and desires, creating economic value. Say's conception of the entrepreneur was another popular component of the entrepreneur mythos that focused on individuals' particular skills and knowledge leading to financial success. However, it also marked the addition of social change to the entrepreneurs' impacts and responsibilities.

In 1911, the Austrian economist Joseph Schumpeter built on Say's Treatise to contribute the most enduring theorization of the entrepreneur in economic literatures in *The Theory of Economic Development* ([1934] 1983). The entrepreneur in Schumpeter's model—via a "gale of creative destruction" (Schumpeter [1943] 1976, 84)—is a disruptive force in capitalism, sustaining economic growth and creating change in an otherwise stable, cyclical system powered by monopolistic entities and paradigms. His economic model was in direct contradiction to the notions of stability and equilibrium guided by an invisible hand espoused by classical and neoclassical economic schools of thought. Finally, in 1921, American economist Frank Knight published *Risk, Uncertainty and Profit*, drawing on Cantillon, rather than Say, to theorize the entrepreneur as an essential element of capitalism, responsible for "deciding what to do and how to do it" (1921, 268) in an economic system defined by uncertainty. Schumpeter's contribution to the entrepreneur mythos became untethered from its critique of earlier economics but retained the notion that entrepreneurs are uniquely skilled at generating change particularly in areas seen as traditional and pertinacious like large established businesses and government agencies. Knight influenced this by adding a layer of responsibility and power to the position of the entrepreneur as change-agent.

Cantillon, Say, Schumpeter, and Knight make up the common canon literature on the history of entrepreneurs in economics with allowances for variations across time and argument (Ripsas 1998; Hébert and Link 1989; Pozen 2008; Landes, Mokyr, and Baumol 2010; Kates 2015). Further critiques and expansions of the concept are rooted in this literature resulting in a persistent archetype of the entrepreneur as some combination of a risk-bearer, supplier of financial capital, change-maker, decision maker, industrial leader, manager, coordinator of economic resources, enterprise owner, employer, contractor, arbitrageur, and allocator of resources (Hébert and Link 1989, 21). This canon appeared overtly during my fieldwork primarily from the entrepreneurs who studied economics, business, finance, or another related field during university or graduate studies. These entrepreneurs cited these authors in their bachelor's or master's theses and mentioned them by name in discussions with me. The canon was also present implicitly at events, in conversations, and in interviews where the hallmarks of their theoretical positions cropped up as "common sense." Entrepreneurs without academic backgrounds in business or economics absorbed this knowledge at events and from collaborations with others—often removed by multiple degrees from the source. Stefan, a startup founder with no formal education in business, described for me the work he did as "a necessary storm of innovative disruption." He explained further that,

> …big companies and people are quite happy to just keep doing things as they are as long as nothing is failing. You know, so, entrepreneurs are needed to bring this storm, this hurricane of innovation to shake things up to keep them moving and changing.

I asked him if he thought of the phrase himself or if it was a quotation. He told me that it was just "something people say." Without direct knowledge of him, Stefan was relying on Joseph Schumpeter's theorization of entrepreneurship as a "gale of creative destruction" to understand his own work and purpose. This literature intertwined the practice of business, particularly the creation of new businesses, with social change and thus set the groundwork for the promise of innovation that suggests change stems from invention.

In anthropology, interest in entrepreneurs has peaked twice: first from the 1950s to 1970s within critiques of structural-functionalism and again in the late 1980s up to the present within anthropologies of neoliberalism. The first wave of interest within anthropology was, like Schumpeter ([1934] 1983) and Knight (1921), interested in disrupting a` dominate theory's focus on equilibrium and inattention to individuals and thus the shared interest in entrepreneurs was not coincidental but rather a point of interaction between anthropology and economics (Stewart 1992). The second wave of interest in entrepreneurship within anthropology has only just arrived but has been ascending since the early 1990s alongside the intertwining of entrepreneurs with the rise of neoliberalism.

The former literature borrowed heavily from the economics canon described above as a basis for its theorizations of entrepreneurs. Thus, this literature can be useful for understanding entrepreneurs' understandings of themselves as it took economics theory and placed it in conversation with discussions of social relations and in critique exposed the tensions many entrepreneurs experienced in their work. Early entries into this literature took up concerns of who initiates cultural change—prestigious innovators who others sought to imitate (Linton 1936), maladjusted, frustrated and outcast tinkerers (Barnett 1941), or both (Adams 1951)—and introduced the "Entrepreneur as Rebel Against Traditional Society" (Hagen 1960), as the prototypical example of a change agent (Pärson 2018), and as broker across communities, difference, and scale (Wolf 1956; Geertz 1960; Flores-Meiser 1978).

In 1963, Fredrick Barth and colleagues produced the cornerstone of this literature in the edited volume *The Role of the Entrepreneur in Social Change in Northern Norway*. In his preface and introduction, Barth (1963) argued that entrepreneurs ought to be investigated because of their roles as community leaders and brokers between communities and across scale. He begins with Cyril Belshaw's (1955, 147) definition of the entrepreneur as the manager of a business unit that participates in profit taking, innovation, and uncertainty bearing. However, Barth argues for a shift from the individual as entrepreneur to the

entrepreneurial career as a chain of transactions between the entrepreneur and the environment and community they work in. Although I have not taken a transactional approach to my understanding of entrepreneurs, my understanding of the entrepreneur as a role or title that is wielded rather than as a person originated with Barth's descriptions and were supported by my observations in the field.

The entrepreneur's community, he went on to explain, is not a passive receptacle of the entrepreneur's innovations but is made up of actors who also "make choices and pursue strategies" and this community, including the entrepreneur, is subject to its "routinized, institutionalized community life in terms of the choices available and the values that are ascribed" (1963, 7). What differentiates the entrepreneur within this community, argued Barth, is that (1) they are focused on the maximization of one type of value: profit, (2) they cannot rely on accumulated experience but rather on experiment and speculation, and (3) they bear greater uncertainty as their ventures are based on their own reasoning often against conventional wisdom. He then concluded with an analytic model for the study of entrepreneurs through three variables: (1) the entrepreneur's niche, that is their position relative to material and social resources, (2) the entrepreneur's assets, including expertise, skills, capital, and social claims, and (3) the entrepreneur's restrictions, that is their obligations, requirements, and opportunities.

In Barth's (1966) expansion on this model, he uses his observations of entrepreneurs for critique of structural analysis in favor of a transactional approach. Later applications of Barth's model, however, focused more on the entrepreneurial subject than on the structuralist critique. Through these applications, two prominent issues emerged: (1) profit maximization was not a universal or common trait of entrepreneurial aspirations and (2) when examined in "non-western" contexts, too much was assumed to come from outside the local society and particularly through colonial rule. The entrepreneur's "single-minded concentration on the maximization of one type of value: profit" (1963, 7) was largely absent from these applications of Barth's model because: (1) the studied entrepreneurs desired

"prestige without profit rather than profit without prestige" (Strathern 1972, 373), (2) entrepreneurs found that the dogged pursuit of profit could only diminish the community's resources and thus tended to support many modest ventures instead of a singular maximized venture (Levine 1985), or (3) the entrepreneurs were motivated instead by ideals or promises of technological progress as early adopters, educators, and evangelists (Flores-Meiser 1978). Likewise, I met no one with such a single-minded concentration on profit and like the authors cited here found an array of social and material concerns that usurped the role of profit in decision making. The second issue stemmed from ethnographies of emergent entrepreneurship among locals under colonial rule. These found that, as opposed to Europeans bringing capitalist and thus entrepreneurial practice and rationalities to the people they colonized, entrepreneurial practice emerged from the intersection of markets introduced by colonialists and existing values and practices in local societies (Finney 1969; Strathern 1972; Gordon 2011). They argued that, contrary to the then popular assumption that entrepreneurship was an imported phenomenon that had to be forced upon resistant and recalcitrant "traditional societies," entrepreneurship flourished because of existing values and practices, such as self-made big men and the social networks that already channeled resources and wealth.

Following this peak in interest in anthropology, a thread of entrepreneurship studies grew alongside the next that saw the concept of the entrepreneur loosening to encompass nearly all independently owned business activity (Stewart 1992, 74). Within this diverse literature, the concept of the entrepreneur largely stood in for two archetypes: "the little guy" and "the resourceful man." The little guy archetype was used to explore the relations between sole proprietorships and large businesses or corporations particularly when other forms of unequal power were present, particularly across scale, class, and indigeneity (Durrenberger and Pálsson 1985; Nonini 1987; Oxfeld 1992; Finch 1997; Zarrugh 2007; Galemba 2008; Willmott 2014). Although fruitful for exploring the tensions in these inequalities, the loosening of the entrepreneur as a concept became a questionable analytic

resource and several of the authors instead sought to focus on particular attributes associated with entrepreneurs—such as opportunism, risk taking, or self-employment—rather than the entrepreneur as a whole (Stewart 1992, 74; Nonini 1987, 364).

The resourceful man archetype was used primarily in two ways: first by early actor-network (ANT) theorists in science and technology studies and second by applied anthropology in the fields of design and engineering. For both, the resourceful man drew on the entrepreneur as a person who had a talent for leveraging resources and creating networks to accomplish some aim, usually for profit. In ANT, scientists and other intellectuals were described as conforming "in every way to that of the classical picture of the entrepreneur. They attempt to obtain the use of various kinds of resources, to fit them together and to profit from the results" (Callon, Rip, and Law 1986, 9). In applied anthropology, the entrepreneur was an inspiration for extending the anthropological reach through the resourcefulness of entrepreneurial practices such as pitching, creating scholarly artifacts with value, and extending anthropological knowledge on diversity and cultural competency beyond the classroom (Hummel 1997; Rencher 2014). Although these two archetypes still appear within anthropology, there is little cohesion or cooperation between them to create a useful theorization for the study of entrepreneurs. Rather, the entrepreneur is, in these studies, a useful heuristic for the study of other practices, identities, and struggles.

The second wave of interest in entrepreneurship within anthropology has only just arrived but has been ascending since the early 1990s alongside the intertwining of entrepreneurs with the rise of neoliberalism. Like many of the authors in this literature, I use neoliberalism here in a loose sense to describe the anti-Keynesian political-economic project that gained popularity in the 1970s and 80s, particularly under the Thatcher and Reagan administrations. This diverse and unruly project has come to (1) co-opt governments for the creation of "free" markets at the expense of social welfare and the commons; (2) co-opt practices of modernization and restricted them to privatization, contingency, and

surveillance (Srnicek and Williams 2015, 51–65); and (3) co-opt the concept of freedom and restricted it to freedom from the state and of the individual to choose between consumer goods and services (Rose 1999). Neoliberalism is, of course, not monolithic but varied, contingent, and contradictory. This has led some scholars to proclaim the concept to be ill-used or meaningless. However, I agree with Srnicek and Williams (2015, 52) that the variable, flexible and contradictory nature of neoliberalism has made it only stronger and more enduring as it has made it adaptable to almost any environment so that, like an invasive species, it can flourish within and around existing ecologies of thought while it grows dominant. Thus, rather than dismiss the term for its ambiguity, I accept this ambiguity as a defining characteristic of neoliberalism. Essential to neoliberalism's spread and adoption is not the tenants of its ideologies but rather the ways that it creates subjects—specifically, entrepreneurial subjects. The growth of neoliberal ideas within Sweden and specifically within SthlmTech has been both productive and unproductive for entrepreneurial labors. Neoliberalism's influence, particularly the unintended consequences of its adoptions will appear throughout this guidebook.

Using four films—All The Right Moves (1983), Ferris Buehler's Day Off (1986), Nothing In Common (1986), and The Secret to My Success (1987), Elizabeth Traube (1989) documented an emerging imagination of the next generation of the American middle class that was rebelling against corporate, white-collar existence in favor of the frontier spirit and entrepreneurial ethic that was being idealized under the Reagan administration in the United States. Prior to the mid-1980s, she argued, the entrepreneur had been receding behind monopolistic capitalism and long-term, pensioned employment. However, through the 1980s, popular media began to reflect the anxieties of middle-class youth about their seemingly inevitable bureaucratic futures and their hopes to instead become successful, self-made heroes on entrepreneurial journeys—not unlike the narratives of young Swedes throwing off the crust of their stable desk jobs in Sweden's largest companies like Ericsson, IKEA, and Volvo in favor of potentially world-changing jobs as innovative entrepreneurs.

As Rebecca Gill (2013) has demonstrated, the archetype of the neoliberal entrepreneur gained legitimacy and prestige through its leveraging and resistance to older economic archetypes, namely the self-made man of the industrial revolution and the organization man of the post-WWII era. From the self-made man, the neoliberal entrepreneur borrows the supposed morality and spirit of bootstrapping one's own story of rags to riches via making and innovation. However, unlike the robber barons of the industrial revolution, these narratives use venture capital and corporations as the foil to the entrepreneurial hero, offloading elitism onto their funders and the organization man. Gill's work here is important for demonstrating how the idea of the entrepreneur within neoliberalism is an evolution—not a genesis. What is new about entrepreneurs under neoliberalism is not their existence but rather how their attributes, values, and practices have been disarticulated and spread across the political-economic landscape to the extent that "everyone, it seems, is an entrepreneur these days" (Pozen 2008, 283).

Since the 2000s, this has come to be called entrepreneurial lives (Lemke 2001), entrepreneurial selves (Bührmann 2005; Bröckling 2015), or entrepreneurial citizenship (Irani 2019). While Barth theorized that the entrepreneur was not a person but a role created through transactions within a community, this new literature on neoliberal entrepreneurs documents the radical disassembly and distribution of these entrepreneurial roles, traits and values throughout social life or as Ulrich Bröckling described it,

> In other words, the entrepreneurial self is a form of subjectification. As such, entrepreneurial activity is less a fact than a field of force. It is an aim individuals strive for, a gauge by which they judge their own conduct, a daily exercise for working on the self, and finally a truth generator by which they come to know themselves. (2015, viii)

Christina Scharff (2016) described ten contours of entrepreneurial subjectivity under neoliberalism that demonstrate how this subjectification has dispersed entrepreneurialism far beyond the socio-economic framework of culture change described by the earlier 1950s to 1970s anthropology into the psychic lives of all neoliberal citizens: (1) the self as business to be branded and turned into a product; (2) being constantly active and still lacking time; (3)

embracing risks, learning from failure, and staying positive; (4) surviving past difficulties as evidence of good character; (5) hiding injuries because they are seen as individual failures rather than systemic failures; (6) negotiating other, competing discourses that are intertwined with entrepreneurial subjectivity; (7) using individual achievement and responsibility to disavow social critique; (8) feeling anxious, self-doubting, and insecure; (9) competing with the self when the prescribed competition with others is taboo; and (10) making boundaries between lazy and hard-working people, then lacking empathy for and blaming them for failures. Scharff found these qualities not in the founders of businesses but among classically trained musicians. This form of entrepreneurialism is pervasive, invasive, and not restricted to traditional spheres of entrepreneurial activity in business, finance, and subsistence. Human creativity has, according to Oli Mould (2018), been subsumed under neoliberal ideologies that have reshaped it from "being a divine power, to a socialized and collective endeavor, to an individual characteristic that could be traded" (2018, 12) and exploited for perpetual capitalistic growth. The allure of the entrepreneurial life and self, argued Sarah Kelman is "in the affective registers, dreams, and desires and in the aspiration to be certain kinds of people through entrepreneurship: modern (Ong 1987), pious (Rudnyckyj 2017; Sloane-White 2008), elite (Osburg 2013), flexible (Freeman 2007), and free (Tsing 2013)—in short, an 'enterprising self' (Rose 1998, 151)" (2018, 63).

The harnessing of creativity and innovation by neoliberal entrepreneurialism has not only become a way of life for individuals but also a promise for social and infrastructural "progress" that has been taken up widely by coalitions of states and private organizations—like SthlmTech—through smart city initiatives, innovation agendas, startup hub formations, and entrepreneur driven development programs (Hughes 2010; Poggiali 2016; Pfeilstetter 2017; Kelman 2018; Mould 2018; Irani 2019). These regimes, argued Lilly Irani, "subsume hope and dissatisfaction, redirecting potential political contestation into economic productivity and experiment" (2019, 22). Lisa Poggiali's (2016) ethnography of Kenya's Silicon Savannah demonstrated how these entrepreneurial innovation programs forces community members

into making claims of technical expertise in order to become visible in the work that shapes their communities and how that claim-making is called into question along vectors of inequality. Further, Irani proposes, when these promises of progress are made, we must ask, "who becomes an innovator and who becomes the innovator's other? Who conceptualizes and valorizes, and who does the work? Who modernizes whom, and toward what horizon?" (Irani 2019, 3).

This large and growing literature has demonstrated the ubiquitous spread of neoliberal entrepreneurialism via studies of migration (Constant, Shachmurove, and Zimmermann 2007; Lem 2008; Klien 2019), evolving and post-socialisms (Yurchak 2002; Yang 2011), cultural heritage (Harney 2011), land and water usage (Feng 2012), illicit and informal work (Galemba 2008; Thieme 2013; Miyauchi 2014), gender (Simon 2000; Bruni, Gherardi, and Poggio 2004; Alexeyeff 2008; Dolan 2012; Bourne and Calás 2013; Lewis 2013; Naudin and Patel 2017; Mickey 2019), religion and spirituality (Osella and Osella 2009; Lima 2012; Fonneland 2013; Luca 2016; Hill 2017; Hennigan and Purser 2018), kinship (Shever 2008; Stensrud 2017), music and dance (Shipley 2009; Morcom 2015; Enriquez 2018), medicine (Qureshi 2015), and science and academics (Hoffman 2011; Shore and McLauchlan 2012; Delfanti 2013; Brustureanu 2018; Marouda 2018). However, as I found in SthlmTech, the neoliberal entrepreneur is not monolithic and the integration of entrepreneurial practice is not always or totally an acceptance or internalization of neoliberalism but rather is a hybrid response emerging from local life, values, and practices (Yurchak 2002; J. Anderson 2004; Cahn 2006; Freeman 2007; Brotherton 2008; Galemba 2008; Boyle 2008; Hill 2017).

Chapter 4.

Approach

Figure 4.1 On the trail leading to my Airbnb rental.

My days in Stockholm began by walking the trail that led from my Airbnb host's backyard through a patch of woods to the back of an apartment building. Due to the Swedish right to roam (*allemansrätten*) granted by the Swedish constitution—a right that allows people to walk, bike, ski, or camp on any land except private gardens, cultivated land, and the area immediately around a house—there were many of these paths and shortcuts around the wooded areas of the city and its suburbs. The trail led out to a road that I followed to its end where it met a paved path down the hill to the train station.

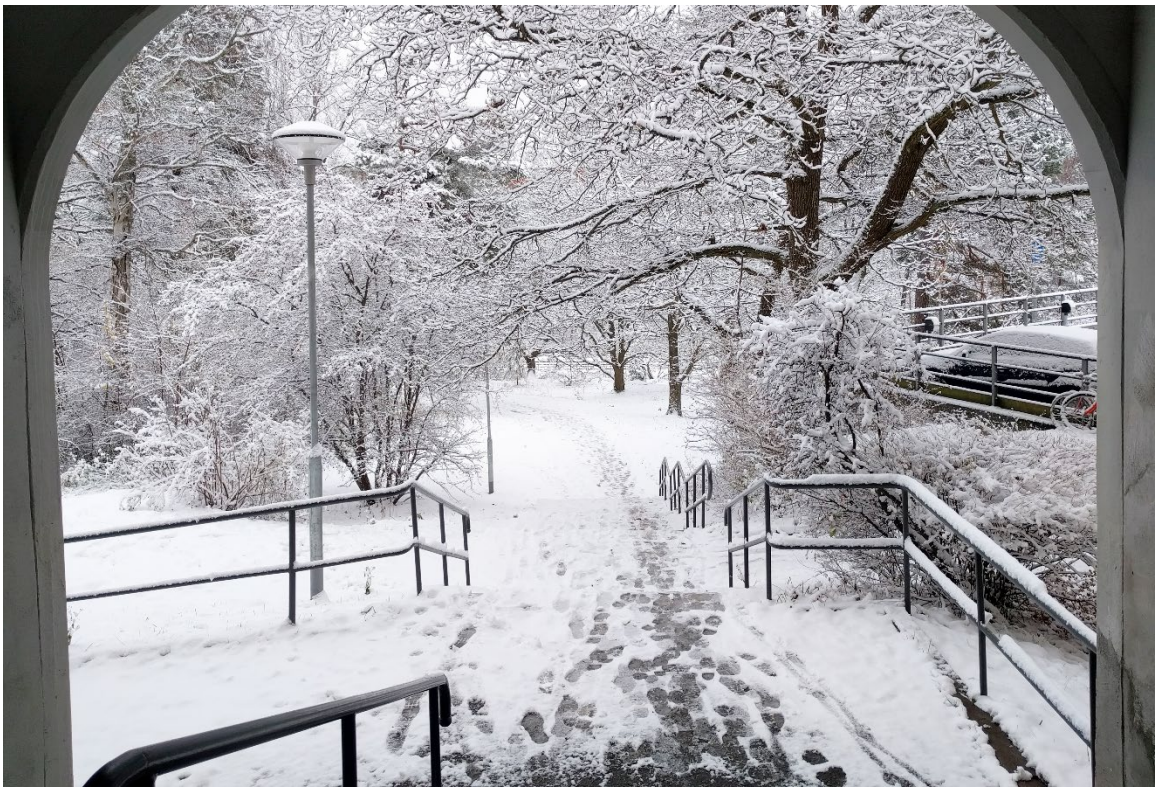

Figure 4.2 The pathway down the hill toward Käppala station.

From the Käppala station I rode the train to Ropsten. The SL trains and buses varied in age from the sleek Wi-Fi enabled train on Lidingö to a handful of older models still running in the center city. They were always impeccably clean and people went out of their way to not touch each other or make eye contact even when packed at rush times. Most days my only interaction while riding the public trains was on the 21 train in Lidingö. There

were no ticket gates at the stations, so an attendant would come by and scan my SL card. When the train was not busy, a couple of the attendees would come sit with me and help me practice my Swedish.

Figure 4.3 The SL train that ran the length of Lidingö.

The experience, as an American, was unexpected. I was used to public transit in small cities like Binghamton, NY and Grand Rapids, MI and large cities like New York City, Chicago, and Washington DC where public transit is often aging, crowded, dirty, and featured no small amount of people with little regard for personal space and an eagerness to chat with strangers. Public transit was also not something everyone used in the US. In most of the cities I have lived in, public transit—or rather the ability to avoid it—was a status symbol—leading to waning support for these system's upkeep. In Stockholm, I saw a wide array of people on the trains and buses from people riding home with their piles of designer retail bags to school children traveling with teachers to people selling magazines for money and frequently the entrepreneurs of SthlmTech.

From Ropsten, I would change trains to head to my first scheduled slot of the day. My fieldwork primarily consisted of events, meetings, and "office hours." Events took me around the city to its venues, large and small, to watch the spectacle of SthlmTech on show. Meetings on the other hand, were my way of fitting into the normal schedules of the people of SthlmTech. My time was almost always scheduled in advance with the trading of emails and digital calendar invites. The entrepreneurial community was busy and the strong commitment to a "work-life balance" meant that getting time for interviews, fikas, or shadowing required planning and scheduling that fit within their schedules and scheduling infrastructure. The remainder of my time outside of events and meetings were spent at "office hours"—which involved arriving at a coworking space or café popular with entrepreneurs and sitting with a sign inviting conversation about my research. I also usually tweeted a selfie from the location with an invitation to come say, "Hello!"

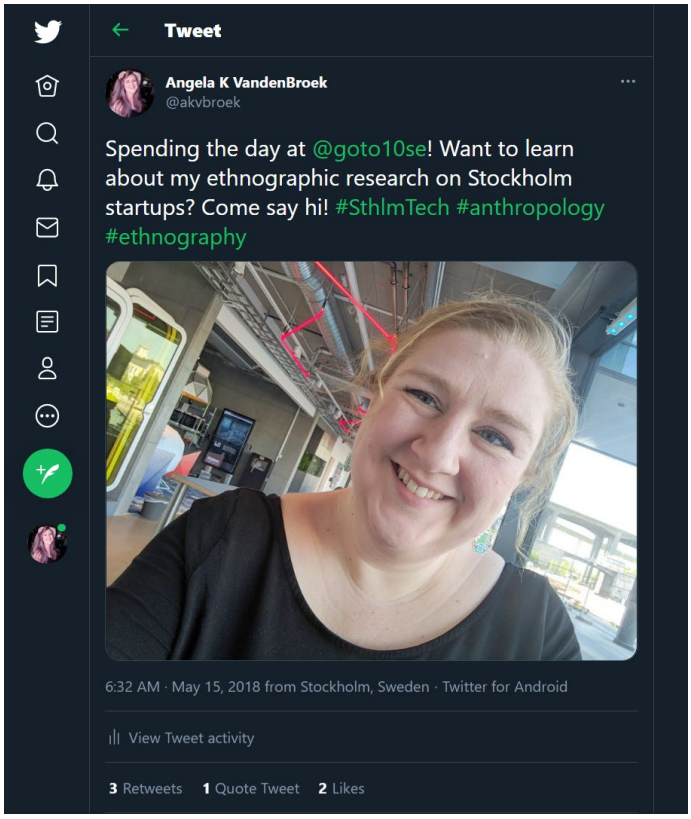

Figure 4.4 Example of a "Come say hi!" tweet that I used to promote "office hours" during fieldwork.

Experts & Scavenging

The kind of fieldwork I did in Stockholm could be classified as a study of "experts." The anthropology of experts has largely focused on intellectuals and technocratic elites following calls to study up (Nader 1972) and sideways (Hannerz 1998) and the growth of science and technology studies (e.g. Latour 1987; Hertz and Imber 1995; Knorr-Cetina 1999; Helmreich 2000). The power arrangements and material conditions of these studies, however, were distinctly different from mine. So, I have adopted Dominic Boyer's conception of an expert as any "actor who has developed skills in, semiotic-epistemic competence for, and attentional concern with, some sphere of practical activity" (2008, 39). This broader conception means that most anyone is an expert in some capacity and thus the anthropology of experts ought not to focus on the "elite" status of some experts but rather more flexibly on people's expertise. This approach, for example, could then encompass works like Jeanne Favert-Saada's (2015) *The Anti-Witch* on witchcraft in the Bocage for its focus on the complex relations between experts engaging each other, blurring lines between researcher and researched.

My fieldwork in Stockholm was defined by the ways experts and I interacted and constructed access to each other that was complicated by the webs of power, urgency, and professionalization we were both caught up in. I found the connotation of "elite" hidden within "expert" to be out of step with these experiences. For example, issues of power were not usually about their power over me or my power over them. Rather, issues of power were often external. For example, the caveats and secret keeping requests that often came along with my interviews: "Don't tell people I cursed so much. I have a conservative American investor that would flip," and "This incubator program is garbage. But don't tell [X] that. I can't afford to be kicked out the office space."

Likewise, access restrictions and the demand for scheduled meetings tended to arise from busyness caused by overloaded schedules and normative expectations for work-life

balance rather than from elitist attitudes or gatekeeping. This email from Maja, for example, was a common first response to my cold emails.

> I feel what you are doing is so important and I know I could learn from this opportunity to talk with you. I regret that I am unable to step away at all for the next three months as we are doing a major product launch and all my time is already booked. Will you be in town in three months? I'm anguished over this. If you are still here please reach out to me then. Again, I'm sorry and really hope we can reconnect. I also apologize for asking you to follow-up, I just don't think I will be able to keep your project in my mind with all else until then.

Many of the people I talked to were one bad pitch away from failure. Although many had LinkedIn pages filled with executive titles (e.g., CEO, CTO, CIO), founder or co-founder titles, and advisory board memberships, many felt precarious and uncertain about their success in the present or their prospects in the future. This is not to say that I did not encounter any easily classified "elites"—as I did. However, the bulk of the people I worked with were not. Rather, a better description may be that they were non-elite experts in an elite network that placed burdens on them, on me, and our ability to communicate around and through it.

These conditions altered my initial conception of fieldwork to encompass a wider understanding of what was worthy of observation, documentation, and reflection. Under similar conditions, Nick Seaver (2017) has called this "scavenging."

> The scavenger replicates the partiality of ordinary conditions of knowing—everyone is figuring out their world by piecing together heterogeneous clues—but expands on them by tracing cultural practices across multiple locations and through loosely connected networks. (Seaver 2017, 6–7)

Like Seaver, I draw on Hugh Gusterson (1997) who argues for a "polymorphous engagement" with ethnography's subjects to re-imagine fieldwork "within sociocultural contexts that are diverse and changing" (Seaver 2017, 6) drawing the parts of fieldwork that are often devalued or ignored back in for study. For example, in my own fieldwork, the interview transcript was only a fraction of the data collected when I conducted an interview. I also scavenged knowledge about how the people I interviewed networked, arranged meetings, enforced communication policies, performed introductions, understood interview procedure, and so

on. Also like Seaver, my interviews were often done amid "everyday life" on train rides, coming along to run errands, in hallways between meetings, while they finished lunch, tidied their desk, or waited in the lobby of a coworking space for their food to be delivered. Thus, interviews—like most of the mundane seemingly non-ethnographic activities in my fieldwork—were rich opportunities to scavenge ethnographic data. Accessibility and the ability to "know" the objects of inquiry were not barriers around my fieldwork but, like Seaver (2017, 2019), were part of the everyday texture of our fieldwork lives as both we as ethnographers and the people we worked with "enacted" these objects with and around complex sociotechnical systems.

In addition to these considerations, I have also had to grapple with the implications of working with people who were already highly reflexive about their own practices and were knowledgeable about anthropology (even if major misconceptions were common). This meant that, like Johan Nilsson's experiences, the existing epistemic practices and reflexivity among the people I worked with weakened "the revelatory power of the academic parlor trick of a performativity analysis" (2018, 32) or other forms of generating surprise and reflection common to anthropology. I spoke with people who not only had strong opinions and thoughtful understandings of their own expertise, but of mine as well.

These discussions and collaborations became integral to my work and I believe the result is better for it. However, this also means that the people I worked with may not always agree with my findings and observations. Diana Forsythe—who, after publishing results of her study of knowledge engineers (1993), received a scathing published reply from an engineer (Fleck 1994)—explained, "Viewing the world through the eyes of one's informants is a methodological strategy, not the end of anthropological research" (Forsythe 1994, 119). From here she accepted the difference between her observations and conclusions and those of the people she studied arguing,

> I understand my task not as speaking for my informants, as Fleck seems to believe (and which would hardly constitute 'impartiality' either), but rather as characterizing for the reader two different perspectives on the problem of knowledge. (1994, 118)

I have tried to overcome my own fear of these experts' judgment of my work by taking a similar stance and in hope that, even in disagreement, my work may be an addition rather than a replacement of their own positions.

The Next Train

After arriving in Ropsten from Lidingö, I usually took the 13 train into the city. On Mondays, however, I attended meetings and seminars at Stockholm University and worked from my office there. On those days, I transferred at Östermalmstorg and took the 14 train to Universitetet. The area around the university campus is lush with parks, gardens, and trails perfect for walks with colleagues. During the rest of the week, however, I traveled around the city visiting offices, working in coworking spaces, meeting at cafés, restaurants, hotel lobbies, or other public locations for meetings and attending events and meetups in the afternoon and evening.

In Norrmalm, among the shopping malls and designer retailers, I would get off at Östermalmstorg station and walk to many SthlmTech destinations, including the offices of Invest Stockholm (the city's business promotion agency), Wellstreet (a venture capital firm), and most often SUP46 (Startup People of Sweden). At the time, SUP46 was located on the third floor of the Europahuset where the European Parliament and European Commission's representatives' offices were located.

Figure 4.5 SUP46 Café counter.

SUP46, founded in 2013 by Jessica Stark, Sebastian Fuchs and Nathalie Nylén, was the most well-known (or notorious depending on who you spoke with) entrepreneurial hub in Stockholm. Coming off the elevator, I would walk through the glass doors into the café. The café served pastries, small meals, and coffee. It was decorated with black chalkboard painted walls, balloons, chipboard accents, and an abundance of entrepreneurial kitsch—like a yellow drone, a mural of a moose and unicorn riding a tandem bicycle, a 3D printer, portraits of successful entrepreneurs, a collage of member logos, and a split-flip counter device that updated when the café got a new Facebook like (which I could not resist testing out by liking and un-liking the page a few times while waiting for my first meeting there).

Figure 4.6 One of the work areas in the public section of SUP46.

The café was usually populated by people on laptops or meeting over coffee—also usually with their laptops as they discussed pitches, negotiated contracts, or worked through ideas. The rest of the floor was split into a section of conference rooms and a large event space that was available for rent and the members-only coworking space. The coworking space was filled with tables—at standing or seated height depending on the preference of its occupant—filled with all the expected technologies and ornaments of office desks. There were small meeting rooms and sound-proof pods for escaping the large open work area. A kitchen with an abundance of coffee makers sat adjacent to a break area with couches, armchairs, and game tables.

SUP46 was one of the first locations I visited on the recommendation of an entrepreneur I met at STHLM Tech Fest. I held office hours in the café throughout my time in Stockholm, attended events in its meeting spaces, and followed its members to see their workspaces and hold meetings in the members-only section of the office. Of the coworking spaces and hubs I visited, SUP46 was the most startup focused. While others offered space and services to a range of freelancers, contractors, creatives, and entrepreneurs, SUP46 had

the air of an exclusive startup club. Its public café and event spaces were positioned in awe of its membership and the "magic" that happened behind the glass doors leading to their workspace.

Figure 4.7 The entrance to Norrsken House.

A ten-minute walk north from SUP46 led me to Norrsken House. Norrsken House is a coworking space, event center, and incubator for the Norrsken Foundation. The foundation was founded in 2016 by Niklas Adalberth, co-founder of Klarna one of SthlmTech's unicorn companies, with the mission to support impact entrepreneurship based on his belief in the philosophy of effective altruism. Norrsken House opened in 2017 and has since hosted events, members, and projects with the mission of "getting good shit done" and supporting "companies with the potential to radically improve the world" (Norrsken Foundation n.d.). The space was filled with natural light from its skylights and an abundance of plants. The workspaces, meeting rooms, and event spaces were layered within the large warehouse space and connected by black metal walkways and glass floors. The atmosphere clearly reflected the organizations' brand of sustainability and practical solutions, while still emanating typical startup and entrepreneurial vibes with its office furniture, rolling whiteboards, and aspirational messaging to scale quickly and make change.

Figure 4.8 Inside Norrsken House.

Heading further south on the train, I navigated to *Slottet* (The Castle), a coworking space quite different from the vibe and community of SUP46, where I held a membership over the summer. I took the 13 train and got off at Gamla Stan station, which inconveniently left me on the wrong side of the small Stadsholmen island. But, the walk was faster and more enjoyable than the more convoluted train to bus route needed to be dropped off on the other side. Gamla Stan (the old city) is the oldest area of Stockholm and features several landmarks including the Royal Palace (Kunglina Slottet), the Stockholm Cathedral (Storkyrkan), and the popular Grand Square (Stortorget)—home of the Nobel Prize museum, a row of iconic colorful buildings, and the Christmas market. The streets are small, cozily lit with warm lights, mostly cobbled or bricked, and used primarily by pedestrians.

Figure 4.9 A workspace at Slottet. The Swedish royal palace is visible through the windows.

Figure 4.10 The intersection of Köpmanbrinken and Österlånggatan in Gamla Stan.

The west side of the island nearest the train station is a heavily trafficked tourist area that, going east, leads to inviting older shops, restaurants and pubs, before ending on the west side at the palace and historical buildings converted to office spaces. Slottsbacken is a wide street that much more resembles a public square than a street. On the north side of and running parallel to Slottsbacken is the palace and treasury. The Storkyrkan at the west end of the street overlooks the street as it slopes down to the water. On the south side of Slottsbanken are a number of historic buildings. Closest to the water are the offices of the Swedish Institute (Sweden's public diplomacy agency) followed by Slottet. Unlike SUP46, Slottet had no public areas and catered to a mix of freelancers, creative, and entrepreneurs who rented space by the floor, the desk, or the ability to use open spaces when available. It also lacked the hip, city vibe of SUP46 and Norrmalm in favor of lush, artistic, and antique inspired designs that better suited its setting in Gamla Stan.

Figure 4.11 On the far right is the edge of the Swedish palace, to its left is Slottsbacken. The first building to the left of Slottsbacken is the building that housed the Swedish Institute and Slottet.

The first floor had a yoga studio, a sauna, and a couple of meetings rooms that members could reserve. The second floor featured a lovely kitchen and break area that balanced the minimalism of IKEA style shelves and cabinets with an eclectic collection of art and vintage tables, chairs, and decor. A set of gymnastics rings, a large audio system, and an array of artistic colored lighting options gave the room a playful vibe that reflected the casual socializing of the afternoon and lively evening events that were held there.

Figure 4.12 The kitchen area at Slottet.

Figure 4.13 The art studio room at Slottet. The studio and its materials were available to all members.

Figure 4.14 One of the main floor work areas at Slottet.

Behind the kitchen were large rooms for any member to work in. The ornate woodwork on the walls, the heavy curtains, and crystal chandeliers lived up to its name as "The Castle," while the practical array of tables and desk chairs reflected the coworking space's necessities. The remaining floors were each themed to different needs of its members. There was a floor reserved for a large startup that I did not have access to, a floor with a large art studio, and a cozy attic space with round window seats that looked out toward the palace. My time at Slottet was primarily over the summer holidays. So, it was quiet most of the time with only a handful or people working on each floor as others were on vacation. However, I was never alone on any floor and I enjoyed the laid-back casual atmosphere of coworking in the summer which lent itself to many prolonged, meandering conversations and coffee breaks with my fellow coworkers. The physical office space was complimented by a lively Facebook group. Members shared selfies of chance encounters, announced good news about their work, asked for help on projects, sought lost items, and shared photos of homemade snacks available in the kitchen. The sense of community was carefully supported by Slottet's staff and a 27-page handbook outlining rules and information to ensure a community of "excellence to each other," "purpose," "*både och…*"[1] and "neat coziness."

Figure 4.15 Watching a pitch for Simply Events at the January 2018 STHLM Tech Meetup.

[1] Translates to "both and…" This phrase signifies a common philosophy within entrepreneurial spaces in Sweden and elsewhere that the logic of "either X or Y" is restrictive logic and instead embrace a "both X and Y" logic in decision making. At Slottet, the phase was used to signal acceptance of complex people and projects that were "both and."

Every month on the first Monday of the month, I made my way south on the 13 train to the Slussen station and then walked the couple of blocks to the Hilton Slussen hotel situated on the north end of the Södermalm island overlooking Gamla Stan. This was the location of "Europe's largest monthly entrepreneur meetup" called STHLM Tech Meetup. At approximately 5:30 p.m., I would enter the hotel lobby and head down the hallway to the left where attendees waited to be let into the hotel's auditorium. Just before 6:00, we were allowed in to find our seats. Eight rows of plush seats with fold out tables swooped around the stage with room for a few hundred attendees. After the event, around 8:00, a portion of the attendees headed back down the hallway and across the lobby to the hotel's bar for socializing, networking, and discounted drinks. The dark, tightly packed bar was always bustling with introductions, quick pitches and the conversations of long-time friends.

Heading to my southern most frequent destination, I switched to the 17, 18, or 19 train at Gamla Stan station and rode south to the southern end of Södermalm and got off at the Skanstull station. From there, I walked south over the Skansbron bridge and down a staircase to Hammarby quay. There was a small concrete park with swings, benches, and a swimming area at the base of the stairs and along the water's edge a boardwalk led to GoTo 10.

Figure 4.16 View of Hammerby Quay from the Skansbron bridge. The glass GoTo 10 and the Internet Foundation building is visible on the right.

GoTo 10 is a café, event space, and coworking space operated by the Internet Foundation of Sweden (Internetstiftelsen), a non-profit organization that manages Sweden's top-level domain (.se) and studies and promotes Internet usage and digitalization. The public area of GoTo 10 is on the first floor and runs the length of the building facing a wall of windows overlooking the waterway. Upon entering, guests are met with a sign-up station where an email address and a name gets one a membership card and signed up for the mailing list. Next to the sign-up station is the café counter where one can buy coffee and pastries. Just past the counter the left wall falls away to open up into a large meeting and events area. With the windows behind me, the event space has a large monitor on the left for presenters next to a floor-to-ceiling painting of GoTo 10's yellow logo and the back and right walls are lined with platforms for seating and roll-away benches that fit neatly under the platforms when not in use. Moving beyond the main event area, guests are greeted by a robot sculpture with a screen instructing members to scan their membership card to open the gate with "Hello human! Blip your blip on the blipper please."

Figure 4.17 "Hello human! Blip your blip on the blipper please."

Beyond the gate is an open coworking space with high and low tables, quiet booths, and meeting nooks. The space is bright and colorful with painted murals, a LEGO wall, and artwork made from pipes that integrate into the open industrial ceiling. At the end of the long work area is a large meeting room with bright yellow curtains, black walls, and GoTo 10's logo painted across the back wall. This meeting room was where my collaborative workshop was held in August 2018. The workshop, titled *Thinking Through Futures*, was a collaborative analysis experiment where I shared preliminary findings from fieldwork and through group exercises explored their implications via the lateral reasoning of attendees.

Figure 4.18 Thinking Through Futures workshop at GoTo 10.

The second floor of GoTo 10 was a private coworking space available only to paying members and their guests with open work areas and meeting rooms. Above that were the offices for the Internet Foundation.

Multisited & Collaborative Ethnography

By the numbers, my fieldwork sounds as if it was massively-multisited—with the same connotation as MMO games (massively multi-player online games). This description suggests chaos emerging from enormous, amorphous crowds and extensive, indistinct networks of social relations. This portrait of fieldwork appears vastly different from the Malinowskian tradition of anthropological fieldwork (Malinowski 1932) among a single village with its imagined boundaries. However, as I will argue below, this project's fieldwork was neither as vast and chaotic as it appears at first nor was it far from the those classic aims of ethnography to document the organization and anatomy of group of people, capture the imponderabilia of actual life, and grasp another's "point of view, his relation to life, to realise his vision of his world" (Malinowski 1932, 24–25). Rather, my fieldwork uncoupled these aims from specific places to reflect the movement of the people and ideas that I followed. Entrepreneurship moves and so my fieldwork with entrepreneurs did too.

Multi-sited fieldwork emerged as a methodological trend in the late 1990s, largely in response to rising interest in "world systems" (Marcus 1995, 96) and the unsettling of culture, locality, and place (Barth 1969; Appadurai 1991; Rodman 1992). Place, rather than being simply the location of an activity, such as fieldwork, came to be seen as unstable, overlapping, continually in the process of being made, and always caught up in the politics and projects of the people that make it (Rodman 1992; Low 2009). As Ulf Hannerz (2003) pointed out, this trend was not particularly a novel form of doing fieldwork as even "Malinowski was already going multilocal when he followed the Trobrianders along the Kula ring" (2003, 202) and migration studies was already working across space between points of departure and arrival. The interest in multisitedness at this time was thus a response to a changing world—or to some extent anthropologists' changing conceptions of it—while holding fast to its signature intimate, localized methodology—only multiplied (2005, 2010, 2012). Multisited fieldwork could thus be seen as a conceptual framework for studying

dynamic social relations as they move across space without discarding the practice of intense, local fieldwork that is valued and taught in anthropology.

Two decades later, I am still frequently asked by anthropologists why I did not focus on a single office or organization during my fieldwork. The primary concern seemed to be one of depth: how could I have the depth required for ethnography if I spent the bulk of my time spread across twenty-six organizations? However, this concern highlights a misunderstanding of multisited fieldwork that imagines the anthropologist as attempting to capture the entirety of multiple sites for comparison, like the established methods of comparative fieldwork. Multisited fieldwork is instead part of a larger shift in the re-figuring of fieldwork in anthropology that not only sees anthropologists moving to more locations, but imagines the field in terms of a "globalized, deterritorialized world" (Appadurai 1991, 196) where the lives of the people we study are too unruly to be defined by location. As Kim Fortun has pointed out, "Even in 'lab studies,' involving extended ethnographic engagement at one site of scientific production, the best work crosses scale, tracing out funding streams and what they enable and constrain, or tracing the way scientific interest colludes and collides with national interest" (2009, 169). Instead, anthropologists seek to study the circulation of "meanings, objects, and identities that are diffuse in time-space" (Marcus 1995, 96) as what binds people together is as much about their shared imaginations of place and its possibilities as their physical locations (Appadurai 1991).

These shifts toward multisitedness have coincided with changing understandings of the relationship between anthropologists and anthropology's subjects—what Holmes and Marcus (2005, 2010, 2012) have called a "refunctioning of ethnography" which has evolved through complicity and multi-sited ethnography (Marcus 1997), para-ethnography (Marcus 2000), and more recently collaborative ethnography (Holmes and Marcus 2008, 2012). I have drawn on this literature to formulate and situate my project as a collaborative endeavor with the people of SthlmTech. Ethnography has of course contained an element of collaboration for most of its existence in anthropology and has re-branded its relations to its subjects

from informants to interlocutors or collaborators with the rise of postcolonial anthropology. However, collaborative ethnography requires more than "the subject responding to, cooperating with, and tolerating the ethnographer's more or less overt agendas" (Holmes and Marcus 2008, 85). Rather, collaborative ethnography requires that the ethnographer acknowledges the broadly defined research and experimentation of her subjects as para-ethnographic practice and construct the ethnography as nested within this field.

Early on in forming my dissertation project, I decided that I wanted to be able to leverage my skills as a web developer to experiment with how my ethnographic data would be stored, organized, analyzed and shared for the purposes of building a collaborative ethnographic project. To do this, I developed Ethno.Space. Ethno.Space is a web-based application that is built on top of the WordPress content management system. I developed the software the year prior to arriving in Sweden for a specific fieldsite that collaborated with me on the early stages of the dissertation. Unfortunately, the organization had to back out of participation due to some unforeseeable personal circumstances of several of their employees during my first weeks of fieldwork. This meant that the software was tailored for a project with a stable group of interlocutors with prior buy-in. However, my actual fieldwork became a highly unstable assemblage of diverse participants who varied from one-time encounters to frequent collaborators. Thus, Ethno.Space, much like many of the products and services made by the entrepreneurs I worked with, was not used as intended and instead became a dynamic apparatus constantly under development as I reconfigured it to meet the needs of the project. In this way, Ethno.Space became more than simply the software where I stored my data. It became a form of participant-observation.

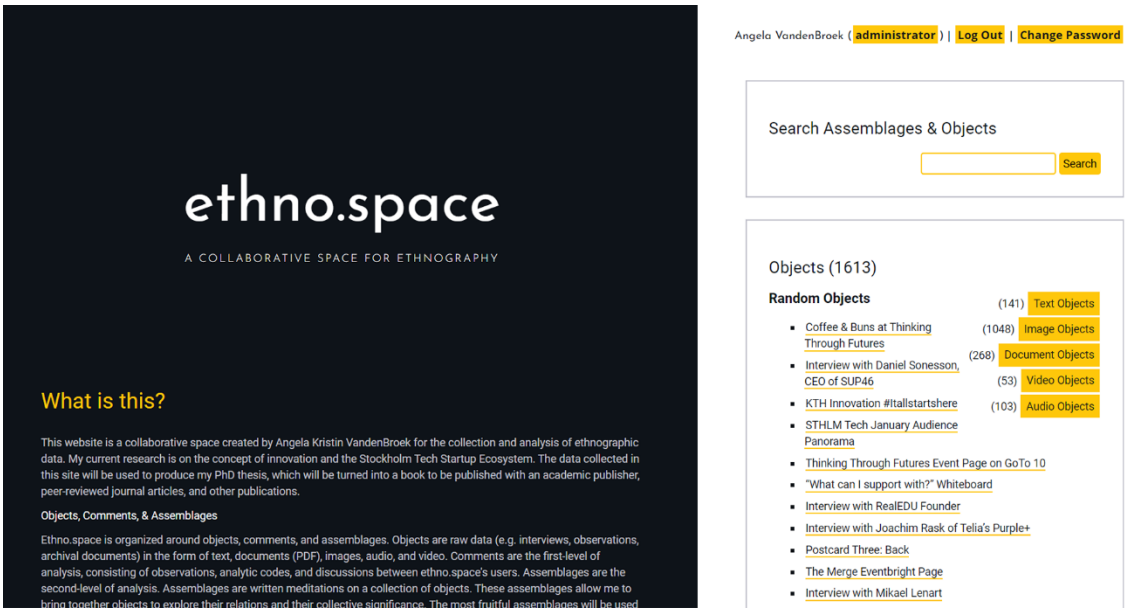

Figure 4.19 Screenshot of Ethno.Space.

Ethno.Space is organized around three types of digital records: objects, assemblages, and interlocutor profiles. Objects are any piece of data in text, image, audio, video, or document format. Each object has metadata describing it, such as date, location, event name, genre, description, affiliated interlocutors, transcripts, and so on. Assemblages are descriptions and analysis of a collection of objects. In practice, assemblages included timelines compiled from many objects; draft outlines of papers, chapters, and this dissertation; memos describing initial thoughts on the relationships between objects; and so on. Interlocutor profiles detailed how I met each person, their relevant personal and professional background, how they were related to other interlocutors, and links to all the objects in Ethno.Space about them.

Objects, assemblages, and interlocutor profiles all had text-based comments enabled. On objects, comments could be attached to the entire object or any specific part of an object (e.g., a quotation in a text object or a timestamp in a video object). In addition to comments, tags could be added to objects or parts of objects. These tags were sets of managed keyword lists that I used to identify themes for thematic analysis (Boyatzis 1998). I then used this analysis to identify literatures within anthropology, STS, and other disciplines

that best helped me articulate, understand, or expand on these themes. This meant that certain literatures, such as digital anthropology that may at first appear to be a natural fit, especially given my prior work, do not appear within these pages. Instead, I allowed the emergent themes, issues, and concepts from the field to drive the theoretical and comparative research for this project.

These comments and tags were intended to be collaboratively used by both myself and interlocutors. In the original project design, I had planned to work with a specific team within one organization. This team had expressed interest in collaborating in this way and their supervisor agreed to provide work time for these activities. I had hoped that committing to this collaborative imperative, where all stages of fieldwork would be open to the critique and analytic play of my interlocutors, it might allow me to "defer to, absorb, and be altered by" (Holmes and Marcus 2008, 84) these reflexive subjects. Unfortunately, my fieldwork was vastly different from this original design. Without the buy-in and institutional support to participate in this way, very few interlocutors contributed comments or tags and many preferred to send feedback on what they saw in Ethno.Space in person or via email or text message.

Collaborative ethnography does not always find itself happily embedded within the ongoing research and experimentation of others. Even when the ethnographer's presence is requested, the structure of the institutions involved, including both the arrangement of labor, expertise, and materials and the socialization of individuals, can obstruct productive collaboration and relegate collaborative engagement to more superficial boundary work (Stavrianakis 2015). Science and technology studies, responding to Thomas Kuhn's ([1962] 2012) *Structure of Scientific Revolutions*, has investigated the ways that collaborative work is done through boundary objects (Star and Griesemer 1989) and trading zones (Galison 1997). However, as Duncker (2001) has found, collaborative work requires extended and often institutionalized work to develop listener and speaker dictionaries that can become hybrid repertoires or creoles for full fluency among all collaborators only after sustained effort.

Thus, the collaborative aspects of this project were not as extensive or structural as I had originally intended. That said, Ethno.Space did still contribute to a collaborative ethos for this project and its contents (both data and analysis) led to many sustained conversations and debates with participants that informed my fieldwork in real time.

Although interaction with the collaborative features of the app were limited, almost every interlocutor logged in at least once with a core group of frequent contacts logging in on semi-regular basis. To encourage wandering and curiosity, I did not track interlocutor's movements through Ethno.Space and stated such on the homepage after log in. I only tracked the timestamps of logins. This allowed me to see who logged in and when. I could not, however, see what objects they viewed or how long they stayed logged in.

During the design process for Ethno.Space, I made this decision based on my experience with LinkedIn. LinkedIn is a social network site where people can connect with "professional" contacts and post information from their resumes, which became vital to my fieldwork. Unlike other popular social networks, users can see who has visited their profiles. This surveillance changed the way I moved about the site. Feeling watched, I visit other's profiles deliberately knowing that within moments they could receive a notification to their phone or desktop browser with my name and a link to my profile. During fieldwork, I often used this to my advantage as a kind of soft notification of my intent to work with someone. This notification let them know that when my request to talk to them arrived in their email inbox, I had already "done my homework" on them. This kind of surveillance, however, would not have been nearly as productive for Ethno.Space, as I needed people to feel safe enough to follow their curiosities without me, the curator of the site, looking over their shoulders.

I had originally intended Ethno.Space to be a highly collaborative digital space, as described above. However, in the end, most people did not engage with the site beyond lurking—that is reading but not taking any action to make their presence known such as commenting or tagging. However, this failing did not mean that Ethno.Space did not perform important roles in my collaborations with the people I worked with. My software

played four important—albeit unanticipated—roles in my fieldwork. First, as Ethno.Space was a large part of the informed consent process that began my relationship with most people in SthlmTech, my identity as a web developer and designer was foregrounded alongside my identity as an anthropologist. This gave me a certain amount of legitimacy and insider status among tech-oriented entrepreneurs and other enthusiasts. For example, during the informed consent process with an app developer turned startup founder, he exclaimed, "You're a dev too?! That's great! I was worried I would have to gloss over a lot of what I do." This was a common sentiment that led many people to share more technical details than they otherwise would, particularly men who were more often surprised by my technical skill sets.

Second, Ethno.Space became a symbol of transparency and trust for many interlocutors. Many of the people I worked with were concerned about what I would say about them, their companies or organizations, and what my intentions were. Giving them access to see the data about them, how I organized it, and how I was thinking about it in real time was reassuring to most of them. Third, Ethno.Space was a way for people to see my work-in-progress and offer feedback and critique—usually over email or when we next met in person. These conversations were helpful for me to adjust on the fly to what I was learning. Fourth, Ethno.Space offered an excellent fictional project for a startup. During my fieldwork, I attended many events and workshops where attendees were asked to think about their startup to learn new design, evaluation, or other methodologies, consider what kind of co-founder or employees could be helpful to find during networking, or to practice skills like pitching, making slide decks, networking, and creating business plans. I do not intend to turn my software into a for-profit venture and have only perfunctorily considered releasing it as freeware—mostly because of the time needed to convert it from a well-honed personal tool into a generalizable tool useful to others. However, as an exercise in entrepreneurship, it worked because (1) I developed the software myself and knew its functionality, limitations, and legal frameworks intimately; (2) as an experienced qualitative

researcher both in academics and applied work, I was expertly acquainted with the market of existing qualitative data management and analysis software; and (3) having discussed the project with other social scientists at conferences, I had a good sense of what the gaps in the market were, how my project could fill them, and the interest level of my peers. This made Ethno.Space a useful object for play in participant-observation.

Beyond Ethno.Space, my commitment to collaboration was supported by a formal meetup at the end of fieldwork where I workshopped preliminary findings and by a series of smaller informal meetings throughout fieldwork where I discussed specific issues and topics with groups of interested people—not as an interview or focus group, but as meetings of peers with similar concerns and interests working together to understand a particular topic.

Part II.

Innovation as Invention

> Imagine a clock. One with all the gears and springs and pendulums. That is how it is. We aren't cogs. I don't mean that. I mean we are all finely crafted experts fulfilling our purpose together to make innovation happen. To make great startups that make great futures.

Listening to Janis, an employee at one of SthlmTech's support organizations, I imagined opening the back of an antique clock to see its brilliantly polished gears and the quiet tick-tick of the mechanism working. Imagining the intricacies of its functionality and how its hundreds of small and large components were perfectly set to perform its function, I could see the allure of the clock metaphor to describe SthlmTech. The clock is not simply a mechanical device for turning gears. Rather, it is a device made of mechanical parts that tracks and materializes the abstract nature of time. In a similar way, people saw the experts of SthlmTech not as components in a machine—like cogs in a corporate structure—but as collaborating, finely tuned, expert components with an awe-inspiring mechanism that produces the magic of innovation.

> To me an ecosystem is based on components that are working nicely together. In nature, an ecosystem is something that revolves and they are feeding each other in an ecosystem. And, a good ecosystem has that capacity, components that work nicely together, they don't fight each other, they don't overlap too much, and they achieve a higher goal for the system.

Here, Pär Hedberg, CEO and founder of Sting, evoked a similar popular metaphor: the "balanced natural ecosystem." This metaphor used the ecosystem name to gesture toward a mythical biological ecosystem that is at equilibrium with all of the animals, plants, and their environment, smoothly and losslessly circulating energy with no single group dominating any other. Like the clock metaphor, the balanced natural ecosystem emphasized an assemblage of components cooperating by fulfilling their specific niche for the greater purpose of innovation.

These metaphors create a sense of awe and reinforce belief in the ecosystem's structure and purpose. However, the implication of this kind of mechanistic metaphor is that all of the messiness and complexity is cut away—smoothing over of the contradictions, overlaps, gaps, and excesses between the expertise, aspirations, values, and obligations of

the people of SthlmTech, leaving the ecosystem to appear to be a benevolent, always improving, and naturally emerging community rather than as a sociotechnical system with historical and political underpinnings that shape its infrastructures, strategies, aims, and outcomes. I argue that the ecosystem is not simply a neutral support infrastructure—as it is advertised to be—but rather a pedagogical system that generates and teaches a specific discipline of entrepreneurship—one that defines and disciplines domains of expertise, their relationships, and their practices in order to teach an optimized and accelerated discipline of innovation-as-invention. In the metaphor of the ecosystem as a field from the introduction of this text, this revelation breaks the myth that entrepreneurs are guided gently across an open and barrier-less field of entrepreneurship and instead makes visible the strong hands and barriers of SthlmTech's curriculum and how it has led to well-worn paths with few deviations.

In SthlmTech, entrepreneurs are guided by the ecosystem's expert components through the innovation-as-invention curriculum. Starting either in industry or university, founders with ideas are taught to enroll in incubators and entrepreneurial education centers where they learn the skills to produce a startup materially, legally, and linguistically. From there, they are handed-off to angel investors for seed funding and mentorship and to coworking hubs for inexpensive workspaces where they will develop their products or services alongside peers and mentors. All the while, they attend events and meetups where evangelists curate discussions and lectures for them and risk-capital investors groom them for investment through public pitching, foresight, and advice. When ready to scale, they seek out venture capital firms who provide series A or B funding and guide them through the prescribed growth stages. Once the startup has exhausted its growth potential, it is liquidated and the founders cut their losses and start over. Or, if they succeed, they "exit" by paying back investors via an initial public offering on a public stock exchange or a buyout of the company. From idea to exit or failure, this is the innovation curriculum put forth by

these ecosystems and it is through this curriculum that innovation-as-invention becomes a standardized discipline of practice and knowledge.

Chapter 5.

Meetups

In March 2018, the venue for STHLM Tech Meetup temporarily changed from the Hilton Slussen to the newer, swankier Hotel at Six. At the April 2018 meetup, I walked through the hotel's bar to the waiting area outside the auditorium taking in the new venue's sights and sounds. I was roughly half an hour early, as I usually was. I liked arriving early as this period of waiting was usually a good time to meet people and mingle in a more relaxed way than much of my other fieldwork allowed. On this particular evening, I found myself chatting with two entrepreneurs about Spotify's untraditional IPO (initial public offering) and the increasing tendency of startups to stay private for longer periods than in the past. It was mostly idle chit-chat about the day's biggest news story for entrepreneurs. I was hitting it off well with one of them in particular as he kept bringing the conversation back to my research to ask questions. As we were exchanging LinkedIn profiles, entrepreneur and STHLM Tech Meetup event coordinator, Mikael Lenart appeared in his signature black leather jacket in the entryway to the auditorium.

Figure 5.1 *At Six reception area outside STHLM Tech Meetup.*

I knew Mikael's jacket long before I knew his name. It has a large white decal of his startup's logo (Venue) on the back and is made entirely of reclaimed leather materials. Mikael, always in his jacket, was ever present at STHLM Tech Meetups just off stage, managing technology and audio equipment and ensuring the smooth running of the production. Before the event, he could be observed walking briskly around the venue doing last minute preparations. However, it was his appearance in the entryway that usually signaled the beginning of the event—although other staff members occasionally did this job too.

The attendees with reserved seating merge into a queue and one by one entered the auditorium—standing-room-only ticket holders were let in just before the event start time. The room was wide and shallow so that the stage felt close and the gathering intimate, despite its size.

Figure 5.2 Mikael Lenart in his Venue jacket at STHLM Tech Meetup August 2018.

The stage was lit with a purple glow emanating from the stage lights and a screen that spanned the entire back wall of the stage. The screens displayed the white STHLM Tech Meetup heading on top of a photograph of Gamla Stan filtered to deepen the saturation of

the image's blues and purples—matching the events online branding. The mellow, hypnotic electronic beats of "Lonely Days" by Mario Basanova slowly built as we entered the room. I could not help but bop along to the now familiar song as I found a seat in the third row. The song is part of the playlist that began every STHLM Tech Meetup. The playlist is hosted on STHLM Tech Meetup host and founder, Tyler Crowley's public Soundcloud.[1] As I pulled out my notebook, audio recorder, and phone from my bag and tried to figure out how to balance them without the old venue's handy arm-rest tables, "Lonely Days" gave way to Dutch DJ, Eelke Kleijn's remix of Arcade Fire's "Reflektor." Amid the music's quicker beats and disco-inspired jam, the steadily growing audience became livelier and the conversations between them louder in order to to hear each other over the music. No one around me seemed bothered by the volume but instead seemed to gain energy from it—motivating smiles, hugs, enthusiastic handshakes, and waves across the room.

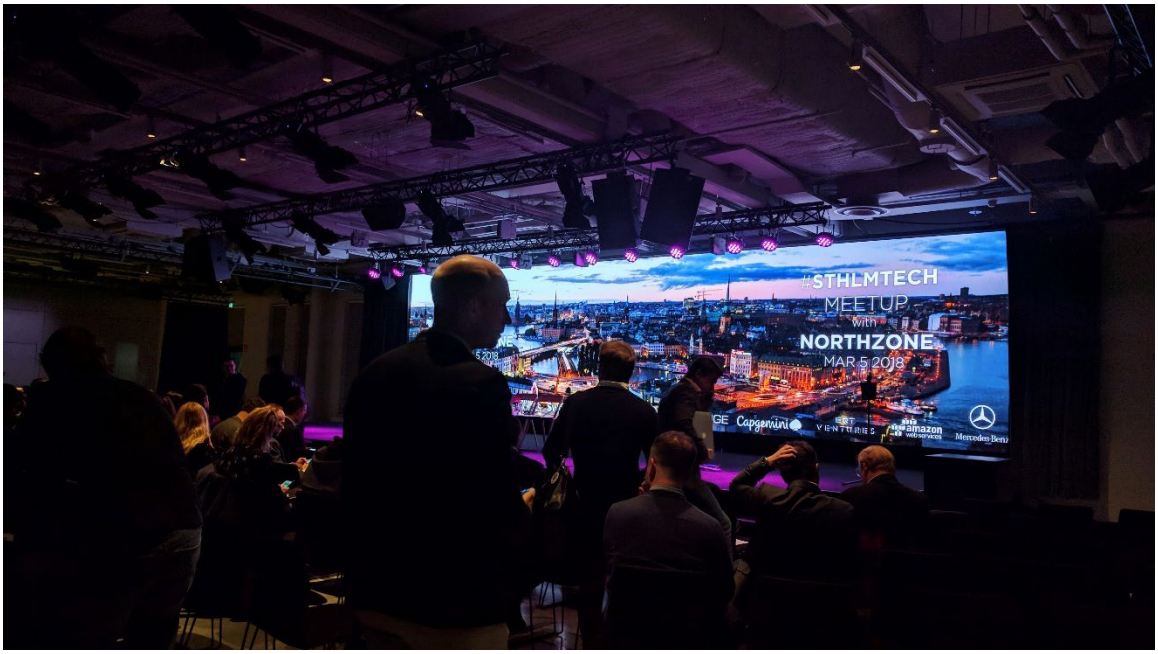

Figure 5.3 Finding seats at STHLM Tech Meetup March 2018.

[1] Soundcloud is a Swedish founded startup that hosts music and podcasts. https://soundcloud.com/tyler-crowley/sets/sthlm-tech-meetup

A man sitting behind me gestured at my audio recorder and asked if I was a journalist. I explained that I was an anthropologist and listed my affiliations and gave him the "elevator pitch" for my project. This began an enthusiastic conversation about his startup and my research— "That's even better than a journalist. People should be paying attention to what's happening here!" he exclaimed. At the end of the nearly seven-minute song, the entire room seems to pause for a moment as We Are Rockstars' "Does it Offend You" begins to boom through the auditorium. The song signals that the meetup will start soon and the overwhelming track encouraged most conversations to wind down. The track was aggressive and fast, the kind of music that makes one want to drive fast with the windows down, which is probably why it was featured in the 2009 Fast & Furious movie trailer.

Mikael, founder and co-host Tyler Crowley, and co-host Tuva Palm (then CPO of Nordnet Bank and an angel investor) worked their way to the stage to situate microphones, laptops, and get ready to kick off the show. Tyler was wearing his usual "uniform" for these events: shaved head, faded black denim jeans, black Nike sneakers, and a black t-shirt. Tuva was also dressed chic and casual with cropped light denim and a sheer black blouse. Their attire and demeanor added to the event's intimacy. Despite the event's overall spectacle, the hosts felt like friends meeting for a fika rather than celebrities or game show hosts—even more so as Tyler and Tuva leaned down to talk to people in the first couple of rows and wave at people they recognized across the auditorium.

The enthusiasm was palpable as the music faded and Tuva called out: "Welcome everyone for the second time at At Six! I love this venue!" Tyler jumped in and asked, "Who's been here before?" Roughly half the crowd raised their hands and those that did laughed. I joined in knowing the punch line from previous meetups. "You guys know! I don't even need to say it. It's a secret joke that half the room knows about," Tyler said conspiratorially. Nearly every meetup, Tyler asked this question and each time roughly half the audience were first-time attendees. This was presented by Tyler as evidence of the dynamism of the event and by extension SthlmTech itself.

After this, I know what is coming next: Tyler walks to the laptop on the podium and says, “We are just going to go really fast tonight because we have a lot to cover!” There is a subtle murmuring and a few chuckles around me. Although this statement seems like just a way to communicate the pace of the evening, underlying this statement is the frequent acknowledgment by Tyler that as someone with an American background he has no issue with packing in too much content and going late. However, most of the Swedes in the room have little patience for this, which generally leads to a large portion of the audience leaving precisely at the scheduled end time and with Tyler expressing mild and joking annoyance. Tyler reminded us that there is an official hashtag, #SthlmTech, and tweeting with it will result in an automatic retweet from the official SthlmTech account for its 11 thousand followers.

Each STHLM Tech meetup begins with Tyler talking about the month’s biggest headlines concerning SthlmTech—generally about large funding rounds and investments with nods to startups who “got their start” by pitching at a STHLM Tech Meetup event. This evening’s first headline was special, one of Stockholm’s unicorns, Spotify, had just had its IPO on the New York Stock Exchange. A photograph of the NYSE building with a large Spotify logo projected across the front appeared on the screens behind the stage. “First things first,” Tyler begins, “some Swiss company IPOed.” I could not help but laugh heartily along with the rest of the audience. A woman a few seats down from me snorted loudly into her water bottle, causing another round of laughter around her. The photograph was already infamous in the business media. It had Swiss flags across the bottom because someone at NYSE mixed up Sweden and Switzerland as the home of Spotify—one of Sweden’s most well-known startups.

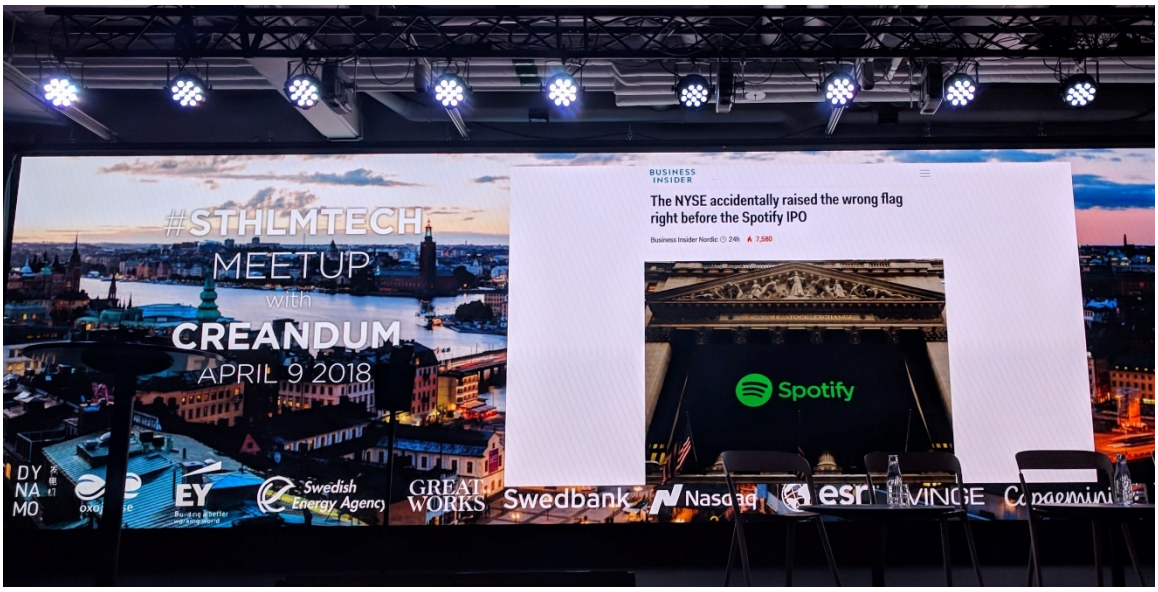

Figure 5.4 The infamous NYSE flag mix up presented at STHLM Tech Meetup April 2018.

"It was actually a genius marketing strategy!" Tyler exclaimed, "I mean all of the media was all 'HaHa! Look at this fuck up!' and then people were like 'Oh shit! Spotify IPOed today? I should get some shares!' So, it was a genius marketing strategy! … or… or… Americans are stupid…" Tuva cut in, shaking her head and chuckling, "No no no…" Tyler quipped, "Oh, I'll let you decide," then after a brief pause for effect, "The correct answer is B!" As a former American citizen, Tyler often expressed sharp and self-deprecating critiques of his former home country and relied on his experiences there and in Sweden to contrast the two. His joke landed and raucous laughter overtook the audience again.

As Tyler was fond of saying at these events, "This whole thing is completely unscripted!" So, there is plenty of snappy, curse-laden chat between headlines and new investment announcements, often calling on Tuva and Tyler's network of contacts in the audience for support or information. I sensed that they had succeeded in whipping up the audience's enthusiasm. Even through my own skepticism and cynicism of hype, I found myself engaged and easily falling into the rituals of the event. By the time the first speaker came up on stage the laughs, gasps, and applause were coming easily with people erect in

their seats, some holding up their phones to capture photos or to live-tweet the proceedings.

STHLM Tech Meetup began in January 2013 as the project of Tyler Crowley, an immigrant from the United States who settled in Stockholm because, as he said in a 2014 interview with VisitStockholm, "I honestly feel Stockholm is the most exciting city on earth right now for where technology is going." He had been recruited by the Stockholm Business Region in 2013 to assist in the development of SthlmTech. From this position, based on his previous work in London and Los Angeles, he sought to create a monthly meetup, an official ecosystem hashtag for social media (particularly Twitter), and worked with others in establishing public coworking spaces—his recipe for a startup ecosystem (Lumb 2014). Perhaps the biggest success of these efforts was in building some of SthlmTech's most productive innovation-as-invention educational infrastructures—including STHLM Tech Meetup.

A Meetup Education

During my time in SthlmTech, I attended fifty-one events for entrepreneurs. These included annual startup conferences, corporate run user conferences, workshops, hackathons, and lectures. However, by far most called themselves "meetups." Meetings of people within a trade coming together "not only as a space for exchange, but also for the production of hierarchies and sustaining social relationships" has existed since at least the eleventh century (Nyqvist, Leivestad, and Tunestad 2017, 4–5). These kinds of events are ripe for ethnographic engagement because, as Hege Leivestad and Anette Nyqvist's (2017) demonstrated in their edited volume of ethnographies of conferences and trade fairs, they provide opportunities to observe and engage professionals in a face-to-face "village" like setting where their secondary roles as professionals have been thrust to the fore as they seek to make connections and exchange knowledge. Unlike large industry conferences, however, the meetup is particularly local. Whereas conferences are usually hosted at a

destination that people travel to, the meetup is aimed at people who are already in the meetup's location—in this case Stockholm. There were people who traveled to attend, such as guest speakers and, most notably, host Tyler Crowley who was notorious for spending only two days a month in Stockholm and the rest of his time at a resort he owned in Thailand. Because of this, many of the meetups in Stockholm and particularly the STHLM Tech Meetup felt more like city council meetings than industry conferences. Local leaders of SthlmTech—primarily evangelists, investors, and "rock star" entrepreneurs—led the meetings by announcing old and new news, opened discussion with specialists on relevant topics to the community, facilitated presentations from the community (usually pitches), and concluded with announcements of upcoming events and opportunities. Following the event, the space was opened up for people to socialize and network. As infrastructure, meetups acted as a scaffolding for circulating hype stories, facilitating connections and organizing relationships, and for making entrepreneurs in relationship to itself. Lastly, meetups were key elements for a bodily experience of hype. Hype is not simply speech but is heard and felt through music, posture, proximity to other excited bodies, and the anticipation one feels from engaging in repeated ritual. The hyped atmosphere added to the validity and excitement for the curriculum the events presented.

Meetups facilitated the flow of hyped innovation-as-invention stories. These were typically news-style stories or opportunity announcements that provided exciting information on new developments, such as new technologies, startups, funds, or investments. These stories were seemingly circulated as a method for promoting SthlmTech by boasting the accomplishments of the people in it and the opportunities that were provided for them. However, they also created goals, pathways, and milestones for others to follow and aspire to. First, one gets the meetup announcement via email:

> Hey Angela,
>
> I have some good news... 2018 will be the biggest and best year for yet for Stockholm startups. How do I know this?...

> Just in the past month multiple new funds have been raised or launched and I'm really excited to have them all on stage Monday night at STHLM TECH Meetup - www.sthlmtech.com
>
> You might have seen the exciting news a few days ago about a new VC firm based in Stockholm called Luminar Ventures -
>
> Sweden's Luminar Ventures announces €50 million fund to back early stage startups
>
> Happy to update that Luminar will be joining as special guests Monday night with the other new investors who launched or raised new funds recently like The Nordic Web, Wave, Futuristic, Inventure and Ny teknik.
>
> Also to kick off 2018 right we have some very bright folks from Amazon, MercedesBenz, EQT, Swedbank and more to share their expert predictions in Media, Tech, Transportation, Finance, Bitcoin, Investing etc. We did this last year and you'll be surprised to see what the predictions were :)
>
> REGISTER HERE
>
> See you Monday night!
>
> Tyler

These emails tease the news one will hear at the event and what guests will be in attendance. They also, however, introduce and strengthen ideas about what kind of voices and stories are important, valuable, and worthy of attention. In this case and most others, venture capital takes center stage as both the big news and the voices to be heard. Before the event, as attendees hang out outside the event space waiting to be seated, attendees mingle and chat about the event's coming attractions. After introductions, then conversations usually turned to the event as easy small talk: Who is presenting? What do you think about them? Will you be going after Luminar's new fund? Before the event begins, the meetup has already begun structuring the conversations of entrepreneurs away from their ideas and missions and towards funding and the desires of funders. During the event, these stories take center stage as they are discussed by hosts, panels, and guest speakers. Networking in the event space or the bar next door, attendees further discuss what they have learned. Lastly, the stories from the event are further circulated as journalist attendees write about them and attendees tweet about them.

Meetups also are ways to not only bring people together but bring them together in specific configurations sometimes explicitly but often implicitly. Matchmaker meetups, for example, explicitly seek to bring together potential co-founders, employers and employees,

mentors and mentees, or investors and startups. At these events, you are asked to introduce yourself either via a short pitch to the room or on your name badge as one of a small number of roles—entrepreneur, developer, investor, mentor, and so on—and to choose from a number of predefined relationships that you seek: co-founder, investment, job seeking, talent seeking, mentorship, and so on. Other configurations of this explicit "matchmaking" included large poster boards where you could write your name and contact information with one thing you could offer and one thing you would like to get. I usually wrote "Interesting conversations about you!" and "Interviewees for ethnographic research," which were usually quite effective. In this way, meetups reinforced established roles and relationships that lead to the production of startups with little or no critical reflection on if or how these configurations support or lead to the change entrepreneurs were seeking.

While there were organizations that taught one to be an innovative entrepreneur with some greater nuance—such as incubators, universities, and specialist programs like the Stockholm School of Entrepreneurship—the first place most people became aware of how to be an entrepreneur were at meetups and for many these remained the most enduring innovation education they received. Unlike these other educational programs, meetups had very low barriers of entry. Most of them were free or cheap—a reserved seat ticket for STHLM Tech Meetup was 50 SEK (~US$5) and a standing room only ticket was free. Additionally, they did not require attendees to have prior knowledge, experience, or even a plan to be an entrepreneur to attend. Even during the formal and informal networking periods, I rarely observed gatekeeping in conversations around me but rather an eagerness to encourage learning and knowledge sharing.

Even when I observed someone caught in a conversation that they were uninterested in, more often than not they would leave the conversation by handing the person off to someone in their network that they thought would be a better fit. For example, in the bar after a STHLM Tech Meetup, I was talking to a woman who was looking for a developer to work on her new startup and man who had recently arrived in Stockholm as an

asylum seeker after having been a successful entrepreneur in Syria. Her startup was a social media app for connecting parents with children of the same age in their city and was already well networked within SthlmTech. He was interested in finding a co-founder for his startup idea around crypto-currencies and this was his first event in SthlmTech. I expected her to blow him off after she listened to his lengthy pitch and history. As he talked, she kept scanning the room and glancing at her phone. However, when he had finished speaking she said, "I know just who you should talk to" and gestured at another man across the room to come over. She introduced them, repeating with a surprising amount of detail the man's pitch and story, then wished them luck on their shared interest in crypto-currencies, before turning back to me to ask about my research. This meetup ethos of openness made it possible for most people to feel welcome in this space to learn.

During the event itself, meetups had a number of strategies for educating entrepreneurs. Panelists and guest speakers provided endless advice on everything from how to cold email someone, set up meetings, organize a business plan, or network. At STHLM Tech Meetup, this advice was often elicited from panelists and speakers by Tyler and Tuva, who would ask questions like, "What is the best way for people to send you their idea?" or "What really annoys you that entrepreneurs do?" or "What are you looking for in founders you might invest in?" However, the clearest form of education were public pitches. Not all meetups featured public pitches, but most did. STHLM Tech Meetup always ended with two to three pitches that were discussed by the night's panel of investors. At the end of the night, the audience would vote on who they thought had the best pitch. The winner got to have dinner with the investor panel after the event was over. This framing positioned the startup's mission and aims in terms of investor's needs and desires—even when the hype of their change-making idea was foregrounded, discussions always turned back to scalability, profits, and novel inventions making it first to market.

Pitching

Before the pitching started at STHLM Tech Meetup, Tyler introduced the concept to the newcomers: "The idea is to see what it is like to be in a pitch with these guys," he gestures at the two-person investor panel, "We are doing this for real. They are really going to pitch and these guys are really going to share what they are thinking." Then, he added on, "As part of this process I'm going to become an asshole." People across the audience chuckled at this. I did as well, mostly because I know he is very much not an asshole, even when he says he will be one. Rather, he was making it clear that he was putting on his "American" affect to give the pitchers a tougher audience than they might otherwise expect in Sweden. He continued,

> It is a character I'm playing. I have to say that because I used to get a lot of nasty emails from Swedes saying: 'You're such an asshole to these people!' I am doing this for an important reason that will be obvious shortly. I really do want them to get funded but to do that I have to play the bad guy. Trust me I love them, otherwise they wouldn't be here.

Tyler personally picked the pitches for each meetup. So, who the audience and investors saw were curated picks that, whether they "won" the pitch contest that night or not, were often eventually funded. It was difficult to say if this was because of Tyler's skill at finding fundable startups or because of the prestige they gained from being one of Tyler's picks—likely some combination of both.

A man and a woman dressed casually but fashionably were standing at the podium ready but clearly nervous; he fidgeted with the hem of his shirt and she shifted her weight back and forth between her legs.[2] The man clicked the laptop button to display their first slide—a large image of their logo. "Hello! I am Per and this is Jonna and this is our startup, Forests! We are on a mission to understand the world's forests and their inhabitants." Jonna then jumped in to tell a story about an endangered animal. She clicked for the next slide and

[2] This example has had the names and pitch altered to protect the privacy of the people involved.

Per described the importance of the world's forests to global climate change. Jonna clicked for the next slide and brought the image of the endangered species back up. Before she could begin, Tyler interrupted, "Oh, this guy again." The audience and the pitcher's laughed, the pitchers nervously, but good naturedly—they seemed to know they had made a mistake. They continued with the slide. Then, they brought up a slide of a famous individual known for his ecological activism. Per explained who this individual was and that he was a partner on their startup.

At this point, Tyler interrupted again: "Let's pause there because I think we are about to get to the good stuff. But, that was a very lengthy Swedish introduction," pointing at the investors in front of him, "What's going through your heads? Pretend the audience isn't here and you've just been listening to this pitch at your office. What's going on in your head?" The first investor piped up immediately, "Please just tell me what you do!" Tyler started, "At this point you're just…" The investor interrupted and exclaimed, "I just don't actually know what they do!" Tyler gestured for the pitches to continue.

Slightly flustered, Per continued, "The problem with science is that there are only so many scientists. But, it turns out there are lots of hikers, birders, and amateur naturalists everywhere! So, what we do is give them tools to log and share what they see in the forests—citizen scientists. This allows us to crowd source data and give that data to the scientists that need it." Jonna clicked for the next slide showing details of where to get the app and their contact information. She said, "If any of you out there like to spend time in the forest and want to help out, you can download our app here!" The audience responded enthusiastically, clapping and fumbling with their phones to scan the QR code on the screen before the slide could change. I would guess that most everyone knew that the pitch had some significant flaws from an investment perspective, especially those that had seen public pitches before. However, I never saw a pitch that did not get a solid round of applause for their efforts.

As the applause died down, Tyler asked the investor panel, "What is going through you mind now? I would guess: how do they make money." The first investor said, "I still, I just, I don't know what they do." The second, with a bit less incredulity added, "I guess I don't know what exactly they are collecting, what they are collecting it for, or how they will make money from collecting it." After a brief pause, the first investor said, "Ok, so this is like social media for hikers. I like that. It seems like a nice app. And, I guess you would be collecting a unique data set that no one else has. And, that gets me excited because as soon as you have unique data you can always use it for something. But then, I guess this is where I struggle. I don't get why this data is important. I get that this data is important for conservation which I think is great. But, how do you go from having that data to having an impact and making money from it." The investor here cleverly detached the data from the entrepreneurs' change-making aims for conservation and reattached it to profits that supposedly generate "impacts."

Tyler turned back to the founders, opening up for them to respond. Per explained that many birders and amateur naturalists already keep paper logs of what they see. The app allows them to keep track of this digitally on their phone and through social media functionality share it with their friends on the app. This is why people will want to use it and pay for it. As a bonus, they can then send this crowdsourced data to scientists who need the data to create models for understanding climate change. In his response, Per shifted his innovation argument from changing how climate science data is collected to the invention of an engaging social media technology.

After this exchange, the investors and founders got into a discussion about how the data could be used to generate profit, namely that the users could benefit from the aggregate data as much as scientists—such as locating good places to see rare birds. The founders agree this could be added to their app. One of the founders suggested that people will want to use the app because of the benefit it has for science. Tyler then interjected, "That might be a nice thing to claim in marketing. But, you will find that people don't use

apps because of what the app does for someone else. They will use it because it is useful to them."

One of the investors changed the subject to the pitch itself: "This has potential, especially the social layer, that could be your unfair advantage over competition and copycats. But, you've told me a nice story about conservation today. And, that is not what I as an investor need to hear, even if I agree with you. What I need to hear is the core of your business. The conservation is a nice side effect that you can mention on the side. But, I need to hear about the core of your business." Tyler, attempting to clarify for the founders, explained, "What's happening here is that you want to create this business because of conservation—and kudos to you for doing that and I hope more startups do things like this where they try to solve real fucking problems. Seriously, climate change is a huge fucking problem and we need people to do this. You can see that this is really driving them. But, that takes away from the potential of being a good business pitch. An investor has to know how they are going to get their money back. Those things can go together, but you have to understand your motivations are different."

"Look," Tyler said while turning around in his chair to face the pitchers, "this is what you should say. I've built a great app that people love to use its a digital record book for hikers, birders, whatever, it has social stuff, gamification, it's addicting, people want to pay to use it. How do I know? Because we already have ten thousand users. And, hey, we can also use the data from it to save the planet by giving it to scientists." One of the investors pointed at Tyler, "Yes. I would give you money for that." In this exchange, while recognizing the innovation-as-change agenda of the entrepreneurs, Tyler emphasizes and privileges the innovation-as-invention requirements of investors, teaching the pitchers and the audience how to convert the former to the latter. This is how meetups and public pitches educate entrepreneurs—not just the ones on stage but all those in the audience taking notes for their own ventures. These onstage discussions highlight the aspirations and needs of the investors and teach how all other visions should be reshaped to conform to these molds.

Chapter 6.

Evangelists

The first time I met Maral Kalajian in person I was waiting in line at a Starbucks before our scheduled interview time. She tapped me on the shoulder and exclaimed, "You have curly hair too!" Her Lebanese heritage gave her a significant volume of soft dark curls that stand out in Stockholm. When she first arrived in Stockholm, she was often the "only woman in the room and almost always the only foreign woman." Rather than shy away from her difference, she made use of her abundant curls to make herself a recognizable icon in SthlmTech: "It made it easy for people to walk up and ask if I was Maral-from-Twitter. So, people could associate me in person as the same person sharing their journeys and stories online." Maral enjoys telling people that she "tweeted herself" into her dream job. She had admired startups since she was a child and in 2013 coincidentally found herself in Silicon Valley.

She started looking up events she could attend and started with the 6th annual Women 2.0 conference in San Francisco. The conference was themed on "The Next Billion" that innovation and emerging markets would bring about and the role women could play in it based on new research unveiled at the conference that found "Women-led private technology companies are more capital-efficient, achieve 35 percent higher return on investment, and, when venture-backed, bring in 12 percent higher revenue than male-owned tech companies" (Klein 2013). Maral did not want to pay the expensive ticket price and so she volunteered to hand out goody bags and name badges to gain access. While there, she noticed everyone was tweeting so she quickly downloaded the app and recovered her old

account information and joined in. She spent the next six months volunteering and tweeting her way through Silicon Valley startup events.

Figure 6.1 Maral (right) interviewing Annika Fogelgren (left) at FemTech in 2018.

In September of 2013, she returned to Stockholm where she had previously obtained her master's degree in information and communications technology and entrepreneurship at KTH Royal Institute of Technology in 2009. She sought out opportunities to engage with Stockholm's budding startup ecosystem, starting with the newly developed SUP46 hub. She reached out to one of the founders Jessica Stark via LinkedIn to meetup. When she arrived at SUP46 she found that there was not yet a ceiling or much furniture and the projector screen was a white bed sheet. But, on printed pages taped to the walls she saw the hashtag #SthlmTech and knew how she would get involved.

She started going to events and populating the new hashtag with the stories she heard on event stages and from talking to the people she met. Stark invited her to a lunch where she met Rosie Linder who had an idea for a startup that produced research-based

games, books, and movies that encourage social and emotional intelligence in children. Maral signed on as a co-founder, working at Phillips as a social media specialist during the day and as an entrepreneur and budding ecosystem evangelist at night. In June 2015, she landed her dream job as a director at Startup Grind Stockholm, where she organized events putting people's stories on stage and not just on her Twitter account. A month later, she co-founded and became the moderator for the yearly meetup, FemTech at SUP46. FemTech like most events I attended included panel discussions, public pitches, and networking. The difference was that the audience and participants were all women. Like Maral's first startup event, the one she co-founded is an event for showcasing women's stories across a diversity of backgrounds and positions in the ecosystem. By the time I met her, it seemed like Maral was everywhere and knew everyone. She had just started a new job as marketing director for a company she was excited and passionate about: a startup working to tackle climate change with AI technology that attaches to home electric meters called Watty. She was still running FemTech, tweeting under the hashtag #SthlmTech, and blogging.

What is an Evangelist?

Evangelists in the software and technology industries are public advocates for a company, a technology, a community, or a practice. Maral was an innovation ecosystem evangelist—one of around twenty that I met in SthlmTech. Ecosystem evangelists spent a significant portion of their work lives advocating for SthlmTech and the innovation curriculum it generates. I also encountered brand evangelists and other startup-specific roles. However, they had more in common with marketing than with the ecosystem evangelists discussed here. The term "evangelist" in the technology context was coined by Mike Murray from the Macintosh division of Apple in the 1980s (Kawasaki 1990, 2). However, it was Guy Kawasaki that popularized and operationalized the concept in the 1990s. Kawasaki was hired by Apple to work in the Macintosh division to encourage developers to develop software for "a computer with no installed base, 128K of RAM, no hard disk, no

documentation, and no technical support, made by a flaky company that IBM was about to snuff out" (Kawasaki 1990, 2). He largely succeeded but with some setbacks caused by internal disagreements with Apple executives and so quit in 1987. After leaving Apple, Kawasaki authored *The Macintosh Way* (1990), a guide book for what he called "guerilla management" which included his first outline of evangelist marketing strategy and practice. He described the essence of evangelism as,

> to passionately show people how you can make history together. Evangelism has little to do with cash flow, the bottom line, or co-marketing. It is the purest and most passionate form of sales because you are selling a dream, not a tangible object. (1990, 100)

He describes it as a relentless relationship—like with a spouse (1990, 105) or a child (1990, 107)—where one is constantly in contact providing care and information to cultivate the customer's devotion to the product. Inspired by his Christian faith and admiration of speakers "on the pulpit" (Kawasaki 2006), he went on to study at "Billy Graham's School of Evangelism" to hone his approach for *Selling the Dream* (1992). In 1995, Kawasaki was re-hired by Apple as the "Chief Evangelist" and was responsible for lifting Apple out of near ruin through his evangelical approach. The primary tool he used was a mailing list called the Mac EvangeList (Kahney 2006, 76). Through it, he reached 44,000 "EvangeListas" that he encouraged to: proselytize to Windows PC users; harass journalists who published negative stories about Apple, resulting in journalists being hit with hundreds or thousands of emails at a time when a handful a week was the norm; and be the "guy in aisle six" to answer questions and promote Apple computers—although many were known for sabotaging other product tables and belittling sales people in front of potential customers (Kahney 2006, 76–79).

Although there was some fervor among some people I spoke to over the work and ideas of Steve Jobs, Kawasaki's evangelism seemed remote to the way people within SthlmTech understood the practices and expertise of its evangelists. Particularly, the more aggressive, televangelist-inspired overtones were almost entirely absent from how these evangelists described themselves. Rather, the conception of evangelism within SthlmTech

more closely resembled another of Jobs' collaborators: Stewart Brand. Stewart Brand founded, edited, and wrote for the Whole Earth Catalog (from 1968 to 1972 and off and on until 1998) and founded one of the largest and longest running online communities, WELL (The Whole Earth 'Lectronic Link founded in 1985 and still runs today). Brand, inspired by the first satellite photograph of the "Whole Earth" captured by NASA in 1966, imagined the future as one of "shared destiny" where new technological tools could bring about a socially- and ecologically-just renovation of the world through self-sufficiency, self-education, DIY culture, and—as the original slogan of the catalog suggested—"Access to Tools." Using the Whole Earth Catalog and the WELL, Stewart Brand was heavily influential in establishing the ethos of Silicon Valley (Turner 2010). This ethos carefully intertwined 1960s American counterculture values of anti-establishment and communitarian life with neoliberal promises of individual freedom and expression through commercial enterprise and digital technologies. Brand and the Whole Earth community transformed digital technologies into tools of endless creativity and self-realization and high-tech labor into freedom from white-collar drudgery. The evangelists of SthlmTech, like Kawasaki, brought people together and provided them with stories, inspiration, and calls to action. However, they were not focused on "guerrilla marketing" or sales but rather, like Brand, were ideologically oriented advocates for entrepreneurship, innovation-as-invention, and the community built around them in Stockholm.

Curating Innovation

Evangelists were considered to be experts in marketing and building hype. Maral, working in marketing, certainly had these skills, as did the other evangelists I spoke with and observed. However, I found that while their marketing and hype building skills got them invited onto stages and into media, they were also experts in a different domain that was both vital to the ecosystem and under-appreciated. Evangelists were curators. By this, I mean that they had a skilled and attentive practice for collecting stories and histories that

they synthesized and interpreted for consumption within the ecosystem. This practice was particularly impactful for shaping shared understandings and histories of the ecosystem by creating a kind of institutional memory and for creating connections between individuals, organizations, and ideas to facilitate knowledge exchange and collaboration across difference. This expertise and practice has largely supported the innovation-as-invention curriculum as most evangelists were themselves brought up through the curriculum's teachings. However, it also has the potential, and has in some ways, already begun to undermine the curriculum by creating space for new stories, voices, and conversations.

Early on in my fieldwork, Maral saw a tweet I had posted on the hashtag about my research. She reached out to me and offered to help by sharing her knowledge of the ecosystem that she called "her community." After our first meeting, she tweeted "Thank you for pulling info from my head today! It was fun :) more people should speak with you" and then tagged eleven people from across the community and sent me further contacts privately. This was what Maral did. She curated extensive knowledge of who was in SthlmTech, what they were doing, what their stories were, and the resources they had. Then, she leveraged that knowledge to put people into conversation privately or on event stages when she thought people could learn from each other's stories and knowledge.

Maral dedicated significant effort toward the collection of people's stories and sharing them on social media, in interviews, on blog posts, on event stages, and in personal conversations.

> I love people. People ask me, "What are your hobbies?" For me, meeting people is my hobby. I take so much energy from constantly meeting new people. Like sometimes when I am at the office for two, three weeks without getting out and meeting other people outside the office, I say, "I'm going to go to a café and have other meetings that maybe aren't related to work." It brings so much energy and also it comes so naturally to me to support others. So, I think that is one of my biggest drives. And, then if you can support a few and then you can see the impact of it on the whole, on the community, then you start supporting the entire community.

Maral's "hobby" was skillful as her practice was not merely coincidental but rather was a practice that she reflected on and worked to improve. In June 2015, she moved from an

amateur evangelist to a professional one, when she took a full-time position as co-director of the Stockholm chapter of the Silicon Valley based non-profit, Startup Grind:

> So, basically we used to celebrate our heroes in the community and be able to bring them together. And bring people together from all walks of life, not just the startup world, and put those people on stage and then have a really cozy chat together—a fireside chat we called it. So, I did that for one and a half years and it gave me practice on stage, because I was interviewing. And also it challenged me to get the names signed up to come. It was really a great experience, I loved Startup Grind.

In this role, she honed her skills in both the collection and interpretation of ecosystem stories. For these fireside chats to be successful, it was not enough to simply get people to participate. Rather, it was important to have people with different stories and perspectives in conversation on topics they were knowledgeable about. Organizing this, thus, required a careful and thorough practice of learning, tracing, and interpreting knowledge about these people and the community their stories spoke to. These kinds of presentations and storytelling practices were particularly important within SthlmTech as the community was structured by social networks with most people meeting others through personal ties. So, interaction and collaboration across difference—such as difference of expertise, role, class, education, race, citizenship status, gender, or other experience—needed an infrastructure for connection that could circumvent the traditional methods of networking.

Some of the evangelists I met were not only concerned with the kinds of collaboration that were glorified for accelerating or facilitating innovation-as-invention. Evangelists often hosted conversations on a wide range of issues that affected the community. Although, as some of them have described to me, it is difficult to find financial support and audience attention for these conversations and so had to find ways to embed them within spaces that fit within the expectations of the innovation-as-invention curriculum.

Figure 6.2 The migration panel at STHLM Tech Meetup March 2018. From left to right are two startup founders, Mikael Ribbenvik, Tuva Palm, and Tyler Crowley.

The European migrant crisis that began around 2015—which has been better documented elsewhere (e.g. Khosravi 2018b, 2018a; Andersson 2018; Lindberg and Borrelli 2019; Mc Cluskey 2019; Cabot 2019)—was a widely discussed off-stage issue within SthlmTech during my fieldwork. At the March STHLM Tech Meetup in 2018, ecosystem evangelist, Tyler Crowley, however, used the otherwise conforming meetup's space and time to arrange a conversation between Mikael Ribbenvik, the Director General of the Swedish Migration Agency (Migrationsverket), and two startup founders who had struggled with the agency's practices and policies that had led to the actual or threatened deportation of their staff. While waiting for the guests to make the way onto the stage, Tyler explained how the discussion had come together and introduced the emotional tone that would follow. First, he introduced Mikael Ribbenvik as someone whose "story" he knew and rather than setting him

up as the enemy said, “I genuinely love you and I know where your heart is at.” But then, he contextualized this introduction with an overview of the issue from other stories he had collected from media and his contacts, explaining that SthlmTech had been working to do “good” by employing, investing in, and supporting immigrants, asylum seekers, and their ventures within the ecosystem but that their efforts had largely failed because of Sweden’s immigration bureaucracy. Throughout the conversation, Tyler moderated their discussion by drawing out points of tension and potential intersections between the panelists’ stories. The resulting conversation, although emotionally laden and frequently hostile, continued for forty-five minutes—considerably longer than the meetup’s usual fifteen- to twenty-minute segments.

First, Tyler asked Mikael to tell the story of how the transition from a closed immigration system to a relatively open system, combined with a number of court decisions had led to the agency’s difficulties. Then, he invited one of the founders to explain his tortuous experience with Migrationsverket as he tried to help three of his employees migrate to Sweden. Mikael and the founder tacked between their positions with Mikael explaining the legal and material infrastructures that led to the founder’s struggles and the founders relating the suffering caused by them. With Tyler’s guidance, these exchanges brought productive attentions to the intersections of their perspectives. After telling the story of how one of his employees had been deported, Mikael asked the founder if the person had then left the country. He replied that they had not as they had appealed. From Mikael’s perspective, this was the system working as intended and as best it could within the confines of its burdens. However, the founder detailed the emotional, physical, and familial stress and anxiety caused by waiting in precarity, uncertainty, and under threat of deportation, in this case for more than two years, while the system was “working.” Together, they created portrait of the problem that both demonstrated the need for reform and explored the landscape in which such reforms would need to be made. This panel discussion, of course, did not solve these problems. However, by using his curated

knowledge of these stories, Tyler was able to create a more nuanced story of how Sweden's migration policies and infrastructures intersect with its innovation ecosystem that could be used for future collaborative work.

The curatorial practices of SthlmTech's evangelists far exceed the expectations and touted expertise that is tacitly put upon them by the ecosystem that frames them merely as influencers and personalities. By ignoring their curatorial expertise, their influence becomes perceived as primarily external (for outside investment or talent) or introductory (for new entrepreneurs) as they hype and market the ecosystem. Their pervasive influence on the shared histories and stories of the ecosystem, however, is obscured and elusive, as it is understood primarily in ambiguous mystical terms—like guru, force, or wisdom. This obscurity both removes their curatorial practices and expertise from scrutiny and limits their own reflexive practice that could lead them to better wield the power they have. If their work was seen as not merely hype and marketing a taken-for-granted system for producing innovation-as-invention, what kinds of conversations and educations might become possible alongside or even in place of them?

Chapter 7.

Angels

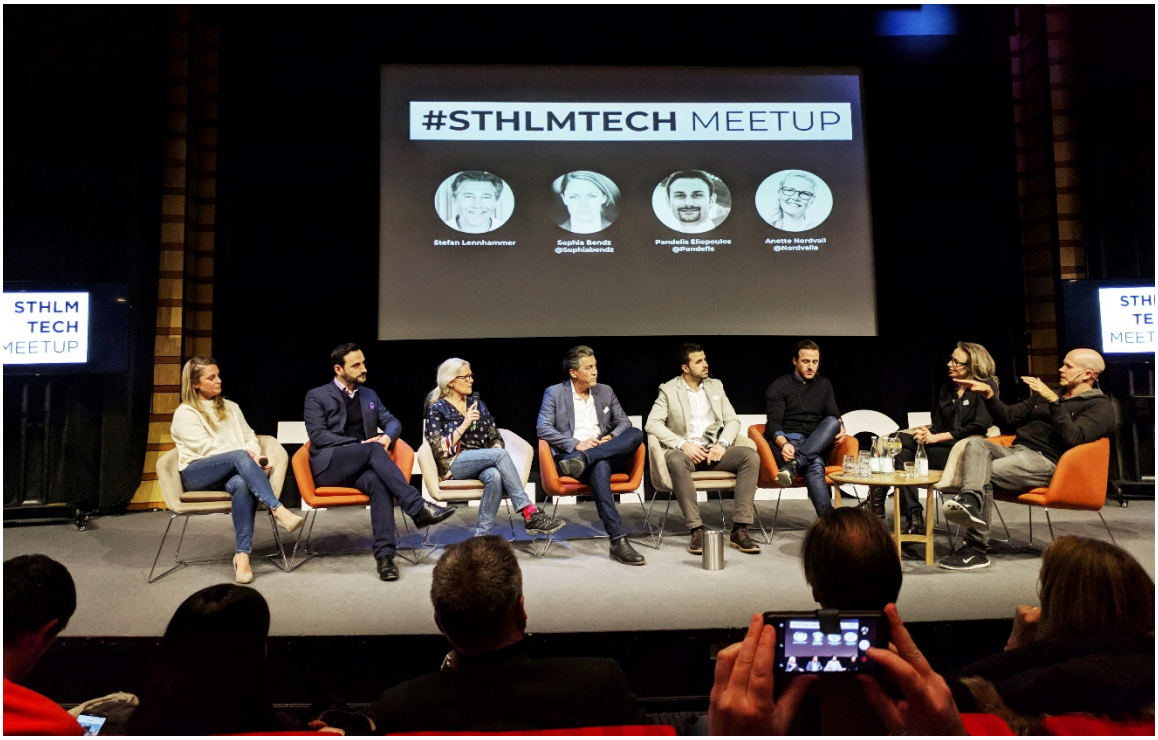

Figure 7.1 Anette Nordvall (third from the left) on the investor panel at STHLM Tech Meetup.

Anette Nordvall was the most recommended angel I encountered during my networking activities within SthlmTech. The first time I heard of her, however, was at STHLM Tech Meetup in February 2018 when she was one of six angels on the evening's investor panel. She stood out on the stage partly for her magenta socks but mostly for her contributions to the evening's discussions, most notably during the first pitch. The entrepreneur started well by describing a problem and then explaining what solution her company offered. As usual, Tyler cut in and asked the panelists for their thoughts so far. One of the panelists started off by saying "I don't understand what the product is." Tyler asked

the next panelist, “Are you thinking the same?” He replied, “Yes.” I was confused by this response. I had heard a fair number of pitches by this point in my fieldwork, but I was not as well versed as these professional investors. However, even I thought the pitch was quite clear and I could easily think of analogies to similar companies. I glanced to the side and saw confused looks and furrowed brows from the audience members around me. I jotted down in my notes, “I’ve heard this critique before to pitchers. But usually they are telling long winded stories or something. This seems really obvious, are they just being purposefully obtuse?” As I was writing, Anette chimed in and said, “I’m thinking it is…” and then in two short sentences accurately described the startup’s service and its value, concluding “I find it kind of attractive.” I quickly scribbled in my notes, “Well not everyone is playing dumb. AN got it straight away.” There was a brief awkward pause then another panelist broke the mild tension by saying “I’m just curious what a [quirky service name] is!” The audience laughed and Tyler gestured for the entrepreneur to continue. Following the pitch, it became clear that several of the angels really did not like the startup idea. After some typical questions for the entrepreneurs, they began debating ways to change it, in some ways quite fundamentally. Tyler exclaimed, “The product has changed folks! And, now you are more interested in that product, yeah?” This conversation went on for some time without much regard to the growingly agitated pitcher who was largely being left out of the conversation. Eventually, Tyler asked the panelists to raise their hands if they thought the company should be changed. Anette cut in without voting, leaned forward to be able to see the entrepreneurs and said, “You have to choose for yourselves.” Tyler thanked the entrepreneur who began packing up her materials. The audience erupted into discussion and some even began to leave. Noticing the sudden change in the audience, Tyler made an inquiry about the time, thinking that he had gone over but found that the meetup was ahead of schedule. He tried to continue the discussion with the panelists. The audience continued to talk amongst themselves, ignoring the panelists. This was the only time this happened at any of the more than fifty events and meetups I attended that year. A man behind me said to the woman next

to him, “These guys…these are the kinds of investors to avoid. If they don’t like it, do not invest. I think they just like ideas to be theirs.” He scoffed loudly. The woman replied, “Yes. Agreed. The one with the pink socks though…” He interrupted her, “Anette you mean?” “Yes,” she continued, “she seems to have the right approach.” In the margins of my notebook I wrote, “Reach out to AN for interview??”

I did end up reaching out over email and scheduled an interview over Skype as she was not in Stockholm at the time. During the interview, she described her journey from managing a small business with her sister-in-law to becoming one of “Sweden’s Most Powerful Tech-Investors” in 2015 and 2016 according to *DiDigital*, a Swedish business media outlet. When she was 26, Anette alongside her sister-in-law managed a quarantine station for animals entering Sweden, that by law were required to be quarantined for 120 days. When collecting animals from ports of entry, she had to engage in the frustrating activity of completing a “frickin’ form” on a typewriter that required her to painstakingly align it to the many checkboxes and fields. During a summer job at the age of 15, she had become acquainted with punch card systems that standardized the entering of information for computation. This experience inspired her to seek out an automated system for the “frickin’ form” and found a path forward in her husband’s tinkering with screensaver development for the office Commodore 64. Together with a programmer friend, he developed software that could digitize the form into something resembling a spreadsheet. Anette grew this software into a startup called Door to PC and sold it to municipalities in Sweden. In 1993, her startup became part of a larger telecommunications company and she moved with it to the Research Triangle in North Carolina. Anette was not content with the idleness or repetitiveness of staying with a single venture for long, however.

> I have never been a very good employee because I tend to have—not a short attention span because my attention is pretty long—but I get—not bored because it is such a silly word—but I get sort of uninspired about everyday common stuff. So, I am not the best administrator. I am not the best sort of go down into the mine and put your stuff on and do the same same same stuff all the time. I like to do quicker things. I like to analyze and strategize and so forth.

The company IPOed in 1998 and with her connections within the telecommunications industry, Anette gained the ability to become involved in various kinds of investments and business opportunities, including real estate, day trading, and other projects like one that developed a custom automotive heads-up display—similar to those commonly seen in cars today—that was used in the movie Fast and The Furious 4 (2009). What "gave her goosebumps" was not the accumulation of wealth but watching companies grow and learn. The small size of the community in the Research Triangle combined with the number of Swedish companies with local headquarters there (approximately 60 in her estimation) allowed her to become quickly acquainted with high-ranking executives in these companies. This led her to consulting roles with Swedish companies looking to work within the United States.

However, after the 2008 financial crisis in the United States, Anette, like many other Swedish former-expats I met, decided to return to Sweden.

> In 2010, in Sweden, it was just starting. Everybody was coming back. We didn't have a crisis as we did in the US. Everybody felt that they had a crisis here in Sweden. But, we were looking at people when we came in the Fall of 2009, and people were sitting around at the coffee shops and the restaurants and they had, you know, plastic bags from all the retailers. And, we were like "People are shopping here! People are enjoying outside life. Spending money on dinner!" In the US it was like oof. Nothing was going on. For the first time in North Carolina, people were actually commuting together in a car because of gas. We would go like "No, I can't go; Let's take a phone call instead." [...] So, the only thing I saw was opportunity and I saw that the Swedes didn't understand what they had… that this is actually the land of opportunity. That Sweden had all the infrastructure for everyone to fail and still be taken care of by the society. You will not be booted out from your apartment if you're a decent person and you just have some challenges and you need some support from the social system, you have schools, you have healthcare, there's bunch of good things here.

Today, Anette describes herself as an "Active Early Stage Tech Investor and Environmentalist, focusing on the New Nordic markets on ICT, and Deep-tech Science based innovation; while adding for profit Impact, Diversity, Environment, and Global goals into the mist. Appreciated Board member, Public speaker and Business leader." Anette's reach within the ecosystem like other angels extends far beyond investment as she has been an entrepreneur, a speaker, a chairwoman, a podcaster, a researcher, among other roles.

What is an Angel?

Angels are individuals with wealth—that in SthlmTech was generally, although not always, obtained through entrepreneurship—that they invest in high-risk ventures as individuals or in syndication with other angels. Angel investors, like venture capitalists, make equity-based investments in ventures, particularly startups. Unlike VCs, however, angels do not invest from funds of others' money. Rather, they invest from their own wealth. In the early days of the US technology startup boom during the 1980s, there was a widely held perception that there were gaps in the capital markets of startups where formal risk capital, such as venture capital firms, were not investing, particularly in seed and pre-seed stages where investments of less than $500,000 were needed (Wetzel 1983). However, these gaps were being filled somehow and in 1983 William E. Wetzel, Jr., coined the term business angel to describe the relatively invisible actors (at the time) who filled them. Entrepreneurship and management scholars, Richard T. Harrison and Colin M. Mason provided a contemporary definition of a business angel as,

> a high net worth individual, acting alone or in a formal or informal syndicate, who invests his or her own money directly in an unquoted business in which there is no family connection and who, after making the investment, generally takes an active involvement in the business, for example, as an advisor or member of the board of directors. (2008, 309)

This definition highlights three important characteristics of angels that distinguished them from other forms of formal and informal investment: (1) they invest their own wealth; (2) they are not blood or fictive kin to those they invested in; and (3) they were active participants in their portfolio companies generally at greater degree than VCs.

In Sweden, the growth of the informal risk capital market followed a reduction in taxes in equity based investments in the 1990s, the stability of inflation and GDP after the 1980s, and the country's general transition from a debt-based economy to an equity-based one in the mid-2000s (Månsson and Landström 2006, 281–82). Two surveys of Swedish angel investors in 1992 (Landström 1998) and 2004 (Garsten 2010; English-Lueck and Lueck Avery 2017) provide insight into how the landscape of informal risk capital changed during this

period in which angel activity doubled in Sweden. Between 1992 and 2004, the hype of the Internet and technology development swayed angels from investing in real estate and financial services to primarily technology startups. Through angel networks—organizations that operate similarly to venture capital firms where syndicates of angels invest together—angels became both more well-known and with the increase in exposure to investment opportunities became more selective. As angels became more professionalized through angel networks and experience, the amount they invested increased by 25%. However, the number of investments and the amount invested proportional to their wealth increased only conservatively. This can be explained, however, by the substantial time investment required of angels, especially when their tendency to have highly active roles within their portfolio firms (Wetzel 1983; Freear, Sohl, and Wetzel 1995) is taken into account. At STHLM Tech Meetup in February 2018, host Tyler Crowley asked a panel of angel investors, "What is your biggest weakness as an investor?" Panelist Sophia Bendz without hesitation replied,

> I can start. Time. That is why this question is good. How much time do you have? The more investments you do the more people want to jump on a call and discuss an option program or launch plan or PR hire.

Panelist Pandelis Eliopoulos added, "Time is a good one. Another thing is that sometimes you meet so many companies and it's hard to get through the noise. So you need to practice a little bit to get the attention." The panelists like the 1994 and 2004 survey respondents expressed not a limit to their financial capabilities or willingness to invest but simply the inability as an individual to manage a larger portfolio.

Like their counterparts in other countries, the vast majority of angels are older men with entrepreneurial experience (Månsson and Landström 2006, 335; Landström 1998, 335). During fieldwork, however, I met and saw more women than this premise suggested I should have. However, this was likely because of the many initiatives and the popular demand for a larger female presence across the ecosystem that ensured that event stages always included women and that people were more likely to recommend women as potential contacts for this research.

In the Care of Angels

Within SthlmTech's innovation-as-invention curriculum, angels were presented as virtually interchangeable with venture capitalists except that angels invested earlier and in smaller amounts than their VC counterparts. Thus, they were often called upon as foresight experts to promote innovation-as-promise, as is discussed in Chapter 8 on the foresight of venture capitalists. However, in this chapter, I will focus on their roles as mentors and educators who were tasked with being the caregivers of new entrepreneurs and their startups—making them key facilitators for teaching the innovation-as-invention curriculum.

In anthropology and in science and technology studies, care as an analytic object has arisen primarily from feminist work that sought to shine light on practices of care and empathy both domestically and professionally that, because of their feminine and racial affiliations, had been under-theorized (Mol et al. 2011). The anthropology of care has since greatly expanded and produced insights into our understanding of care as situated, exclusionary, linguistic, material, and aesthetic (Black 2018). Within the anthropology of entrepreneurship, care has come to be associated with corporate practices and policies that provide care through services informed by employee surveillance that is intended to increase employee's productivity (Garsten 2010; English-Lueck and Lueck Avery 2017). In design anthropology, particularly in ethnographies of Swedish design, care was a politics embedded in the cultural geometry of design practice, such as in human-centered design and ergonomics (K. M. Murphy 2015). I am using the concept of caring and caregiving to describe the role of angels in SthlmTech, rather than educating or teaching, to address their work as not only providing instruction but also in emotional and moral support and guidance that prepared and primed entrepreneurs for the next steps in the innovation-as-invention curriculum. This caring was not merely a concern, but rather a practice of care that required skill, competence, and reflexive attention. Although I have chosen to use a woman as a case study for this section, this expertise should not be understood as something women have brought to the angel role, as the care discussed here was present in my interactions with

both women and men. However, the erasure or obscuring of care as an expertise in entrepreneurship certainly stems from the masculine dominated field's devaluing of practices considered to be feminine.

The business literature traces the etymology of angel in informal risk capital to theater angels (Avdeitchikova, Landström, and Månsson 2008; Ramadani 2012; Liu Tingchi and Chen Po Chang 2007). In the late 1880s and early 1900s, prior to the establishment of non-profit theater philanthropy like the Ford Foundation, box office sales rarely covered the costs of theater productions in the United States (S. M. Anderson 2007). Thus, the theater arts relied on patrons, which came to be called angels, to finance their performances. These angels were generally seen as very wealthy individuals, "who, out of personal vanity, rather credulously drop large sums of money into a Broadway show so they can see their names in the Playbill for the latest Broadway hit," (Crespy 2007, 120) or who, as one 1905 news article described them, "simply lik[ed] the pretty face of a chorus girl" (*The Sun* 1905). In 1981, William E. Wetzel Jr. submitted a report commissioned by the US Small Business Administration which laid the foundation for research on informal risk capital investing in the United State and led to him coining the term "business angel" in 1983 (Sohl, Harrison, and Mason 2018). Today's popular perception of business angels in the United States do not stray far from the early 1900s theater angels as recent popular documentaries demonstrated the desire of wealthy individuals to put their name on hot new ventures, such as Ja Rule and the failed Fyre Festival (Smith 2019), and to be enchanted by young women, such as former US Secretary of State George Shultz's unfaltering commitment to Elizabeth Holmes even after her medical technology venture Theranos was found to be fraudulent (Gibney 2019). However, although these characters do exist in the informal risk capital industry, they are not representative of all or even most business angels operating in Stockholm. Rather, SthlmTech's angels resemble Jack Cooley.

Jack Cooley was a property master of no particular fame in the early 1890s. However, his actions as a theater angel so impressed his company manger that the manager

anonymously wrote to *The Sun* in New York City to expound upon the lessons other theater angels could learn from his prop master.

> Eight or nine years ago Cooley was the property man of a company I was managing on the Pacific Coast circuit. We were trying to get the rich pickings on the far slope of the Sierra Nevada, but after we had been out six or seven weeks and had reached Denver we struck a period of bad business. [...] I called the company together, explained matters, and said that the end of the rope had been reached finally. In the general consternation caused by this announcement, I didn't notice old Jack Cooley edging toward me nervously. [...] "Governor," he whispered to me, "can I speak with you a moment?" I thought the [sic] was going to give me a hard luck story and ask for money. [...] But Jack looked serious, and then said: "Is this really the end of the show?" [...] "Well, Governor," asid [sic] Cooley, "I have saved up a trifle over $200, and I've got it right here in my pocket now. Do you want it?" [...] That night was the turning point of our career. It may sound like a fairy story, but Cooley's money came just at the right moment. [...] That show stayed on tour for thirty-nine weeks after the memorable night that Cooley became angel for the company, and every actor and actress received full salary during that period, and when we finally closed the season, still on the commonwealth plan, we each of us enjoyed a respectable dividend, not even forgetting Cooley. (*The Sun* 1905, 27)

The primary lesson the company manager expressed was that,

> Any fool millionaire with money can be an angel and never mind the loss. It requires no nerve to pay out money when you have millions still remaining in the bank. The real test of an angel comes when he is risking his last dollar to keep the show going and is interested in the venture from other motives than simply liking the pretty face of a chorus girl" (*The Sun* 1905, 27).

Although the angels studied by others (e.g. Wetzel 1983; Freear, Sohl, and Wetzel 1995; Liu Tingchi and Chen Po Chang 2007; Avdeitchikova, Landström, and Månsson 2008) and myself are very rarely investing their "last dollar," those in SthlmTech do tend to have gained their wealth from the industry in which they invest, often as entrepreneurs themselves, and see themselves not as outside benefactors but as active participants in their portfolio companies, usually with consulting roles, membership on boards of directors, or even employment within the company. In a 2004 survey of Swedish angels, 70% had gained their wealth through entrepreneurship and 96% had ownership or management experience in startups and relied on this prior experience for investment decisions (Månsson and Landström 2006, 291). Venture capitalists and other investors are also often directly involved in the startups they fund, usually as advisors or board members. Angels, however, had a more intimate relationship with their investments. Without the infrastructure of a VC firm

or other organizational backing, they spent more time working personally with their founders. Angels use of their personal funds also led them to feel more responsible for the founders they invested in and the ideas they supported—not simply for their financial outcomes but also for their ethical and moral implications. To this end, each angel that I spoke with had curated a collection of skills, practices, infrastructures, and knowledges that supported their work to care for the founders and startups they invested in. This caregiving practice began with evaluating their inventions for their potential as "innovations"—that is their commercial viability—while directing the ambitions of entrepreneurs to generate social change toward that viability. This was not a nefarious plot by angels to groom entrepreneurs for VCs, as angels usually were also highly motivated by their own desires to effect positive social change. However, as individuals with deep knowledge and personal experience of entrepreneurship and SthlmTech's innovation-as-invention curriculum, they often perpetuated the lessons taught to them.

Anette's approach to evaluating startups began not with an entrepreneur's personality or ability to inspire—as most VCs did—but with the "innovation" itself, what impact it could have and how viable it may be. Anette was particularly concerned with climate change leading her to invest in companies like We Don't Have Time, which "is a movement and a tech startup that leverages the power of social media to hold leaders and companies accountable for climate change" (We Don't Have Time 2018). "I'm not so into making money or to have the money," she told me, "but [...] that it grows because you believe in the company and the company is doing the right thing. That gives me goosebumps." After evaluating the startup's impacts and potentials, then she evaluates the founders based on four areas of skill:

> My belief is that you need to have four skills if you are wanting to have a good team. You need to be an innovator. You also need to have the fire in the belly and the gut in the belly to be a really good entrepreneur. And those don't usually come together. Then, you need to have a good communicator, a good marketer, someone who can bring your message out. And, then, you need to have the administrator, the person who is diligently taking it down to a normal level and trying to make some structure out of it. And those four key features are very rare in one person. And if they are in

> one person, they're going to burn out their candles at all ends within a couple years. So, you need to find good partners. And, that is very rare in the early stage, that you have the full team.

Here Anette is expressing both a knowledge of what is needed for the startup to succeed in SthlmTech, but also an attention to the capacities and limits of individuals. This care was not simply a passing concern but was embedded within her own infrastructures of evaluation and investment. In my conversations with other investors and other community stakeholders, the ability to be skilled in all or multiple of these areas was usually (although not always) valued as "double" or "quadruple threats" and when paired with a seeming willingness to work long hours with few breaks was valued as "passion" or "dedication." However, among angels, one of the most valued qualities in a founder was for them to accurately understand their capacities and limitations and seek help to supplement them. Both of these positions were concerned with the effects on the startup's outcomes. However, the closeness of angels to the founders they invest with led them to more often take an empathetic and emotion-based approach often based on personal experience, as Jens, a former entrepreneur and angel investor, described to me:

> I don't even look at, you know, just one. One founder just can. not. do. it. alone. [*He hit the table between each word for emphasis.*] I tried that once. I failed. Big time disaster. I almost lost my wife. In the end, I chose to lose my business. So, now when a founder comes to me for seed money for their idea, I ask them: "Who is helping you? Who's your partners?" If they don't have an answer, then I send them back out to find them. I tell them, go to this meetup, go talk to [redacted for privacy], he will help you meet people. If I know someone, I'll send them introductions. But, I won't let someone try and do it by themselves. They need to be set up to take care of themselves. That's why I sign my emails with…Do you know this Swedish?…Sköt om dig. It means you, you take care of yourself. I won't get my money back if you are crashed out. If you don't take care of your person, your family, if you're not feeling balanced, you will fail.

Angels, who predominantly invested at the seed level, further developed skills and practices specifically for guiding and mentoring founders as they grew their idea into a functioning startup. VCs also did this kind of work. However, as Anette explained to me, at the seed stage you are starting with almost nothing as they are "pre-product, pre-revenue,

pre-almost everything in the company." Whereas VCs who tend to invest later in a startup's life—called series A, B, or C funding—are working with startups that,

> are already making 100 million SEK a year, they have a business, they've hired people, the engine is sort of working, and they just need to go from a 100 thousand users to a million users. Then, you only need to put X amount of energy into the company then Y will just come out of it.

Angels spend their time, skills, and attention to mentor and guide pre-seed or seed-stage startups so that they can become startups that VCs want to invest in and benefit from. This extends their care work from their founders and investments to functioning as a foundational engine for the ecosystem. Incubators and educational organizations—organizations that offer seed funding, education, and guidance to founders, such as KTH Innovation, Sting, or the Stockholm School of Entrepreneurship—could similarly be described as institutions of care in the ecosystem. These organizations have formalized this expertise of care into curricula and mentorship and hand-off programs that are made specifically to guide founders. Both the angels and the people working in incubators I spoke with, spent time learning and cultivating knowledge particularly on their mentorship, educational, and interpersonal communication skills as well as their understanding of how to transform ideas into startups and the common points of tension and failure. And, just like Jack Cooley, they were not simply investing capital into a venture but their time, skill, and energy to support and care for the venture. So, although angels were most often called upon as experts in foresight and investment, their daily work more often drew on their expertise of care for founders, startups, and the ecosystem to sustain the innovation-as-invention curriculum.

Part III.

Innovation as Promise

SthlmTech is saturated with hype. Sweden and Stockholm's public diplomacy organizations hype local innovativeness across history from Nobel's dynamite to the founding of Spotify. Evangelists, investors, and other ecosystem leaders spend large amounts of time promoting SthlmTech, its startups, and inventions—through the production of events, showcases, and media. These promotional efforts are not only meant to create general and political support for SthlmTech but also to drive people toward its innovation curriculum for generating the futures its leadership hope to bring about though it. Hype storytelling is a key feature of SthlmTech and is a fundamental aspect of how innovation-as-promise functions.

> I'm upset that the media, sometimes in Sweden, will hype up anyone. They hype up someone who just started—before they have made something. It is not the right thing. You cannot celebrate before you achieve something. You have to earn it a bit. I get pissed off when I think about it. I know a lot of people who are suffering to do something that will really make a difference in the world. That is what entrepreneurship is all about. That is why real founders exist. Not because they want to be cool or known.

As Maral Kalajian expressed in this interview with me, hype was not something that was appreciated by the people I talked to in SthlmTech. The primary reason was because most associated it with the practices of so-called wantrepreneurs—that is a mythical type of entrepreneur who was known for seeking a glamorous "entrepreneurial" lifestyle that included a lot of press coverage and morally, ethically, or socially poor ideas for startups—if they had an idea yet at all. Ibrahim Naji, a Palestinian-Swede and founder of RealEDU, "suffered" for his startup. As far as I know Maral and Ibrahim did not know each other. However, I am confident that Ibrahim would have easily fit Maral's understanding of what a "real entrepreneur" is. He worked long hours, was passionate about his work, was inspired by his personal struggles within education, and developed a service that aims to do social good. He was not likely to be found seeking out the spotlight unless it furthered his startup's cause. And, he too had a distaste for hype.

> Being a rockstar in the 80s, it was cool as a motherfucker. And that's being an entrepreneur today, right? It is so hyped up, so cool, so this, so that. I hate it. It's going to fuck up a lot of things for a lot of people. People think its cool, but… I guess

> the only message I want to get out, the only thing people need to know about taking on this role as a founder or co-founder is that it takes work. […] You need to have a disgusting work ethic. You have to burn and have a passion for what it is you do. […] Just work. That's my only thing I want to emphasize to all the bullshitters out there.

This wantrepreneur phenomenon was generally attributed to changes in the media coverage of entrepreneurship in Stockholm and globally. Where entrepreneurs went from being seen as barely employed wishful thinkers who sometimes achieved some level of success in business to potential "rock stars" with fan bases who read their books, attended their talks, dreamed of working for them, emulated them, or mourned them when they passed—like Steve Jobs, Mark Zuckerberg, Elon Musk, and Jeff Bezos—or, closer to SthlmTech, Daniel Ek (founder of Spotify), Niklas Adalberth (co-founder of Klarna), and Sebastian Siemiatkowski (co-founder of Klarna). Even new entrepreneurs with small, emerging startups could be rock stars if the right person spoke publicly about their potential. Most entrepreneurs and investors, however, disliked this rock star status—even while using it for their own benefit—and foresaw a coming reckoning for the bubble created by the hype of rock star entrepreneurs and by hyping entrepreneurship as the business of rock stardom.

In addition to this, hype was also often discussed in terms of hyped ideas particularly via Gartner's hype cycles. Gartner, Inc. is a large multinational consultancy company that, in 2010, made 773 million USD in revenues in its core business segment, research (Steinert and Leifer 2010, 254). They are most well known for their hype cycle model in the technology industry. The 1995 model, usually presented as a graph, shows how expectations for a new technology change over time. The line signifying this begins with low expectations at the time of the "innovation trigger." It then rises steeply at the peak of inflated expectations caused by media and endorsements of early adopters. This is followed by a steep decline that turns up only just above where it started at the beginning. This steep decline is caused by failures and backlash in the media. This low period is called the "trough of disillusionment." If a company survives this trough, then the expectations steadily, but slowly, rise over time through a period called the "slope of enlightenment" as improved

generations are released and best practices emerge. Finally, the line of hype flattens out in the middle of the chart in period called the "plateau of productivity" as interest peaks.

Under empirical scrutiny, however, "the current model and processes used by Gartner to elaborate their hype cycle analyses must be rejected due to methodological flaws and procedural inconsistencies" (Steinert and Leifer 2010, 254). Perhaps luckily, I did not observe the hype cycle model being used as or described as a good tool for decision making. Rather, it was used to describe the past—namely to point out that hype is inevitably followed by backlash.

These two pieces of the hype puzzle, however, were only a small part of the story of hype in SthlmTech. Hype has a "tendency toward excess" that casts it as "a pejorative, a cacophony from which most people want to distance themselves" (Powers 2011, 217). During my fieldwork, discussions about hype were often bogged down by conceptions of hype as cynical, false, or deceptive speech or rhetoric. These discussions were focused on the quality of hype speech—its allure and honesty or lack thereof—in specific instances—as in "That pitch was just so over the top!"—or as a genre of speech—as in "Hype is such a distraction from real entrepreneurship." I describe these conversations as being bogged down because they elicited intense emotional responses from the people I talked to making it difficult to discuss hype beyond these particular, ubiquitous critiques.

Another feature of these conversations was a suspicion about my motives as a scholar. The people I spoke to were aware of the scholarly critiques of technology and startup hype as techno-utopian (Segal 1985; Hand and Sandywell 2002; Turner 2010; Poggiali 2016) or as techno-solutionism (Morozov 2013; Tiso 2013; Maturo 2014; Easterbrook 2014)—particularly as these critiques have become pervasive in popular media and blogs and were discussed in terms of Gartner's "trough of disillusionment" on popular technologies like AI and cryptocurrency. This suspicion was clearly manifested when after asking an entrepreneur, Harry, if he would be willing to sit down for an interview, he said, "You won't catch me up. I'm not one of those people who buy into all this hype. So, I'm a bad person to

interview." He became a semi-frequent conversation partner at events and on walks to the T-bana (Stockholm's subway system) after them. He even attended my workshop. He never did sit for an interview, however, as I was never able to convince him that my research was not seeking to call out "those kinds of entrepreneurs" for their naivety, neoliberal sentiments, or attraction to spectacle—I suspect that I also did not convince him that this isn't what I should have been doing.

After some time in the field, the swift and decisive ways that hype was dismissed as a topic to reflect on appeared to me glaringly incongruous with the pervasiveness and intensity of hype's presence across SthlmTech. If hype is devalued by the people of SthlmTech, then—I felt compelled to ask—why does it permeate so much of their everyday practice? To answer this question, it becomes important to understand that hype is not simply a cynical form of aggrandizement but also, as Kaushik Sunder Rajan found among biotechnology companies in Silicon Valley, hype is a promissory discourse in a speculative marketplace that calls "the future to account for the present" (2006, 116). Setting aside the cynical perspective on hype, he argues that hype is a credible, fabricated truth that entrepreneurs and investors work toward rather than a fabricated lie that is meant to defraud and deceive. In this way, hype becomes a way for imagining the future and working to enact that future. The exaggerated tones and claims of hype are, then, tools for enrolling allies and securing investments (Brown 2003, 6). From this perspective, hype and expectations are performative measures for enacting an imagined future rather than a description or prediction of it (van Lente 2012). Thus, the measure of hype is not about "truth or falsity; rather it is about credibility and incredibility" (Rajan 2006, 114)—that is, one need not believe that the claims of hype will definitely come to fruition, only that it credibly could happen. Thus, hype is a powerful tool for innovation as promise for the way that it generates exciting, actionable knowledge—that is then tied to a prescribed and accessible practice for action.

Chapter 8.

Venture Capital

Figure 8.1 Sïmon Saneback (left) on the investor panel at STHLM Tech Meetup October 2017.

The first time I saw Sïmon Saneback he was on stage at my first STHLM Tech Meetup in October 2017. Tyler Crowley, STHLM Tech Meetup's host and founder introduced Sïmon as the representative of the venture capital firm Wellstreet that was at the time the most active VC fund in Stockholm. He described Wellstreet as a "very unique" venture fund founded by, run by, and for entrepreneurs. I heard Sïmon's name floated fairly often during my time in Stockholm. As he was the third most active investor in Stockholm in 2017 according to his website, this also was not surprising. But, it wasn't until I connected with

Claire, an entrepreneur and graduate student, that I was introduced to him. Sïmon was aiding her in getting a project off the ground. So, as it went with so many of my contacts in SthlmTech, Sïmon and I first connected via an introduction email:

> Hi Simon,
>
> Hope you are doing great as usual and enjoying the summer vibes!
>
> A nice lady from the US (PhD researcher) who is a visitor researcher at Stockholm Uni now, wants to interview you for the PhD research she is conducting about Innovation in Stockholm tech community. She had already interviewed many of the SthlmTech faces, leaders, entrepreneurs, and you are on the top of that list because you are going to enrich her research so far by schooling the readers since you're the most active VC profile at the most active VC firm.
>
> Angela knows you are so busy but if you can give an hour at your office she would be so happy, I think she has an open schedule until August where you can pick a time that suits you. Read more about this awesome lady here [This was linked to my personal website.]
>
> Angela, this is Simon! :) Simon is the most active VC, entrepreneur, awards winner and speaker and lately he started to support FemTech movement, he himself is a big school :))
>
> Simon, this is Angela! :) she is behind the first american PhD research about Sthlm tech community innovation, which is going to be a good resource for the next students generations.
>
> Best regards,
>
> [Claire]

Sïmon replied promptly:

> [Claire], thanks for the intro and the kind words :) moving you to BCC.
> Angela, nice to e-meet you. Let me know how I can support.
> Sïmon Saneback

A handful of emails later and I was set to interview Sïmon over lunch at Wellstreet. Just a couple of blocks from SUP46, Wellstreet's office was easy to find as I followed my usual path from Östermalmstorg station north on Birger Jarlsgatan to SUP46 and instead turned to the west a block further north than usual. Walking in the front door, the office immediately felt cozy with dark lighting in the reception and common areas and gold accents to match the firm's logo. I had arrived at Wellstreet's office a few minutes early. So, a receptionist offered me coffee and directed me to take a seat. Along the edges of the common area were brighter glass walled offices and meeting rooms with windows overlooking the street. My coffee did

not have time to cool before Sïmon, a 30-something man with short dark hair and closely shaven beard, appeared from one of the glass-surrounded offices.

We walked to Pascha Café across the street to grab some lunch, as Sïmon was fitting me into his schedule on his lunch break. On the way there and back, he probed my knowledge about SthlmTech—who had I met, was I aware of such or some other organization, and so on. When we returned to the Wellstreet office, he took me to a brightly lit conference room with chic white office furniture made in typical simple and ergonomic Swedish forms. Sïmon jumped in right away and gave me the same spiel about Wellstreet I had heard him give at STHLM Tech Meetup ten months earlier. With very little effort on my part, he soon naturally fell into the meandering, open-ended style of my interviews.

Sïmon founded his first startup at sixteen years old. At thirty-two years old at the time of our interview, this gave him sixteen years of entrepreneurial experience—about half of his life. He was originally drawn to business by observing his father and five uncles as a child. The term entrepreneur wasn't popular then, so he decided at twelve years old that he wanted to be a "businessman." He admired their freedom and that they "made things"—he also admired their financial income. When he grew up, he told me, the financial draw fell away. Now, he was motivated by the fun—he loved the creativeness and was inspired by the stories of people making new technology and doing things with it.

Sïmon had spent the last decade in Stockholm, specifically in a wide range of roles. In addition to his work as an investor, Sïmon was an active evangelist promoting SthlmTech and working actively to shape its future, such as to be cashless and more equitable for women and minorities. Particularly influential on his current position was his time as an angel investor. He "failed miserably" as an angel investor, he told me, because he was just giving money to people. Based on his experiences across SthlmTech and outside of it as founder, board member, advisor, executive, public speaker, among other things, he developed a "new approach" to investment. Together with seven other entrepreneurs, he put this into practice by forming Wellstreet. He told me that he saw two problems with

venture capital at the time: (1) traditional VCs were investing earlier and with more money, which was inflating valuations of unprepared and underdeveloped startups leading to an increase in failures; and (2) entrepreneurs needed more than money to be successful, they needed experienced knowledge, access to networks of people, and guidance on operations. The Wellstreet founders, including Sïmon, sought to change this by staffing a highly diverse team of investors and consultants to provide guidance and by creating "problem-specific" cohorts in their portfolio to encourage collaboration and network building. The approach was discussed frequently among people I talked to as new and unique. My time spent with other venture capitalists in Stockholm, however, found these practices of knowledge sharing, network building, and cohort building to be quite common, although much less formalized and reflected upon.

What is Venture Capital?

Venture capital is a form of capital invested in high-risk ventures. Venture capitalists are the general partners and employees of a venture fund's management company. Venture capital is structured around a fund, a management company, limited partners, general partners, and their portfolio of startups. The fund is a pool of capital usually created by institutional investors, such as pension funds, insurance companies, or endowments; but, can also include individual investors. This fund is structured as a limited partnership with the limited partners providing the fund and the general partners taking responsibility for the management company. The management company oversees the investment decisions and work to ensure that investments make returns, as they carry a fiduciary duty to their limited partners.

Venture capital firms and the professionals that work within them, from herein referred to as VCs, invest in risky, but potentially high yield, ventures such as startup companies. This investment is usually an equity investment where the VC purchases common or preferred stock in the company, usually with liquidation rights to ensure a

higher priority payout if the company fails. The fund makes money, then, when the company makes an exit either through an initial public offering (IPO) on the stock exchange, an acquisition by another company, or if the shares are purchased by another party, such as the founders or a new investor. However, the high rate of failure among startups means that a large portion of these investments (between 70-75% according to the VCs I spoke to) will never exit. This means that the fund is largely grown by a fraction of investments that have a "hockey stick" shaped growth pattern and are able to exit between $100 million and $2 billion, thus making the large failure rate viable in the long term.

Nearly all of the VCs that I spoke to referred me directly to or quoted without citation Steve Blank, a veteran serial entrepreneur from Silicon Valley and a prolific author and educator on innovation and entrepreneurship, for their go-to definition of a VC-friendly startup. Blank defined six types of startups, only one of which he identified as the kind of startup that works best with venture capital: the scalable startup (Blank 2013).[1] The scalable startup according to Blank is a "temporary organization in search of a scalable, repeatable, profitable business model" (Blank and Dorf 2012, 12). Or, in the words of one VC interlocutor, "Venture capital works best with small startups that look in the mirror and see the billion-dollar unicorns they will be in ten years—even if that is laughable. We don't play well with little shops that look in the mirror and are happy with their current reflection."

The nature of venture capital investments, particularly the high-risk, high-reward investment structure combined with the general partners' responsibility to the limited partners, has shaped the labor of VCs to expand far beyond the technical infrastructure of setting up investment deals financially and legally. They must also become adept in observing and assessing ideas, startup teams, and other factors that may impact a potential investment outcome. Then, once they invest in a startup, the VC stays involved as a mentor

[1] For a thorough discussion of Blank's definitions and their impact, see Chapter 3 under the heading "What is a Startup?"

and advisor, usually formally on an advisory board of board of directors, to guide the startup toward an exit that is profitable for the fund. VCs, thus, carry expertise not only in the financial management of the fund, but also specialize in particular fields (e.g., food technology, gaming, financial technology), have experience and skill in growing companies quickly, creating and spreading hype, and develop extensive networks for gaining insight and expertise more broadly as well as to support their portfolio of companies with additional opportunities for partnerships and mentorship.

Sweden's venture capital industry began through government intervention after a period of stagnation from 1973-1982 (Fredriksen 1997). During this time, regional government organizations created development corporations that later were converted into venture capital in order to combat unemployment problems (Karaomerlioglu and Jacobsson 2000, 67). Private venture capital modestly grew in the early 1980s after institutional investors were allowed to invest in startups (Karaomerlioglu and Jacobsson 2000, 69). However, it was not until the 1990s that the number of funds and management firms began to truly take root and grow. Swedish policy in the 1990s fostered this growth by creating legal architecture for limited partnerships, modest reductions in taxation, and new or bolstered exit possibilities including the over-the-counter (OTC) market, alternative trading markets (e.g., AktieTorget and Innovationsmarknaden), and the traditional stock market (Karaomerlioglu and Jacobsson 2000, 69–70). This resulted in the venture capital market in 1998 becoming ten times the size it was in 1987 (Månsson and Landström 2006). Of the venture capital management firms operating today, the largest were nearly all founded during this period, including EQT, SEB Venture Capital, and Northzone. This generation of VCs funded the first class of billion-dollar startups, including King (2003), Klarna (2005), Spotify (2008), and Mojang (2009). The dot-com crash caused a slump in the Swedish stock market and thus in the exits of startups in 2000 leading to a decrease in venture capital activity (Månsson and Landström 2006). In the 2010s, however, there was another boom in the creation of venture capital firms, including Wellstreet, Luminar Ventures, and Nordic Tech House following the successful

exits of the unicorn first class. This boom emerged following on the heels of rapid growth across the ecosystem, including the formation of Sting (2002), KTH Innovation (2007), Tillväxtverket (2009), SUP46 (2013), SthlmTech Meetup (2013), and a flurry of activity aimed at creating a curated community that could be called an ecosystem.

This booming period of ecosystem growth was not only motivated by but was also deeply entangled with the unicorn concept and the values it secreted. Thus, venture capital, although it only funds approximately 6% of startups in Europe as of 2018 (Wyszogrodzki and Malik 2019), was the most common form of investment suggested and promoted at the events, in the educational documents, and by the people I encountered in the field.

The Promises of Foresight Hype

In SthlmTech, venture capitalists are called upon as experts in primarily three domains: (1) business scaling and growth, (2) business valuation (both fiscally and socially), and (3) foresight hype—with the former two being highly dependent on the latter third. VC foresight as a domain of expertise is best understood as the perceived ability to construct a prediction of the future—usually concerning technology, consumer behavior, and the performance of verticals, ecosystems, or startups—based on one's knowledge of present and past conditions— and then promote it as advice and guidance for the entrepreneurial community. Sïmon is often billed as such an expert at events. If you ask him, though, he will tell you there is no such thing as an expert when it comes to these things. Among the VCs I met, Sïmon was not alone in this uneasiness about foresight, as demonstrated by this quote from Rolf, a Stockholm based VC and entrepreneur:

> You can't know it. I can't know it. Nobody, I mean no one, can tell you what is going to happen. All these "experts" [*he said the word with particular disdain*] are out here telling people what is going to happen and what to do to cash in on it. They're all bullshit. I'm bullshit. I do it to. We are supposed to know what's going to happen so we do the best we can. But, no one is an expert.

This unease came up in most of my conversations with VCs who preferred the safety of "informed speculation" over prediction that could be easily disproved over time, making

them appear less credible. By leaning on informed speculation, they could still claim some expertise while allowing their future-oriented claims to be walked back to imaginations, dreams, or desires when they did not come to fruition. Despite this unease, however, VCs were frequently asked about the contours of the future in media and on stage and although many divulged their unease to me, when these same VCs were asked on stage to make predictions they usually did so without hesitation or equivocation and with all the fanfare of typical hype speech.

As part of my interview protocol for VCs, I asked each about their research and knowledge practices for foresight: specifically, how did they come to know what they think they know about the future? There were a number of common practices across them, including subscriptions to data and research services on startups and investments (e.g., Crunchbase), trading information with their network of contacts, reading news broadly on business, technology, politics, and law, and consuming large numbers of business pitches. Others had more particular habits and epistemic infrastructures in place, such as news outlet RSS feeds fed into machine learning algorithms to surface trends, a goal to read one book on technology or business from a scholarly publisher every month, a small notebook for cataloging the topics of overheard conversations while moving through the city, a quarterly meeting with a friend who worked in government, and collecting various successful startup and corporate employee handbooks. Beyond this, each VC I met had particular preoccupations and affinities that anchored their approach ranging from interesting technologies or business stories. At the time I met him, some of Sïmon's preoccupations were block chain technologies, the potentials of a cashless society, the impact of the Chinese marketplace app Wish on Swedish shopping behavior, and the effect of wantrepreneurs and their investor enablers on SthlmTech.

All of these practices were for seeking some knowledge or insight about what may occur or become a factor relevant for the future—specifically the future of startups and investment in them. The process of turning this knowledge into foresight hype was generally

seen as mysterious and magical by people outside of venture capital (and even by some within the field) who imagined there was some ingredient between knowledge collection and foresight that was an innate talent or intuition. This mystique reduced anxiety stemming from uncertainty and added to the credibility of VCs as experts and their predictions especially when they came to fruition—even if only partially. However, through my discussions with VCs like Sïmon, I found no such magical quality to their epistemic practice. Rather, I found that their foresight expertise was not in predicting the future but in creating what Douglas Holmes (2018) has called "tractable futures" based on his research with central bankers:

> Central bankers, rather than predicting the future, seek to create elements of a tractable future. They do this with words. They use language to explore, promulgate, and sustain the ideas that animate our economic future, as well as the structures of feeling, the sentiments, expectations, and desires that make them real. (Holmes 2018, 173)

As foresight experts, VCs did not predict the future. Rather, they used presentations, interviews, panel discussions, editorials, social media posts, white papers, and reports to lay out stories about the future that could be used as resources for founders, other investors, politicians, and other stakeholders as they navigated an industry that is fundamentally built on uncertainty. Their stories build upon the insights gained from their knowledge production practices to give texture to the future—what to be excited about, what to pay attention to, what factors to concern one's self with, and what dangers may lie ahead. This isn't a prediction but rather an informed imaginary filled with desire, hype, ambition, and curiosity designed to influence others' actions—specifically action toward VC-friendly entrepreneurship. Thus, VC's foresight first promises a better future and then prescribes a specific path toward it—this is innovation as promise.

Sïmon maintains a YouTube playlist of his recorded talks, presentations, and interviews. Watching them consecutively, instead of as the standalone events they were intended to be, the tractable future Sïmon was creating became clear in the patterns of storytelling that surfaced across them. Sïmon's future is simpler, where tasks are seamless

and without friction; data will be smarter, not bigger, so a person's data must be purposefully collected to specifically benefit their experiences; consumers will be more demanding and less loyal, so that companies must inspire and wow customers and not merely have the lowest price; and people's needs, desires, and convenience will dictate technological innovation, rather than which technology is currently hyped in the media. He tells the story of this future by weaving together histories, anecdotes, models, and survey data to show a trajectory extending forward via entrepreneurship's (and venture capital's) promise on which the audience can observe and take action.

As investors, Sïmon's and other VCs' futures are persuasive and often taken-for granted by entrepreneurs because the ecosystem reinforces VC's status each time they are asked to provide foresight—especially without further discussion or critique—and then showcases them as gatekeepers who control whose startups are or are not funded and considered valuable. VCs act as gatekeepers directly by controlling whose work is funded and whose is not and indirectly through their influence on other non-VC investors who have accepted their foresight and logics into their own practice. In listening to SthlmTech's VCs, I often heard descriptions of futures that were appealing. However, the epistemic practice of venture capital is not undertaken from some objective view from nowhere. Rather, their knowledge is created, collected, curated, valued, and distributed from a situated position within an occupation with its own responsibilities, values, and logics that become infused in the tractable futures and pathways of action they hype for others. Innovation as promise, thus is not a simple imagination of some better future with a suggested pathway to achieve it. Rather, innovation as promise is always necessarily entangled within complex webs of desire, ambition, obligation, and situated position. And, its pathway to these futures is created and guarded by powerful actors whose roles and biases are largely hidden behind belief in their magical powers of intuition and foresight.

Chapter 9.

Facts & Unicorns

Table 9.1 Excerpt from Atomico's 2015 Spreadsheet on Billion Dollar Companies that originated the Unicorn Factory story (Atomico 2015).

Company	Business Description	Sector	Year Founded	City	Year of Inclusion
King.com	King.com is a social game developer providing online games for global portals, websites and other media companies.	Gaming	2003	Stockholm	2014
Klarna	Klarna provides e-commerce payment solutions for merchants and shoppers.	Financial Services	2005	Stockholm	2013
Mojang	Mojang is a Swedish game developer creating video games such as Minecraft.	Gaming	2009	Stockholm	2014
Skype	Skype provides mobile and web applications that allow users to make voice and video calls and chat over the internet.	Social	2003	Stockholm	2005
Spotify	Spotify is a digital music service that gives you access to millions of songs.	Content	2006	Stockholm	2011

Table 9.2 Timeline of Selected Unicorn Factory Quotations

2015	On a per capita basis, [Stockholm] is second after Silicon Valley as the most successful producer of technology companies valued at over $1 billion. These include familiar household names such as Skype and Spotify, alongside the newer entrants to the tech unicorns club of Mojang (Minecraft), Klarna (online payments) and King (Candy Crush). —CITIE: *City Initiatives for Technology, Innovation, & Entrepreneurship* (*Altabev* 2015, 20)
	In the past decade, this city of 800,000 inhabitants has churned out more billion-dollar tech companies than any in Europe, beating out metropolises such as London and Berlin. According to a study by Atomico, 'on a per-capita basis, Stockholm is the second most prolific tech hub globally, with 6.3 billion-dollar companies per million people compared to Silicon Valley with 6.9. — *The Financial Times* (*Ahmed* 2015)
	Stockholm—Europe's unicorn factory: [...] within recent years the city has produced five unicorns, or start-ups with a valuation exceeding $1 billion. These unicorns are Skype, Spotify, King, Mojang, and Klarna. According to research by Atomico, Stockholm has the 5th highest number of unicorns globally and is in 2nd place with regards to number of unicorns per capita, surpassed only by a small margin by Silicon Valley. — *Stockholm Business Region Development* (*Teigland et al.* 2015, 2)
	Stockholm has the highest number of unicorns per capita in the world after Silicon Valley. — *Invest Stockholm* (Invest Stockholm 2015)
	Stockholm produces more billion-dollar companies per capita than any other region in the world after Silicon Valley. Skype, King, Mojang, Klarna, Spotify and iZettle are all unicorns founded in Stockholm. — *Stockholm Business Region* (Stockholm Business Region 2015)
2016	Sweden, with government support, has turned into a 'unicorn' factory. — *Market Watch* (*Dujmovic* 2016)
	When counting the number of 'unicorns', i.e., high-tech startup companies that achieve a valuation of at least USD 1 billion within 10 years, Stockholm stands out as the city with the most unicorns per capita in the world and as a region second only to Silicon Valley. This is one reason why Stockholm in the international press has been called the 'unicorn capital of the world'. — *Stockholm School of Economics Institute for Research* (*Skog et al.* 2016)

2017	[Spotify,] The music streaming service is the first European technology company that has taken on the biggest of the US giants at their own game and won. Apple effectively admitted as much when it set up its own rival streaming service in 2015. Spotify has done this from Stockholm, a city of less than one million people that has more unicorns – defined as privately-owned companies valued at more than $1bn – per person than any other city on the planet. — *The Independent* (*Chapman* 2017)
	The relatively small Nordic country has just 10 million people, but it is the second most prolific tech hub on a per capita basis. [...] Whatever the reason, Stockholm has earned the well-deserved reputation as a unicorn factory. — *Uncubed* (*Uncubed* 2017)
2018	Sweden has the second-largest concentration of billion-dollar companies per capita in the world (with 6.3 billion-dollar companies per million people, trailing only Silicon Valley at 8.1). — *Startup Guide Stockholm* (*Hansen and van Uden* 2018)
	Stockholm is regarded as one Europe's brightest tech start-up hubs; the city has produced more billion dollar companies (the so-called 'unicorns') per capita than anywhere besides Silicon Valley. — *The Sydney Morning Herald* (*McDuling* 2018)
	Meanwhile Sweden is – paradoxically enough – the second best country in the world when it comes to producing modern billion-dollar startups. Only Silicon Valley beat Stockholm when it comes to unicorns per capita. — *Swedish Startup Manifesto 2.0* (*Lidne et al.* 2018)
2019	Spotify, Mojang, King, iZettle — all are examples of billion-dollar companies born in Sweden that have made Stockholm the world's biggest unicorn factory per capita behind Silicon Valley. — *Financial Times* (*Milne* 2019)
	Stockholm has one of the fastest-growing tech startup scenes in the world. Home to more billion-dollar firms per capita than any region outside Silicon Valley, the city has earned its crown as the European unicorn factory by churning out a long line of tech behemoths. — *Raconteur* (*Brickner* 2019)
	Once upon a time there was a city in a cold place a long way to the north. One day the city started to tell a story about itself. As the chapters unfolded, life in the city changed, and soon it didn't even seem so cold or far away any more. People listened to the story and realised that the city wasn't quite what they expected. They started to tell the story to each other about how the city had created a magical unicorn factory. — *The European Investment Bank* (*Björner and Zetterberg* 2019)

2020	Sweden represented 68% of Nordic VC investments according to Pitchbook and in particular, Stockholm has grown into a unique melting pot for technology ventures and claims after Silicon Valley, to be the home to the second most unicorns per capita in the world as well as the largest tech company in Europe, Spotify. — *J12 Fund & Angel Network* (*Banderet* 2020)
	Known as Europe's 'unicorn factory', Stockholm has more $1 billion-plus companies per capita than anywhere outside of Silicon Valley thanks to companies like Skype, Spotify, Klarna, King, Mojang and iZettle. — *Invest Stockholm* (*Holm* 2020)
2021	Indeed, Stockholm boasts more 'unicorn' companies – startups valued initially at over a billion dollars – per capita than anywhere except Silicon Valley. — *The Local* (*The Local Creative Studio* 2021)
	With the most per capita unicorns outside of Silicon Valley, Stockholm has a thriving tech startup scene. It's the perfect place to build connections and engage with other entrepreneurs to grow your business. — *Norrsken Impact Accelerator* (*Norrsken Foundation* 2021)

Guides and reports for innovation ecosystems usually include lists of facts to orient the reader to what makes the ecosystem unique, special, or valuable. They range from population numbers, labor statistics, and aggregate investment numbers to quality-of-life claims, creative or innovative capacities, and technological or ethical affinities. These facts circulated widely within SthlmTech as they popped up on event stages, in brochures, in slide decks, in café art, on websites, and in conversation. Because these bits of knowledge are considered to be in a category called "facts", they were generally circulated without resistance or question, as most people understood facts to have specific qualities that make them trustworthy. When I asked about these facts in the field, most people did not know from where they originated or how to verify their accuracy. Yet, they trusted their authenticity and considered them to be non-political statements that objectively reflected reality. A fact, however, "is not just a fact" (Dumit and Sensiper 1998, 217) but is rather the emergent result of historical and ongoing knowledge practices and the material conditions of their lives.

The stage for STHLM Tech Meetup January 2018 was setup at the Hilton Slussen with the familiar seating layout for the night's panels and the usual black and white slides with the meetup's title and sponsors projected behind the stage. Co-hosts Tyler Crowley and Tuva Palm whipped up the audience with news that another one of Stockholm's startups had reached a billion dollar (USD) valuation before it's exit and thus had become a unicorn.

TYLER. 2017 was a very big year!

TUVA. The year everything happened.

TYLER. But how big, let's kind of dive into it. There were some reports coming out that Stockholm was the second-best performing city in Europe. I think they were referring to London as number one perhaps.

TUVA. Probably.

TYLER. Although that might change after Brexit. But umm… (*The audience laughed.*)

TYLER. iZettle takes in 400 million on a billion-dollar valuation and…

TUVA. That's not bad!

TYLER. That's not bad. That kind of makes it officially… we had three new unicorns.

TUVA. Yeah! Yeah!

TYLER. For those that don't know, unicorn means your company is worth a billion dollars and 8 billion SEK that's basically a billion dollars.

TUVA. That's it then you're a unicorn.

TYLER. That means we had three in 2017!

TUVA. Yeah in 2017.

TYLER AND TUVA (*not in sync*). Bambora, LeoVegas and iZettle.

TYLER. And then already for next year, TrueCaller looks like they might…

TUVA. Yeah!

TYLER. Northzone who knows how fast that might go. They might become the next Swedish unicorn.

TUVA. We have candidates.

TYLER. If we count the three we had this year, there's maybe only two cities on Earth that had three this year. Maybe Beijing, San Francisco for sure, but maybe Beijing and that's it.

TUVA. Yeah. Based on capita. I would say without the statistics for it, I would claim, Stockholm has the most unicorns per capita. We have the most unicorns per capita.

TYLER. We were tied with San Francisco until recently, I don't know if maybe that is still true. But if we keep throwing in two per year…

TUVA. Definitely. Definitely.

In June 2019, Northvolt secured its billion-dollar valuation and Truecaller's summer 2019 valuation just missed the mark at around $750 million but reached it after a 2020

investment. During my time researching Stockholm and conducting fieldwork around SthlmTech, I heard no fact more often than this one:

> Stockholm produces more unicorn companies per capita than anywhere in the world, except Silicon Valley.

It was included in almost every foreign or non-specialist news article about SthlmTech that I read and collected during and after fieldwork. It was mentioned on stage at least once at just over two-thirds of the events I attended. The homepage for Invest Stockholm, the arm of the Business Region of Stockholm responsible for promoting Stockholm's business sector, is titled, "Welcome to Stockholm: The UNICORN factory." It was a frequent topic of casual conversation, especially when at least one person (often me) in the conversation was seen as a newbie or outsider. And, it was ubiquitously included in guides to SthlmTech.

The fact of the unicorn factory, however, is not as straightforward as one might think. There is substantial ambiguity in the unicorn concept, how unicorns are counted, how unicorns are claimed by ecosystems, and why being a unicorn is so widely valued. Like innovation, the unicorn concept's ambiguity makes it a powerful tool for persuasion, hype, and enrolling allies toward goals and impacts that are largely obscured by this ambiguity. Also, like innovation, the unicorn concept's ambiguity has been mobilized toward—and indeed was invented specifically for—supporting the maximizing and optimizing of entrepreneurship for venture capitalism. The unicorn factory fact first promises the magic of companies changing the world and then directs entrepreneurs toward venture capital investment and rapid scaling—and along the way has generated a problematic culture of wantrepreneurialism.

What is a Fact?

Before turning to the effects and origins of the unicorn factory, it is first important to establish a theory of facts that differentiates this discussion from the common perception of facts I encountered in the field. In STS, the interest in facts as objects of analysis emerged from an evolving sociology, philosophy, and history of science that had previously taken-for-

granted the positivist narratives and claims of scientists about their own knowledge production. This led to a series of studies in the late 1970s that challenged the rational claims of scientists by demonstrating the social constructedness of scientific facts (Latour and Woolgar 1979; Knorr 1977; Mendelsohn, Weingart, and Whitley 1977). Scientific facts, they found, are not simply lifted from reality and presented to some public. Rather, they are contingent upon political and power structures, the organization of laboratories and disciplines, professionalization practices and norms, scientific ideologies, moralities, and aesthetics (Daston 1995; Shapin and Schaffer 1985). Additionally, they concluded that facts' appearance as unconstructed is not a natural result of their truthfulness but rather the result of significant epistemic work, rhetorical persuasion, materialization, and subsequent erasure of routine scientific labor (Latour and Woolgar 1979).

The imperative within anthropology and STS to unpack the origins and lives of facts lies within what we have learned about what facts do. Once constructed, facts take on a life of their own as they are taken up in projects of power and resistance, embedded within bureaucracies and systems of standardization, and appropriated into new and unanticipated knowledge economies. Facts are black boxes (Latour 1987) that hide within them the vagaries, uncertainties, and unknowabilities that their unconstructed edifices obscure. This makes facts *slippery*. By this, I mean that they can be difficult to hold onto and evaluate not only because most take them for granted as truth, b`ut also because they can be constructed in such a way as to make their validity both difficult to verify and unimportant to the projects that take them up. This allows them to *slide*. I mean this in the sense of the Swedish idiom, "*de glider på en räkmacka*" (they slide in on a shrimp sandwich). The idiom is usually used to describe privileged people who reach elevated positions with very little effort as they ride on a slippery open-faced sandwich covered in mayonnaise, cheese, dill, and tiny shrimp right into positions of power and influence where their *secretions* are absorbed and

appropriated.[1] These facts because of their *slippery*, *sliding*, and *secreting* nature require little effort and pose little risk to circulate, making them powerful but unwieldy tools for influencing the discourse and practices of a community.

A classic example of such as slippery, sliding fact comes from within STS itself: Moses' bridges. In 1980, Langdon Winner argued that artefacts have politics using a now widely referenced fact: Robert Moses, an influential public official responsible for many public developments in New York and Long Island from the 1920s to the 1970s, embedded his own racist politics into the construction of bridges in Long Island that prevented public buses, used widely by people of color and of low income, from accessing the beaches (Winner 1980, 123). Moses' bridges have become a ubiquitous "matter of fact" in STS, design, and anthropological literatures and classrooms. In 1999, Bernward Joerges provided evidence that Moses' intentions were not to keep the beaches protected from the poor and people of color but to protect them from robber barons and that the height of the bridges was a cost-saving measure based on the rationality that commercial traffic was already banned from the parkways (Joerges 1999, 417–18). Steve Woolgar and Geoff Cooper (1999) further complicated Moses' bridges with evidence that buses have always passed freely beneath them. However, neither of these complications of the original fact have stopped the circulation of it within STS and far beyond over the last two decades since these revelations were published. My most recent encounter with Moses' bridges was during an interview with Isak, a SthlmTech entrepreneur, who explained to me about "New York's racists bridges" and how his understanding of them informed his approach to developing his startup:

> I have to be careful about how we work and what we might be putting into our product. We talk a lot about what the implications might be. I don't want to build racist or sexist bridges.

[1] A similar English idiom is "to be born with a silver spoon."

Like Woolgar and Cooper (1999), I am inclined to believe that the resiliency of the Moses' bridges fact is not because of the fact's truth status, but its utility as a "moral tale" that informs action based on a set of politics and knowledge that it represents. In the case of Robert Moses, this fact-checking also does not negate the other deeply impactful ways that Robert Moses and his colleagues infused New York City's infrastructures with racism (Caro 1974). So that even if the fact of Moses' Bridges is not true, there is truthfulness in what it conveys about Robert Moses' impact on the people of New York City and its utility in understanding the politics of design, as facts have real impacts on decision making and on the bodies and health of people (Dumit and Sensiper 1998; Dumit 2006). Thus, in order to understand how facts act within a community, one must examine not only these facts' truthfulness but also how they are constructed, circulated, documented, altered, forgotten, and appropriated.

Thus, in order to explain how the unicorn factory fact supports innovation-as-promise, I will first explain how it was constructed, circulated, and revised into a slippery, sliding fact secreting ideologies and logics across the ecosystem. From this approach, I do not intend to debunk this matter of fact—which, as will become clear, is an impossible task—rather I intend to focus on what it does and how it does it.

What is a Unicorn?

The slipperiness of the unicorn factory fact lies within its two main claims: first, that unicorns are a category that can be identified; and second, that SthlmTech produces an extraordinary abundance of them. While I am not here interested in the truthfulness of these claims, I am interested in the great degree of ambiguity, uncertainty, and unknowability that is packed into each. Ignorance, although often treated as simply the lack or absence of knowledge, in this case should be understood as "a substantive historical phenomenon that [...] incorporates certain knowledge, logics, ethics, emotions, and social relationships" (High, Kelly, and Mair 2012). Not knowing—either by a "refusal to not take

notice of" (Dilley 2010) or by how practices and infrastructures produce secrecy, unknowability, incalculability, and instability (Anand 2015)—creates a fact's quality of slipperiness. General social agreement to accept ignorance within the minutiae of a fact's claims reduces the perceived risk involved in repeating it and building upon it. If there is unknowability and instability in the unicorn category itself, then taking on the title requires only that enough people positioned with the right powers accept one's claim—moving that claim into a space of persuasion, trust, and social relationship rather than a space of proofs and falsifiability. If the category involves these forms of ignorances and the claims to the category are likewise charged with them, then a city can more easily tell a powerful story of magical beings with inspirational storytelling and impressive statistics that are all but impossible to challenge.

Aileen Lee founded Cowboy Ventures, a San Francisco based venture capital firm, in 2012 for which she launched a study of startups with billion-dollar valuations. These large valuations and exits are important to investors, she argued, because startup failure rates necessitate that funds maintain one or two very large exits,

> to return just the initial capital of a $400 million venture fund, that might mean needing to own 20 percent of two different $1 billion companies, or 20 percent of a $2 billion company when the company is acquired or goes public. (Lee 2013)

So, Lee and her team set out to understand them by surveying public data about venture-backed software startups in the United States from 2003 to 2013. From this dataset, they determined that just 0.07% or 37 of surveyed startups had a valuation of $1 billion USD or greater. To Lee, this meant that these 37 were not just rare but also possessed some "magical" quality that led to their achievement and so this led her to choose the magical moniker *unicorn* to describe them.

Lee published the results of this survey in a 2013 *TechCrunch* article and from it launched the now ubiquitous concept. Being a unicorn or even a potential unicorn can increase a founder's credibility (Kerai 2017) and—as I found in SthlmTech—greatly increases media coverage and promotion of the startup and leads to prestige and legitimacy for its

founders. The desirability of the unicorn status has also led to the inflation of valuations far above fair market value in order to obtain the coveted title (Gornall and Strebulaev 2017).

Unlike publicly traded companies, privately held companies have no external economic valuation measure and many lack revenue. Startups acquire valuations only when specific transactions occur, such as new investments. As privately held companies, they do not have the same obligations for reporting that publicly held companies have, making these valuations hidden from public view and determined by a small number of private individuals who make these decisions on a largely subjective basis (Miloud, Aspelund, and Cabrol 2012; Röhm et al. 2018; Köhn 2018). Bloomberg reporters Sarah Frier and Eric Newcomer (2015), based on interviews with VCs, described these valuations as "made-up" and dependent on investors FOMO (fear of missing out). In a blog post about his experience investing in the Swedish unicorn Spotify, venture capitalist Pär-Jörgen Pärson, exemplified this sentiment:

> When Daniel and Martin presented their demo of Spotify in early 2007, I was totally blown away. But, I had already lost several millions in failed prior music technology investments and the ongoing lawsuit against Niklas Zennström for his file sharing app Kazaa and the threats to imprison the entire Pirate Bay founder team clearly gave reason to pause. The music industry was a virtual minefield. But there was something entirely different going on at the tiny offices at Riddargatan than anything we as venture capitalists had seen before in Sweden. The best talent was attracted to Spotify like bees to honey and the buzz wasn't constrained to the environs of Stockholm – no there were brilliant minds in London, New York, LA and San Francisco that knew about this crazy cool app and had secured a much coveted private beta invite. (Pärson 2018)

The widespread use of the unicorn title has also led to a loosening of its boundaries. Originally, the term was operationalized for the original study as only United States based, privately held, software startups with venture capital funding and a valuation greater than $1 billion USD. Today, the concept is most often applied loosely to any business, anywhere in the world, in any vertical, that had a $1 billion valuation at some point before or at the point of exiting via an initial public offering, acquisition, or buy-out. This loosening is also complicated by companies staying private for longer so that even companies like Spotify, that at the time of exit was 12 years old and employed nearly 5000 employees, could be considered startups and thus unicorns. From this history, unicorns have come to embody

the magic and excitement of entrepreneurship's promise and potential, despite the ambiguities of its conception. This concept has been combined with various histories of SthlmTech and beliefs about its composition and potential to assemble the fact of SthlmTech as a unicorn factory.

There is no comprehensive or definitive list of unicorns globally or even regionally—although there have been attempts (Insights 2019; Nusca 2016; Wikipedia contributors 2019b; Atomico 2019). The incomplete and contradictory nature of these lists is largely due to ambiguity in the criteria for unicorn status and in startup valuations. Even within SthlmTech, who is and who is not a unicorn varies widely across the ecosystem. My list of SthlmTech's unicorns were at the time of writing: Skype, Paradox Interactive, MySQL, Lendo, King, Spotify, Klarna, Mojang, Bambora, LeoVegas, iZettle, Northvolt, Oatly, Avito, Desenio, Truecaller, Itiviti and Epidemic Sound. This list, however, is contestable. Skype, although co-founded by Swedish entrepreneur Niklas Zennström, was developed in Estonia and refers to itself as an Estonian startup (Warnick 2013). Paradox Interactive initially exited on the US stock market with a low valuation but retried its exit on the Swedish stock market and got its $1 billion valuation on the second try. Avito is a Russian based startup that was founded by Swedes and was largely financed by Stockholm based venture capital firms Northzone and Kinnevik. Outside of SthlmTech, most unicorn listings credit Sweden with only a fraction of these based on their data sources and limiting criteria—Atomico's yearly report, for example, only includes VC-backed companies in their unicorn listings (Atomico 2019). Additionally, there is temporal ambiguity over whether one can count companies that were unicorns but are no longer startups—that is, they have made an exit—in which case most of the above listed unicorns would not be counted.

Despite these ambiguities, these unicorns are integral to understanding the underdog story of the little city (or country) making big magical companies that is at the center of SthlmTech's diplomatic and political projects to promote innovation-as-promise. This fact of SthlmTech—that has been cultivated informally and formally across its events,

media, organizations, and evangelists—has come to rest upon SthlmTech's record of producing unicorns at a rate that far exceeds the expectations of most in the industry due to its size, its taxation and regulation infrastructures, and stereotypes of Swedish behavior (e.g. not working overtime, taking long vacations, and being averse to hype).

During my fieldwork, new unicorns were announced with fanfare at events and in the media. Portraits of unicorn founders hung in co-working spaces. A mural on the wall of SUP46, SthlmTech's most famous startup hub and co-working space, features a moose (a common symbol of Sweden) and a unicorn riding a tandem bicycle symbolizing the close relationship between Sweden and unicorns. Successful public pitches were often followed up with panelists discussing their unicorn possibilities: "Could this be the next one?" Business media was flush with unicorn stories. Unicorn founders acted as mentors by appearing on panel discussions, giving lectures at educational institutions, and providing state-organized internships meant to train and encourage future entrepreneurs.

Figure 9.1 SUP46's unicorn and moose mural.

The magical power of unicorns was described to me by Elsa, a city employee whose job was to support the growth of SthlmTech:

> I think unicorns have this magic power because they have such a global reach. I mean most companies that have turned into unicorns have created a whole new market. So that says a lot about the innovation power, the quality of the workforce, and also the capital that is available here. I mean that is pretty attractive! They are magnets for others.

Spotify, Klarna, Mojang, and SthlmTech's other unicorns are presented as symbols of the perceived potential SthlmTech creates for its entrepreneurs. Although each has its own histories, missions, and values, these stories are not generally part of the unicorn factory story—which is why SthlmTech's tenuous claim on some unicorns like Skype are largely unproblematic for these purposes. The unicorn factory story is about how a mythical community of co-located people and resources created an environment that gives birth to magical beings: unicorns. Claims of magic are not unusual for capitalist spaces. As the authors of *Magical Capitalism* (Moeran and de Waal Malefyt 2018) have demonstrated, magic helps us overcome uncertainty and unpredictability, which is essential for venture capitalism as it is "uncertain about the future and yet depends upon it" (2018, 11). While the individual journeys of these companies and others that aspire to, have failed to be, or reject the push to be unicorns are much more complex and often contradictory to the unicorn factory story, the magical nature of unicorns obscure these gaps and like other forms of magic they "do not simply 'represent' another reality; they generate their own versions of realities" (2018, 34).

The unicorn factory fact began sliding from a statistic published in a report on four Nordic startup ecosystems prepared for Index Ventures (a US & Europe based venture capital firm) for Slush (a large Helsinki based entrepreneur conference) by CITIE (City Initiatives for Innovation, Technology, and Entrepreneurship). The report cites a dataset on billion dollar startups assembled by Atomico (a Swedish venture capital firm founded by Skype co-founder Niklas Zennström) in 2015—but is now unavailable online or in the Internet Archive. The only copy of the dataset (see Table 9.1 at the beginning of this chapter)

I have been able to locate includes Skype, King, Spotify, Klarna, and Mojang but is missing MySQL and Lendo—both of which had billion dollar valuations before the Atomico dataset was published in 2015 (2008 and 2010 respectively). The exclusion of these two companies may be related to their age as both were founded in 1995. However, as the unicorn concept has loosened and became more central to SthlmTech's self-presentation, these companies and other older and non-technology companies such as Oatly have been included in unicorn lists. Since 2015, the claim has been repeated with abandon largely without an updated citation to a new report or dataset. Instead, the claim is generally supported by headlines about new billion dollar valuations—that is if evidence is provided at all.

At the peak of the dot-com bubble in 1998, the venture capital market in Sweden had grown ten times the size it had been in 1987 (Månsson and Landström 2006). The firms established during this period invested in the "first" class of billion dollar startups in Sweden right after the dot-com bubble burst: Skype (founded 2003) King (founded 2003), Klarna (founded 2005), Spotify (founded 2008), and Mojang (founded 2009). These five all reached a billion dollar valuation between 2005 and 2015, making them ideal for the unicorn title that had burst into the startup scene in 2013.

Figure 9.2 Screenshot of Mikael Damberg's Facebook post announcing his new startup policy.[2]

[2] Translation from Swedish: "Stockholm has, to date, delivered at least five unicorn companies, that is information technology companies with a valuation of over a billion US dollars: Spotify, Klarna, King, Mojang, and Skype. Now the government is rolling out a new startup policy and looks forward to welcoming more unicorns to the stage."

In January 2015, Social Democrat Mikael Damberg, then the leader of the newly reorganized Ministry of Enterprise and Innovation, announced a plan to reorient more of the state's risk-capital investments from late stage to early stage ventures (Jeffery 2015). Since the Fall of 2014, he had been repeatedly touting Sweden's five unicorns in order to promote and justify his plans (Damberg 2015)—thrusting this class of unicorns into the national spotlight. In March of 2015, the Financial Times ran the headline "Stockholm: the unicorn factory" for the first time citing the "local successes" of the unicorn first class and the per-capita claim from the Atomico report (Ahmed 2015). In June 2015, The Stockholm Business Region published a summary of a Stockholm School of Economics report on the state of Stockholm's FinTech (financial technology startups) industry with the introduction titled "Stockholm – Europe's unicorn factory" (Teigland et al. 2015). Ahead of STHLM Tech Fest 2015, Invest Stockholm posted a press release titled "Why is Stockholm a Unicorn Factory?" with a list of ten facts to support the Financial Times story's claim:

> 1. There are 5 unicorns in Stockholm: Skype, Spotify, Mojang, King and Klarna.
> 2. Truecaller will soon be the 6th unicorn.
> 3. There 10 more unicorns coming up.
> 4. Stockholm has the highest number of unicorns per capita in the world after Silicon Valley.
> 5. Europe's highest valued startup is based in Stockholm (Spotify).
> 6. Two of the four most valuable European startups are based in Stockholm (Spotify and Klarna).
> 7. VC investments tripled last year. Startups have already raised more this year than entire last year.
> 8. Almost 20% of the entire working population in Stockholm work in Tech.
> 9. Programmer is the most common job in Stockholm.
> 10. The number of Tech companies in Stockholm has doubled in the past 10 years. (Invest Stockholm 2015)

By late 2015, the fact of the unicorn factory had slid from a relatively obscure statistic in a report aimed to promote city innovation systems into state policy planning and promotion, business news media, academic research reports, state run public diplomacy, EU funded research initiatives, and entrepreneurial events. Since 2016, the fact has only

continued to slide across all of these spaces and enter even more. By the time I arrived in Stockholm in August of 2017, the fact was no longer being argued or defended with evidence of its premises. Rather reflections on the fact, where reflection happened at all, turned from "Is Stockholm a unicorn factory?" to "How is Stockholm a unicorn factory?" For example, Invest Stockholm buried its earlier press release in its archives and replaced it with a permanent story idea.

> 1. In the 1990s, the government offered a tax break for residents to buy personal computers. This helped Swedes become early adopters of technology.
>
> 2. In 1994, Stockholm built the world's largest open-fiber network with 100% of businesses and 90% of homes tapping into that infrastructure today.
>
> 3. Sweden is a small market. That's why so many Stockholm startups are born globals with a strategy to scale and reach an international market from day one.
>
> 4. The social security system makes entrepreneurs dare to be creative and take risks. If they fail they don't have to wind up on the street.
>
> 5. Free education and a highly educated population with access to incubators, means access to talent.
>
> 6. A supportive startup ecosystem, with access to co-working spaces, startup hubs, events, innovation grants and a growing number of angel investors and venture capital firms.
>
> 7. A culture of sharing – with a first generation of successful entrepreneurs inspiring and investing in the new generation of entrepreneurs.
>
> 8. Extremely high openness to new ideas.
>
> 9. All of the above in combination with political stability and long term economic growth provide Stockholm with the best business climate in the world.
>
> And just to give you a tenth reason – our cold climate and dark winters foster creativity when we spend large parts of the year indoors, focusing our energy into finding unique solutions to complex projects. (Stockholm Business Region 2015)

This shift further entrenched the slipperiness of the fact. If the primary driving inquiry around it is no longer about its truthfulness, then there is even less risk in stating it. The unicorn factory shifted from being a fact about SthlmTech to being *the* fact about SthlmTech. It is now difficult to find a mention of the ecosystem without reference to its unicorns.

While this fact was never challenged on its veracity during my interactions within SthlmTech, its relevance and impact became a common feature of my interviews and other conversations. In order to describe the way that the unicorn factory acts as a slippery black-

box that slid quickly and easily throughout the ecosystem, I have thus far described the fact by its construction and circulation alone. However, this has the side effect of making it appear to be unattached to other assemblages of meaning, value, and rationalities. In turning toward the effects of this fact, I will draw attention to its secretions that have come along on its journey and along the way embedded themselves covertly and overtly in the knowledge and practices of SthlmTech.

Unicorn Promises & Wantrepreneurialism

The unicorn concept was developed by venture capitalists for venture capital. Thus, what is known about unicorns and what is valued in them aligns with the rationalities and needs of venture capital. Venture capitalists have a fiduciary responsibility to make returns on investments and thus value ventures that can grow their valuation under the terms of investment. Thus, unicorns are particularly valuable to VCs. As Aileen Lee (2013), the originator of the concept, explained unicorns can keep the fund viable when most investments will fail. Thus, scaling as a value—particularly when resulting in exponential or "hockey-stick" growth—is firmly attached to the unicorn factory. Although the attention to growth and scale are, of course, not solely the result of this one matter of fact, it has imported the value under different—and primarily clandestine—conditions than it normally would be. The "business" logic told to me by many of Stockholm's entrepreneurs who began their entrepreneurial journeys prior to 2015 was that unicorns are good for venture capital. Thus, if your startup's aims are supported by a rapid growth model, then venture capital and striving to become a unicorn is a useful strategy for achieving those aims. However, this logic has become tainted by the unicorn factory's secretions. Unicorns—separated from the VC roots that gave them meaning—are seen as inherently "good" both financially and morally as they represent the achievement of their founders to gather masses and "disrupt" so-called stale practices, markets, industries, or lifeways. Thus, the unicorn factory is a statement about SthlmTech's goodness measured by its unicorns. All of the labor by

SthlmTech's architects and entrepreneurs to do entrepreneurship differently than its strongly neoliberal cousins—by encouraging healthier work-life balances, fighting gender disparities, supporting immigrants and asylum seekers, making entrepreneurship significantly less risky for individuals and thus more feasible for disadvantaged citizens—all of this—has become subsumed under the unicorn factory. SthlmTech wasn't considered good because of this labor, it was good because it produced unicorns in spite of it.

Lisa Ericsson, Head of KTH Innovation and a key architect of SthlmTech, expressed concern to me about the "climate today that puts scaling and growing above everything else" and anticipated a coming backlash if not to fast, VC-backed scaling generally, then at least to startups who create social problems or financial failure because they scaled too quickly. The problem, she suggested, was that the demand for scaling often creates a gap away from the core values of entrepreneurs and makes it difficult for startups to grow sustainably. Based on her years of mentoring and educating entrepreneurs, she found that companies who grew organically—that is through steady growth of sales and customer base instead of through VC funding—were able to spend more time learning about how their technologies were used by customers. Conversely, fast, exponential growth made it difficult for the company to stay in touch with how their technologies were being received and put to use—so that even among technologies that could have done some good failed. This, of course, does not mean that growth is *prima facie* bad, however. As Nick Srnicek and Alex Williams (2015, 43) argue, there are real, complex, and systemic global problems, such as global warming and localism, as an ideology that holds up the virtue of local solutions, is not capable of solving or even substantially reducing these problems. The argument that Lisa made was not that scaling—exponential or incremental—was morally good or bad but that the need, speed, and practices of scale should be determined by the values and goals of the startup rather than by the ideologies that the unicorn factory has embedded in SthlmTech.

The values and ideologies silently secreted by the unicorn factory fact, have helped to generate one of the most troublesome effects of innovation-as-promise:

wantrepreneurialism. Unicorn founders become stars—they appear in profiles in the media and in guides; they mentor other startups; they are interviewed and included in panel discussions at events; they sit on advisory boards for startups and support organizations; and their expertise is sought by state employees and politicians. Their net worths, lifestyles, personal politics and fashion choices are dissected and speculated about. Each new unicorn is celebrated as it upholds the unicorn factory, adding to its reach, and continuing its slide. This has led to the unicorn factory secreting a cult of individual achievement and a fictional entrepreneurial lifestyle built on the promises of unicorn entrepreneurship.

During my fieldwork, I generally ended interviews by asking people to imagine what about SthlmTech they would like to see be different. Most of the responses were related to this particular effect of the unicorn factory. Wantrepreneur is a portmanteau that combines wannabe and entrepreneur. I heard this neologism often in these conversations as people complained about "these new kids" or "the next generation" of entrepreneurs. While I certainly met people, usually white, Swedish men in their 20s, who behaved in the off-putting ways described as wantrepreneur behavior—such as excessive boasting, claims of bootstrapping,[3] and being in constant search of an idea—the framing of the issue around *wantrepreneurs* places too much emphasis on individual behaviors and attitudes that are symptoms rather than the disease. So, I will instead refer to *wantrepreneurialism* as a phenomenon, that is a set of practices, values, and aesthetics that are generated by the circulation of the unicorn factory fact and venture capitalism—specifically the eschewing of collaboration and the idea-entrepreneur inversion.

Collaboration was seen as a highly valuable practice and a moral imperative among the entrepreneurs I spoke to. Although collaboration is often bandied about without any supporting practices or policies, particularly in the marketing for co-working spaces, it did

[3] A term referring to the idiom of "pulling one's self up by one's own bootstraps," meaning to have accomplished something significant without outside aid.

have a substantive presence in SthlmTech. This could be seen in the ways founders developed company cultures around transparency and flat hierarchies, the ways that entrepreneurs built networks of collaborators, and explained their successes and failures in terms of their collaborative alliances, practices, and skills. The stardom of unicorn founders, however, obscured and hid the plentiful and vital collaborations that led to their rise. I often heard resentment of this and unicorn founders themselves often apologized for it. Similarly, most of the people I worked with highly valued humbleness in the practice of entrepreneurship—excepting of course when one was required to "put on a show" for pitches or marketing. This was generally attributed to affinities for the sentiments of *jantelagen* (the Law of Jante). Jante is a fictional Danish town created by Aksel Sandemose (1936) in his satirical book *En flyktning krysser sitt spor* (*A Fugitive Crosses His Tracks*). The book is best known for its ten laws of Jante:

> You're not to think *you* are anything special.
> You're not to think *you* are as good as *we* are.
> You're not to think *you* are smarter than *we* are.
> You're not to imagine *yourself* better than *we* are.
> You're not to think *you* know more than *we* do.
> You're not to think *you* are more important than *we* are.
> You're not to think *you* are good at anything.
> You're not to laugh at *us*.
> You're not to think anyone cares about *you*.
> You're not to think *you* can teach *us* anything. (Sandemose 1936)

Although Sandemose meant them as a judgment of Scandinavian culture and adherence to jantelagen is more stereotype than actual practice, the laws of Jante were frequently cited as a reason that unicorn founders should be seen as suspicious, "too Silicon Valley," or unworthy of their fame. They saw self-aggrandizement as harmful to the cultures of equality and collaboration that they valued and sought to cultivate as the focus on the self erased how one's achievements were always the result of collaboration with others. However, the centering of the individual was not merely a result of individual behavior. Rather, it was encouraged through constant reverence of successful founders in ecosystem discourse and non-conforming entrepreneurs were instructed by mentors and in pitches—both in public

and private—that their collaborations had no external value unless they were directly and inextricably linked to a venture capitalist's valuation (e.g. projected growth)—even when venture capital was not being pursued. To bring up these collaborations without such a link was usually belittled as "too Swedish" and with condescending adjectives like "quaint," "adorable," or "innocent" that implied naivety. In this way, collaboration was something that was used to sell to entrepreneurs and startup teams, such as within coworking spaces, company culture documents, or even venture capitalists courting entrepreneurs. But, the value of these collaborations were erased in the other direction in favor of individualist narratives of unicorns. For the new entrepreneur, whose primary education in entrepreneurship begins (and sometimes ends) with the promises of innovation promoted by SthlmTech's curriculum, which includes and relies on the unicorn factory fact, it is this latter valuation of collaboration that they are first exposed to, making the former devalued and gimmicky.

In promotional materials for SthlmTech, it is often boasted that one can start a business in Sweden in one week and with as little as 5000 euros and receive extensive free or inexpensive support from SthlmTech's organizations. This low barrier combined with pervasive narratives of highly inspiring unicorn founders and their individualist ideologies has led to the inversion of the entrepreneur-ideas relationship. Rather than being inspired by their personal expertise of a problem, many new entrepreneurs were inspired by a perceived glamorous lifestyle of networking and flexible work schedules and the prestige that comes with being a "disrupter." Thus, unlike so-called "traditional" entrepreneurs, they became entrepreneurs in search of ideas to work on rather than a person with an idea in search of a way to make it work. My first encounter with someone most of my collaborators would have considered a wantrepreneur was at a party. He was chatting me up and discovered that I was conducting fieldwork around SthlmTech. He proceeded to tell me that he was an entrepreneur and had been one for the last 18 months. I asked about his startup and rather than hearing the typical elevator pitch I had come to expect, he told me about his

Post-It note wall. He did not in fact have a startup or an idea for one. He had a wall in his basement covered in "more than a hundred" ideas for startups. But, none of them, he told me, were "viable" yet. He was looking for a co-founder to help him narrow it down. He then asked me if I knew anyone. Up until this point I had spent time talking to people who saw their startup ideas not as something that would help them get to the entrepreneur lifestyle, but as an obsessive passion to build better futures based on a specific expertise. What these entrepreneurs found so appalling about wantrepreneurs was that entrepreneurs saw their ideas as important and worthy of self-sacrifice and wantrepreneurs turned this upside down by making ideas tangential to their own self-improvement.

The entrepreneur-idea inversion was critiqued by other SthlmTech entrepreneurs for the way that it generates poor ideas—in terms of financial viability and social responsibility—through a technological solutionism approach to entrepreneurship. Evgeny Morozov laid the groundwork for his arguments on technological solutionism in *The Net Delusion* (2012) and in *To Save Everything, Click Here* (2013). He articulated his unease with popular and scholarly approaches to "the Internet" that recasts "all complex social situations either as neatly designed problems with definite, computable solutions or as transparent and self-evident processes that can be easily optimized—if only the right algorithms were in place!" (2013, 5). Technological solutionism, he argued, stems from Internet-centrism. Morozov described Internet-centrism as a group of interconnected myths that impact public understanding and academic theorizing of the Internet. Internet-centrists view the Internet as a melting pot of context-less technologies that are consumed by the meta-narrative of "the Internet" (2013, 18), which Morozov described as a "mythical entity" (2013, 21). This mythical entity is used by Internet-centrists to argue that the Internet fundamentally revolutionized human society and will never end, making discussions of its relations with historical politics and technologies or any suggestions for its replacement or alteration difficult if not impossible. Finally, Morozov described how Internet-centrists view the nature of the Internet as fundamentally open, free, and equalizing. Internet-centrists

then use the mythical Internet as a model for fixing all human ills and perfecting all practices by making them more efficient through its use. Morozov's arguments have led to scholarship that has begun to question technological solutionism in computational thinking (Easterbrook 2014), health and self-monitoring (Maturo 2014), and political movements (Tiso 2013). A pessimistic approach to technology and critique of techno-utopianism is not new, however. Other scholars have previously questioned the democratic limits of technology to give power or voice to underrepresented peoples (e.g. Hand and Sandywell 2002; Helmreich 1999; Nafus, de Paula, and Anderson 2007; Sale 1995; Zuckerman 2008).

Among the SthlmTech entrepreneurs I spoke with, few had read Morozov's work. Yet, the concept of technological solutionism had become part of their zeitgeist through the work of public scholarship and journalism that they referred to as "tech backlash." Although there was much disagreement and debate among them about the merits of tech backlash's critiques, solutionism resonated with many of them in describing this problem with wantrepreneurialism. Ulrike, a serial entrepreneur with, as he described it, "mediocre but steady success" working on improving an infrastructural problem that had led him to abandon his labor job to seek out the resources of SthlmTech, explained to me:

> Not to offend you, but social researchers get a lot wrong in the tech backlash. I think they really should be looking at, you know, these young guys, the wantrepreneurs. They are so excited to be entrepreneurs they forgot they need an idea to be one! [*He chuckled.*] So, now they've made a whole career out of, can you believe it, running around trying to find solutions to problems that just don't, just don't exist. [*He says with an exaggerated Swedish accent*] "My app is going to save the world! I just have to find a co-founder who knows what to do with it!" [*In his normal speaking voice, he continues*] Solutionism I believe is what you researchers called it where you don't know what you are doing but you believe the Internet can fix everything and so all you must do is throw an app around and it will eventually stick to something, anything. But, when you invent problems, instead of discover them, you're just going to fail and, if I am completely honest here, you'll probably fuck up a bunch of people first.

The rise of wantrepreneurialism, fed by the unicorn factory and innovation-as-promise, led to an explosion in the availability of funding for these new ventures. Sïmon Saneback, founding partner & board member of the venture capital firm Wellstreet, explained to me that "money is for free" and that all you need is a "very nice PowerPoint" to

get an investment. He expressed concern about what this will mean for the ecosystem if another recession hits where these startups with poor business plans and no viable products will result in "many bankruptcies and failures" and this will be a "wake up call" for investors and policy makers. Simon was not alone in this sentiment. Fear of a bubble forming around SthlmTech, as wantrepreneurialism was supported by eager investors, was common and its bursting was even welcomed by some who wished to see a more stable community of entrepreneurs and supporters emerge from its deflation.

From this perspective, the unicorn factory can no longer be seen as just a fact, that is as a simple description of some reality. Rather, the fact has become a black boxed assemblage of history, knowledge claims, and material conditions that generate the facade of an unconstructed fact, making it a slippery and powerful asset as it slides through diplomacy, policy making, media sensationalism, infrastructure building, and hype generation. Its slipperiness has allowed it to slide around, through, out of and back into SthlmTech secreting values, ideologies, and meanings that complicate the aims, priorities, and ethics of Stockholm's entrepreneurs and their supporters. In presenting this description, I hope to complicate the idea that Stockholm must be a unicorn factory now, in the past, or in the future. If this fact is constructed, could it be reconstructed otherwise or abandoned altogether? Recent calls by some, particularly from the Norrsken Foundation and Invest Stockholm, have sought to remedy some of these issues by calling for Stockholm to become an "impact unicorn factory"—that is to produce startups that positively impact a billion people instead of gain a billion dollar valuation. While admirable, I question whether this thinking is radical enough to undo the damages and unwanted shifts caused by the original fact as it still maintains attachments to growth and stardom.

Rather, I suggest this premise to consider: what if the five original SthlmTech unicorns never became mythical creatures, but, like the large companies that proceeded them, simply moved into a new sphere of the business landscape leaving entrepreneurs to create startups based on their own ambitions, hopes, and anxieties for the future

unblemished by the promise of unicorn-driven innovation? What if venture capital and all its logics were seen as only one method of starting-up, innovating, and creating positive futures amid a constellation of other equally viable options—which already do exist but are sullied by unnecessary VC logics or are downplayed as less prestigious? What could SthlmTech have become and what futures could it have contributed to?

Chapter 10.

Hashtag

Figure 10.1 The twitter account for STHLM Tech Meetup and STHLM Tech Fest.

The hashtag #SthlmTech is a ubiquitous feature of SthlmTech and the origin of the nickname for Stockholm's innovation ecosystem. In May of 2013, the nascent STHLM Tech Meetup gathered at the Hilton Slussen where the attendees narrowed down the options for what to name their community. Tyler Crowley, founder of STHLM Tech Meetup and at that

time a consultant hired by the Business Region of Stockholm to help organize SthlmTech, stood at a podium with his laptop with the suggested names on the screen behind him: startupfika, stockholmstartups, sthlmtech, techvikings, siliconislands, stocktech, and techholm. Five years later at the May 2018 STHLM Tech Meetup, Tyler and Tuva—as they usually did at the beginning of the meetup—reminded everyone to use the hashtag #SthlmTech:

> TYLER. This hashtag that you see at the top #sthlmtech meetup. I did a tweet today if you go to the @sthlmtech twitter account you will see the tweet. It was five years ago today, literally tonight. We stood literally right here at this podium and voted for that. I have a photo of it that I stupidly didn't put in the deck but you will see it if you go to the Twitter account. And, if you use that hashtag then the Twitter account will automatically retweet you and send it out to the 11.5 thousand Twitter followers.
>
> TUVA. It's not followers it's 'influencers.' So, it's the people you want to reach.
>
> TYLER, *laughing*. So, it's not just Russian bots.
>
> TUVA, *laughing*. No. No. No.
>
> TYLER. Yeah, you're actually right about that. It is a good group.
>
> TUVA. It is true. It's not a joke. It's true.
>
> TYLER. So, you can use that and Tweet it. It is also good to follow that Twitter account and see everyone else that is using it.
>
> TUVA. So, please take pictures and write comments about what people are saying on stage—or off stage or wherever—and share it on Twitter so we can all follow.

The hashtag was part of three-part plan laid out by Tyler as the essential ingredients for a startup ecosystem—the others were a monthly meetup and a coworking space (Lumb 2014). The hashtag was promoted across most of the events I attended. Eventually, Tyler's twitter account for STHLM Tech Meetup stopped auto-retweeting the hashtag and is now managed manually. At the March 2018 STHLM Tech Meetup, Tyler explained:

> TYLER. We had a weird thing happen this week, some Nazi idiot was using the hashtag.
>
> TUVA. Oh! I didn't see that.
>
> TYLER. And the account auto-retweets it and these journalists are calling me saying "Why are you retweeting Nazis?" And, I'm "It's an automatic bot account that will retweet anybody who uses the thing." I said, "Can you tell me where the tweet is so I can delete it?" And they're like, "Yeah, here's the link." Ok great, now it's deleted and were back. And, then some other people were questioning it, "I think he just auto-retweets." And then they tested it. So, they're like, "Go this football team!" and @SthlmTech retweets it. So it's auto-retweeting. It's an auto retweeting account so…

TUVA. So take pictures, use the hashtag on Twitter.

TYLER. And, it goes out to the eleven thousand people that follow it, which is why Nazi's have an interest in it.

TUVA. Don't post anything, uh…

TYLER. Please don't be a Nazi…

TUVA. No!

TYLER. …or mention anything about football unless its Football Addicts or another cool startup.

A few months later, the account silently stopped auto-retweeting but the hashtag and its associated account have maintained a high level of activity and remains the online hub of SthlmTech.

Hashtags and Twitter

Hashtags may seem like a Twitter specific technology that was later adopted by other social media sites like Instagram and Facebook. However, the protocol for tagging chat systems into groups with an octothorpe (or number sign) far predates Twitter and is a classic example of user innovation. The origin of the Twitter hashtag began with a single tweet:

> how do you feel about using # (pound) for groups. As in #barcamp [msg]? (Messina 2007b)

At the time, Chris Messina was co-organizer of the original BarCamp—an open alternative to the exclusive, invite-only technology conference Foo Camp. Unlike many of the tech and user conferences at the time, BarCamp was open to anyone and wanted the knowledge and ideas shared at the event to be shared widely. Riffing on the movie Fight Club, the first "Rule of BarCamp" is "You do talk about BarCamp" (Çelik 2006). IRC (Internet Relay Chat)—invented in 1988 and still in wide use today—uses the octothorpe to designate channels for organizing conversations. Messina who was a regular user of IRCs and was thus familiar with the concept and used it as inspiration for how to organize discourse on Twitter. He also liked the symbol because "it was easy to type on T-9 phones in 2007! (Pre-touch)" (Messina 2013). A few days after his initial tweet, Messina (2007a) published an extensive blog post

about his proposal and other such proposals and ideas from across the "blogosphere." The hashtag, which he called a "tag channel" was meant to be an "emergent folksonomic approach" (Messina 2007a) to marking tweets as part of a discourse. He argued that rather than having a top-down, organizational infrastructure like Facebook groups, hashtags could be created by anyone, used by anyone, and "eavesdropped on" by anyone by providing "contextualization, content filtering and exploratory serendipity" (Messina 2007a) instead of bounded and structural groups that require opt-in/opt-out protocols. Additionally, hashtags could act as ephemerata that emerged as needed and disappeared when no longer salient. It was not until hashtags gained widespread use and two years passed that Twitter decided integrated the hashtag into the platform by linking them automatically to matching search results.

The #SthlmTech hashtag, because of this history, has many of Messina's ideas embedded within it, particularly its eavesdrop-ability. Marie Sundström, public relations and marketing manager for Invest Stockholm, described to me the importance of this openness:

> It has been an important part of our ecosystem and a place where you can quickly grasp what is going on. I have been doing research on other startup ecosystems like what is going on in Barcelona, Berlin, London, and Paris and it is difficult to find all the information. But, when you have one common place to go, like the #SthlmTech hashtag, you can quickly understand who to contact and get in touch with and what is going on.

As a newcomer to SthlmTech, the hashtag was useful in this way to me as well. Scrolling through the feed made it easier to identify who the evangelists were and the major news outlets. After some encouragement from Maral Kalajian, one of these evangelists, I started posting to the hashtag more frequently and used it primarily as a recruitment tool by posting my location and openness to talking, usually paired with a selfie so people knew who to look for.

Figure 10.2 Tweet from FemTech Meetup at SUP46.

Like the evangelists of SthlmTech, I used the hashtag to present myself and my research to the community by live-tweeting events, accounting my experiences, and asking questions. In February and March of 2018 I posted a series of tweets to #SthlmTech with questions from my interview protocols that I called "Question of the day for #SthlmTech." I did not get many replies, which is fairly typical for the tweets on the #SthlmTech search page. However, it was an effective way of letting people know who I was, what I was doing, and what I wanted from them. At events and in co-working spaces, I was often approached by people asking, "Are you that ethnographer from Twitter?" and even had some in-depth

conversations with people who stopped me to say, "I've been thinking about that question you asked on Twitter." This approach to using the hashtag was not a novel use, rather it was a form of participant-observation that allowed me to experiment with and learn the contours of the hashtag's role in the community. The hashtag allowed me to temporarily insert myself into the ongoing conversation and by modeling the Twitter habits of evangelists in the community, promoting my workshop event like the other event organizers, and live-tweeting my observations while out at events like other attendees, I learned to hype my work in ways that made sense to the people I was trying to work with and learn from.

Genres of #SthlmTech

The #SthlmTech tweets during my fieldwork largely fell into three categories: media outlets sharing articles, organizations sharing their events and services, and individuals promoting their work and interests. Of the latter set, the tweets were not simply the litany of opinions and self-expression as is common to most of Twitter. The individuals and organizations posting to #SthlmTech followed common patterns in constructing their tweets and those that did not, over time, learned to do so. In this way, the hashtag created expectations of communication, values, and topical relevancy in line with innovation-as-promise via six common tweet genres. The first genre, "where I am at today," I have already discussed above as it was my primary method of tweeting on the hashtag. It was used primarily for networking, inviting visits, and promoting one's connections. It could also be used to highlight what conversations were happening and valuable enough to highlight.

Second, were questions with expected answers. These tweets were usually proposed as a way of "organically" soliciting answers that reflected how evangelists, diplomats, and

other community leaders sought to define the community's identity and strengths. For example, Tuva Palm, co-host of STHLM Tech Meetup, tweeted:[1]

> Is it just a coincidence or do we see a trend right now where successful women quit their top jobs to fully capitalize on their competences as angle investors, prof board members, executive advisors etc? And if that is the case - why? #brilliantminds2018 #sthlmtech #womenintech (Palm 2018)

Marie Sundström then replied:

> Not a coincidence! Sweden has the best working environment for women in the world and over 80 of the leading #sthlmtech companies have declared themselves #awomansplace working actively to support equal opportunities for women and men. (Sundström 2018)

These tweets were not coordinated in advance. Yet, after spending time within SthlmTech on the hashtag and in person, the latter tweet seemed inevitable after reading the first. The increased visibility and activity of women within SthlmTech was a staple of lists describing SthlmTech's advantageous over other ecosystems and also fit well within Sweden's national branding strategy that also emphasized gender equality (Swedish Institute 2021). Over the course of this research, I began to see community members adopt this tweet genre to demonstrate their knowledge of SthlmTech, its features and facts, and its perceptions of innovation. Popular questions like "Why is Stockholm so innovative?" or "Why are Stockholm startups so impactful?" which were inevitably followed by answers about SthlmTech's innovation-as-invention support infrastructures and their success stories.

> Why does #Sweden produce so many startups? (World Economic Forum, (@wef) 2018)

> Sweden is the Land of opportunity! Healthy infrastructure, social healthcare, public schools, free higher education, responsible and innovative tech innovation eco system including financial succession #nordictech #sthlmtech (Samarra'e 2018)

Another common combination directly evoked innovation-as-promise by asking about a future—"Where is the future of X?"—and answering with "Stockholm because…"

[1] All of the examples in this chapter were chosen because of their prominent authors. I purposely chose not to include examples from small accounts with less visibility, as there was a reasonale expectation of privacy via obscurity.

Third, a related tweet genre was the "fast facts" tweets that shared "facts" about SthlmTech, Stockholm, and Sweden to promote "Swedish innovation," the ecosystem, and its startups. Top among these were those related to the unicorn factory discussed in the previous chapter. Other facts were also popular, particularly those about gender equality, quality of life, popular cultural practices (e.g., fika), and environmental sustainability. These were often drawn directly from or matched closely the public diplomacy and nation branding materials produced by state agencies, like the Swedish Institute and the Business Region of Stockholm. Rankings were also common fodder for these fast fact tweets, as Sweden often ranked highly on metrics prized by the SthlmTech community, such as this one by Anna Gissler, CEO of Invest Stockholm, a division of the Business Region of Stockholm responsible for promoting Stockholm as a "business destination."

> Stockholm together with New York ranks as fourth best university cities in the world. #movetostockholm #investstockholm #visitstockholm #sthlmtech (Gissler 2018)

Fourth, celebration tweets allowed people to publicize their accomplishments and connections. These tweets, however, also demonstrated which skills, measures, milestones, connections, and stories were seen as valuable and worthy of honor. For example, Pär-Jörgen Pärson, then a partner at the venture capital firm Northzone, tweeted a photo of his "VC of the Year" Europas Award with thanks to several of the founders he had invested in. This was quote-retweeted by the Northzone account with added congratulations with the founder references reduced to the two unicorn startups. Finally, the Northzone retweet was quote-retweeted by then Northzone partner Marta Sjögren who added the valuations of the unicorn startups to her congratulatory message.

> Congrats @pjparson on winning VC of the Year at the #Europas. He all too humbly stands alone in #eutech to have delivered an unprecedented European track record of VC successes w/in 3yrs: @avito ($2.7bn), @Spotify ($28bn) & @iZettle ($2.2bn). Beyond well deserved 🏅 . #STHLMtech (Sjögren 2018)

In this retweet thread, the celebratory story changed from a VC and all of his startups, to a VC and his unicorn startups, to a VC and his unicorn startups with their double- or more

unicorn valuations emphasized. By following what is and is not celebrated on the hashtag, innovation-as-promise emerges as a prominent narrative of celebrating the innovation ecosystem's successes in terms of its successes in innovation-as-invention, scaling, and "disruption" rather than in terms of qualitative impact or social change.

Fifth, event live-tweets moved the stories, ideas, and education of events onto the hashtag to bolster their circulation. For example, Sarah Samarra'e—then an entrepreneur, graduate student at Stockholm University, and a VC at the firm she founded, Venture Student—frequently volunteered or attended at SthlmTech events and was a reliable source for live tweets of the stories shared at them. For example, in this tweet she shared the predictions made by an EQT Partners spokesperson at STHLM Tech Meetup in January 2018—furthering the reach and adding credibility to the VC foresight.

> EQT predictions for the tech community for 2018: "Tech backlash, AI and crypto as the leading narratives" #sthlmtech (Samarra'e 2018a)

Sixth, and lastly, proof of innovation tweets documented encounters with "innovations" as products and services. These tweets were usually posted by SthlmTech community members but not by those affiliated with the startup that produced the innovative product or service. For example, Sarah Samarra'e posted this tweet about a SthlmTech startup and how their app changed the way she handled a difficult situation.

> Found an id card for immigrants this morning in the street, I searched the name in @Truecaller and it appeared! I called her, 2 hours later I delivered the card. Kudos to tech which solves ppl detailed problems. #SthlmTech Thank you @Truecaller! (Samarra'e 2018b)

Her tweet not only points out the utility of the app, but also tapped into two powerful narratives circulating at the time within the community: (1) Truecaller was an innovative and successful company about to be a unicorn born from SthlmTech's innovation-as-invention curriculum, and (2) SthlmTech was well or even best suited for initiating positive change for the lives of immigrants in Sweden following the influx in immigration and asylum seeking after changes to the law in 2013.

Although Twitter and other social media may seem to be an open platform for expression, it is always embedded within the expectations of an "imagined audience" (Naudin and Patel 2017) or "networked audience" (Marwick and boyd 2010) shaping how one performs on the platform. In the case of the SthlmTech hashtag, this audience is conceived of as both SthlmTech insiders to which one must pitch and supported but also as eavesdroppers as imagined by Messina when he invented the hashtag. These eavesdroppers were not expected to be well versed in SthlmTech, innovation, or entrepreneurship and so the popular tweet genres tended to inform, educate, and discipline the audience toward particular perceptions of the ecosystem and innovation it was said to produce. It is also important not to fall into the "digital dualist" framing that imagines this kind of digital performance as distinct or separable from supposedly non-digital life. Rather, the hashtag's feed of tweets is always deeply integrated into an "augmented reality" that merges online and offline sociality until their entanglements are inseparable (Jurgenson 2012). So, that the mechanisms of innovation-as-promise tack between the hashtag, the culture of facts, and foresight hype amplifying and circulating its aims and ideas.

Part IV.

Innovation as Change

After a meetup, I sipped glasses of cheap wine in a hotel bar with a 30-something entrepreneur named Johanna. We had sat next to each other at that evening's event and upon hearing about my research, she was quick to tell me how entrepreneurs are unjustly viewed as techno-utopianists by popular media, politicians and academics.

> First you tell us to get educated in computers, engineering, and business and tell us it is the only way to be successful—thinking that will get me a job at Ericsson or something. But, then, the world goes to shit and you all go for Trump and Brexit and boost [the Sweden Democrats]. I'm scared; I've got to do something. [...] Everywhere on the globe, politicians are not moving fast enough or not listening to us. Big corporations are making it worse. And, here I am and all I know how to do and all the tools available to me are for [*here she made quotes with her fingers*] "innovation". Then, here you come and call us too optimistic and addicted to our phones and shame us for wanting to make a living that makes us feel like we can make even a very small dent in the shit going on. I am not optimistic, I don't think my app is going to save the world, but it feels better than nothing.

Johanna was not negating the problems that arise from techno-utopian ideologies or even denying that her work was complicit in them. Rather, she was complicating the critique that often imagines tech-entrepreneurs, their motivations, and politics, through assumptions based on Silicon Valley's largest corporations and their respective entrepreneurial heroes and the veneer of marketing that surrounds most startup scenes. Johanna was challenging me to see her not as an "entrepreneur" but as a young woman born into a socio-economic context that both deeply troubles her and fundamentally shapes her ability to act on that anxiety.

Quoting Sir Thomas More's critique in book one of Utopia, she said "first you make entrepreneurs, and then you punish them." She only knew the one line, she told me, because she had picked it up from *Ever After*, a 1998 movie re-telling of Cinderella staring Drew Barrymore. In the movie Drew Barrymore uses the Utopia quote to convince the prince to free a friend of hers who had been sold into slavery. Perhaps if Johanna had remembered the longer passage, she would have said:

> For if you suffer your people to be ~~ill~~ [STEM and business]-educated, and their manners to be ~~corrupted~~ [shaped by tech companies] from their infancy, and then ~~punish~~ [critique] them for ~~those crimes~~ [building those technologies] to which their first education disposed them, what else is to be concluded from this, but that you first make ~~thieves~~ [tech-entrepreneurs] and then ~~punish~~ [critique] them.

The social sciences often portray contemporary entrepreneurialism as a monolithic and ahistoric force of neoliberal capitalism even while demonstrating how capitalism is a "contingent process full of instabilities, improvisations, and unanticipated articulations" (Anand 2017, 18) and how neoliberalism can be "resisted, coopted, and rearticulated" (Gill 2013, 332). I approached my fieldwork with these latter approaches to the dominant fixtures of capitalism and neoliberalism, making space in my imagination for entrepreneurs that neither subscribed to any of neoliberalism's most pernicious tenants nor considered themselves to be so-called capitalists. In so doing, I found no one that could be described otherwise. Rather, I found individuals dedicated to innovation-as-change—that is, people dedicated to generating change in society that solves problems, increases wellbeing, improves environmental sustainability, and so on.

Following Sarah Kelman, I found the more compelling aspects of studying entrepreneurs to be in "what it feels like to be an entrepreneur" (2018, 63) with an emphasis on their anxieties, fears, preoccupations, aspirations, desires, dreams, and hopes. I found that, like myself, the people I spoke to were themselves anxious about the rise in contingent and flexible labor stemming from the gig economy, the impacts of racist algorithmic systems, the rise in racist and fascist politics in Europe, the dismantling of Sweden's welfare state, and global climate change. They were suspicious of the promises of venture capital backed unicorns, calls for deregulating technology and data collection, and increasing trends of surveillance capitalism. Also like me, they wanted to use the skills and resources at their disposal to find some way to have a good life for themselves and others amid all this anxiety and suspicion. The path to entrepreneurship was not always smooth and for some required epistemic labor, like Albrekt:

> That is one of the things I had to look at closely: my relationship to money or–more correctly–my emotional connection to money. Because, intellectually, I had this idea that, yes, it is good and money can't make me a bad person. But, emotionally, one of the feelings I had was shame. If I become this person who goes after money, I won't like people and I'll use people. Or, I won't have a healthy relationship with them. After I looked at that very closely, I thought it's nonsense—the whole thought. Money

> doesn't have the power to influence your character. It's more like it gives you opportunities to do *something*.

Through engagements with books, podcasts, speakers, courses, peers, and mentors, capitalism became transformed into an imperfect but powerful apparatus for their aspirations. Consumer behavior became something to study—not to exploit for profit—but as a way of aligning themselves with others' lives to more quickly and easily reach and affect them. With the support of investment, they could amplify their aspiration with marketing, more in-depth research, and better engineers and designers. Through this new opportunity structure, they could assert their agency and aspire for better futures with far less frustration. For example, Hugo and Ester built a phone app to support the work of their former activist non-profit employer. After struggling to promote it through the organization's means for a year, they managed to accumulate less than one hundred downloads. However, after spinning out the app into a private venture with grant money and a seed investment, they pitched the app as a lifestyle product with all of the hype of a new startup and deemphasized their activist ambitions. Just six months after relaunch, they had more than 80,000 downloads and thus believed that they were more successful in having the impact they were seeking.

Edward Fischer (2014) describes the good life as beginning with access to—relatively defined—adequate material resources, physical health and safety, and family and social relations. However, these commonly accepted requirements of wellbeing, Fischer argued, are insufficient for understanding claims of wellbeing and added that a good life also requires an ongoing aspiration for a better future with the opportunity to pursue it with dignity and a connection to a larger purpose. The people I talked to described Sweden's generous social welfare systems as providing much of the material resources required for wellbeing, including access to healthcare, education, security, and unemployment services. But, entrepreneurship offered access to the three additionally required domains of wellbeing proposed by Fischer: commitment to a larger purpose, aspiration, and dignity.

For Dan Sonesson, CEO of the startup Jetty, this came in the form of creating spaces for joy and happiness by creating digital systems for event planning (primarily large music festivals) that are free from the anxieties of putting on such events or frustrations of attending a failed one. For Anna Jenelius, co-founder of Valiant Game Studio, who struggled with making video games at her former corporate job, dignity was found in her work by creating her own startup where she could achieve her aspirations to encourage empathy toward other lifeways:

> There are a lot of things about society today that can be kind of scary and a lot of things to be pessimistic about. And, I'm like, "OK, here I am making games, making entertainment, not doing anything 'real'." [...] How can I justify sitting here making games when the world looks like this? [...] So, I was actually considering going into politics or volunteering, like what should I do? [...] That is kind of what got me thinking—games reach billions of people! Literally, every tenth person in the world has played a Swedish [video] game. They reach all of those people and if all of those games actually said something we could really be part of the conversation. [...] So, I realized [...] this is what I want to do because I'm good at it and I love it. So, I'm going to use this as my weapon of choice, if you will. But, always keeping our eyes on the ball. We are here to make the world a better place—but in our way.

As Herbert Applebaum explained, no matter how we organize society

> our survival as a species depends on the need to work. [...] Work is the cooperative effort of mankind, the sharing of knowledge and skill to create our human-made world. Work is associated with self-esteem and well-being, with social progress and quality of life, and with the promise of releasing people for self-fulfilling leisure. (Applebaum 1992, xii)

Finding satisfaction with work is a crucial component of a good life. While the people I worked with in Stockholm sought this through entrepreneurship, it was obviously not without problems, indignities, struggles, and failures. Rather, like Ulrich Bröckling, I found that entrepreneurship may

> strengthen self-confidence and what psychologists call self-efficacy but it also exacerbates the feeling of powerlessness. It may set free creativity but it also generates unbounded anger. Competition is driven by the promise that the most capable will reap the most success, but no amount of effort can remove the risk of failure. The individual has no choice but to balance out in her own subjective self the objective contradiction between the hope of rising and the fear of decline, between empowerment and despair, euphoria and dejection. (Bröckling 2015, viii)

Given these observations, I treat entrepreneurs empathetically as actors struggling under the same systems I struggle with as an anthropologist who, like myself, seek to create better

futures using the skills, resources, and tools available to them. Thus, in my writing, I seek to follow the model presented by Emily Martin (1987) in her ethnography of the medical field's treatment of women:

> Although I will be critical of many central ideas current in medicine because I think they are demeaning to women, doctors as individuals are certainly not to be held responsible. Medical culture has a powerful system of socialization which exacts conformity as the price of participation. It is also a cultural system whose ideas and practices pervade popular culture and in which, therefore, we all participate to some degree. There are no individual villains in this book. Although doctors, like anyone else, can make mistakes, and I was sometimes told about them in interviews, I have steadfastly not used any of those cases to illustrate my points: I want to get at normal, correct, routine medical procedures and the ideas behind them. (Martin [1987] 2001, 13).

Likewise, I do not seek to understand how entrepreneurs uphold the ills of neoliberal and venture capitalism, but rather how the field of entrepreneurship and the ecosystem that is meant to support them hinders their aims—specifically by trading their innovation-as-change ambitions for innovation-as-promise. This is not to say that I intend to indulge entrepreneurial fantasies of boot-strapping, risk-taking heroes who will save the world with their apps or apologize for or ignore the harms of their work (Noble 2018; Benjamin 2019). Rather, I take their ambitions seriously and apply my anthropological efforts to helping them articulate and understand how innovation culture co-opts and redirects their efforts.

Chapter 11.

Sandboxes & Flows

I met Alexander Hjertström through his co-founder Johannes Herrmann while both were working from the coworking space at SUP46. Along with Fredrik Kempe and Mehdi Rejraji, they co-founded the startup Airinum. Airinum makes face masks for filtering out pollutants that are designed to be both functional and an everyday fashion accessory akin to sunglasses. Airinum was one of the startups with such as succinct and clear origin story that I heard it often from people who used Airinum as an example of social entrepreneurship, a Kickstarter startup, a non-tech-tech startup, a quintessentially Swedish brand, and an innovative startup. Airinum and its origin story was featured in guide profiles, SthlmTech promotional materials, and in business media frequently with the origin story featured on their website.

> In the fall of 2014, co-founder Alexander moved from Sweden to India. The people, the scents and the food created a life that was uniquely colourful, but there was something that troubled him. His long-gone asthma had started to come back since moving to India. He realized he was becoming another victim of air pollution. After searching for a means to protect himself, Alex found that wearing an anti-pollution breathing mask was the most effective way. To his surprise, however, most of the masks on the market were very basic and far from perfect in their construction. Their designs were primitive, reminiscent of the masks worn by dentists or miners. Not something you would want to wear everyday. Coming back from Asia, Alexander discussed this problem with his old friend Fredrik. Living in Sweden, clean air was something they both took for granted. Realizing that everyone can't breathe clean and healthy air they decided to do something about it, and Airinum was born. (Hjertström n.d.)

This story sounds like the perfect sales pitch for following the guides of SthlmTech through the innovation-as-invention curriculum. From idea to finding a co-founder in Stockholm to then building the company in SthlmTech, the story was often held up as an ideal entrepreneurial journey. However, the story is a construction that dramatically simplifies

reality to a pitch—which is of course what it is. It presents the story of a serendipitous situation that led to an idea that brought back to SthlmTech was grown into a innovative startup. However, it cuts away all of the deviations, explorations, and experimentations that led Alexander and Airinum away from and back to SthlmTech's guided paths of innovation and entrepreneurship.

Alexander graduated with his bachelor's degree from the Stockholm School of Economics in Management and Financial Management & Accounting. From this early point in his career, he was already engaged with entrepreneurship. His bachelor's thesis was a survey of SSE students and alumni examining the quality of their entrepreneurial training that argued SSE lacked training and support that would make entrepreneurship a legitimate and legible career choice for its students. During his last semester at SSE, Alexander began working for Rocket Internet as entrepreneur in residence. Rocket Internet is a venture capital firm with an internal startup incubator and operations support network. After his first Swedish project with Rocket Internet was concluded, he was promoted to Global Venture Development Manager, which involved moving abroad to work in the firm's portfolio companies. His first assignment was an e-retailer called Kasuwa in Lagos, Nigeria. He started off working on pricing strategy, then shifted to project manager for Unit Economics, oversaw the re-branding of the company to Jumia, then finally ended as CFO of the company. He maintained a blog about his experiences in Lagos where he reflected on the differences from his home country of Sweden, namely infrastructure, corruption, and crime—although with the upbeat (and at times paternalistic) optimism of a young Swedish entrepreneur who saw "enormous potential" in the country and hoped that increased business investment would draw attention to problems and force political action (Hjertström 2012).

After a brief trip back to Sweden, Alexander moved on to another Rocket Internet venture in Australia—Iconic, an online fashion retailer—and then worked as chief marketing officer for another startup Hello Fresh, that became a billion-dollar unicorn company a few

years later. In 2013, he began his master's in business back in Sweden at SSE, where he met his future co-founder and masters' thesis co-author, Johannes. In his second year, he did an exchange program in Ahmedabad for six months at the Indian Institute of Management. This is the point where the Airinum origin story picks up. Alexander and the other Airinum founders initially bootstrapped their company, meaning that they relied on their personal resources to fund the company. In 2015, they raised $75,000 USD from the a crowdfunding campaign on the platform Kickstarter—from which they earned the achievement of being Kickstarter's most backed fashion startup of 2015 (Hansen and van Uden 2018, 2:32)—and have since been funded through a combination of sales and angel and VC investment.

Alexander had been working in startups and venture capital for years prior to his time in India. And, although he took advantage of SthlmTech spaces, Alexander described this time as exploring the "psychology" of the people he sought to help in order to develop solutions that "fit" them—literally and figuratively—rather than as following the ecosystem's curriculum. This approach included conducting extensive qualitative and collaborative studies using interviews, focus groups, and surveys for Airinum's development. At this early stage, Airinum was already working in collaboration with those people that would live with it—primarily people from outside of Sweden—on everything from product design and aesthetic to marketing, branding, and pricing. The ability to collect, synthesize, and integrate qualitative research was a key component in many founders' expertise. However, outside of a handful of workshops and classes on "design thinking," this work did not fit within SthlmTech's curriculum and was relegated to obscuring and magical language about the "genius" of individual entrepreneurs like Alexander and the superiority of Swedish design—erasing from Airinum's story the people Alexander collaborated with who were primarily non-Swedish, non-entrepreneurs who provided deep insight into experiences of air pollution and mask wearing that became the foundation of Airinum's work.

In a conversation I had with him, he expressed frustration that too many founders become so excited by their own ideas that they fail to talk to the people who actually use

them, leading to their startups being out of touch with people's actual needs and lives. To avoid this the Airinum team discussed and collaborated with the people they expected to live with their products. From these methods, they were able to identify the shape of the problem with existing products: existing face masks did not fit a diversity of face shapes and sizes, leading to leakage; existing face masks were incompatible with other safety and fashion items such as helmets and glasses; existing face masks did not last and had to be frequently replaced and disposed of, which felt wasteful to many; and existing face masks were unattractive and concerns for appearance often trumped fear about poor air quality. They also learned contextual details, such as the lack of awareness about the link between air quality and health, the geographic distribution of people affected by poor air quality, and the laws that impacted people's choice to wear air masks, such as India's laws requiring helmets to be worn by cyclists that made mask wearing impractical. All of this research was then integrated into Airinum from product design to marketing. Although entrepreneurship is often chided for its reliance on quantitative data, graphs with projected earnings, and other such "researched" objects, it was this kind of qualitative research and experiential aspects of founders' epistemic practices that led to more meaningful connections between founders and the people they sought to have an impact on.

During an interview, Alexander told me, "Every day we have to ask ourselves: 'What do we stand for? And, when we face our customers, are we proud of how we handle it?" He saw himself not as building a better future for himself but as building a better future for the world by changing conversations about air-pollution and helping people protect themselves in the meantime. Alexander was not simply motivated to profit from the solving of a problem he had identified. But rather, he was motivated by the problem itself—that is air pollution—and affecting change that had positive outcomes for real people. Because of this, he saw Airinum as doing two things: (1) providing a product that can immediately improve the health and lives of people who live amid air pollution and (2) elevating the problem of air pollution in political and popular discourse. Of these, the latter was what drove his decision making

despite the former being the critical idea that held his startup together. He explained this paradox to me by saying that in order to stay true to his values he had to advocate for change that would make the need for his product obsolete because,

> Currently, there is air pollution. Currently, there are people dying from it. Hence we have a solution. But, as the air gets better we will just need to change what we do.

He did not see himself as exploiting an ecological and health crisis, but as providing a stopgap while advocating for change and preparing for a future where his stop gap is no longer needed. Evidence of this approach includes Airinum's efforts to get their face masks into elite spaces—spaces where discussion and awareness would include people with the power to act on it—including fashion shows in Paris or in marketing to European and American travelers. Additionally, they have run initiatives to promote awareness without promotion of their product, such a poster campaign in the UK that included no mention of Airinum on the materials, instead they included only educational information and activist calls to action.

In discussions, Alexander expressed the difficulty of engaging in this kind of ethical work. Not only did he have to consider, discuss, and enact his values and ethics within his business' strategies, he also had to translate them in persuasive ways to people with different interests and temporal perspectives. This kind of work required "bold imagining for a better, ethical future," he told me, but often one must negotiate and fight for it with people concerned about financial returns or short term and immediate needs and who's fears and hopes for the future were different. I do not mean to imply that they must only deal with value conflicts from investors. For example, Alexander expressed concern that an educational blog written to be clear, catchy, and informative failed to get traction among customers who much preferred the attractive photos of people wearing Airinum's masks on Instagram.

Of course, not all founders have values and ambitions that share affinities with social and environmental justice. So, by describing Alexander's affinities I do not seek to apply a

moral purity to founders who seek such change. Airinum is not beyond reproach, as Alexander was keenly aware. He discussed with me the problems of contributing to climate change and air pollution by shipping his product worldwide and creating a luxury item to combat a problem primarily experienced by disadvantaged people. His expertise is not in creating innovative startups with impeccable ethics, but in constructing strategies, organizational cultures, business materials, and discourses that are imbued with particular values and are legible to the stakeholders upon which the viability of the startup depends, including investors, brand evangelists, mentors, membership committees, and customers.

The kinds of expertise I observed in founders ranged widely from storytelling to qualitative research, from policy to marketing, from artificial intelligence to air pollution, from programming to art. Their expertise reflected the diversities of their background, their preoccupations, their anxieties, and the serendipity of experience. I found no one who claimed to be an expert in innovation—as they were so often billed in innovation strategies, diplomacy materials, manifestos, marketing, and media and presented as holding,

> …the knowledge and competence base for innovation that is developed through research, education or independent learning. (Swedish Ministry of Enterprise, Energy, and Communications 2015, 10)

Instead, I found people with specific domain expertise that they wished to mobilize, to the best of their ability, toward some positive effect in some facet of society. Although they were usually adept at hyping their startups for circulation within SthlmTech, they generally saw their efforts as mundane and practical and simply using the resources and tools at hand. When I asked entrepreneurs if they saw their startup as innovative or if they saw themselves as innovators, most said no, equivocated by saying "only in marketing" or "only on my resume." This kind of response was particularly common among founders who described innovation in abstract, magical, or emotional terms and saw their own labors as common and personally meaningful but not reaching the height of innovation's bliss.

Sandboxes

I checked in on Airinum in February 2020 to see what had changed. I pulled up their website and was presented with the message: "All products are unfortunately sold out at the moment." My immediate concern was that like so many startups, the company was failing. However, this was not the case. Rather, in planning for how their product would be used with a focus on air pollution, they ordered stock with the expectation of a steady stream of purchases from people living in polluted locations and a few spikes of sales from air pollution events, such as wildfires. They did not foresee a major disease outbreak that would see their air pollution masks be appropriated as people tried to protect themselves from the spreading coronavirus. In an interview for *Di Digital*, Alexander described the difficulties they've had, including massive unexpected increases in sales, getting their newly manufactured products out of the Chinese factories where they are manufactured, and communicating the deficiencies in their products in a pandemic (Forsberg 2020).

Although startups are often described and hyped as flexible and quickly scalable solutions to the world's problems, those built following the ecosystem's innovation-as-invention curriculum are not structured to immediately respond to massive, unpredictable crises like these. With innovation being limited to the practice and expertise of developing startups and then ushering them through planned growth stages, these processes become brittle when confronted with the unpredictability and unknowability of life beyond the startup. While serendipity is configured as a boon for idea generation, the serendipity of life after launch is usually seen as a foil.

As people that seek to "solve problems" for other people, they are necessarily entangled in all of the complexities of sociality, power, politics, infrastructures, and language—in short the stuff of anthropology. But, unlike anthropology, their work must answer to stakeholders and practicalities that scholarly work usually does not. So, to exempt entrepreneurship from legal and social liability, innovation culture sequesters

entrepreneur's "innovation" to the labors and practices that occur between idea and the launch of the startup.

In this way, innovation-as-invention is "sandboxed"—that is separated into a confined "play" space like a playground sandbox within entrepreneurial spaces away from innovation-as-change. I've borrowed the concept of sandboxing from computer science and software development. In these fields, sandboxes are "an encapsulation mechanism that is used to impose a security policy on software components" (Maass et al. 2016, 5). They drew inspiration from the walled-off boxes of sand at playgrounds meant to protect both a child at play from her environment and to protect the wider environment from the child's play. Sandboxing in computer science then became an encapsulated environment for testing, experimentation, and creation enforced by policies that both protected the work from its environment and the environment from the work. In the same way, I use sandboxing here to describe the policy, infrastructural, and social mechanisms described in this dissertation that encapsulate the work of entrepreneurs away from social life beyond the startup.

Figure 11.1 The Android "sandbox" on the Google campus in Mountain View, California.

Work within a sandbox needs only gesture toward some want, desire, or problem outside of the sandbox to motivate and justify it. This kind of innovation is fun and exciting, filled with all the giddiness of hope and potential as one is not yet faced with the inevitable unintended consequences, failure, and appropriations that occur after the ecosystem's curriculum. By sandboxing this form of innovation away from the complexities of social life, it becomes easier to optimize and accelerate its practices and standardize its areas of expertise—as the measures of its success are defined by its internal measures rather than measures of positive social change which require more complex and flexible evaluation methodologies and open one up to liability and responsibility for these outcomes which can be avoided when they are seen as out-of-scope.

Innovation as change, understood as the ongoing and uncontrollable flow of social change, was often used as a way to defer blame and responsibility for a failure by shifting it onto this unpredictability. Sandboxing encouraged this deferral by embedding it within the innovation-as-invention curriculum. A clear example of this deferral occurred at an event I attended in Stockholm. One of the speakers on the stage said, "There was a Sequoia company who went crazy fucking shit hot for like two years. Someone is going to remember the name. Does anyone remember what I'm talking about?" An audience member yelled out, "Yik or YikYak." YikYak was a startup founded by Americans Tyler Droll and Brooks Buffington in 2013 that had been funded by the VC firm Sequoia in 2014 with $60 million investment at a $350 million valuation. The mobile app allowed users to see, up or down vote, and post anonymous discussion threads that were only visible to people within five miles of the post's geographic origin. On stage the speaker continued,

> Yikyak went buck-wild. It looked like it was going to be the next Facebook for a minute. And then it got shut down because it was anonymous and people were doing death threats and all kinds of crazy shit and schools went berserk and because people were using it as an anonymous attack people were feeling threatened in school and then schools blocked it. Geofence blocked it and it died. Then, Sequoia was like "well shit". [...] When you look back at the YikYak story it is phenomenal. It is one of the most immediate deaths due to something unforeseeable.

This description of YikYak's failure as "unforeseeable" was immediately laughable to me, not only as an anthropologist but also as someone who returned to university as a student the year of the app's launch. I learned about the app from a group of male undergraduates while waiting in line at the campus bagel shop. I remember hearing them discussing the app's features and reading each other the jokes that had been posted. Curious, I googled the app and learned that it was anonymous and highly popular at universities. As a woman who was an undergraduate for the launch of Facebook, LiveJournal, and Hot-or-Not[1], my first reaction was that an anonymous bulletin board frequented by undergraduates was going to become quickly inundated with hate speech, harassment, death and rape threats, and bullying. I download the app to confirm my suspicions and the first post I saw was a man claiming that a woman, who he named and provide a dorm location for, was a "slut" that any man could easily persuade into sex. I deleted the app. So, when the speaker on stage claimed that YikYak's failure was unforeseeable, I snorted loudly as I tried to hold in an incredulous laugh—as it seemed entirely foreseeable to me. Another audience member seated just behind chuckled and then shouted: "That was foreseeable!" Despite this rebuff, the speaker replied: "It wasn't—they didn't! They just got out innovated by assholes." Glancing around the audience, I saw many heads nodding and heard murmurs of agreement.

Of course, the men who created YikYak did not intend for their app to amplify toxic university campus cultures. However, without their intervention, the change in social behavior could not have happened in this way. Despite this, the "innovation" was not credited to them or their invention but rather credited to the impossibility of predicting all outcomes from within the sandbox.

[1] LiveJournal is a journal website that allows people to write individual or group journals and share them anonymously or under their real name. When I was in college, a group journal called "Dear GVSU" was used in a very similar way to YikYak. Hot-or-Not was a website, that claimed to be a dating app, where anyone could upload photographs of people and users could vote them as "hot" or "not" resulting in a hotness score. Both of these predictably resulted in harassment, bullying, hate speech, and threats.

Flows

Fortunately, many entrepreneurs—like Alexander who has spent nearly a decade trying to leverage entrepreneurship toward positive social change—are learning that innovation-as-change requires ongoing collaborative work that not only cooperates with but also defers to the experience of people who live with their products and services. They understand innovation-as-change cannot be wholly managed or designed and it is not presumptively positive, as it is always a collaboration between every aspect of a social milieu and thus involves a level of complexity that cannot be wholly predicted or accounted for.

Entrepreneurship's role in innovation-as-change is thus like a stone in a stream, affecting flow but always necessarily in collaboration and in tension with the rest of the stream's environment and always among the agency of other actors. Although the troubles with scaling production and delivery persisted throughout 2020, the Airinum team chose not to retreat to their safety of their original pitch and claim the novel use of their products was innovative misuse that they were not responsible for. Rather they listened, learned, and adapted. For example, they sought KN95 certification for their existing filters to confirm their suitability for pandemic use and then shipped inexpensive valve stoppers that turned their one-way air-pollution protection into two-way coronavirus protection.

Entrepreneurship is built upon ignorances generated by the unpredictability of social life. By invoking ignorance here, I do not mean stupidity but rather a lack of knowledge that has particular textures, politics, and practices because of the context of that expertise (High, Kelly, and Mair 2012). Ignorance in this context, is an active acknowledgement of not-knowing that creates absences in pitches, business proposals, advice, and guidance that are not merely missing but purposefully unquestioned and left out. In order to protect themselves from legal and social liability, entrepreneur's "innovation" work has been sequestered to the labors and knowledge that proceed these ignorances and deem the rest unknowable and thus "out of scope."

I do not seek to argue, as some have, that the answer is for startups to employ anthropologists to solve this problem—particularly because anthropology has its own myopias and ignorances. Rather, by calling attention to it, I hope to use it to break apart some of the entrenched rhetoric about startups' ability to solve all problems or be quicker, more agile agents for social change. In this case, Airinum is not an agency responsible for responding to crisis and given the way their company has been shaped and textured by their ethics and intent to grow awareness around air pollution, they were not prepared to be a pandemic "solution." Thus, being ill prepared for this outcome is not necessarily a shortcoming of Airinum but rather a shortcoming of systems that outsource crisis response to neoliberal dreams of innovative entrepreneurs agilely solving all problems—despite supporting a curriculum that teaches them not to engage in this work.

Through discussions like those I had with the Airinum founders and other entrepreneurs of SthlmTech, I have come to see innovation-as-change as something more than the excuse to sandbox "innovation" and excuse failure. Instead, I have come to see entrepreneurship's role in innovation-as-change as an emergent social process that occurs primarily after—rather than during—the prescribed practices of entrepreneurship.

> Yesterday I was at this conference where they were talking about innovation a lot. You know, it's becoming like a buzzword. When I was, when I first came to Sweden eleven years ago, my professor explained innovation as the commercialization of invention, because invention, it stays in the labs. But innovation, it gets out in the world and people start using it, right? I think innovation is anything that can become usable, accessible, understandable for people. [...] When people start picking it up and seeing the change. Then that's innovation. That's how I see it.

Maral was the first to express this to me. Although she did not extend her observation to my conclusions, she did, however, crucially link the idea that simply developing an idea or even bringing it to the level of a product or service was not alone "innovation." Rather, only by entering the ongoing flows of innovation-as-change and responding to it throughout the life of the startup can one truly be "innovative" in the sense that the entrepreneurs I met aspired to be.

I have come to understand startup founders not as the experts of innovation but as provocateurs who generate material, discursive, and practical interventions within the milieu in which innovation occurs. In the case of Airinum, their masks were not innovations, but provocations that became mixed up in the complexities of our world, including not only air pollution but also climate change, a pandemic, politics of healthcare, global supply chain logistics, and so on. This was the point for innovative work. If the resources, attention, and political power the idea of innovation brings forth were to be reallocated to include or even favor the time period after the current curriculum of SthlmTech, then how might Airinum's current situation have changed? If they had been taught to value this kind of serendipity as innovation instead of the kind that generated the initial idea, how might they have been prepared financially, infrastructurally, and epistemologically to engage? With this support and mindset, then startups could not only be held responsible for how they respond to and provoke social change but could become supported, active, and willing participants in it—rather than protecting themselves from critique and liability by claiming their innovative work is complete when it leaves the confines of their sandboxes.

Chapter 12.

Disrupting SthlmTech

Innovation ecosystems generate a curriculum of innovation as invention that co-opts processes of invention and creativity and repackages them with prescriptions that benefit certain powerful actors and organizations within the ecosystem while promising unlikely social and environmental benefits. Venture capitalists and other prominent and powerful stakeholders weave and circulate stories of innovation-as-promise—via hyped tractable futures attainable through the curriculum skewed toward their benefit. Meanwhile, the unpredictability and complexity of innovation-as-change is used to defer blame and responsibility for failure and to justify the sandboxing of entrepreneurial innovation to the innovation-as-invention curriculum—even while promising the social change it avoids. This is how innovation culture collapses innovation-as-invention, -promise and -change to tell a story of innovation that is aspirational, practical and attainable, largely unaccountable, and unfortunately, unlikely to bring about the change it promises in most cases.

However, new forms of engagement with innovation-as-change hold promise for new and more productive ways of achieving the goals of entrepreneurs to generate positive change through interventions and ongoing and continuous collaboration with the flows of innovation in social life. Yet for now, SthlmTech still guides entrepreneurs by first inspiring them to action through innovation's promise and then by generating a distributed, informal curriculum of innovation-as-invention that is continually reinforced and renewed through the everyday interactions and practices of people and organizations within SthlmTech. This curriculum defines and disciplines expert roles and their relations and creates standardized and optimized pathways toward the commercialization of invention. SthlmTech's curriculum

was formed from a combination of interactions with global discourse on startup and innovation ecosystems models, infrastructures, and practice inspired by Silicon Valley and the local history and culture of Stockholm. SthlmTech provides materials and mentorship that guide entrepreneurs between milestones (e.g., idea, prototypes and minimum viable products (MVP), business plans, seed funding, series A and B funding, growth markers, key performance indicators, etc.) and through storytelling and hype generates tractable futures that guide entrepreneurs' decisions (e.g., what and how to innovate, who to innovate for, etc.). While SthlmTech's curriculum has led to significant successes of various measures, from producing an unusually large number of unicorn companies to generating strong commitments to sustainability, it has also limited innovation and expert practice within entrepreneurship itself and produced unproductive side effects, from wantrepreneurialism to a growing bubble of inflated valuations.

While the guides of SthlmTech are powerful, particularly among the newer cohorts of entrepreneurs who have become entrepreneurial citizens through engagements with its meetups, incubators, and media since the ecosystem's formation, it is not totalizing. As I have described, there are a wide range of practices, areas of expertise, and cultural practice that move within SthlmTech that do not conform to and often subvert the narratives of innovation-as-promise. Entrepreneurs *do* seek out engagements and collaborations beyond SthlmTech. Venture capitalists, business angels, and evangelists do not neatly fulfill their roles but exceed them in subversive ways that open space for change and experiment. Amid all of the hype and unicorns, there is ongoing concern and reflection on their impacts. Yet, the influence of SthlmTech's curriculum is that it obscures these alternative and subversive practices and requires that they be translated into conforming practices and story genres to be seen as valid and convincing. Lastly, it also limits entrepreneurs' ability to become engaged in the flows of innovation-as-change by only upholding those scenarios that fit the model of innovation-as-promise—that is, it makes it difficult to imagine, find resources for,

and build support for alternative pathways of innovation that do not follow SthlmTech's guides.

From this position, I propose a draft manifesto. It is a draft because while I have completed this research and have presented evidence to support these arguments, the propositions below are starting points, not end points, for a radical disruption of innovation. This manifesto needs collaborators to co-opt it, alter it, and put it into practice alongside their own expertise. So, through this manifesto, I propose my own intervention into the flows of innovation and through the next stages of my career I intend to follow it and continue to engage these flows in ongoing efforts to seek positive change among the change makers. The following is a reimagining of innovation that was built from my conversations with entrepreneurs, investors, and other ecosystem stakeholders. This reimagining is not an unreachable utopia. Each element is rooted in already existing and emerging ideas and initiatives happening in SthlmTech and elsewhere. Instead, like the hype of innovation-of-promise, it is a credible, fabricated truth that we can work toward.

An Innovation Manifesto

1) *Innovation is Innovation-as-Change.*

Innovation should always be understood as innovation-as-change. That is, innovation should be defined as the ongoing and always emerging process of change within social life in the broadest sense. All other forms of "innovation" should instead be understood as interventions within the flows of innovation—and thus always dependent on, in collaboration with, and in tension with social and material life. Thus, interventions are never deterministic—meaning that their outcomes cannot be wholly predicted or assumed to be positive no matter their intentions.

2) *Demand Clarity of Purpose in Interventions.*

While innovation culture promises futures filled with positive social changes, it more often delivers excitement about novel technologies, profits for investors, many failed startups, and a handful of unicorn companies. The ambitions of entrepreneurs become lost, subdued, or refashioned to fit into the ecosystem's curriculum. Instead, I suggest that to be successful, each intervention into streams of innovation ought to be based in a clarity of purpose—and design its strategies and alliances accordingly. This is not to say that entrepreneurship or even risk-based capital should be abandoned—but rather that these strategies should be determined by the intervention's purpose rather than by a prescribed curriculum.

3) *Dismantle Sandboxes & Renegotiate the Terms of Responsibility.*

The sandboxing of interventions away from the complexities of social life may allow one to more easily standardize and optimize practice and the circulation of resources. However, this perspective is built on the misguided hubris that entrepreneurs can imagine, invent, and implement an intervention and achieve intended innovation. Once innovation is understood within all of its complexity and unpredictability, this kind of sandboxing appears irresponsible and limiting, as it denies all of the dependencies interventions are always necessarily a part of and restricts who is invited into the intervention's collaborations and what strategies might be deployed to only those that are available inside the sandbox. Thus, sandboxes must be dismantled in favor of ongoing and ever-emergent interventionist labors built through coalitions of diverse and responsive collaborators.

By doing so, we can also renegotiate the terms of responsibility for the impacts of interventions. The sandbox enables entrepreneurs to imagine that they are only responsible for their intentions from inside it. But, this creates a discourse that unfairly and unrealistically sets the expectation that they must foresee and prevent all negative outcomes in order to seem ethical. Alternatively, dismantling the sandbox and its restrictive timelines

and procedures in favor of ongoing flows with clarity of purpose, places interventionists into constant collaboration with outcomes making them responsible for their responses to emerging outcomes rather than for predicting them.

4) A *New Innovation Ecosystem.*

Lastly, I seek a new innovation ecosystem that supports diverse interventions into innovation. Rather than constructing a handful of optimized paths with shrouded allegiances, this new innovation ecosystem would offer infrastructural, legal, and epistemic support for temporary assemblages of experts, stakeholders, supporters, and resources as they form and reform adapting to the flows of innovation around a particular intervention. This is not an abandonment of entrepreneurship or even of entrepreneurship backed by venture capital backed investments. Rather, this ecosystem would begin with the assumption that these are not the only or even the best methods of intervention and instead see them as part of a wider constellation of existing and not-yet-imagined possibilities. This would result in a more robust ecosystem driven by clarity of purpose and a responsibility for engagement.

An Innovative Anthropology

I called this reimagining a credible truth that *we* might work toward—and I do mean we, as not only the people with whom I collaborated in SthlmTech but also we as in anthropologists. Anthropology often falls into the same sandbox trap as entrepreneurship—in which we fail to follow our interventions into flows of social change—preferring to retreat to academic procedures, publications, and conferences rather than adapting our methods, tactics, and alliances to meet the challenges of innovation—or worse disparaging those that do as less valuable or virtuous than academic anthropologists. Thus, I am additionally calling for an innovative anthropology. One that does not simply study problems and publish interventions but that via applied, public, engaged, or activist anthropology follows our

interventions into flows of innovation. This does not mean that every anthropologist must become an activist or work within industry. Rather, as a discipline, we must broaden and support diverse forms of doing anthropology in public and in collaboration with the streams of social life we seek to influence not as a stop gap for a poor academic job market or as a fulfillment for the neoliberal aspirations of university administrations but instead as a matter of necessity for the change we know is needed and we have the skills to effect.

In the anthropology of business, technology, and entrepreneurship—this looks like both a broad analysis and critique of their practices, epistemics, infrastructures, and power dynamics combined with an interventionist anthropology that trains and supports anthropologists to not only provide insights within the existing frameworks of design and innovation culture but also leverages anthropological analysis and critique and our strengths in challenging assumptions and managing complexity to work as strategists within innovation ecosystems, their constituent organizations, and within businesses and startups. In short, making anthropology available for collaboration in ongoing flows of innovation alongside entrepreneurs, designers, inventors, and so on—to form alliances where our concerns and ambitions align.

Figure 12.1 The window seat in the "attic" workspace of Slottet where I spent my last hour of fieldwork contemplating innovation and reflecting on what I had learned.

Glossary

Accelerator	An organization that provides workspace, training, and/or small amounts of funding to help a startup grow its business for new rounds of funding.
Angel	An individual that invests their private funds into risk-based equity investments.
Bootstrapping	Starting a business without outside funds but rather personal funds or through revenue.
Coworking	Sharing an office space with others who are not part of one's company.
Ecosystem	A collection of private and public organizations, infrastructures, and experts loosely working together to support entrepreneurship and innovation.
Entrepreneur	A person who has founded or intends to found a startup.
Equity	A form of investment where one owns a percentage of a company called a share.
Evangelist	A person who spends a substantial period of time promoting something.
Exit	The point that an investor exits an investment, usually after an IPO, acquisition, or other transaction leading.
Founder	A person who establishes a startup.
Hashtag	A keyword or phrase proceeded by a #. Used to organize threads and topics on social media.
Impact Entrepreneurship	A form of entrepreneurship where decisions are ideally made based on the social or environmental impact of the decision rather than on profit or valuations.
Incubator	An organization that provides workspace, training, and/or small amounts of funding to help an entrepreneur transition an idea into a business.
Meetup	An event where people with a similar interest meet, usually organized via meetup.com.

Pitch	A short (usually less than ten minutes) presentation of a business proposal for enticing an investor.
Risk Capital Investment	A category of equity investments in risky ventures that includes venture capital and angel investors.
Seed Funding	A comparatively small investment in as startup usually obtained at the idea stage, prior to business of product development.
Startup	A type of small business, variously defined.
Unicorn	A startup company that has reached a billion-dollar (USD) valuation before exiting.
Venture Capital	A form of equity-based investment that draws from a fund to invest in risky ventures, primarily startups.
Venture Capitalism	A form of capitalist practice based on the values and practices of venture capitalists, such as rapid scaling and equity investment.
Venture	Synonym for startup.
Wantrapreneurialism	A portmanteau of wannabe and entrepreneurialism that is used to describe a recent phenomenon of entrepreneurs that value the entrepreneurial lifestyle over impact and other toxic practices.

Bibliography

Adams, Richard N. 1951. “Personnel in Culture Change: A Test of Hypothesis.” *Social Forces; a Scientific Medium of Social Study and Interpretation* 30 (2): 185–89.

Ahmed, Murad. 2015. “Stockholm: The Unicorn Factory.” *Financial Times*, March 31, 2015. https://www.ft.com/content/e3c15066-cd77-11e4-9144-00144feab7de.

Alexeyeff, Kalissa. 2008. “Neoliberalism, Mobility and Cook Islands Men in Transit.” *The Australian Journal of Anthropology* 19 (2): 136–49.

Altabev, David. 2015. “The Nordic Analysis.” CITIE: City Initiatives for Technology, Innovation and Entrepreneurship. https://www.nesta.org.uk/report/citie-the-nordic-analysis/.

Anand, Nikhil. 2015. “Leaky States: Water Audits, Ignorance, and the Politics of Infrastructure.” *Public Culture* 27 (2): 305–30.

———. 2017. *Hydraulic City: Water and the Infrastructures of Citizenship in Mumbai*. Duke University Press.

Anderson, Jan. 2004. “Dairy Deregulation in Northern Queensland: The End of Traditional Farming ?” *Anthropological Forum* 14 (3): 269–82.

Anderson, Sheila Mcnerney. 2007. “The Founding of Theater Arts Philanthropy in America: W. McNeil Lowry and the Ford Foundation, 1957-65.” In *Angels in the American Theater: Patrons, Patronage, and Philanthropy*, edited by Robert A. Schanke, 173–89. Carbondale, IL: SIU Press.

Andersson, Ruben. 2018. “The Price of Impact: Reflections on Academic Outreach amid the ‘Refugee Crisis.’” *Social Anthropology* 26 (2): 222–37.

Appadurai, Arjun. 1991. “Global Ethnoscapes: Notes and Queries for a Transnational Anthropology.” *Recapturing Anthropology: Working in the Present* 191210.

Applebaum, Herbert A. 1992. *The Concept of Work: Ancient, Medieval, and Modern*. SUNY Press.

Atomico. 2015. “Data on Billion Dollar Companies.” *Atomico Data on Billion Dollar Companies*. https://assets.contentful.com/v6wpmtr1bucb/11CjBxiEkG4yieyQUeA0k8/460c2fb9b47e839b60106fd8e47630d5/AtomicoData.zip.

———. 2019. “State of European Tech 2019.” Atomico. November 2019. https://2019.stateofeuropeantech.com/.

Avdeitchikova, Sofia, Hans Landström, and Nils Månsson. 2008. “What Do We Mean When We Talk about Business Angels? Some Reflections on Definitions and Sampling.” *Venture Capital* 10 (4): 371–94.

Barnett, H. G. 1941. “Personal Conflicts and Cultural Change.” *Social Forces; a Scientific Medium of Social Study and Interpretation* 20 (2): 160–71.

Barth, Fredrik. 1963. *The Role of the Entrepreneur in Social Change in Northern Norway*. Oslo: Norwegian Universities Press.

———. 1966. *Models of Social Organization*. Royal anthropological institute of Great Britain and Ireland.

———. 1969. “Introduction.” In *Ethnic Groups and Boundaries: The Social Organization of Culture Difference*, edited by Fredrik Barth, 9–39. The Little, Brown Series in Anthropology. Boston: Little, Brown and Company.

Belshaw, Cyril S. 1955. “The Cultural Milieu of the Entrepreneur: A Critical Essay.” *Explorations in Economic History* 7 (3): 146.

Benjamin, Ruha. 2019. *Race After Technology: Abolitionist Tools for the New Jim Code*. John Wiley & Sons.

Björklund Larsen, Lotta. 2018. *A Fair Share of Tax: A Fiscal Anthropology of Contemporary Sweden*. Springer Nature.

Björner, Emma, and Olof Zetterberg. 2019. *Stockholm: The Tale of the Unicorn Factory*. City, Transformed. Luxembourg: European Investment Bank.

Black, Steven P. 2018. “The Ethics and Aesthetics of Care.” *Annual Review of Anthropology* 47 (1): 79–95.

Blank, Steve. 2010. “Steve Blank What’s A Startup? First Principles.” *Steve Blank* (blog). January 25, 2010. https://steveblank.com/2010/01/25/whats-a-startup-first-principles/.

———. 2011a. “Steve Blank Why Governments Don’t Get Startups.” *Steve Blank* (blog). September 1, 2011. https://steveblank.com/2011/09/01/why-governments-don%E2%80%99t-get-startups/.

———. 2011b. “Xconomy: Why Governments Don’t Get Startups--Or, Why There’s Only One Silicon Valley.” Xconomy. September 1, 2011. https://xconomy.com/san-francisco/2011/09/01/why-governments-dont-get-startups-or-why-theres-only-one-silicon-valley/.

———. 2013. “Steve Blank: The 6 Types of Startups.” *The Accelerators* (blog). The Wall Street Journal. June 24, 2013. https://blogs.wsj.com/accelerators/2013/06/24/steve-blank-the-6-types-of-startups-2/.

Blank, Steve, and Bob Dorf. 2012. *The Startup Owner’s Manual: The Step-by-Step Guide for Building a Great Company*. BookBaby.

Bourne, Kristina A., and Marta B. Calás. 2013. “Becoming ‘Real’ Entrepreneurs: Women and the Gendered Normalization of ‘Work.’” *Gender, Work, and Organization* 20 (4): 425–38.

Boyatzis, Richard E. 1998. *Transforming Qualitative Information: Thematic Analysis and Code Development*. SAGE.

Boyer, Dominic. 2008. “Thinking through the Anthropology of Experts.” *Anthropology in Action* 15 (2): 38–46.

Boyle, Mark. 2008. “The Spatialities of Actually Existing : Neoliberalism in Glasgow, 1977 to Present.” *Geografiska Annaler. Series B, Human Geography* 90 (4): 313–25.

Brickner, Taryn. 2019. “Step inside the Unicorn Factory.” Raconteur. November 28, 2019. https://www.raconteur.net/sponsored/step-inside-the-unicorn-factory/.

Bröckling, Ulrich. 2015. *The Entrepreneurial Self: Fabricating a New Type of Subject*. SAGE.

Brotherton, P. Sean. 2008. “‘We Have to Think like Capitalists but Continue Being Socialists’: Medicalized Subjectivities, Emergent Capital, and Socialist Entrepreneurs in Post-Soviet Cuba.” *American Ethnologist* 35 (2): 259–74.

Brown, Nik. 2003. “Hope Against Hype - Accountability in Biopasts, Presents and Futures.” *Science & Technology Studies* 16 (2): 3–21.

Bruni, Attila, Silvia Gherardi, and Barbara Poggio. 2004. “Doing Gender, Doing Entrepreneurship: An Ethnographic Account of Intertwined Practices.” *Gender, Work, and Organization* 11 (4): 406–29.

Brustureanu, Bogdan. 2018. “Academics as Knowledge Entrepreneurs.” *Social Sciences Information. Information Sur Les Sciences Sociales* 57 (4): 662–90.

Bührmann, Andrea D. 2005. “The Emerging of the Entrepreneurial Self and Its Current Hegemony. Some Basic Reflections on How to Analyze the Formation and Transformation of Modern Forms of Subjectivity.” *Forum, Qualitative Social Research / Forum, Qualitative Sozialforschung* 6 (1). http://www.qualitative-research.net/index.php/fqs/article/view/518/1122.

Cabot, Heath. 2019. “The Business of Anthropology and the European Refugee Regime.” *American Ethnologist* 46 (3): 261–75.

Cahn, Peter S. 2006. “Building down and Dreaming up: Finding Faith in a Mexican Multilevel Marketer.” *American Ethnologist* 33 (1): 126–42.

Callon, Michel, Arie Rip, and John Law. 1986. *Mapping the Dynamics of Science and Technology: Sociology of Science in the Real World*. Palgrave Macmillan UK.

Cantillon, Richard. 2015. *Essay on the Nature of Trade in General*. Edited and translated by Antoin E. Murphy. Indianapolis: Liberty Fund.

Caro, Robert A. 1974. *The Power Broker: Robert Moses and the Fall of New York*. Knopf.

Çelik, Tantek. 2006. “BarCamp / TheRulesOfBarCamp.” BarCamp. January 20, 2006. http://barcamp.org/w/page/405173/TheRulesOfBarCamp.

Chapman, Ben. 2017. “How Sweden Became One of the Most Innovative Countries on Earth.” *The Independent*, December 26, 2017. https://www.independent.co.uk/news/business/news/sweden-s-technology-powerhouse-shows-brexit-britain-positive-way-fix-its-ailing-economy-a8118641.html.

Constant, Amelie, Yochanan Shachmurove, and Klaus F. Zimmermann. 2007. "What Makes an Entrepreneur and Does It Pay? Native Men, Turks, and Other Migrants in Germany." *International Migration* 45 (4): 71–100.

Crespy, David A. 2007. "An Alternative Theater Angel: Grant Goodman." In *Angels in American Theater: Patrons, Patronage, and Philanthropy*, edited by Robert A. Schanke, 120–72. Carbondale, IL: SIU Press.

Damberg, Mikael (@mickedamberg). 2015. "Stockholm Har Fram till Idag Levererat Minst Fem Enhörningar." Facebook. September 1, 2015. https://www.facebook.com/mickedamberg/posts/1025305204167197/.

Daston, Lorraine. 1995. "The Moral Economy of Science." *Osiris* 10: 3–24.

Delfanti, Alessandro. 2013. *Biohackers. The Politics of Open Science*. London: Pluto Press.

Dilley, Roy. 2010. "Reflections on Knowledge Practices and the Problem of Ignorance." *The Journal of the Royal Anthropological Institute* 16: S176–92.

Dolan, Catherine. 2012. "The New Face of Development: The 'Bottom of the Pyramid' Entrepreneurs." *Anthropology Today* 28 (4): 3–7.

Dujmovic, Jurica. 2016. "Sweden, with Government Support, Has Turned into a 'Unicorn' Factory." June 17, 2016. https://www.marketwatch.com/story/sweden-with-government-support-has-turned-into-a-unicorn-factory-2016-06-17.

Dumit, Joseph. 2006. "Illnesses You Have to Fight to Get: Facts as Forces in Uncertain, Emergent Illnesses." *Social Science & Medicine* 62 (3): 577–90.

Dumit, Joseph, and Sylvia Sensiper. 1998. "Living with the 'Truths' of DES: Toward an Anthropology of Facts." *Cyborg Babies: From Techno-Sex to Techno-Tots*, 212–39.

Duncker, Elke. 2001. "Symbolic Communication in Multidisciplinary Cooperations." *Science, Technology & Human Values* 26 (3): 349–86.

Durrenberger, E. Paul, and Gísli Pálsson. 1985. "Peasants, Entrepreneurs and Companies: The Evolution of Icelandic Fishing." *Ethnos* 50 (1–2): 103–22.

Easterbrook, Steve. 2014. "From Computational Thinking to Systems Thinking: A Conceptual Toolkit for Sustainability Computing." In *Proceedings of the 2nd International Conference on Information and Communication Technologies for Sustainability (ICT 4S'2014)*.

English-Lueck, J. A., and Miriam Lueck Avery. 2017. "Intensifying Work and Chasing Innovation: Incorporating Care in Silicon Valley." *Anthropology of Work Review: AWR* 38 (1): 40–49.

Enriquez, Falina. 2018. "Business, Transnationalism, and Patrimony: Comparing Entrepreneurial Musicians in Recife, Pernambuco." *Suomen Antropologi* 43 (1): 6–27.

Favret-Saada, Jeanne. 2015. *The Anti-Witch*. Hau Books.

Feng, Xianghong. 2012. "From Labor To Capital: Tourism And The Poverty Of Resources In Rural Ethnic China." *Urban Anthropology and Studies of Cultural Systems and World Economic Development* 41 (2/3/4): 329–65.

Finch, John. 1997. “From Proletarian to Entrepreneur to Big Man: The Story of Noya1.” *Oceania; a Journal Devoted to the Study of the Native Peoples of Australia, New Guinea, and the Islands of the Pacific* 68 (2): 123–33.

Finney, Ben R. 1969. “New Guinean Entrepreneurs; Indigenous Cash Cropping, Capital Fromation and Investment in the New Guinea Highlands.” *New Guinea Research Bulletin*. http://agris.fao.org/agris-search/search.do?recordID=US201301205473.

Fischer, Edward F. 2014. *The Good Life: Aspiration, Dignity, and the Anthropology of Wellbeing*. Stanford, CA: Stanford University Press.

Fleck, James. 1994. “Knowing Engineers?: A Response to Forsythe.” *Social Studies of Science* 24 (1): 105–13.

Flores-Meiser, Enya. 1978. “The Human Being, the Entrepreneur, and Change: The Case of a Generalized Intermediary.” *Papers in Anthropology* 19 (2): 1–9.

Fonneland, Trude. 2013. “Spiritual Entrepreneurship in a Northern Landscape: Spirituality, Tourism and Politics.” *Temenos - Nordic Journal of Comparative Religion* 48 (2). https://doi.org/10.33356/temenos.7510.

Forsberg, Julia. 2020. “Svenska Duons Andningsmasker Slutsålda Efter Coronaviruset.” *Di Digital*, February 4, 2020. https://digital.di.se/artikel/svenskarnas-andningsmasker-slut-efter-coronaviruset.

Forsythe, Diana E. 1993. “Engineering Knowledge: The Construction of Knowledge in Artificial Intelligence.” *Social Studies of Science* 23 (3): 445–77.

———. 1994. “STS (Re)Constructs Anthropology: A Reply to Fleck.” *Social Studies of Science* 24 (1): 113–23.

Fortun, Kim. 2009. “Figuring Out Ethnography.” In *Fieldwork Is Not What It Used to Be: Learning Anthropology’s Method in a Time of Transition*, edited by J. D. Faubion and G. E. Marcus, 167–83. Cornell Paperbacks. Ithica, NY: Cornell University Press.

Fredriksen, Øystein. 1997. “Venture Capital Firms Relationship and Cooperation with Entrepreneurial Companies, Linköping Studies in Science and Technology Thesis No 625.” Linköping University.

Freear, John, Jeffrey E. Sohl, and William E. Wetzel. 1995. “Angels: Personal Investors in the Venture Capital Market.” *Entrepreneurship and Regional Development* 7 (1): 85–94.

Freeman, Carla. 2007. “The ‘Reputation’ of Neoliberalism.” *American Ethnologist* 34 (2): 252–67.

Frier, Sarah, and Eric Newcomer. 2015. “The Fuzzy, Insane Math That’s Creating So Many Billion-Dollar Tech Companies.” *Bloomberg News*, March 17, 2015. https://www.bloomberg.com/news/articles/2015-03-17/the-fuzzy-insane-math-that-s-creating-so-many-billion-dollar-tech-companies.

Galemba, Rebecca B. 2008. “Informal and Illicit Entrepreneurs: Fighting for a Place in the Neoliberal Economic Order.” *Anthropology of Work Review*: AWR 29 (2). https://doi.org/10.1111/j.1548-1417.2008.00010.x.

Galison, Peter. 1997. *Image and Logic: A Material Culture of Microphysics*. University of Chicago Press.

Garsten, Christina. 2010. "Ethnography at the Interface: 'Corporate Social Responsibility' as an Anthropological Field of Inquiry." In *Ethnographic Practice in the Present*, edited by M. Melhuus, J. P. Mitchel, and H. Wulff, 11:56–68.

Geertz, Clifford. 1960. "The Javanese Kijaji: The Changing Role of a Cultural Broker." *Comparative Studies in Society and History* 2 (2): 228–49.

Gibney, Alex. 2019. *The Inventor: Out for Blood in Silicon Valley*. Streaming Video. United States: HBO Documentary Films. https://www.hbo.com/documentaries/the-inventor-out-for-blood-in-silicon-valley.

Gill, Rebecca. 2013. "The Evolution of Organizational Archetypes: From the American to the Entrepreneurial Dream." *Communication Monographs* 80 (3): 331–53.

Gissler, Anna @annagissler. 2018. "Stockholm Together with New York Ranks as Fourth Best University Cities in the World. #movetostockholm #investstockholm #visitstockholm #sthlmtech." Twitter. April 19, 2018. https://twitter.com/annagissler/status/987059425553895425.

Gordon, Kathleen E. 2011. "What Is Important to Me Is My Business, Nothing More: Neoliberalism, Ideology and the Work of Selling in Highland Bolivia." *Anthropology of Work Review: AWR* 32 (1): 30–39.

Gornall, William, and Ilya A. Strebulaev. 2017. "Squaring Venture Capital Valuations with Reality." Working Paper Series. National Bureau of Economic Research. https://doi.org/10.3386/w23895.

GoTo 10. n.d. "Om Goto 10." GoTo 10. Accessed May 17, 2019. https://www.goto10.se/om/goto-10/.

"Grow VC Group." 2019. Grow VC Group. 2019. https://group.growvc.com/.

Gupta, Akhil, and James Ferguson. 1997. *Culture, Power, Place: Explorations in Critical Anthropology*. Duke University Press.

Hagen, Everett. 1960. "The Entrepreneur As Rebel Against Traditional Society." *Human Organization* 19 (4): 185–87.

Hand, Martin, and Barry Sandywell. 2002. "E-Topia as Cosmopolis or Citadel: On the Democratizing and De-Democratizing Logics of the Internet, or, Toward a Critique of the New Technological Fetishism." *Theory, Culture & Society* 19 (1–2): 197–225.

Hannerz, Ulf. 1998. "Other Transnationals: Perspectives Gained from Studying Sideways." *Paideuma* 44: 109–23.

———. 2003. "Being There ... and There ... and There!: Reflections on Multi-Site Ethnography." *Ethnografeast* 4 (2): 201–16.

Hansen, Sissel, and Marissa van Uden, eds. 2018. *Startup Guide Stockholm*. Vol. 2. Copenhagen, Denmark: Startup Guide World IVS.

Haraway, Donna. 1988. “Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective.” *Feminist Studies: FS* 14 (3): 575–99.

Harney, Nicholas Demaria. 2011. “Neoliberal Restructuring and Multicultural Legacies: The Experiences of a Mid-Level Actor in Recognizing Difference.” *Ethnic and Racial Studies* 34 (11): 1913–32.

Harrison, Richard T., and Colin M. Mason. 2008. “Sampling and Data Collection in Business Angel Research.” *Venture Capital* 10 (4): 305–8.

Hébert, Robert F., and Albert N. Link. 1989. “In Search of the Meaning of Entrepreneurship.” *Small Business Economics* 1 (1): 39–49.

Helmreich, Stefan. 1999. “Digitizing ‘Development’: Balinese Water Temples, Complexity and the Politics of Simulation.” *Critique of Anthropology* 19 (3): 249–65.

———. 2000. “Flexible Infections: Computer Viruses, Human Bodies, Nation-States, Evolutionary Capitalism.” *Science, Technology & Human Values* 25 (4): 472–91.

Hennigan, Brian, and Gretchen Purser. 2018. “Jobless and Godless: Religious Neoliberalism and the Project of Evangelizing Employability in the US.” *Ethnography* 19 (1): 84–104.

Hertz, Rosanna, and Jonathan B. Imber. 1995. *Studying Elites Using Qualitative Methods*. SAGE Publications.

High, Casey, Ann Kelly, and Jonathan Mair. 2012. *The Anthropology of Ignorance: An Ethnographic Approach*. New York: Palgrave Macmillan.

Hill, Joseph. 2017. “Charismatic Discipleship: A Sufi Woman and the Divine Mission of Development in Senegal.” *Africa: Journal of the International Institute of African Languages and Cultures* 87 (4): 832–51.

Hjertström, Alexander. 2012. “Arrival – Lagos, Nigeria.” *Alexander Hjertstrom* (blog). July 7, 2012. https://alexanderhjertstrom.wordpress.com/2012/07/07/arrival-lagos-nigeria/.

———. n.d. “About Us.” Airinum. Accessed February 21, 2020. https://www.airinum.com/pages/about-us.

Hoffman, Steve G. 2011. “The New Tools of the Science Trade : Contested Knowledge Production and the Conceptual Vocabularies of Academic Capitalism.” *Social Anthropology/Anthropologie Sociale* 19 (4): 439–62.

Holm, Tora. 2020. “Data Centers in the Stockholm Region.” Invest Stockholm. 2020. https://www.investstockholm.com/investment_opportunities/data-centers-colocation/.

Holmes, Douglas R. 2018. “A Tractable Future: Central Banks in Conversation with Their Publics.” In *Uncertain Futures: Imaginaries, Narratives, and Calculation in the Economy*, edited by Jens Beckert and Richard Bronk, 173–93. Oxford, UK: Oxford University Press.

Holmes, Douglas R., and George E. Marcus. 2005. “Cultures of Expertise and the Management of Globalization: Toward the Re-Functioning of Ethnography.” In *Global*

Assemblages: Technology, Politics, and Ethics as Anthropological Problems, edited by Aihwa Ong and Stephen J. Collier, 235–52. Malden, MA: Blackwell Publishing Ltd.

———. 2008. "Collaboration Today and the Re-Imagination of the Classic Scene of Fieldwork Encounter." *Collaborative Anthropologies* 1: 81–101.

———. 2010. "Prelude to a Re-Functioned Ethnography." In *Ethnographic Practice in the Present*, edited by Marit Melhuus, Jon P. Mitchell, and Helena Wulff, 176–84. New York: Bergahn Books New York.

———. 2012. "Collaborative Imperatives: A Manifesto, of Sorts, for the Reimagination of the Classic Scene of Fieldwork Encounter." In *Collaborators Collaborating: Counterparts in Anthropological Knowledge and International Research Relations*, edited by Monica Konrad, 126–43. New York: Berghahn Books.

Hughes, Alan. 2010. "Innovation Policy as Cargo Cult: Myth and Reality in Knowledge-Led Productivity Growth." In *The Innovation for Development Report 2009–2010: Strengthening Innovation for the Prosperity of Nations*, edited by Augusto López-Claros, 101–17. London: Palgrave Macmillan UK.

Hummel, Andrea. 1997. "On Our Own: The Enterprising Anthropologist." *Practicing Anthropology* 19 (2): 26–29.

Insights, C. B. 2019. "The Complete List of Unicorn Companies." CB Insights. 2019. https://www.cbinsights.com/research-unicorn-companies.

Invest Stockholm. 2015. "Why Is Stockholm a Unicorn Factory?" *Invest Stockholm* (blog). September 2015. https://www.investstockholm.com/stockholm-it-region/news-stockholm-it-region/why-is-stockholm-a-unicorn-factory/.

Irani, Lilly. 2019. *Chasing Innovation: Making Entrepreneurial Citizens in Modern India*. Princeton University Press.

Jeffery, Miriam Olsson. 2015. "Damberg Om Sveriges Fem Enhörningar | SvD." *SvD Näringsliv*, April 24, 2015. https://www.svd.se/damberg-om-sveriges-fem-enhorningar.

Jemielniak, Dariusz. 2014. *Common Knowledge?: An Ethnography of Wikipedia*. Stanford University Press.

Joerges, Bernward. 1999. "Do Politics Have Artefacts?" *Social Studies of Science* 29 (3): 411–31.

Jurgenson, Nathan. 2012. "When Atoms Meet Bits: Social Media, the Mobile Web and Augmented Revolution." *Future Internet* 4: 83–91.

Kahney, Leander. 2006. *The Cult of Mac*. No Starch Press.

Karaomerlioglu, Dilek Cetindamar, and Staffan Jacobsson. 2000. "The Swedish Venture Capital Industry: An Infant, Adolescent or Grown-Up?" *Venture Capital* 2 (1): 61–88.

Kates, Steven. 2015. "Origin and Evolution of the Term 'Entrepreneur' in English." https://works.bepress.com/stevenkates/4/.

Kawasaki, Guy. 1990. *The Macintosh Way*. Glenview, Illinois: Scott, Foresman.

———. 1992. *Selling the Dream: How to Promote Your Product, Company, Or Ideas and Make a Difference Using Everyday Evangelism*. Harper Business.

———. 2006. “Evangelism: Eternal Life, Forgiveness, and Operating Systems - Guy Kawasaki.” Guy Kawasaki. December 18, 2006. https://guykawasaki.com/evangelism_eter/.

Kelman, Sarah. 2018. “The Bumipreneur Dilemma and Malaysia’s Technology Start-up Ecosystem.” *Economic Anthropology* 5 (1): 59–70.

Kerai, Anita. 2017. “Role of Unicorn Tag in Gaining Legitimacy and Accessing Funds.” *The Business & Management Review* 9 (2): 119–27.

Khosravi, Shahram. 2018a. “A Fragmented Diaspora: *Iranians in Sweden*.” *Nordic Journal of Migration Research* 8 (2): 73.

———. 2018b. “Stolen Time.” *Radical Philosophy*, no. 203 (December): 38–41.

Klein, Karen E. 2013. “Women Who Run Tech Startups Are Catching Up.” *Bloomberg News*, February 20, 2013. https://www.bloomberg.com/news/articles/2013-02-20/women-who-run-tech-startups-are-catching-up.

Klien, Susanne. 2019. “Entrepreneurial Selves, Governmentality and Lifestyle Migrants in Rural Japan.” *Asian Anthropology* 18 (2): 75–90.

Knight, Frank H. 1921. *Risk, Uncertainty and Profit*. Cambridge: Houghton Mifflin Company.

Knorr, Karin D. 1977. “Producing and Reproducing Knowledge: Descriptive or Constructive?: Toward a Model of Research Production.” *Social Science Information. An International Interdisciplinary Journal* 16 (6): 669–96.

Knorr-Cetina, Karin D. 1999. *Epistemic Cultures: How the Sciences Make Knowledge*. Cambridge, MA: Harvard University Press.

Köhn, Andreas. 2018. “The Determinants of Startup Valuation in the Venture Capital Context: A Systematic Review and Avenues for Future Research.” *Management Review Quarterly* 68 (1): 3–36.

Kuhn, Thomas S. [1962] 2012. *The Structure of Scientific Revolutions: 50th Anniversary Edition*. University of Chicago Press.

Landes, David S., Joel Mokyr, and William J. Baumol. 2010. *The Invention of Enterprise: Entrepreneurship from Ancient Mesopotamia to Modern Times*. Princeton University Press.

Landström, Hans. 1998. “Informal Investors as Entrepreneurs: Decision-Making Criteria Used by Informal Investors in Their Assessment of New Investment Proposals.” *Technovation* 18 (5): 321–33.

Latour, Bruno. 1987. *Science in Action: How to Follow Scientists and Engineers Through Society*. Cambridge, MA: Harvard University Press.

Latour, Bruno, and Steve Woolgar. 1979. *Laboratory Life: The Construction of Scientific Facts*. Beverly Hills, CA: Sage.

Lee, Aileen. 2013. “Welcome To The Unicorn Club: Learning From Billion-Dollar Startups.” *TechCrunch*, November 2, 2013. http://social.techcrunch.com/2013/11/02/welcome-to-the-unicorn-club/.

Leivestad, Hege Høyer, and Anette Nyqvist, eds. 2017. *Ethnographies of Conferences and Trade Fairs: Shaping Industries, Creating Professionals*. Cham, Switzerland: Palgrave Macmillan.

Lem, Winnie. 2008. "Migrants, Mobilization, and the Making of Neo-Liberal Citizens in Contemporary France." *Focaal* 2008 (51): 57–72.

Lemke, Thomas. 2001. "'The Birth of Bio-Politics': Michel Foucault's Lecture at the Collège de France on Neo-Liberal Governmentality." *Economy and Society* 30 (2): 190–207.

Lente, Harro van. 2012. "Navigating Foresight in a Sea of Expectations: Lessons from the Sociology of Expectations." *Technology Analysis & Strategic Management* 24 (8): 769–82.

Leslie, Stuart W., and Robert H. Kargon. 1996. "Selling Silicon Valley: Frederick Terman's Model for Regional Advantage." *Business History Review* 70 (4): 435–72.

Levine, H. 1985. "Entrepreneurship and Social Change: Implications from a New Zealand Case Study." *Human Organization* 44 (4): 293–300.

Lewis, Patricia. 2013. "The Search for an Authentic Entrepreneurial Identity: Difference and Professionalism among Women Business Owners." *Gender, Work, and Organization* 20 (3): 252–66.

Lidne, Annika, Daniel Sonesson, Johan Attby, Nils-Erik Jansson, Hampus Jakobsson, Daniel Daboczy, Douglas Roos, Sebastian Fuchs, Jessica Stark, and Byrenius Erik. 2018. "Svenska Startupmanifestet 2.0 - Swedish Scaleup Manifesto." Svenska Startupmanifestet. June 25, 2018. https://web.archive.org/web/20190611095808/https://en.startupmanifesto.se/.

Lidne, Annika, Carl Waldenkranz, Adiba Barney, Nils-Erik Jansson, Martin Källström, Jessica Stark, Alan Mamedi, et al. 2015. "The Swedish Startup Manifesto." The Swedish Startup Manifesto. June 2015. https://web.archive.org/web/20150806193350/http://en.startupmanifesto.se/.

Lima, Diana. 2012. "Prosperity and Masculinity: Neopentecostal Men in Rio de Janeiro." *Ethnos* 77 (3): 372–99.

Lindberg, Annika, and Lisa Marie Borrelli. 2019. "Let the Right One in? On European Migration Authorities' Resistance to Research." *Social Anthropology* 27 (S1): 17–32.

Linton, Ralph. 1936. *The Study of Man: An Introduction*. The Century Social Science Series. New York: Appleton-Century-Crofts, Inc.

Liu Tingchi, Matthew, and Bryant Chen Po Chang. 2007. "Business Angel Investment in the China Market." *Singapore Management Review* 29 (2): 89–101.

Low, Setha M. 2009. "Towards an Anthropological Theory of Space and Place." *Semiotica* 2009 (175): 21–37.

Luca, Nathalie. 2016. "Pentecôtismes et Esprit d'entreprise En Haïti." *Archives de Sciences Sociales Des Religions* 61 (175): 87–110.

Lumb, David. 2014. “The Recipe For Building A Startup Scene In Any City.” Fast Company. Fast Company. October 30, 2014. https://www.fastcompany.com/3037054/the-recipe-for-building-a-startup-scene-in-your-city.

Maass, Michael, Adam Sales, Benjamin Chung, and Joshua Sunshine. 2016. “A Systematic Analysis of the Science of Sandboxing.” *PeerJ Computer Science* 2 (e43): 1–36.

Malinowski, Bronislaw. 1932. *Argonauts of the Western Pacific: An Account of Native Enterprise and Adventure in the Archipelagoes of Melanesian New Quinea*. New York: George Routledge & Sons.

Månsson, Nils, and Hans Landström. 2006. “Business Angels in a Changing Economy: The Case of Sweden.” *Venture Capital* 8 (4): 281–301.

Marcus, George E. 1995. “Ethnography in/of The World System: The Emergence of Multi-Sited Ethnography.” *Annual Review of Anthropology* 24: 95–117.

———. 1997. “The Uses of Complicity in the Changing Mise-En-Scène of Anthropological Fieldwork.” *Representations* 59: 85–108.

———, ed. 2000. *Para-Sites: A Casebook Against Cynical Reason*. Chicago: University of Chicago Press.

Marouda, Marina. 2018. “Clinical Trials and Venture Tribulations: Stem Cell Research and the Making of Vietnamese Bio-Entrepreneurs.” *Critique of Anthropology* 38 (1): 96–114.

Martin, Emily. [1987] 2001. *The Woman in the Body: A Cultural Analysis of Reproduction*. Beacon Press.

Maturo, Antonio. 2014. “Fatism, Self-Monitoring and the Pursuit of Healthiness in the Time of Technological Solutionism.” *Italian Sociological Review* 4 (2): 157–71.

Mc Cluskey, Emma. 2019. *From Righteousness to Far Right: An Anthropological Rethinking of Critical Security Studies*. McGill-Queen’s Press - MQUP.

McDuling, John. 2018. “There Are Lessons for Us in Sweden’s Record Unicorn Count.” *The Sydney Morning Herald*, March 11, 2018. https://www.smh.com.au/business/the-economy/there-are-lessons-for-us-in-sweden-s-record-unicorn-count-20180129-p4yz0g.html.

Mendelsohn, Everett, Peter Weingart, and Richard Whitley. 1977. *The Social Production of Scientific Knowledge*. D. Reidel Pub. Co.

Messina, Chris. 2007a. “Groups for Twitter; or A Proposal for Twitter Tag Channels.” *Factory Joe: This Can All Be Made Better. Ready? Begin* (blog). August 25, 2007. https://factoryjoe.com/2007/08/25/groups-for-twitter-or-a-proposal-for-twitter-tag-channels/.

Messina, Chris (@chrismessina). 2007b. “How Do You Feel about Using # (Pound) for Groups. As in #barcamp [Msg]?” Twitter. August 23, 2007. https://twitter.com/chrismessina/status/223115412.

———. 2013. “@brittanyannen # Because of IRC Convention and It Was Easy to Type on T-9 Phones in 2007! (Pre-Touch!).” Twitter. October 4, 2013. https://twitter.com/chrismessina/status/386127369603256320.

Mickey, Ethel L. 2019. ""Eat, Pray, Love" Bullshit': Women's Empowerment through Wellness at an Elite Professional Conference." *Journal of Contemporary Ethnography* 48 (1): 103–27.

Milne, Richard. 2019. "Can $5bn Klarna Avoid the Fate of Other Swedish Unicorns?" *Financial Times*, August 7, 2019. https://www.ft.com/content/1312b0ea-b904-11e9-8a88-aa6628ac896c.

Miloud, Tarek, Arild Aspelund, and Mathieu Cabrol. 2012. "Startup Valuation by Venture Capitalists: An Empirical Study." *Venture Capital* 14 (2–3): 151–74.

Miyauchi, Yohei. 2014. "Imagined Entrepreneurs in Neoliberal South Africa : Informality and Spatial Justice in Post-Apartheid Cities." *Milan Journal of Mathematics* 12 (2014). https://search.ebscohost.com/login.aspx?direct=true&db=ant&AN=667210&site=ehost-live.

Moeran, Brian, and Timothy de Waal Malefyt. 2018. *Magical Capitalism: Enchantment, Spells, and Occult Practices in Contemporary Economies*. Springer.

Mol, Annemarie, Ingunn Moser, Enrico Maria Piras, Mauro Turrini, Jeannette Pols, and Alberto Zanutto. 2011. "Care in Practice. On Normativity, Concepts, and Boundaries." *TECNOSCIENZA: Italian Journal of Science & Technology Studies* 2 (1): 73–86.

Morcom, Anna. 2015. "Terrains of Bollywood Dance: (Neoliberal) Capitalism and the Transformation of Cultural Economies." *Ethnomusicology* 59 (2): 288–314.

Morozov, E. 2012. *The Net Delusion: The Dark Side of Internet Freedom*. PublicAffairs.

———. 2013. *To Save Everything, Click Here: The Folly of Technological Solutionism*. New York: PublicAffairs.

Mould, Oli. 2018. *Against Creativity*. London: Verso Books.

Murphy, Antoin E. 2015. "Introduction." In *Essay on the Nature of Trade in General*, edited and translated by Antoin E. Murphy, ix–xxii. Indianapolis: Liberty Fund.

Murphy, Keith M. 2015. *Swedish Design: An Ethnography*. Ithaca, NY: Cornell University Press.

Nader, Laura. 1972. "Up the Anthropologist—Perspectives Gained from Studying Up." In *Reinventing Anthropology*, edited by Dell Hymes, 284–311. New York: Pantheon Books.

Nafus, Dawn, Rogerio de Paula, and Ken Anderson. 2007. "Abstract 2.0: If We Are All Shouting, Is There Anyone Left To Listen?" In *Communities, All over Again*, 66–77. American Anthropological Association.

Naudin, Annette, and Karen Patel. 2017. "Entangled Expertise: Women's Use of Social Media in Entrepreneurial Work." *European Journal of Cultural Studies*, December, 1367549417743037.

Nilsson, Johan. 2018. "Constructing Consumer Knowledge in Market Research: An Ethnography of Epistemics." Edited by C. F. Helgesson and Lotta Björklund. PhD, Linköping University.

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

Nonini, Donald M. 1987. "Some Reflections on 'Entrepreneur-ship' and the Chinese Community of a West Malaysian Market Town." *Ethnos* 52 (3–4): 350–67.

Nordvall, Anette @nordvalla. 2018. "Sweden Is the Land of Opportunity! Healthy Infrastructure, Social Healthcare, Public Schools, Free Higher Education, Responsible and Innovative Tech Innovation Eco System Including Financial Succession #nordictech #sthlmtech." Twitter. March 27, 2018. https://twitter.com/Nordvalla/status/978661318860386305.

Norrsken Foundation. 2021. "Norrsken Impact Accelerator." Norrsken Foundation. January 7, 2021. https://www.norrskenimpactaccelerator.com/.

———. n.d. "Our Mission." Norrsken Foundation. Accessed April 12, 2021. https://www.norrsken.org/ourmission.

Nusca, Andrew. 2016. "The Unicorn List." Fortune. January 20, 2016. http://fortune.com/unicorns/.

Nyqvist, Anette, Hege Høye Leivestad, and Hans Tunestad. 2017. "Individuals and Industries: Large-Scale Professional Gatherings as Ethnographic Fields." In *Ethnographies of Conferences and Trade Fairs: Shaping Industries, Creating Professionals*, edited by Hege Høyer Leivestad and Anette Nyqvist, 1–22. Cham, Switzerland: Palgrave Macmillan.

Ong, Aihwa. 1987. *Spirits of Resistance and Capitalist Discipline, Second Edition: Factory Women in Malaysia*. SUNY Press.

Osburg, John. 2013. *Anxious Wealth: Money and Morality Among China's New Rich*. Stanford University Press.

Osella, Filippo, and Caroline Osella. 2009. "Muslim Entrepreneurs in Public Life between India and the Gulf: Making Good and Doing Good." *The Journal of the Royal Anthropological Institute* 15 (May): S202–21.

Oxfeld, Ellen. 1992. "Individualism, Holism, and the Market Mentality: Notes on the Recollections of a Chinese Entrepreneur." *Cultural Anthropology: Journal of the Society for Cultural Anthropology* 7 (3): 267–300.

Palm, Tuva @tuvapalm. 2018. "Is It Just a Coincidence or Do We See a Trend Right Now Where Successful Women Quit Their Top Jobs to Fully Capitalize on Their Competences as Angle Investors, Prof Board Members, Executive Advisors Etc? And If That Is the Case - Why? #brilliantminds2018 #sthlmtech #womenintech." Twitter. June 12, 2018. https://twitter.com/tuvapalm/status/1006520669981564928.

Pärson, Pär-Jörgen. 2018. "Spotify - The Impossible Success Story - Northzone." *Northzone* (blog). March 15, 2018. https://northzone.com/spotify-impossible-success-story/.

Pfeilstetter, Richard. 2017. "Silicon Utopias: The Making of a Tech Startup Ecosystem in Manchester (UK)." *Suomen Antropologi* 42 (1): 91–102.

Poggiali, Lisa. 2016. "Seeing (from) Digital Peripheries: Technology and Transparency in Kenya's Silicon Savannah." *Cultural Anthropology* 31 (3): 387–411.

Powers, Devon. 2011. “Bruce Springsteen, Rock Criticism, and the Music Business: Towards a Theory and History of Hype.” *Popular Music & Society* 34 (2): 203–19.

Pozen, David E. 2008. “We Are All Entrepreneurs Now.” *Wake Forest Law Review* 43: 283.

Qureshi, Ayaz. 2015. “The Marketization of HIV/AIDS Governance: Public-Private Partnerships and Bureaucratic Culture in Pakistan.” *Cambridge Anthropology: A Journal of the Department of Social Anthropology, Cambridge University* 33 (1): 35–48.

Rajan, Kaushik Sunder. 2006. *Biocapital: The Constitution of Postgenomic Life*. Duke University Press.

Ramadani, Veland. 2012. “The Importance of Angel Investors in Financing the Growth of Small and Medium Sized Enterprises.” *International Journal of Academic Research in Business and Social Sciences* 2 (7): 306–22.

Rencher, Marlo. 2014. “Value and the Valley of Death: Opportunities for Anthropologists to Create and Demonstrate Value in Entrepreneurial Contexts.” *Practicing Anthropology* 36 (2): 52–56.

Ripsas, Sven. 1998. “Towards an Interdisciplinary Theory of Entrepreneurship.” *Small Business Economics* 10 (2): 103–15.

Rodman, Margaret C. 1992. “Empowering Place: Multilocality and Multivocality.” *American Anthropologist* 94 (3): 640–56.

Röhm, Patrick, Andreas Köhn, Andreas Kuckertz, and Hermann S. Dehnen. 2018. “A World of Difference? The Impact of Corporate Venture Capitalists’ Investment Motivation on Startup Valuation.” *Journal of Business Economics and Management* 88 (3): 531–57.

Rose, Nikolas. 1998. *Inventing Our Selves: Psychology, Power, and Personhood*. Cambridge: Cambridge University Press.

———. 1999. *Powers of Freedom: Reframing Political Thought*. Cambridge: Cambridge University Press.

Rudnyckyj, Daromir. 2017. “Subjects of Debt: Financial Subjectification and Collaborative Risk in Malaysian Islamic Finance: Subjects of Debt.” *American Anthropologist* 119 (2): 269–83.

Sale, Kirkpatrick. 1995. *Rebels against the Future: The Luddites and Their War on the Industrial Revolution: Lessons for the Computer Age*. Reading, MA: Addison-Wesley.

Samarra’e, Sarah (@thetechslopes). 2018a. “EQT Predictions for the Tech Community for 2018: ‘Tech Backlash, AI and Crypto as the Leading Narratives’ #sthlmtech.” Twitter. January 15, 2018. https://twitter.com/TheTechSlopes/status/952971165869461512.

Samarra’e, Sarah @thetechslopes. 2018b. “Found an Id Card for Immigrants This Morning in the Street, I Searched the Name in @Truecaller and It Appeared! I Called Her, 2 Hours Later I Delivered the Card. Kudos to Tech Which Solves Ppl Detailed Problems. #SthlmTech Thank You @Truecaller!” Twitter. May 21, 2018. https://twitter.com/TheTechSlopes/status/998548151471628288.

Say, Jean-Baptiste. (1821) 1971. A *Treatise on Political Economy; or the Production, Distribution, and Consumption of Wealth*. Translated by C. R. Prinsep and Clement C. Biddle. New York: Augustus M. Kelley Publishers.

Scharff, Christina. 2016. "The Psychic Life of Neoliberalism: Mapping the Contours of Entrepreneurial Subjectivity." *Theory, Culture & Society* 33 (6): 107–22.

Schumpeter, Joseph A. (1943) 1976. *Capitalism, Socialism and Democracy*. New York: Routledge.

———. (1934) 1983. *The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest and the Business Cycle*. Translated by Redvers Opie. New Brunswick: Transaction Publishers.

Seaver, Nick. 2017. "Algorithms as Culture: Some Tactics for the Ethnography of Algorithmic Systems." *Big Data & Society* 4 (2): 2053951717738104.

———. 2019. "Captivating Algorithms: Recommender Systems as Traps." *Journal of Material Culture* 24 (4): 421–36.

Segal, H. P. 1985. *Technological Utopianism in American Culture*. Syracuse University Press.

Shapin, Steven, and Simon Schaffer. 1985. *Leviathan and the Air-Pump: Hobbes, Boyle, and the Experimental Life*. Princeton, NJ: Princeton University Press.

Shever, Elana. 2008. "Neoliberal Associations: Property, Company, and Family in the Argentine Oil Fields." *American Ethnologist* 35 (4): 701–16.

Shipley, Jesse Weaver. 2009. "Aesthetic of the Entrepreneur : Afro-Cosmopolitan Rap and Moral Circulation in Accra, Ghana." *Anthropological Quarterly* 82 (3): 631–68.

Shore, Cris, and Laura McLauchlan. 2012. "'Third Mission' Activities, Commercialisation and Academic Entrepreneurs: Remaking the Public University." *Social Anthropology* 20 (3): 267–86.

Simon, Scott. 2000. "Entrepreneurship and Empowerment: Experiences of Taiwanese Businesswomen." *Anthropology of Work Review: AWR* 21 (3): 19–24.

Sjögren, Marta @martasjogren. 2018. "Congrats @pjparson on Winning VC of the Year at the #Europas. He All Too Humbly Stands Alone in #eutech to Have Delivered an Unprecedented European Track Record of VC Successes w/in 3yrs: @avito (2.7bn), @Spotify (28bn) & @iZettle ($2.2bn). Beyond Well Deserved 🏅 . #STHLMtech." Twitter. July 4, 2018. https://twitter.com/martasjogren/status/1014458622582181889.

Skog, Albin, Mats Lewan, Michael Karlström, Sergey Morgulis-Yakushev, Yixin Lu, and Robin Teigland. 2016. "Chasing the Tale of the Unicorn: A Study of Sweden's Misty Meadows." 1. Innovative Internet 1. Stockholm: Stockholm School of Economics.

Sloane-White, Patricia. 2008. "The Ethnography of Failure: Middle-Class Malays Producing Capitalism in an 'Asian Miracle' Economy." *Journal of Southeast Asian Studies*. https://doi.org/10.1017/s0022463408000362.

Smith, Chris. 2019. "Fyre: The Greatest Party That Never Happened." Streaming Video. United States: Netflix. January 18, 2019. https://www.netflix.com/title/81035279.

Sohl, Jeffrey E., Richard T. Harrison, and Colin M. Mason. 2018. "In Memory: William E. Wetzel Jr." *Venture Capital* 20 (3): 233–35.

Spigel, Ben. 2017. "The Relational Organization of Entrepreneurial Ecosystems." *Entrepreneurship Theory and Practice* 41 (1): 49–72.

Srnicek, N., and A. Williams. 2015. *Inventing the Future: Postcapitalism and a World without Work*. London: Verso.

Star, Susan Leigh, and James R. Griesemer. 1989. "Institutional Ecology, 'Translations' and Boundary Objects: Amateurs and Professionals in Berkeley's Museum of Vertebrate Zoology, 1907-39." *Social Studies of Science* 19 (3): 387–420.

Startup Commons. 2016. "Startup Ecosystems." Startup Commons. https://www.startupcommons.org/.

Startup Genome. 2019. "Startup Genome | We Love Startup Communities." Startup Genome. 2019. https://startupgenome.com/.

———. 2020. "The Global Startup Ecosystem Report (GSER 2020)." Startup Genome. https://startupgenome.com/reports/gser2020.

StartupBlink. n.d. "Global Map of Startups & Ecosystem Rankings." StartupBlink. Accessed April 7, 2019. https://www.startupblink.com/.

Stavrianakis, Anthony. 2015. "From Anthropologist to Actant (And Back to Anthropology): Position, Impasse, and Observation in Sociotechnical Collaboration." *Cultural Anthropology: Journal of the Society for Cultural Anthropology*. https://doi.org/10.14506/ca30.1.09.

Steinert, M., and L. Leifer. 2010. "Scrutinizing Gartner's Hype Cycle Approach." In *Technology Management for Global Economic Growth (PICMET), 2010 Proceedings of PICMET '10:*, 1–13.

Stensrud, Astrid B. 2017. "Precarious Entrepreneurship: Mobile Phones, Work and Kinship in Neoliberal Peru." *Social Anthropology* 25 (2): 159–73.

Stewart, Alex. 1992. "A Prospectus on the Anthropology of Entrepreneurship." *Entrepreneurship Theory and Practice* 16 (2): 71–92.

Stockholm Business Region. 2015. "The Story of the Unicorn Factory." *Stockholm: The Capital of Scandinavia* (blog). October 2015. https://press.investstockholm.com/posts/blogposts/stockholm---the-unicorn-factory.

Strathern, Andrew. 1972. "The Entrepreneurial Model of Social Change: From Norway to New Guinea." *Ethnology* 11 (4): 368–79.

Sundström, Marie @mariesundstrom. 2018. "Not a Coincidence! Sweden Has the Best Working Environment for Women in the World and over 80 of the Leading #sthlmtech Companies Have Declared Themselves #awomansplace Working Actively to Support Equal Opportunities for Women and Men. They're Listed Here." Twitter. June 15, 2018. https://twitter.com/MarieSundstrom/status/1007530001883893760.

Swedish Institute. 2021. “Gender Equality in Sweden.” Sweden.Se. February 26, 2021. https://sweden.se/society/gender-equality-in-sweden/.

Swedish Ministry of Enterprise, Energy, and Communications. 2015. “The Swedish Innovation Strategy.” N2012.33. Swedish Ministry of Enterprise, Energy, and Communications. http://www.government.se/information-material/2012/10/the-swedish-innovation-strategy/.

Teigland, Robin, Claire Ingram, Nicholas Wesley-James, Torbjörn Bengtsson, and Julika Lamberth. 2015. “Stockholm – Europe’s No.2 FinTech City.” Stockholm Business Region Development.

The Local. 2017. “Almost 580,000 Now Waiting for Apartments in Stockholm.” The Local. August 16, 2017. https://www.thelocal.se/20170816/almost-580000-now-waiting-for-apartments-in-stockholm.

The Local Creative Studio. 2021. “Stockholm’s ‘Secret Formula’: What Makes the City Unique?” The Local. January 26, 2021. https://www.thelocal.com/20210126/stockholms-secret-formula-what-makes-the-city-unique-invest-stockholm-tlccu/.

The Sun. 1905. “Theater Angels with Nerve: Property Man Who Financed A Show for Forty Weeks,” June 25, 1905.

Thieme, Tatiana A. 2013. “The ‘Hustle’ amongst Youth Entrepreneurs in Mathare’s Informal Waste Economy.” *Journal of Eastern African Studies* 7 (3): 389–412.

Tiso, Giovanni. 2013. “‘The Net Will Save Us’: Political Solutionism and the Five Star Movement.” *Overland* 211: 55–60.

Traube, Elizabeth B. 1989. “Secrets of Success in Postmodern Society.” *Cultural Anthropology: Journal of the Society for Cultural Anthropology* 4 (3): 273–300.

Tsing, Anna. 2013. “Free in the Forest: Popular Neoliberalism and the Aftermath of War in the US Pacific Northwest.” *Rhetorics of Insecurity: Belonging and Violence in the Neoliberal Era, Edited by Zeynep Gambetti and Marcial Godoy-Anativia*, 20–39.

Turner, F. 2010. *From Counterculture to Cyberculture: Stewart Brand, the Whole Earth Network, and the Rise of Digital Utopianism*. University of Chicago Press.

Uncubed. 2017. “9 Swedish Startups You Should Know.” *Uncubed Blog* (blog). January 11, 2017. https://uncubed.com/daily/9-fastest-growing-swedish-startups/.

“Understanding Startup Ecosystems.” 2014. Startup Commons. 2014. https://web.archive.org/web/20140309092327/http://www.startupcommons.org:80/understanding-startup-ecosystems1.html.

Warnick, Jennifer. 2013. “Skype at 10: How an Estonian Startup Transformed Itself (and the World).” Microsoft News Center. 2013. https://www.microsoft.com/en-us/stories/skype/skype-chapter-2-welcome-to-estonia.aspx.

We Don’t Have Time. 2018. “About Us.” We Don’t Have Time. April 22, 2018. https://www.wedonthavetime.org/about-us.

Wetzel, William E., Jr. 1983. “Angels and Informal Risk Capital.” *Sloan Management Review* 24 (January): 233–35.

Wikipedia contributors. 2019a. “Startup Ecosystem.” Wikipedia, The Free Encyclopedia. April 20, 2019. https://en.wikipedia.org/w/index.php?title=Startup_ecosystem&oldid=893309982.

———. 2019b. “List of Unicorn Startup Companies.” Wikipedia, The Free Encyclopedia. June 5, 2019. https://en.wikipedia.org/w/index.php?title=List_of_unicorn_startup_companies&oldid=900385524.

Willmott, Cory. 2014. “Radical Entrepreneurs: First Nations Designers’ Approaches to Community Economic Development.” *Anthropology of Work Review*: AWR 35 (2): 95–109.

Winner, Langdon. 1980. “Do Artifacts Have Politics?” *Daedalus* 109 (1): 121–36.

Wolf, Eric R. 1956. “Aspects of Group Relations in a Complex Society: Mexico 1.” *American Anthropologist* 58 (6): 1065–78.

Woolgar, Steve, and Geoff Cooper. 1999. “Do Artefacts Have Ambivalence: Moses’ Bridges, Winner’s Bridges and Other Urban Legends in S&TS.” *Social Studies of Science* 29 (3): 433–49.

World Economic Forum, (@wef). 2018. “Why Does #Sweden Produce so Many Startups?” Twitter. March 25, 2018. https://twitter.com/wef/status/977915572389335043.

Wyszogrodzki, Piotr, and Abhijeet Malik. 2019. “European Startup Survey.” PwC (PricewaterhouseCoopers). https://www.pwc.com/gx/en/services/entrepreneurial-private-business/small-business-solutions/european-start-up-survey.html.

Yang, Jie. 2011. “The Politics of the Dang’an: Spectralization, Spatialization, and Neoliberal Governmentality in China.” *Anthropological Quarterly* 84 (2): 507–34.

Yurchak, Alexei. 2002. “Entrepreneurial Governmentality in Postsocialist Russia: A Cultural Investigation of Business Practices.” In *The New Entrepreneurs of Europe and Asia: Patterns of Business Development in Russia, Eastern Europe, and China*, edited by Victoria E. Bonnell and Thomas B. Gold, 278–324. Armonk, New York: M. E. Sharp.

Zarrugh, Laura. 2007. “From Workers to Owners: Latino Entrepreneurs in Harrisonburg, Virginia.” *Human Organization* 66 (3): 240–48.

Zuckerman, Ethan. 2008. “Meet the Bridgebloggers.” *Public Choice* 134: 47–65.