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Making futures? Technology start-ups in Singapore

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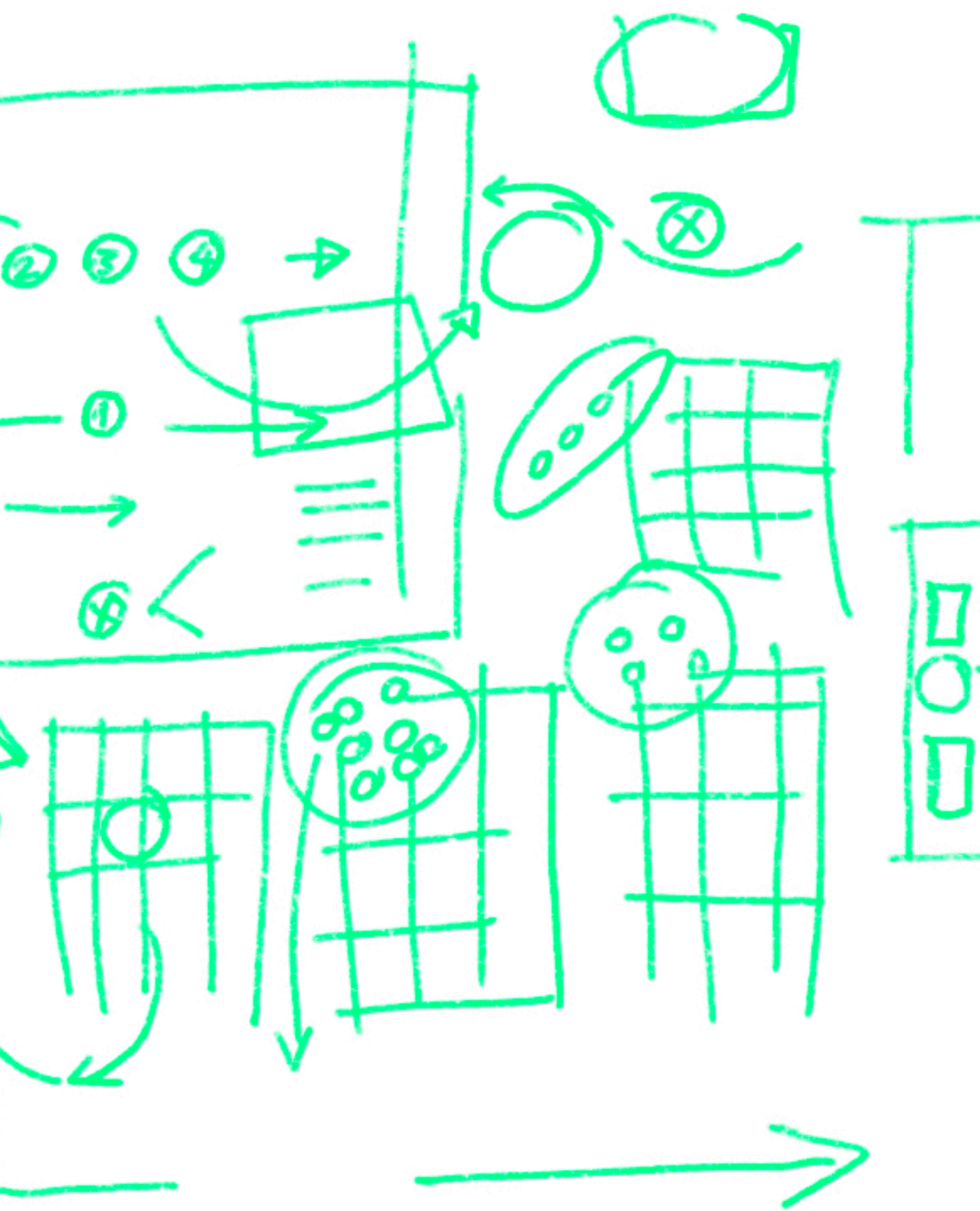
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Making Futures?

Technology Start-ups in Singapore.

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Zane Kripe

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INTRODUCTION

1. Setting the Scene

This dissertation is an ethnographic study of the many ways in which future plays a role in the present. I examine this topic by studying the practices of early-stage web technology start-ups in Singapore.

On January 26, 2012, just a week after the start of the Lunar New Year, a start-up accelerator program called 'The Accelerator' started its first run. Wei and Oscar, the two entrepreneurs running it, had invited technology enthusiasts from around the world to apply and develop "Asian technology for Asia". According to them, Asia was the opportunity, and Singapore was the centre from where to capitalise on it. Through The Accelerator, Wei and Oscar wanted to facilitate the emergence of a new culture of innovation-based entrepreneurship in Singapore and saw their activities as central to the development of Singapore's start-up ecosystem. Along with private investor funding, The Accelerator received support from Singapore's government, which also saw Singapore's future tied to innovation and technopreneurship.

The Accelerator, in its first round, had accepted and invested in 11 start-ups and promised to accelerate their growth with high-quality mentorship, taking them "from an idea to investment in a matter of 100 days". Each of those start-ups, most of whom were just at the level of idea, promised to bring some social change through their services. One wanted illiterate workers to find better jobs; another wanted travelling salespeople to have an easier way of managing their inventory; another two offered better ways for people to plan their travels; another two wanted to connect parents with their children better. The plan was that for 100 days, they would be mentored 'for success' to bring their visions to life. At the end of the program, the start-ups would be showcased to a room full of investors, and the appealing ones would receive funding for further development.

On this particular day at the end of January, the start-up founders gathered on the second floor in a former factory building that was now allocated for Singapore's start-ups called Blk 71. After a few brief welcome talks and a performance of a traditional Lion dance for good luck as part of the Lunar New Year celebration and opening of the program, The Accelerator opened the doors to the participating teams. The first day

was nerve-wracking for the founders, who, with no lengthy introductions, had to pitch their businesses as a way to get to know one another. They immediately received feedback from the organisers on how to improve their pitches because the next day, they were already scheduled to pitch to select investors The Accelerator had invited. Investors would provide their perspective on what they wanted to see from these budding companies by the time the Demo Day arrived. Demo Day would mark the end of the program but, ideally, be an important stepping stone in a longer trajectory of start-up growth.

The stakes seemed high for the teams accepted at The Accelerator. While some teams were local, others had specifically flown to Singapore for this 100-day program – from New Zealand, India, the Philippines, Indonesia, Malaysia, the Netherlands and Thailand. For many budding founders, that meant giving up their jobs and suspending their social lives, at least for these 100 days. Most of the participants were males younger than Oscar and Wei, and for almost all of them, this was the first time they had established and run a start-up. Most of the participants were also in financially less secure positions, and many relied extensively on their savings, from the support of their families, or had borrowed from friends to afford the three months in Singapore. The idea of potential start-up success they were chasing seemed to add additional pressure.

For example, Seth, a participant from the Philippines, told me that his parents had great trust in him and expected that this trip to Singapore would mean that he would be onto ‘something big’ – “like Facebook or something”, as he put it. For his family, the fact that he was selected to come to Singapore was already a sign of his success, and his being here just meant that even more success was pending. Partially fuelled by this confidence in their son, they had lent him money to pay the rent for him and his co-founder for the months in Singapore. Fidgeting nervously with his fingers as we discussed these family expectations, he admitted that he was worried that he would let them down.

Seth had met his co-founder, John, at their previous employer, and they had become friends. Now, in Singapore, they had found a small room they shared in an apartment owned by a Singaporean family. It was an hour’s ride away with the metro from the Blk 71 offices, and they were allowed to do their laundry once a week during specific hours. Sometimes, it meant that only one of them could make it for the mentor meetings and lectures organised by The Accelerator, as the other had to stay home to do laundry. John’s family couldn’t support John’s trip to Singapore financially, and as John admitted, they were somewhat concerned about his start-up aspirations. According to John, he was supposed to be the breadwinner in his family – after all, he was the first and only one who received, even if not finished a university education. Now, he had to stop supporting them and rely on his co-founder for a living.

They had four more teammates in the Philippines who couldn’t afford to come to

Singapore and, therefore, worked remotely despite the organisers' preference that the whole team be present. Both John and Seth often found it impossible to communicate the atmosphere and intensity of The Accelerator program in their daily calls to their teammates. They often felt that their teammates didn't appreciate their hard work and the pressure they were dealing with. They felt the only way to make it 'real' for their teammates would be to bring them over. The Accelerator and Singapore's start-up social life brought together mentors, investors, successful entrepreneurs who had exited their companies before, and other aspiring start-up founders; the insights, the routine pitch presentations, and also simply being in Singapore where even 'the escalators moved faster' - all of it was something one needed to experience to 'really' understand. In a conversation, Seth explained that he had been in Singapore once before participating in the program and that it had been:

"Just...[searching for words] hands down - it was one of the most amazing experiences that I had, especially when I went to Marina Bay Sands, and the light show over there was fantastic."

At that moment, back then, he felt he could imagine living here, and now, coming here, to this futuristic and spectacular city to build a start-up was a dream come true. However, even before they could present at the Demo Day, Seth left the start-up.

He had a feeling that in too many meetings with mentors and potential investors, John was promising things they couldn't deliver and was increasingly uncomfortable about how they were getting along. For him, too much 'photoshopping' was happening as they presented themselves and the future possibilities of the product they were building. Added to that was the pressure that was part of The Accelerator program, where already on the first day, they felt 'behind' and in need to 'catch up'. Combined with the stress from the living conditions he found himself in, it was too much to bear. For example, it turned out that John was a loud snorer, leaving Seth seriously sleep-deprived. He'd try to mitigate that by working from The Accelerator's office at night and sleeping during the day when John was in the office. That didn't help their relationship. Seth also felt that John didn't treat the limited budget he had borrowed from his parents seriously enough, seeing John's purchases of cigarettes and other personal care items as careless and irresponsible. All in all, what was supposed to be an amazing acceleration into future success was in fact, taking too much of him. On a start-up work-related trip back to the Philippines halfway through the programme, he decided not to return to Singapore and quit the start-up.

Meeting Seth a few months later in the Philippines, I learned about the heartbreaking personal drama he underwent as he was making the decision to quit and in its

aftermath. He felt like he had failed his family, friends, teammates and himself by quitting the start-up. He felt depressed and ashamed and wondered if he had lost his life's biggest opportunity. In that conversation we had, it was hard for him to find the words to explain how tough it was for him, and he would often pause, needing to handle the strong, painful emotions that the recollection of this experience was still bringing him. Yet, another year later, in an online call with him, I learned he was working in yet another new start-up in Manila. He was asked to join the team precisely because of his trip to Singapore, which marked him as 'experienced' in start-up matters. In our online call, he told me that The Accelerator had been a fantastic experience, which he was now talking about proudly. He felt he had made some mistakes in 'considering risks', but he would be more careful this time and was excited about the new start-up and the future they were building there. No, he was not in touch with John. He admitted that the relationship was broken beyond repair.

In many important ways, Seth and John were like other aspiring start-up entrepreneurs I met and interviewed during my research. Some were less vulnerable, others even more; some were more successful, and others, just like Seth and John, invested considerable energy to recast their often painful experiences favourably. Yet, they all were inspired by the promise of a better future through building a technology start-up and becoming entrepreneurs.

To better understand the structuring role future plays in the present, in this dissertation, I explore how future was a critical temporality upon which start-up building practices hinged. What constituted the 'Asia opportunity', and why would participants from around the world come to Singapore to chase it? Why would investors and the Singapore government provide funds for people who did not have much more than just an idea? How come 'Photoshopping' that Seth found too much to bear was not so much his co-founder's culpability as much as it was crucial for start-ups trying to make themselves attractive to investors? Why was Seth's experience of failure in Singapore so painful to him, yet also how was it viewed as an 'asset' that ensured new job opportunities later in the Philippines? Answers to all of these questions can be explored by taking the futurities that structured start-up practices seriously. The start-up futurities promised a lot to those who were pursuing them - opportunities to discover themselves, live a driven, purposeful life, bring wider social change and gain economic prosperity. Yet, they did so in very particular ways, shaped by the particular contexts and places. By exploring start-up futurities, I aim to, first, expand the anthropological understanding of how to study futurities ethnographically and, second, explore the larger question of the cultural significance of the future in a capitalist context.

Despite the Singapore government's strong push for developing a high-tech economy, culturally, Singapore has often been seen as the very opposite of the highly liberal San Francisco Bay Area, the home of the world's most famous and arguably most influential technology companies. Asia, more generally, but also Singapore, has long been featured as the 'Other' in the global order of technology innovation. Science fiction writer William Gibson famously described Singapore as "Disneyland with the Death Penalty" (Gibson 1993), exemplifying the perceived mismatch between Singapore's aspirations and its cultural identity, which was often said to be based on 'Asian Values'—a set of norms loosely based on Confucianism that value industriousness, familial piety, discipline, frugality, educational achievement, collective needs above individual freedoms, etc. Similarly, Richard Barbrook and Andy Cameron, in their canonical text "The Californian Ideology" in 1995, criticised the worldwide embrace of the contradictory merger of hippie ideals with the neoliberal ideology that they saw spreading through the web technologies developed in Silicon Valley and suggested that Singapore had the potential to offer an alternative digital future. They drew out the inherent contradictions in the Californian ideology, which promises to both "replace corporate capitalism and big government with a hi-tech gift economy" (Barbrook and Cameron 1996, 6) as well as establish a thriving competitive marketplace where "each member of the virtual class is promised the opportunity to become a successful hi-tech entrepreneur" (Barbrook and Cameron 1996, 7) and warned that it should not be adopted as an inevitable future around the world. Instead, it should be challenged by what they call 'technological artisans' elsewhere. In the article, they suggested that Singapore's governmental oversight in the development of networked technologies presents an alternative version of how the digital future can unfold. Is Singapore, then, presenting an alternative for the digital future? This thesis will show that Singapore's digital economy was developing in ways that were both uniquely Singaporean as well as shaped by Singapore's embeddedness in global power hierarchies, where Californian ideology shaped the aspirational landscapes in meaningful ways.

Expectations of the future and concerns about what needs to change in order to reach these visions infused many aspects of the daily lives of my interlocutors, animating their aspirations and enticing them to invest their energies while also coming to terms with the limitations in obtaining those ideals. Focusing on the terrain of technology start-ups where new technological services are launched offers fertile material to explore how the future features in everyday practices since so much about what happens with technology start-ups in the here and now has to do with what it promises and projects to do *in the future*. This thesis then ethnographically details how 'common'

people, just like Seth, John, Oscar, Wei and others, tried to create their futures by aligning with, challenging and co-shaping larger narratives about what the future holds on a daily basis. In this way, shifting between the individual, collective and larger structures, this thesis follows the feminist approach to studying capitalism as it explores the “powers and practices through which people constitute diverse livelihoods (and from which capitalist inequalities are captured and generated) as they seek to realise the potentialities of resources, money, labor, and investment” (Bear et al. 2015).

2. Anthropological Study of Futurities

In a broad sense, this dissertation explores the cultural significance of future in how people live, make life, and relate to themselves and others. Despite future being something that is never ‘here’—only always yet to come—it nevertheless shapes the here and now in many fundamental and intricate ways. The main research question I seek to address throughout this dissertation is: How can future be studied ethnographically? What kind of theoretical and practical assumptions do anthropologists need to embrace to develop their understanding of futurities, especially when acknowledging the ‘not-yetness’ of futures ethnographically? I build my contribution to this larger question through an ethnographic study of the technology start-up futurities in Singapore in the years 2010-2014. I define ‘start-up futurities’ as various futures related to and necessary for the practice of building technology start-up companies.

In my writing, I deliberately violate the rules of English grammar by not using the definite article for the term ‘future’ - in the descriptions of encountering futures in ethnographic contexts, I will use the terms ‘future’ and ‘futures’ without the definite article to emphasise the inherent multiplicity of futures present at any given moment. I will use the term ‘the future’ with the definite article only in cases where I find it important to emphasise that there is a process of claiming and controlling ideas about future unfolding, and one should read it accordingly as a claim to power. In instances where I aim to emphasise an analytic approach to future, I will refer to it as ‘futurity’ or ‘futurities’ (plural) - analytical constructs for understanding different types of futures as distinguished by differing forms and structures (Adam 2004; Pels 2015; Koselleck 1985). Below, I elaborate on why I have made such decisions.

Anthropologists are known to study culture, which, in popular understanding, is often associated with cultural history, traditions, and heritage - generally speaking, 'things of the past' rather than 'of the future'. Even though most anthropologists would disagree with the characterisation of their research interests as tied to the past, it is also true that future as an explicit focus of anthropological analysis is relatively recent and arose only with the end of the Cold War (Pels 2015; Valentine and Hassoun 2019). Anthropologists have been dealing with temporality directly (Bryant and Knight 2019; Gell 1992; Munn 1992; Pels 2015; Ringel 2018; Salazar et al. 2017; Valentine and Hassoun 2019) as well as indirectly when discussing "political structures, descent, ritual, work, narrative, history, cosmology, etc., as well as, at another level, general theories of anthropological discourse" (Munn 1992, 93), yet explicit attention to the future as a construct remained rare, especially if compared to the attention given to the relevance of the past. As anthropologist Nancy Munn, in her comprehensive overview, put it: "(...) anthropologists have viewed the future in 'shreds and patches', in contrast to the close attention given to 'the past in the present'" (Munn 1992, 116). Similar criticism has also been expressed in later works that have attempted to explore the impact, implications and variations of thinking about the future (Appadurai 2004; Bryant and Knight 2019; Guyer 2007; Pels 2015; Persoon and van Est 2000; Rosenberg and Harding 2005; Wallman 1992). Peter Pels has convincingly argued that the lack of serious attention to the future can be understood as an unfinished project of decolonising anthropology (Pels 2015). For Pels, the crucial aspect of decolonisation is to recognise modernity's primitive temporal classifications in which anthropological work is caught up and which clouds our ability to recognise the plurality and complexity of futurities and, more generally, the multitemporality of human experience.

Interestingly, a growing anthropological interest in futurities has been witnessed since roughly around the second decade of this millennium. Ethnographic attention has been increasingly directed to how people's daily lives are structured by what they expect, hope, fear, or don't expect to happen (Valentine and Hassoun 2019). Reviewing this recently growing interest, Ringel has even described the future as a "fashionable topic" in anthropology (Ringel 2018, 123). One might wonder - why so? What has changed? The anthropological interest in attending to the futurities of the people they study is not and has never been neutral but caught up and shaped by our disciplinary agendas and biases (Persoon and van Est 2000). In reviewing the anthropological literature on futurity since the Cold War, Valentine and Hassoun (2019) argue that the existing concern with the anthropology of the future is rooted in anthropologists' own socioeconomic and political biases and aspirations - our concern with the impact of neoliberal global-

isation and a desire for the commonality of all people. When the future threatened “a continuing world for metropolitan actors and institutions, including those of university departments and disciplines, professional career paths, and academic labor” (Valentine and Hassoun 2019, 245), anthropologists started to consider futurities more seriously. In that regard, it seems no coincidence that this research project exploring futurities was promising enough to the funding bodies precisely in the context of the 2008 financial crisis, which had also seriously shaken European confidence in a better future.

How have anthropologists approached futurity, then? Reviewing the anthropological studies of futurities, Ringel has distinguished two often overlapping approaches - one is to empirically study practices that work towards a certain future in various sociopolitical and economic contexts. Studies following this approach highlight “local interlocutors’ temporal agency and the concrete politics of, and conflicts over, the future” (Ringel 2020, 124). The other approach he distinguishes takes a more theoretical and abstract route, trying to understand how researchers can culturally understand collective orientations towards the future. This approach also includes a more nuanced reflection on how anthropology as a discipline has engaged with futurities.

This dissertation combines ethnographic and analytical approaches to studying futurities. On the one hand, I look at futures as an ethnographic fact by paying attention to how ideas about ‘the future’ and futures are encountered in ethnographic settings in my field of technology start-ups in Singapore. I examine ideas about ‘the future’ historically and contextually, attending to the politics of culturally specific ‘images of the future’ and practices aimed at working towards them. On the other hand, at a more analytical level, this project tries to elucidate the implicit *structure* and *form* of futures encountered (*futurities*) to learn more about the complex ways temporality is structured and structures our lives in turn.

My approach to studying futurities ethnographically

Futurities feature strongly in all the technology and entrepreneurship-related debates and discussions, ranging from the entrepreneurs assigning themselves to the role of ‘creating the future’ to presenting various ideas about ‘the future’ through their business pitches, promoting the adoption of their technologies and various other projects that actively aim to control what ‘the future’ looks like. A quote that captures this sentiment very well is the claim that “The best way to predict the future is to invent it” (Isaacson 2011, 216), famously attributed to people as varied as information society scholar Peter Drucker, US President Abraham Lincoln, computer scientist Alan Kay and entrepreneur Steve Jobs. It ties together the entrepreneurs’ agency in determining the

future by innovation that changes social processes. In many ways, one can say that the technology start-up space is characterised by futurism. Technology start-up ideas can all be seen as claims for specific futures that they aspire to bring about, and business and technological activities are part of future-making practices.

This points to the long and strong tradition of associating technological development with societal progress (see among others Jasanoff and Kim 2015; Winner 1993; Suchman et al. 2002; Sturken et al. 2004; Adam 2004; Turner 2006b; Adam and Groves 2007). The future is often discussed in terms of new, usually denser socio-technical arrangements (Pfaffenberger 1988; Coupland 2018) and such linkage of technology innovation and futurities goes beyond Western secular traditions (Barendregt 2009; Furlow 2009; Jasanoff and Kim 2015). This widely taken-for-granted connection between futurity and technological development is part and parcel of the master narrative of modern culture (Pfaffenberger 1992) and deserves a critical exploration. In the dissertation, I aim to challenge this seemingly natural connection between technology and futurities, by showing the work and effort that went into ‘claiming’ futurities or forging, even if temporarily, the alignment with larger narratives about the future by people who self-identified as technologists and entrepreneurs. What can be learnt about futurities if we look at how future is configured and reconfigured at the everyday level of technology start-up production? What can be learnt about technology start-ups if attention is paid not only to the past and present but also consideration to what futurities play a role in their everyday practices? By exploring futurities in the domain of technology entrepreneurship, I aim to show this connection’s inherent complexities and cultural particularity and thus ‘provincialise modern futures’ as Pels (2015) put it. Below, I outline my approach to futurities, which includes approaching future as a social construct, examining how futures are materialised, challenging the notion of ‘the future’, by looking for the multiplicity of futurities, treating claims about the future as claims for power, and examining the forms of neoliberal futurities.

Future as a social construct

Rather than contributing to the mushrooming field of futurism, this dissertation asks *how* future, rather than just being a time to come, is a social construct that plays a role in the present. Future ethnographically can be understood as a social field of never-ending projections and contestations played out in the here and now (Wallman 1992). As Rosenberg and Harding nicely explain it: “Futures (..) lie not only in a segregated, market domain (characterised by practices such as forecasting, planning, and speculation) but in the domain of social practice generally” (2005, 11) and futures can be caught “not only in explicit forms of futurism but in the manners of talking, doing, and imag-

ining that get us through from day to day” (Rosenberg and Harding 2005, 11). The people I studied, generally speaking, were very well versed in dealing with future in the now—they commonly told me and others of their plans and plans about how to achieve them. As I will argue in Chapters Five and Six, it was part of the cultural style (Ferguson 1999) of entrepreneurialism to exhibit a certainty in their ability to do what they intended to do and to achieve what they intended. In most situations, they fluently operated with multiple contingency plans and displayed a high ‘capacity to aspire’ (Appadurai 2013). This certainty also translated into assumptions of how to relate to oneself and express oneself, including in the manners of how to speak and carry one’s body.

Importantly, though, futurities as social constructs also have pasts and histories. When analysing contemporary Western societies and their relationship with the future, multiple authors (Adam and Groves 2007; Guyer 2007; Huyssen 2000; Lowenthal 1992; Rosenberg and Harding 2005) point towards a perceived loss of future or future nostalgia. Rosenberg and Harding describe it in this way:

“In the first years of the twenty-first century, representations of the future have cycled wildly through a historical repertoire from the ray-gun gothic of the 1930s to the noir and the endism of the 1940s and 1950s to the plastic op-art modularity of the 1960s and back again. (...) More and more, our sense of the future is conditioned by a knowledge of, and even nostalgia for, futures that we have already lost” (2005,6).

As I describe in Chapter Two when discussing Singapore’s narration of its history, Singapore’s political elite has established a pattern in the way it approached future, so even if the contents have changed from imagining industrial to postindustrial economic development, Singapore’s futurity - the structure of the future as always in danger - has remained constant and shaped how people engaged with futurities on daily basis.

Materiality of futurities

Implicit assumptions about future, some more and others less conscious, pervade most of our interactions and actions. Through various ‘future making and claiming practices’ that engage with futurities, such as, but not limited to, planning, speculating, designing, announcing, etc., humans are continuously re-imagining and claiming futures. Such practices often also involve and rely on what can be described as more or less explicit ‘images of future’ - culturally and historically specific visions, ideas, perceptions, scenarios, expectations and beliefs about the times to come. Often, they also rely on material artefacts that illustrate or point towards futures in the making - some

are more permanent than others - typically illustrations, mock-ups, prototypes, signposts, construction sites, and, as anthropologists have already shown - digital status notifications (Waltorp 2017) or policy plans (Abram and Weszkalnys 2013), announcement boards and marketing posters (Onneweer 2007) post-it notes or excel spreadsheets (Miyazaki 2005).

In the process of doing this research, I found the focus on the materiality of futurities very helpful. I drew my inspiration from Miyazaki (2005), particularly his work on the objectification and materialisation of finance theory, where he illustrated how discourses and ideas materialise in events, books, spreadsheets, etc. Chapter One, for example, opens with a description of how narratives about where the future is and is not located materialised in start-up events, funding schemes, blog posts, and videos, and those, in turn, provided additional context for people to move countries, start businesses and change careers. Chapter Two furthers this exploration of materiality by looking at government-led urban transformation projects in Singapore, such as one-north (low capitalisation) aimed at welcoming 'the future' in Singapore, and describing how these urban space transformations provided the ground for contesting the futures they entailed.

As this thesis will show futurities materialise not only in large-scale infrastructure projects. They also become embodied and lived. To illustrate that, I draw on Ferguson's work on cultural style amongst the miners in Kitwe, which showed that people practised and showed their alignment with particular futures in deeply embodied ways - not only with whom they associated but also the way they talked, dressed, the gestures they used and the references they made (Ferguson 1999). In Chapters Five and Six, I write about the transformations my interlocutors underwent or thought they should undergo in order to become entrepreneurs. Often, those transformations concerned how to carry their bodies and how to talk. Unsurprisingly, race and gender emerged as crucial aspects, less open to transformation than other identity markers. This highlights how embodied futures are less malleable than, for example, discursive ones and will contribute to a larger discussion about the desire for perpetual malleability that is central to start-up futurities.

Multiplicity of futures

One of the starting points for me is the recognition that 'the future' does not exist - there is always an ongoing contestation between multiple futures. In any given context, there is always a multiplicity of futures present - some are actively recognised and pursued, others are latent, unfolding in the background, set in motion earlier, sometimes labelled as 'obstacles' that need to be fixed by people concerned with them. Some are

socially constructed and primarily narrative in form; others, such as infrastructure or bodies, are materially prefigured; some are more accessible to human adaptation, others less so. To emphasise this point, I, as described earlier, purposefully avoid using definite articles with the term future, unless it is to point the contrary - that a future is being claimed and imposed as 'the future' by a particular actor.

Attuning ourselves to this diversity is a crucial starting point for an ethnographic study of futurities. In start-up practice, I could observe the multiplicity and also ephemerality of futures most visibly when the entrepreneurs would stand in front of whiteboards, routinely mapping out various paths for their businesses and products, erasing some and re-drawing others, and re-arranging their to-do lists in response to these changes. The multiplicity of futures, temporarily embraced and discarded, was also visible in the changing business pitches, or product name changes and simply casual discussions and contemplations about how to go about one's life - in which relationships to invest, which hobbies to pursue, which diet to follow, etc. This multiplicity can quickly become dizzying; moreover, one could say that there is nothing particular about the multiplicity of futures - they are mere potentialities and changes in life. Therefore, it is important to clarify why I think it is a basic but crucial starting point for any ethnographic project.

I argue that the recognition of multiplicity is especially critical in contexts where claims towards what the future will or ought to be are pursued by powerful actors, where loud claims can obfuscate the less loud ones and where seemingly hegemonic futures dominate. Studying technology start-ups in Singapore is such a case. For one, Singapore's government has been incredibly successful at claiming and monopolising the narrative about 'the future of Singapore' and the role different players had to play in it. In Chapter One, I explain how the vision for the future of the Singaporean government, entrepreneurs, and investors seemed aligned. Yet, as the chapter progresses, it also reveals the limitations of this vision and how the differently positioned actors also struggled and doubted their abilities to pursue this vision successfully. A similar pattern also reveals itself in all the other chapters where, despite the dominance of certain futures, people found themselves relying on the resources that essentially entailed different futures.

More broadly, though, the spread of digital technologies in popular understanding, but also social sciences is often associated with changing relationship with time, primarily understood as an experience of increasing acceleration (Giddens 1990; Beck 1992; Hope 2006; Larkin 2008; Wajcman 2008; Zandbergen 2012). Perceived acceleration, in combination with technological and market determinism, which was often used strategically, all contributed to a feeling of the future being a tightly defined space. I needed to actively look for multiplicity to ethnographically escape this hegemonic and

totalising frame. Here, the focus on the materiality of futurities, as described above, is very helpful as it allows us to engage with the multiplicity. In Chapter Two, I will describe how I found it to be the most rewarding in relation to physical space, where the clashes and concerns regarding futures became easily more visible. For example, the muddy pedestrian paths pressed into the green fields circumventing paved but less organic routes to the local food court in the newly built industrial science park one-north, was a simple, mundane instance of this point. Even if the hegemonic future of development was dominating, it couldn't escape the multiple ways in which people made life in, through and around it. The futurities of neoliberalism and technological determinism can appear totalising, but adjusting one's eye to the many ways in which people negotiate, adjust and contest them provides opportunities to look for alternatives.

Valentine and Hassoun have critiqued how eagerly anthropologists have embraced the notion of 'temporal multiplicity with its implication of temporal coevalness' (Valentine and Hassoun 2019, 245) as a starting point for understanding futurity. According to them, assuming multiplicity of futures implicitly suggests 'commonality' - that all people share the time. However, Black and Indigenous scholarship has shown this to be a handy tool for the oppressor who, in order to establish its power, colonises and disowns people of their futures. The problem, as they describe it, is that implying commonality doesn't acknowledge the political potential of, for example, 'refusal' to be in 'shared time' for certain groups when coevalness and shared humanity are forced by dominant groups. Rifkin's work on the temporal recognition of Indians showcases the problematics of such forced coevalness. He writes: "Shared present is not a neutral designation but is, instead, defined by settler institutions, interests, and imperatives." (Rifkin 2017, viii) I share the cautiousness expressed by Valentine and Hassoun and similarly argue that anthropologists must foreground the political nature of temporalising narratives and practices through which, for example, epistemologies of linear progress or acceleration are used to claim and retain power. Yet, I still see the multiplicity of futures as one of the core starting points, as long as it is recognised that they are steeped in power relations. Thus, even if suggesting coevalness is problematic, not acknowledging the multiplicity of futures as a starting point would be even more problematic. As I describe in Chapter One, denying coevalness is also a political move. The underlying point here is that any dealing with time is inherently political and about power (Greenhouse 1996), which is something my next proposition also takes up and elaborates on.

Claiming futures is about claiming power

All of the above-mentioned points also point to another crucial, if somewhat obvious, point: any claim towards a singular or universal future should be considered as a

claim of and for power. Power and inequality, as I will discuss more later, are often at the centre when talking about futures (Greenhouse 1996; Persoon and van Est 2000). Who is in a position to say what the future will be, and what kind of tools, practices, and systems enforce these messages? These are crucial questions to explore if one aims to study futurities.

In Sandra Wallman's edited volume (1992), which is one of the very few earlier anthropological attempts to address the role of future explicitly, Wallman argues that "Belief in the future underpins the sense of self and its survival" and "Changes in those beliefs, however generated, can work radically to alter the way individuals and groups relate to each other, to the natural environment, and to culture itself." (Wallman 1992, 16). The expectations about the future just as much as past experiences inform identities and social organisation and how people position themselves politically, economically and socioculturally in relation to each other and the 'others'.

The works that have explored the role of expectations and aspirations show that possibly one of the most significant features of images of future is that they have a tremendous capacity to mobilise as well as demobilise people, depending on how accessible or closed the future vis-à-vis the present is perceived to be. For example, Apadurai (2013), in his work "Capacity to Aspire", shows how common goal setting and collective money saving allow the poor in Mumbai to gradually stand up against their predicament gradually. Ferguson's ethnography of the miners in the Zambian town of Kitwe (1999) reveals the devastating experiences of people after the images of the modernised future they believed in fell apart with the economic decline. Ferguson shows that the myth of coming modernity in Zambia influenced a wide range of the miners' cultural and social actions. It was performed implicitly in the manners people dressed and talked, with whom they associated, and on what terms. In a related manner, Dz-enovska's work (2012) dwells on the sense of a loss of any possible future in the Latvian countryside. It shows how this loss of a shared future led to the literal 'emptying' of the countryside as people left the countryside and old buildings collapsed. In this case, the lack of a perceived future led to the disintegration of sociality (while not excluding the emergence of other new social formations based on different futures) and what remains of the infrastructure. Thus, to understand how people organise their social worlds in the present, their anticipations for future must be considered just as important as their past. In my work, this is a foundational concern. It becomes most apparent in Chapter Three when I discuss the role of the notion of a 'start-up ecosystem', which brought together a set of very differently positioned actors and, despite their differences, allowed them to establish certain norms and practices around a future ideal in mind. In a more subtle way, this also reveals itself when future scenarios become a 'safe space' for start-up founders to dream of awaiting success and escape the hardships and complexities

of their actual situation.

Related to the point that joint visions of a future are crucial for establishing and sustaining sociality, this process goes hand in hand with social boundary-making and the establishment of differences. These processes also rely on temporisation, where futurism plays a crucial role. As I'll describe in Chapter One, the people I studied used both temporal coevalness to associate themselves with particular groups (e.g. other entrepreneurs in Silicon Valley), as well linear developmental teleologies to differentiate themselves from other people (e.g. the emergent consumers in Asia) to establish themselves and their businesses. Chapter One of this thesis will show how, discursively, for Singapore to position itself as the place for attracting capital, it portrayed itself as a mediator between the 'more in the future' West and 'yet to develop' East. In this way, they reinforced neo-colonial and techno-orientalist tropes.

The images of the future do not just exist here, there or elsewhere, but they must be brought into being, practised and spread. Both Ferguson's (1999) and Tsing's (2000) works show that the creation of certain global myths or images of the future is a collective endeavour supported by various actors, who can also have very different intentions as well as positions (government officials, entrepreneurs, academia, miners, lodgers, media, etc.). To illustrate the political nature of creating temporal epistemologies and the socioeconomic aspects related to such claims, I find using the notions of 'conjuring' and 'scale making' by Anna Tsing (2000) beneficial as they direct the attention to the processes through which certain groups work towards presenting particular futures as desirable or problematic or irrelevant, and helps to make that work visible. This will be an ongoing theme in the chapters of this dissertation - what needs to be un-imagined and re-imagined when start-up futurities are being pursued?

Neoliberal futurities

I argued earlier in this chapter that focusing on the terrain of technology start-ups where new technological and commercial services are launched offers fertile ground for exploring how future features in everyday practices and, therefore, learning more about futurities—analytical constructs for understanding different types of futures as distinguished by differing forms and structures. Despite the growing body of knowledge, except for Pels, who outlines Seven Steps towards Anthropology of Future as an invitation for other anthropologists (Pels 2015), there is not necessarily a coherent theoretical framework for studying futurities (Salazar et al. 2017; Bryant and Knight 2019). In his seminal article, Pels has distinguished a few futurities that seem fundamental to contemporary neoliberalism: the notion of an open future, an empty future and not-yet events (Pels 2015, 779). To what extent are they particularly neoliberal futurities?

Many social scientists with ethnographic accounts from around the world have argued that since roughly around the early 1980s the world context has been dominated by a hegemonic neoliberal future, marked by its emphasis, among others, on flexibility (Freeman 2014; Ong 1999, 2006; Thrift 2005), speculation and celebration of risk-taking (Appadurai 2013; Bear 2020; Ho 2009b; Neff 2012; Anagnost 2013; Berlant 2011), individualisation, managerialism and entrepreneurialism (Thrift 2000; Ong 2006; Freeman 2014; Neff 2012; Irani 2019) and changing notions of time and tempo (Thrift 2000; Guyer 2007; Adam, Whipp and Sabelis 2002; Larkin 2008; Wajcman 2008). These studies also make it clear that its effects and the way it makes itself apparent differ in different contexts, for different social groups, and at different times.

Start-up futurities are certainly dominated by neo-liberal thinking, yet as all the chapters will show, people embracing them constantly had to draw upon resources that were imagined to be outside of the neo-liberal futurities of capitalist production. Therefore, the work of classifying futurities and their interplay is important as it enables us to understand the continuities in the ways particular groups in societies approach futures rather than embrace the claims of constant change, which are a characteristic of modern futurities rather than a description.

In a condensed way, start-up futurities capture both the promise and the ills of neoliberal futurities - the excitement of starting up, the openness of possibilities that could be, the freshness of beginnings, the infinite malleability, the promise of perpetual improvement and change, and personal and social transformation, all while getting rich. Start-up futurities promise the perpetual betterment of life, and the promise of change is intrinsic to it. All of these promises excite and hardly ever ask to attend to the consequences that these ideas have, the resources these processes draw upon, and the complexities of solidifying and staying put that are also necessary for social life.

Throughout this dissertation, I show how, despite the seeming inevitability and openness of neoliberal futures, they require a lot of work to be maintained and appear desirable. Even then, it was not open to everyone on equal terms. Showing the work that maintaining the neoliberal future ideal required for my interlocutors allows us to question its inevitability and eventually also opens space for a discussion of possible alternatives. This seems a crucial task in a context where many have felt that “it is easier to imagine the end of the world than the end of capitalism” (Jameson 2005). Following the feminist approach to studying capitalism, this thesis aims “to reveal the constructiveness—the messiness and hard work involved in making, translating, suturing, converting, and linking diverse capitalist projects—that enable capitalism to appear totalising and coherent” (Bear et al. 2015). In each chapter of this dissertation, I highlight one domain (e.g., global imaginaries, urban space, social organisation, value, subjectivity, and body) in which the hegemonic neoliberal future made itself apparent as an ideal

and then attend to the struggles in attempting to bring this idea to life. This way, I show both the enticing power of this future and reveal its limitations. In the process, I develop a framework for an ethnographic study of futures in each chapter, highlighting multiple considerations for studying futures ethnographically.

3. Why Study Technology Start-ups in Singapore?

Anthropology of (digital) technology

Anthropologists have traditionally studied technology as part of material culture (Pfaffenberger 1992; Bruun and Wahlberg 2022), yet establishing serious anthropological attention to digital technology took a while (Escobar et al. 1994a; Ingold 1997). Anthropological work on digital culture often draws upon and contributes to adjacent fields such as Science and Technology Studies and Media Studies, making disciplinary boundaries often feel arbitrary. However, the most prominent earlier works continued the material culture approach to understanding digital media and the cultures around it (Horst and Miller 2006). That allowed anthropologists to challenge many popular assumptions about digitalisation's perceived global effects. For example, Miller and Slater's pioneering ethnographic work on the Internet in Trinidad (2000) showed how the Internet, rather than being 'virtual', 'seamless', and 'placeless', can be better understood as emerging from real-world practices in Trinidad.

In 2010, Gabriela Coleman reviewed the ethnographic studies of digital media technologies. She suggested that most of the work can be loosely grouped into three areas: the cultural politics of digital media, the vernacular cultures of digital media, and the prosaics of digital media (Coleman 2010). Indeed, by the second decade of this century, digital anthropology was "well on its way to becoming a full-fledged subdiscipline" (Boellstorff 2021, 43) and as Geismar and Knox remarked: "debates and discussions within the field of digital anthropology have flourished both within and beyond material culture studies and within and beyond anthropology." (Knox and Geismar 2021, 1) Even though the work produced under the title 'digital anthropology' is incredibly diverse, yet rather little attention has been given to studying the people who are creating the digital technologies themselves, and the cultures surrounding that production. As Geismar and Knox explain,

"(..) an exclusive focus on users tells us very little about the digital systems themselves – the material conditions of their production, the cultural logics that go into their design, their

capacity to reorganise the temporality or spatiality of social relations or the opacity of many of the infrastructures of digital life.” (Knox and Geismar 2021, 8)

Carolyn Marvin, in her influential book “When Old Technologies Were New”, argued that even historians of technology have typically overlooked the role of ‘technical actors’ such as electricians in the way technologies such as electricity and phones came to be understood. She argues that what might be typically seen as ‘technical actors’ are “as deeply involved in the field of cultural production as in the field of technical production” (Marvin 1988, 7).

Some of the earlier works exploring the making and developing computer technologies were pioneered by Lucy Suchman, who studied the design and office practices at Xerox Palo Alto Research Center, affirming the intertwined relationship between what is designed and the cultures within which the objects are produced (Suchman 2000). English-Lueck ethnographically traced the broader everyday context of life in Silicon Valley (2002) and highlighted the diversity and cultural complexity of the place. Works by Turner (2006) and Zandbergen (2011) have provided more context to the cultural environment of Silicon Valley by tracing the historical and spiritual influences of counter-culture and connecting them directly to the production processes of digital technologies (Turner 2006b, 2009). Ethnographies about working ethos in the gaming industry (Dyer-Witheford 1999) and the hacker culture and free and open source software movements (Kelty 2008; Coleman and Golub 2008; Coleman 2010, 2013, 2014) all have illustrated how the social and cultural processes that sustain and enable the production of digital artefacts are crucial for understanding not only what is being produced, but also brought insights about the nature of work in technology sector.

The making of commercial web services

The production of web services through which the majority of the world understands and experiences ‘the internet’ or ‘the digital’ happens on the spectrum between large corporations and the products of hackers and free and open source software communities, oftentimes experienced through specific apps. As Marwick, one of the few scholars who has given more attention to the economic side of the development of web technologies, has argued about social media technologies,

“To understand the industry of social media, we must look at Silicon Valley’s venture-based start-ups, their culture, and how this

culture has been and is being exported—for better or for worse—around the world.” (Marwick 2018, 2)

She argues that technologies that people end up using are not only shaped by technological cultures but, importantly, are part of the industry and particular economic relations between the different actors involved in producing and consuming these technologies. In anthropology, we often contextualise the Web with regard to its counter-cultural and military origins (Barbrook and Cameron 1996; Turner 2006a; Rosenzweig 1998; Zandbergen 2011). Here, I propose that we pay more attention to 1994 and the browser wars (Kelty 2008), which mark the beginning of the increasing commercialisation of the Web and transformations in the interfaces and conceptualisation of ‘users’ that came after. After all, the majority of the inhabitants of the world understand the internet through its ‘consumer-facing’ web services - such as search services, online maps, news sites, taxi booking applications or social media, which are, in essence, very much the kind of services my interlocutors in Singapore tried to develop. Yet, surprisingly, in anthropology, very little attention has been paid to this intersection of commercial and technological cultures, where most web technologies get produced.

Geismar and Knox, in a recent edited volume on digital anthropology, note that most anthropological attention has focused “on open source rather than closed corporate forms of digital organisation (e.g. Kelty 2008)” due in part to the inaccessibility of the latter (Knox and Geismar 2021, 8-9). It may possibly also have something to do with anthropologists’ own aspirations and biases, being more interested in the seemingly more noble value-driven areas of social organising rather than the ‘business’ side of sociotechnical life, which is left for economists and business studies to explore. Interestingly, some anthropologists have even insisted on keeping these areas separate - for example, Coleman has argued that with her study of free and open-source hackers, she wants to make sure that “it [will be] more difficult to group free software in with other digital formations such as YouTube, as the media, pundits, and some academics regularly do under the banner of Web 2.0.” (Coleman 2013, 20). While it makes sense from the perspective of the argument she makes about the particularity of the morality of hackers working on free and open source software, in terms of thinking about the web as a sociotechnical system, such separation hinders rather than illuminates. The cultures of hacking and entrepreneurship have been closely intertwined (see, for example, Barbrook and Cameron 1996; Barbrook 1998; Turner 2005, 2009; Ardévol and Lanzeni 2017), as Coleman herself acknowledges.

Studies of contemporary large web technology companies at the intersections of media studies and political economy have been done by van Dijck (Dijck 2013; Niederer and Van Dijck 2010; Dijck and Nieborg 2009), emphasising the role of commercial con-

cerns as shaping the design and practices of web technology companies. While powerful in illuminating the power of design and economics, the latter does not provide the intimate insight that ethnographic research does, which is what this study aims to do. A good example and inspiration is Silvia Lindner's ethnographic study of makers in China, where she shows how the maker and market cultures are deeply intertwined through the notion of 'socialist pitch' (Lindtner 2020). In this thesis, I draw on Lindtner's work extensively, not least because her research also unfolded in an accelerator program. Another example is the work of Irani (2015), who studying hackathons in India, has argued that these social spaces where technology enthusiasts gather should be seen as places of ideological constructions, for example, "hackathon is not just a place where technology gets made (...) [it is] a pedagogy of entrepreneurialism" (Irani 2015, 3), highlighting the importance of understanding these cultures of technological thinking and making in an economic context. Thus, part of the task of this dissertation is to explore the structural pushes and pulls that shape individual actions as they journey into making web technology companies and how digital services emerge in the interplay between personal aspirations and more extensive institutionalised or not economic and political structures. Only rather recently, more critical attention has been given to exploring start-up culture as a global phenomenon (Friederici, Wahome and Graham 2020; Koskinen 2023) and particularly the role start-up culture plays in various nation-building and governance projects (Getzoff 2020; Moisio and Rossi 2020; Chua 2019; Irani 2015; Lindtner 2020).

Studying technology entrepreneurship in Southeast Asia

The second blind point that this dissertation tries to correct is that the knowledge generated about these spaces of technology business production stems mainly from the global North. The few ethnographies focusing on production outside the large centres show the centrality of Silicon Valley in this relationship and counter the idea that globalisation and new network technologies have rendered the world flat (Castells 2004). Koskinen (2023), building on Ong and Collier (2005), has suggested viewing start-up culture as a global form. A system of rules and principles that spread and develop across different contexts in context-specific ways, yet still with Silicon Valley functioning as a figurative template for startup cultures around the world (Koskinen 2023). Yuri Vladimirovich Takhteyev's study of software programmers in Rio de Janeiro showed how "peripheral participants in many ways bear the burden of maintaining the predominance of central sites" (Takhteyev 2009, 427). Similarly, Biao's study of the global networks of Indian programmers leading up to the Y2K bug detailed the highly unequal

nature of the worldwide IT labour force (Xiang 2007). Such works criticise the global inequality in the production of the 'new economy', where the global North usually claims the more intellectual, creative forms of labour and the positions by the assembly line and in resource extraction are relegated to the global South (Dyer-Witthof 1999; Escobar et al. 1994b; Lüthje et al. 2013; Srinivasan 2017).

Studying technology start-ups elsewhere, more attention has been given to analysing the discourses that construct entrepreneurship in particular locations. (Getzoff 2020) has examined the discursive construction of Israel as a start-up nation, depicting how this discourse also produces a neoliberal Zionist subject that economically outperforms Arabs and Palestinians and provides a neoliberal management template for other nations. Pollio, in turn, has analysed the narrative discourses that constructed Cape Town's so-called 'silicon cape' as the entrepreneurial capital of South Africa and Africa at large (Pollio 2020).

When it comes to studying digital technologies in Southeast Asia, a large part of the attention has been given to the use and appropriation of technologies, especially as a means of civil activism (especially in the case of Indonesia and Malaysia - e.g. Postill 2014a, 2014b; Rafael 2003; Jurriëns and Tapsell 2017; Tapsell 2021; Lim 2017; Nisa 2018; Frey 2020; Lengauer 2016; Sinpeng 2020; Barendregt and Schneider 2020; Schneider 2023. Interesting work is also produced at the intersections of embracing social media for advancing one's own economic goals - either through blogging or influencer culture (see, for example, Abidin 2016, 2015, 2021). Yet again, very few studies explore the technologies' producers and the contexts through which these technologies emerge. Barker's study of engineers in Indonesia is an interesting earlier exception, albeit with a strong focus on the role of the nation-state (Barker 2005) rather than delving into the lives of the engineers. A recent edited volume by Jurriëns and Tapsell on Digital Indonesia (2017) includes a section on e-commerce, thus recognising the importance of this domain within studying digital culture. Yet, none of the three articles in this section engage in a serious ethnographic analysis of Indonesian technology entrepreneurship. They do make a point, though, that there are a lot of expectations about how technological entrepreneurship should unfold in Indonesia, thus indicating that this is a culturally charged area, one that is worth exploring.

The start-ups I worked with aimed to provide specific, primarily utilitarian services - inventory management for stores, job searches, online entertainment for children, facilitating online travel planning, shopping online, video editing, etcetera. Most wanted to create technologies not as political statements but as pragmatic businesses and as a way to personally realise themselves. They were both inspired and constrained by globally and locally circulating examples of what it means to start a business. In Singapore, start-up technology entrepreneurship was understood and introduced as a new,

different form of entrepreneurship (Chua 2019). That understanding came with opportunities and challenges, as I will show in the coming chapters. In this way, this work shows how people everywhere are entangled in the enticing promises of neoliberalism. How do people in Southeast Asia, rather than just engaging as users with consumption or political activism in mind, have the agency to pursue the paths of entrepreneurship and innovation, and how exactly do they formulate what are the needs and ideas for the future and how do they claim their own futures?

4. Structure of the Thesis

Seth and John's start-up journey, sketched at the opening of the introduction in many ways, sets the narrative arch of this monograph. This thesis is structured into an introduction, a conclusion, and six content chapters, all studying futurities ethnographically. I focus on six domains where start-up futurities were making themselves felt in the context of everyday life and called for transformations, this way also contributing to the sense of their hegemonic power. I discuss 1) the ways in which futurities structured global sociopolitical imaginaries; 2) the ways in which various futurities materialised in urban space; 3) the ways in which start-up futurities invited an imagination of social relationships conducive for production as an 'ecosystem' 4) the ways in which futurities informed notions of value; 5) the ways in which futurities shaped people's subjectivities; and 6) the ways in which futurities were embodied and performed. Each chapter reveals the hard work that was needed to maintain the ideals encapsulated in start-up futurities as attainable and the limitations my interlocutors came across. The focus of each chapter also allows us to advance our thinking about how to study futurities ethnographically and move from a global scale to national, social and subjective levels.

CHAPTER ONE: "Come to Asia, Singapore is the Future!" The Aspirations of Scale

The opening chapter follows the invitations expressed in various forms by start-up entrepreneurs, investors and Singapore's government to see Singapore as the centre from which to capitalise on the emergent future in Asia. The chapter describes how Singapore's centrality in this imaginary geography relied on balancing two important aspects - on the one hand, its proximity and cultural affinity to the rising populations of 'Asia', which were being recast as emergent consumers of digital products. On the other hand, this position relied on Singapore's deep embeddedness in global finance and eagerness to learn from places like Silicon Valley. The chapter questions this imaginary geography in which Singapore stands central vis-a-vis Silicon Valley and Asia and

asks what sort of temporal relationships, social and historical contexts generated and sustained the appeal of this geography, what sort of future-making practices it enabled and explores the limitations of these images of the future ethnographically. Using examples from start-up conferences, blog discussions regarding Singapore's position in the start-up economy, and a practice called 'visa runs' where entrepreneurs would exit and re-enter Singapore to extend their tourist visas, this chapter highlights the appeal and contradictions of this imaginary geography. The promise of building economies of scale in Asia at the moment when US and European economies were in decline animated this capitalist dream of future growth and helped to attract people and capital to Singapore. It also, however, relied on and reinvigorated neo-colonial and techno-orientalist tropes, thus allowing us to view critically the claims of 'newness' central to the coming of the new economy.

CHAPTER TWO: Technopreneurship and Singapore's Future

The second chapter describes how technology entrepreneurship emerged as a national political agenda for the future in Singapore. Based on literature study, I'll explain how, for Singapore's political elite, 'the future' has been instrumental in defining the present moment and opening up areas for intervention and control. Ethnographically, the chapter zooms in on a particular place - Blk 71, an old factory building within the one-north science park temporarily allocated by the government for technology start-up use in 2010. There, the bottom-up initiatives for entrepreneurship came together with the Singapore government's ambitions to foster a future of a knowledge economy. While Singapore's government controlled the narrative about 'the future' and presented it as the only possible way ahead, the materialisation of it in space through infrastructure project one-north and the case of Blk 71 reveals the actual multiplicity of futures that permeate any given moment, and thus provide an insight in the contested nature of this vision. Overall, this chapter contextualises the Singapore government's ambitions to foster the knowledge economy future as part of a longer historical trajectory and how globally circulating ideas about the 'knowledge economy future' found their ground and can be understood as 'particularly Singaporean'. This chapter, therefore, emphasises the importance of always approaching future-making historically, locally and through materialisation in space.

CHAPTER THREE: Building Singapore's Start-up Ecosystem

Using examples from start-up networking events and places like Blk 71, amongst others, this chapter describes how the people directly involved in building technology start-ups rallied around the concepts of 'start-up community' and 'start-up ecosystem'

which denoted specific social roles and ways of engaging for different actors - government, budding start-up entrepreneurs, experienced serial entrepreneurs, investors, bloggers, students, etc.

Examining the sociality fostered by these actors, this chapter introduces the hyper-socialized environment that valorised networking, serendipity, openness and inclusivity and describes how it was equally characterised by exclusion, secrecy and strategic planning. It argues that these spaces and sociality provided the social context in which ideas of innovation and social change could be translated into commodity form and thought of as businesses. Through social validation, this context was crucial in supporting the materialisation process of start-up ideas into early-stage businesses. This context also educated and trained people to work with a very specific understanding of entrepreneurship - one that is scalable, serial and high-growth.

The chapter argues that the idea of an 'ecosystem' functioned as an image of the future of frictionless production in the new economy. The metaphor of ecosystem suggested that this future vision was 'natural' and 'desirable', but the stories described in the chapter will show that instead of being self-organising, the 'ecosystem' required a lot of work and effort, both discursive as well as material to appear feasible and attainable.

CHAPTER FOUR: Creating Value

This chapter addresses this promise inherent in start-up futurities that through technological start-ups, entrepreneurs can find personal fulfilment, change the world, and become rich in the process, all at once. It explores the work that goes into materialising technology start-up ideas into products and businesses and highlights the shifting understandings of value in the process. It describes how the various notions of value are linked to different forms of future by following a case of a start-up called Wonderings over the course of five years of the company's existence.

In the start-up world, Wonderings would be easily looked at as a 'successful' case - emerging from Start-up Weekend, it was accepted in The Accelerator program, attracted investment, and within five years was acquired by another, larger company. Following the story from the inception of the idea to the dissolution of the business, this chapter will show how the initial value of the product materialised through deeply personal, affective and embodied aspirations of future. Yet, at the moment when the company had to be valued in a financial context, this gave way to the emptying of the future, and the product was subjected to the *potential* value of company, which in turn changed how the product was developed. Drawing on examples from pitch sessions, the Lean Start-up methodology, and various training programs for start-up entrepreneurs—including the

founders of Wonderings—this chapter explores how value was understood in the early stages of a start-up and its product. It examines what was perceived as valuable, how value was performed, created, and negotiated, when there was little or no ‘substance’ for it in terms of the product. Importantly, the chapter invites to question for whom is the value created at the end of the day?

CHAPTER FIVE: The Entrepreneurial Ideal

Progressing further into the thesis, I explore what kind of subjects this vision of an entrepreneurial future imagined. Chapters Five and Six explore entrepreneurship as a personal, embodied project of transformation, which meant continuous work to commercialise important aspects of one’s identity in order to attract potential capital. This chapter explores the importance of futurity in this neoliberal subjectivity. When people discussed the way one, and others should be and how they wished to become, it offered an ethnographic glimpse into ideas about self-hood that were linked to the dominant futurities.

My interlocutors thought of themselves as future ‘projects in the making’, a highly commodified form of selfhood where all their actions and experiences were expected to build up their human/ social ‘capital’. This, in turn, meant that they had to think of themselves as always flexible, always changing and always developing in ways that would maximise their opportunities. The entrepreneur becomes a self-directed labourer in the service of international financial capital. Drawing on interviews and observations I highlight two important aspects in this regard. One, central to this subjectivity was to be always looking for ways how to reframe current experiences as a potential opportunity in the future. This way, the narrative about failure as an opportunity, as illustrated by Seth’s experiences in the opening vignette, also becomes convincing. Two, it required a constant performance of certainty about one’s capability to plan for the future and strategise one’s role in it.

CHAPTER SIX: Embodying the Entrepreneur

The Sixth Chapter continues exploring entrepreneurship as an individual ideal, but approaching it as an embodied, lived process highlights how the contradictions held within the neoliberal ideal work out in practice as people struggle to realise this ideal. Some parts of personhood are less ‘makeable’ than others, especially when it comes to gender and race. Through the examples of how bodies had to be controlled, ‘Asian-ness’ transformed, and gendered performances managed, the implicit racial and gender ideologies of the entrepreneurial ideal become visible. They reveal how this ideal is steeped in global power relations and puts at a disadvantage bodies that don’t fit the

implicit ideal based on the Western white male stereotype.

Family relationships were typically seen as something that slowed down the speed and limited the flexibility of the entrepreneur unless they provided resources, such as inspiration for commercial ideas (e.g. ageing parent, sick child, angry spouse, etc.), or useful contacts or networks, or financial support, or space to work or a chance to offload care-work. Similarly, military service was seen as delaying entrepreneurs unless it was understood as a space to gain useful connections, grow one's network, learning about new business opportunities.

The concluding chapter confronts this implicitly white masculine ideal by showing how entrepreneurs in Singapore struggled to live up to this ideal. Race and gender all caused different levels of friction in the commodification process and, when commodified, had different market values or abilities to attract attention and, along with potential financial capital. By focusing on the continuous work, social context and body, this chapter challenges the understanding of entrepreneurialism, common in business management, as a compilation of particular personality traits.

5. This Project

This research has been based on the “deep hanging out” and participatory observation of daily practices of start-up entrepreneurs, investors, mentors and many others who associated themselves with the technology start-up scene in Singapore. The first step in exploring what my field could be was via the internet. During my pilot study in late 2010 and early 2011, I looked for technology-related events in the region that were planned or had happened and had been discussed online, using ‘BarCamps’ and ‘un-conferences’ as my starting point. By mapping out the instances of various BarCamps, I could identify the people who seemed to be actively involved, the organisations they were associated with, and, importantly, also the leading blogs and media platforms that reported on these events. Following these online sources allowed me to draft a list of people to reach out to, which I did via e-mail, followed by a meeting in a local cafe or food place once I travelled to Southeast Asia.

After the pilot study, I kept following the forums and news platforms I had become aware of during my initial travels. In the autumn of 2011, on the Hackerspace SG forum, I learned that a few people in Singapore, whom I had already been in touch with during my trip earlier, were launching a new initiative in Singapore - a start-up accelerator. I jumped at this news. This context seemed to provide an interesting ground for my research on how technology enthusiasts were bringing a technological idea to life

and becoming entrepreneurs. Academic reasoning aside, this also seemed to offer some structure and a base' where to ground myself. As the planned date for my fieldwork was approaching, I was increasingly experiencing the anxiousness many scholars feel in the face of uncertainty of impending fieldwork (see, for example, Coleman 2013). Where will I go? Who will talk to me? How will I fill my days in a meaningful way? Grounding myself in the accelerator program offered me a clear starting point for at least 100 days. Excited, I e-mailed the two organisers to see if they would be open to having me observe the program. In a quick response, I was kindly welcomed to be their 'in-house anthropologist' for the duration of the program.

The Accelerator program was run multiple times - I followed the first run of the program in its entirety in 2012 and partially the subsequent three runs. I spent six months, from January to July 2012, following the first start-up accelerator program in Singapore and making shorter trips to Indonesia (March/April) and the Philippines (May/June 2012). I travelled to Singapore again in 2013 from February to March to observe the second run of the program and again in 2014 from March to June, combined with a brief trip to the Philippines at the end of this trip. I then travelled briefly to Singapore again in February 2016. These visits to the field were supplemented with online calls with my interlocutors that I had gotten to know, as well as following the events through online forums and blogs.

The people behind The Accelerator become akin to my host family in many ways - which is not uncommon in anthropological fieldwork. Not only could I study their work in close detail, but my informal association with them also provided a social context when meeting and introducing my research interests in technology start-ups to others. The fact that The Accelerator opened a cafe and organised regular informal networking events in their large open office space meant that this was an excellent place for "deep hanging out"; in fact, it was not very different from classic anthropological fieldwork. Being close to the organising team gave me an unexpected but deep insight into the investors' concerns. It also allowed me to see the development of more than 20 start-ups close-up as I sat in their meetings with the organisers, mentors, and pitch sessions, as well as in the shared office room, joined them for lunch, dinners, and smoking breaks. It is out of this position of being immersed in a particular training program and the connections that it provided within Singapore and the region that this dissertation and its central arguments emerged.

The Accelerator program, for the majority of the time of my research, was housed at Blk 71 - a large ex-factory building officially allocated to start-ups and located within the one-north development area. Such a position gave me easy access to many start-up companies and allowed me to explore their practices in closer detail. In addition, I spent time at physical locations of other start-up spaces in Singapore, such as Hackerspace and The Hub and visited multiple others, such as N-house, the Foundry, etc. Alongside spending time and meeting my interlocutors in these comparatively permanent locations, I also regularly took part in the various events and meet-ups such as BarCamps, Start-up weekends, Founders Evenings, SG Geek Girls, Open Houses of The Accelerator, Startup Grind events, WalkaboutSG, Supper Happy Dev House, Hackathons, various pitch sessions organised by universities or during the start-up conferences Echelon and Startup Asia; networking sessions between investors and start-up founders, etc. organised by different players, all of which I describe in greater detail in Chapter Three when discussing the idea of a start-up ecosystem. In addition to participating and observing, I did semi-structured interviews with investors (early-stage private investors and fund managers), entrepreneurs, start-up event organisers and multiple start-up program managers. These interviews were all in English, the first language for many of my interlocutors, but for many others, including me, their second language. Most of the start-up entrepreneurs were in their twenties and thirties, while most of the investors were in their forties, fifties or older.

In addition to my fieldwork interactions and observations, I followed and analysed the online discussions that were taking place in online discussion groups and online media platforms such as e27 and TechInAsia, which addressed the technology start-up industry. Likewise, I read the books, blog posts and news articles that start-up founders were advised to read or discuss during our meetings. Like many of my interlocutors, I followed US-based technology and start-up media such as Hacker News, Wired, TechCrunch, etc. I also draw on various government documents and reports about start-ups in Singapore and globally. My interlocutors often wrote publications with varying depths of analysis - from blog posts to manuals on accepting investments and reports for government to their master's and doctoral theses and books on entrepreneurship-related topics. Where necessary, I also draw upon these sources, some of which were public, and others were shared with me privately.

At the time of my research, the social networking site Facebook was very popular across Southeast Asia. I decided early on that I would not actively invite anyone I met to connect with me there because Facebook can be used in many different ways, including it being perceived as a very 'private' place (Miller et al. 2016). I accepted the 'friendship'

request only if the people I had met invited me to connect on Facebook after they already knew I was an anthropologist doing research.

All fieldwork positions come with their gains but also limitations. Locating myself within Blk 71 and The Accelerator, in particular, also meant that I was less involved with events and start-ups in other locations and contexts. The benefit of following a few companies in closer detail and frequently attending events in different locations provided me with both the breadth and depth necessary for ethnographic research. At the same time, I am aware that positioning myself, for example, within one of the universities' start-up spaces or Hackerspace would have shaped this dissertation differently. Moreover, Blk 71 was a project championed by specific people in the government, and even if the Singapore state is often discussed as a monolith entity, it certainly isn't one; instead, it is a complex mishmash of splintering interests. To some degree, this is addressed in Chapter Two. Likewise, The Accelerator had its particular approach to entrepreneurship, and my association with it opened many doors while also certainly closing some others.

My position within the accelerator program

Within The Accelerator program, my position vis-à-vis the start-up teams was introduced as a researcher, and in an e-mail sent to the start-up teams, the director of The Accelerator clarified:

"Zane - is not part of our operational team and is here to do independent academic study. She would appreciate it if you are willing to share your journey through the bootcamp and beyond, but that is an arrangement between you and her."

I also relied on individual explanations and discussions with the members of the participating start-up teams about my role. I reminded them that they could ask me to leave any meetings at any moment, which some did on occasions when they felt the need for it. In practice, I was often referred to as someone 'to talk to', a 'psychologist', someone who is not involved but can 'help to see the forest from the trees' after a conversation. The start-up founders within The Accelerator, used to my continuous presence, would often invite me to walk with them for them 'to vent' after a particularly stressful experience. This resonates with the labour division in the Shenzhen accelerator that Lindtner studied where women in support staff were responsible for the emotional labour to make the "precarious and high-risk conditions of "venture labour" both

manageable and fun.” (Lindtner 2020, 145) I would also help them in pitch training by listening and checking if they are following the script or keeping time. In attempts to be ‘useful’, I would also help them prepare questions for their potential customers and join in the occasional interviews, providing a sounding board to discuss their ideas. Over the course of time, I was increasingly viewed as a holder of specific knowledge that can be useful for the participants, resonating with Lucy Suchman’s thoughts on the ‘consumption of anthropology’ in commercial enterprises where the anthropologist is herself somewhat exotic as well as has potential to provide intimate access to relevant others (Suchman 2007).

Position in the field

After the first month in the field, I started to worry that I often talked and spent time with people from Europe and the USA. Was I subconsciously looking out for foreigners like myself? I questioned myself. This misguided search for an ‘authentic Singaporean experience’ (Handler 1988) allowed me to realise that the start-up space in Singapore indeed was a mix of Singaporeans, people from the region and many foreigners from around the world, but predominantly the West. Even though my research was in Singapore and my insights are contextualised in relation to Singapore, my interlocutors were a highly diverse group with regard to their ethnic and national backgrounds as well as their temporariness or permanence in Singapore. It consisted of Singaporeans (some belonging more easily than others to the state-recognised racial labels such as Chinese, Malay, Indian; see, for example, Rocha and Yeoh 2021), Filipinos, Indonesians, Indians, Malays, Americans, and people from various European countries. Many had very diverse global migration experiences, challenging my attempts to ‘place’ them to a single, explanatory origin. For example, Singaporeans who had lived large parts of their lives in Canada and the United States, or second-generation Eastern European immigrants in North America now moved to Singapore, or Indonesian Chinese whose families migrated to Hong Kong but then moved to Singapore for education (see, for example, Ong 1999). While many of my interlocutors were born and raised in Singapore and did not plan to leave for extended periods, many others were hoping to spend extended time abroad at some stage in their lives. Foreigners had relocated to Singapore, some permanently, others did not plan to stay long term, while many others saw Singapore as their ‘base’ to touch and go as part of their mobile lifestyle. Many didn’t identify as living in Singapore but would be arriving there for work on a regular basis for extended periods of time over many years.

In this sense, this ethnography is ‘Singaporean’ insofar as it recognises Singapore

to be constituted by such a diverse group of people who were there at the moment of my fieldwork, but many others, just like me, were there temporarily. As I will discuss in Chapters One and Two, this is not an accident but a result of conscious Singaporean government actions. This research primarily focuses on the perspectives and experiences that would belong to the so-called 'metropolitan' part of Singaporean society - those who have received a good education and have travelled abroad as well as 'foreign talent' - well-educated professionals from abroad that the government has deemed necessary for the state's economic development. Although some of my informants came from working-class backgrounds, they had generally attained a university education, which positioned them for upward socioeconomic mobility. Many others came from much well-off contexts already, and this socioeconomic capital they inherited was crucial, as I will discuss in more detail in Chapter Five. My occasional conversations with working-class Singaporeans such as taxi drivers, cleaning aunties and hawker centre workers reminded me just how particular and bizarre the start-up scene was.

In many aspects, I resembled many of my interlocutors. My education (including my technical education during my Master in Media Technology at Leiden University), my interest in start-ups, and my international background fit me relatively easily in Singapore's context. Being well educated and white skinned often meant that I was perceived as a 'foreign talent', and that, in combination with me 'studying culture' sometimes seemed to suggest that I have deeper knowledge and insight into 'how things should be' (Suchman 2007). I was also part of the racial hierarchy in Singapore, where colonial legacies, in combination with the Singapore state's policies, meant that whiteness afforded me benefits that many of my interlocutors of colour in many cases would not have (see, for example, Rocha and Yeoh 2021). Start-up sociality, which I describe in detail in Chapter Three, celebrates openness and sharing, and in that sense, it also facilitated my research.

Being female also shaped my position in the field, as most interlocutors were male. Within The Accelerator, I bonded more with the female support staff of the program, developing more intimate relationships and insights about their concerns. While many male interlocutors became good friends, I believe being male would have led me to different contexts and events, as I was aware many 'male only' events were happening. On the other hand, perhaps it was easier for men talking to me to open up about the pressures of family and spheres that commonly would have been seen as off-topic in this masculine environment. A more extensive discussion of race and gender occurs in Chapter Six of this dissertation.

The relationships with many of my interlocutors grew over time. I participated in their life events in ways that went beyond 'professional' - for example, by celebrating Chinese New Year with their families, being invited to weddings and birthday parties,

watching movies, shopping together, and even going on a multi-day hike to Mount Kinabalu in Malaysia. Wei and his mother were incredibly generous, hosting me in their family home upon my return trips in 2013 and 2014. This sense of having a ‘home’ meant a lot, not only emotionally but also financially. In 2014, Singapore was ranked the world’s most expensive city by the Economist Intelligence Unit (EIU) in their World-wide Cost of Living Survey (*Worldwide Cost of Living* 2014), and my PhD research budget was stretched very thin by my fieldwork in Singapore. The close relationships with many of my interlocutors and their international mobility also meant that we would occasionally meet outside of my official fieldwork when they visited Europe. Multiple of my interlocutors have visited and stayed with me in The Netherlands and Latvia.

I am pseudonymising most of my interlocutors and their companies in order to protect their privacy. I am keeping the names of the locations, events, blogs and news platforms unchanged. In some instances, I have taken the liberty to change some minor information regarding the business or personal history of the people I am describing, aiming to make them less identifiable and, at the same time, not entirely misrepresent them. Even though for people personally knowledgeable of the start-up field in Singapore at the time of my research, it would be rather easy to recognise the mentioned people and companies, my efforts in pseudonymising are primarily concerned with preventing my dissertation showing up in online search results when these companies or people are being searched for by their names.

Other work

Parts of this dissertation have been published earlier. Parts of Chapters One and Two found their way into Tim Bunnell and Daniel P.S. Goh’s edited volume “Urban Asias: Essays on Futurity, Past and Present” in a chapter titled “Geographies of Futures and Singapore’s Technopreneurship Aspirations” published by Jovis in 2018, while part of the material and arguments from Chapter Three were published as Kripe, Z. (2019). Making Community Work: Constructing Singapore’s Start-Up Community. *Asiascape: Digital Asia*, 6(3), 161-184. <https://doi.org/10.1163/22142312-12340110>. Parts of Chapter Four informed the Kripe, Z. (2014) “The business behind the business: the role of finance in the design of web services” *Selected Papers of Internet Research 15: The 15th Annual Meeting of the Association of Internet Researchers*.

“Come to Asia, Singapore is the Future!” Aspirations of Scale

1. Introduction. Geographies of Technology Start-up Futurities

“The future is already here—it’s just not evenly distributed,” famously said the science fiction writer William Gibson, capturing the idea that there is a geography to technological and other advancements typically seen as futuristic. During the exploratory pilot stage of my research, when I travelled from Indonesia to Singapore, from Malaysia to Burma, I quickly came to realise that Singapore played a crucial role in the start-up scene, certainly in the experiences and imaginations of technology enthusiasts around Southeast Asia. Technology geeks I met in Indonesia talked excitedly about the times they visited Singapore and were impressed not only with the dazzling skyline but also with the technology and business community there, from which they adopted specific organisational practices. Malaysian web start-up founders explained that it is much more reasonable to incorporate their businesses in Singapore because the legal processes are much faster there, and the tax regime is more favourable. One Malaysian founder, who had worked in Silicon Valley before returning to Malaysia and starting his company, explicitly stated that running a business in Singapore compared to Malaysia would be like facing the ‘real world’. For him, Singapore had the predatory competition and flow of finance that he associated with business in the ‘real world’. While in Burma, many web technology enthusiasts’ stories circulated around the aspiration to move to Singapore for work because of the wealth and quality of life they felt it would offer them.

The sense was that Singapore was perceived as being more in *real-time* with ‘the world’ or more into ‘the future’ as compared to the rest of the region. Perceived temporal difference between Singapore and other locations in Southeast Asia was also stressed

when people said that *time flies* in Singapore as compared to where they are from, or as one of my Indonesian friends remarked - “Even escalators move faster there.” People also scoffed at the Singaporean laws, for example, forbidding jaywalking or chewing gums, which were often described as ‘petty’, and noted that Singapore is too organised to be enjoyable. Despite these remarks, the general sense was that in the perceptions of the people who were passionate about new technologies and technology businesses, Singapore was *ahead* of the rest of the region and moving at a different *speed*.

Once in Singapore, the narratives about Singapore’s future were much more diverse and contested. On the one hand, many of the people whom I met proclaimed that this is the ‘Asian century’ and Singapore is the perfect location from which to capitalise on the emerging global future. As I will discuss in more detail later in this chapter, this very dominant narrative, especially amongst the many Western expatriates in the tech scene, combined with the excellent living conditions that English-speaking Singapore offered, was part of the reason why many of them had moved here in the past years following the 2008 financial crisis. A couple of my interlocutors from Western Europe even explicitly argued that “Europe is dead” and “the future is here” (i.e. in Singapore/Asia). On the other hand, many technology-focused people in Singapore were also very sceptical about the creative potential of Singapore’s future. They argued that when it comes to technology and entrepreneurship, Singapore needs to ‘catch up’ with the West to compete in the global economy. Singapore was described as too sterile for innovation, too small for starting a high-growth business, and/or the people too conservative to be willing ‘to do what it takes’ to create or support a genuinely innovative technology business. In these stories, the future was implicitly located either as an exclusive property of Silicon Valley or seen as attainable through cooperation with other countries in the region and by major shifts in the norms and values of the society. These narratives lamented the lack of liberal culture in Singapore and saw it as a crucial part of success in the high-tech economy. Overall, both the optimistic and pessimistic narratives shared a common feature - they assigned temporal categories to geographical spaces - associating some places with the future, others with lagging behind, and, importantly, attributed value to being more in the future. Exploring these discourses, showing their historical trajectories, and the work they did is the central task of this chapter. In this chapter, I will explore the work this imaginary geography my interlocutors drafted was doing and asking in whose favour it worked. I will examine the production of this discourse at regional and local technology start-up conferences and Singapore-based blogs catering to this audience.

To combine such narratives about the geographies of technology start-up futures, I use the notion of ‘imaginative geographies’ (Said 1978). This term highlights the ways in which the imaginative aspect of thinking in terms of the future is linked with spa-

tial geographies. It thus opens the space for a discussion of discourses' material consequences. In my application of the concept, however, I rather refer to them as imaginary geographies to emphasise the fact that they are created through imagination, not that they are necessarily creative, as the term 'imaginative' would imply. This also aligns with the way the term is used in science and technology studies when discussing, for example, sociotechnical imaginaries (see, for example, Jasanoff and Kim 2015).

Imaginary geographies and scale-making

The concept of 'imaginative geography' was famously developed by literary critic Edward Wadie Said in his work on Orientalism published in 1978, where he analysed how Europe had discursively produced 'the Orient' as its primary 'Other'. Said illustrated how, rather than understanding space as an objective phenomenon, instead it gains meaning beyond what is empirically known about the place. The meaning is socially produced and deeply embedded in power relations. Therefore, the concept of 'imaginative geography' also allows me to talk about the production of knowledge in the context of global power hierarchies and examine what role different spaces are expected to play in relation to one another. In this approach, I am picking up the baton from anthropologists studying globalisation, who recognise that "spaces have always been hierarchically interconnected" (Gupta and Ferguson 1992, 8) and social change then is not something that happens when 'different cultures meet', but instead concerns itself with how the existing perceived differences are re-articulated in the connection. This chapter then addresses the question of how to study futurities ethnographically by offering to explore the temporalities of global sociopolitical imaginaries. What is Singapore's position in this geography of start-up futurities? What connections are re-defined, and how and what power relationships are re-established?

The concept of 'scale' is central for geographers (Massey 1998; Marston 2000; Bird et al. 1993) who tend to see it as a principal way for spatial differentiation, denoting various levels such as "body, home, community, urban, region, nation, global" (Neil 1993, 101). While geographer Neil Smith suggests that scale "defines the boundaries and bounds the identities around which control is exerted and contested," (Bird et al. 1993, 101), I tend to agree with Doreen Massey (1998) who points out that social life is far more complex to be divided in clear cut and distinct scales. Instead, what I, following Tsing, am interested in, is an exploration of 'scale making' - the claims about the existence and often access to, the importance (or non-importance, for that matter) of certain scales, which underlie imaginary geographies - such as 'local', 'national', 'regional', or 'global'.

In relation to understanding the ways in which space and temporality are intertwined and constructed Tsing's approach to studying scale-making and conjuring is instructive because it allows to explore how certain localities are created as sites of aspirations for a variety of differently situated players and how these aspirations can both enforce their claims as well as create moments of friction (Tsing 2000, 2004). Therefore, to study futurities ethnographically, I suggest exploring what scales they require to imagine and what needs to be unimagined for these futures to seem viable. I connect Anna Tsing's notion of 'scale making' to futurities because temporality is an inherent part of any scale-making project. In this chapter, I will show how, through start-up conferences, blog discussions, and other publicly discussed contexts, narratives about Asia as the future and Singapore as a convenient location from which to access this future materialised. These narratives evoked the scales of Singapore as a 'global city', 'regional centre', and partaking in 'global start-up culture'. The concepts of scale making and conjuring (Tsing 2000) are useful as they reveal the limitations of such global claims by showing when, how and by whom such images are crafted within various projects. At an analytical level, this allows us "to find the specificity and contingency of the global" (Tsing 2000, 120). Singapore positioning itself as a 'global city' is a very particular claim on geography and a very particular expression of imagining Singapore's position and relationships in the world. Likewise, claiming something to be part of 'global start-up culture' is a particular claim on relationships, connections and disconnections alike.

Scales are not neutral ways of viewing the world, but "must be brought into being: proposed, practiced, and evaded, as well as taken for granted" (2000, 120). Tsing points out that the more scale-making projects intersect, the more dramatic the performance and the larger the likelihood that people will believe in the viability of the particular future image. However, the possible overlapping of multiple scale-making projects is a contingent process rather than something that can be prefigured and predicted.

I will discuss how entrepreneurs, investors and entrepreneurs aligned in their support for these scales, which depicted the rising middle classes and digital consumers of populous Asian countries as conveniently accessible from Singapore. This narrative was crucial for attracting capital, people, and ideas to Singapore. Yet, I will also show how, despite Singapore's convenient location, one could only unlock the so-called 'Asia Opportunity' by applying Silicon Valley's practices. These scales relied on creating temporal differences between the 'more in the future' West aka Silicon Valley and 'not yet in the future Asia'. Crucially, scale-making and conjuring highlight how these processes of imagining rely on generating difference and perpetuating inequality.

The chapter questions this imaginary geography in which Singapore stands central vis-a-vis Silicon Valley and Asia. I ask what sort of temporal relationships and social and historical contexts generated and sustained the appeal of this geography and explore

the limitations of this futurity ethnographically. Then, I will argue that the narrative of 'The Asia Opportunity' relies on a much older discourse of 'Asia on the Rise', which is re-cast in a way that allows a select few to join in and benefit from the rise of Asia. Asia' is implicitly seen as less developed, and the future of its development provides spectacular growth opportunities. This essentially was a neo-colonial capitalist and techno-orientalist imagination of the future where development would happen through inclusion in the market. It shows that old geographies of power have not necessarily disappeared but underlie and inform the new geographies of technopreneurship and innovation futures. I will conclude by examining a practice called visa runs and argue that 'the entrepreneur' was oftentimes placed precariously in this imaginary geography.

2. The Asia Opportunity

In 2011, in a video published on youtube.com, Wei Yung Huang , the co-founder of The Accelerator, invited aspiring entrepreneurs and hard-core technologists from around the world to follow his example and come to Singapore and start their businesses with the support of The Accelerator's incubation programme. According to him, moving to Singapore is a smart decision for the following reasons:

"The reason we are doing this here in Singapore is because Singapore is a great place to start a business - it's easy to get funding, and it's easy to get talent. Come to Asia - Asia is the future, and Singapore is the dot com capital of Southeast Asia. This is a great place to be."¹

Wei's words emphasising Singapore's strategic position were reinforced by images of Singapore's spectacular skyline in combination with more traditional Chinese shop houses, people rushing on well-paved streets and riding a shiny, clean metro, overall giving a sense of a modern, dynamic metropolitan hub with a hint of 'Asian' history. Earlier in the same video, Wei's business partner, Oscar Fisher, had already explained that it is Singapore's strategic location in Asia that makes it *the* location for start-ups, where

"within something like four hours flying time of Singapore we've got about a third or half of the world's population."

¹ References to the quoted videos and websites here and elsewhere are removed with the interlocutor's privacy in mind and can be provided upon request.

The interplay between Singapore's 'future readiness', accessibility of talent and financial capital, and location vis-a-vis the rest of Asia in this video established Singapore as the location from which to capitalise on the future that was emerging in Asia. This was one of the two promotional videos for The Accelerator program they had made with professional video production and circulated online to attract start-up founders to apply. The other, titled "The Asia Opportunity", featured well-established technology entrepreneurs and investors explaining why they are locating themselves and their businesses in 'Asia'.

In their description of Singapore as desirable through its location in relation to the countries surrounding it, Wei and Oscar reproduced a narrative endorsed by the Singaporean government. In his 2001 National Day Rally speech, Prime Minister Goh Chok Tong had invited people to think of Southeast Asia as the 'hinterland of the past' and instead think of Singapore in relation to 'greater Asia', a hinterland which can be reached within seven hours of flying time (Yew 2011, 275).

The entrepreneurs Wei Yung Huang and Oscar Fisher weren't the only ones suggesting 'Asia' as the destination for the young and ambitious. A few months before The Accelerator had shared their videos on YouTube, The Economist had featured an article, "Go East, young moneyman", explaining that Asia, and in particular locations such as Hong Kong, Singapore and Shanghai, became the prime destinations for graduates from prestige business schools in the West. This trend has intensified since the financial crisis of 2008 ("Go East, Young Moneyman" 2011). While The Economist mainly discussed young people in finance (which is predominantly young white males, see Ho 2009a), seasoned technology writer from San Francisco Sarah Lacy, in her book "Brilliant, Crazy, Cocky: How the Top 1% of Entrepreneurs Profit From Global Chaos" (2011) described a similar trend amongst aspiring technology entrepreneurs. In the book, Lacy introduces the well-educated youth from the USA who have relocated to Beijing with the goal of starting their technology companies. Lacy points out that this would be exactly the type of crowd which would have come to Silicon Valley in the 1990s. Yet now these "opportunists, pioneers and risk takers" have discovered China, which is

"the bright homing beacon for the Western world's profit-seekers looking to get their piece of the explosive 1.3 billion-person-strong Chinese dream." (69-70)

A popular American investor named Jim Rogers in 2007 had moved to Singapore, announcing that "If you were smart in 1807 you moved to London, if you were smart in 1907 you moved to New York City, and if you were smart in 2007 you moved to Asia" - a quote often repeated by the various players in Singapore's start-up ecosystem (see, for

example, Cheok 2015). Similarly, in 2012, the Economist wrote:

"The financial crisis of 2008, followed by the various excitements of 2011—the American debt-ceiling fiasco, the euro zone's interminable wrangling, riots on the streets of Western capitals—seemed to mark a tipping point. Asia's rise looked faster than anyone had expected." ("Tiger Traps" 2012)

Singapore, with its population of 5 million as of 2010, was clearly not China. Still, its location at the tip of the Malaysian peninsula, surrounded by some of Southeast Asia's most populous countries, and the concentration of capital in it easily inspired people to call it the capital of Southeast Asia. Alternatively, people would often refer to Singapore as 'Asia lite' - 'Asia' because of Singapore's ethnically diverse population and location in Southeast Asia, but 'lite' because it was 'easier' to live and do business in Singapore than maybe any other Asian country due to its high living standards, English speaking population, and pro-business government. I put 'easier' in inverted commas since Singapore was certainly not an easy place to live unless you were well off. At the time of my fieldwork, it was ranked as the world's 5th most expensive city to live in, and just a few years later, it topped the charts as *the* most expensive one (*Worldwide Cost of Living* 2014). For the better off, though, Singapore indeed seemed an 'easy' place to be in. 'Everything functions here', one of the British interlocutors explained to me on May 23, 2012, after we ran into each other on the metro, having met earlier in one of the technology meet-ups. In describing why Singapore 'was great', he emphasised the rule of law and orderliness of the urban space. At the time of our conversation, he had been in Singapore for seven months and cheerfully explained to me that 'he totally loves Singapore, ' which to him felt 'futuristic':

Here in Singapore, they are creating a country with no history, and everything is new. Here, it just feels like living in a computer simulation- no breaks in the code - everyone is walking properly, everything functions.

He compared this to the computer game Sims; for him, it was undoubtedly a positive comparison - a technologically constituted utopia, infinitely malleable. On top of that, he said he was enjoying 'the white men advantage' here, which he explained to me as 'being able to do everything without anyone saying anything bad'. As it happens in quick chats while commuting, I didn't have a chance to enquire more. Still, these themes of Singapore 'feeling like the future' and being portrayed as such on the one hand, and

the power inequality within which this attractiveness of Singapore was established, on the other hand, is the wider theme I will address in this and the following chapter.

Moving to Singapore

It was the perceived differences in development that, to a large degree, informed the identification of ‘where opportunities lie’. Both British Oscar Fisher and Singaporean Chinese Wei Yung Huang identified themselves as ‘serial entrepreneurs’ and investors who have spotted the opportunity “which is currently being ignored by much of the start-up community in Europe and America” (The Accelerator’s video). Oscar’s education was in physics, and he spent most of his life in movie production, while Wei received his education in computer science, contributed to the open-source email standards and co-founded two Silicon Valley-based web companies. They both had moved to Singapore and jointly started The Accelerator as a business, but also explained that their larger mission was to develop Singapore’s start-up ecosystem, which I explore in detail in Chapter Three. While Wei had returned to Singapore to reunite with his family after living most of his life in North America, Oscar chose to move with his wife and young son after developing an understanding that ‘Europe is done’. Many of the other entrepreneurs in the technology and media industry who had moved to Singapore argued that Singapore offers them present conditions and future opportunities that are not accessible from where they were before.

One of the most well-known such moves was made by the billionaire and co-founder of Facebook - Eduardo Saverin, who moved to Singapore in 2009 and renounced his US citizenship. Forbes’s article titled “Why Eduardo Saverin moved to Singapore” argued that this move could be linked to two times lower income tax and no tax on the capital gain in Singapore in the wake of the upcoming initial public offering (IPO) of Facebook. As additional reasons, the article introduced the comfortable celebrity lifestyle Saverin enjoys in Singapore and the returns on investment in the region, with growth rates exceeding the ones of the West, concluding that “From high returns on Asian property investments to the easy access to other booming markets in the region, it makes sense for financially-savvy investors to move to Singapore” (Tulshyan 2012).

Another example indicative of the type of argumentation that located futures in Singapore came from Derek Sivers, a highly respected USA-born entrepreneur who also moved to Singapore in 2011. In a blog post on his website, he explained that his move was motivated by the easy access to a range of countries which can be characterised as emerging markets, ease of doing business in Singapore (referenced to the World Bank’s Ease of Doing Business Index where Singapore ranks as #1 since 2006 when the

ranking was started); and “amazing people from NUS, Hackerspace, e27, EDB, and INSEAD”, which he later summarised under the term “entrepreneur scene” (Sivers 2011).

It was a common theme amongst the Western expatriates in the technology start-up scene, predominantly males in their late 20s to early 40s, who argued that this was ‘the Asian century’ and Singapore was the perfect location from which to capitalise on the emerging future. It was the perceived possibility to ‘create’ a market - to introduce a product or service not known in the respective countries and to develop a business of a potentially large scale, that allured many entrepreneurs. For example, one of the seasoned entrepreneurs interviewed for one of The Accelerator’s promotional videos had moved his business from the USA to Singapore and explained:

“The next billion people who are gonna be on the Internet - they are not in California, they are not in Beijing, they are not in Tokyo, not in London. They are in Jakarta, Surabaya, they are in India, they are in Africa, they are in Cambodia, Thailand, Philippines. This is where the next billion people to be joining the Internet are. Their experiences will be different to the first billion. In the same way, the East Asian experience is very different to the North American experience. There are many different consumer behaviour issues and structural issues about [how] the industries work in this region that make this place particularly special, and I’m very excited about that.”

Interestingly, as I noticed, the mere presence of such expatriates in the technology space was also often taken by Singapore-based entrepreneurs to be an indicator that the future of the Singaporean tech space is promising.

Asian century and techno-orientalist futures

In understanding these narratives, it is crucial to see them in a longer historical context and examine the global power inequalities that shape them. The ‘rise of Asia’ or the ‘Asian Century’ has been a powerful, well-known discourse since at least the early 1980s (Anagnost 2013, 11). Techno-orientalism, “the phenomenon of imagining Asia and Asians in hypo- or hyper-technological terms in cultural productions and political discourse” (Roh et al. 2015, 2) has been a strong part of these discourses and clearly evident also in the encounters with my interlocutors described in this chapter. As scholars have argued, techno-orientalism emerged as a reflection of the West’s unease and worries about losing the cutting edge at defining modernity (Morley and Robins 1995) and

thus has gone hand in hand with the economic rise of countries in Asia, originating and first being articulated in relation to the rising power of Japan. Since the mid-1980s, it has been reified in relation to China's economic development in terms of sinofuturism and the economic development of India as well as Asian Tigers in the late 1980s and early 1990s (Sommer 2006; Morley and Robins 1995; Roh et al. 2015).

While Orientalism, as articulated by the West, imagined the East as pre-modern, stuck in time and backwards, within techno-orientalism, the "futurised" Asia is depicted as technologically advanced. Yet this portrayal doesn't challenge the West's dominance but reinforces it by suggesting that even a technologically advanced East contributes to a narrative where the West remains central and pivotal. Rather than seeing 'Asia' as a threat, techno-orientalist narratives I encountered amongst predominantly Western interlocutors set on capitalising on the emergent future in Asia remodelled it as an opportunity for themselves. So, if Asia is the future, then let's capitalise on it. As Roh, Huang, and Niu have argued, techno-orientalism should be seen as: "part of the West's project of securing dominance as architects of the future, a project that requires configurations of the East as the very technology with which to shape it." (Roh et al. 2015, 2) As Gabriele de Seta has argued, both sinofuturism and techno-orientalism deny coevalness in similar ways:

"The future functions exactly as the past does in orientalist arguments: as a temporality through which otherness can be safely managed and problematic interactions steered away from." (De Seta 2020, 91)

As this chapter will show, Singapore's position in this futurity relied on embracing these techno-orientalist narratives where they supported its future aspirations and strategically managing to propose itself as a broker between the 'West' and the 'East'.

Techno-orientalist narratives, especially in relation to China and India, have focused on the vast, comparatively cheap labour resources readily accessible to businesses in the West. However, among the technology entrepreneurs I worked with, the attraction of cheap labour was of rather low importance. Instead, the primary attraction was the imagination of the potential of the emergent consumer markets, fuelled by the vast young populations in the region, eager to consume digital objects and embrace digitally enhanced lifestyles that promised scalable growth for many years to come. This rendering of 'the Asia Opportunity' was therefore rooted in an imagination of an emergent 'Asian consumer', which could be both the rising middle classes with their increasing buying capacity, as well as the large populations living in poverty that might never become middle class but form 'the fortune at the bottom of the pyramid' (Praha-

Linear time, pre-determined future and temporal incongruity

As I encountered it, this particular blend of techno-orientalism relied on particular temporal relationships, configuring futurity in a specific way. Morley argued that Japan was increasingly seen as a threat to the USA and Europe because it destabilised the common assumptions about time and space where the West was modern and the others were behind (Morley and Robins 1995, 160). Now, some 'others' were living in the same time or even more modern and thus more in the future than the West. Through the affinity between progress and modernity as the passing of time and thus entering the future, and through the affinity between progress and technology, technology and future have become linked into a relationship where the new technology signifies the future, times to come, and vice versa.

In the 'Asia Opportunity', futurity, progress, and social change rested on a union of technological and market determinism - the idea that inclusion in the market, which will supply new technologies, will be the basis of social change in Asia which will lead to 'development' and modernity. Development, progress and modernisation within this idea are imagined as inevitable forces washing over the region. Some countries deemed in need to 'catch up' more than others to become 'modern'. The arrival of modernity goes hand in hand with expanding the market and, thus, new business opportunities for investors and entrepreneurs embracing the 'frontier spirit'. It was the perceived differences in economic and technological development that largely informed the identification of where the market opportunity was. The perceived temporal incongruity and, in particular, the imagination of a 'frontier zone' (Tsing 2003) ensured the circulation of people, ideas and capital.

What structured this imagination of 'Asia Opportunity' as I encountered it in my field then was a form of temporal distancing - an imagination of people living at the same time as inhabiting different temporalities - some more in the past, some more 'modern'. As anthropologist Fabian, in his seminal work "Time and the Other: How Anthropology Makes Its Object" (Fabian 1983), has argued, this rejection of contemporaneity and simultaneity is a "denial of coevalness", which is a highly political move. Such temporal distancing, which was also the basis for many of my interlocutors arguing that Singapore is already living the future (or not for that matter), has been characteristic of modernisation and development theories (Ferguson 1999). Even though modernisation theories have been criticised in social sciences, they nevertheless inform the way people interpret their lifeworlds, and Singapore is often conveniently imagined as "a

strategically sited access point for trade between the industrial west and the pre-industrial east.” (Bishop et al. 2004, 8).

Lindtner, who researched the maker culture in China, has pointedly argued that:

“the displacement of technological promise onto what was once imagined as the periphery of technological future making is a discursive move with material consequences, providing legitimacy for the reordering and restructuring of space and people, the flow of investments into certain spaces and technology practices rather than others, the casting of certain people as deserving while continuously keeping others on hold, framed as not (quite) ready, not capable of their own self-investment.” (Lindtner 2020, 5)

Indeed, as this chapter will describe, the discursive construction of Asia opportunity had material consequences as it was used to direct and legitimise the flows of people and capital to Singapore and required a reimagination of people and places in specific ways. Such geographical imaginaries based on temporal differentiation seem to be not only structured along the lines of what Lucy Suchman has called reproductions of “neocolonial geographies of centre and periphery” (2011, 2) but also actively inform people’s understandings of the world and the decisions they make with regard to their lives (e.g., moving to a particular location, setting up a business in one location rather than another, engaging in certain activities rather than others, etc.).

While the broader popular discourse of the rise of Asia and the demise of the West gave a frame for entrepreneurs and investors to argue their preference for locating to Singapore, I suggest that the identification of “Asian opportunity” and how it connected to Singapore was a complex overlap between particular understandings of economic progress, Singapore’s government’s endorsed narrative of Singapore’s history, nation branding, and policies, and, equally important, also a particular ethos associated with entrepreneurship that requires imagination of a ‘frontier zone’ (Tsing 2003). As Tsing has pointed out, these scale-making projects gain a particular strength at the moments when they overlap (Tsing 2000), and it is the overlap between multiple scale-making projects by different actors who forge sometimes unexpected allegiances that Singapore becomes the capital of Southeast Asia and the centre from which to capitalise on the ‘rise of Asia’.

A limiting aspect of evoking the notion of techno-orientalism is that it relies on the oppositional division between the ‘West’ and the ‘East’. While some discussion recognises self-orientalisation as a co-constitutive dynamic, such a large-strokes division doesn’t allow to address the power dynamics in more nuanced detail. Therefore, in the next sections, I will discuss the balancing my Singapore-based interlocutors performed

in embracing this imaginary geography that required them to navigate between Silicon Valley and Asia.

3. Singapore as a Global City and Regional Hub

The vast room was dark and cold. Aggressive music was blasting rhythmically along the video projected on three large screens...blue capital letters exchange one title after another: "Singapore's Tech landscape", "73% internet penetration", "64% mobile internet penetration"... "2hrs10mins on social media daily"... "Where do you STAND?" I snuggled deeper in the soft conference chair and was glad that with this question, the trailer ended. Startup Asia Singapore - an annual technology start-up conference that would take place in Singapore in the upcoming two days would educate, discuss and provide all that one supposedly needs to know about doing technology business *in the region*.

The music stopped, and a young lady walked on stage in a confident, wide stride. The room with close to 500 people burst into applause and ovations. Gwen was a well-known figure in the technology start-up scene in Singapore and beyond. She founded and, until 2013, ran one of the first and best-known technology entrepreneurship blogs called SG Entrepreneurs (SGE) when it was acquired by their rival Tech in Asia - the conference organisers. Among other things, she has represented Southeast Asian and Asian start-up scenes as an expert, panel discussant, jury member, etc., regularly at various events in Singapore and around the world.

"Asia is big and difficult, and we are here to help you," said Gwen, welcoming the audience. It consisted of both established and aspiring start-up entrepreneurs, venture capitalists, bloggers, students, government officials and employees from multinational businesses. Later, on their blog, Tech in Asia published an infographic detailing the participant demographics - from 1458 attendees, 1118 identified themselves as males and 340 as females, all from a total of 44 different nationalities. 706 people from Singapore, 163 from Indonesia, 104 from Malaysia, and 106 from Japan.

Tech in Asia's Startup Asia Singapore conference was not the only major technology start-up conference that took place in Singapore, nor was it the only one to position itself as the repository of knowledge about Asia, but it was a good example of such events and the work they did in constructing scales and materialising narratives about Asia Opportunity. In this section, I will discuss conferences like the Startup Asia Singapore and the work done by the Singapore-based start-up-focused online media platforms to show how, through their activities, they both drew from as well as reinforced

the imaginary geographies of technology futurities in Asia and Southeast Asia. At the time of my research, three notable local online news media covering start-up news in the region were operating in Singapore. SGenpreneurs, e27, and Tech in Asia were publishing start-up business news covering not only Singapore but also start-ups from many other countries in Southeast Asia, Asia, and occasionally elsewhere. All three, first established by students, had, over the years, become venture capital-backed, professional and influential news sources respected and referred to by the entrepreneurs and investors I worked with. At the time of my fieldwork, Tech in Asia acquired SGenpreneurs. All the platforms engaged not only in reporting about various start-up events but also in organising them. For example, e27 organised annual conferences titled Echelon and smaller events called Satellite events around the region, as well as more frequent smaller-scale 'Founders Drinks'. Tech in Asia organised the annual Start-up Asia conference. While SG entrepreneurs at the time didn't have their own signature conference or event, they were actively involved in organising events for others, such as the Demo Asia conference.

These conferences operated using and also reinforcing these imaginary geographies with a specific understanding about Singapore's position in it. I will show how such a proposition to learn about Asia through Singapore made by Gwen can be understood in relation to a longer history of how Singapore has positioned itself in the region.

Singapore as a global city

The narration of Singapore's future by its political elites has relied on a very specific depiction of Singapore's 'natural' and 'indisputable' reality - its small size, lack of natural resources, and its geopolitical position amidst an often turbulent region. It wasn't long after the establishment of independent Singapore, something I will discuss in more detail in the next chapter, that Singapore's foreign minister, Mr. Rajaratnam, detailed the vision of Singapore as a *Global City* for the new island state to 'survive' (Rajaratnam 1975). Conceptualising Singapore as a *Global City* at the time allowed political elites to overcome the perceived problem of being expelled from the Federation of Malaysia, where Malaysia's territory until the expulsion was commonly considered Singapore's hinterland. Mr Rajaratnam proposed: "Once you see Singapore as a global city, the problem of hinterland becomes unimportant. For a global city, the world is its hinterland." (Rajaratnam 1975, 8).

With the turn of Asianisation in Singapore's politics since the 1970s, Singapore has been increasingly introducing itself as an *Asian* hub or *regional* hub (Hong and Huang 2008, Clancey 2012, Crang 2009) positioning itself as a "switching centre for goods ser-

vices, capital and information and people.” (IT2000 as quoted in Crang 2009, 16). Indeed, Singapore is surrounded by the largest and most populous Southeast Asian countries - Indonesia (with more than 237 million inhabitants according to the 2010 census) and Malaysia (more than 28 million inhabitants) and within close reach of countries such as Vietnam (close to 90 million inhabitants), Cambodia (14 million) and Thailand (67 million).

Similar to how then Prime Minister Goh Chok Tong argued in his 2001 National Day Speech that everyone should “regard all the countries and cities which are within 7 hours of flying time from Singapore as our hinterland” (National Day Rally Speech, 19 August 2001 as quoted in Yew 2011, 275), the entrepreneurs I worked with invited similar imaginations of Singapore located at the very centre from which to capitalise on Asia, and more specifically Southeast Asia as a region of emergent opportunities. Perhaps precisely because of such flexibility in how Singapore defined itself in relation to the rest of the world, it is even more important to ask - what kind of imaginary geographies enabled and shaped the new digital economy in Singapore? What connections needed to be forged, and how were relationships structured for these purposes? As discussed in the previous section, Singapore embraced techno-orientalist narratives, which relied on temporal distancing between those who were ‘developed’ and those who were ‘still developing’ through the inclusion in the market.

Aligning with the Singapore government’s imagination of Singapore having to be understood as expanding beyond itself, also in the entrepreneurial imagination, Singapore gained its meaning only in relation to the broader region, which was often discussed as ‘Asia’, but even more often than that as ‘Southeast Asia’, which was imagined as Singapore’s hinterland. Singapore had to claim these scales of being a global and regional city to attract capital, people and ideas and ensure its position of power in the region. This was brought home to me very clearly during a shared drive through Singapore sometime in March 2014 by one of my core interlocutors. We were driving past a large, dark building, and Caishen pointed at it and said he feared Singapore would become like this place. Since I had caught only a glimpse of an empty space on the ground floor featuring a ‘for rent’ sign, which in many parts of Europe had become the icon of recession at the time, I asked if he meant the ‘for rent sign’. No, he responded. What he meant was

“A place between places where none goes. Where none knows what is inside, and when you enter, it is all dusty, sad and filled with some obscure hairdressing saloons for middle-aged ladies.”

According to him, if Singapore doesn’t grasp the economic reality and establish

itself as a hub, then all the capital and people will flow to places like Jakarta and Bangkok. Singapore, in turn, will become a dusty building where life ‘merely goes on’ rather than growing. Caishen was not the only one amongst the entrepreneurs, especially the ones involved in investing, who was concerned about such a future scenario.

For example, in 2011, Willis Wee, the CEO of what became later Tech in Asia, wrote an article titled “Drop your arrogance, Entrepreneurs”, arguing that:

“Singaporeans tend to dismiss tech companies/startup founders from other Asian countries. To most Singaporeans, only Silicon Valley is cool... tech companies in China, India, Indonesia are not. (...) But with Asia rising up fast, shouldn’t we take a closer look at our markets? How many people bother to understand what’s happening in Asia? (...) Don’t cry saying that we don’t have a market – Indonesia, India, China, Taiwan, Malaysia – all are out there, up for grabs. In fact, more and more Asian folks in the U.S are moving back to Asia to exploit the opportunities here.” (Wee 2011b)

His blog post invited entrepreneurs to focus on Asia’s economic opportunities. Otherwise, investors will go to the ‘big markets’ directly without Singapore’s intermediary role. Willis explained that he identified the opportunity to blog about technology in Asia, thus setting an example for other entrepreneurs. A similar personal experience-based example with a similar message was shared in another post by a colleague of Willis - Bernard Leong. Bernard felt he wanted to add to this discussion Willis had raised about expansion and thus followed up on his personal blog that was later republished with an article “Advice to startups: Get out of Singapore ASAP”. There, he directed the founders to think in the following way about the region in relation to one’s ambition:

“If your company specializes in a web-tech solution for the emerging economy, Jakarta (Indonesia) and Manila (Philippines) are probably your best bet. If your appetite is big and massive, China and India are on the list.” (Leong 2011)

In that post, he explained that Singapore can play a ‘test market’ role before one proceeds to build the business elsewhere in the region. The idea of using Singapore as a ‘test market’ affirmed a belief in technological and market determinism and universalism. Both Willis and Bernard’s articles expressed two common points. Both agreed that Singapore was too small to be considered a primary market, and both suggested that an entrepreneur should look outside Singapore and preferably go to neighbouring Asian

countries. While Bernards' article stressed this as a business prerogative because scaling was a way to build a big business, Willis also pointed out that unless Singaporeans embrace the emerging opportunities in the familiar region, they will lose out.

The same but different: Singapore and the construction of the region

Singapore's recognition as a Global city and *the capital* of Southeast Asia relied as much on its cultural affinity with the other countries in the region as on being framed as their *opposite* when it came to the rule of law, lack of corruption, and efficient infrastructure. Exploring the scale-making processes and the various motives and aspirations of the different players who engaged in conjuring particular scales and the moments when these processes clashed allow us to avoid the pitfalls of trying to subscribe to some culturalist explanations, such as, for example - Confucianist values, which might or might not bind the East Asian countries.

Leong Yew (2011) argues that Singapore's positioning is essentially one of uneasy variations between Singapore as a 'global hub' and Singapore as an 'Asian hub'. Arguing that such culturalisation of geography is inherent to the knowledge economy, he points out:

"Because of the state's geographical and cultural proximity to Asia, it has attempted to marry physical convenience with its role as a knowledge comprador. Its location meant that knowledge workers and companies had easy access to regional subjects and local capital, while its new culturalism suggested that Singapore possessed the regional knowledge on the one hand and on the other the skills to interface with the global knowledge network." (Yew 2011, 271)

Even more so, Yew also points out how the construction of *Asia* is nowhere near being stable:

"Asia has been flexibly represented as an entity Singapore should differentiate itself from, as an economic competitor, while also embracing it as a place for Singaporeans to invest in or as an entity collectively cautiously venturing into the knowledge economy." (Yew 2011, 274)

It was through the perceived differences in capital, people and ideas that Southeast Asia was constructed as a region. Illustrative here is Koh Jit Siong's, one of the start-up

conference Echelon organisers quote in an interview with Forbes. In it he discussed how they decided where to organise the Satellite events - a series of events in various countries around Southeast Asia leading up to the central event in Singapore, and how they differ from the main event in Singapore:

"If you see on the bigger picture, we want to connect the ecosystem, in terms of business opportunity, market access, investment, hiring opportunities. Every country has its own strengths and weaknesses. [In] Singapore we have a lot of capital, forex is very high. If you go to Indonesia, it's a big market. Mobile is huge with lots of good developers. You go to every cities [sic], there are key set of strengths and weaknesses. We do consider these before we set-up a satellite event there, because they have to contribute to the entire ecosystem." (Lim 2012)

Central to this imagination of regionality was Singapore, which was reflected in how the events were hierarchically structured. The first two Satellite events were Indonesia and Malaysia in 2011. Every year, more and more countries were added, including the Philippines, Hong Kong, Thailand, Taiwan, Japan, and India. At these Satellite events, start-ups would present themselves and be evaluated by a jury. The winning start-ups from these Satellite events then presented themselves at the central Eschelon in Singapore, and this way, besides the monetary prize, they gained exposure to influential venture capitalists.

Singapore's position in these events is showing Singapore as the centre of activity and allowing the satellite events to reach out to start-up talent in the region. Mohan Belani, one of the co-founders of e27 and the CEO of e27 at the time of my fieldwork, explained in an article:

"If you want to feel the heartbeat of the Asian tech ecosystem, if you want to attend THAT one event that will give you amazing experience, Echelon is the one to be at. It is [sic] the most credible, most up to date event that will give you a true picture of the Asian tech startup ecosystem." (Lim 2012)

While Startup Asia didn't seem to structurally differentiate between its conferences in Singapore, Jakarta and Tokyo, the difference was notable in the agendas. For example, in the Singapore chapter of the conference, issues of the state of the art of entrepreneurship around Singapore were at the centre of the event and were supplemented by strategies for expanding in various markets. For example, both Startup Asia Singapore

as well as Echelon 2014 featured 'market expansion tracks' - special sessions about expanding in various 'markets' around the region that were divided along the national borders - Indonesia, Vietnam, Thailand, and others. However, in these what sometimes would be referred to as 'regional' events, a subtle but meaningful difference in the topics could be noticed. Rather than discussing general business practices and 'Asia opportunity' topics, they focused on the various business experiences one would have within particular countries.

An illustrative example of this subtle difference was Hugo Barra's appearance at both Startup Asia Singapore and Jakarta conferences in 2014. Hugo Barra was a highly successful Vice President and product spokesman of Google's Android division. He left this position in 2013 to work for a rapidly growing and highly popular emerging Chinese mobile company, Xiaomi. This move, in combination with the rising popularity of Xiaomi, which was often dubbed 'the Chinese Apple', seemed to affirm the 'Rise of Asia' in ways that made the entrepreneurs around me very excited about both Xiaomi's rise as well as Barra's talk at the Startup Asia Singapore conference. At the time of his presentation, the room was so packed that people had to sit on floors and stairways of the auditorium. While in Indonesia his talk was titled "Fireside Chat: How Xiaomi is Trying to Push All the Right Buttons in Indonesia" and focused on Xiaomi's business expansion and technology customisation in Indonesia, in Singapore the talk was titled "Fireside Chat: How Xiaomi Became A \$10 Billion Startup In 2 Years" and discussed Xiaomi's strategy of growth and logistics across the different countries. Looking through the prism of start-up events, Singapore's role as the centre for capital and business knowledge, rather than the market itself, becomes clearly visible. The sociality that was brought to life through start-up events, with its power hierarchies, norms and values, is the focus of Chapter Three; for now, it is important to emphasise that by bringing the various players together, a certain flexible regionality was enacted through these conferences. Singapore has a prominent role in this imagination - a point where knowledge and capital are concentrated in the hands of selected people, who could, from Singapore, gain access to places around the region that were constructed as 'markets'. Such a position of Singapore promoted through these bottom-up organised start-up conferences was very much aligned with the proposed vision of Singapore's government, which was occasionally also present at these conferences. For example, the 2014 Startup Asia Singapore was opened by the Minister of Trade and Industry Teo Ser Luck, who started the conference by explaining that Singapore wants to become a 'regional start-up hub' and even if Singapore is not the market itself, it is linked to the world through the start-ups who access the markets through Singapore. The notions of Singapore as a 'Gateway to Asia' and 'Launchpad to the region' were ever present during the discussions at the conference, just as they are online on Tech in Asia, e27, and

before the acquisition of SG Entrepreneurs (SGE).



Setting up for Startup Asia Conference in Jakarta.
Photo by author.

Perceptions of temporal incongruity were central in the work of constructing the countries in the region as ‘markets’. The ability to claim a future in the start-up space relied on access to capital and absorption of Silicon Valley knowledge. This allowed players such as e27 and Tech in Asia to capitalise on their position by becoming ‘knowledge brokers’. The same principles operated at an individual level. I started the introduction of this dissertation with a recount of how Seth, an entrepreneur from the Philippines, came to Singapore and, in a way, felt that he ‘experienced’ a future. Despite having left the start-up he cofounded in the Philippines, his experiences were sought after because he had been in Singapore. This was a common pattern for many of my interlocutors who returned home to countries typically imagined as ‘less developed’ than Singapore in specific domains.

For comparison and to illustrate how particular was the fact that the circulation of people, ideas and capital in this start-up futurity relied on constructing and reifying differences between the countries in the region, I can offer an insight from Beng Huat Chua’s analysis in studying the production, consumption and circulation of popular cultural products such as Korean TV dramas. He argues that it was the perception of ‘coevalness’ between populations in East Asia, including Singapore, that ensured the circulation of goods and even possibly promoted a common identification (Chua 2004). Interestingly, in relation to studying the production, consumption and circulation of popular culture, Singapore seems to be located as part of *East Asia*, yet when it came to technology start-ups, the regionality that I encountered in the field was predominantly

Southeast Asian where Singapore was imagined to be closely bound with Indonesia and Malaysia. If nothing more, this point further illustrates how regionality was socially constructed in circulation and brought alive through the various discussions and meetings taking place, which is what I aim to discuss more in this chapter by focusing on the start-up conferences and start-up blogs.

In the 1990s, a range of technology pundits argued that with the rise of the new, immaterial economy, geography became irrelevant under the assumption that knowledge could now be produced and accessed from anywhere in the world with the help of digital technologies. Over the years, this has proved to be an illusion more than reality. Globalisation, capital and the associated opportunities do not cover the world as a wave, even though the process is often imagined as such. Instead, “they jump point to point, and huge areas are simply bypassed” (Ferguson 2008, 379) in favour of the more resourceful areas, which change over time. Singapore, in that case, and the discussion of ‘geographies of future’ provides an opportunity to study both the ‘fixity and mobility of capital’ (Sassen 2000).

Singapore’s position in the geography of start-up futurities was closely tied to its proximity to the countries around it, which were experiencing rapid growth of their middle classes with particular consumption patterns (Pinches 1999). Singapore aimed to function as a base for capital accumulation, ensuring highly comfortable living conditions for entrepreneurs and organised infrastructure with a stable government, the rule of law, and the supply of capital. Thus, the entrepreneurial depiction of Singapore as in the centre of Asia and also as a “comprador” for understanding Asia (Yew 2011, 271) echoed the narrative endorsed by the Singaporean government. To summarise, in order to establish this particular geography of start-up entrepreneurship, it predominantly relied on differentiating Singapore from the rest of the region based on its economic and governance development. It claimed an affinity with the region on the basis of proximity and shared cultural knowledge. The next section will explore another direction, towards Silicon Valley, where Singapore also balanced the scales of being a global city and a regional hub.

4. Balancing Between Silicon Valley and Asia

In relation to the development of Singapore’s biomedical industry Clancey (2012) has pointed out that Singapore’s position endorsed “regionalism that was at the same time both an affirmation and critique of the global,” (Clancey 2012, 30) as Singaporeans attempted to contribute to the ‘global’ body of biomedical knowledge through excep-

tionality of 'Asian' bodies. Likewise, Singaporean historians Hong and Huang have argued that "The official Singapore discourse on self-representation thus relies on the strategies of Occidentalism and self-Orientalisation." (Hong and Huang 2008, 207)

A similar tension between Asia as exceptional yet simultaneously with global potential was evident in entrepreneurial circles. For example, The Accelerator positioned itself to be in the business of developing "Asian Technology for Asia", suggesting that there were limits to the universal application of technology. At the same time, the company's promotional material featured investors endorsing The Accelerator's approach to building 'global' businesses. Despite the hopeful assumption that with the 'rise of Asia,' countries in Asia have a chance to determine their own parameters of modernity (see, for example, Roy 2009; Bunnell et al. 2012), in my experience, Silicon Valley had a largely hegemonic control over technology entrepreneurship futurities.

Silicon Valley and the San Francisco Bay Area in the USA, the birthplace of the microchip and personal computer industry and home to many globally leading web technology companies seemed to be defining what the future was supposed to be for most of the technology entrepreneurs I spoke to. This overarching influence was exemplified by the pervasiveness of references to Silicon Valley and will be evident in every chapter of this dissertation. For example, entrepreneurs in Yogyakarta, Kuala Lumpur, Manila, Yangon and Singapore routinely referred me to blog posts written by San Francisco-based superstar entrepreneurs and venture capitalists to explain to me their own actions. Posters with motivational quotes from Steve Jobs and other legendary Silicon Valley entrepreneurs frequently embellished the walls of start-up and co-working offices across the region. In addition, it was in comparison to Silicon Valley that Singapore's bright technology future was commonly questioned. Singapore was described as too organized for disruptive innovation, too small for starting a high-growth business, and its people too conservative to be willing "to do what it takes" to start or support a truly innovative technology business. This tension and its historical roots will be discussed in more detail in Chapters Five and Six, yet here it is important to stress that such an imaginary geography where San Francisco was seen as the definite holder of the definition of innovation and start-up business practices also created space for establishing connections and making local interventions. Not only the entrepreneurs themselves looked up to San Francisco, but also Singapore's government and educational institutions actively facilitated learning from San Francisco through a variety of programmes that sent people from Singapore to Silicon Valley as well as lured specific types of people from San Francisco to Singapore trying to facilitate that Singaporeans learn how to 'think and act global'.

The Accelerator programme, like Singapore's government, had to emphasise Asia's exceptionality in order to position itself as a necessary point that could connect Silicon

Valley's practices, know-how and finances with the potential scale of Asian consumers. This embrace had to extend to Silicon Valley's hegemonic hold of start-up futures in order to find space for Singapore. Let me present two examples of how The Accelerator both embraced and attempted to challenge Silicon Valley vis-à-vis Asia in order to create space for themselves in this futurity.

In the days leading up to the opening of the first run of the accelerator program, Wei brought a package into the office. It was filled with freshly printed A5-size books. Opening the box, Wei passed one of the books to me to see. The glossy cover was adorned with The Accelerator's name and titled "What Silicon Valley Knows About Asia". I opened the book to see empty pages. In trying to understand what it was and how to react to it, my first guess was that it was empty because it was a notebook that Wei had custom-made for the mentors soon coming into the program - a handy thing for making notes on what they would learn here from start-ups participating in the program. 'Smart!' I said, thinking he was anticipating the mentors' needs. Wei smiled, seemingly pleased and walked away to place the books on The Accelerator's bookshelf. Only after Wei had left for the bookshelf did it dawn on me. It was not a notebook. It was a finished book! It was Wei's cheeky way of saying that Silicon Valley knows *nothing* about Asia. The book illustrated the non-existent knowledge. Indeed smart, Wei!

At the same time, Wei, just like most entrepreneurs, embraced most discussions coming from the US and San Francisco Bay Area and popularised them as examples of how business has to be done. For example, he filled the already aforementioned bookshelf with books written by predominantly US-based entrepreneurs and venture capitalists on how to think about innovation, developing a product and running a business. The Accelerator popularised this reading list in its blog posts and asked the applicant teams to consider those to be the 'expected readings' prior to joining the programme.

Wei had also printed inspiring quotes that he had placed at various locations around The Accelerator's working spaces. Outside on one of the office windows, visible to everyone passing, was a quote:

"Silicon Valley isn't a place. It's an idea. And whether you're making toilet paper in Rwanda or building gaming companies in Asia, **you're part of it."** (Emphasis in original, Quoting Arrington 2011)

This idea of Silicon Valley being an idea, a mindset more than a specific location, had been popularised by two venture capitalists based in the US - Vinod-Khosla: "Silicon Valley is not so much a place as a state of mind. It's a way of doing things that can be done anywhere" (Khosla 2014 and Andreessen 2014).



The quote on the top left: "Silicon Valley isn't a place. It's an idea. (...) you're part of it." Inspiring quotes posted on windows, readable to anyone passing down the hallway at Blk 71. Photo by author.

I've never been to San Francisco, but I have to admit that Silicon Valley had never felt so accessible as when I was doing my fieldwork in Singapore. I often wondered how bizarrely 'close by' San Francisco felt. Intimately and casually referred to as 'SF' it mostly felt like it was physically 'just around the corner', attesting to the density and frequency of the connections that were established between these two places almost literally on the opposite sides of the planet. Someone was always either on their way to 'SF', or had just arrived from there, dealt with the jet lag, or shared the newest insights, told stories about with whom and whom from the industry they had just met, or explained what of the many often government-funded exchange programs to SF they had benefitted from.

One such program was run by the National University of Singapore, called National Overseas College (NOC), which funded selected students to spend from 6 to 12 months in Silicon Valley and other places with high start-up activity, such as Pennsylvania, Beijing, Shanghai or Stockholm working for a start-up. Many of the very active organisers and known entrepreneurs in Singapore had participated in this program, and most of them directly referred to their NOC experience as the key inspiration.

For example, what was known as "e27" was started in 2006 by two students from the National University of Singapore, Mohan Belani and Justin Lee. They had attended the NOC program in the San Francisco Bay Area, and after their return home to Singapore, they were active in the university's incubator Garag3, organising 'unconference' events and Barcamps. Along with the events, they started the blog "Entrepreneur 27 Singapore: Web 2.0 Unconferences, Sites & Cool Tech", where they shared news about technology, start-ups and related events. Their slogan back in 2008 was "We live to

make geeks cool and their code-craft in demand. Both male and female. Since Jan 2006." The "About Us" section of their site at the time is quite telling of both their influences, as well as how they see Singapore and their own roles.

First they explain how the name captures their beliefs:

"The "27" in Entrepreneur27 (E27) really means "<27". It reflects our beliefs in youth and entrepreneurship and a hope for a new generation of innovators and thinkers who grew up with ubiquitous internet and mobile infrastructures."

And then in a section titled "How can we take part in changing our world for the better?" They explained that

"At E27, we hope to imagine the future for people as we make sense of an increasingly digitized world. We do so in the context of entrepreneurship and we speak the language of innovation."

The last section detailed their inspiration and how they saw Singapore's problems and opportunities in this new age:

"Our exposure to the entrepreneurial culture of Silicon Valley culminated in an appreciation of the importance of an open knowledge-sharing culture that was pervasive among Silicon Valley innovators, entrepreneurs and investors. Such a culture was found to be lacking in Singapore upon our return.

The technology industry in Singapore is small but promising. Historically, Singapore's technology industry has been second-tier to Silicon Valley: we are best known as contract manufacturers and channel distributors for foreign-based technology firms and lags behind in organic innovation.

However, the advancement of the internet infrastructure, in terms of speeds and reliability, has leveled the access problems to markets, knowledge and talents and created a cottage industry of enterprises tapping upon the business opportunities available. This is an opportunity for Singapore-based enterprises.

E27 strongly believe in the entrepreneurial opportunities in the web and mobile sectors. "27" represents our youth focus on entrepreneurs below 27 years old. It is more a figurative expression of our beliefs in promoting youth entrepreneurship rather than a binding rule towards our target attendees and members.

We believe that the younger generation, having grown up in a time

when internet and mobile phones transcended obscurity to achieve ubiquity, possess the tech savviness and cultural awareness to create the successful enterprises of tomorrow.”

What stands out to me beyond the youthful excitement about living at the time of perceived radical change is that for one, the reference point for ‘how things should really be’ for these young, inspired founders of e27 (Their youth-oriented bias was characteristic of the start-up space and it is something I will address in greater detail in Chapters Five and Six) was Silicon Valley techno-culture which they had soaked up themselves during the NOC program. NOC was set up with exactly the explicit goal of learning from start-ups in Silicon Valley. Now, they had returned home to transfer the method of fostering innovation to Singapore. In this process of defining this relationship between Singapore and Silicon Valley, they also re-defined Singapore’s former advantages - being able to fulfil large manufacturing orders and act as a distributor as irrelevant in the innovation economy. There was the promise of a global start-up culture, which could now be implemented in Singapore through participation in sharing ideas.

Later, they would re-articulate their statement as:

“We are devoted towards Silicon Valley-style, community-driven advocacy of technology innovation in Asia. We combine our online media with offline events to influence, discover and evangelize upcoming technology innovations from the startup communities around Asia.”

A lot of the events and start-up aimed programs incorporate references to Silicon Valley in their tag lines or logos as many of them were local chapters of US-based programs; for example, the Founders Institute’s tagline was “Globalising Silicon Valley”, Plug and Play “Silicon Valley in the box”. All of these seemed to suggest that Silicon Valley, indeed, is more of a ‘practice’ that can be replicated anywhere in the world by absorbing the knowledge of innovation and market principles with the assumption that they can be applied universally. As this dissertation will show time and time again, this ideal was very hard to sustain in practice and caused a lot of tension in the process.

5. Don’t Drink the Southeast Asia Kool-Aid

The chapter so far has focused on the business scalability and growth opportunities that had to be imagined in order for the scale-making projects to bring different players

together. This section will focus on what needed to be unimagined in the process, as imagination and unimagination had to work hand in hand for successful scale-making and future conjuring processes. Through a depiction of a discussion regarding the actual fragmentation of the region and practice called 'visa runs,' I will show how much struggle and work waited for those who wanted to pursue start-up futurities. This complicates the easy imagination of Asia on the rise and Singapore's imagination as a Global city as inevitable, natural futurities and highlights the work and the friction that was part of these futurities.

I think it is necessary to search for a more nuanced answer about what really invited this imagination of Southeast Asia. Whose interests were served the best when such imaginary geography was evoked? To what kind of expectations regarding appropriate ways of being and doing business did such geographies lead? Because in everyday life, this idea about Southeast Asia as being a joint 'package' was contested.

Even in the same start-up conferences that brought the region to life, the idea of such an 'Asia' or even 'Southeast Asia' was also challenged. In the closing keynote of Startup Asia Singapore 2014, Wei Yung Huang invited the audience to reflect on why six market expansion tracks took place in different rooms rather than one during the conference.

"(..) why is there a Market Expansion track for each country? Why shouldn't we just have one [emphasis] market expansion track for all the Southeast Asia? But we are not there yet. So in theory we are supposed to have an ASEAN Economic Community by 2015 (..) but I think in practice it is going to be up to the private sector to lead a lot of this stuff - whether its logistics or payments or language translation."

According to him, unlike the USA, which is united by language and currency, and unlike Europe, which is united by currency, Southeast Asia, with its 11 countries and more than 50 languages, is a 'fundamentally hard' problem to tackle for entrepreneurs wanting to scale up their businesses across the region. This reflection illustrated to me that while the 'Singapore as a capital of Southeast Asia' scale-making project was aligned with the government's vision, from the perspective of an entrepreneur, this scale was not self-evident. Wei's talk showed the belief in entrepreneurship as the driving source for progress and the universality of 'market forces' to bridge and smooth out the uneven terrain of cultures, practices, languages, political frameworks, and similar frictions. Surely enough, in the talk, he reaffirmed that 'Southeast Asia, with its billion people coming online' and 'with half of that population being below 30', was a really

exciting place for entrepreneurs at the moment - "The sort of golden market everybody has been looking for" as he put it. So, while on the one hand, there was a clear problematisation of the region, there was also an imperative, fuelled by the desires of capital, to imagine and construct such a joined 'Southeast Asia market'.

The same position was expressed in an interesting discussion that unfolded across online blogs in 2013 and from which I adapted the title for this section. The stimuli for discussion started on July 1, 2013, when a Tech in Asia blogger, Anh-Minh Do, published a blog post titled "With Southeast Asian Web Entrepreneurs Eyeing The Region, You Better Learn This Stuff" (Do 2013). The author's point was that Southeast Asia as a region is starting to 'heat up' in an unprecedented start-up activity. He identified multiple reasons why he thought this situation had developed and why the "heated battle for the web in the Southeast Asian region" will continue in the coming years - political stability, ASEAN regulations that facilitated mobility across the borders, increasing pressure from rising China, Rocket Internet expanding across the region, little growth in the domestic markets separately, so businesses have to expand. His overall urgent tone that stressed the importance of thinking about the region was also focused on the idea of survival: "In order to survive, Southeast Asian tech start-ups have to think regionally first." (Do 2013)

Overall, it wasn't very different from other blog posts that had detailed similar sentiments, especially when discussing Singapore's position in Southeast Asia. Yet, this blog struck a cord and evoked a response on e27 by an entrepreneur from the Philippines. His blog was titled "Think before you drink the Southeast Asia start-up Kool-Aid", commenting that Southeast Asia is a fiction - a Cold War construct that puts all these very different markets in one bag. Arguing that the entrepreneurs and investors "tend to overestimate the market opportunity, and underestimate the fragmentation," (Segovia 2013) he resented the push from investors he had met towards start-ups needing to have a "Southeast Asia expansion strategy" in order to have chances of attracting venture capital. He identified legal, cultural, and economic (e.g. existing competition) differences between the countries, which, as he saw it, were so dramatic that it was impossible to talk about one regional strategy. Evoking his previous work experience at a large multinational company, he explained that even with the abundant resources the multinational had, it wasn't able to expand across the region as a blanket. Instead, successful products that sold very well in some countries would fail absolutely in others. Alluding to this widespread expectation to think about Southeast Asia as one market, he warned against it, saying that it's a delusion which many people are picking up just too easily.

This provoked a third blog post at Tech in Asia by a venture capitalist who immediately introduced himself and his firm as "big believers in a "regional strategy""

admitting that they also encourage and invest in the start-ups that want to ‘tackle *the region*’. Instead of trying to deny the fact that there is a significant difference between the countries in Southeast Asia, Matt fully embraced it, and similarly to Wei, he defined it as a ‘hard problem’ to be solved. For him, as an investor, it meant that a start-up company that has gone through ‘the hard work’ of building an international business would be rewarded for its efforts because it would be more appealing in the eyes of potential acquirers:

“When a startup handles the regional expansion, puts in the hard effort to build a regional company, the startup creates value for the acquirer and is paid back handsomely during acquisition, which is a win for both the VCs and the startup founders alike. As we like to say, hard work pays off.” (Walters 2013)

This perspective clearly reflected the investor’s bias that wants to imagine scale for continuous growth. In order to imagine the frontier - a space which needs to attract capital through its promise of huge potential, the imagination also needed to unimagine certain aspects of the terrain - in this case, everything that rendered countries and vast populations different and would create friction in streamlining and subjecting them to the ‘universal logic’ of market forces and capital. This imagination of future potential, expressed in geographical and political regionalisms such as Southeast Asia, was a necessary precondition for investment and Singapore’s centrality in this imaginary geography.

Visa runs and the boundaries

It was a lazy Sunday midday, and the area around Blk 71 was empty. As I approached the building, hoping to be able to catch up with some work, I noticed two Filipino entrepreneurs sitting by the edge of the building. One of them was John, who I introduced already in the Introduction. He was smoking. The other, Glenn, who was younger, in his very early 20s, was keeping him company. I was happy to see them because, on Friday, they had left Singapore on what was known as a ‘visa run’ - exiting Singapore briefly and returning in order to obtain a new tourist visa that would last another 30, 60 or 90 days, depending on from which country the person had arrived in Singapore. Visa runs were a precarious business, especially for founders from neighbouring countries such as the Philippines. It was very possible not to return to your working desk from such a ‘run’ if the immigration deemed your re-entry problematic. Even if it hadn’t happened

to anyone we knew directly, the stakes for both entrepreneurs were high since the possibility of not being allowed back into the country was terrifying. It would clearly put a big fat stop to their participation in The Accelerator program.

My eager greeting and questions about how the visa run went were met with shy smiles and embarrassed chuckles. John said that it went 'ok' and emphasised that the most important thing is that they are back here. The chuckles and the insistence to focus on the fact that they are back as the most important aspect of their trip made it rather clear that there was much more to it. Only after a while did they start sharing the still upsetting details of their experience over the past few days. They were from different start-up teams but had decided to go on the run together since both of their tourist visas were about to expire, and their teammates were entering and exiting Singapore at different moments. Their plan had been to exit Singapore to Malaysia and enter Johor Bahru, which is the most Southern city in Malaysia. It can be reached from Singapore by crossing the Johor-Singapore Causeway, which connects the two countries over the Straits of Johor. It is a busy crossing point with cars, busses, and motorbikes bringing tourists and locals, both Malaysian as well as Singaporeans. Especially on Fridays, at the end of the working week, it is a very busy place as many Malaysians working in Singapore return to Malaysia for the weekend.

To save money, they went to Johor Bahru by bus late on Friday night after the Friday pitching sessions and socialising with the investors had ended. Yet, arriving in Johor Bahru so late at night, they couldn't find a hotel. It was already late and pitch black, and they felt really lost. To find a solution, they decided to take a taxi from the bus station, asking it to bring them to a hotel. The taxi driver took them to a hotel but took advantage of their vulnerable situation by asking them a very high fee for its services. As John saw it - the taxi uncle ripped them off. Maybe the hotel didn't have a double room available, or it was too expensive for their tight budgets. Either way, both John and Glenn had to share the bed for the night. This was something they disclosed with an uncomfortable laugh, trying to ease their discomfort about the situation through humour. Luckily, the next morning, they found a bus back to Singapore, and after a few very stressful moments at the immigration point, when re-entering Singapore, they were back and could continue to work for another 30 days.

They had lost money from their already painfully tight budgets and had faced great uncertainty and embarrassment. For both of them, coming to Singapore was their first trip abroad. It is not hard to imagine how vulnerable such a 'visa run' made them feel - with a taxi uncle whom they expected to receive help from but were cheated, with a hotel room that cost them a fortune yet placed them in an awkward and what seemed to be somewhat humiliating situation. And above all, their precarious position was amplified by the threatening immigration checkpoints, where they faced a real possibility

of not being permitted back into Singapore and therefore put stop to their work at The Accelerator programme. It is quite understandable why they wanted to focus on the fact that they were back. That, indeed, was the most important.

Despite the fact that Singapore was attempting to position itself as a place for technology start-ups, the entry position for aspiring entrepreneurs was ambiguous since they rarely had a lot of capital to rely on, and their businesses were mere ideas rather than stable corporate entities that could provide the reasoning for their presence in Singapore. This made them precarious subjects in the face of Singapore's immigration policy, which was tailored to the specific needs of Singapore as a Global City. While the image of the world as its hinterland would imagine a free flow of capital, people, and ideas with no boundaries, Singapore was very specific about the sort of people and the terms on which it wanted to allow entry. Importantly, as scholars studying migration have pointed out (see, for example, Baas and Yeoh 2018), different migratory groups had different future horizons given in Singapore by the state, which sometimes aligned but very often clashed with people's own aspirations and visions of their life (Baas 2017).

Singapore's immigration policy was one of the actively used policy instruments Singapore exercised to regulate its labour market. Singapore, as a Global City, aimed to pick and choose and shift its hinterlands in relation to its manpower and migration policies. At the time of my research in 2013, Singapore's population was estimated to be 5.399 million inhabitants, out of which only 3.844 million were permanent residents (*Population Trends 2013*), which meant that nearly one-third of the population was transient and, to a large extent could be rather conveniently regulated through migration instruments such as visas and employment passes (see for example Abdul Rahman 2010). Singapore's development strategy over the years classified transnational labour into two major groups - 'foreign talent', which denoted the highly educated, mobile, well paid and welcomed group, and the 'foreign workers' - people allowed to enter Singapore for the purpose of semi or unskilled labour, usually in the construction, manufacturing and domestic help sectors. For the 'foreign workers', there were common 'source countries' such as Indonesia, Malaysia, Philippines, Bangladesh, India, etc., whose nationals typically would face higher levels of discrimination, were low paid and were explicitly allowed to enter Singapore for a limited period of time with no access to permanent residency.

Differing levels of discrimination and favouritism were also embedded in the tourist visa system. Some country nationals could receive visas on arrival, while others had to apply for them beforehand. Those receiving the visa on arrival would receive visas with different durations depending on the country they belong to. For example, for EU citizens, the duration of a tourist visa was 90 days. For holders of the Philippines

passport, it was 30 days. People who had Indian or Burmese passports had to apply for visas beforehand.

Most aspiring entrepreneurs that entered Singapore from abroad, whom I knew, did so on a tourist visa basis, with a visa issued upon arrival. Once in Singapore, the entrepreneurs usually tried to extend the tourist visa. If the extension was rejected or expired, they went on visa runs, which they usually continued up until the moment they could qualify for one of the more permanent passes - either an Employment pass or an S Pass for highly skilled professionals and mid-level skilled professionals, respectively. One of my interlocutors told me he had exited and returned to Singapore so often over the course of a couple of years that he was forced to make a trip to his home country for a passport renewal because his old one had no more space for immigration stamps. I have a suspicion he had more reasons to go home, but this half-joke, half-true comment is an anecdotal example of the lived experience that forced people to access the future in Singapore only by regularly exiting it.

Both the Employment and S-passes become available options only after the business has been already incorporated in Singapore and preferably at least six months old. Thus, this path was not viable for the entrepreneurs wanting to start their business. Additionally, these passes could be realistically obtained (and not without additional difficulties) at the moment the employing business has received external funding or made enough revenue to cover the minimal salaries necessary to employ an employee - for Employment pass the minimal salary at the time of my research was \$3,300 and for S-Pass it was \$2,200, translating to roughly 2,200 and 1,500 Euros respectively. The actual costs for the company to pay for those passes were higher because, in addition to the salary, for the S-Pass holders, the company also had to cover medical insurance and a monthly foreign worker levy that could amount to up to 750 SGD or 500 Euros a month.

There was a special pass aimed at “foreign entrepreneurs wanting to start and operate a new business in Singapore” (“EntrePass,” n.d.). It was called Entrepass, and this was the only pass that one could apply for with the intention of establishing a business in Singapore. However, the Entrepass seemed to imagine a very different kind of entrepreneur - one that was far removed from people like John or Glenn. In order to qualify for this pass, the applicant needed to show proof of at minimum 50,000 SGD (roughly 32,500 Euros) of paid-up capital and either had to hold Intellectual property or had to be on contractual terms with a Singapore government-accredited venture capital or education institution. Theoretically, there was also an option for the Work Holiday Program, which allowed students from a university in Australia, France, Germany, Hong Kong, Japan, New Zealand, Switzerland, the United Kingdom, or the United States aged 17 to 30 to spend up to six months in Singapore for the purpose. Yet, very few of the entrepreneurs I knew could make use of it. All these passes had to be usually renewed on an

annual and biannual basis, and since there were nationwide quotas of how many pass holders could be at different categories, there could never be a certainty that one's pass would be extended. The issue of organising one's stay in Singapore has become especially problematic since the 2011 General Elections, especially since the so-called Population White Paper protests, which took place in 2013 and will be described in more detail in Chapter Two. During this time, growing anti-immigrant labour sentiment was articulated and voiced strongly.

The national boundaries exemplified by the need for visa runs were one such aspect that the imaginary geography of Singapore as the hub of the region wished to unimagine. However, these boundaries were very real and, for many of the entrepreneurs who came to Singapore, a constant worry. It was not always as upsetting as in the case of Glenn and John. Clearly, depending on one's wealth and country of origin, the levels of experienced precarity varied. Entrepreneurs from within the region often combine visa runs with their visits home for family and business reasons. Those who had relocated to Singapore from further away and had more wealth used these if not for business, then for vacations on the beaches of Phuket in Thailand or Bali, Indonesia, to name a few popular destinations. Yet, it was always a matter of time and money. Those who had neither resorted to the more risky but quicker and cheaper run to Johor Bahru in Malaysia. Especially the entrepreneurs from the Philippines, India, Thailand and Indonesia - countries on which Singapore relied for much of its immigrant workers who fulfilled lower-skilled jobs and thus were subjected to much stricter regulations and control from the government. They faced much more thorough questioning at the immigration checkpoints and, in private conversations, have remarked that exactly the visa runs with the uncertainty they carried with them were the hardest and the most unpleasant part of the experience of building a business in Singapore. National boundaries and migration regimes structurally made different types of futures in Singapore possible for different groups of people with different levels of ease. In this way, the lived experience of trying to locate a start-up in Singapore as the launchpad for the rest of the region reveals itself as more of an ideal rather than a straightforward practice. The future in Singapore turned out to be accessible only through temporarily exiting Singapore—both in terms of business and physically for the founders themselves.

6. Conclusion

Throughout this chapter, I showed that geography and how it is imagined also matters in the new economies of technology entrepreneurship. Despite highly utopian

assertions in the early 1990s that digital technologies connect everyone everywhere, geography and places have never ceased to matter, nor are they overtaken by abstract cyberspaces. Even more so, not all places matter in the same way. Despite ideas about globalisation sweeping the globe as a wave, it connects places and disconnects others, often at the same time. In this chapter, I used the notion of 'imaginative geographies' (Said 1978) to explore what kind of image of the world and what kind of understanding of Singapore's position in the world vis-a-vis other spaces informed and structured the technology start-up culture in Singapore, and vice-versa, how through technology start-up related practices such as blogs and start-up conferences these discourses had material consequences. Therefore, in this chapter, I proposed that exploring the global power dynamics as captured in the practices of constructing imaginary geographies is a fruitful way to study futurities ethnographically.

I used the notions of 'scale-making' and 'conjuring' developed by anthropologist Anna Tsing to highlight how these processes of imagining specific scales such as 'national', 'regional' or 'global' informed the flows of capital, people and ideas. These concepts helped to show how these processes of imagination relied on generating difference and perpetuating inequality, based on unequal global power relations where Singapore was imagined to stand between the 'more in the future' Silicon Valley and 'hungry-for-development' 'Asia'. I examined what sort of temporal relationships and social and historical contexts generated and sustained the appeal of this geography and explored the limitations of this futurity ethnographically.

Laura Bear has argued that "racial, gendered, national and other imaginings of the social permeate acts of speculation." (Bear 2020, 1) and "speculation conjures social distinctions and capitalises on inequalities of race and nation" (Bear 2020, 9). My research started at a time when the 2008 financial crisis had scarred the Western economies, and surplus capital was searching for new, more opportune places for growth. In this larger global context, the techno-orientalist narratives about Asia being the location of the future resonated with a new-found force. An older narrative of 'Asia on the Rise' was re-casted as 'the Asia Opportunity' for the entrepreneurially minded and those with capital to spare. It imagined 'Asia' as in need of digital services that could be delivered by Singapore-based start-ups drawing on the knowledge of 'Asia' and the appropriation of practices of Silicon Valley. The identification of an "Asian opportunity" and how it connected to Singapore was a complex overlap between a particular understanding of economic progress, Singapore's government's endorsed narrative of Singapore's history, nation branding, and policies, and equally important, also a particular ethos associated with entrepreneurship that requires an imagination of a 'frontier zone'. The notion of 'scale' here featured as an emic, aspirational term crucial for directing capital, people and ideas. In the chapter, I argued that the imaginary geographies of technology

entrepreneurship relied on a linear temporal imagination, which organised spaces in hierarchical relationships. Silicon Valley was imagined to be in the future and set the standard for how the future would be; Singapore was trying to catch up with it by using its temporal advantage over the temporally distant Asia, which was seen more in the past (yet with a pre-determined future in the context of sinofuturism). The images of the future that animated and drove Singapore's appeal for international finance and entrepreneurship relied on an imaginary geography characterised by temporal incongruity and denial of coevalness. 'Asia' was implicitly construed as less developed, as the future of its development would provide spectacular growth opportunities.

The Asia opportunity narrative seemingly envisioned an alignment between the Singapore government's wish to see Singapore as a 'global' city, investors' aspirations for high returns on capital, and entrepreneurs' wish to build innovative businesses and change the world. The scale and growth opportunities had to be imagined in order for the scale-making projects to bring different players together. The blogs and conferences were working to benefit from and, at the same time, entrench this narrative, enacting a flexible regionality where Singapore stood central. Yet, they also provided opportunities to challenge it, and through the chapter, it became evident that the entrepreneur is positioned precariously in this imagination of start-up futurities.

While this imagination of Singapore as a global city positing the region as its hinterlands is one that entrepreneurs also embraced due to the aspirations of scale, in practice, this movement between 'the centre' and its 'hinterlands' was filled with frictions. Imagination and unimagination had to work hand in hand for successful scale-making and future conjuring processes. Discussions about the actual diversity within the region and the practice called 'visa runs,' illustrated how much struggle and work awaited those who wanted to pursue start-up futurities. This complicates the simplistic imagination of Asia on the rise and Singapore's imagination as a Global city as inevitable, natural futurities and highlights the work and the friction that was part of these futurities. By describing the 'Visa runs', I showed how old power hierarchies revealed themselves and structured the possible futures as well as the shame and vulnerability the interlocutors from around the region experienced to access their future in Singapore. Similarly, entrepreneurs drawing on their own experiences argued that the imagination of scalability at the regional level required them to unimagine the local diversity that they actually had to deal with when starting to build their businesses.

This leads me to conclude that the imaginary geography of start-up futurities was essentially a neo-colonial capitalist imagination of the future where development happens through inclusion in the market. It shows that old geographies of power have not necessarily disappeared but underlie and inform the new geographies of technopreneurship and innovation futures. While Silicon Valley has a well-established history

of claiming the technology innovation futurities globally, the same may be said of Singapore at the regional scale. Despite its humble origin story, it was a regional colonial centre, even as part of the British Empire (see, for example, Bunnell 2016). Similarly, the narrative about Asia on the rise gains its strength from decades of techno-orientalist imagination and fear of the West losing its economic and cultural dominance. Such teleological imaginations, which deny coevalness to countries, places and people coexisting simultaneously, is bound up with the imagination of a deeply hierarchical geography. In that regard, then, it does not matter whether the source of the future is set to be in Asian or Euro-American urban centres because both aim to deny the multiplicity of futures-in-the-making inherent to any particular context and locality, which is what I will explore in greater detail in the next chapter.

Technopreneurship and Singapore's Future

1. Introduction. Historicising futurities

In 2000, as the Dot-Com Bubble was bursting in the USA, an American researcher studying technopreneurship in Asia provided in his blog an analysis of what was happening in Singapore:

"1996 was the year in which the Internet first began to boom in Singapore, and since then the country has witnessed an equivalent boom in entrepreneurial spirit. Inspired by the tales of the initial Internet-made millionaires from America, Singaporeans have jumped on the Internet and technological bandwagons and intend to ride them for all they're worth. The term "technopreneur" has become one of the hottest buzzwords in Singapore to describe people who are willing to embrace risk and take the entrepreneurial plunge into industries ranging from IT to biotech. With the founding of hundreds of new technology startups in the past few years, the government has decided to promote technopreneurship and reap its rewards. For technopreneurs in Singapore, this translates into the paternalistic support of a government that is suddenly bent on facilitating the success of homegrown startups." (Burnett 2000)

The author identified the dominant tropes within the knowledge economy - entrepreneurship, information-based industries such as IT and biotech, risk-taking individuals, "get-rich-fast" success stories, and Singapore's particular brand of overtly controlling government. However, locating the beginnings of technopreneurship in Singapore in the mid-1990s, even if not wrong, might be somewhat misleading. I argue that taking a more historically embedded perspective reduces the risk of seeing technopreneurship as a preoccupation merely inspired by American success stories and the knowledge economy as a 'global' phenomenon that gradually spreads over the world

as a new stage of economic globalisation. Instead, what I aim to show in this chapter is that the shift towards a knowledge economy and technology entrepreneurship is much older and has acquired a meaning that is particular to Singapore. Even if it is a global trend that heightened in the 1990s, the way it comes to life is local, and particularly Singaporean.

In this chapter, I propose that to study futurities ethnographically, one needs to approach them historically and in local settings. I view technology entrepreneurship or technopreneurship and start-up culture to be part of a larger shift towards a knowledge economy in Singapore, which is also occasionally referred to as the 'new economy'. Importantly, it articulates a particular vision of the nation's future that fits in a longer trajectory of how Singapore has been self-identifying as a nation and how it has generally approached the future. Singapore should not be seen as 'copying a standard' when it comes to fostering its start-up environment; there is no pure 'original' that gets tainted by local particularities. Therefore, in this chapter, I argue that technopreneurship, how it became a buzzword in the 1990s and captured the minds of my interlocutors during the years of my research, needs to be seen in the context of Singapore's knowledge economy aspirations, which are rooted in the political economy of development and Singapore's colonial history, consolidation of power by Singapore's only leading political party - the People's Action Party (PAP), nation building and Singapore's geopolitical considerations just as much as the success stories rising predominantly from the United States and circulating via international media. This more historical approach towards start-up activity comes in contrast with the predominantly future-oriented stance of my interlocutors, who very often assumed that 'the start-up space in Singapore' was always just 'recently' active and everything exciting was yet to come. Moreover, most of my informants constantly looked to the entrepreneurial success stories as the ones that define what start-up entrepreneurship is and should be and compared their efforts to them. Focusing on start-up entrepreneurship, particularly Singaporean, I aim to avoid comparison but examine how it fits or clashes within a longer historical trajectory.

Overall, this analysis of how the knowledge economy future has been articulated by political elites in Singapore will highlight the instrumentality of futurities in claiming power and control. Paying attention to the politics of claiming futures directs this chapter to planning and the organisation of space within Singapore. The futurities associated with the coming of the knowledge economy presupposed a necessary urban transformation. This chapter will zoom in on one such infrastructure project called one-north (written in lowercase in official documents), aimed at welcoming the knowledge economy in Singapore. Focusing on space will reveal both the multiplicity of futurities and contestations regarding them.

While planning is considered to be central to how modern nation-states engage

with futurities, this chapter will draw attention to the limits of planning, especially when examining spatial transformations and how those shaped people's experience of place-making. Discourses materialise in many ways, and I argue that looking at how they relate to space is a particularly productive approach when studying futurities ethnographically. When materialised into space, futurities gain different levels of permanence and malleability. I will show how exactly, in relation to spatial arrangements, people were articulating their concerns about the future proposed by the government and its viability, questioning whose future this will be. It is also in relation to space that I could ethnographically engage with the multiplicity of futures and the work of 'un-imagining' and 'unseeing' necessary to imagine the coming of the knowledge economy.

First, I will introduce the historical narrative of Singapore's past and its emergence as a nation-state and how this very specific narration that relied on the fear over the non-viability of the future for Singapore, which has been instrumental in how Singapore's leading political party has managed the republic. What will become apparent in this chapter is that the knowledge economy with start-up entrepreneurship is a vision of the future for Singapore proposed and actively pursued and endorsed by the government. Based on an analysis of secondary sources regarding the coming of the knowledge economy, I will distil two narratives dominant in explaining how the future of the knowledge economy is arriving in Singapore and where the agency over this future was located. I will show that it was positioned as either external or in the hands of the government. Notably, both legitimised serious interventions in education, labour management, urban arrangements and infrastructure. While on the one hand, discussion of the coming of the knowledge economy usually is framed around how different the new stage of economic development is, this chapter will show that its narration in Singapore relies on a longer tradition of how Singapore's future has been discussed. Therefore, attending analytically to how futurity is narrated can give a more balanced perspective above certain hypes. Much like earlier visions, knowledge economy futurity relies on a typically modern imagination of unilinear growth and development, where the future is considered open for creation and empty to produce economic wealth. Singapore's government has tried to control tightly the futurities that could emerge within the nation-state.

Acknowledging that people can engage with politics of temporality in relation to space, this section then picks up on some of the tensions that arise in relation to the coming of the knowledge economy in Singapore's society, such as concerns about increasing inequality and density of urban life. This chapter concludes by zooming in on Blk 71 - a former factory building planned to be demolished to give way to one-north development, yet temporarily given for technology start-ups. Looking at Blk 71 will show how, despite a strongly controlled narrative over the future, the daily practices and material

infrastructures also challenge such master narratives and reveal the ever-present multiplicity of futures.

2. Knowledge Economy as the Future for Singapore

From the moment your plane lands in Singapore, you are struck not only with the humid boiling heat of the tropics and the way it clashes with the icy crisp air-conditioning the moment one walks indoors but also the incredibly well-planned, clean, fashionable and organised space. The latter will strike you even more strongly if you arrive from any of the neighbouring countries in the region. As scholar Victor Savage has pointed out in his description of Singapore:

“What the landscape epitomises is the human mastery over nature. Like the economic and political sectors, the Singapore landscape reveals absolute planning. Nothing is left to chance. Practically every tree and dustbin is in a designated public space, a product of overall design and conscious policy making.” (Savage 1992, 235)

Indeed, the following ride from the airport with a GPS-equipped taxi or with the air-conditioned metro which has been described by one CNN article as ‘oozing future’ (Kristensen 2015) brings you smoothly in the centre of Singapore showcasing wide highways surrounded by well-groomed tropical flower beds, parks and organised high rise living blocks along the way. When you reach the downtown or the central business district, you’ll be blasted with a stunning view of spectacular, sparkling skyscrapers and globally iconic massive structures such as one of the world’s largest ferris wheels called the Singapore Flyer, or the impressive ship-shaped Marina Bay Sands hotel and casino skyscraper. The city glisters. It is a spectacle of and for capital. For example, Singapore’s Economic Development Board’s (EDB’s) email newsletter with business news sent to presumably foreign audiences interested in economic opportunities in Singapore has a motto: “Singapore - Future Ready”. The urban environment certainly tries to amplify and confirm this slogan. The surface is seemingly clean, green and neatly organised.

Singapore’s associations with the future are no coincidence. Ever since the establishment of independent Singapore, its appearance has been meticulously planned and groomed to appeal to such business-oriented people as the recipients of EDB’s newsletter. Lee Kuan Yew, Singapore’s first and longstanding Prime Minister is quoted saying that “In wooing investors, even the trees matter” (Koh 2000, 40). Environmental law

scholar Koh, for example, explains that part of the rationale behind Singapore fashioning itself as a 'garden city' had a lot to do with showing the grip the government has over its territory in order to convince investors that their future investments will be safeguarded: "well-kept trees and gardens were a subtle way of convincing potential investors, in the early crucial years, that Singapore was an efficient and effective place." (Koh 2000, 40) The tiny city-state is known worldwide for its dramatic transformation "from third world to first" during the second half of the twentieth century. This economic, social and technological development success is often attributed to the Singapore government's strategic planning and tight management (Kuan Yew 2000) and the control over space is meant to exemplify this.

Even if Singapore has been internationally critiqued for its strict management of the population and repression of political opposition, many people I worked with appreciated Singapore exactly for how organised the space is. Illustrative of the kind of relation that this organised space evokes in many people who arrive in Singapore is a conversation I overheard between two Europe-born entrepreneurs and investors based temporarily in Singapore. One explained -

"When I land in Changi [airport], I feel like I want to kiss the carpet-covered floors because I know that from this moment on, no one will attack me, no one will try to rob my wallet or steal my laptop."

"Yes," the other joined in laughing, "the floor is so clean that you can actually do it. And you know that the taxi uncle will bring you to your destination without cheating you, there won't be any delays and you actually can get work done."

My interlocutors here emphasised the sense of security and what they called a 'no-nonsense' environment where one can proceed with doing business smoothly, unhampered by problems such as crime, pollution, malicious service providers, surrounding poverty, or bad infrastructure. The environment in Singapore presents itself as optimised for productivity and capital accumulation. There is seemingly no friction. It celebrates a story known as 'Singapore's success' and projects it into the future. Yet, the government and most Singaporeans will be quick to remind you that it wasn't always so and should not be taken for granted.

"(..) Singapore did not seem to be able to survive. (..) We survived. Later we prospered. How did it happen?" (Lee Kuan Yew, 'Lee exhorts the young to know about the past', Straits Times, 16 November 1984, quoted in: Hong and Huang 2008, 5)

Contemporary Singapore is praised and admired for its incredible economic success over the course of its history. Yet, this story of success is always presented against the backdrop of the 'unpromising beginnings' of Singapore. According to the founders of Singapore's nation-state, there was 'no future' for an entity such as Singapore - an idea of independent Singapore back in the 1950s was thought of as a 'political joke', an inconceivable scenario for the same political elites which later, on August 9, 1965, announced the establishment of independent Singapore. Understanding how this perceived 'lack of the future' for Singapore has played throughout the years is crucial for understanding how the idea of Singapore's future tied to the knowledge economy was introduced.

The official narrative of Singapore's official history starts in 1819 (Hong and Huang 2008), when on the swampy island at the tip of the Malaysian peninsula, humid and swallowed by the jungle, Sir Stamford Raffles arrived with his vision of establishing a trading post for the British Empire. From 1826 till 1959, Singapore's territory was part of the Straits Settlements, administrated by the British East India Company. Chinese, Indian and Malay migrant populations flocked to Singapore's harbour to serve the entrepôt economy. The Japanese occupation in 1942, however, revealed the fragile position Straits Settlements play in the Britain's Imperial plans. The occupation had left Singapore impoverished, with destroyed infrastructure and dysentery plaguing its malnourished population. The violence of Japanese occupation and the inability of the British government to protect and care for Singapore's inhabitants led to anti-colonial (yet not necessarily anti-British) political activism, resulting in the right of self-government in internal affairs. The struggle for colonial independence in Singapore, however, was not conceptualised in terms of Singapore's nationalism. Instead, the territory of Singapore was thought of as part of Malaya (later Malaysia). Consequentially, the emerging political elites in Singapore promoted and achieved Singapore's inclusion into the Federation of Malaysia. Yet, political struggle and racial conflicts led to Singapore's severance from the Federation only two years later.

This moment of separation was also simultaneously the birth of an independent Singapore. According to historical commentators, it couldn't be more dramatic - trauma in the national psyche in a Freudian-like manner - rejection of the tiny and weak

Singapore in the stormy waters of Southeast Asia, expelled to be alone and perish. Singapore's emergence, which is often described as "unpromising beginnings", plays a crucial role in the way Singapore's future has been conceptualised by its political elite and understood as part of its historical trajectory.

The fragility of Singapore's condition at the time of separation from Malaysia is exemplified by the "moment of anguish" when, on August 9, 1965, Lee Kuan Yew broke down in tears announcing the news of separation. The following day the Straits Times gave an account of Lee Kuan Yew's speech and emotional collapse:

"Everytime we look back to the moment we signed this document this is for us a moment of anguish." Tears. "For me it is a moment of anguish. All my life, my whole adult life, I have believed in merger and unity of the two territories..." His voice faltering, Mr. Lee added: "We are connected by geography, economics and ties of kinship It broke everything we stood for." Mr. Lee broke down. Tears rolled down his cheeks. For a moment he buried his face in his hands. He started to speak, then broke down again. Apologetically, he said he was far too angry to go on with the subject. (Sam 1965)

The depiction of the early years and their vulnerability are supported also by describing the unstable international political climate, communist tendencies within Singapore as well as outside it, Indonesian aggression towards Malaysia as well as the decision of the British to withdraw their military basis from Singapore, which at the time contributed to roughly 15% of the newly established state's economy. These narratives, which have been thoroughly incorporated into the way Singapore's history and consequentially national identity is narrated, establish Singapore as a tiny island with no resources, no economy, a poor population and a new government, which is threatened by internal and external political adversaries.

19 years after the establishment of independent Singapore, at the opening of National Exhibition, Lee Kuan Yew asked, "Many wrote off independent Singapore. We survived. Later we prospered. How did it happen?" (Hong and Huang 2008, 5). Singapore's remarkable development is always depicted against this dramatic and bleak background, which emphasises the fragility of Singapore and the nearly supernatural insight of its political elite, which has allowed it to surmount the obstacles. Terence Chong (2010), the editor of the second monumental edited volume which explores the success of Singapore puts it together fluently:

"It [the story of Singapore] is a story of a little island, cut

from its hinterland and saddled with the challenges of mass housing, high unemployment and an uncertain future. Regardless of storyteller, the Singapore success story has always unfolded in a consistent manner. It begins with the "moment of anguish", a painful self-realization of an unformed nation, the existential fear for one's self, followed by the Herculean effort to overcome all the odds, and finally, the achievement of success. Through hard work, pragmatic policies and sound leadership, the island made the transformation from an "absurd proposition" to a global city." (Terence Chong 2010, 1-2)

Consequently Chong notes that the "obstacle-triumph binary" has become a leit-motif of Singapore's story and crucial to the Singaporean identity (see also Boon-Hiok 1978). Singapore's success story, epitomised in its cityscape, has been built on an 'obstacle - triumph' binary ever since the very beginning of Singapore's independence.

According to arguably Singapore's most prominent sociologist, Chua Beng Huat, such framing is exemplary of what he calls the 'ideology of survivalism', which, together with 'pragmatism' has "served as the basic concept for the rationalisation of state policies that extend beyond economics to other spheres of life." (Chua 1995, 4) Chua rightfully notes that survivalism "creates a state of uncertainty, providing operational room for the second concept [pragmatism], which given the context, meant 'doing whatever is necessary to survive'." (Chua 1995, 37). What is of importance here is that through such particular temporal framing, political power is able to control the understanding of the present and define the appropriate manner in which to proceed. Controlling the future is a political strategy in the present.

Questions regarding survival are questions regarding the possibility of having a future. In this regard, Sandra Wallman (1992) has argued that "Belief in the future underpins the sense of self and its survival," and "changes in those beliefs, however generated, can work radically to alter the way individuals and groups relate to each other, to the natural environment, and to culture itself." (Wallman 1992,16). Thus, the existential threat that is formed to be part of the existence of Singapore allows us to define the present as in need of a 'pragmatic' response. Rendering Singapore's future as fragile and endangered evokes the notion of crisis. 'Crisis' as Janet Roitman reminds us is a powerful temporal category. Roitman explains that the construction of crisis requires a normatively charged imagination of the difference between the past and the future and, more importantly, that evoking crisis "allows certain questions to be asked while others are foreclosed." (Roitman 2014, 94). Claiming a sense of crisis enables political players to resort to a much wider arsenal of political tools for control and to redefine what was and what needs to be.

Essentially, it was under the rhetorics of survivalism and pragmatism that the People's Action Party (PAP) was able to consolidate its power and implement the dramatic modernisation and industrialisation programs that, as the story goes, 'transformed the tropical island into a metropolitan city'. An important effect of discussing Singapore's future in terms of survival is that it limits the discussion of multiple possibilities. For example, Savage (2004) has argued that the political discourse emphasises a lack of margin for error. Either Singapore succeeds or perishes, two binary options. Thus, any alternative to the government's vision that wouldn't be 'pragmatic' would mean the opposite of Singapore's survival, which in Singapore is predominantly defined in terms of economic progress (See Chua 1995, among others).

It is through the use of such diametrical contrasts that Singapore's government gains its legitimacy, leaving very little 'grey' area for discussion of alternatives. While it is more common to think of nation-building rhetorics as based on the imagination of a utopian future (Dzenovska 2012) and in particular, development narratives needing to be based on the future-positive scenario (Mosse 2005), in Singapore's case the fear of 'perishing' or the fear for survival serve as equally potent background that is necessary for any promise about a better future to work. Thus, in Singapore's case, the fragility of futurity is an element that crucially structures the present and the near future possibilities.

Historicising the way national future(s) are narrated provides two benefits. Firstly, it opens up the notion of 'future' as a politically neutral temporal category of the times to come and explores how futurities get defined in a process of negotiating power - the power to define what has been, is and will be. Secondly, it enables us to explore recurring patterns in how temporal trajectories shape the introduction of new ideas, in this case, the knowledge economy, and are used to delineate the relevant actors and available actions. The next section will turn to the question of the knowledge economy as Singapore's future.

Naturalised vision of an inevitable future

The articulated direction towards the knowledge economy in Singapore dates back to the early 1980s, when the government published its Economic Development Plan (1981). The plan stated the ambition for Singapore to become a "modern, industrial economy based on science, technology, skills and knowledge." (Yuen 1992) Singapore's economy until then focused on manufacturing, albeit already higher-end manufacturing. For example, between 1986 and 1996, 45-50% of the world's hard disk drives were produced in Singapore (McKendrick, Doner and Haggard 2000). Singapore was also the

first location outside the USA to produce Apple computers.

Even though the plan was later abandoned (Heng and Low 1993), the approach towards increasing higher value production, focusing on services and fostering computerisation grew in importance. Anna-Katharina Hornidge has argued that the arrival of the knowledge economy in Singapore has been “offered as a visionary guide for collective action and a focal point of collective identity reducing feelings of insecurity and uncertainty” (Hornidge 2010, 785). Economic development has been the prime priority in policy planning and is characteristic for the so-called ‘Singapore’s success story’ (see, for example, Roy 2011). I agree with Hornidge in that the knowledge economy in Singapore has been introduced as a path of action towards long-term economic prosperity, and thus provides a utopian future-positive vision, but as this and the following sections will show Singapore’s future relies not only on the future-positive imagination, but also gathers its strength from future-negative scenarios. The fear of a dystopian future turns out to be an equally powerful motivation.

Either way, though, as a vision for the future, the knowledge economy in Singapore has been narrated by various officials in a highly deterministic manner, naturalising its coming as inevitable if Singapore wants to ‘succeed’. For example, Coe and Kelly (2000) note that while it is hard to pinpoint the exact moment when exactly the knowledge-based economy (KBE) started to dominate the public discourse in Singapore, “By mid-1999, the term ‘KBE’ had seemingly entered the common vocabulary of all Ministers, bureaucrats and media commentators in Singapore.” Drawing parallels with the notion of ‘globalisation’, they explain that “Rather like the notion of globalisation, the KBE has assumed an air of inevitability; it is an unassailable trend in the global economy to which Singapore must respond.” (Coe and Kelly 2000, 418)

It is this aura of *inevitability* and how it features in the variations of knowledge economy narratives in Singapore that I wish to explore in more detail. Based on a reading of a range of sources such as economic reports, policy documents and public speeches, I suggest there are two main narratives of the knowledge economy and how it relates to Singapore. I call them the ‘incremental growth’ and ‘fragility’ narratives. Both of these narratives naturalise the knowledge economy as the future and present its arrival as the only possible way to ensure a prosperous future for Singapore. Both are argued in relation to neoliberal market principles. In one case, progress is a result of internal economic development; in the other, progress is external and needs to be caught up with. Thus, both, in a similar way, foreclose any possible discussion about alternative futures. They are not clear-cut and very often, despite their contradictions, are used together in public speeches, policy documents, academic analysis and media in explaining why and how the knowledge economy relates to Singapore. Together they preclude any meaningful discussion of alternatives.

The 'incremental growth' narrative

The 'incremental growth' narrative regards the coming of the knowledge economy in Singapore as a seemingly *natural* process. The next logical step, so to speak, is the development of Singapore's economy. It is a future unfolding and there is little or nothing that can be done about it. This view sees continuity in Singapore's economic development and seems to be slightly more popular amongst academics, especially economists and analysts of Singapore's innovation systems (see for example Wong and Singh 2011; Koh and Wong 2005; C. Y. Kuo; Linda Low 2001; Corey 1991).

The incremental growth narrative is partially rooted in the way the knowledge economy was initially identified in the 1960s and 1970s through the works of Fritz Machlup (1962) and Mark Porat (1977), who saw progression towards a more service-based economy as a 'typical' trend amongst industrialised countries. So, for example, in 1983, economists Jussawalla and Cheah published a journal article titled "Towards an Information Economy: The Case of Singapore", explaining that "recent empirical studies have documented the emergence of information-based economies in developed countries within Europe, the U.S.A., Japan, and Australia. Casual observations suggest that the newly industrialising country of Singapore is proceeding towards a similar trend" (Jussawalla and Cheah 1983, 161) and proposing that it's important to account for the contribution informational activities make to Singapore's national economy.

More recently, such a view has also been encouraged by the knowledge and skill 'spillover' concept in economic theory, popularised by the influential strategist Michael Porter (whose intellectual influence amongst Singapore's government has been tremendous). According to this narrative, Singapore's economic strategy had always relied on industrialisation and increasing connectivity with the rest of the world. As Singapore's economy developed, so did the technological capabilities and the skills and know-how of its manpower. Eventually, then, it was somewhat '*natural*' that Singapore moved on to more and more knowledge-intensive production. Occasionally, this narrative harks back to the arrival of Sir Stamford Raffles to Singapore in 1819 to show the historical continuity of Singapore being the hub of the region. Projecting this 'Singapore as the regional melting pot' position back into history implies the naturalisation of Singapore's current position as the information and services hub of the region (see, for example, Bishop et al. 2004).

The 'fragility' narrative

The other strand, which I call the 'fragility narrative', however, takes an opposite stance. Instead of suggesting that Singapore's move towards a knowledge economy was a natural evolution, it emphasises that it was a radical break from its earlier pol-

icies, a forced survival strategy that Singapore had and still has to rapidly implement in order to survive in the dramatically changing international context. It emphasises that Singapore, being a small territory with an open economy and highly dependent on the external environment, just has no other choice than to start moving towards a knowledge-based economy and higher value-added production. The sweeping nature of globalisation and the rise of competition from India and China, as well as neighbouring Southeast Asian countries, are presented as risks for Singapore's future and, therefore, require Singapore to devote whatever resources it can to be one step ahead of the rest of the world. This narrative, instead of presenting a seemingly 'natural' continuity in economic development, displays a break in Singapore's economic development approaches. It similarly acknowledges the growing importance of the knowledge economy but presents it as a global trend that Singapore can either join or 'be left behind'. For example, scholars Heok and Luyt, analysing the discourse of Singapore's first IT plan IT2000 issued by the National Computer Board, note:

"Singapore could not afford to be left out of the race. There was a palpable sense of urgency that could not be shaken as readers of the report were buffeted by images of Singapore's vulnerability, of it being a "small player" and "compelled to be 'open' in order to flourish", how it was subjected to the "full blast of the 'new information order'." (Heok and Luyt 2009, 82-83)

This version of the knowledge economy in Singapore seems to be more common among politicians, government-issued reports and policy documents.

Even though these narratives are contradictory, they do not necessarily mutually exclude each other. A range of scholars have depicted a combination of these narratives, where Singapore's future is threatened by external sources but despite that, its economy has always been on its progressive path. This mixed narrative usually focuses on the superb supervision by Singapore's foresightful political leaders (see, for example, Meng 2010; Lim and Lee 2010, 153; Yue and Lim 2003; Yue 2005).

Both of these narratives stem from a much wider discourse that is familiar in Singapore - they align with the 'obstacle/triumph binary' in which Singapore's 'success story' has been narrated historically. They represent the utopian and dystopian endpoints of a spectrum in which Singapore's past, present and future are discussed. The 'incremental growth' and 'fragility' narratives draw their power from Singapore's success story that relies on the 'obstacle-success' binary. Both narratives seem to take economic growth as the core measure of progress and the passing of time, where the future is accessible through economic growth. This deterministic narrative, which, rather than describing

any 'objective' reality, serves political and economic interests, should be understood historically. Importantly, it should be clear that such instrumental use of 'future' legitimised a whole array of interventions and transformations, one of which, one-north, will be the further focus of this chapter.

3. Planning the Future and Urban Space

Planning is often understood as central to the way modern nation-states engage with and craft futurities. It is assumed that through plans, particular ideas about the future are laid out - plans usually express certain visions of the future and assumptions about the necessary action to achieve that vision. Scholars studying changing forms of future have remarked how future has increasingly become an area to govern and in particular, to be governed through blueprints and plans:

"By the time the idea of progress had taken hold, people rather than their gods were in charge of the future. (...) Like any other territory which was subject to human design, planning, management and regulation, the future became a realm to be administered. This in turn brought forth new experts on the subject, in this case not experts who would predict what was going to happen to the lives and plans of individuals and groups but specialists in producing futures to blueprints, which meant achieving desired results in and for the present." (Adam and Groves 2007, 80)

As such, planning should be understood as a typically modern way of dealing with the future. Planning as a practice relies on a certain form of future - namely, an *open future* - a future that is imagined to be open for human intervention. However, it is not only open but also available to be imagined in a way that the present sees necessary. This form of open future is what enables much of the planning that goes on and creates the discrepancy between the projected future and the actions made in present. As Adam and Groves describe the open future:

"Emptied of content and meaning, the future is simply there, an empty space waiting to be filled with our desire, to be shaped, traded or formed according to rational plans and blueprints, holding out the promise that it can be what we want it to be." (Adam and Groves 2007, 11)

Singapore's approaches to development planning are instructive in highlighting how planning as a mode of governance relates to futurity. What characterises most development policy visions is that, for the most part, they are 'future positive' - they argue that the future will be better (Mosse 2005) if the policy measures are implemented properly. Also, in Singapore, we see how planning and projecting are some of the central ways the government organises its relationship with its subjects. Importantly though, planning happens *in space*: "Planning is a form of conceptualizing space and time, and the possibilities that time offers space." (Abram and Weszkalnys 2013, 2) It was through the planning and control over the physical space that Singapore's government gained its legitimacy and trust not only in the eyes of its population but also in foreign investment to which Singapore has tied much of its economic development.

Thinking of planning as a technology and exercise of government (Scott 1998) then points us to the state's ability to control the present moment as much as the passage into the desired future. In that regard, Singapore is often characterised as highly controlled and managed - a space where the *high modernism* with its goal of "sweeping, rational engineering of all aspects of social life in order to improve the human condition" (Scott 1998, 88) has been brought to its fullest. Architect Rem Koolhaas has put it very illustratively:

"It is managed by a regime that has excluded accident and randomness: even its nature is entirely remade. It is pure intention: if there is chaos, it is authored chaos; if it is ugly, it is designed ugliness; if it is absurd, it is willed absurdity. Singapore represents a unique ecology of the contemporary." (Quoted in: Olds and Yeung 2004, 491)

In Singapore, urban development is usually organised through a three-level planning hierarchy. The overarching planning is done through the so-called Concept Plans - plans that outline a specific vision of the whole country for 20-30 years, reviewed on a 10-year basis. For example, multiple scholars have pointed out that the 1971 Concept Plan "hinged on far-sighted planning for industrialisation and economic growth." Yet the 1991 Concept Plan "has been described by one of its planners as a 'far-reaching plan for everyone, touching on all aspects of life from business to leisure. Its powerhouse is economic growth.'" (Eng 1992, 178) The Concept Plans are followed by "Development Guide Plans (DGPs) which translate the broad objectives and policies of the Concept Plan into specific plans for individual areas." (Eng 1992, 183) And those are followed

by Master Plans that layout zoning of the land for the following 10-15 years, reviewed on a 5 year basis (Heng and Low 1993, 238). These urban development plans need to be seen in the context of and in relation to national and economic plans also produced by the Singaporean government.

Yet, Abram and Weszkalnys (2013) rightfully point out that overemphasising the intentions of planning often ascribes too much coherence to the planning process and too great unity to the complex infrastructure that bureaucracy is, assuming that the results reflect the intentions. In a poignant analysis of urban transformation in Kuala Lumpur, Baxstrom shows that “while the plan must gesture to ‘the future’, this gesture does not often require the specification of ‘a future’ to function in a highly effective manner in the present.” (Baxstrom 2013). That means that while plans might lay out certain visions of the future, the significance of the plan lies not so much in what it envisions but in what this envisioning allows in the present. To use the words of Abram and Weszkalnys: “At the state level, planning is a way of managing the present, of governing and organizing the relationships between the state, citizenry and other entities (..)” (Abram and Weszkalnys 2013, 2). Thus, while the plan might map out a certain future, it tells us more about the present.

Indeed, also Singapore’s planning process can be described as a complex process that involves negotiations between various government and nongovernment actors. Additionally, despite Singapore’s appearance as a tightly planned space, many scholars have noted that Singapore’s management throughout the years has relied more on ad-hoc rather than long-term, transparent planning (Heng and Low 1993, Chua 1995, Eng 1992). As Chua (1995) has pointed out - survivalism and pragmatism are based on ad-hoc rationality, therefore, often at odds with a larger utopian vision of a country’s development. According to him, the ‘crisis mentality’ of PAP characterises the often incoherent and quickly changing policies that PAP implements depending on “the economic growth picture at a specific point in time.” (Chua 1995, 69)

Urban change

It is also in relation to the dramatic urban changes that Singapore’s miraculous success in economic development is articulated. In a presentation introducing Singapore during one of the start-up events, the speaker showed a presentation slide of a town in Switzerland from the 1960s to the present. Visually, there didn’t seem to be a big difference between the two images. Then, he contrasted the Singapore of the 1960s with the one of today just five decades later - in place of dirt roads and low attap roofed squatters homes, the audience would see Singapore’s glittering skyline telling a story about

developmental success and the benefits of globalisation. “From a village to a metropolis in a bit more than half a century” is a popular narrative repeated in the start-up space.

During my fieldwork, urban change was ongoing; the city was always partially under construction, even if most of it happened behind huge curtains covering the construction places. Large screens and gates covered the deep holes from which new skyscrapers were erected and new metro lines zigzagged the underground. Public housing skyscrapers built just 20 years ago were demolished to erect new, taller, more modern ones to continue increasing the property value and house even more of Singapore’s expanding population. “Here will be xxx. Your future home,” announced the banners covering yet another massive construction site across the street from where I lived. In his editorial to *Etnofoor* on Landscape and Media, Onneweer has described how mediations of landscape are charged with politics of temporality by framing the moment through an imagined past or the future, or “seeking a mythological timelessness to overcome the effects of change.” Onneweer argues that in contrast to preoccupation with the past and memory as the most dominant temporalities for landscapes, “The temporal inverse of memory is potentiality, a relation with the future through the landscape.” (Onneweer 2009, 48) Singapore’s landscape then is very outspoken about the immediate and near future, seemingly having one foot already ‘there’. A running joke I encountered was that even Google Maps, copyrighted a year ago, won’t be accurate in Singapore because the city changes too fast.

Population White Paper - the limits of infrastructure

It was in this experience of the city - navigating it through the increasingly busy streets, metro lines and escalators- that people also often articulated their understanding of Singapore’s current state and raised their concerns about the future, which included dissatisfaction with the kind of development trajectory the government had been pursuing. The breakdowns and delays of the metro, which was supposed to ‘ooze future’ as described earlier, just as plumbing disruptions, gave context to raising complaints about Singapore’s infrastructure not being able to handle the increasing density of the growing population.

Aside from regular grievances in everyday conversations and on social media about the fully packed metro lines and traffic jams, in January 2013, this turned into one of the first mass political protests in decades. Early in the year, the government released “A Sustainable Population for Dynamic Singapore: Population White Paper”, which discussed how to maintain Singapore’s development in the context of a rapidly ageing population and low birth rates. One of the core mechanisms suggested to ease

this problem was to continue relying on immigration. The White Paper proposed that by 2030, Singapore's population will increase from 5.3 million to 6.5 - 6.9 million inhabitants, out of which 4.2 to 4.4 million would be immigrants (permanent residents and citizens)(*A Sustainable Population for Dynamic Singapore: Population White Paper* 2013). This proposed vision propelled the so-called 'Population White Paper protests' where reportedly 2000 to 5000 people gathered in the Speakers' Corner, the officially designated place for public protest, with posters saying "Save Singapore — Say NO to 6.9 million", "Singapore for Singaporeans" (Adam 2013b) and news reports eagerly reported that "Singapore's population has jumped by more than 1.1 million since mid-2004 to 5.3 million" (Adam 2013a) largely by increasing the amount of foreigners who at the time constituted 2 million inhabitants.

Additionally, many Singaporeans felt that the government's immigration policy, which favoured well-educated and wealthy immigrants, put them in a worse position when it came to being able to find jobs and affordable housing. In 2013, Singapore was announced as the world's most expensive city. This news spread like wildfire, even if it only resonated very strongly with the experience of many people who had trouble making a life as they desired. This indicator, together with the references to rising inequality, were often cited to me by Singaporeans to articulate their concern about Singapore's present and future development trajectory.

Government officials responded to the protests by explaining that 6.9 million is not a population *target* but an *indicator* around which to coordinate infrastructure development. However, that didn't do much to ease the fear that many people felt they quite literally wouldn't have *space* anymore in Singapore and its projected future. These protests were rather striking, as for the first time in 50 years, Singapore's future as laid down by the government had been openly challenged in a political protest.

Aside from such 'sanctioned' political protests, the authorities rendered other protest actions as 'hooliganism' or 'vandalism'. For example, during my 2012 fieldwork, stickers with various slogans in Singlish, such as 'Press until Shiok', 'Press to Time Travel', etc., appeared on streets, bus stops, and traffic lights alongside a spray-painted 'My Grandfather Road' on multiple roads in the central business district. The artist Sam Lo, dubbed 'Sticker Lady', was quickly arrested. The arrest sparked a discussion about freedom of artistic expression (Lee 2014b) and was picked up briefly also by start-up media with pleas to not arrest her "for the sake of Singapore's entrepreneurial future" (Lee 2012). The artist, through their work, had critically commented upon and challenged Singapore's seemingly unanimous drive towards continuous progress and change. Their decision to proceed with the spray painting and stickers reportedly was to "take back the streets to make Singapore feel like Singapore again" (www.peoplepill.com/i/samantha-lo).



Photo of one of the Sam Lo's stickers I encountered on my way by traffic lights. Photo by author.

The next section will zoom in on a particular urban transformation project meant to herald the coming of the new economy, further examining the ways in which urban space was transformed in the name of welcoming 'the future'.

4. one-north

At the very heart of the urban transformations aimed at establishing the knowledge age has been the one-north project. Commenced by the National Science and Technology Board (Lee 2001) and included in the T21 plan (Boo 2000), it was initiated in 1998 when the government announced it would allocate S\$5 billion for its development. To be gradually developed over 20-30 years, it was envisioned to become the home for biomedical, ICT, media, physical sciences and engineering research & business.

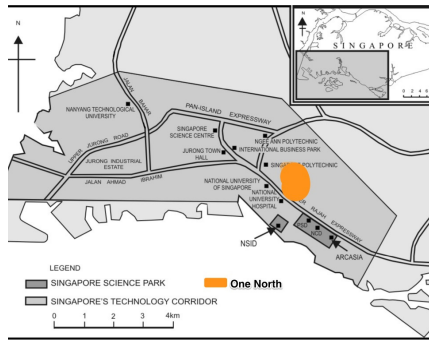
Jurong Town Corporation (JTC) was the major player in realising the Singapore government's industrialisation programs by building factories and industrial estates. According to the developer, one-north was the "ideal work-live-play-learn environment conducive for creative minds to excel and where innovation reigns. It would be a melting pot of talent, ideas and business opportunities." ("One North," n.d.) Such an approach was also reflected in the design planning of the area. In many semi-official descriptions, the one-north project was often called "a city within a city", emphasising the confluence of work and live environments in this so-called mixed-use development that aimed to accommodate approximately 140,000 people once finished.

Initially under the name of Buena Vista Science Hub (Phillips and Wai-Chung Yeung 2003, 714), in 2001, it was rebranded to one-north (Wong and Bunnell 2006) to “represent Singapore’s unique location - one degree North of the equator” (Lee 2001). At the opening of the master plan and unveiling of the new brand identity, the then Deputy Prime Minister Dr Tony Tan Keng Yam introduced one-north as Singapore’s plan for the New Economy and as one of the necessary “intellectually stimulating and vibrant physical environments where a critical mass of talents, entrepreneurs, scientists and researchers can congregate, exchange ideas and interact.” (Tan 2001; Lee 2001). At the time, Singapore’s knowledge economy aspirations were already linked to Silicon Valley’s success. JTC believed that building this new infrastructure ‘from scratch’ would give Singapore an advantage compared to Silicon Valley because Singapore can bypass “the headache of having to retrofit old buildings with fibre-optic cables, an essential for dot.coms.” (Boo 2000) What can be seen in this expectation is a typical modernist assumption that one can start from a ‘clean page’ and invent a future that has nothing to do with the embeddedness of the previous realities, or futures unfolding.

The one-north area is located at the northwest of the city (and one degree north of the equator, as its name suggests), and it sits at the very centre of Singapore’s Technology Corridor. The Technology Corridor was first laid down in the Technology Corridor Concept Plan as part of the 1991 National Technology Plan (NTP). The NTP, in turn, was developed in close accordance with the Strategic Economic Plan (SEP), which was also issued in the same year. The Corridor itself was drafted through a policy plan following international examples of how to foster a knowledge economy. This is also evident in the positioning of one-north near Singapore’s Science Park, Jurong Industrial Park and a range of research institutions.

One-north is embraced from the southwest by Ayer Rajah Express, from northwest by North Buena Vista Road, from east by Commonwealth Avenue and from southeast by Queensway and Portsdown Avenue. Facing the one-north across the Ayer Rajah Express from the south is Singapore’s Science Park, while at the northwest sits the campus of the National University of Singapore and north of it is Singapore Polytechnic.

The master plan of one-north was developed by internationally renowned, London-based company Zaha Hadid Architects, who, in designing it tried to embrace “the spatial repertoire and morphology of natural landscape formations” (“One North Master Plan,” n.d.) and aimed at creating “a complex order rather than either the monotony of Modernism or the chaos you find in contemporary cities” (Ouroussoff 2008). Zaha Hadid is the author of many large-scale mega projects in various ‘global’ centres of the world such as Paris, London and, involving her, signalled Singapore’s ambitions to position itself at the centre of cutting edge. The development of the Science Park was established in the Technology Corridor Concept Plan, strategically locating the Science



Adapted image from Phillips and Wai-chung Yeung 2003, 716. The Location of Singapore's Science Park and Technology Corridor" with approximate marking of one-north area in orange by author.



Image from Wong and Bunnell 2006, 71 depicts "The one-north project in Singapore" area.

Park near other research and tertiary institutions and Jurong Industrial Park. In the vision of one-north, the buildings, roads, and parks all would seamlessly merge into one natural form. Yet, according to the New York Times writer Nicolai Ouroussoff, apparently, the actual implementation hadn't lived up to the vision and expectations of the architect:

"Yet once construction began, the design of the buildings was left to local architects hired by the developer. As the towers rose in clusters scattered across the site, it was difficult to read the formal intent. With more than 20 blocks now complete, parts of the city look surprisingly conventional." (Ouroussoff 2008)

Nevertheless, JTC touted one-north as a "cluster of *world-class* research facilities and business park space" (emphasis mine, "One North," n.d.) as the project is continually developed in stages with the expected deadline of finishing receding further into future despite the intense tempo in which landscape changes occurred in Singapore.

As such, the one-north project repeated much of what was being done in many other places worldwide, wanting to facilitate the development of a knowledge-based economy and stimulate industrial reorganisation. One of the ways policymakers attempt to stimulate the growth of the information economy is by establishing high-tech parks, science parks or creative clusters, knowledge hubs, innovation zones, etc. (Keane 2011). While with different connotations, all these terms indicate the highly intellectual form of economic production and the particular spatial structure based on proximity. As elsewhere, these projects are architecturally spectacular and developed by world-renowned architectural bureaus to signify an international and future-oriented ethos. Along with such state investments also go (private) property developers and increased land values.

Historically, the idea of industrial districts was articulated by Alfred Marshall in the 1920s, but as productive spaces for post-industrial economic development, they became internationally popular in the 1980s. Inspired by the success of Silicon Valley and Route 128 in the USA and resonating with the spread of neoliberal policies, business parks and incubation centres sprung up in cities around the world. Typically, they combined higher educational centres with highly productive high technology industry (Massey, Quintas and Wield 1992), based on the idea that the clustering leads to 'creative spillovers' and 'serendipitous encounters' of people and companies working in disparate areas. The expectation is that physical proximity will increase the chances of them getting to know one another, which would potentially facilitate the discovery of new methods or products and lead to innovation. This is one of the underlying assumptions of why such clustering is desirable. The other one is based on the principle of 'economies of scale' - many companies in the same field need similar support and have similar costs, which they can reduce by collaborating. Often discussed as 'the networking effect', it is evoked to explain that when many companies share resources, each added company adds overarching value to the group (Feld 2012). National emphasis on developing such areas was encouraged in the 1990s through the popularity of the work of Michael Porter on national competitive advantages. (Keane 2011)

While much of the economic and management literature and policymakers celebrate the role of such centres (even if struggling to quantify the exact economic output of such science hubs), scholars from other disciplines have been much more critical about the actual significance of such parks. For example Massey, Quintas and Wield have described them as:

"based on a rigid and not necessarily very productive model of invention and innovation; they are expressions of a highly hierar-

chical social structure which itself is intimately related to that founding model of innovation; and they are as geographical entities constructed around notions of difference and status which both reinforce the social hierarchy and further rigidify the technological model." (1992, 3)

Keane, for example, has provided analysis of how, in China, the creative clusters often serve the interests of various stakeholders, such as regional political elites who need to fashion themselves, property developers who need to raise prices and stimulate gentrification, etc., more than actually help creative production. Human geographers have noted that the contemporary patterns of production locations are rather complex. Out of these, cultural quarters, creative clusters or districts do stand out as places where "cultural production, ancillary consumption and amenities, and spectacle" take place together (Ho and Hutton 2012, 220). Usually, they are located centrally, close to the central business districts, and they offer various services such as restaurants, cafes, and cultural venues, as well as celebrating lifestyles where leisure is merged with production. In many creative clusters' accounts, this trend has also meant gentrification and increasing property prices.

In the case of one-north, it is embedded in very particular local discourses and practices. While 'clustering' is promoted as a preferable spatial logic in the new economy (in this way also revealing the inner contradiction about the actual relevance of place in a presumably immaterial and space-less economy) in Singapore, it has its particular meanings and expectations associated with it making it also a 'particularly Singaporean' practice.

Local meaning of one-north

Much of the one-north promotional material imagined the one-north community to form an "international", world-class centre of excellence. Yet, the protests against overcrowding in Singapore, and the perception of foreign talent receiving premium treatment in Singapore illustrated that the relationship was filled with tensions related to social inequalities. Time and space are "multiple, heterogeneous and uneven" (Thrift and May 2001, 5) and play out differently within the city (Sassen 2000). If one-north is an area that brings 'the future', will the benefits be distributed to those not located physically within this future? If clustering means not only concentration of capital but also 'bringing together' particular types of people in "self-contained" spaces for "living, working and playing", it means that the very same people will be bound to particular

localities within the city. In his book “City of Quartz: Excavating the Future in Los Angeles” (2006), Mike Davis has skillfully analysed how urban architecture transformations reflect and enforce spatial divisions between different social groups and reflect larger ideological changes that underlie these spatial transformations. Therefore, in the rest of this section, I will examine how the spatial segregation between one-north and other parts of Singapore is reflective of social and power relations and hierarchies.

One of the ways the tension about rising social inequality starting in the 1990s was articulated in Singapore was through a discursive division of Singapore’s inhabitants into two distinct groups - ‘heartlanders’ and ‘cosmopolitans’ (Chua 2003). The discussion about the ‘heartlanders’ and ‘cosmopolitans’ gained prominence in the late 1990s and rose out of Singapore’s internationalisation policies, which stimulated Singaporeans to venture outside Singapore and become more ‘cosmopolitan’ in order to be globally competitive. These categories of ‘cosmopolitans’ and ‘heartlanders’ were introduced in the political and popular discourse by Prime Minister Goh Chok Tong in 1999 (Ho 2006) to address the need for presumably different groups of Singapore’s society to become closer. What was understood with ‘cosmopolitans’ was the younger, more mobile Singaporean generation which spoke English, had travelled and obtained a good education and was internationally oriented. ‘Heartlanders’, however, were considered the more conservative, older generation Singaporeans living in HDB housing, speaking Singlish, and loyal to Singapore and ‘traditional values’ (Ho 2006). Tan (2007) has argued that the ‘cosmopolitans’ and foreign talent formed a new elite segment in Singapore society. In this context, the government’s vision was that the cosmopolitans would populate one-north. It is interesting to note that the ‘foreign workers’ are entirely invisible in this discussion as they are cast as not belonging to Singapore. Human geographer Natalie Oswin has argued that low-skilled migrants, just like queer Singaporeans, are trapped in Singapore’s dominant hetero-temporality, which precludes them from future in the city-state, drawing our attention to how “heteronormativity works through teleological narratives of progress and social reproduction in Singapore” (Oswin 2014, 412). Singapore state was particular and definite about who, for how long and for what purpose could be in Singapore.

Singapore as a hotel

Around 2006, a particular metaphor gained popularity to articulate this perceived division and increasing inequality amongst different groups in Singapore. Supposedly articulated by an opposition politician Eric Tan before the 2006 General elections, it

described Singapore as a hotel:

"Singapore is like a 6 star hotel. In this hotel, the elite are either managers or guests. The managers want to retain the hotel's 6 star status and attract foreign guests who will pay the expensive room rates. You don't need three guesses to guess who the managers are. The elite locals on the other hand enjoy the good facilities and can afford the expensive room rates. However they are guests with no ownership and have no desire to contribute to the running of hotel apart from paying high room rates. Both the foreigners and local elites use our country as a good place to make money but when it becomes uncomfortable they move out. The rest of us are the worker bees: chamber maids, waiters etc. We work hard for our children and dream they will become either managers or the guests of the hotel. This hotel, although a good one, is home to no one. There is no soul of a nation in a hotel." (As quoted in Lim and Lee 2010, 149)

The criticism of Singapore as a hotel, not a home, directly pointed to the perceived inequality in Singapore, which was seen as composed of 'cosmopolitans' (both foreign as well as local) and the 'heartlanders', where the former enjoy high mobility and treat Singapore as a temporary location for profit or convenience. Note that once more, the foreign workers are entirely invisible in this depiction.

Importantly, this metaphor also touched on the question of who contributes to the running of the state and how invested different groups are in what kind of future of the nation. The heartlanders in this depiction had very little power to determine what went on in the space they were bound to. It depicted them as their dependent for their livelihood on the existence of this hotel, yet threatened by the transience and mobility of the cosmopolitans. It also suggests divergent aspirations of the two groups, where the cosmopolitans are depicted as concerned with maintaining their lifestyle and making profits. At the same time, the heartlanders aspire to make a life for themselves and their children, and they have invested through generations in the presence of Singapore. Thus, structurally, in this metaphor, two different future visions are allocated to different societal groups. While social inequality is a multifaceted phenomenon that would defy such a sweeping over-generalisation of two groups in society or neatly condensed in a metaphor, it is a useful example to illustrate the kind of tensions that pervaded "the making of place in the space" to use the words of Gupta and Ferguson (1992) in Singapore at the time of my fieldwork.

Spatial segregation

Political theorist Terrell Carver has argued that spatial segregation has been a discursive strategy of the Singaporean government distinguishing between its core supporters living in the 'heartlands' and the new 'creative industry subjects'. He has argued that:

The strategy was therefore almost one of cultural apartheid between presumed social classes, to be managed spatially through a built environment of culturally 'creative' spaces distanced in geographical and semiotic terms from 'traditional' ones where 'family values' reigned, undisturbed by anything 'objectionable' (2010, 389)

Indeed, spatial segregation has been a strategy of how the Singapore state has managed its population and labour in many ways - starting with the continuation of the colonial division of ethnic enclaves such as 'Chinatown', 'Little India' and Kampong Glam and continuing to the present day, most notably with the enclaving of the foreign workers in dormitories established in urban fringe. Many scholars have written about the spatial segregation practices used to manage foreign labour - low-skilled temporary immigrants and the 'rest' of Singapore (Yeoh and Lam 2022) emphasising the spatial justice problems as part of the 'global city' dynamics in Singapore (Goh 2014).

In this case, spatially imagining one-north as a 'city within a city' continued the practice of spatial segregation, differentiating between those supposed to produce value in the coming knowledge economy and 'the rest'. Moreover, when it comes to production in the knowledge economy, another tension was brought to the fore, namely that Singapore's economic development was ideologically framed as a result of the 'Asian values' characterising its labour force. Asian Values, in turn, were often positioned as in diametrical contrast to Western liberal freedoms (Hill 2000) and therefore created a 'cultural problem' for the political elites of how to integrate economically productive forms of 'creativity' while at the same time limiting their potential to disrupt. Ideologically speaking, Western creativity required challenging authority, but Singaporean subjects respected authority; whereas creativity was about individualism, Singaporean subjects supposedly prioritised the collective.

With the coming of the knowledge economy, this perceived clash was picked up by political elites arguing that Singapore now needed to cultivate entrepreneurial subjects. I discuss the Asian Values discourse and the clash with an ideal entrepreneurial subjectivity and the cultivation of it in more detail in Chapters Three, Four, Five and Six, but in this chapter, it is important to address the strategies that the Singapore state adopted

to deal with this necessity for cultivating productive creativity. One of Singapore's strategies was to import 'foreign talent' and position itself as a cosmopolitan and creative global city both discursively as well as through specific reforms aimed at establishing new institutions and spaces for new types of education, art and entertainment (Ooi 2010; Lee 2004; Lee and Lim 2004).

There are two points to elaborate. One is that around the turn of the millennium, Singapore's knowledge economy was imagined to be developed with the help of foreign talent. For example, Prime Minister Goh Chok Tong's 1997 National Day Rally speech as quoted in *The Straits Times*, 30 August 1997 pointed out:

"In the information age, human talent, not physical resources or financial capital, is the key factor for economic competitiveness and success. We must therefore welcome the infusion of knowledge which foreign talent will bring. Singapore must become a cosmopolitan, global city, an open society where people from many lands can feel at home." (Yeoh 2004, 2436)

Similarly, George Yeo, Minister for Trade and Industry is quoted in *The Business Times* on 22 May 2000 arguing:

"Having a cosmopolitan work environment, like that of Silicon Valley's, is necessary if Singapore is to attract and retain top talent. ... I don't think [we] will succeed in Singapore unless we replicate some of this environment in Singapore, which means being fully aware of what's happening in the world, and not being small-minded, petty or prejudiced in the way we look at human beings. ... If you start wanting to recruit only those you like, because of the way they look, or the way they sound or dress, then you're not in the game. We must make sure that we're getting our fair share of the weird and wonderful from China, India, the West, and the rest of the world. If we can do that, then we're in the running." (Yeoh 2004, 2436)

The other point is that there was particular attention paid to the spaces where the foreign talent would mix with Singaporeans and cultivate the new subjects. One north was seen to be one such space. Kris Olds has described how the economic restructuring also led to opening up of Singapore's higher education to collaborations with prestigious foreign universities, hiring foreign professors and led to "emergence of a complex of Western university campuses, programs, and joint ventures in Singaporean space, and substantial local university reforms" (Olds 2007, 972). Ong, who also who calls

such spaces ‘environments of calculation’ describes how educational institutions were not only aimed at training scientists and engineers, but also how they had to cultivate scientists-entrepreneurs: “The goal is not merely to train world-class engineers; it is also to transform them into entrepreneurs, scientists who can convert their knowledge into marketable products.” (Ong 2004, 180).

The tension for the Singapore government and rationale for spatial segregation is premised on the idea that creative elements in society can be disruptive to the respect for authority. This fear is rooted in a typical Western narrative that links creativity with liberal political freedoms, especially freedom of expression. The ‘Asian values’ concept was developed to counter ‘Western deviancies’ at the time associated with the counter-culture in the USA, which also happened to be, to a large extent, the cultural roots of the digital revolution. I treat ‘Asian values’ as a political discourse that was actively involved in nation-building rather than a culturally accurate depiction of some essentialised Singaporean identity. Similarly, I am critical of the definition of creativity that favours white middle- and upper-class American males (for a more inclusive approach to understanding creativity, I recommend viewing Hallam and Ingold 2007).

While Singapore has always awed with its economic success, politically, it has been seen by the West as ‘problematic’ from the perspective of human rights (death penalty and caning as punishments are practised in Singapore, also PAP’s censorship practices as well as the way it has dealt with opposition have been criticised). Thus, often Singapore’s ability to perform in the knowledge economy explicitly or implicitly is linked to a discussion of ‘opening’ and ‘loosening up’ of Singapore’s political control (Tan 2003), or inspires arguments that the Singaporean government is only ‘pretending’ to foster knowledge economy (Lee and Lim 2004).

The political concern about ‘balancing’ the creative elements productively without ‘disrupting’ the rest was expressed in a discussion about ‘little bohemias’—spaces where more liberally oriented international foreign talent lived but did not interfere with the ‘heartlands’ and their sensibilities.

Human geographers Wong and Bunnell, in studying the new economy discourse in Singapore, have described how in the development of one-north certain residential areas, like Chip Beas Gardens in Holland Village and houses at Portsdown Road, were re-worked as ‘little bohemias’. Wong and Bunnell quote the then Senior Minister Lee Kuan Yew saying that in the emerging ‘little bohemias’, entrepreneurial subjects can do their own thing “but not disrupt the heartlands.” (2006, 77) A similar argument has been put forward by Tan (2007), who explains the dual audiences as a result of the government’s preference for bringing in and fostering the ‘creative class’ as described in the works of Richard Florida (Florida 2002), aka foreign talent in Singapore.

To summarise, one way to claim futures is through materialising them in space and

spatial transformations. One such state-led urban transformation project in the name of a knowledge economy-focused futurity was a one-north development plan that imagined containing the creative workers responsible for production in this new economy. While for economists, the spatial dynamics related to the knowledge economy, such as clustering and concentration of particular groups of people in particular locations, are mostly viewed in terms of economic benefits, the spatial segregation between one-north and other parts of Singapore shows how it is reflective of social and power relations that have long historical, social, and political roots. Therefore, the one-north case allows us to view such projects not only as part of the 'global city' trend but also as particularly local, accentuating local issues of justice and inequality. Social divisions became more visible in relation to the use of urban space. In the context of the coming of the knowledge economy, looking at one-north also stressed the question about which groups of people could claim what futures in Singapore are and on what terms.

The next section will zoom in on one particular building block within the one-north development area to illustrate how analytically focusing on space helps to engage with a multiplicity of futures, as futures materialised in space have different levels of durability.

5. Blk 71

Instead of simply producing the desired effects, each attempt to create a certain future in a particular local context also has to deal with (latent) futures set in motion earlier. Such futures of the past manifest themselves in various forms – as diverse as existing infrastructures, routine embodied practices, policy planning documents, press releases or boundary work done by various players who want to make their own future claims. Acknowledging the multiplicity of futures that underlie any given context can help to question the idea of “the future” and explore the power relations that characterise claims for “the future”.

Block 71 in Singapore is a case in point. The flatted factory building from the 1980s was part of the Ayer Rajah Industrial Complex for light industrial production and stood in the area that was marked for the eventual development of the one-north media sector. Yet, in 2010, converging interests between the Media Development Authority (MDA), the National University of Singapore (NUS) Enterprise program and Singapore's telecommunication investment arm SingTel Innov8 led to allocating Block 71 for temporary use as a “prototype” for the eventual media start-up ecosystem that was envisioned in the one-north masterplan. As a result of this seemingly ad-hoc “interim” plan of MDA,

in 2011, a new incubation space and program called “Blk 71” was opened at Block 71, providing very cheap and, for some start-ups, even entirely free office space. Zafar, who studied entrepreneurship in Singapore, has described the converging interests of NUS, which was looking for a next-level incubation on top of the already existing incubation programs run on campus, and MDA, which was looking to “bring coherence to the start-up sector in the city” (Zafar 2016, 94).

Upon opening Blk 71, the three main institutional actors introduced this project as a “comprehensive eco-system for start-ups” and the working area “as a one-stop-access space” where all the relevant facilities for the start-ups would be provided to facilitate their growth. The reality, however, was less exciting. In 2011 the surrounding area was very much a landscape in progress - few of the planned one-north buildings were finished, and arriving at one-north felt more like entering a remote construction site than a thriving knowledge economy node or all-encompassing live-work-play environment that JTC touted one-north to be.

Some entrepreneurs I worked with frowned upon the bare arrangement of the factory block, which scholar Zafar has aptly described as a “no-frills cement block” (Zafar 2016, 93), taking this as an indicator of their low standing in the knowledge work hierarchy within the government. Rather than building new buildings with expensive labs, start-ups were just placed in an empty factory building. An especially telling example of how incompatible the place felt for start-ups were the old signs at the doors of the toilets at the end of each floor, which distinguished “Executive” from regular bathrooms – reflective of social hierarchies that are commonplace in industrial production sites but antithetical to the flat social organisation of start-up world.



A sign on the door marking separate ‘Executive’ women toilets at Blk 71. They typically were locked. Photo by author.

In addition, the local food court's working hours at the time were synced with manufacturing shift work schedules - opening up in the wee hours of the morning and closing in the early afternoon and staying closed during the weekends. Start-up entrepreneurs who preferred to work during the evenings and weekends were often forced to travel quite far for food. Some of my interlocutors even commented that Block 71 is located "in the middle of nowhere". They contrasted it with culturally rich and actively populated areas of Singapore such as Kampong Glam, where Hackerspace was located, or Tanjong Pagar and Little India, where many start-ups were based, along with various cheap food courts, trendy cafes and shops. Blk 71, as a vision of MDA, NUS Enterprise and Singtel Innov8, then seemed to be caught up between the not-yet realised futures of the one-north masterplan and the past futures of industrial manufacturing that manifested themselves through the physical infrastructure of Blk 71 and the working rhythms of the food centre.



Blk 71. Photo by author.

Should you be here?

In my discussion of one-north, I emphasised the spatial segregation of different groups of society in Singapore. This aspect was made strikingly obvious to me in an encounter on an afternoon in 2014 when I had taken a brief break and sat down outside at the back area of the Block 71 building, sipping my iced coffee to get some energy and last through the evening hours. I had gotten cold in the air-conditioned office and enjoyed the hot evening sun and air. Suddenly, someone said, "Hi, are you from Switzerland?" and sat down next to me. It was a Chinese man in his 50s, wearing a white long-sleeved button-up shirt and black suit trousers and carrying a stuffed black leather

briefcase. He was wearing glasses in silver frames and holding his mobile phone in his hand.

I was startled to see him kneeling and sitting next to me. His bureaucratic look and the fact that it was not common for local people to begin a conversation just like that made me fear that I had done something wrong by sitting there and that I was about to be scolded. Instead, the man shared one of the most appreciated observations. He looked at me and said, "Wow, I didn't know there are so many." he paused, "What we call - foreign talent." He had tried to find a polite way of saying that I was obviously a foreigner. "Look," he pointed at two white tall men in the distance - "two ex-pats there!" He switched from the 'foreign talent' to the more common way of referring to white people as ex-pats. And then he pointed to me, too. "Who is your employer?" He asked me. After I briefly explained that I was doing research there, he commented again that he was surprised to see so many foreigners in this area. I asked him to explain what he meant. He chuckled and said that it's uncommon to have so many ex-pats in a place "like this". According to him, this place is a local small and medium business (SME) place where local people usually work. It is more common to see white people at places like Fusionopolis; he pointed to the white and blue glass skyscraper across the field, where the large multinational companies were located.

In a pointy and sharp manner, which is common for older people in Singapore, he questioned me about my research and the length of stay, and I tried to use every opportunity to learn more about him. He told me he was 'in insurance' and that he graduated in mechanical engineering at NUS. Why did he change from engineering to insurance? He explained it in the following way: Seeing the future of electronic manufacturing as an industry made him think that it was not a 'good future'. It's not only that it was bound to be relocating away from Singapore eventually, but he also emphasised that 'it just doesn't create enough value'. The way he meant value was both in an ethical as well as a commercial way because he referred to the need for Singapore's national economy to grow as well as his own wish to work in an industry where he can help people by making their health insured. He pointed out to the large smartphone he was holding in one of his palms covered in a black faux leather case, saying that this is just garbage that is produced and it causes global warming. We briefly spoke about my enjoying Singapore, and we wished each other good luck. I stood up and took the stairs back up to the office.

This interaction struck me not only because it was so uncommon to be approached in spaces other than start-up offices, but also because his comments captured so well how the Block 71 was in between the different types of economies - the older forms of production, predominantly occupied by Singaporeans, and the aspirations of the new, knowledge economy that will be done by Singaporeans, but in collaboration with 'for-

eign talent’.

Contingent and overlapping future-making projects

Despite these reservations, Blk 71 very quickly became a central point for Singapore’s technology aspirations. Technology start-ups and services supporting them were occupying not only the few floors initially allocated by the three founding organisations but the whole building. In 2014, *The Economist* named Block 71 “the world’s most tightly packed entrepreneurial ecosystem” (“All together now: What entrepreneurial ecosystems need to flourish,” 2014), and it was set for a further expansion under the title “Launchpad@One North” rather than the initially scheduled demolition.

The first entrepreneurs who had relocated to Blk 71 were already associated with either NUS Enterprise, MDA or Singtel Innov8, which expected the start-ups they were working with to use the space and provided it at no cost. Other entrepreneurs who were not directly related to these founding institutions could rent the space for significantly lower prices than they could elsewhere in the city. This was important for many start-ups working in one of the world’s most expensive cities. More broadly, beyond the alliance of NUS, MDA and Innov8, and the overall expanding financial and ideological support the government was providing to the technology start-up scene, there were also many smaller private initiatives that had identified themselves as involved in the business of making Singapore’s start-up ecosystem (discussed in more detail in the next chapter).

They ranged from start-up incubators and accelerators to private investors and early-stage venture capitalists, bloggers and start-up media platforms, lawyers, accountants and marketing advisors helping technology start-ups. For such players, it made sense if not to directly relocate to Blk 71, then at least to organise, attend and contribute to the events and discussions at Blk 71. For example, The Accelerator convened weekly Open House events, inviting everyone interested in Singapore’s technology scene to network in an unofficial setting over drinks and snacks. Such initiatives and the way they resonated in the online and offline media contributed to a broader sense that Blk 71 was the one concrete place where all these various actors could find one another. This, in turn, attracted even more people and foreign visitors such as myself; Blk 71 was introduced as “Singapore’s Silicon Valley”. For those not in the know, the “Future starts here” slogan embellished the walls of Blk 71, announcing that this is the place for Singapore’s technology entrepreneurship.



Side wall of Blk 71 facing the highway announced to everyone that "The Future Starts Here". Photo by author.



Launchpad@One North development in the process. Fusionopolis on the left. Photo by author.



Launchpad@One North development in the process. Blk 71 on the right. Photo by author.



Works for the first expansion of Launchpad@One North begin. View from Blk 71. In the background Fusionopolis on the right, next to it INSEAD business school. Photo by author.

While in the next chapter, I discuss critically the social relationships and practices of ‘openness’ and ‘sharing’ that characterised start-up spaces such as Blk 71, it is also worth highlighting that there was an overall sense of collegiality in Blk 71. Also, Zafar, in her analysis of Blk 71, describes how, unlike in other spaces, she felt easily welcomed and supported by the people who were working at Blk 71, who helped her find her way and made introductions (Zafar 2016).

Yet, despite the somewhat unexpected way Blk 71 gradually emerged as the hip version of Singapore’s innovation and technology entrepreneurship future, it is essential to recognise that there was no singular futurity. Rather, the different participants and tenants had their varied images of the future, and these future-making projects always could clash.

For example, in 2014, many of the initial tenants had to move out to make space for younger start-up companies, as the original tenancy was based on a three-year term. Initial tenants felt that they had contributed to the success of Blk 71 and yet were being denied the opportunity to reap the benefits. Another example was when one tenancy was prioritised over another in the selection procedure. Or when the tenants wanted to arrange their space in particular ways, they thought would be beneficial for growing their businesses, but managers of the building were concerned that these configurations would negatively impact their ability to find new tenants in the future. Many entrepreneurs worried about the large influence of the government and government-related institutions that steered the Blk 71 project, wondering whether the government’s institutionalised success metrics are aligned with the ones entrepreneurs have. Similarly, many worried that Blk 71 and all the accompanying start-up activity could be relocated to another, less expensive area as the land value at one-north kept rising. In an unofficial conversation with a representative of JTC this notion was casually confirmed in an off-hand obvious manner: indeed, based on the Urban Redevelopment Authority (URA) zoning and the property market dynamics, Blk 71 would have to give way to ‘something bigger’ eventually.

The Blk 71 success was rooted in institutional agendas of different educational and governmental institutions, balance sheets and survival interests of private companies, personal growth aspirations of individuals, rising rent costs elsewhere in the city, narratives about Asia on the rise as well as many coincidences that characterised the various reasons why people came together at Blk 71. Therefore, the success of Blk 71 can be best understood as a result of contingent overlaps of various interests by different players rather than an example of central planning.

Discussion of Blk 71 in terms of a singular future would be to ignore the people and companies who were forced out of the premises as Blk 71 was established, overlook the futures of companies that did not want to or could not afford to be at Blk 71, or the ones

who had to move out after the initial start-up phase. Importantly, such a framing would discount the futurities of those actors who did not want to associate themselves with Blk 71, or the alternative clusters of start-up activities elsewhere in the city either associated with Singapore's other universities or private initiatives. It would overlook the often divergent interests of different governmental institutions such as the URA, JTC, MDA, SPRING, as well as often competing interests of various institutions of higher learning such as National University of Singapore (NUS), Nanyang Technological University (NTU) and Singapore Management University (SMU). Correspondingly, talking about Silicon Valley as "the future" ignores the various alternative ways the creative economy develops around the world, rooted in very particular material and ideological contexts, building up and clashing with other futures set in motion earlier.

6. Conclusion

From the perspective of the Singapore state, the facilitation of technology start-up activities belonged to the area dubbed 'technopreneurship'. It was part of the broader national shift towards the knowledge economy as Singapore's national economic future. Technopreneurship was seen as an important element contributing to the commercialisation of innovation and, therefore, held the potential for national economic growth. For that to flourish, Singapore's local entrepreneurial talent had to be cultivated, which was seen as possible through collaboration and interactions with 'foreign talent'. Singapore's government allocated specific areas and built specific spaces in Singapore where that could happen. This chapter focused on one such infrastructure project, called one-north, which was, from the state's perspective, central to bringing the knowledge economy future.

In this chapter, I argued that studying futurities, such as the coming of the knowledge economy, should better be done by viewing them as local phenomena - examining how they emerge as local visions that resonate from within rather than as global phenomena fuelled by some innate logic sweeping the globe. This allows to approach futurities historically and as embedded in and emergent from local contexts. In Singapore's case, this chapter showed how turning to a knowledge economy as a national vision for the future resonated with a longer understanding of Singapore's state as small, devoid of natural resources but able to cultivate its human resources. While American success stories played a role in this process, Singapore's start-up culture should not be seen only as an attempt to replicate an existing standard.

The knowledge economy and the desire for start-up culture in Singapore are rooted

in unique practices, institutional settings, discourses, narratives, and particular spatial arrangements that gave particular meaning to the knowledge economy in Singapore in response to and in relation to its internal historical, political, and sociocultural processes as well as external currents. This chapter contextualised historically the emergence of technology start-up culture in relation to the state and how this emergence accentuated cultural tensions rooted in ideologically shaped understandings of 'Asianness' as antithetical to creativity. The development of technopreneurship, therefore, should be seen as embedded in Singapore's political, economic, and sociocultural history.

Approaching this historically also illustrated how 'the future' has been instrumental in claiming and consolidating power for Singapore's political elites. A deterministic view of futurities allowed to legitimise the state's and political elite's actions and constricted the space for discussion and contestation as it limited the possibility for 'future-positive' alternatives. The only other option was to 'not have a future'. Singapore's government has legitimised its interventions in education, labour and urban infrastructure by narrowing and tightly controlling 'the future' through the notions of survival and pragmatism in the name of nation-building. Thus, paying attention to how futurities are used in order to negotiate power and define what is possible is crucial when studying futurities ethnographically.

Planning is typically imagined to be the central way in which states engage with futurities; yet the limits of planning as a 'future-making practice' become visible when examining spatial transformations and how those shaped people's experience of place-making. Discourses materialise in many ways, and I argue that looking at how they relate to space is a particularly productive approach when studying futurities ethnographically. The analysis of Blk 71 revealed that the role of planning is limited, and what is seen as a 'coherent' state - is better understood through the negotiations of different institutions. I also argued that Blk 71's success resulted from overlapping interests and contingent developments, where the state's actors and funding played a crucial but just one of multiple roles.

Moreover, even if planning and especially urban development in Singapore relied on the imagination of a blank slate as a starting point, in practice, it was about the multiplicity of different futurities that were stabilised and made more durable through material and social infrastructures such as old buildings and working hours of food stalls. As environmental anthropologist Kregg Hetherington has beautifully articulated this:

"The tense of infrastructure, like any development project, is, therefore, the future perfect, an anticipatory state around which different subjects gather their promises and aspirations. Yet any given infrastructural intervention does this differently, and the

materiality of infrastructure enables the gathering of pasts and futures in novel ways." (Hetherington 2016, 11)

In the previous chapter, I argued that in the case of technology start-ups, the entrepreneur's and investors' vision of global imaginaries deemed relevant for futurities was discursively aligned, even if the practice was tension-filled and the burden of absorbing these frictions was placed on the entrepreneurs. In this chapter, I illustrate how the coming of the knowledge economy also accentuated tensions within Singapore about the rising social inequality and cohesiveness. It drew attention to the discourses about different groups within society as being offered different visions of futures and on different terms. These discourses and how they related to urban planning practices also showed how one-north reflects global trends in knowledge economy hubs but was deeply embedded in local discourses and spatial segregation practices.

In conclusion, studying futurities historically, locally, and through their spatial materialities allows us to develop ethnography-based insights into how future visions are constructed, contested, and realised. Singapore's technopreneurship and knowledge economy are not just products of global trends but are deeply rooted in the country's historical and local contexts resulting from overlapping interests of differently situated players. The analysis of projects like one-north and Blk 71 highlights the importance of considering the durability and a multiplicity of futurities as analytical starting points. The ethnographic examination of Blk 71 and one-north showed that futurities are always multiple, dynamic, context-dependent, and subject to contestation. The next chapter will continue to be located at Blk 71 and the one-north area for the most part and explore the social relationships within these spaces of innovation.

Building a Start-up Ecosystem

1. Introduction. Organising Sociality for Future Production

It was early Friday afternoon, mid-July in 2012, and the boiling sun was setting. The air was vibrating thick with heat and humidity. But here, on the 26th floor, where we sat in a milky white, unfurnished conference room, the air was crisp and cold. Air-conditioning marked the stark boundaries between the inside and outside. The high-rise city beneath looked like a construction place made from differently levelled Lego blocks. Dark patches of green demarcated the city's tropical parks, and the greyish-blue stretch of water was the Singapore Straits.

My interviewee, Wei Yung Huang, and I overlooked the city from almost a bird's eye point of view and discussed Singapore's future. Highly intelligent and seemingly always impeccably dressed in a full three-piece suit, Wei was one of the more charismatic and kindly eccentric players in what I got to know as Singapore's 'start-up ecosystem'. Wei was born in a well-off Singaporean Chinese family and later spent much of his life in Canada and the USA. He felt strongly about Singapore's future, and he wasn't shying away from playing his role in shaping it. He believed that through social engineering of the right conditions, he could facilitate the cultural shift that Singapore needed in order to succeed in the new economy. Participating in and organising events that brought together people interested in and passionate about technology start-ups was central to these efforts. He saw The Accelerator's role as crucial to the development of Singapore's start-up ecosystem, and The Accelerator's activities included not only its accelerator program but also weekly Open Houses for people to network. Before starting The Accelerator, Wei was also involved in establishing Singapore's Hacker-space, co-organising Singapore's Start-up Weekends, and participating in Bar-Camps, TEDxSingapore and many other social events related to technology, innovation and start-ups. Other activities that Wei organised, such as private dinners, were for selected people only - he enjoyed hosting dinner parties with delicious food he prepared himself and lively conversations that ranged from the science behind diet habits to discussions about structural problems for innovation, investment strategies and deals. Even if ex-

ceptional, Wei was by no means alone in these efforts.

There were many people who saw their work directly or indirectly relating to 'Singapore's start-up ecosystem' - a collection of various people, places and events that all contributed to the development and growth of high-growth technology start-ups. Ranging from aspiring and experienced entrepreneurs to investors at various levels, university program managers, bloggers and journalists, event organisers, marketing specialists, recruiters, lawyers, ex-start-up entrepreneurs, programmers, artists, government officials, politicians and fund managers. And just like Wei, many described themselves as directly involved in developing and building a 'start-up ecosystem'. For many, 'the development of a start-up ecosystem' was a context in which they saw the value of their own work, and in many cases, their abilities to reap financial rewards were related in one way or another to their activities in this social space. At the beginning of my research, I wondered why start-ups had to have their own events and their own places. Why were so many discussions centred around the notion of building the community, ecosystem and the social norms that ought to guide entrepreneurs, mentors and investors? Why did people like Wei and others spend their time and resources on 'strengthening the start-up community' rather than working on their business exclusively? How did these people and various businesses discuss collaboration while also acknowledging that they were, in some way, competing with one another?

In this chapter, I examine this start-up sociality closely to illustrate what roles, norms, practices, and values characterised it. Who were part of it, how were they interacting with each other, and on what basis? Commonly referred to as a 'start-up scene' or 'start-up community', this sociality was seen as crucial for establishing what was discussed as a 'start-up ecosystem' - a system facilitating flows of capital, labour, information between differently situated actors all contributing to the creation and growth of new start-up ventures. As I will argue in this chapter, an ecosystem was an ideal start-up futurity that imagined a frictionless and sustainable form of production of technology start-ups. Through the ecosystem, 'gifts' such as ideas, knowledge and experiences freely shared by participating people through networking and support of venture capital were expected to turn into 'commodities' - high-growth start-ups. Relying on a natural biological metaphor enabled an imagination of starting and developing high-growth start-ups as a sustainable and systematic practice. It was a normative ideal that coordinated the labour of otherwise disparate actors, and it endorsed a very particular kind of entrepreneurship - one that is built on venture capital, serial, and high growth. While the 'ecosystem' metaphor invites us to think about the system as self-organising, sustainable, and natural, in this chapter I show how it required a lot of work and effort, both discursive and material, to seem feasible and attainable. Attending to the tensions and work that my interlocutors invested in bringing the ecosystem about highlights the

hard work that the maintenance of start-up futurities requires.

This chapter will first discuss the kind of ideals that the notion of ecosystem captured by looking into the genealogy of the concept of ‘ecosystem’ that extended beyond metaphorical use. I’ll describe its longer intellectual trajectory from being central to cybernetic thinking to an application, analysis and organisation of economic production. Then, I will describe this hyper-social production environment in Singapore and the players and the social relationships they aspired to establish, and attend to the internal contradictions that were part of these relationships. I will show how the start-up sociality fulfilled three core functions - first it attracted people who could contribute to the development of technology start-ups; second, it educated them about and socialised the rules and practices in the production of high-growth technology start-ups and the roles they could play. Thirdly, the start-up sociality provided the social context in which ideas about social change could be materialised as commodities. I will highlight the often overlooked importance of venture capital in this sociality and argue that the ecosystem ideal structures the possible futures in a very specific way.

In this way, I see start-up sociality and ecosystem as a “peri-capitalist space” where “capitalist and noncapitalist forms interact” and further capitalist accumulation without direct control over labour (Tsing 2015, 66). I draw upon the insights of Anna Tsing, who has illustrated how noncapitalist forms of production and value are not external to the mechanisms for capitalist accumulation as one could imagine but rather central to it. Through socialising within the ‘ecosystem’, ideas, emotions, sharing of knowledge and experiences and capital were expected to result in new businesses.

First, I want to return to the interview with Wei on that Friday evening in July and situate his ideas in personal and social context to illustrate the many ways in which the notion of ecosystem both structured and gave purpose to his actions and how, in his practices, the ‘free’ gift giving was deeply intertwined with expectations of potential returns later.

Eat cheese and change the world

Wei, who had earlier started multiple technology companies in Silicon Valley and was also known for leading crucial open source projects, deeply believed in the progressive power of technology and was a good example of how, by networking, one could simultaneously establish himself in this field as well as shape it. In the earlier years following his return to Singapore from San Francisco, he actively organised and supported various events that aimed to inspire, connect, and support people involved in technology, design, and related fields commonly associated with the new knowledge economy.

Organising and attending these events did not bring direct financial rewards; instead, it helped Wei establish himself in Singapore after his return from the USA and allowed him to introduce his vision of bottom-up organising of entrepreneurs and investors.

For Wei and many others involved in technology start-ups, the idea of changing the world was inseparable from “making money” in the process. Next to running The Accelerator, Wei was also actively involved as an ‘angel investor’ - a term commonly used to describe wealthy private individual investors who financially backed start-up companies in the very early stages of their development. As the term suggests - ‘angel investors’ were seen as more than just investors - they had a strong philanthropic dimension captured in the name already in the sense that such investors often would take risks on ventures and individuals that others would avoid, aiming to contribute to innovation and the success of new ideas. Wei was part of BANSEAS, a network of business angel investors that Wei contributed to and drew upon in his work at The Accelerator. Wei was recognised not only among fellow technology enthusiasts and investors but also by various government officials and was on multiple occasions invited to attend government-organised panels regarding entrepreneurship and make policy recommendations concerning Singapore’s Information and Communication Technology business environment. He also often spoke at conferences organised by universities, government agencies and other businesses, actively participating as a judge and mentor in various business plan competitions and training. Usually, he would not be paid for these activities, yet they allowed him to get to know others and make sure that others knew of him, his vision and activities. He was very well-spoken and witty, and his message invariably focused on how technology allows people to use their potential and change the world through entrepreneurship.

On that July afternoon, just a few days before I was about to leave Singapore after my first six months of fieldwork, I asked if Wei could discuss in more detail what a start-up ecosystem really is and how it works. Wei thought for a second and said: “Well, I will give you a positive example,” and told me a story of how a wealthy former JP Morgan executive had recently moved to Singapore, partially motivated by Singapore’s friendly tax regime. Upon his arrival, the JP Morgan executive expressed his interest in investing some of his money in technology start-ups to a hearing government official. He was immediately referred to BANSEAS, the private association of angel investors. In BANSEAS, he was connected with Wei, who told him about the upcoming Demo Day organised by The Accelerator. There, the investor in question had a chance to choose from 10 well-groomed start-ups to invest in. As a result, this investor invested 360,000 \$. For Wei, this was a great example of ‘flow’ within the ecosystem that spans individuals,

government and private initiatives. He explained:

“...so that is kind of the, .. like, this is how it’s supposed to work, and that is an example of an ecosystem in action - where the government, BANSEA and The Accelerator, you know the whole thing is coming together...and... it’s good...and that sort of thing happens in Silicon Valley all the time because there is enough critical mass for these connections to occur. (..) ..naturally, you know, a start-up is like this rare, beautiful flower that is very delicate, and most places in the world are deserts, and there are only a few places in the world that are sort of these oases, of life, water and sunshine and other helpful bugs and insects that will, like, eat the bad insects...and Silicon Valley is one of those oases, and Singapore is gradually becoming one ..”

In Wei’s description, an ecosystem is a complex and fragile system that, once correctly developed, can produce great and exceptional economic value. Singapore, according to Wei, was taking the correct steps to develop a productive ecosystem. While Wei didn’t mention it, in other accounts of the ecosystem, it would be quite common also to include the university in this image of a functioning ecosystem. For example, the National University of Singapore (NUS) had a strong division that focused on fostering entrepreneurship and had a range of exchange, study and mentorship programs as well as ‘incubation’ spaces, all aimed to make sure that students explore the path of entrepreneurship and once there then would have access to mentors and funding.

As Wei and I talked, the noise in the large office area behind us grew stronger and stronger - people were gathering for the weekly Open House that The Accelerator was organising. This was another example of an activity aimed at ‘strengthening the ecosystem’ by drawing the ‘community’ together to talk and exchange ideas. The expectation was that the Open House would provide space for networking and, therefore, strengthening social ties, overflow of ideas and establishment of ‘serendipitous encounters’ that are seen as leading to innovative production. At the time, The Accelerator spent roughly 100-200 Singapore dollars on cheese and wine every week for the Open House and considered this a good investment for ‘building the community’. That particular evening, I met founders from multiple Singapore-based start-ups, Indian and local investors, entrepreneurs and investors from Start-up Sauna in Finland who happened to be travelling through, and programmers from Singapore, Germany and the USA. Even my housemates - an American MBA student who was doing his internship with a Singaporean start-up and his German girlfriend sent here to set up her company’s ‘Asian’ office also found their way to The Accelerator’s Open House. This weekly gathering was just

one of many social events that filled the agendas of people involved with technology start-ups.

The Accelerator, on its website, presented the weekly Open Houses as “a random collection of geeks, entrepreneurs, investors and creatives” who are invited to “gather to eat cheese and change the world”. In many ways, this slogan captured the ecosystem’s promise - low-key meetings, serendipitous encounters, and the exchange of ideas between differently positioned people will lead to transformational new businesses. Non-capitalist interactions will lead to capitalist accumulation organically and naturally. Ethnographic examination of this futurity, though, will show that it required a lot of resources and was an ideal that my interlocutors, The Accelerator included, often struggled to sustain.

2. Genealogy of the ‘Start-up Ecosystem’ Concept

I wasn’t the only one who was trying to understand the field of start-up entrepreneurship in Singapore. In fact, many entrepreneurs and other professionals who had an interest in this area were also actively engaged in ‘mapping the field’ and analysing each other’s positions. Even if our motivations and goals were, to a large extent, divergent in terms of activities undertaken, my research wasn’t that different from that of what many of my interlocutors did to understand ‘who is who’ and the relationships and topical issues at stake. Very often, my interlocutors were as dazzled and confused by the sheer amount of start-up-related events and people as I was, and especially in the later stages of my fieldwork, I often found myself in a position where I could tell my interlocutors about the ‘history’ and institutions and people. Partially, that was due to the nature of my research that allowed me to work with a variety of actors and return every year for a few months over a three-year period, but it also speaks to the short memory and high degree of circulation of this social space. It wasn’t uncommon for my interlocutors to date the beginning of ‘real’ activity in the start-up field just around the time when they got involved themselves.

We all relied on the start-up media to inform us about upcoming and past events, trending start-ups, and entrepreneurs we should know of. We relied on networking at social events to get introductions and ‘snowball’ our way further ‘in the know’ and asked open-ended questions to find out what was considered ok and what was not. We attended events that educated us about what is expected from an entrepreneur and posted on online forums to introduce ourselves and ask questions. Many of my interlocutors were also writing about their experiences online and documenting ‘who is

who' on their blogs, and many of my interlocutors were much more efficient than I was in communicating their findings, which were usually presented as 'giving back to the community' and commonly were rewarded with increased recognition and typically also commonly higher social standing. Very often, these attempts were linked with academic research projects. For example, Oscar, for example, wrote his Master's thesis on accelerator programs and lectured on entrepreneurship and innovation. Wei, in turn, created a visual representation of various sources of start-up funding - it was not only widely circulated by the start-up people but also included in articles published by scholars studying Singapore's economy. Some of them were academic projects - an ongoing survey TechSg.io by NUS Enterprise; and others were collaborations such as the "Singapore Tech Entrepreneurs' Network Map Project" by NUS Enterprise and Endeavour Insight, sponsored by J.P. Morgan. Similarly, my interlocutors drew upon analytical concepts and theoretical models stemming from organisation studies, psychology, sociology, political science, and anthropology.

In his work "Arbitraging Japan", Hirokazu Miyazaki sets out to study financial traders as "not simply decision makers but also thinking subjects engaged in dialogue with a variety of broader intellectual debates and projects." (Miyazaki 2013, 6). He notes that financial traders, much like social scientists, engage and develop various theoretical frameworks through which to understand their professional and personal lives. A similar point has been made by Holmes and Marcus (2006, 2004), introducing the idea of 'para-ethnography' which describes a situation when the researcher and her interlocutors are simultaneously involved in the analysis and construction of the field. Similarly, my work, to a large extent, involved working with professionals who drew upon academic concepts and scientific practices to understand their actions and the phenomena they were concerned about. With that being said, our goals differed, and the kind of knowledge they aimed to generate was predominantly 'actionable' - one that could directly inform their actions. In turn, my task as an anthropologist is to examine how such organising constructs work and from what genealogies they gain their power. Therefore, in this section, I want to examine the longer intellectual history of the 'ecosystem' concept since that played a role in how the concept could easily travel.

Ecological and economics metaphor

'Ecosystem' is clearly a deeply powerful metaphor. As Gareth Morgan in his seminal work "Images of Organisation" has explicated:

"The use of metaphor implies a way of thinking and a way of seeing

that pervade how we understand our world generally.” (Morgan 2006, 4)

Also, the metaphor of ecosystem shaped how people involved in the technology start-up sociality viewed each other. Earlier, Wei used the analogy of natural systems to describe the support start-ups need to grow - he compared a start-up to a rare flower which would die in the ‘desert’ that most places in the world are; instead, a selected few places, such as Silicon Valley and eventually also Singapore were like ‘oases’ where the start-up flower could grow through the nurturing interactions of various elements. His description illustrated how the ecological metaphor is deeply ingrained in the understanding of this particular economic production system. It also highlighted the fact that a start-up ecosystem was perceived to consist of different actors fulfilling particular roles by interacting with each other in very particular ways, even if their actions were not concerned with the growth of the flower in question. It is through their interactions that they ensured ‘the climate’ for start-ups to develop.

Applying organic metaphors to the organisation of social life, especially economic life is not anything new (Morgan 2006), especially in the technology start-up world, where start-ups are ‘incubated’, ‘grow’ and ‘bleed’, ideas ‘hatch’ and early investment usually comes as ‘seed’ money. Start-ups are often compared to babies that their devoted founders nurture. Kevin Kelly, the director of Wired magazine, for example, has argued that

“Because network technology behaves more like an organism than like a machine, biological metaphors are far more useful than mechanical ones in understanding how the network economy runs.” (Kelly 1998, 33)

While metaphors have a significant influence on the interpretations of the social world (Thomas and Sturken 2004), ‘ecosystem’ is not only a metaphor but also an analytical concept used both in biology as well as applied to the analysis of economic life. According to science historian Sharon Kingsland, economists and biologists started to borrow and apply each other’s models to their own respective disciplines around the 1970s (Kingsland 1994). The merger between economic and ecological imaginations is traceable to the application of cybernetic thinking to social life, which led to the development of studies of complex social systems, emergence and self-organisation (see, for example Curtis 2011). Attempts to plan and manage the economy as a whole as a cybernetic system with technological means was a project undertaken in the Soviet Union during the 1950s, as well as in socialist Chile in the 1970s (Medina 2011). The field of

‘management cybernetics’, for example, focused on the survival of the firm through adaptation to its environment, introducing the conceptual framework where the business can be seen as an organic entity and thus be subjected to evolutionary processes and evolutionary rationality.

In this connection to evolutionary principles, predator-prey analysis was an especially attractive concept for modelling population growth, and evolutionary biology principles seemed to serve well when applied to the study of firms within economic theory. One of the more extreme versions of rendering economic interactions as ‘natural laws’ of evolution and ecosystem thinking is presented in the works of Rothschild in the early 1990s, who attempted to establish a field called ‘bionomics’. Titled “Bionomics: The Inevitability of Capitalism” (1990) and “Bionomics: Economy as Ecosystem” (1992) his work attempted to explain how

“a capitalist economy can best be comprehended as a living ecosystem. Key phenomena observed in nature – competition, specialization, co-operation, exploitation, learning, growth, and several other – are also central at business life.” (Rothschild 1990, xi)

Rothschild is reported to have mingled well with such Silicon Valley figures as Kevin Kelly (Turner 2006a; Fuchs 2009), who played a significant role in shaping and disseminating the particular blend of Californian Ideology, as well as authored an influential book called “New Rules for New Economy” (first published as a book in 1998), which drew heavily on the biological and organic metaphors to describe the new economy enabled by network computers (Kelly 1998).

Business and start-up ecosystems

When talking about the concept of the ecosystem, my interlocutors often referred to an article by James F. Moore: “Predators and Prey: A New Ecology of Competition”, published in Harvard Business Review in 1993, as a source of this concept rather than this longer ideological genealogy described above. In the article, Moore described a business ecosystem, a concept that allows one to see businesses in relation to one another as part of a joint *ecology* (Moore 1993). Based on his readings of anthropologist Gregory Bateson’s “Mind and Nature” (1979) and Stephen Jay Gould’s work on natural ecosystems, Moore argued that there are many parallels in the development of firms to natural and social evolution. Importantly, such an understanding allows us to see companies not as bounded units acting alone but as acting in relation to other elements

in a system. He explains:

"a company be viewed not as a member of a single industry but as part of a business ecosystem that crosses a variety of industries. In a business ecosystem, companies co-evolve capabilities around a new innovation: they work cooperatively and competitively to support new products, satisfy customer needs, and eventually incorporate the next round of innovations." (Moore 1993, 76)

Thus through the idea of an ecosystem, a certain system, a certain social space is constructed where companies act and interact with each other. It is a much more holistic and dynamic way of approaching economic relations. For example, it also includes 'indirect' relationships - relationships that are not central to a particular transaction but can be described more as 'the environment' or context - as relevant. Using examples such as IBM, Apple, and Walmart, Moore argued that these are the leaders of particular ecosystems and having such leadership "(..) enables all ecosystem members to invest toward a shared future in which they anticipate profiting together." (Moore 1993, 76) Thus, the way Moore approached business ecosystems was as a construct of a certain collective that has a shared future and where a few players have leading roles, but overall, the system is self-organising.

Moore's work in 1993 needs to be understood in the context of much wider thinking about globalisation and technological development that characterised the early 1990s and the intellectual climate in the USA. Systematic thinking about the development of firms was already a concern of economic theorists. At the time the works of Michael Porter were particularly popular (for example, Porter 1998). He developed the clustering approach as a way to analyse the growth of companies and, eventually, the growth of national economies. However, as scholars have noted,

"this approach to strategy does not pay enough attention to the many other actors and environments in an industry: the organisations making complementary products, the infrastructure on which the organisation depends, and the various institutions, people, and interest groups that affect the entire industry." (Bloom and Dees 2008)

Thus, Moore's work provided a more nuanced and holistic approach to understanding economic growth. Possibly one of the reasons why Moore's article gained significant popularity was because he articulated a vision that emphasised collective action and collaboration. Such emphasis resonated with the enthusiastic ideas about the new, immaterial economy enabled by technological innovation in the early 1990s. Moore is

also the author of multiple books such as “The Death of Competition: Leadership and Strategy in the Age of Business Ecosystems” (1996) and “Shared Purpose: A Thousand Business Ecosystems, A Connected Community, and the Future” (2013). Such a combination of harmonious collaboration that also embraces competition resonated well with the San Francisco Bay Area elites and the particular ethos that Barbrook and Cameron have described as ‘the Californian Ideology’ - the mixture of “the disciplines of market economics and the freedoms of hippie artisanship.” (Barbrook and Cameron 1996, 5) typically popularised in magazines such as Wired. Competition in an ecosystem still exists, but it is seen as beneficial for everyone because now, even if one particular player loses due to the competition because the ecosystem is strong, the person or institution will be easily re-hired - so there won’t be a loss either at systems’ or individual level.

At the time of my research in Singapore, many of my interlocutors referenced Moore’s work, and the concept of ‘ecosystem’ was also actively used by various government agencies. For example, in the 2002 Economic Report, the sub-committee of Entrepreneurship and Internationalisation stated:

“Our desired outcome is to create a vibrant, self-renewing, and self-sustaining enterprise ecosystem that is connected to the larger global ecosystem. We can not *manufacture* entrepreneurs but we can create the environment and conditions that allow, encourage and facilitate entrepreneurship.” (Lim 2002, i)

While Moore talks about electronic ecosystems, automobile ecosystems, personal computer ecosystems, etc., many of the people I worked with in their discussions and much of the discussions online first and foremost evoked an idea of a *start-up ecosystem* - a complex system that is concerned with the development of high growth (high) technology businesses as such. Thus, not in relation to particular commodities such as ‘mobile start-ups’ or ‘gaming start-ups’, but start-ups themselves - start-ups as vehicles of growth.

In our conversation, Wei referred me to another book that should illustrate what a start-up ecosystem is. Titled “The Rainforest: The Secret to Building the Next Silicon Valley” (Hwang and Horowitz 2012), it is written by two Silicon Valley-based venture capitalists and CEOs who address *innovation* ecosystems. They argue that the Ecosystem is not only a metaphor but a biological system where the ‘raw ingredients’ of talent, ideas, and capital circulate. The better these ingredients circulate, according to them, the healthier and thus more productive is the ecosystem:

“A Rainforest is a human ecosystem in which human creativity, busi-

ness acumen, scientific discovery, investment capital, and other elements come together in a special recipe that nurtures budding ideas so they can grow into flourishing and sustainable enterprises." (Hwang and Horowitz 2012, 29)

These "human networks can generate extraordinary patterns of self-organisation" (Hwang and Horowitz 2012, 12), which, according to the authors, lead to the formation of "new life forms", aka 'innovation' in unpredictable ways. Using the metaphor of rainforest as a lush and fertile environment, they contrast it to croplands (and thus industrial, monotonous and repetitive production) and argue that for innovation to occur, none should define whether what starts to grow is a crop or a weed. As opposed to croplands, in Rainforests, weeds are allowed to grow, and they often turn out to be companies such as Google and Facebook. Even though the book promises to "reveal the invisible, underlying rules of behaviour that cause people to come together in successful innovation communities" (Hwang and Horowitz 2012, 29), unpredictability and serendipity unlocked by circulation are the core terms in their book. They were often invoked to describe how innovation should happen amongst my interlocutors in Singapore. While not spelt out directly, the ecosystem's inherent promise is that it will 'naturally' and smoothly translate 'gifts' into 'commodities' - people's ideas and experiences shared by networking and supported by financial capital will be turned into commodities.

By describing the ecosystem as a metaphor and concept rooted in cybernetic thinking, biology and economy, I aimed to depict the central assumptions it is based on and the kind of associations about economic life it evoked for the people involved. Based on the 1960s cybernetic ideals (and the abuse of ecological metaphors as the filmmaker Adam Curtis (2011) has argued) and ideas about evolution, the ecosystem concept gives a naturalised version of an economic production system, which seems quite hard to argue against, since it is based on arguably indisputable, 'natural' rules. Moreover, it paints a somewhat utopian image of a collaborative, self-balancing and organising system which sustainably produces economic value. Thus, I approach it as a normative ideal that casts a collective vision for the future. In the following sections, based on ethnographic accounts, I will detail how the notion of ecosystem helped to structure social relationships and the kind of contradictions my interlocutors found themselves dealing with.

Importantly, the start-up ecosystem was a globally circulating concept and one that allowed to assess and compare very different places. For example, a company called Start-up Genome since 2012 has been producing annual 'Global Start-up Ecosystem' reports that compare cities around the world and rank them in areas such as start-up quantity, risk capital funding, start-up performance, talent (entrepreneurial experience and knowledge), support systems (mentorship, service providers), the mindset of the entrepreneurs (defined as unproblematically global ideal "great entrepreneur is visionary, resilient, has a high appetite for risk, a strong work ethic and an ability to overcome the typical challenges startups face" (Startup Genome 2012, 3), trendsetting (how quickly new technologies and management techniques are adopted), and differentiation from Silicon Valley (Startup Genome 2012). Similarly, I saw my interlocutors use the concept of the ecosystem to understand, analyse and compare the global flows of capital, people and ideas. Sometimes, they would refer to Singapore's ecosystem; on other occasions, for example, as described in Chapter One, they would discuss the whole of Southeast Asia as an ecosystem within which people, capital and ideas need to circulate in specific ways. The following situation from February 12, 2013, gives a good impression of the work that the concept did for comparing and bringing together various aspects.

That midday, I shared an island of desks with two others in a co-working space that was still being arranged before the official opening. The room was cluttered, a work in progress—desks and chairs arranged in an unstructured manner, while framed posters rested on the floor, awaiting their place on the stark white walls. Scattered business cards, plastic bags filled with plush toys, a bicycle, and haphazard stacks of books lay amidst a thin layer of dust. Most occupants had stepped out for lunch, set to return and restore order to the space. The air carried the dusty remnants of recent construction while the hum of air conditioners battled the relentless tropical heat.

The two other people in the room clicked away on their laptops as if their lives depended on it. Their heads were slightly tilted, eyes intensely glued to the screens. Each was absorbed in their own work. One of them was Aiden, whom I knew pretty well. He was a Taiwanese man in his 20s who had moved to Singapore after spending parts of his life in Europe and the USA. Well-versed in the start-up ecosystem, he had travelled extensively across the region.

The other person was unfamiliar to me, though I assumed he was of a similar age. At one point, he paused typing, stretched his arms and back, and broke the silence with a strong American English accent. His voice seemed unusually loud for the setting. It turned out he was a Singaporean and a programmer. Contrary to common stereotypes, he was noticeably tall for a Singaporean Chinese and unusually talkative for a program-

mer. His relaxed and casual demeanour suggested that he was not one of the ‘MBA types’—a group I had come to recognise well in this co-working space. MBA students from the neighbouring INSEAD were typically more polished and deliberate in their manner, and their dress code could be described as ‘casual Friday’ on any day of the week.

As their conversation unfolded, I learned that the tall Singaporean at our table had just returned from Silicon Valley and was about to launch his own start-up in this building. His name was Frank, and he was eager to talk.

“Soo... how is the ecosystem in Indonesia?” he asked. “Indonesia? The ecosystem is very small,” he stated matter-of-factly. He went on to note that there was ‘something’ in Thailand but ‘not too much—just a few active people.’ From Aiden’s quick and structured response, it was clear that he had analysed this topic many times before. To substantiate his observations, he added that he had explored start-up ecosystems in Seoul, Saigon, Tokyo, and China multiple times. According to him, Tokyo had substantial venture capital investment, but it was ‘very insular,’ with entrepreneurs focused solely on the domestic market. “And none speak English,” he added. As I listened, I wondered what weight Aiden was assigning to that observation. In the start-up world, where ‘going global’ was the ultimate aspiration, a lack of English proficiency seemed to imply a limited international outlook. Not ideal, I assumed.

Aiden continued, explaining that in the Philippines and Saigon, there were ‘a lot of developers, but entrepreneurship is not innate.’ Taking risks and making ‘that jump’ into entrepreneurship was particularly difficult, as many people had to prioritise financial stability and family obligations. He stretched his back before sharing, in his usual analytical tone, that, in his opinion, Seoul had ‘the best ecosystem’ in the region.

“Why?” Frank asked, eager to understand. “Because it has produced good start-ups. Singapore hasn’t,” Aiden replied curtly. “So we’re not catching up?” Frank asked, his tone tinged with disappointment but also a sense of his fears being confirmed. Aiden shook his head but then added, “There are a lot of changes happening in Singapore right now—so it’s hopeful.” Yes, I’ve been away a lot, and I can see that too,” Frank responded, sounding more optimistic.

They had just run through a familiar script, one I had encountered time and time again. It was through the concept of the ecosystem that Frank and Aiden could talk and compare places as different as ‘Philippines’ in the same sentence with ‘Seoul’ and measure the ‘progress’ of Singapore as opposed to ‘China’. Through this concept, they could link changing cultural norms with start-up success stories, market valuations and access to labour in ways that would be hard to explain otherwise. Through the concept of ecosystems, they could contrast access to venture capital with the language skills and availability of programmers. Looking at the world through the notion of a start-up eco-

system, one could bring together the various elements deemed necessary for start-up production. Moreover, it allowed them to measure and compare places and characteristics that otherwise would not be comparable as it allowed to make the incommensurable commensurable at various scales.

3. Start-up Sociality in 'Ecosystem'

At the time of my fieldwork, a whole industry catering to start-ups and education about start-up entrepreneurship was flourishing. With different degrees of formality and levels of structure, differing regularity and length, the start-up calendar in Singapore by mid-2012 was definitely very busy, featuring multiple start-up events almost every day of the year. This ranged from particular programming language meet-ups to overnight hackathons to evenings where business founders could share their experiences, business plan competitions, massive three-day conferences and highly exclusive paid workshops, and events aimed at explaining various government grants. These were often talks and discussions where investors and mentors would discuss best practices for building a start-up and raising funding, becoming an entrepreneur, or sharing sessions about visits to other start-up centres worldwide. They also featured loosely structured events such as BarCamps for exchanging knowledge or sponsored talks by large technology companies on particular ideas such as 'Big Data', 'Smart City', etc. Online discussions on the major blogs and forums were also important in informing people about one another and developing a sense of a shared social field. Some events were only a once-off and lasted a few hours; others were regular, and some lasted a whole weekend or went overnight. Some were fully 'bottom-up' events started as initiatives of enterprising individuals, and others were organised with varying degrees of involvement and support from large corporations or the Singapore government.

In addition to these events, also a whole range of permanent physical spaces had established themselves as co-working spaces for entrepreneurs working individually or in small teams, often offering additional services such as educational or motivational talks and networking opportunities. Led by passionate individuals and groups, corporations, universities, as well as governmental bodies, the kind of social events and spaces that characterise Silicon Valley in California or Silicon Alley in New York (Neff 2012; Marwick 2013) were becoming more and more widespread over the years of my research in Singapore.

Scholars studying production in the new economy, in particular, have noted the 'hy-persocialized' nature on which the techno-economical production relies (Turner 2009;

Terranova 2000; Neff 2005; Thrift 2001; Marwick 2013; Rencher 2012; Pfeilstetter 2017). For example, Turner has argued how The Burning Man festival in the Black Rock Desert of Nevada provides the 'cultural infrastructure' modelling the social relationships that underlie the production of informational goods at Google (Turner 2009), emphasising commons, peer-production, collaboration, openness and sharing. Similarly, the start-up events and places in Singapore played a crucial role in the production of technology start-ups.

I propose that in Singapore, at the time of my fieldwork, they fulfilled three major roles. First and at the most basic level, they attracted and brought together labour - people who were interested in or curious about technology start-ups. Secondly, they socialised the people in their expected social roles and associated norms and values, which were seen as necessary for the production of high-growth technology start-ups. They educated those involved on a range of issues, most importantly on what can be considered a good business, how one should pursue it and what one should expect of the process and results. Thirdly, they provided the social context and social connections for turning their ideas of social change into their commodity forms and later businesses. Openness and sharing were crucial values praised in this context because they aided in achieving these goals. Viewed from the ecosystem model, openness and sharing were crucial in order to facilitate the circulation of ideas, people and capital in a productive manner.

Openness and sharing

Openness and sharing were typically celebrated in such spaces, both discursively and in practice, often visible in the design of spaces and the structure of events. Predominantly, openness and sharing were embraced narratively - in the way people explained what they do. For example, after having a tour through one university's incubator spaces, I thanked the person for his time and energy in showing me around, to which he responded - "That is how we are in the start-up community—openness and sharing are really important" and proudly but casually shrugged his shoulders. In alignment with the metaphor of the ecosystem, the people involved explained that it is important to share and keep information flowing freely. Discursively, there was a dismissive attitude towards non-disclosure agreements, which were often discussed as 'silly' and 'unnecessary' at the early stage of start-ups.

Openness was also evident in the open floor plans that characterised most co-working and incubation spaces. Many different teams would work in an open space next to one another, breaking off from the larger group only for online calls or private meetings.

Offices in the new or refurbished buildings would typically have glass walls; while creating separate spaces, they would still make everyone visible to each other.

The majority of the events were open to anyone interested and commonly free of charge. During the start-up-related events, the sharing sessions would typically have extensive Q&As for people to ask questions and hear answers. A significant part of the time would be allocated for interaction with one another. After or before the official agenda, typically, there would be snacks or simply unstructured time allocated for 'networking' in this way, encouraging socialising among the attendants. This quickly gave a sense that this sociality is open to anyone interested and that sharing experiences and ideas is an integral part of it. My access to the field was enabled a lot by this attitude.

In these ways, start-up spaces positioned themselves as spaces that are in some ways different from other professional spaces in Singapore - for example, HackerspaceSG branded itself as "Singapore's first kiasu-free zone". *Kiasu* was understood to be a mainstream attitude in Singapore to not share and collaborate in fear that this would worsen one's position for the benefit of someone else². HackerspaceSG then contrasted against such a mainstream selfish and fearful mentality and encouraged sharing and collaboration in its branding and the way the space was set up and managed. By having conversations that would be typically seen as 'internal' publicly, the notions of openness, egalitarianism and sharing were put into practice. For example, a conversation thread started on the open Hackerspace online group about the need for "spring cleaning" after five years of being in operation is just one instance of how openness and sharing of responsibility were perceived. One member initiated the conversation regarding the lack of order at Hackerspace, suggesting that people are using the place for sleeping too much, the dirty dishes with water pile up in the sink, increasing dengue risk and that the accumulation of broken gadgets generally creates a sense of mess. Other members agreed that they need to "start a program of gradual improvement to get us back to "space for adults to work and socialise" rather than "teenager's bedroom." (Hackerspace discussion forum, <https://groups.google.com/forum/#!topic/hackerspacesg/kQ-mngteYAA>, last accessed April 20, 2019). Suggestions to move this conversation to a more private in-person discussion were shut down, requesting that this should be 'accessible and open for everyone'. After a lengthy discussion over a few days about which of the problems are the most pressing, what improvements are necessary to make housekeeping easier, whether or not specific rules should be created (e.g. a ban on sleeping in the space during certain hours), the most effective ways of fighting mosquitos, and expressions of general recognition that housekeeping is a problem the

2 Not to confuse with popular 'fear of missing out' or FOMO. *Kiasu* is based on an idea of competition in a context of finite resources, which creates a sense of 'zero sum game' situation. FOMO, instead, focuses on the importance of socially shared experiences as a way to advance or maintain social position.

concluding sense was that members are actively taking matters in their own hands.

Sharing of business proposal

Another example of making something ‘open’ that typically would not be shared comes from the very early days of The Accelerator. It is a very helpful example, as it illustrates two important points pertaining to this chapter’s arguments. Firstly, shows the strategic value of ‘openness’ and ‘sharing’ in bringing a specific vision of the future to life. Additionally, concerning the notion of the ecosystem itself, it allows to see that the ecosystem ideal is crafted to support the growth of a very particular type of start-ups - namely those of high-growth, which are built on venture capital.

In 2010, The Accelerator shared its business proposal online, asking readers on various business and technology-related forums to comment on it. The request for comments explicitly discussed Singapore’s business environment as an ‘ecosystem’ for technology start-ups. In the document, they argued that what Singapore’s ecosystem was missing at the time was a “renewable source of credible, balanced entrepreneurial teams”. The Accelerator proposed that if they receive funding, they would be willing to “nurture” such teams to the point where they can “put forward investment-ready businesses.”

Wei and Oscar depicted a start-up ecosystem as being composed of specific types of people, roles, contexts and activities that are necessary for start-up growth.

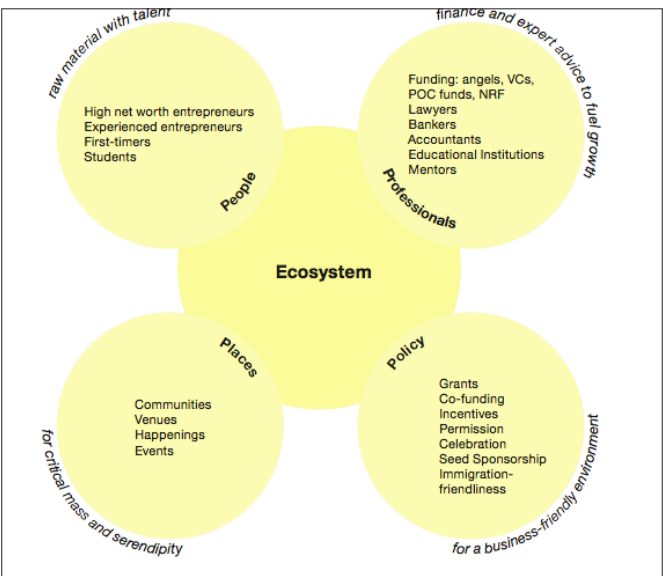


Illustration of start-up Eco-system by The Accelerator in their Proposal, 2010

According to Oscar, the proposal was published in the ‘spirit of openness’ on online forums and shared in e-mails with people Wei and Oscar thought might provide valuable feedback or possibly get involved. Sharing the document openly was meant as a strategy to get feedback and thus be able to improve it by identifying what was missing and what other people thought of it. Oscar explained that getting the reactions of variously situated people would allow them to ‘get a sense of how people would redefine what they think The Accelerator is doing’. In other words, based on the feedback, The Accelerator could use the language of the different stakeholders when communicating with them, thus increasing the chance of attracting support for The Accelerator’s efforts. Another expectation that motivated the sharing of the document was that once people saw The Accelerator’s intent, they would be willing to join this vision, for example, by investing in The Accelerator, therefore enabling The Accelerator to happen. On the flip side, there was also a hope that if some relevant actors would find The Accelerator’s activities somehow ‘threatening’, then this transparent way of sharing should assure them about The Accelerator’s intentions, leaving less room for doubt and mistrust. Thus, sharing the intent of future action was crucial in finding ways to realise this future. ‘Openness’ and ‘sharing’ then served to make a claim on a future process and find necessary resources to bring that into action.

The Accelerator was proposing to ‘fix the missing link’ in the ecosystem’s flow in order to nurture the entire ecosystem. They had identified what they saw as a lack of investment-ready businesses that venture capital would like to fund and proposed through their program to develop such start-ups. The Accelerator’s proposal was met with interest, and in 2012, The Accelerator started its first acceleration program funded partially by private investors, Singtel Innov8 and SPRING. Here lies one of the paradoxes of the start-up ecosystem concept. While in theory, it is imagined as an organic, self-organising, self-sustaining and renewing system, in practice, it is strategically evoked, organised and crafted by players who find it useful or necessary in one way or another.

Facilitating ‘serendipitous encounters’

A term often evoked in relation to the productive encounters within the ecosystem was ‘serendipity’ - it denoted both a temporal and spatial convergence of unexpected but positive events. The Accelerator’s Open Houses - the weekly events described at the beginning of the chapter were organised in particular to attract people to The Accelerator and encourage such ‘serendipitous encounters’ between people who normally wouldn’t have reason to meet. Through such unstructured possibilities to meet and

network, Wei and Oscar thought they were increasing the 'social capital' of Singapore's start-up ecosystem. The way they understood it, for social capital to develop, they needed places and events for all sorts of people to come together easily, with low friction; people had to be made to believe in start-up success and see the examples of local people who have 'made it' trust amongst different players including trust in the regulatory framework was also needed. In this section, I will describe how, through Open House events and the running of a Café, The Accelerator tried to facilitate this sociality necessary for the functioning of an ecosystem. They expected that the Open Houses would provide the necessary space for networking and, therefore, would help strengthen the social ties, trust, flow of ideas, and establishment of 'serendipitous encounters' that were seen as leading to innovative production. Undoubtedly, by organising these events, The Accelerator wanted to position itself at the centre of the start-up community. Being recognised and well-regarded would increase its chances of attracting good start-ups to its acceleration programme. Thus, strengthening 'the community' was something that would promote the 'general good', but it would also serve The Accelerator, helping it finance better start-ups, which would have better chances of acquiring further funding, growing bigger, and eventually bringing revenue to its investors, i.e. The Accelerator.



Oscar 'mapping out' the various elements necessary for increasing social capital in Singapore's start-up ecosystem, partially described above. This was just one of many maps produced in reflective moments of brainstorming with one or multiple people in the room, mapping out the various groups of people who could be potentially involved or traits or ideas that need to be spread in order for The Accelerator and Singapore's start-up ecosystem to succeed. Photo by author.

At first glance, this all seemed to resemble how such start-up sociality was imagined in some of the canonical texts referred to me. For example, one of the often referred to 'manuals' for knowledge on how to build towards a start-up ecosystem was a book called "Startup Communities: Building an Entrepreneurial Ecosystem in Your City" written by American venture capitalist and entrepreneur, also a founder of Techstars accelerator network of which The Accelerator was part of, Brad Feld. Feld emphasises that conscious work needs to be put into organising such start-up ecosystems. As the main stakeholders, he identifies entrepreneurs, government, universities, investors, mentors, service providers and large companies (Feld 2012). Also, Feld, similar to Horowitz and Hwang, depicts a start-up community as one that is focused on the circulation and sharing of ideas and resources - knowledge, finance and infrastructure. Experienced entrepreneurs are supposed to pass on their knowledge to the inexperienced ones. Universities produce science that can be used for businesses. Investors are willing to risk their capital to support the growth and development of the start-up business. The government facilitates the process by setting up an entrepreneurship-friendly legal climate. Additionally, Feld also stresses the role of various events and activities, which should provide the base for developing the 'start-up community'. Both the "Rainforest" and the "Startup Community" books make it very clear that the relationships between the players must be understood in a way that supersedes individual benefits and focuses on the long-term benefit of the whole system - capitalist growth. Openness, sharing, and collaboration are described as the traits that characterise professional interactions in Silicon Valley and are conducive to such growth.

It is important, though, to also acknowledge that in practice, this openness and sharing were always partial and often were applied strategically in ways that were seen as beneficial to the individual players. During the first weeks of The Accelerator's 100 day programme, I attempted to blog about what was happening there. Still, I very quickly found it to be extremely complicated because it was clear how a lot of the information I came across was sensitive at the time when the events were unfolding and could cause potential damage if discussed publicly. For example, confusion about which ideas to work on in the teams would reflect badly on the founders, just as the formation and splitting up of the teams, establishment or failure to establish certain partnerships in the making, etc. Similarly, many of the talks held by The Accelerator mentors were public, but many were only for The Accelerator participants. Within those talks, it wasn't rare that the speakers would ask not to film or record the conversations, as they revealed information that wasn't 'ready for the public' - meaning deals and plans in the making or rather cynical strategies and explanations of their success. Chapter Four will explain

in more detail the importance of narrative construction and framing of business and, therefore, also the importance of controlling what is being said about the company. In that context, I stopped my attempts at blogging after a few posts.

At a larger level, even though there was a lot of sharing, openness, and emphasis on different actors supporting one another, the fact that there was also competition should not be overlooked. While all of these places and events supported technology entrepreneurship, they were also competing for people's attention and money, an aspect of the 'ecosystem' that wasn't typically discussed openly. All the co-working spaces run by entrepreneurs tried to find their own specific niches. Also, The Accelerator, in its application for funding, detailed how it differs across multiple aspects from many other initiatives in Singapore aimed at entrepreneurs. Constructing difference through specialising and finding one's own niche was an important way to be able to talk about collaboration rather than competition, yet in the context of limited resources, competition was still an unavoidable fact. Organising social events such as the above-mentioned networking sessions or motivational or educational talks was one way of 'adding value' to the community they served and promoting themselves to others potentially interested. Similarly, The Accelerator's investment in the Open Houses and Café aimed to contribute to people getting to know one another, the serendipitous encounters and exchange of ideas so necessary for building a 'community', yet it also was crucial for The Accelerator that all possible start-ups and investors know of The Accelerator.

While many event and space organisers wanted to attract financial support from various governmental agencies aimed at supporting innovation and entrepreneurship, government involvement was also often viewed with suspicion. Partially because there was a sense that the government would want to organise things in a 'rigid' and 'formal' way, but also, maybe more surprisingly, because enterprising government officials could pick up a good initiative and copy it as a solely theirs, but then with the 'unlimited resources' of a national government. The struggle to bear the costs associated with sociality in the start-up ecosystem will be described in more detail in the next section.

4. The Costs of the Ecosystem

In this section, I will zoom in on two of The Accelerator's practices aimed at fostering the community and ecosystem, namely the Open Houses and Café, and focus on the resources and the work that went into providing them and the tensions The Accelerator staff had to grapple with, resulting in them constructing a 'secret office'. These tensions, I argue, reveal the problems at the heart of the ecosystem ideal as the free labour and

gifts did not ‘naturally’ convert into a money economy as The Accelerator struggled to cover the costs of their operations. This section first explores the concept of “compulsory sociality” at The Accelerator’s Open Houses, where networking, although essential for opportunities, became a draining obligation for staff. Secondly, it addresses the financial strains of maintaining community spaces like a Café, which, although seen as pivotal for fostering connections, struggled to be financially sustainable. Finally, it discusses the challenges of reciprocating the free labour provided by mentors and creating a ‘secret office’ to manage the overwhelming demands on time. Overall, this chapter highlights the hard work and resources that went into reaching for and maintaining the ecosystem ideal, providing a space to counter the assertions about its ‘naturalness’.

Open Houses and compulsory sociality

By 2013, The Accelerator had become increasingly popular. Open Houses were always busy, with investors, entrepreneurs, travellers and journalists coming by The Accelerator to chat about their ideas, learn about what Wei and Oscar thought of Singapore’s ecosystem, or just out of curiosity about the place that had managed to develop a reputation of an interesting place ‘worth checking out’. As Oscar explained to me in early 2013- ‘The Accelerator was clearly the ‘heart’ of Singapore’s start-up ecosystem’. Central to this position were The Accelerator’s Open Houses.

On Fridays, anyone interested could come to The Accelerator for the Open House and meet Wei, Oscar, or others involved in a technology start-up business. Open Houses almost always turned into small social parties with wine, snacks and even music. Sometimes, there were around 10 people present, but very often, especially when The Accelerator’s programs were running, it was reasonable to expect at least 50-60 people. Many people were interested in the new teams of The Accelerator and would pass by to chat with them or Wei and Oscar to see what ideas were being worked on. Investors used these Open Houses to have informal chats with each other and the start-ups. MBA students from nearby business school INSEAD came to learn what possible business opportunities they could find here amongst small but quickly growing companies. Travelling business people popped by to learn from locals about ‘what is going on’ in Singapore’s start-up community. It was a hotspot for weekly networking and ‘catching up’ amongst the people involved in technology businesses. Friday, by the end of the working day, many of the people working in the area found it handy to pass by The Accelerator’s Open House to see who is present, unwind after the working day and see if anyone else would like to share a cab and go downtown for food and more drinks and possibly get immersed in Singapore’s nightlife.

However, even though Open Houses were aimed at bringing people together, they were also a source of anxiety for most of The Accelerator's team, which at the time consisted of six people, including Wei and Oscar. Open House turned the ending of an already exhausting work week into a dragged-out evening that required extra energy. By 2014, when I last visited The Accelerator Open House, all senior staff members were actively seeking ways to escape these evenings, and staying and representing the company had become more of a mandatory chore than enjoyable 'hanging out'. We can see how Open Houses and other start-up-related events were what Gill and Rossiter, following Melissa Gregg (Gregg 2006) have called "compulsory sociality" - a sociality "in which networking was the norm, and people could lose out by dint of not having the right contacts." (Gill and Rossiter 2007, 6) Implicit in the serendipitous encounters established through networking was the promise of an opportunity, and not participating in them would mean 'losing out'.

It's hard to pinpoint what exactly the 'opportunity' was - for some, it was something very specific, like getting a chance to meet with specific investors or entrepreneurs; for others, it was just a general sense of potential opportunities arising eventually out of being part of the group. It could be getting to know someone you hire later on, meeting someone who hires you, meeting someone you establish a business with, or giving you a further introduction. It could be about telling your start-up idea and finding people willing to join or fund it. It could be learning about problems others face and thus getting encouragement at times when things seem bad. It could also be just as simple as having amazing conversations with people who have done crazy things, unlike anyone else you know. Or someone giving a book or film recommendation that has the potential to change one's outlook on life. It could be any of that. In Chapter Five, I discuss how this potentiality was at the centre of how people thought of their experiences in general. In this Chapter, I find it helpful to emphasise the hard work at the centre of this sociality, as evident in the experiences of The Accelerator staff. Recognition that this sociality is a demanding labour requesting time and energy that is not sustainable over long periods of time was also visible in the running ironic joke that those who are 'actually' building a start-up are not present in these start-up events since they do not have the time to attend them. This common joke also highlighted how one had to 'manage' this sociality in relation to the 'actual' work. One of Wei and Oscar's strategies also provides a good example of this.

While Open Houses were meant to foster the community, they also allowed Wei and Oscar to manage the intense demands on their time. Many people wanted to meet with them, and while these meetings could potentially be useful, they took too much time. Thus, if the potential of meeting a particular person was not clearly identifiable, Wei and Oscar would invite them to the Open House rather than meet in one-to-one

meetings. That way, the opportunity to interact was still open but most likely limited to a much shorter period of time. Importantly, Wei and Oscar didn't have to turn people down. Instead, they could make the nice gesture of 'inviting' them to an event. This way, the person was kept 'close enough' to learn about how they could contribute but also 'far enough' to drift away if, after five minutes of talking, it becomes clear that The Accelerator can't really benefit from this person and still not antagonise the invited person.

Gina Neff, in her analysis of New York start-up sociality in the early 2000s, showed how the intense social networking was part of what she called the 'venture labour' - a strategy to manage the risk of high job insecurity by investing in social relationships that could potentially be useful personally or for the company they worked for (Neff 2012). I prefer to call the work 'speculative labour' - work that is directed towards potential, hopeful, even if unclear, gains in the future. I use the term 'speculative' to emphasise the assumption of worth that doesn't have conclusive evidence, the combination of hopeful aspiration and calculation, and I develop the concept further in the next chapter. Additionally, Alacovska (2019), building on the work of Miyazaki (Miyazaki 2006) has emphasised the crucial role of 'hope' in understanding "creative workers' meaningful daily agency and intentions that resist the paralysing and disciplining effects of aspirational normativity and nostalgia." (Alacovska 2019, 1120)

In what follows, I will describe in more detail the various strategies that Wei and Oscar used to manage the tension between the need to support the development of the start-up ecosystem and community and their own ability to manage and do the daily job at The Accelerator. Attending to this struggle and tension highlights how, firstly, the ecosystem required a lot of work and resources despite its ideal of being self-organising and natural. The free gifts did not effortlessly turn into capital as the ecosystem ideal suggested. Secondly, it also reveals the tension between potential opportunities in the future and the needs of the present, which the individuals involved in this sociality had to grapple with.

The Accelerator's Café and 'monetising the community'

As part of their effort to provide 'low friction' opportunities for bringing people together, In 2013, The Accelerator invested significantly in the construction of a new office and in opening a cafe for everyone who would like to come by. Wei, Oscar and a few The Accelerator mentors on one particular occasion discussed it as a 'Third Space' based on Robert Putnam's essay and later book "Bowling Alone: America's Declining Social Capital" - a space that is neither home nor work but a place in-between (Putnam

1995). They saw the Cafe as crucial in developing and strengthening the community - people would come in for coffee, talk, exchange ideas, and build relationships, and all of that should add to the mutual trust and cross-pollination of ideas, contacts, networks, which would reduce friction and increase chances for new innovative start-ups to arise. Yet the question of how to make the cafe pay for itself was also something that needed to be addressed. Aside from the initial investment in constructing the cafe and buying an espresso machine, the weekly costs of the supplies, as well as the barista's salary, needed to be covered. Oscar, who was concerned about The Accelerator's budget, was particularly explicit that the Café needs to 'pay for itself', even if he agreed with Wei that the impact of the cafe is much longer term and the investment will be hard to quantify immediately. The struggle to balance their investment in the community with their day-to-day needs of maintaining their business needs created tension. At such moments of tension, implicit hierarchies and limitations to openness and sharing were revealed.

One idea for covering the Café costs was to introduce membership so that people who wanted to have coffee regularly could buy it. However, this idea did not sit well with the organisers. As they discussed this idea, they also realised that until then, precisely because the entrance to the Café was free, there was a strong but implicit barrier that divided, on the one hand, those who knew that they 'belonged' and thus were 'entitled' to drink the coffee from, on the other hand, those who had to wait for an invitation to sit down and be offered coffee. The worry was that introducing a financial barrier would reduce the impact of the social barrier, and then anyone who paid would feel entitled to be there. Despite the seeming 'openness' this turned out not to be desired. Some people were more welcome than others.

Even though the Open Houses and the Café were officially open to anyone interested, those who were deemed not to have 'much to add' found themselves sitting alone or, in some cases, even being avoided. It was clear that despite the open access and language of 'community', some people were more welcome than others. The organisers occasionally joked that, for the Open Houses and the café to be successful, the people going to them should be 'pretty, witty, or wealthy'. In that context, the 'wealthy' were the investors, the 'witty' were the cheeky and smart entrepreneurs, and the 'pretty' were the other interesting people who could entertain the investors and attract entrepreneurs.

Despite all the social success and recognition, The Accelerator struggled to make ends meet. Events such as Open Houses and Cafe cost money and time, and while both Oscar and Wei recognised them as long-term investments, they also felt that they should be supported by the ecosystem and community itself. While investors seemed to be willing to invest in the start-ups The Accelerator was accelerating, they were less

inclined to cover the costs The Accelerator had for running the program. Costs such as rent and salaries of the small team of The Accelerator did not directly translate into future profit opportunities for the investors. In a way, The Accelerator struggled to prove that its contribution added enough value for investors to pay for it. In this example, the problematics of the ecosystem's promise become more articulated, as the 'gifts' and 'free labour' invested in the building of the ecosystem actually required real resources - money, time and infrastructure. They did not convert 'naturally' into a money economy that would sustain paying rents, salaries and coffee beans. In 2013, Oscar explained to me:

"I mean, an accelerator is like a heart of an ecosystem, and just like a heart, it can't really exist on its own, you know, it needs a body around it (...)" Oscar went on: "...so I think we got the community piece real right, and I think we realise now that one way of modelling The Accelerator is that the foundation is a community. And what we have done is created a space and a program where the people have a reason to come together - even if you don't know each other. And they have something in common and they meet. And then what we added on that is acceleration program with a little bit of money attached and a teaching function. And our hope is that you know, the community thing would like to make that pay for itself, to monetise if we can." (Oscar, interview 15.02.13)

Oscar and Wei spent considerable time brainstorming how to 'monetise the community', with no clear decisions on how to do that. For example, the idea of asking for a participation fee during the Open Houses had its drawbacks. The single occasion on which The Accelerator had tried to charge a fee, after having offered the event at no cost for years, was met with confusion by regular attendees; The Accelerator did not attempt this again, worrying that it might sabotage everything that they had done in the name of openness and sharing until then.

Secret office, gift giving, money & reciprocity at peri-capitalist sites

The social success also caused an increasing strain on the workload of The Accelerator staff. In 2013, they even constructed a 'secret office' that was located at the end of the open office area used for working and socialising. The secret office's entrance was white, merging nearly seamlessly with the white walls and covered by a banner. During

an office meeting, the need for the secret office was explained by Oscar as follows:

"People want to play with us. We are sort of the Pied Piper, Peter Pan of the community, and every body wants to play with us. The problem is - we need to work. And the problemthe reason we want a corner office that nobody comes into is, so that we can actually get some work done."

The tension between the potential future gains brought by 'compulsory sociality', where future opportunities lie in connections and circulation, and the need to work on concrete proposals that bring in 'cash' made itself visible. In a paradoxical way, the openness and sharing demanded that the staff also practice exclusion and secrecy as the social demands drained their time and finances. The Accelerator's efforts to find a balance between the two highlight the tension at the heart of the promise of the ecosystem. On the one hand, it held the promise of a collective that, when coordinated well, would produce innovation and increase financial revenue for everyone involved. On the other hand, it required a lot of investment, sometimes to the point that it was not sustainable and facilitated social values such as secrecy in direct contrast to those that the organisers were boasting about, e.g. openness.

For The Accelerator, this issue was even more sensitive when it came to managing their time with people who had agreed to mentor The Accelerator's start-ups. These mentors were either investors, or experienced entrepreneurs or professionals in particular niches such as law, marketing or accounting, who agreed to come in and consult the start-ups at no cost. The motivations for the mentors to provide their support freely varied - some wanted to get an early scoop on the participating start-ups and make better-informed investment decisions later, others saw this as an opportunity to sell their services eventually, and for some, it was an enjoyable intellectual challenge. For some, that seemed to be a great way to associate themselves with new initiatives, and for many, that was part of what they felt it was a social service 'to the community'. Some mentors explained that they had benefited from mentorship in their own entrepreneurial journeys, and now they were 'passing it forward'. Also, Oscar and Wei emphasised this volunteering quality to mentors' motivations in public talks, introducing it as "giving back to the community". Despite this being a voluntary activity guided by various motivations from mentors, The Accelerator also modified and quantified the time the mentors would 'invest' in The Accelerator's start-ups. In their proposal to start-ups who applied to The Accelerator, they offered 150,000 \$ worth of investment, where only 15,000 \$ was 'in cash', while the remaining number was an estimation of the value from The Accelerator's and, importantly, mentors' work. As The Accelerator explained to

one potential participating team during the intake interview:

"Each of the start-ups gets 4 to 5 hours a week of mentorship by people who charge more than 1000\$ per hour. This much of valuable advice."

According to Anna Tsing's analysis, such a muddled relation between 'gift' and 'commodity' is typical for peri-capitalist sites as non-capitalist or free labour gets integrated into the capital accumulation.

As anthropologists have shown since long ago, gift-giving comes with its expectations of reciprocity and Wei and Oscar felt the need to reciprocate the mentor's investment by making themselves available when the mentors wanted to spend their time with them. In the same discussion, when Oscar explained the need for the 'secret office', he also explained that even with the secret office in place, he is going to work from home more often because there were people whom he would not be able to refuse to meet and it would simply make it impossible for him to have enough time:

"I'm probably.. from next week, just not being here, because people like Mark Black, who I love dearly as a friend, and he's a great mentor and everything else... he wants to come in... he wants to share his latest ideas, and he wants to spend an hour. So with the two of us spend[ing] an hour, [or] one and a half [of an hour] with him, basically giving him free feedback (...) [we can't get our work done]. And that's kind of vaguely, potentially useful to us, [but] it's just that it doesn't move any of the things forward. I have a hunch that as long as Wei or I are in this particular space, we won't get any peace, and ironically, the more successful the space is, the more it's buzzing with people and the less opportunity there is for us to get any work done here. So... [silence]"

What Oscar was highlighting was the fact that even when such social engagements were necessary, they took away too much time that could be devoted to working on more concrete future opportunities, such as writing proposals to attract funding. What Oscar also pointed towards was the expectation of reciprocal benefit from socialisation to The Accelerator and the particular mentor. This aspect was further illustrated when one of the employees asked why they couldn't just politely and firmly turn people down by saying that Wei and Oscar are busy to which Oscar explained:

"the problem is that it actually creates a "I'm been turned away."

Im a mentor, I give you my time for free, you should give me mine, when I want to see you... my time is valuable, I'm a multimillionaire ... I've built a business and I want to see you, because I'm here, and I give you my time for free," and it is this strange psychology, unfortunately."

While Oscar was highlighting the tension between reciprocating the gift the mentor is giving, simultaneously, he was also referring to the differing positions in social hierarchies he found himself (and The Accelerator) in relation to such mentors. The mentors had the financial resources and knowledge The Accelerator needed to continue their work, and thus, The Accelerator found themselves dependent on them; the mentors required attention, which took away time for working on more pressing and concrete future opportunities. Therefore, illustrating the social hierarchies and roles within this start-up sociality is the main task of the next section.



A busy Open House at The Accelerator office.
Photo by author.

5. Social Hierarchies and Shifting Notions of Entrepreneurship

Even though the language surrounding the start-up ecosystem was focused on 'community', 'collaboration', 'trust', 'openness', 'sharing', 'long term', 'support' and a general sense that 'a rising tide (should) lift all boats' it often concealed how much the social relationships were also built on exclusion, secrecy, competition, clashing interests, and short term gains. In practice, the social relationships were hierarchical, dividing not only those who were 'in' and those who were 'out' but also those who were 'in' and found themselves in social relationships with various degrees of power and

respect. This section will start with an account of one of many start-up conferences I attended, which helps to provide an insight into the various formal roles that were recognised in the 'community' as well as the 'informal' distinctions between those 'in' and those that were 'out'. It also describes how these events popularised a changing notion of entrepreneurship: one based on innovation and scalability and with potential for high growth. Such entrepreneurship relies on venture capital. Combined with the analysis of the hierarchies described in the start-up conference, it allows me to highlight the often overlooked fact that this start-up's sociality is centred around the interests of venture capital.

Start-up conferences and social hierarchies

In early 2014, I attended one of the three major technology start-up conferences in Singapore called Startup Asia. At the time of my fieldwork, two major conferences were regularly organised by two Start-up blogs. Echelon was the oldest and was organised by e27, and Startup Asia was organised by TechinAsia. The third major conference - Innovfest - was organised by NUS Enterprise, the entrepreneurship-oriented section of the National University of Singapore (NUS). Although the attendance fees for the Startup Asia conference were high, the organisers distributed various discounts online and at meetings leading up to the event. Additionally, some individuals were invited as guests or media representatives and were thus able to attend without paying. As a student, I was able to attend the conference at a reduced fee.

The area around the conference venue within one-north on this May day didn't seem very populated, yet when I approached the building itself, it was buzzing with people. A large banner above the escalator introduced the name of the conference, Start-up Asia, and as I ascended to the first floor, I was surrounded by many people. It was 15 minutes before the official start of the program, yet the queue was more than 100 people long, snaking through the area up to the doors of the main conference hall, circling through the stands of various technology companies that were here to showcase their businesses. Volunteers wearing bright t-shirts were frantically working through the piles of registration lists, often struggling with their fancy yet not always smoothly working tablets and scanners.

All the attendees were divided into five following groups - Speakers, Investors, Start-ups, Corporate, Media and Students. During the two days of this and other similar conferences, I learned that each of these categories had their specific roles and events on the agenda that they were supposed to attend. In this way, the start-up events allowed them to socialise and practice these roles and associated values. Start-ups were there to

pitch and attract investors - through designated activities in the agenda like networking and 'Investor speed dating'. Investors were there to look for start-ups to invest in and provide feedback to those who were not yet ready for investment. The media was there to tweet and report this event to the technology blogs. Corporate representatives were there to look for good ideas/inspiration and possible acquisitions and partnerships. Students were there as potential entrepreneurs to get inspired to start their own start-ups or, if not that, then potentially become interns at nascent start-ups that often relied on low-paid labour to start. Even though universities, in the theoretical accounts of the start-up ecosystem, have been identified as places that produce specialised knowledge that needs to be commercialised, in practice, these start-up blog-led conferences did not feature student or research-based projects. In my experience, only the conference organised by NUS Enterprise had many stands with students showing their research projects described in a way that emphasised the potential for turning these projects into commodities. Last but not least, 'Speakers', a mix of investors and entrepreneurs from various locations, were there to discuss industry and region-specific developments and changes in the business and technological landscape and inspire people about technology entrepreneurship's socially relevant role.

Much like at other conferences, here at Startup Asia, when attendees looked at one another, one of the first things they saw was the bright tags hanging around their necks in different colours to identify the group to which they belonged. I had ordered my ticket as a 'student' and was intrigued to see that wearing this tag rendered me almost invisible to the majority of the people attending the event. This contrasted sharply with an earlier experience I had when attending a similar event a year earlier, for which I had been given an 'investor' tag because I was accompanying an investor whom I had interviewed. At that conference, I was continually ambushed by start-up founders giving me their business cards and promoting their businesses without even giving me a chance to explain that I was not the person they thought I was. Attending with the investors also allowed me to go to an informal rooftop after-party at a fancy club with some of the best-known entrepreneurs and investors participating in that conference. This time, arriving as a 'student', I knew well that the likelihood of me attending such exclusive parties was slim. These contrasting experiences drew my attention to the rather obvious fact that, despite assumptions about flat hierarchies in the new economy, the roles assigned to members of the start-up community have different appeals and provide different levels of access to contacts, information, and other resources.

Yet, these categories with pre-ascribed roles and expected ways of interacting tell only one part of what took place during these conferences. While some of the talks by more controversial, famous, or 'hot' speakers drew the main conference hall full, most of the time, individual, pre-arranged meetings took place amongst investors and their

portfolio companies.

Gabriella Coleman has argued that Hackers' meetings can be understood as 'ritual celebrations of their lifeworld' (Coleman 2010). If start-up conferences are to be seen similarly, then the interactions intended by the conference program and the informal activities accompanying such events served multiple and often different functions. The talks and performances on the stage are supposed to bring inspiration, affirmation, and new avenues to explore and show the hardship of the entrepreneurial journey, yet celebrate it and define the state of the art of the industry. The Startup Arena sections of the conference were where pre-selected start-ups pitched their businesses and publicly received feedback from investors, and then the best one was selected. While the stakes were real, the fact that this was happening in front of a varied and relatively unrestricted audience made it a predominantly educational affair. It was not uncommon to see other aspiring entrepreneurs filming the entire pitch session and making notes of the investor questions. The other, less formally organised events that accompanied the conference, though, served to solidify the social relationships between those who were 'in' and exchange insider knowledge that wasn't publicly shared on stage.

Those who were 'in' rarely sat through the official conference meetings. Instead, they used these conferences, which brought together many (potential) collaborators, often from abroad, as opportunities for meetings with specific people. As a result, it often seemed as if two parallel events were going on – the official conference and an agenda of parallel private meetings. The first round of such private meetings typically started shortly after the opening keynote and extended late into the night, often with dinners and drinks, as at the rooftop party I had attended a year earlier. For many, attending the conference was only a backdrop for their actual agenda based on the intention to meet up with specific people. For example, I once witnessed one of my interlocutors looking over the attendee list prior to a similar conference, matching names with images and identifying the people she wanted to talk to as well as the people she wanted to avoid during the intense hours of networking. Similarly, in the past, I had used these conferences to arrange meetings and interviews with people from Indonesia, the Philippines, and Thailand. Or be pleasantly surprised to meet an interlocutor from the region at these events.

Simultaneous with this intensive socialising, most people were keeping up with their work lives. It was common to see cafés near the conference venues packed with people either in small groups talking or leaning over their laptops wearing earphones, typically slightly annoyed, trying to ensure sufficient signal strength for their Skype conversations. In addition, attendees were also actively sharing information on social media to let people know that they were attending the event, signalling their presence to those who might be interested in meeting them, as well as signalling that they were

now hearing about insider information and hanging out with those who were part of the 'in' crowd.

The evening schedule sometimes involved an after-party, some of them exclusive; most of the more acclaimed or successful entrepreneurs and investors rarely chose to attend these after-parties, instead organising their own, smaller get-togethers. The exclusive nature of these events was illustrated by an account of a serial entrepreneur in his forties, who was also an investor in a range of technology businesses. I ran into him on the second day of the conference at a nearby café, where we were having coffee.

When asked whether he was heading back to the conference, he shook his head and said that he 'did not need to go back there': he had gotten what he needed just by meeting selected investors in the evening before. The night before, he had met with a group of investors attending the conference whom he knew, and—according to him—they had all gotten drunk together. His way of describing their encounter suggested that they had bonded to the point that he did not need to see them formally at the conference—their relationship was affirmed, and they had exchanged relevant information. He also mentioned that the other male investors had kept the evening going by 'chasing women', whereas he had returned home to his wife. He explained that he had been in the business for ten years and knew 'who is who'; he had encountered these people on different occasions over the years (conferences, board meetings, discussion panels, networking sessions, etc.). I asked him what really went on when he met with his peers, and he responded: 'When we meet, it's like this: "I have done this, and this deal of this much money", and then someone else responds: "I've done x mil [million] and x mil [million] deal". So it is like "my d**k, your d**k, my business card, your business card".'

It was clear that part of the exchange was based on impressing one another, and at the same time it was also about exchanging relevant business and personal information. More strategic and often sensitive information was shared in these private conversations than in the more formal and inspirational talks. For example, strategic business intelligence was shared, such as who was working with whom, who was consulting whom, and who had invested in what. Knowing who had invested how much in which endeavour showed those in the industry not only what was considered 'hot' but also allowed them to estimate how much money which investment fund still had, and thus what the potential chances were for collaborating in investment deals. But such signalling could also indicate exactly the opposite: how much of a threat one might be to another. Similarly, knowing that someone else is working in a particular field was strategic knowledge because then the person could be approached for advice and industry insight into that particular field when necessary, or could be used to connect with other people, in this way contributing to one's role as a 'connector'. For example,

Alice Marwick, describing status in Silicon Valley, has noted that status symbols in the technology scene are often 'types of knowledge': 'of topics, of industries, of players within the industry,' and 'possession of such knowledge indicates that the owner has succeeded' (2013: 78).

The entrepreneur with whom I was chatting was not apologetic about the fact that this social group excluded others on the basis of whether they were 'established'. When I asked what it meant to be 'established', he explained it in the following way:

"When you join the group, you say, "Hi! Yes, I have closed this and that [deal], exited three companies, and am now investing." That is when you are part of the group. If you come in and you say, "I am doing a start-up," people will look at you and say, "Hi!" [signified pause]."

Then he laughed, letting me understand how inappropriate it would be to have nothing more to add to this accomplishment.

This entrepreneur emphasised the unofficial, exclusive selection that characterised these events by telling me that knowing who is meeting where and when is insider knowledge shared only between those who belong to these loosely constituted groups. According to him, if you are not part of any group, then you go to the start-up party, which is a general party organised by the conference and open to all attendees. His account emphasised the highly gendered nature of these interactions, which typically occurred between men and at least occasionally required bonding through after-work drinking and 'chasing women' as he had described. I will attend to the issues of gender in more detail in Chapter Six. Pertaining more to the main arguments of this chapter, evident in his depiction of this sociality was the fact that the informal hierarchy encouraged serial entrepreneurship, in which life is organised around continually creating and selling new ventures. As such, this practice is typically based on the use of external financial capital, and thus, venture capitalists find their way at the top of this hierarchy. This hierarchy is also evident in the structure of the events, where even though a lot of sharing is happening, the start-up founders are publicly subjected to questioning during their pitches and not the other way around. Moreover, it is investors who are given the right and the position to 'judge' what is a good start-up and what is not.

Changing notions of entrepreneurship

The way I got to understand it, one of the central tasks of these social start-up

events was to socialise a new form of entrepreneurship as ‘the new normal’. It was high-growth, serial entrepreneurship. As described by Steve Blank, an American entrepreneur and an author of multiple influential books regarding start-ups:

“A “*scalable startup*” takes an innovative idea and searches for a scalable and repeatable business model that will turn it into a high growth, profitable company. Not *just big* but *huge*. It does that by entering a large market and taking share away from incumbents or by creating a new market and growing it rapidly.” (Emph.origin., Blank 2010)

Such high-growth, scalable entrepreneurship is distinguished from other forms of entrepreneurship in academia as well as increasingly in policy worldwide. For example, David M. Hart, professor of public policy and assistant director for innovation policy at the White House Office of Science and Technology Policy in 2011-2012, writing about entrepreneurship, argues that ‘entrepreneurial’ businesses differ radically from small, mom-and-dad businesses and therefore require different policies:

“Entrepreneurial ventures are not the same as small businesses, and entrepreneurship policy is therefore distinct from small business policy. (...) the well-established neighbourhood restaurant or dry cleaner, although small, falls outside the definition. The distinguishing elements of entrepreneurship are novelty and dynamism. The phrase “continuing to expand” is essential to the definition, even though it creates serious difficulties for measurement and analysis.” (Hart 2003, 6)

In the years 2012 and 2013, I encountered comments in start-up media as well as during talks by entrepreneurs that the Singapore government sometimes *mistakenly* conflates small and medium-sized businesses with start-ups and that it shouldn’t because start-ups have a different growth trajectory and, therefore, require different support (see, for example, Lee 2014a). Around that time, representatives of Infocomm Development Authority of Singapore (IDA) and its investment arm Infocomm Investments Pte Ltd (IIPPL), together with representatives from NUS as well as The Accelerator, had started to attend a prestigious Massachusetts Institute of Technology two-year training program called “Regional Entrepreneurship Acceleration Program” in US, which taught how to design and execute a “well-designed acceleration strategy focused on entrepreneurial activity” by developing an entrepreneurial ecosystem (*MIT REAP Brochure: Acceleration Through Collaboration* 2013). Premised on the promise to replicate

Silicon Valley's success this expensive and exclusive training program that recruited state officials from around the world should be seen as part of the 'cultural circuit of capital' (Thrift 2001) - where business schools together with economists, management gurus, national governments, and many other actors develop new economic theories to understand and explain capitalism at the same time legitimising and popularising new economy practices around the world.

In 2014, IDA also displayed a preference for high-growth entrepreneurship when it announced a range of programs aimed at fostering Singapore as a hub of start-ups. During the media event at the soon-to-be-opened National Design Centre on March 6, 2014, introducing these programs, both IDA and IIPL representatives put extra effort into explaining what type of companies the government and investors are interested in. In a room packed with government officials, selected start-up founders and media representatives from the mainstream media as well as start-up blogs, the speakers from IDA and IILP explained that it is not small and medium-sized enterprises (SMEs) but instead what they called 'IDEs' - Innovation Driven Enterprises that they want to support.

In a view that very much reflected what many start-up entrepreneurs thought, it was IDEs and not SMEs who, after a small investment, were able to produce what they called 'escape velocity'³ - exponential growth that is efficient and requires, in theory, only increasing the volume of what exists, rather than continuous investment in each new addition. Because of their rapid growth, such businesses provide many more jobs, have higher productivity, and can use resources invested by private investors or the government more efficiently.

In his presentation, one of the government representatives used an example of a girl graduating from Stanford and wanting to start her own bakery shop. To him, this was an example of a 'too simple solution to a too simple problem', and he asked why she was doing an MBA at Stanford that would most probably cost 60,000 USD to start a mere bakery shop - something she could easily do without such an investment. Instead, high-growth businesses create new value by innovating and scaling their business rapidly - not tied to a particular location. In the example, the girl turned her SME bakery shop into an IDE. Instead of making gluten-free cupcakes, she created a portable sensor that allowed people to test quickly whether the food contained gluten. The example came from MIT (<http://news.mit.edu/2016/portable-sensor-gluten-free-0706>).

To me, this situation illustrated how this understanding of entrepreneurship prioritises high growth and scalable entrepreneurship, where small businesses were la-

3 This is a reference to another popular book in the start-up space written by Geoffrey Moore called "Escape Velocity: Free Your Company's future from the Pull of the Past" published in 2011, and not the earlier 1995 book by Mark Dery "Escape Velocity: Cyberculture at the End of the Century" which is a critical insight into the digital culture.

belled 'lifestyle' businesses and are not as instrumental for national economic growth. In the start-up circles, such businesses would be dismissed even though they provide the livelihood and social fabric for the vast majority of the population. This contrast also allowed start-up entrepreneurship to differentiate and establish itself as distinct. Similarly, for example, Ghosh describes how the existence of *jugaad* (everyday, frugal innovation practices) and family business allowed start-up entrepreneurs in India to "establish themselves as a distinct economic and cultural formation" (Ghosh 2022, 41). In my fieldwork, I encountered references to 'family businesses' and also 'inventors' which I will describe later in Chapter Four, as ways to differentiate what start-up is *not*. Such an understanding of entrepreneurship also dominates entrepreneurship studies and is based largely on the work of the economist Joseph Schumpeter, who developed theories about economic growth through innovation and viewed entrepreneurship as heroic, innovative and contributing to economic growth (Aldrich 2005; Carland et al. 1984).

In his blog, Steve Blank interestingly lamented the fact that

"Unfortunately, the popular culture and press have made scalable startups like Google and Facebook the models that every entrepreneur should aspire to and disparages technology small businesses with pejoratives like "lifestyle business."" He remarks "That's just plain wrong. It's simply a choice." (Blank 2010)

However, seeing how this form of entrepreneurship was popularised amongst people in positions of power, endorsed by governments, and subsequently supported through various financial schemes makes me question his assertion that for people considering an entrepreneurial journey, 'it's simply a choice'. These choices are not picked from a level playing field. There is no universal, self-evident understanding of what constitutes entrepreneurship - instead, we always have to explore how what is deemed entrepreneurial comes to be defined as such (Kelman 2018). In this case, we can see how the definition favoured by the cultural circuit of capital (Thrift 2001) resonated in Singapore and was endorsed and socialised by various actors within Singapore. In Chapter Five, I will explore in more detail the boundary work that the entrepreneurs themselves felt compelled to do to differentiate what they do from other potential career paths. At the moment, it is important to emphasise that certain choices are enabled and pronounced as more legitimate and worthwhile than others, and in this case, high-growth, scalable, innovation-driven entrepreneurship was the form of entrepreneurship that was socialised and valorised. Viewing innovation-driven entrepreneurship as a 'better' and 'more important' form of entrepreneurship in turn, further legitimised providing

extra support for those who were already enjoying more privilege to start with. In what follows, I will first briefly address the assumptions inherent in venture capital funding and the power they had on determining what counts and what doesn't.

6. Social context for turning ideas into businesses

As discussed so far, the start-up sociality was aimed at attracting and bringing people into the circulation of the ecosystem; through start-up conferences and events, people got to learn about a new type of entrepreneurship, one that is innovation-driven and high growth and try out their roles in this ecosystem. This section will provide more insight into the third aspect, which is that this start-up sociality provided the social context for turning people's ideas of social change into businesses. It facilitated the first steps in materialising these ideas from 'mere ideas' into something that exists and is socially recognised. This section again will highlight the crucial role of venture capital in structuring the demands on how ideas should gain their commodity shape. In this section, I will introduce one particular start-up, which started with the idea the founder had when travelling, and I will highlight the role of these events in transforming this idea into a commodity and building a business around it. This case will show how this sociality attracted people, educated them and shaped the development of the idea in a very particular way. This case will also set the stage for the next two chapters, focusing on various notions of value developed through the start-up and then questioning the subjectivities and motivations of people pursuing start-up journeys.

A Great idea! The beginnings of Wonderings

How do entrepreneurial ideas start, and under what conditions and in what forms do they materialise? To illustrate an example of how it can happen, I will trace the beginnings of Wonderings with David, a French male in his mid-20s who had quit a private wealth management firm around the time of the financial crisis and, after travelling around the world, had decided to stay in Singapore for a while. He had been trying out ideas about what kind of company he would like to start and had put together multiple apps on Facebook. A year into his stay in Singapore, he had a new idea based on his travel experiences, and he decided to present this at the Startup Weekend.

Startup Weekends are two-day events where people with ideas present them in one-minute pitches. Then, the audience votes for the ideas they like the best and even-

tually form teams around the most popular ideas. Then, the attendees are given 48 hours to develop a prototype of that idea and develop a business model. At the end of the weekend, the teams present their prototypes and business models to a jury, which is usually composed of investors and seasoned entrepreneurs. Startup Weekend is a format and brand that originated in the USA and is centrally managed. In 2010, Startup Weekend received a grant from the Kauffman Foundation to stimulate its expansion as a worldwide movement. In Singapore, start-up weekends were regular features and were well attended by people not only from within Singapore but also from the region. For an uncritical description of the significance of Startup Weekends, see Nager, Nelsen and Nuoyrigat 2012 and, in particular, in Mexico, see Cerventes and Nardi 2012).

The Start-up Weekend at which David presented his idea took place April 29-May 1, 2011. He was thinking of making a website where travel destinations can be seen on a map. Instead of saying where one wants to go, the user can indicate how much money s/he wants to spend, and the available destinations will become visible. David had come up with the idea because he had faced the problem himself. Here's how he told about the original context for the idea:

"I was in China, visiting the big cities, and it started raining. And when you are in a big city in China, its already polluted, so if it rains, you end up never seeing the sky [slight chuckle]. And after two weeks I was pissed off, and I said I want to go away and I didn't know where I can fly from Shanghai. So I started searching on Expedia and different websites, and as I wanted to have sun I had to map it with weather.com to find where I could find sun. And it took me like... the night to find that I should go to Bali. And I thought - why not to make this process easier, by making it on a map where I could see.. One year later, I pitched this idea in Startup Weekend Number Two in Singapore, a few people were happy to join it. We did the first prototype over the weekend. And we continued. Now we have the product 'live'. We have a user base. Users are coming every day, but we are a bit struggling to grow it even more, so we joined The Accelerator."

So, the idea of Wonderings was born out of a concrete, context-specific, and embedded personal experience. In this way, it echoes one of the industry's standards, which suggests building products that solve a need the founder has marketed under slogans such as *"Scratch your own itch!"* or *"Do something you are passionate about!"*. Similar to many other interlocutors as described in Chapter Five, also David was actively and routinely thinking about ideas that could become businesses and was purposefully seeking

out social contexts that facilitated turning ideas into products by providing the forum to discuss and develop them and finding other interested people who could contribute into turning them into a reality. That is why David presented the idea at the Startup Weekend in 2011, and that is why he and his team decided to apply to The Accelerator Bootcamp program later on. The significance of these social contexts could not be overstated. Here's what David recalls about the Startup Weekend in an interview two years later:

"Following my pitch of this idea of a map of flights available from an airport, several people gathered and we worked on it for the weekend. By Sunday evening, we had a working prototype mapping Tiger Airways flights from Singapore. The audience said 'wow', even though the judges did not name us the winner. However, we're the only team which stuck together, and we continued working evenings and weekends on the project."

It is also important to recognise the technological environment that makes it possible to put together a working prototype over a weekend and thus affirm the 'thingness' of the idea into the world with great speed. While David, for example, recalled that it was really hard work from 7 AM till midnight that they all put into it, he also acknowledged that the cloud technologies which enable one to literally switch on a server online at any moment in the day really enabled them to focus on other things rather than waste their time on setting up the technological infrastructure. Instead, they programmed the website, set up web crawlers that scraped the data from airline websites, implemented a basic design on a Google Maps backdrop, arranged interviews with industry experts and gathered feedback about the viability of their idea. All of these proved to be crucial later on since these insights allowed them to tweak the way the site operated and got them invitations to further industry events that allowed them to find partners and build it into a business. This instantaneous flexibility afforded by contemporary web services, which allows the creation of working websites fuelled by data streams coming from various sources over a very short time, is celebrated amongst technology entrepreneurs and investors alike. Oscar, for example, used this technological context as an explanation of why The Accelerator's mission to streamline innovation in Singapore is attainable at the moment.

As the freshly formed team of Wonderings was working on developing their site so they could show the demo version to the judges on Sunday night at the Startup Weekend finale, they were also busy structuring their work to answer two other important questions that they were judged upon - who will be Wonderings customers and what

is Wonderings business model. As for the customers, they thought of people similar to themselves, and they hoped to be able to build a business by getting paid from the airlines - after all, the Wonderings website would be sending new customers their way. At this stage, Wonderings was a commodity - a service that people could use, but it didn't have a clear business model. According to David, the lack of a convincing business model - a vision of how the site will generate revenue, was also one of the central critiques they received from the Startup Weekend's judges and possibly one of the main reasons why they didn't win the event.

Despite not winning the event, David's idea of Wonderings seemed very appealing to a lot of people around them. In a seemingly natural way, it resonated with the idea of Singapore as a hub from which to explore the region. People seemed to quickly understand what the site was about and connected with the vision of discovering new unknown places in the region. Wonderings also got featured in the BBC's technology podcast called Click, which got a lot of attention in Singapore. The materiality of this idea in the form of an accessible website was also important because it allowed people outside their closest circle to experience the idea. David explained that there was what he called 'the excitement of the prototype' - it was a visual, fun, simple and exciting thing that many people could try to use. Four of the initial team of eight who had followed David's initial idea at the Startup Weekend continued working on it.

'Authentic connection' and personal futures

While David initially shared the idea for Wonderings, all the other three partners who decided to continue working on the idea saw it as something that they could relate to personally. For all of them, the work on this idea seemed to promise a personal future that, even if uncertain, would be in some way better than what they were experiencing at the time.

Ryan, a Bulgarian who grew up in Canada, was one of the three others who decided to continue to work on this idea. At the time of Startup Weekend, he was working for Blackberry, which was previously a dominant leader in the Asian mobile phone market and was experiencing a rapid downturn. Ryan had travelled to Singapore to be with his Singaporean girlfriend, who also worked at Blackberry. He now described his days at the large multinational as very comfortable but boring and not leading anywhere. He didn't see much possibility for personal growth or challenge by continuing to work in this company. Attending the Startup Weekend was one of his steps in exploring what other things could be out for him.

In contrast to Ryan and David, Quentin was born in Singapore and had always

been working as a freelancer; this, according to him, essentially was a lonely and unstable work, so he was looking for opportunities to mingle with like-minded people and be a bit more social. Startup Weekend seemed to be the place where he could find such people and shared sociality. Also, working on projects as a freelancer meant that he usually had to follow his client's requests rather than use his own inspiration and determine the shape and future of the product he was programming. As Quentin told me when we spoke in 2012, he really liked the idea of the travel website. Also, the fact that people wanted to continue working on it seemed quite extraordinary - according to him, it was very rare that people wanted to quit their jobs and start something. For Quentin then, this was an opportunity to enjoy a team to work together with someone and a project that would have a possibility to develop into something that is longer term than the freelancing projects he usually worked on, which gave him little sense of ownership.

Dhruv, the fourth member of the team, was an Indian male who had relocated from India to Singapore to work for a young technology company. He had seen the difficulties and turbulences in the company he worked at, and thinking about all the mistakes he saw his bosses making, he rationalised that he should not try to make something by himself. In general, Dhruv was always open to exploring new areas of personal development, and starting a start-up seemed to be another way to continue developing himself. Amongst other personal development projects, he was actively pursuing meditation and yoga, trying to get better at public speaking and even agreed to try out drawing with me when I shared that I like sketching.

All four young men saw their personal futures as open for them to invent. All of them were searching for ways to do (more) meaningful work and saw an opportunity in the start-up world, where one is seemingly in charge of his own destiny in ways that will be described in more detail in Chapter Five of this thesis. They all liked the idea of Wonderings, and to a certain degree, the discovery weekend travel fitted their own lifestyle, which included self-development, discovery and travel. Thus, the future imagined through the idea was not only open but also embodied and contextual for each of these founders because it was envisioned through the founder's own life experiences in an affective manner. The social validation and excitement they received during and after the Startup Weekend, as well as their personal aspirations, all together suggested to them that this is an idea 'worth pursuing'. I will come back to their story later.

In what follows, I will address the role of social validation that the start-up sociality provided, highlighting its importance in the materialisation process of the start-up. Wonderings was not exceptional in how their participation and performance in start-up social events helped their company be treated as a social thing in the world.

It was the case of many early-stage start-ups where the founders explicitly told the

audience how the approval of such social gatherings as Startup Weekends, Business Plan, Pitching competitions, and incubators like The Accelerator was crucial. Wonderings, just like many other The Accelerator participants, were quick to put The Accelerator logo on their website, announcing their participation in the accelerator program. Similarly, start-ups gather links to their coverage in media and post them on their websites, often under the title “As seen in”, in order to establish their legitimacy through showcasing this social approval. For example, another The Accelerator participant told me about his company Beanees – before they were accepted at The Accelerator, they were “(..) nothing! [Before The Accelerator we were] Just two crazy guys working in a dorm room.” But being accepted in The Accelerator meant that they were ‘something’. Something with a future potential – because otherwise, then – why would The Accelerator accept them and invest in them? This points our attention to the fact that despite the assertions about the founders’ belief in the idea, belief itself, even if associated with originating within an individual, is a social and collectively shaped experience. Moreover, these social contexts also structured the ideas in particular ways as they typically expected start-ups to think about their ‘target market’, ‘business model’, and ‘sales avenues’ and so on, and judged the potential of these ideas based on these commercial plans. Silvia Lindtner, in her analysis of technology and innovation in China, has convincingly argued that

“the role that incubators and adjacent entrepreneurial training programs (from Startup Weekends to hackathons and accelerators) play in training people to see themselves as human capital and to channel their commitments to justice and technological alternatives as attractive to finance capital.” (Lindtner 2020, 13)

Thus, the ecosystem not only facilitated the materialisation of the ideas by providing the space and time to mobilise resources but also their commodification as they were being judged on their ‘commodity potential’ and encouraged to develop all the necessary aspects for them to be successful businesses. In short, these events facilitated the packaging of ideas into commodity forms, comparing them, ranking them, and celebrating the process of successful commodification, which is something I will discuss in detail in the next Chapter.

Venture capital as the proof of value

A telling example that showed the cultural centrality of the investors in rather un-

mistakable terms was that most of the events that attracted, educated and gave inspiration to budding start-up entrepreneurs were fashioned as pitch competitions where the judges were investors. Attending teams were judged by investors, and the winners were selected to receive investment as a 'prize'. In fact, in its attempt to popularise start-ups, the Singapore government's Media Development Agency (MDA), in 2011, in cooperation with venture funds, started an actual TV Reality show called 'Angel's Gate' that was screened on TV and online. Dubbed the "Southeast Asia version of Dragon's Den" by Willis Wee in an article on TechinAsia (Wee 2012), it showcased people pitching their business ideas to venture capitalists, who all dressed in white, sitting in throne-like chairs, critiqued the presented business ideas and passed their judgement in the form of proposing or not proposing to invest in the idea. Also, Wonderings, before joining The Accelerator, had participated in the show.



Angel's Gate promotional image. Source: <https://www.mediabuzz.com.sg/archive/2011/october/1409-angels-gate-asias-first-business-focused-reality-show>

While "Angel's Gate" was more exceptional in its attempt to glamorise and promote a specific form of entrepreneurship that relied on venture capital, on a more day-to-day basis, events such as Start-up Weekends and many networking events were geared to meeting investors' expectations and provided training on topics such as "How to pitch your business to investors" or "What investors are looking for?". In all of these formats, investors played a very central role in defining what is a good proposition, what is a good business plan, and what is a good course of action. They all educated the entrepreneurs to very specific expectations that they should apply to themselves and their ideas as they wanted to turn them into businesses. Investments structure the relationships between the start-up founders, investors and the product in a very specific way, setting expectations regarding future reciprocity between the start-up and the investor, which I will address in the next Chapter.

To illustrate the venture capital expectations, I find a playful cheat sheet Wei had created for investors to provide feedback to the start-ups pitching their businesses to

them quite useful. The list could be quickly filled in by checking off the pre-written 'problems' that the investor noticed in the business pitch. "The Rejection Form Letter" was built on Wei's experience as an investor listening to many start-up pitches and identifying 'typical mistakes'. I find it useful in illustrating investor's expectations because it also implicitly distilled the kind of ideal start-ups investors were looking for. One of the sections, for example, emphasises the expectations of growth by contrasting the ideal start-up to a lifestyle business; it asks investors to mark it if they think that the entrepreneurs should hear the following feedback:

"You appear to want to build a lifestyle business for yourself, rather than a business which investors can exit at a profit. Try friends and family."

Another section aligned 'innovation' with 'scale' and explained how investors aim for 'scalable' ventures:

"It is not clear to us where the innovation lies. Yes, the world can always use another restaurant with good food, but we're not in the business of funding those kinds of ventures. We invest in deeply original, innovative, scalable, industry-making startups. Doing something marginally better than the next guy? Sorry; not for us."

The Accelerator itself was set up similarly to a venture fund, so participating in The Accelerator accelerator program was the first step in a longer trajectory of building the business with venture capital support, which automatically created its own temporal dynamics and expectations of growth. The model on which venture capital funds were built was that the investors expected to gain three times the money they invested. Since many invested start-ups were expected to fail, those that would deliver the returns were expected to return 15-30% annually invested in them to cover for those who failed. This meant that the investors already in their selection were looking for start-ups that could hold the promise of exponential growth or, in other words, scalable start-ups (Saloner 2010, 145-146).

While it seems that such a high return on investments is a morally legitimate way of compensating investors who are willing to take high risks, it is not self-evident why the desired return rate should be exactly that. One angel investor highlighted the arbitrariness of this rate of return in a conversation with me, admitting that he personally thinks that such a high rate of return is 'excessive'. One could say that this rate of return is even more problematic when we consider that much of the creative start-up industry

is heavily subsidised by state funding.

In Singapore, the number of various available grants and state-supported venture capital funds during the years of my fieldwork was impressive. Most of the investments that happened in start-ups I knew were co-funded by the government, where the private investor investment was matched in many cases 1:1 or even 1:1.5 by government funds, with often very investor-friendly buy-out or exit scenarios (Wong 2011). The Accelerator itself was partially supported by government funding, and those start-ups at The Accelerator, which attracted funding after the Demo Days, were most commonly invested in venture capital funds that were backed again partially by government funding. This made me wonder if investor funding should even be seen as 'risk capital' since being backed by the government to such an extent seemed to make these investment deals not that risky for the investors after all. The notion of 'state subsidised risk capital' appeared oxymoronic to me, inviting to think about who is actually bearing the 'risk'.

Because investors were positioned high up in the social hierarchy of start-up sociality, judging what counted as 'good' and 'bad' start-up idea, it was not too surprising then to see that receiving venture capital funding was seen as an important form of social approval that for the budding entrepreneurs helped to legitimise their work in the eyes of their friends, relatives, university professors, etc. This validation signalled to the 'outsiders' that whatever this start-up was doing was a 'serious thing'. Additionally, it also meant that the company had started a path that should lead to the next stage of investment (from 'series A' to 'series B', etc.). The existence of such a seemingly standardised investment path from seed to series A, B, etc., which start-ups would follow worldwide, could indicate how capital was expected to operate on the same logic globally, t.i., receiving venture capital investment is a sign of validation in Singapore as much as it is in San Francisco or Berlin. Yet, at the same time, entrepreneurs recognised that, in practice, investors' decisions to invest or not are always particular and contextual rather than governed by an unchanging capitalist logic.

Bootstrapping, which means developing the company from personal savings, loans, grants, crowdfunding, or just growing one's business slowly, relying on acquired revenue or personal savings, was the most common choice for people who wanted to commence their web technology start-up journey, especially as the initial costs were increasingly low. Yet, during my fieldwork, I was deeply struck by how marginal these other options seemed in the social space and how little they were represented in the discussions or events compared to 'getting investors'. Even though in practice, many of the entrepreneurs I got to know were bootstrapping, or some had acquired government grants, that was seen as only a 'temporary fix' before getting 'the real thing' - venture capital investment within the start-up sociality, that was seen as the 'proper' way of growing one's business. While in theory, venture capital funding is often seen as a tem-

porary solution to access much needed capital before the company grows big enough to be publicly traded or is sold off to another corporation (Zider 1998), in the early stage start-up space as I got to know in Singapore, venture funding socially meant much more, than the funds that were invested.



Startup weekend. Teams pitched their ideas that they worked over the weekend to the investors sitting in the front row. Above the screen is the 'Angels Gate' advertisement poster. Photo by author.

In some cases, I even encountered situations where the entrepreneurs lost sight of what they really needed the investment for, as it had become a goal in its own right. For example, upon my third return to Singapore in 2014, I had a conversation with one of my interlocutors. After spending months trying to get investors, he closed down his previous company and now started to pursue another idea. As we sat and drank coffee, talking about his work, he admitted that when he started his start-up journey, he thought that “it was all about getting the investment”. I told him frankly that I had had the feeling it was more common than just him and asked whether he had any idea why so. His answer was quick and clear - ‘It’s like winning or losing, it is a certification and a validation of one’s work. In Singapore, where parents do not see entrepreneurship as a good career choice, external validation for the start-up is necessary.’ While validation was an important aspect, as discussed, the other point I have tried to show in this chapter is that it was also embedded in the way the start-up sociality was organised around the desire for high-growth start-ups and the role investors were given socially.

This also meant that budding entrepreneurs who did not align with the interests of venture capital did not associate themselves with the start-up ecosystem and this sociality. Here, I can also draw from the study of Ipshita Ghosh, who was researching

start-ups in India and the US and described how people had internalised these distinctions and self-excluded from the events, assuming that they were not meant for them (Ghosh 2022).

7. Conclusion

This chapter explored the relationships, practices and norms characterising the start-up sociality by describing the events and places where people interested in technology start-ups came together in Singapore at the time of my research. The notions of start-up community and ecosystem were central to organising this sociality, and in this chapter, I examined why and how so. I traced how the concept of an ecosystem has a long intellectual trajectory spanning cybernetics, biology, and economy to examine its appeal as an intellectual lens through which to view desired technology start-up sociality. I argued that the metaphor provides an image of a production system that seems ‘natural’, ‘sustainable’, ‘self-organising’ and beneficial for everyone involved. At the heart of the ecosystem promise is an expectation that non-capitalist relationships will ‘naturally’ transform into capitalist growth because the ecosystem allows labour to self-coordinate, bringing together differently positioned actors. Therefore, I argued that an ecosystem should be seen as a normative ideal of frictionless capitalist production and used Anna Tsing’s notion of pericapitalist site of accumulation (Tsing 2015) to highlight the generative power this ideal had as well as turn the attention to the tensions and struggles that were part of the process to bring it in practice.

The various events and spaces for people involved with start-up entrepreneurship were crucial in establishing sociality that often relied on the language of ‘community’ to foster a vision of a collective future. As discussed in the example of the start-up conference, it typically brought together university students, entrepreneurs, investors, accountants, programmers, bloggers, lawyers and corporate representatives. In these events and spaces, these variously situated people were socialised in their expected roles. They got to learn and practice associated norms and values that were seen as necessary for the production of high-growth technology start-ups and a very particular vision of what entrepreneurship is - one that prioritises scalable growth. This type of entrepreneurship was particularly interesting for venture capital markets and endorsed also by the Singapore government. Investor interests structured not only which ideas were seen as ‘good’ but also how they later could develop, which will be the focus of the next chapter.

Importantly, this sociality provided the social context and social connections for

turning people's ideas of social change into commodities. As described through the case of Wonderings, David's idea about travelling in a different way could gather resources to be brought into being through a range of start-up related events such as Start-up Weekend, Angel's Gate reality Show, pitching at multiple start-up conferences and participating at The Accelerator programme. Through social validation and support in attracting people and resources, this context was crucial in supporting the materialisation process of start-up ideas into early-stage businesses. Viewed from the ecosystem model, openness and sharing were crucial in order to facilitate the circulation of ideas, people and capital in a productive manner. These values materialised in open access events, open floor plans, transparent glass-walled offices and public discussions over issues that would typically be seen as 'internal' to organisations.

The language of community, openness and sharing made start-up sociality seem a very democratic space with flat hierarchies, making it easy to overlook how this social space was exclusive not only between those that were seen as 'in' and 'out' but also the hierarchical relationships within the community. While many events were open to attend free of charge, many others had high participation fees or were socially exclusive only to select people. Similarly, as much was discussed openly, even more was shared strategically and selectively. While seemingly everyone could participate, not everyone was appreciated in the same way. While many emphasised collaboration, the sense of competition never disappeared. It was a mixed economy where gifts continuously had the potential to turn into commodities and vice versa. Through a more detailed description of Accelerator's Café and Open House events and their struggles to maintain them 'open', I tried to show how the free labour and gifts shared within the start-up space, despite the expectations, did not always easily translate into a money economy. As this chapter shows, the notion of the ecosystem provided a metaphor through which to imagine how, through the self-organising of variously situated actors such as aspiring entrepreneurs, investors, experienced entrepreneurs willing to be mentors, etc., high-growth start-ups could be churned out in a repeatable, seemingly 'sustainable' manner. Despite the aspirations of sustainability and self-organisation, the struggles of The Accelerator detailed in this chapter showed how this future required a lot of resources and energy in order to seem attainable or even desirable. In this way, the chapter points attention to the fact that while the start-up ecosystem provided a vision of capitalist production in a neoliberal economy, in order to function, it had to draw a lot on notions such as community, sharing, passion, collaboration, etc. Rather than being a simple economic futurity, it needed to draw upon labour that would be typically seen as part of the 'gift economy'.

Creating Value

1. Introduction. Start-ups creating value

Right amidst my first fieldwork period in April 2012, the news broke that the social networking giant Facebook had acquired a small photo editing app for mobile phones called Instagram for a staggering 1 billion USD in stock and cash. At the time, Instagram had been around for less than two years and was run by a small team of 13 people. Moreover, not only did it have a comparatively low number of users, but it also had no revenue. The founders and investors around me in Singapore marvelled at this news. For them, it illustrated a point they already knew and believed in - it showed just how 'little' start-ups needed to create so much wealth. Later that year, I also heard Singapore's government officials refer to Instagram's acquisition as proof of why the government needs to support start-ups - they create spectacular wealth with very few resources.

Technology start-ups are assumed to create 'value' by contributing to economic growth through creating new products and services and, consequentially, new avenues for profit in previously less or uncommercialised areas of social life. In this way, start-ups create value where it was not realised before. Some of my interlocutors even argued that the value created by start-ups is a 'better' form of value than 'older' forms of capital accumulation, such as, for example, buying and selling property, which was particularly popular in Singapore for those with financial means. Start-ups, in this view, create 'new' value by creating something new by innovating, while the older forms of capital accumulation were deemed to be mere value 'extraction'. Related to this is also an implicit moral authority that technology start-ups enjoy because of the assumptions about how they contribute to the development of society at large as they bring technological and social progress through their services. In more extreme versions of this thought (see, for example, Andreessen 2023), technologies brought by start-ups are the sole basis of social change and societal progress in general. For a critique of the assumption that entrepreneurship and technology are the vehicles of social progress, see, among others, Ghosh 2022; Lindtner 2020; Irani 2019.

Technology start-ups seem to be promising to bring value across multiple registers at once - they bring economic value through the product, they bring social value through technological and social progress, and, as the final two chapters will discuss in greater detail - they also promise personal fulfilment to the founders, as they are encouraged to pursue something that they deeply care about. This promise was well encapsulated in the first The Accelerator's advertising video shared online, in which Wei was inviting developers with start-up ideas to apply to The Accelerator programme. As the video was showing the empty The Accelerator's offices Wei was inviting programmers to imagine how the accelerator program would unfold:

"Space looks empty right now, nobody is here. But come January- you can imagine that there will be lots of excitement. There will be 30 people just like you - hanging out, coding, partying, getting things done, starting companies. (...) If you're a programmer and if you have some idea for a product or a service that could turn into a company, we might be able to help you turn into an entrepreneur."

Later in the video, the camera focuses on Wei explaining:

"Think hard about what you want to. Think hard about what only you can do. (...) We're interested in something deep, fundamental, disruptive. Something that nobody else has done yet, or nobody else has done right. And by doing it right I mean - reach millions of people, change the world, (you) might even get rich along the way."

In Wei's narration, starting a company, changing the world, and having fun go hand in hand. All one needs is a room with a set of desks and computer screens, a bunch of like-minded people around, and a stack of Post-it notes. The hacker from the garage has moved to an incubator.

In this chapter, I will question this promise of start-up futurities to deliver across multiple registers of value all at once - the personal, social and economic - by exploring the multiple meanings of value that are at play here and looking at how they shift in the process of bringing an idea to life. I will examine how value is produced and performed in the process of materialising and commodifying start-up ideas. Asking what is valued by whom and in what way in this process will allow me to trace the shifts in the different notions of value and examine the relationship between them.

Case of Wonderings

This chapter will continue to follow the story of Wonderings which we got to know already in the previous chapter. Following the journey of Wonderings from its inception to its absorption into a Japanese travel firm Summit Ventures Alliance (SVA), nearly four years later provides insights into the various, often conflicting notions of value that characterise and drive what is understood as valuable and when. Wonderings seemed to represent an ideal of how start-up founders should come up with an idea and go about executing it. Yet, as the Wonderings case will show - the commodification process was not contradiction-free. In order to attract funding, Wonderings discovered that what they are actually building is not so much their product, but the company. The commodification of the company led to important changes in the Wonderings product and shaped the kind of future that they were pursuing to the point where some of the founders could not relate to the new product.

The Wonderings case is instructive for multiple reasons. Firstly, it illustrates how the social context of the ecosystem allows one to take the first step in materialising ideas by providing opportunities to mobilise resources to start implementing an idea. The social approval was crucial for the founders to continue working on their start-up idea. Secondly, it allows us to trace how the formalisation of the idea into a product and a company also created a dynamic where the idea needed to be 'stabilised' and 'destabilised', on a routine basis. This extreme malleability that was practised through The Accelerator programme required a lot of work, brought up many tensions, and, as I will argue, was enforced in order to find the highest potential value, the most profitable path forward representing the interests of financial capital speculation. Thirdly, the Wonderings case shows how the context also turned the start-up itself into a commodity for financial capital and, therefore, placed particular demands on the product and company growth. In this process, we will be able to follow the shifting notions of value and how different values relate to one another hierarchically at various moments. The disillusionment that followed also allows us to ask - what really is the value that the start-ups are creating and for whom?

2. How to Study Value in Technology Start-up Space?

When the selected teams arrived at The Accelerator accelerator in 2012, they were eager to get busy programming their services. Some already had developed more or less working prototypes and wanted to focus on building the functionality further.

However, during the very first days of the Bootcamp the participants' plans were shattered by the organisers and mentors - they were told that even if coding and building their products might seem to be the logical thing to do, they were not here to do that, or at least, that can't be their focus. Instead, according to the organisers, they were here to build their companies. And that, in turn, meant focusing on making the business work - finding potential customers, mentors, investors, partners and other people who might help them develop their business. How can you have a business when you don't have the product? I was puzzled.

Despite the seemingly direct relationship between a technological product that a company has made and the value it creates for the economy and society at large, my fieldwork experiences showed that the notion of 'value' in start-up space is more complicated than the general assumptions about economic or social value brought by making new services online. The founders were taught that quick prototypes, even as simple as a drawing on a napkin, can be enough to get the business going. Rather than sticking to their original idea, the budding entrepreneurs were asked to 'stretch' and change their business ideas, seeking out the potentially most profitable and frictionless paths to proceed. Instead of programming, the days were spent in meeting rooms in front of whiteboards brainstorming about the business and consequential product possibilities with mentors and investors, connecting with people who might potentially help to find 'sales avenues' and constantly practising how to effectively pitch their businesses, which seemed to continuously change. This struck me, and also quite a few of the aspiring entrepreneurs, as quite confusing because, while there was a lot of talk about 'all action, no talking', the practice seemed to be *mainly talking* - amongst themselves, with the investors, mentors and even potential customers. How to make sense of such emphasis on performance vs. a lack of emphasis on the actual working product?

Anthropologists and sociologists have tried to grasp how value is constituted in several ways. One approach is based on an understanding of value as rooted in the moments of exchange. In contrast, the other approach argues for increasing the disembeddedness of the economy and value from its material constraints. In what follows, I will briefly summarise these approaches and show their limitations in helping to understand the process of 'value creation' as experienced at The Accelerator programme in Singapore.

Value as embedded in moments of exchange

Anthropologists and sociologists have approached the question of value in the economy by studying various types of exchanges and how objects become commodities

or lose their commodity status. For example, building upon Simmel's work, Appadurai has argued that "value is embodied in the commodities that are exchanged" (Appadurai 1988, 3). He expanded Simmel's understanding of value being embodied in the moment of exchange by adding that "*Politics* (in the broad sense of relations, assumptions, and contests pertaining to power) is what links value and exchange in the social life of commodities" (Appadurai 1988, 57). Following Appadurai, then the moment of exchange is an expression of the politics of value that has happened before or at the moment of exchange. While my fieldwork experience showed plenty of politics, pinpointing moments of exchange was much harder - for most start-ups, their products had no clients using their service nor investors investing, yet all that the start-ups were doing in the accelerator program was understood as 'creating value'. All the brainstorming sessions in front of whiteboards, all the meetings with potential partners or interviews with potential customers, pitch practices and research on competitors were seen as contributing to the *potential* of the start-up to succeed in the future and thus equated with creating value in the present. In all of these instances, notions about value were mainly *potential*, as most activities were only supposed to lead up to and facilitate moments of exchange in the future. Thus, in contrast to Appadurai's suggestion that value is constituted through the past and present (Appadurai 1988), my interlocutors operated with an understanding of value as inextricably tied to and realised in the future yet accessible in the present moment. This points to the fact that temporality plays a crucial role in the understanding of value creation. While anthropologists have focused on the past and the present, in this case, we see that including our analytical attention to future expectations is of uttermost importance for understanding contemporary production processes.

Dematerialisation of value

One way scholars have explained the seeming de-coupling of understanding of value as embedded in the use and exchange of the actual good is by problematising the fact that many of the goods sold and bought nowadays are becoming less material. Such analysis typically sees this dematerialisation as the 'next step' in capitalist development, namely the coming of the new, information-based economy. The argument goes that such an economy is perceived to be less material because it thrives on manipulating symbols and information rather than actual 'physical' matter. Indeed, it would be tempting to think about what the budding entrepreneurs in Singapore were doing as a dematerialised form of production, where value has nothing to do with the present reality. While some see such dematerialisation as a positive step which should lead to

a cleaner and safer economy with no growth limitations and celebrate it (for example, “technology is dematerialising the economy,” announces Diane Coyle, professor of economics at the University of Manchester in a Financial Times article in 2015) another popular trend is to view it as ‘inauthentic’ economic development which will inevitably culminate with a crisis such as, for example, a burst of an economic bubble, because it relies on financial speculation rather than being rooted in ‘real’ value.

Scholarly accounts that try to understand this seeming ‘decoupling’ of value and actual product or service often fall into similar dichotomies between ‘real’ and ‘inauthentic’, ‘material’ and ‘immaterial’, ‘symbol’ and ‘matter’ as noticeable in popular conversations, especially when it comes to the analysis of neoliberalism (Ho 2009a). This has received a lot of critique. Maurer calls such approaches “Western folk theories” that are too often recounted in moralising terms (Maurer 2006). Karen Ho critiques such approaches, describing them as “neoliberal exceptionalism” where scholars “privilege distant logics over particularity and grounded cultural analysis” (Ho 2009a, 33), while Slater addresses them as ‘dematerialisation’ thesis, which, according to him, rely on a “dubious distinction that has plagued much social theory: the distinction between objects and signs” (Slater 2002, 95).

Such accounts typically go back to Polanyi’s analysis of economic history and market liberalism. In his seminal work “The Great Transformation. The Political and Economic Origins of Our Time”, he claimed a radical break between the pre-industrial economy and the coming of the industrial economy, one where “Instead of economy being embedded in social relations, social relations are embedded in the economic system” (Polanyi 1944, 60). Common in this analysis is an understanding of the introduction of general-purpose money as an abstracting force that facilitates the disembedding of economic transactions from social relationships (Maurer 2006). Bill Maurer, in his review of the anthropology of money (2006), denounces such works that, according to him, repeat “the same story of the “great transformation” from socially embedded to disembedded and abstracted economic forms” (Maurer 2006: 15). With plenty of examples he shows that the uses of so-called ‘savage money’ and ‘modern money’ go well beyond the sharp borders drawn by the story of great transformation. Arguing that “Money may render everything calculable, but the systems of calculation and quantification on which it depends are not always as straightforwardly algebraic as one might imagine” (Maurer 2006: 23) Maurer invites us to view the manners in which calculation and value attribution take place and what effects it generates, instead of assuming those effects beforehand and to focus on the mechanisms and strategies in which calculations and values are created, assessed and what effects do these processes generate.

Contrary to the disembedding thesis, as already outlined in Chapter Three, the social relationships and context of the start-up ecosystem were crucial in constructing

what was perceived to be a commodity and its value; therefore, the anthropological and sociological literature that I find useful to build this chapter on critiques such accounts of general economic transformation and the coming of a presumably somehow 'less material' new economy. In this chapter, I want to show how the products and companies were materialised and what happened with value in the process. I propose that in order to understand how value is attributed in the technology start-up space, we need to take seriously the way in which future is integral to the assumptions about value.

Focus on materialisation and 'commodity potential'

To understand how the start-up ideas were materialised and how that related to value, I find the work of sociologist Don Slater very useful as he invites us to examine the processes of materialisation - "the social processes by which things come to be treated as things in the social world - whether they are commodities, brands, technologies, or information." (Slater 2002, 96) In this view, he explains:

"'materiality' is not a matter of physicality but rather of what might be called 'social thingness', (..): under what conditions are we able to treat things in the world as objects - durable, stable, external to individuals, with determinate properties and relations to other objects?" (Slater 2002, 96)

Slater also critiques assumptions about the economic transition to somehow a more abstract, less material new economy. According to him, the physicality of objects has never been an issue when it comes to seeing which objects are seen as existing and meaningful in the world. In a nice example that comes close to my fieldwork experiences, he argues that:

"Trobriand islanders participating in a kula ring are as exercised by the materialisation of objects as stable social entities as are dot.com capitalists. They both have to deploy a total social repertoire of practices and institutions to ensure the objectness of what they transact." (Slater 2002, 102).

Understanding and embracing such an approach to the materiality of start-up commodities then should allow us to explore how it is possible to talk about 'value' when the 'materiality' of the product in a physical sense is not self-evident or is constantly shifting. This also attunes our attention to the material infrastructure within which

start-up products gain shape - it becomes clear that the social context of the start-up ecosystem was crucial in materialising the start-up ideas as social things, but so were also technological infrastructures, logo stickers, drawings on whiteboards and blog posts.

Acknowledging that all things have a “commodity potential” (Appadurai 1988, 13), this chapter then asks - how is the commodity *potential* realised - in both meanings of the term - how people realise or become aware that something has commodity potential, and also how it is brought into existing. In what we will see in this chapter in Singapore’s start-up space, the materialisation process went hand in hand with the commodification process, but not without their contradictions. I will trace this process of materialisation by following Slater’s advice and looking at practice and process, the contexts and mechanisms of reasoning that underlay how the start-ups went about deciding on what ideas have the (right) commodity potential and through what kind of process they went to materialise it and establish them as meaningful things. Thus, the task of this chapter, borrowing from Slater, is to pay attention to the “social processes and conditions through which things are stabilised as social materialities, or destabilised, reconfigured, problematised” (Slater 2002, 96) and how that related to various understandings of value.

Speculative labour and performance of potential value

Future anticipation featured strongly in the way start-up entrepreneurs and investors thought of and related to issues of value. Peter Pels has made an important point, arguing that commodities and brands are only realised in time as they index their past biography and promise a future (Pels 2023). Taking temporality, especially futurity, seriously when discussing value requires us to consider how the commodity’s future trajectory is imagined and performed, what other aspects feature in it, and what the expectations are about what will constitute value. While anthropologists have acknowledged the importance of the future in structuring exchange and understanding of value, this ethnographic context requires more nuanced tools for understanding value. To make sense of the processes described in this chapter, I want to propose a term that will help to illustrate the relationship between future, and value - ‘*potential value*’. The concept works in multiple important ways. Firstly, at the most basic level, it is clearly a future-oriented concept, making us consider how expectations about future values shape interactions and decisions in the present. Secondly, and more importantly, it emphasises that the value is *potential* - a source of speculation. The speculation concerns three distinct aspects. The first is the scale of the potential value (addressing the question ‘How much?’). Secondly, the likelihood of this value materialising (addressing

the question ‘What are the chances?’). Thirdly, it also addresses the perceived ease of exchangeability or liquidity and, therefore, engages with questions regarding the malleability of the product and wider social recognition. In terms of start-up commodity lifecycle, investors are concerned with this aspect when they are thinking about further investment and exit strategies of a particular start-up - how easy it will be for this start-up to attract the next round of investment, and are there many larger companies who could be interested in acquiring it? Moreover, this question of exchangeability is central to entrepreneurs when they think about their own experiences - will it be easier or harder to capitalise on their life experiences?

Recognising that the performance of the *potential value* was the basis for real, meaningful interactions and exchanges at the time of my fieldwork, in this chapter, I will ask how was the *potential value* engaged and performed, what was perceived as adding to the *potential value*, and what limiting it. Laura Bear’s work on “speculation as an act of labour that has become crucial to the generation of surplus value” (Bear 2020, 6) is helpful, as it provides a lens through which I can zoom in on the work that the start-up founders invested in crafting the *potential value* of their start-ups and performing it. Bear explains that:

“we speculate by using various technologies of imagination. (...) These are deployed to anticipate the future; to stimulate its emergence; and to control it.” (Bear 2020, 8)

In this chapter, I will show how the *potential value* was constituted and performed through the labour of speculation.

3. The Malleability of the Product

Wonderings joins The Accelerator

As already discussed in Chapter Three, social validation provided in start-up events and social contexts such as Start-up Weekend can really make or break the plan to further pursue an idea. The Start-up Weekend provided the initial context where the idea of Wonderings could become a ‘stabilised social thing’, which meant that it could find supporters willing to put their energy and work into it and eventually develop into a company. The four guys continued working on the site mainly over the weekends, in the evenings often coming together at Singapore’s Hackerspace. They added flight data from more and more airlines to their website map and tried to negotiate to have access

to the airline data in a smooth and reliable way. They also continued attending various start-up events in order to ensure publicity, which not only increased the traffic to their website but, importantly, added more credibility. Having more credibility was seen as very important as they were starting negotiations with airlines about opening their data streams for the Wonderings website. Airlines, which held the key for their ability to display flights, were not overly excited about sharing their data with a small, unknown four-man formation under the name of Wonderings. Without being known publicly, David explained to me, no one would be willing to meet and have conversations with them. Now, they could point to their public performances and the people they have spoken to as a way to show that they 'are credible'.

It was around this time that The Accelerator was starting its first bootcamp program, and for Wonderings, joining The Accelerator eight months after the Start-up Weekend seemed to be the next step in the right direction. The 100-day program would provide a focused environment where they would have a chance to work with influential mentors and ideally receive funding for future growth from investors. The 15000 SGD, which would translate to roughly 9000 Euros investment in exchange for a small amount of equity, didn't seem to be a big demand. The Wonderings team felt that they 'are on to something' but wanted to ensure that the service 'grows' - and gets more and more customers using it. Being accepted at The Accelerator put them in physical proximity with influential players in the start-up space, the mentors, and the investors, thus giving them opportunities to talk and learn and ask for help and advice that they would struggle to gain access to otherwise.

The clear focus of the three months that the program lasted seemed to offer a concrete time period in which to focus and try to see if this idea can become 'something bigger'. It also proved to be the catalyst for Dhruv and Ryan to quit their jobs and for Quentin and David to decrease their other commitments to have an exclusive focus on working on Wonderings. It also made their work on the start-up seem like a legitimate activity in the eyes of their parents, relatives, and friends. After all, it showed that 'serious business people' are willing to invest in them, and they expect that others will do so as well later on.

To summarise - the social and technological contexts described in Chapter Three are crucial for 'materialising' the ideas into the social world as existing 'things' as they provide the space and context to mobilise resources for bringing them to life. Wonderings had gone a step further than most teams from Start-up Weekends. Having a working website that people could use made Wonderings a much more 'stable' thing in the social world, as people were using it and writing about it on social media and blogs, especially the ones covering Singapore's technology start-up events. The positive social reactions that the team members encountered from other people within the ecosystem

also propelled them on a path where they were compelled to and rather easily could join The Accelerator.

Wonderings joined the bootcamp as one of its 'poster teams' - they were well known to the start-up scene, they were sympathetic, fun and articulated in their media appearances, and they also seemed to represent the Singaporean dream - a Chinese/Malay Singaporean founder, Indian founder and two white expatriates or 'foreign talent' which Singaporean government had put in efforts to attract (described in more detail in Chapter One). Yet, as we will see next, the stability of Wonderings became an issue after they joined The Accelerator.

Ideation - embracing extreme malleability

The first weeks of The Accelerator program were officially devoted to 'ideation' - according to the investors, it was about 'stretching' the ideas the teams had originally applied to see what other options were. The entrepreneurs were asked to 'play' and 'experiment' with their ideas about the products they were developing in order to find the most profitable option to proceed with. Rather than programming their websites and developing features, the founders were asked to meet various mentors The Accelerator had selected and after introducing their initial start-up idea, brainstorm with them about the various possibilities the start-up could take up. Mentors applied their experience, knowledge, and imagination to think about other applications that the teams could make based on the technologies or ideas they had developed. These ideation meetings happened in front of whiteboards and projectors or computer screens as people were looking up the various existing examples of businesses they were referring to as part of the conversation. Should one proceed in this or another way? What kind of growth could one expect in developing a product in one way or another? Fast or slow? Is the market here large? Or maybe by slightly shifting the product, the market could actually be re-cast as 'huge'? What kind of industry insights and connections would help in one scenario or the other? What kind of avenues for revenue would open up in one or another case? What kind of roadblocks could be encountered? These were some of the typical questions and explorations that the start-up founders did together with their mentors, who actively applied their business knowledge in suggesting *how* and *what* to think. Some mentors were openly critiquing start-ups' initial ideas; others were trying to work with them and explore more profitable and attainable scenarios, often offering introductions through their own networks of people and institutions.

A rather striking but not unusual example of the ideation exercises comes from the 2013 run of the program, where a start-up developing a service that allows grown-up

children to book healthcare packages for their elderly parents online was advised by a mentor to turn it into a service that operates in the adult entertainment industry providing various sexual service packages. As I was told of this, the founder laughed:

"I'm sure there's a lot of money to be made in that area, but [it] definitely isn't the same business."

Yet, the technological platform on which the health package service was being developed would allow such transformation rather easily and as the mentor saw it - there could be a great market potential. How to understand this ease with which the mentors were suggesting transforming the business ideas? Are the theorists emphasising the de-materialisation of the new economy right after all? Is this malleability made possible, particularly by digital technologies? I would argue that while they might have made it easier, the actual technologies were not really that much of a concern: as I have already mentioned, an 'old technology' such as a piece of paper with a drawing on it could have functioned equally well in this context. Slater's work (Slater 2002) here is helpful again as it emphasises the role of stabilisation and destabilisation as part of the commodity materialisation process. He points out that what distinguishes the new economy, rather than digital technologies, is that the stabilisation and destabilisation have become institutionalised and instrumentalist corporate practices in order to find "an optimal position within competitive and consumption relations." (Slater 2002, 101) He points our attention to the changing corporate practices rather than some undergoing change with regard to materiality. Understanding this is crucial to explain why and how the start-ups were asked to treat their start-up ideas as malleable and flexible.

These ideation sessions often started slow but picked up their energy and usually involved quite some laughing. The insights and, stories, perspectives brought by the mentors opened new avenues for thought. Within the confines of those meetings, the future was wide open - anything was possible, but only the fantastically profitable was imagined. Through narratives, the product was reimagined, new markets conceived, multiple revenue avenues thought of, the potential competitors squashed or acquired, and the start-up and its founders were almighty in this conceptual space conceived of as a possible future. Cynicism and playfulness went hand in hand in re-imagining what would be possible. Mentors often asked - is this version of your product a 'candy' or 'cocaine'? Meaning - how badly those using it will want to use it again? How much the service will mean to those paying for it? Developing the product as a 'must-have', aka preferably 'cocaine' over 'candy', for its users and paying customers was the preferred path.

According to Slater, we can see such 'destabilisation' of a commodity as increas-

ingly becoming a routine institutionalised business practice that is at the heart of competition (Slater 2002). My ethnographic examples show that destabilisation is part and parcel of the creation of a business and product. While The Accelerator had allocated a week for introducing this practice, in practice, this ideation and stretching of ideas became a routine practice that happened not only in mentorship and pitching sessions but also as part of team conversations, and as the next Chapter will show, part of daily routine, a way of being and thinking about the world. As one entrepreneur not part of The Accelerator explained to me:

"It just becomes part of life, like, over dinner, out of nowhere we would be talking - hey, could this idea work, and stuff like that. And ideas just keep coming."

The power of 'daydreaming' and the 'capacity to aspire'

It struck me that in the present, where these day-dreaming sessions took place, there was almost nothing to indicate that this future discussed would be within reach. For example, one team that had made only mere screen mockups of their product indicating how it could look still spent hours discussing how their technology would disrupt the relationship between parents and children and how the data they would gather from these parent-child interactions would make a wonderful revenue stream for them as there would be so many companies interested in buying it. This seemed far-fetched compared to where the team was.

These day-dreaming sessions expanded beyond just the meetings with mentors and became a routine practice for the founders as they were trying to map their path ahead. People would try to map out their imaginary models of businesses and technologies on whiteboards that were available in all rooms, even the narrow pantry. I think of these day-dreaming sessions that sometimes happened during the check-in meetings, sometimes during lunches, sometimes at mentoring sessions and sometimes in the online Skype channel all participants shared, as also fulfilling a very important function for the teams. They could collectively feel good together. On the one hand, these sessions allowed them to channel frustrations in a playful way, but they also gave inspiration and energy to continue. The future they were imagining was very different from the moment in time they were actually in: in the present, the code was buggy, and programs crashed; founders had barely slept for days; team-mates were threatening to drop out and constantly argued as small irritations escalated; their parents were disappointed

that their children were not working for a big, prestige company; girlfriends wanted to break up with them because no time was spent together; investors pulled their business plans in pieces and embarrassed them publicly during pitching sessions, and money was there only for another five weeks of instant noodles. The future-positive, though, allowed them to escape this for a moment.

Here, in these daily practices, we see the power of future-making to mobilise people by creating a temporary feel-good space where one can orient oneself individually or as a team towards a desirable, also simpler-looking future. The mentors played a big role in helping the founders use and develop this way of thinking. As I think of it - the mentors enhanced the nascent entrepreneurs 'capacity to aspire' (Appadurai 2004) by helping them imagine markets and different players in them. They also enhanced their capacity to aspire by showing their own personal example - here they were - people who had built their businesses and had all these incredible experiences, sharing them with budding entrepreneurs. They essentially were teaching the entrepreneurial style that relied on this speculative labour through their own example. I will discuss the notion of style more in the next chapter, together with the role the mentors played in it.

When asked what those meetings with mentors provided, one of the team members of a start-up at The Accelerator's 2013 run of the program explained:

"They expand your view: you make a decision, but it is an informed decision- if we make this decision, are we missing out on something? What should we know? And in this regard, the mentors really helped."

Another team that was interested in cloud technologies and children's toys told that:

"brainstorming with the mentors inspired us to extend our idea to an even more ambitious one. Instead of just bringing toys to the cloud, we now want to turn every object in the world into a toy."

In this space of possibility, start-ups were also asked to form their vision - something that would go beyond just their product - to be their mission regarding the social change they want to contribute to the world. I have to think that only when you imagine yourself as all-powerful and not tied to any constraints, as being in that future-positive mode, can you make a claim on the future with a level of confidence that we see expressed in such corporate visions. Importantly, these visions provided more stability in the context where the start-up's products were destabilised on a routine basis.

That was especially important because such openness to various options, suggestions and critiques also came with its downsides. For one, being exposed to many different opinions made many founders doubt themselves, making them feel confused and exhausted. They had worked hard to ‘stabilise’ their idea as a ‘thing’ before they entered The Accelerator. Some had participated at Start-up Weekends and worked on a prototype there before being selected; others had applied directly to The Accelerator, and at least for the purpose of admissions application, they had tried to present their idea as stable. But now, they were asked to ‘destabilise’ it again. For example, on one of the first evenings of the program, John, whom I met outside Blk 71 during his smoking break, was very distressed. Looking down and away from me, nervously smoking, he told me:

“maybe we should just wait for tomorrow and just think about things, because right now, yeah, a lot of things are going on in our minds. We should, we should write things down, step back a little. See...what we are really good at. So...since we felt before that we are really good at this. Before we came here, we thought that we really had it in the bag, because of the acceptance. We fully understood that even if we thought that its that we had it in the bag - things could change. And actually, right now its starting to you know, hem...sink in...that this is really not easy, but its going to... it should be really life changing...so especially now...lots of things going on, we want to rethink what we are doing...everything actually.”

John felt that they had to rethink “everything” because mentors were seriously questioning their idea, its market potential, their expertise in the domain, and its feasibility. In a context where they felt they had to ‘perform’ and ‘act fast’ and constantly pitch themselves, rethinking ‘everything’ simultaneously felt incredibly overwhelming.

Returning to the ‘initial vision’ or ‘idea’ seemed for many participants to be the safest way to re-start and gain footing in such situations. This was especially true when they experienced what, in start-up lingo, is called ‘mentor whiplash’—situations where equally qualified mentors gave conflicting advice. ‘Mentor whiplash’ was seen as an unavoidable part of ‘entrepreneurial life’, and entrepreneurs’ ability to deal with it was part of the skillset they needed to develop. The mere existence of such a term indicates the pervasiveness of destabilisation as a routine practice in the start-up space. Others claimed that greater self-knowledge will protect them from being disoriented by conflicting advice, for example a French entrepreneur who moved to Singapore named

Rémi:

"you really have to know yourself, know what you are good at and what not. And this will influence also the way you compose your team, how you create the strategy for your business and avoid being whiplashed by mentor's advices."

In his analysis of the materiality of new economy production Slater has argued that rather than seeing things as less material we should understand that:

"the processes by which things are materialised as things - has become recognised as central to commercial practice, because (..) it has become acknowledged as the basis of more effective market behaviour."(Slater 2002, 107)

Thus what Slater is pointing at is that rather than the defining feature of the new economy being loss of materiality, instead it is the increased reflexivity and recognition of the constructed nature of materialising things. From the company's perspective, the 'malleability' of the product has become central to the process of building a business around it - only by keeping the product conceptually (and materially) malleable can the company respond to the 'market' better and gain a competitive advantage. Brands then act as containers that stabilise at a higher level of abstraction, while 'product concepts' are the working materials for entrepreneurs and managers. As Slater explains: "'product concepts' are modes of strategising, organising and integrating everything which has a bearing on the social materialisation of the object in any of its potential social forms."(Slater 2002, 106) Thus, such destabilisation of a product, according to Slater should not be seen as indicative of the lesser physicality of a thing, but rather as the very essence of it. Understanding that this destabilisation is a prerequisite for growth makes it more clear that the particularity of the contemporary business environment relates more to the expectations of growth rather than the objects or their de-materialisation themselves.

Consequently, the start-ups that were not willing to embrace this extreme malleability were identified as problematic. Wonderings were critiqued for their 'too close attachment' to their initial idea and the way it was implemented. To use the words of Slater (2002) Wonderings were too fixed on keeping their product 'stable' in its initial form of materialisation, and the team was not reflexive enough in opening it up for interrogation. If they are not opening their idea up, then they can't find the best path towards the highest potential value. This was seen as 'not progressing'. Ideas themselves

did not carry value; it was how the entrepreneurs acted on them by stretching them, validating them and moving ahead that was seen as crucial. As a result, a few weeks into the program, following Wonderings' pitch during the weekly pitch presentation, which introduced the service pretty much as they had done in the previous weeks, one of the leading mentors got up. He was tense and visibly agitated. In a harsh tone, he explained that 'the time is running' and Wonderings are 'not showing any changes' in the way they approach their product and business. He demanded to see change. This felt like a public scolding. The mentor shifted his narrative to be a learning message for everyone in the room: go out and talk to your customers!

4. "Make Something People Want!" Lean Start-up at The Accelerator

'Go out and talk to the customers' is the slogan of a management method that became popular at the time of my fieldwork. The slogan illustrated the core principle that start-up founders need to leave their offices and talk to their potential users to see if the product they are developing is actually something people want. The Lean Start-up method gained increasing popularity during the years of my fieldwork and was seen by most people involved in the technology business as a clear and structured way to go about building a business and developing a product. Also The Accelerator quickly picked up and endorsed the Lean Start-up method for its start-ups. The way I see it, the Lean Start-up methods institutionalise the principles of stabilisation and destabilisation as described by Slater (2002). In an eerie resemblance to Slater's analysis about the stabilisation and destabilisation of product concepts also Eric Ries argues in the Lean Start-up:

"Products change constantly through the process of optimization, what I call tuning the engine. Less frequently, the strategy may have to change (called a pivot). However, the overarching vision rarely changes. (...) Once we have an engine that's revved up, the Lean Start-up offers methods to scale and grow the business with maximum acceleration." (Ries 2011, 23)

In its essence, it is a business management method that invites start-up founders to question their own assumptions about how their product fits or doesn't fit in a marketplace and in their users' and clients' everyday lives. The start-up founders are expected to 'validate' their assumptions by a series of tests where potential user and customer be-

behaviour is closely tracked and analysed. Based on these tests or 'validations' the product or the business model needs to be adapted to fit the customer's needs better and increase its market potential. The iterative development model has no clear end-point for the product or the business, as it is continuously adapted depending on the market response. To paraphrase: if people are willing to pay and it is reasonable to expect that such people constitute a big enough market, then it is good to go in this direction.

Learning through testing is considered the core of 'adding value' in the process. In the book, Eric Ries explains, "Lean thinking defines value as providing benefit to the customer; anything else is waste." (Ries 2011, 48) yet, since a start-up does not know "who the customer is and what the customer might find valuable," the value is in testing and learning as quickly as possible through the build-measure-learn cycle.

These tests can be done via elaborate technological tracking, for example. However, at the level of start-up idea, the emphasis is on quick, inexpensive and frequent experiments - even as crude as a story narrated by the entrepreneur, or a drawing on a napkin - that can quickly affirm whether the business is going in the right direction or not, judging by how the potential customer responds. Is the customer excited and willing to pay for it right away, or is the response lukewarm? If the response is unclear, maybe that is not the right customer segment, and the entrepreneur needs to seek out other 'markets' or identify a different problem to solve. If the response is enthusiastic, only then should the entrepreneur invest time in thinking about the possible interface and drawing a mock-up version to then again subject it to vigorous testing.

'The Lean Start-up' had gained huge popularity at the time of my research not only in Singapore but across the world and not only in the start-up scene but across different professional domains. In 2012, after returning from fieldwork, a "Lean Canvas" map greeted me even on my supervisor's whiteboard at Leiden University - drawn by a management consultant working for the university. The 'Lean methodology' had expanded to various areas in business and had follow-up books that allowed to translate this methodology to virtually every part of business, ranging from marketing to user experience design, aimed at small companies as well as promising that large corporations can innovate like small start-ups. Eric Ries's "Lean Start-up" book, originally published in 2011, was a common book to see in the start-up offices I visited; by 2012, there was already a devoted meet-up group in Singapore called Lean Start-up Circle. I visited its meetup where four entrepreneurs shared how they are building their businesses by following the Lean Start-up strategies on a regular, rainy weekday evening in 2014, and it had gathered more than 100 attendees at a local club. From the many, many various start-up meet-ups that I had attended in Singapore, this was one of the most well-attended. The organisers said that the large number was not unusual.

Significantly, the language of experimentation, validation and testing had perme-

ated nearly every talk about start-ups with great speed in the years 2012-2014. Not everyone had read the books or attended the workshops, but the logic and principles behind Lean Start-up had become seemingly 'normal' and nearly self-evident. For example, one aspiring entrepreneur, Gavin, whom I met at a government-organised start-up event, had also heard of Lean Start-up and seemed to be well informed about it. He used the terms of experiment, validation and minimum viable product with ease in relation to the app he was developing. Yet, when I asked if he had read any of the books, he waved his hand as if brushing this needless thought away - "No, lah, there is nothing to read. It is logical!"

Thus, the Lean Start-up provides a framework through which to systematically exploit the malleability of the product. The labour of speculation relies on scientific language, and the application of a scientific method provides a veneer of certainty. The attractiveness of these qualities could explain the speed and intensity with which the method became popular and normalised around the world and across various fields to the point where it seemed simply 'logical'.

At The Accelerator, teams were encouraged to follow the Lean Start-up principles, and if they resisted, that was seen as 'not being entrepreneurial'. For example, in one of the video blogs or vlogs, Oscar interviewed a mentor named Samuel, who had flown to Singapore to mentor for The Accelerator from China. Samuel also wanted the start-ups to apply the Lean Start-up methods to developing their products for the business to have potential:

"Oscar: What have you noticed about The Accelerator start-ups?
Samuel: they have failed to do proper research. Who would be their future customers and users? They are rushing to coding and rushing to prototyping. And they don't really talk to enough people. They don't follow them; they don't try to understand if they are actually solving a problem. I think it's possible to learn a lot with just a piece of paper drawing as a basic prototype. First discussing- doing the basic customer development. Talking what are the main pain points, how are they solving them now, and then showing on a piece of paper- this is how I am planing to solve the problem.
Oscar: I totally agree to that. It has been interesting talking to a team earlier today, phone based application and at the end of the conversation [we suggested]- why don't you just call up some customers and talk to them? That was actually a breakthrough moment when they realised that this is all that they have to do. This [rushing to coding and prototyping instead of talking to customers] is a comfort zone thing- especially if you are a technologist."

According to the Lean Start-up and The Accelerator, Wonderings wanted to encourage the discovery of new places, but they still had to find the best way to do it. They had to learn how to change the product or how they think about their business and adjust it based on those insights. I will attend to Wondering's experience with applying Lean Start-up in a later section. At this moment, I want to emphasise the role of the market in determining what and how the product should be.

Invention vs innovation

Just like many of my interlocutors, I was puzzled and surprised about such a lack of focus on the actual development of the product itself. Yet, the organisers explained that this is a typical misconception about what it *really* means to be building a tech start-up. This can be further understood by looking closer at two concepts - invention and innovation which are central to the ideas about creating value in the new economy. They are regularly featured as buzzwords to emphasise that the new economy creates its value through the invention of new technologies or services. Yet, despite these terms' common conflation and association, the business environment is primarily concerned with innovation. Moreover, it is a very particular definition of 'innovation' - one where the new service or object gains its value only when it produces value in relation to the market. For example, a group of Singapore-based entrepreneurs and academics tasked with suggesting a vision for Information & Communication Technologies (ICT) and Computer Science (CS) Research and Commercialisation for Singapore's National Research Foundation (NRF) explained: "A new technology developed in the lab, however clever and well-patented, is not an innovation until it is brought to market. It may be innovative, but not an innovation." (Tsin et al. 2013, 6)

The distinction between innovation and invention also translates into another differentiation - one between an 'entrepreneur' and an 'innovator', which was made clear to me one afternoon in 2014. A group of aspiring or nascent entrepreneurs had gathered at Blk 71 to learn about a new program promising to help entrepreneurs build their businesses. Part of the program's attraction was that it was led by representatives of a famous Silicon Valley venture capital firm, who offered a chance to receive funding from this firm and have easier access to the American market. During the question-and-answer section, the affluent USA businessman who presented the programme, dressed in a suit, was challenged by one audience member. This rather senior, Indian-looking male, shifting uncomfortably in his conference room seat, questioned the planned set-up of the program. He suggested that a group setting can disturb the inner process of the entrepreneur and thus distract from the making of the product. He questioned

why, instead, the organisers don't want to organise the program based on individual mentorship. The Program representative listened for a while and then interrupted the speaker to explain:

"..that's fundamentally.. Its a myth about entrepreneurship. [...]... entrepreneurship does not have to do with invention. Most successful entrepreneurs steal the ideas from someone else. Most successful entrepreneurs are *not* [emphasis] inventors, and most inventors *are-not-entrepreneurs*. [slowly spells out, long pause after it]. The *only* inventors that are successful entrepreneurs are those who go through a process of testing their invention and validating that the invention works. Most inventors, their attitude is - 'I have invented this brilliant technology, and now I'm gonna teach these customers. And these customers don't love it because they are stupid.' Right? That's the attitude of the most of inventors. The entrepreneur [however] says, 'Here's a solution to a problem. Let me take it to a customer.' And the customer says, 'That's not right.' And the entrepreneur says 'Oh, shit! Ok! How about this? Maybe this works?' And they [say]: 'Not quite.' And then they [the entrepreneurs] go 'Ok, but what about this?' And they [customers] say 'Yeah!' and they [entrepreneurs] say 'Aha!' because *entrepreneurship is about a process of testing, iterating, and continuously improving. It's not about inventing. It's not about creating* [my emphasis]. And it's not about avoiding the distractions of reality. It's not about avoiding having other people say, 'Hey, Bill, that's a really stupid idea! Don't do that!' - 'Oh no, I can't listen to you, because it might distract me.' But a good entrepreneur says - 'Why do you think it's stupid, what am I doing wrong, what am I miscommunicating?'"

This emphasised that for an idea to have commodity potential, it needs to be treated as flexible and malleable in its character. The entrepreneur should be willing to bend her idea in response to potential customer feedback, understood as underlying 'the market'. In this context, entrepreneurialism is conceptualised as dynamic and 'in touch with reality', wanting to serve people instead of the 'static' and 'removed' and even somewhat 'egocentric' inventors who care about the 'egoistic' realisation of their vision. Hereby, we can see the highly normative nature of how entrepreneurship is positioned and how they ground the legitimacy of their claims in the 'reality' of the market. In the gospel of capitalism, entrepreneurs speak the truth.

Lean Start-up was very central to the way market needs were identified. By operating through an experimental cycle, Lean Start-up promises to lead entrepreneurs to innovation in a more efficient and faster way because it brings the entrepreneurs closer and more in sync with 'the market'. It seemed to promise to find a way how to 'fill' the future with content by aligning the entrepreneurs' actions with the needs of the market. The hope was that by applying Lean Start-up, the teams would be able to get the metrics they needed to show.

Wonderings initially defined their market as budget-conscious backpackers and adventurous travellers. Such a market segment seemed to 'fit the product' and seemed to make sense because, at the time, Wonderings displayed results from low-cost airlines only. To 'test' these assumptions the Wonderings team was advised by mentors to start interviewing potential customers. I joined Ryan in one such 'fieldwork' at local hostels in February 2011 and observed how Ryan asked the interviewees about how they travel, how they decide on destinations, and how much time they spend on deciding where to go and planning the trip. He also invited the people to use the Wonderings website as he observed them navigating the site - was it intuitive enough? What buttons did people click at expecting what results? How did people react? After the trip, he sent an e-mail to the team including also me:

"Hey guys, So Zane and I went to three hostels today, two Beary Nice Hostels and Wink (these are the highest rated hostels on hostels.com). General feeling I got from users was again, yes, we are on the right track to building a differentiated product. They liked the features we told them about. They like the discovery experience and they say they can see themselves using it. However, we all know that saying and doing are different. They all like the concept, but is it powerful enough to break the mind-mould of the search-by-destination user? That's the million dollar question. (..)"

Thus while these conversations provided him with some insights on how the user interface could be changed promptly (e.g. some buttons on the website didn't respond in some browsers), the uncertainty about how to proceed remained. Ryan did more of such interviews later at the airport and one of the realisations that they started accepting was that most of the backpackers already know their itinerary and rarely leisurely look for random flight options. This discovery made them question whether the target audience they thought they were addressing actually would be interested in their prod-

uct. While these interviews provided the team with a sense of clarity that this ‘market’ audience doesn’t really work as well as they had anticipated, it didn’t help much in deciding which other audience they should be focusing on.

Other teams trying the method also came across similar road-blocks and the Lean start-up method as a path to future was followed rather loosely. For example Ben told that they tried to follow the Lean Start-up approach, but at the end gave it up:

“I think, looking back, I don’t think that was that was the best approach. But it was we tried it out. And we talked to a bunch. And it was just, it was pretty discouraging at the time, because everyone was saying, like, it was like, “Oh, that’s kind of cool. But I don’t really get it!” or like, “No, I don’t think I’d use it.” And like that kind of responses. So yeah, that was that was kind of a bummer for a while. And we went through that. And then at some point, me and Victor were just like- Fuck it! Like - we like the way it is. And we we know, they [the people they had interviewed] are not the right thing. And let’s just try to let’s just build something and make something. So we basically were like, we’re just gonna ignore all the Lean Start-up stuff and do it a different way.”

Later, though, they still applied the Lean Start-up methods in testing how the users they attracted through Facebook advertising responded to various differences in the product.

Judging by Ryan’s and Ben’s insights, which predominantly emphasised what didn’t seem to be working, it is hard to understand why this ‘learning’, to use the language of Lean Start-up, was seen as ‘adding value’. Similarly, considering my concerns that the ideation sessions with mentors often seemed very far-fetched from the actual state of the start-ups, what was the reason to see these sessions as ‘adding value’? Why was treating the product idea as extremely malleable seen as ‘adding value’ and resisting these extreme malleability exercises rendered the founders ‘un-entrepreneurial’ in the eyes of The Accelerator and its mentors? I want to argue that the notion of potential value comes in handy to understand this because these ideation and Lean Start-up exercises all directed the entrepreneur to search for the highest potential value the business could bring over the shortest time. Rather than just pursuing their idea or proposing it to the market they related to, as in the case of Wonderings, these exercises forced the founders to examine what could bring the highest potential financial value and pursue only that.

5. "Entrepreneurs Build Companies, Companies Build Products"

Alongside the expectations of extreme malleability, another process was unfolding - commodification of the start-up. It required to subject the shaping of the product not to the needs of the consumer market but to the needs of the company, which itself was being commodified for the venture capital market. Interestingly, if ideation required opening up the future and exploration of all sorts of potential scenarios, then the commodification of the company required a different approach to future and that led to its emptying. I will explain and explore this process in this section.

At The Accelerator, it was already during the first week that Wonderings got a hard-hitting surprise from the organisers. It happened over a lunch meeting at a busy, noisy and hot hawker centre part of the Ayer Rajah Industrial complex. As the team sat down, two of the programme's mentors asked directly how much money Wonderings would *need to raise* from the investors at the end of the programme in 100 days' time. 'Raising money' refers to a process of securing investment. The team was not sure how to respond. As much as they could get? They answered tentatively, laughing and smiling insecurely, already guessing that it most probably isn't the right answer, and wondering what would be the right thing to say. Their plan was to do as much as they could with the product in the 100 days and then get evaluated by investors, receive different offers from them, and then most probably choose the investors that offered the most money.

The mentors, however, made it clear that it is not how it works. They explained that at the early stage, start-ups usually raise approximately 1 to 1.5 years of *runway*. A start-up's 'runway' refers to the duration of time the company can continue to work, considering its income minus the costs it has. The costs and expenses in relation to the income are discussed as the 'burn rate'. The mentors explained that the way to calculate how much Wonderings will need to raise at the end of The Accelerator would be to estimate, first, what they expect their monthly *burn rate* will be by then, which required imagining what sort of company with what sort of costs it will be, and then multiply the monthly costs for as many months of the runway they expect to need. This, then, will be the amount of money to raise.

We were eating and trying to process this information amidst the intense noises and smells of lunchtime at a hawker centre. What the mentors were presenting seemed so distant, so abstract - the program had just started, to think already about the end of it? There was so much excitement about figuring out all those things they could do with the product. Sitting down in front of an Excel sheet and calculating the costs, such as rent, salaries, marketing, etc., didn't seem to fit. Yet, that is what the Wonderings team

started calculating - the expected costs of an office, salaries of the current founders and the costs of potential future employees (will they need one? Two? Can they hire an intern?), costs of servers and costs of marketing - all of which will contribute to the monthly 'burn rate'. The team was visibly taken by surprise about the decisions they had to make at this moment in time.

Later in a video blog, Oscar, the CEO of The Accelerator discussed this exercise and the importance of it:

"So today we have three teams and we try [to make] them .. to visualize being at the Demo day and having secured a load of funding, and what are they going to actually do. (...) So we ask - how will you know that you have succeeded in securing investment? Will that mean that you have a runway for a year, or will it be 6 months or 18? How much money will you need to keep on rolling? And if you raise 600,000 SGD, then what kind of deal the investor is going to expect? What do you have to show them to get the 600,000 SGD, and how much equity will you have to give away? I think it has been quite sobering for some teams to realise how much they need to achieve to get to that stage."

This exercise relied on imagining a trajectory of the company - understood as a runway - starting at the moment of receiving the funding - expressed in monetary terms. Yet, the reality was that with the product being constantly destabilised, it was very hard to understand how the future of the company should look content-wise. Wonderings assumed they would need some budget for marketing, and most probably, they also ought to plan for hiring someone who could be their marketing person, but these assumptions were based more on what other companies do in general rather than the needs emerging clearly from their imagined product development.

In the video, Oscar continued to elaborate on the question of what the teams need to do in order to secure funding:

"It boiled down to two arguments: some teams will focus on the actual revenue. So, if you want your business to be valued at 600,000 \$ that means you have to be generating quite substantial chunks of cash. But the point is that if the teams want to secure a good deal, then they should be generating revenue. The alternative approach is to say, well, we don't have that many people who are paying me as customers yet, I am not making that much profit right now, but I have a huge number of users signed up, and there is an obvious path to monetising the whole business as we move forward."

Another important exercise that all the teams were subjected to in the first week required thinking about ‘other metrics’, not just financial, that would allow them to express the company’s progress over the 100 days. This exercise was led by a mentor named Lars, who asked the teams to identify what metrics would illustrate that the start-up was gaining traction. With that, he meant identifying indicators that the start-up is indeed on a path where it is getting more and more external interest - whether it is the number of users using the service, the number of partners that have agreed to collaborate, or the number of visits to the site, the duration of each use session. Lars reasoned that not many start-ups would be able to show revenue within 100 days. Still, they should be able to find other indicators (‘key performance indicators’ or KPIs) that are showing progress and, therefore, allowing the investors to see that the start-up is on the right growth path. He explained that for him, as an investor, seeing *traction* will be the most important thing:

“The BootCamp is not about metrics actually, it’s about making the company the best it can be within 100 days. And what is the best [that a] company can be - it is...well... what I’m going to look at day 100 is what I’ve also said to the teams - it’s a word that I really like- it’s TRACTION! So I’m gonna look at traction- how far have they gotten in these 100 days? And traction consists of how far have they have been able to come on the key metrics after 100 days. (...) these KPIs that they have chosen here should be the ones they present on day 100 to investors to convince them that they have actually gotten traction.”

Interestingly though, instead of working from the present moment and projecting into the future, again Lars asked the teams to imagine how these KPIs ‘should look like’ on Day 100, and then work their way back to Day 50, Day 25 so that they all know ‘where’ they need to be at these moments of time:

“So this is what I’m going through with them in order to try to get them to commit as a team. Discuss what they wanna look like on day 100 in order [to get investment] and what are the KPIs that they are gonna produce numbers for on Day 100, and growth curves - so that I, as an investor, am gonna be impressed, and Im gonna invest. Because that’s what it takes.”

According to him, this backward projection in numbers, or backcasting, is very helpful because now every action the teams take will be evaluated against how that

contributes to their goal of reaching these numbers. This calculation was done not only to know how much money to ask from investors but also to anticipate the exchange that would happen between the start-up and the investors and ensure that the start-ups had enough to offer for what they might need to get the deal. The anticipation of this exchange and the work towards it then increased the chances of the exchange happening, yet the needs on which this projection was based were hypothetical.

Through these two goal-setting exercises, the start-ups had to imagine the moment of exchange (receiving investment) and then forecast further into the future and back to the present moment. In both cases, they had to think about the *potential value* that they would show and how to show it, so in this case, it was the illustration of the *likelihood* of the *potential value* that was at stake here. In both of these goal-setting exercises, the future was thought of in numerical, quantified terms. Unlike the day-dreaming sessions, which imagined the future in multiple possible ways, these two exercises imagined a future empty of contents - as long as it was able to show growth or revenue, it was a future to pursue, no matter the product. Whether it meant working with delivering sex or health service packages online, it was all the same. In this way, we can say that the commodification of the company also meant emptying it of its future.

Wonderings, as well as many other teams, were stunned by these exercises of calculation. It seemed as if these exercises made sense in relation to attracting funding, yet they had very little to do with where they were at the moment and how they thought about the development of their product. The whole reasoning seemed to come as a surprise. It was not about how they were going to go about their product but about the rate of growth. In this process of focusing on growth, the first major step was to abstract the product from the entrepreneur's personal and embodied ways of relating to it by foregrounding the scale of growth instead. The anticipation of exchange and ideas about the monetary value that should be exchanged for equity objectified the start-up itself as a company while not necessarily detailing how the product should develop in qualitative terms. And even though the near future was now dotted with timestamps and necessary benchmarks, at least the Wonderings team was unsure how they could reach such milestones as they had identified in the conversation - nearly 10,000 SGD of monthly revenue or thousands of active users. At the time, they had nothing close to that nor an idea of how to get there.

Start-up first, product second

The company, rather than the product then was seen as the main carrier of value. Rather than being the central organising element and source of value as typically imag-

ined, the product becomes subject to the needs of how the company needs to look at a certain moment in the future. This hierarchy was encapsulated in a quote that was often repeated and even made into a framed poster displayed at The Accelerator office that said, “Entrepreneurs build companies, companies build products”. The idea behind this notion is that a company can be set up as a series of processes (automation) which, organised effectively, will produce revenue-generating products with ever smaller interventions by the entrepreneurs themselves. Thus, the company is imagined as an automated, self-managing profit-making machine. As Wei explained to me during one dinner - the goal of the entrepreneur is to render him or herself obsolete from the company (thus allowing the practice of ‘serial entrepreneurship’ as explained earlier in Chapter Three). If the entrepreneur can not do that, then it is a mere ‘lifestyle’ business. For the founders, it also meant expanding what they considered to be their responsibility. John, for example, had been in a start-up before, but as he admitted in a conversation:

“it was different because I wasn’t in the frontline.. like ...I was just coding my ass off...and yeah...I didn’t have to think about market.. not even that, but about management of people, about the directions to go, getting things done...well, it was a totally different perspective than right now...because right now the investors want ..results. I mean we always wanted that, I mean, while also working, but right now its a totally different thing, because it adds more weight to everything you do...so ...its ok...its cool.”

These forecasting and backcasting exercises were the first steps in the longer process of creating such a self-managing entity and required the entrepreneurs to make a leap to a new level of abstraction. This abstraction involved two steps. Through this forecasting exercise, first, a future vision of the company was created, albeit one that was predominantly expressed in terms of quantified, measurable ‘costs’ and formalised into Excel spreadsheets. Secondly, the planned development of the product in the near future was reconfigured in the face of the expected outcome where the product’s qualitative dimensions were left unaddressed, and instead, the rate of growth was mapped out - its trajectory and, thus, the likelihood of the scale of the potential value coming through.

The empty futures of venture capital probabilities

In order to understand why the investors were concerned with the scale and likelihood of the potential value, it is worth reiterating how investors and typical venture

capital funds conceive their task, which I already briefly sketched in the previous chapter. Investment funds invest in multiple companies, and together, these companies form their portfolio. While investing in each company, a fund does not particularly care which of the start-ups delivers the returns - as long as one of them does. To compensate for these losses and achieve the expected return for their investors, successful start-ups are expected to generate extraordinarily high returns. Thus, what investors are looking for when considering investing is essentially projected *scale* and an increased *likelihood* that the start-up will be able to deliver the returns.

Consequently, accepting venture capital funding shapes the future trajectory in a way that typically forecloses the option for a 'lifestyle' business - one that would not have the expected high growth trajectory, even when it is profitable. Garth Saloner, an American economist, has confirmed an understanding that I also learned during my fieldwork:

"(...) once the venture investor believes that the enterprise likely will never hit it big, the interest in the investment may wane—regardless of whether or not the entrepreneur still believes in the business." (Saloner 2010, 148)

Thus, the future trajectory for the company, as far as investors are concerned, typically involves an 'empty future' - one where the content of the business doesn't matter, but it is the monetary *potential value* that determines the future.⁴ In his analysis of the relationship between the entrepreneur and the investor, Saloner has explained this as an opportunity cost for the investors:

"(...) venture investors are investing two things: time and money. The concern with the financial investment is obvious. Less obvious, however, is the opportunity cost in terms of time. Because the cost of continuing to invest time in the entrepreneur's venture is the inability to take on another, potentially much more lucrative venture, the venture capitalist often has an incentive to shut down the venture and move on before the entrepreneur is willing to do so." (Saloner 2010, 149)

4 At the angel and seed level of investing, which is much more informal, there are many reasons why investors choose to invest in one or another start-up, and that also shapes their willingness to 'go along' with the entrepreneur. At the same time, as I will discuss in the next Chapter - also those entrepreneurs who have decided to pursue serial entrepreneurship think about their own personal 'opportunity costs' and are likely to choose to shut down or sell a business that isn't promising the scale that matches their ambitions.

As Bob Zider dispels the myths of venture capital investments in the Harvard Business Review article, he concludes that venture capital, if viewed as a form of credit, turns out to be “very high-cost capital: a loan with a 58% annual compound interest rate that cannot be prepaid. However, that rate is necessary to deliver average fund returns above 20%.” (Zider 1998). Considering this, the crucial role investors play in start-up sociality and setting the norms of what counts as a good start-up idea and what is considered ‘proper entrepreneurship’, as described in Chapter Three, is even more perplexing.

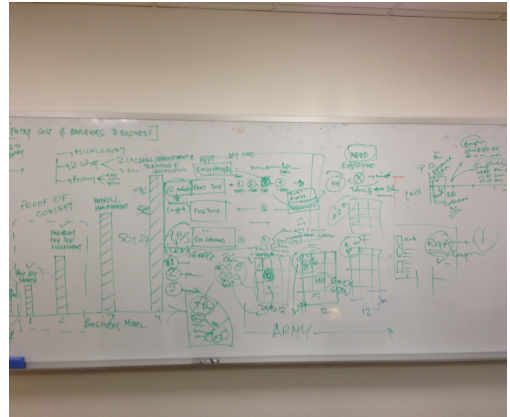
While at the surface level, The Accelerator’s and the participating team’s interests seemed aligned, in practice, The Accelerator’s own financial success relied on being able to make sure that the participating companies get investors. Many of the founders realised that this actually might not be the preferred path for them only in the process. For example, Ben told me:

“It’s a little dangerous...I mean, it was a lot of pressure to get funding. And the thing is, especially most of us are very early-stage companies. It can actually be detrimental to our companies to get funding at this stage because we can’t prove how valuable we are yet. (...) And we talked about that a lot to a few people. And I thought about it, too. And like my, I’m still kind of ambivalent about the whole funding thing. I’d say like, I’m sort of going talking to the investors, but I sort of don’t really want to be.”

He recognised that the funding should be a “tool” rather than a goal itself, but participation in the accelerator program made it into a goal, and the way he saw it, it was dangerous. However, through the discussion in the previous Chapter, I want to argue that all of these settings - incubators, accelerators, and even events that don’t make any direct investments, such as start-up weekends and business pitch competitions - all teach aspiring entrepreneurs to think and prepare their ideas in the context of *potential value*. The social value judgement about the worthiness of the pursuit is already deeply implicated in the notion of serial entrepreneurship, which relies on financial capital as being better and more valuable than a ‘mere lifestyle’ business. Moreover, since speed is important, ‘bootstrapping’, which refers to people funding their own start-up, is not favoured as bootstrapping typically means slow and gradual development.

Whiteboards were actively used to map out various scenarios of start-ups' development, noting the various possibilities for growth, and the desired elements at each stage. Such 'maps' were drawn and re-drawn routinely during the conversations amongst start-up team members, in their meetings with mentors and potential investors.

Photo by author.



6. Shifting Notions of Value

In the previous sections, I have described how the start-ups joining The Accelerator had to embrace a routine stabilisation and destabilisation of the product idea, where the product was subjected to the desires of the market. Simultaneously, they had to embrace the commodification of the start-up itself as it had to be prepared to be attractive for investment. Also, here, the product was subjected—this time to the needs of the company's development. Both of these processes indicated a major shift in the relationship between the various notions of value. While The Accelerator invited technology developers to apply if they wanted to develop something “deep, fundamental, disruptive” and something “only” these people could make, the value of technological sophistication or personal connection to the product seemed to matter less and less in practice. As encapsulated in the “invention vs innovation” discussion, the inventor's interest in the sophistication of the product is misguided; technological sophistication is not the guiding value.

This was a major disappointment for one team in particular, who had arrived at The Accelerator with an almost working web service that they had already worked on a year before taking part in the program. The team were graduates of a well-known engineering school, and in building the product, they experimented with incorporating scientific insights about human behaviour and designed a service that they had already tested with focus groups. They were using very new, most up-to-date technologies to build their product and were considered to be one of the most technically sophisti-

cated teams. Yet, they didn't seem to be able to attract customers. During the ideation sessions, the mentors were trying to find different approaches to what the product is "really about" and how to attract the users, often looking at various social marketing strategies that would ensure virality and planting 'hooks' in the product that would encourage people trying the service to automatically recommend it to their friends.

On a Wednesday afternoon midway through the program early in March 2012, Ronald, one of the founders of Pathfinders, asked if I wanted to grab a coffee, and we started brainstorming about the different strategies that could be used to attract new users. Consequently, this conversation also led us to discuss their situation more generally and the tensions involved. Ronald was obviously frustrated about their inability to attract users. With a slight touch of despair in his usually cheerful voice, he admitted:

"If we were to do this again, we would do it so differently. We agreed that we would never do it this way as we have done it now. Never again."

I asked him to explain what he meant. According to him, they had started their product with technology in mind—they were using the most advanced technology available and trying to master it through the creation of the product. They were 'pushing the boundaries' and doing innovative technological work. Now, they had a highly sophisticated technological product, but that didn't seem to matter because they had no users. And that made them feel betrayed in a way.

"We hate using lame technology. We love tinkering, proving that we can provide the best solution possible. But that is not what people want. People like simple, cheap stuff."

He considered the marketing techniques suggested to them by mentors as intellectually cheap, and even if they worked, they still wouldn't want to use them. The tension that Ronald was expressing to me is essentially a tension of changing points of reference in value creation. While for him, as an engineer, the value of work is rooted in a novel and complex way of realising technology, in the start-up space, the value is determined by the response of the market.

"Oscar and Wei, when they were selecting people - they were actually selecting smart, technological people, who appreciate and want to show off good technology, but it doesn't go well with the Lean start-up because no technical team does that. Its not in the nature of geek. That is against the nature. Releasing shit stuff, even if

they know that it can be improved. It is counter-intuitive."

As pointed out in a supplementary book, "Running Lean: Iterate from Plan A to a Plan that Works" (Maurya 2012), instead of asking whether a certain product can be built, one should ask whether it should be built. Thus, the universal equivalent of measuring the value of a potential product and business, even at the very early stages of its development, is potential monetary value. What is implicit in the Lean Start-up approach is that basically every idea can be turned into a successful business as long as there are people willing to pay for it.

Just like technical sophistication, also personal value and fulfilment mattered less if they didn't correspond with a positive response from 'the market'. On multiple occasions, I heard investors describing the founder's wanting to stick to the idea as 'egoistic' in relation to the needs of the company, or as in the case of Wonderings - 'not showing progress', wanting to stay in their 'comfort zone'. It was the context of the start-up ecosystem with its particular understanding of what entrepreneurship is (growth companies, not lifestyle companies - discussed in Chapter Three) that shaped these dichotomies. Ben articulated the conflict between the path towards the highest *potential value* and the personal value he felt in relation to the product his start-up was developing:

"And that sounds like you're kind of, you're doing what, what people need, but then I tend to come at things from a more like... Like - this is something that I kind of wanted to use, and wanted to make, and, like, something I cared about. It's not something I'm just making in order to.. make the most likely business to succeed."

Yet, while describing the changes in the product, he also agreed that at one moment, they understood that it was a very 'niche' market that they were trying to address and changed the product to appeal to a broader audience. To me this indicates that part of the speculative labour was also reconciling the different notions of value. Ben here elaborated on this in describing what he felt was a contradiction between having a passion for the business and making it work:

"Like, if you're passionate about, like, if you have a dream, it will all work out. And I think that is what they (The Accelerator) really emphasise in their descriptions, right. Like, you know, you really should be deeply passionate and deeply touched by your, by your idea, but then... yeah, the business side sort of also has to be there. Yeah. (..) So I find that also a bit contradictory in sense that, you know, it has to be your passion to the core. And yet, you

should be you should think of it as just the business, right? (..) It's like it's trying to harness forces that are sort of headed in slightly different directions, but on the same general path and then trying to push them onto some track that'll get there. Right."

It is important to emphasise that the other registers of value were not unimportant—they mattered, but they had to be balanced and reconciled. I would argue that the reason why start-up futurities were so powerful in attracting people was because they seemed to embrace all of these registers of value. The next section on the business pitch will show how they all had to be present in the business pitch, which I treat as the central performance of *potential value*.

7. Pitching Potential Value

One of the central practices in the articulation of potential value was pitching. I have come to understand business pitching as one of the core practices for both the materialisation and commodification of entrepreneurial ideas as described in Chapter Three, as well as simultaneously a performance of and a claim regarding the potential value that the start-up was offering. In pitch, both the scale and the likelihood of potential value were articulated. Importantly, through their business pitches, the start-ups tried to convince their audiences about a certain past, present, and future, as they were trying to display the potential value of their products and companies and mobilise their audiences to bring these futures forth. This construction of social reality was a crucial part of the speculative labour that the entrepreneurs were performing.

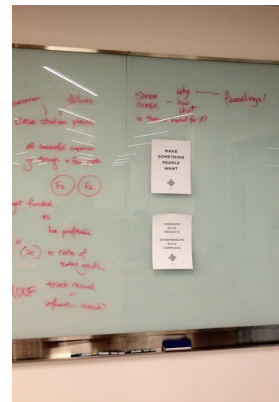
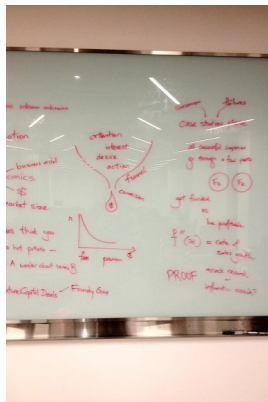
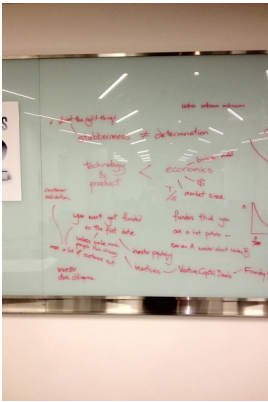
Pitch training was a crucial and routine practice at The Accelerator. Not only did the founders have extensive weekly pitch sessions, but routine pitch practice was also part of all introductions and meetings. The moment The Accelerator program started, it was announced that the nascent entrepreneurs would have to pitch their businesses every Friday for two reasons - one was to use the pitch as a way to express the progress the business has made over the week, and second to practice the art of pitching so that when the Demo day comes at the end of 100 days, the entrepreneurs are skilled at it. The Accelerator hired a professional actor and storyteller to work with the founders individually to hone the delivery of their pitch. They distinguished between four different audiences: (potential) customers and users of the service they are developing, (potential) investors willing to invest funds and share knowledge and connections, (potential) teammates and employees, and (potential) general media audience). Each required an

adapted version of a pitch to capture what was called their 'value proposition' - what potential value is the start-up promising to each of them? It is easy to see how each of these translates to particular forms of value recognised in social sciences - articulation of use value for potential customers, exchange value for investors, and labour value for potential employees. Yet, within the programme, the main focus was on crafting the pitch for investors.

It was made clear in no uncertain terms that the pitch was 'the' way in which the founders could attract the interest of the investors. The story was edited, and each word was selected to be as precise or vague as necessary and to generate the desired effect - intrigue the investors enough for them to approach the start-up individually, which then should lead to an e-mail follow-up and then actual meetings, and if all went well - the investment. Pitch was not only the story, though, and in the next chapters, I will describe in more detail the work, especially control over their bodies and pronunciation, that the entrepreneurs invested in order to craft a successful pitch.

The pitch had to generate affect by making the audience feel both the 'pain' the unaddressed problem is causing and the excitement over the potential of the start-up's solution. This relied on a savvy narrative construction that employed both empathy-evoking stories as well as quantified expressions of market potential. Here, we see the importance of the multiple registers of value, which all had to be present in the pitch - the personal value, the social value, and the economic value. Silvia Lindtner, in her analysis, has described 'pitching' as "a start-up's ability to formulate itself as attractive to venture capital, often using a standardized script, for the start-up has to produce a feeling of anticipation and a promise of scale." (Lindtner 2020, 12-13) Indeed, as my analysis of Wonderings' Demo Day pitch will show, in order to convince the investors about the potential value of Wonderings, Ryan had to draw on emotions to craft a vision of the world where Wonderings is an excellent investment case.

A business pitch typically follows a very clear narrative structure (Ghosh 2020, 2022b) and starts with the perceived problem the start-up was aiming to solve, and the solution suggested via the start-up's product. This is followed by proof, if any, that this solution would work. Then, the pitch describes what competitors are doing (as 'not good enough') and why the start-up idea has great market potential, as well as provides an explanation of why this start-up was the most capable of doing this business (e.g. due to founders' superior technical know-how, insightful personal experiences, due to strong partnership agreements or other advantages in sales avenues, etc.).



Notes on a whiteboard after a mentorship meeting for entrepreneurs about investment. They explain principles such as ‘technology & product < economics’ (left), and map the so-called investment funnel which starts with attracting investors’ attention, building interest, leading to desire and then action - a ‘conversion’ where the investors invest \$ (middle). They also remind about the need to stir ‘feelings’ for people to buy what startups make and that start-ups should ‘Build Something People Want’ and that ‘Companies Build Products and Entrepreneurs Build Companies’ (right). Photographs by author.

Wonderings pitch on Demo Day

Wonderings built their story around the excitement of discovery that is part of travel and contrasted it with the tedious form-filling that the competitor travel website interfaces require. They fashioned themselves as a *new way* of travel, one that matches the changing reality of the rising middle class, which engages in short-term air travel vacations. They emphasised the interface that reflected what was considered contemporary and top-edge - a visual data-driven service. They had no problem in ‘selling’ themselves in a compelling story, and their weekly pitch trainings usually were fun and creative, even to the point where the founders enacted a theatre sketch personifying different travel websites.

See, for example, a Wonderings pitch presented by Ryan at the end of The Accelerator, during its Demo Day:

“Hi, everybody!” says Ryan as he walks up the stage. He looks confident, relaxed and approachable. He is wearing jeans and a t-shirt with Wonderings logo.

“Let me start off with a story. About a year ago my girlfriend and I were just lazying around on a Sunday afternoon, just daydreaming of all the cool places we could go to in Southeast Asia. So we get excited. We take out our laptops and log on to Expedia, Zuji and

Travelocity - just to see what's there." He pauses. "However, we're met with this interface and it asks us - "Where are you going?" On the large projection screen behind him the audience can see the typical travel website interfaces that ask to input information about the place of departure and the desired destination, dates, etc.

"Well...the thing is - we don't know where we're going", says Ryan, adding a mix of confusion and mild irritation to his tone as he crosses his arms on his chest and leans back a bit as if he is having a conversation with a travel website.

"We kind of just want to discover travel", he continues his role-play, sounding increasingly helpless. "We want to go on an adventure, perhaps scuba diving somewhere or rock climbing. We don't have too much money in our pockets; we just want to sort of getaway for the weekend."

Ryan makes a step sideways on the stage and simultaneously shifts his intonation away from the leisurely, confused traveller he was presenting until then to a more analytical, less emotional, but still unsatisfied-sounding narrator: "Unfortunately, these sites couldn't tell us where to go. So, for the next four hours, we have to become data entry clerks. We go through forms, tables, price matrices. Our leisure vacation became work. It's almost like online travel services wanted to make us a travel agent. We're not."

He sounds almost sad now: "By the end of the experience we became so deflated and so unmotivated that our weekend just turned to another lost opportunity." He turns around and looking at the floor with his head dropping adds: "About a week later she left me for a pilot."

The audience laughs. Ryan skilfully waits for the laughter to stop and adds: "That wasn't a joke."

More laughter as he walks a few steps to the left side of the stage. When the room calms down he introduces Wonderings as the solution to the problem and an excellent, scalable business.

Ryan first presented a (fictional, although possible) story of a couple trying to book a weekend holiday and framed the contemporary offer as a 'problem'—the way it is currently possible to book flights doesn't reflect the changes in flight demographics and ways of travelling. The current offer is not reflective of the social change that is happening. In this move, Ryan skillfully made the current websites seem 'out of time', not belonging to the future that they knew was unfolding. Importantly, he spent considerable effort in adding emotions to this - this problem framing drew on emotions such as irritation, frustration, sadness and also a sprinkle of humour. Something that would

engage and resonate with the investors in the room at an emotional level.

As a solution Ryan then presented Wonderings - a new way of discovering and booking travel, one that is reflective of a new way of traveling and thinking about travel (where can I go? What can I do. Now.):

"Ladies and gentlemen, the last hundred days we've been working on a new way to find, plan and book your vacation," Ryan starts seemingly anew, louder than before, sounding confident and determined. No sense of confusion or helplessness in his voice now.

"I am going to introduce you to Wonderings interface," he says and the bright blue and white map appears on the large screen replacing the small and complicated-looking forms of their competitors. "It's a map!" Ryan nearly exclaims, sounding energised and relieved.

Then he introduced how Wonderings works and, in the process, already gave hints to investors about the many ways in which Wonderings as a business is smartly working towards accumulating 'assets' for further commercialisation - they are collecting data about users, they are a platform that can be expanded with more and more revenue streams including not only flights, but hotels, and activities. This in turn helps him present Wonderings as a good investment case later in the pitch.

This was followed by a playful introduction of the types of users that they are targeting and proof that Wonderings is performing well - the various statistics assured that this market is ever-growing.

"In fact, two billion dollars worth of short haul vacations are spent from Singapore. And in Southeast Asia we have eight billion dollars spent on a yearly basis and this is increasing at a twenty six percent year-over-year ratio. This is exciting to us! And its been exciting to our users." Ryan's tempo is upbeat and his voice expresses the excitement.

"Our Facebook advertising campaigns have generated a click-through ratio of nine times the industry standard." He pauses and repeats: "Nine times! Meaning that people are resonating with our messaging, so what we've given back is a Facebook application so they never have to leave the comforts of their Facebook to discover the world around them. This has worked for us because travel blogs have come up to us and said, 'Wow, this is a really cool thing you have. Can we integrate your interface into our web experience?' And we've said 'Yeah, of course!" Ryan opens his arms widely as if emphasising how open they are to such integration. "This has driven down our cost of acquisition. Once a user creates an account, we retain

him; we engage him through social channels, email and Facebook and our blog, of course."

He went on to describe the various 'key performance metrics' such as user accounts, click-through ratios, etc., that Wonderings had generated. This information showed to the investors that the team is knowledgeable about the industry enough to know 'what counts' - even if the numbers themselves were not large, just showing that the team knows they are crucial for how to judge the current state of the business was an assuring enough sign. Thus, it is the skilled anticipation - their skill at speculation - and readiness for action in the future that the investors want to see, as the process of creating a business requires the business idea to be treated as ever-malleable. Then he switched to describing the *potential value*:

"I've only shown you one way to monetise which is through hotels. However, if you are in the web travel space it is very easy to monetise travel, and our unique interface brings up a whole new monetisation horizons."

He pauses for this idea to sink in and continues raising his right hand up with an extended indicator finger up:

"Except we want to go [sic] more. We want to grow, and the first thing that we're going to do is acquire more data. We have been concentrating on Southeast Asia, but with our data partners, we can launch out on a global basis within the year. (..) And furthermore, we're going to keep developing! This framework that we have created is just the first step where we plan to pile on top on ..ehm," he briefly stutters, breaking up the smooth and convincing sounding talk so far. But he doesn't lose his confidence and continues, "features that will let you get to your next travel destinations in minutes not hours. And our plan is to grow from 800 user accounts to 50,000 user accounts by the year-end and also to be able to sell 500 hotels per month on a monthly basis by the year-end." He pauses, and the slide changes again - now showing thumbnail images of each of the teammates.

Addressing the desire for scalability already discussed in Chapter One, Ryan argued that Wonderings essentially is a 'framework', which is now applied to Southeast Asia but can easily scale up globally - as they can acquire data about all the other regions in the world to entice the investor imagination of Wonderings being a potentially global company that can easily scale up without needing much adjustments - only opening data pipes to fill in the framework. Then, he briefly indicated a few indicators

of growth that they would like to focus on within the coming year, suggesting to the investors what sort of growth they should be expecting within the first year of investment. Then he concluded by describing how the team has all the relevant knowledge, including the support from industry insiders (their advisors) to grow this business. By describing whom they would like to hire, he also provided the investors with an idea of how justified the invested dollars would be when spent.

Construction of social reality

The start-up founders were often reminded that in the pitch, they should 'sell the sizzle, not the steak', an expression attributed to a famous entrepreneur in the 1930s in the USA called Elmer Wheeler. Oscar explained to everyone that when one buys a steak, what is being exchanged is meat, yet the person is buying the sizzle - the feeling. Sizzle is the feeling that the steak entices, so when entrepreneurs pitch, they should likewise tell the story of the sizzle - what problem their product solves; and not the story of the meat - the technical nuts and bolts of how their product works. Oscar encouraged the start-ups to 'paint a picture', to 'conjure' it. His practical advice was to start the pitch with words like 'Imagine!' in order to invite the audience to connect with the vision the founders are presenting. Similarly, when Oscar was asked by one of these nascent founders about how investors analyse the pitches, Oscar's response was that the first 45 seconds were the most important and in those seconds: "It's an entirely gut reaction, there's no analysis about it at all, it's a feeling in your heart." He further explained:

"So you have to let people - people have got to feel it in their hearts that they've got it [as in grasped what it is about] quickly at the beginning. And then after that people will follow through with analysis. So you've got to talk to the heart first and then to the head."

The often repeated claim was that they should be personable and relatable, 'touching' the audience emotionally so deeply as if they would feel a 'knife twisted in their abdomen'. As we will see, that also had implications for the success of women entrepreneurs, as discussed in Chapter Six. Anna Tsing has convincingly argued that: "In speculative enterprises, profit must be imagined before it can be extracted; the possibility of economic performance must be conjured like a spirit to draw an audience of potential investors. The more spectacular the conjuring, the more possible an investment frenzy." (2000:118) However, it is not only the economic potential that needs to be presented

through the pitch. For it to resonate, it needed to fit in a wider social construction.

The pitch first required the re-conceptualisation of the social world in a way that the start-up's service seems to be delivering value, and it plays on both emotional and rational argumentation. Jóhannesson, described in (Aldrich 2005, 464) has argued how storytelling and communicating skills were important to nascent entrepreneurs as they are "framing issues and communicating goals to others in a way that draws them into a project" (Aldrich 2005, 464). For the start-ups to develop, they need to conjure potential futures for specific groups of people that are crucial in helping to bring the start-ups' ideas and visions to life. For it, their framing of the issue has to sound convincing - that is - the future has to sound likely and profitable. As Fred Turner has similarly argued, each sales pitch is simultaneously also a "new vision of the social world" (Turner 2016, 256), which not only draws on a certain past but also proposes a certain future. And "Because prototypes are incomplete, half cooked, in need of development, they solicit the collaboration of users and others in the building of a particular future" (Turner 2016, 266).

Business pitch can be understood as a form of storytelling, but one that is typically based on presenting a desired future and, for that sake, also rendering a particular vision of the present - claiming relation to other known trends, articulating problems or ways of solving them. Allison has argued that storytelling is essential "immaterial labor that turns products into brands, brands into intimate friends and consumers into loyal fans (..)" (Allison 2009, 94). Such a way of understanding storytelling about the product assumes that the 'product' exists prior to the story about it and imagines hierarchical relationships between the 'material' and 'immaterial' (Miller 2005). My take on the business pitch and materialisation of the product and business is that they are deeply co-constitutive. It is through the business pitch that the business gets materialised as well as commodified. In a conversation, David agreed that when pitching one's business, it is easy to spot problematic areas and then start to focus on fixing them. He saw pitching also as a reflective instrument for their team. Similarly, The Accelerator staff members often explained that pitch allows them to identify what needs to be worked on.

The pitch equally draws upon situating the start-up proposition within a historical frame of social activity (for Wonderings that is leisure travel for its users and data collection as the basis of business potential), presenting a change, a break with the past that has happened or will happen and it is in this historical temporal break that the start-up can locate itself and present a 'better' vision of future (easy, intuitive, visual way of discovering travel plans).

The speculative work that goes into the pitch provides an interpretation of a social world where the product fits rather than simply maps onto a pre-existing social world.

Unlike much of entrepreneurial studies literature that understands entrepreneurship as being about ‘recognizing objective opportunities’ (Shane and Venkatamar quoted in Aldrich 2005, 457), entrepreneurship at this stage, at least then, is more about convincing audiences about an opportunity rather than addressing some sort of ‘objective’ social situation. This was recognised also by Oscar. In another video blog, he explained what the investors will be interested to see during the demo day pitch and commented that:

“The thing that I really hope is that the investors we bring to our Demo day, would be the kind of a people, who look to the future, and the possibilities of the business, rather than that kind of bank manager financier approach, which is all about the past and who says you have done this and thus your business is worth x. Because when you are at this state of business, frankly it is all about the future, there isn’t any past track record on which to base valuations on. So we’ll see how that goes.”

Thus, pitch is essentially a device which, in a structured way, tries to present a vision of the future and a certain reality in order to entice and mobilise their audiences. What it does in the process is also construct the ‘markets’ the start-ups are after.

‘Black boxing’ and ‘photoshopping’

However, the pitch required not only mobilisation and conjuring of certain ideas about the social world but also skilful concealing of certain facts or realities. This was a crucial part of the pitch. For example - choosing to present one metric rather than another, highlighting the strengths of the team and avoiding mentioning any disagreements that could ruin the teamwork, and mentioning certain actions as to be done shortly without mentioning that this path has already been nearly exhausted with no success so far, or presenting a future vision as ever expandable while knowing very well that most of what is presented is not attainable or not within the scope presented.

On the one hand, pitch stabilises the idea as existing and helps to materialise it by soliciting support; on the other, it also invites probing questions and feedback. According to Slater, every commodity or object that is seen as ‘stable’ and existing essentially should be understood as a result of a successful ‘black boxing’ process - the abstraction of the object from the social world and processes that have created it. While the start-ups would add “As seen in ...” notices to their websites, alluding to the social contexts that made them possible as a way to add credibility to their appearance, they also worked hard to hide the messiness of these social relationships (e.g. the uncertainty

about whether anyone will continue working on the project and if they will, then on what terms), the scrapped versions of their earlier demos, their doubts and fears about which direction to take their business and how to gain advantage over competitors, etc. - all which could give the opportunity to challenge their credibility or potential. Business pitching then was one of the core practices through which such 'black boxing' and objectification took place.

Typically, founders would try to emphasise any positive evidence they had that would suggest future potential. Some referred to this process of making your pitch sound as good as possible, on the border with truth, as 'photoshopping', comparing it to a famous image editing application that is typically used to improve images by enhancing colours or removing unnecessary or aesthetically unpleasing sections (e.g. wrinkles from a persons face or electricity cables in an otherwise serene nature landscape). A similar sentiment was shared by one of the investors, who did recognise the importance of what he referred to as 'photoshop' or 'polishing up', but he was also aware of the dangers that were involved in the process: He agreed that sure, there is always some rhetoric 'game playing' referring to the fact that start-ups often present the wishful as reality, according to this investor: 'Of course there is a bit of polishing required- some Photoshop here and there, but that is part of the game. The story has to be compelling. On the other hand, you shouldn't overdo it. It should be balanced with the reality. Because you can pretend that you can do something for a while, hoping that the result will be good, but aside from the fact that it adds stress, what happens when you can't deliver?' To him, it is important that aside from the rhetorical photoshop, it is important to never lose touch with reality. The way he sees it, many of the Fortune 500 CEOs fall because they start to believe in the 'bullshit' and lose sense of what is actually happening.

Thus, rather than representing a certain reality, business pitches construct it in particular ways and always work to conceal some parts of it, while revealing others. As anthropologists have noted, this strategy of concealment and revelation is central to magic (Pels and Meyer 2003) Importantly, for a pitch to work convincingly, it needs to involve multiple registers of value.

8. What Makes Business Worth Pursuing

Changing the Wonderings

The ethnographic account of how the interests of 'Wonderings' as a company start-

ed to subsume the interests of 'Wonderings' as a product described in the previous sections is illustrative of how an empty future propelled by the practices of Lean Start-up and financialisation starts to gain a stronghold over the more contextual and filled in futures of the product, as the commodification process is geared towards scalability and potential for growth. After the Demo Day, it took eight months for Wonderings to finish the deal with investors, and through those eight months, the team gradually grew disillusioned with the growth of their product. On Demo Day, they had shared their vision that before the year ends, they will increase the number of their users 62 times, yet Dhruv recalled later in an interview that the map-based version was 'not working' - there was no 'organic growth', it was not making money and 'nothing was improving'. By that, he meant that they were not reaching the key performance indicators they had set out and agreed upon. Also, David, recalling that moment, explained that "The metrics were not strong enough".

It was briefly after finally receiving the funding post-The Accelerator that they presented to their investors a new idea of where the Wonderings could develop - a pivot. This time, it wasn't just an improvement of existing functionality or a new feature. Instead, the whole visual, map-based approach was changed to offering travel packages from Singapore Travel Agencies. In March 2013 they pivoted. The only things that connected the old Wonderings and new Wonderings were the name and the fact that they both catered to travel. The map interface was scrapped, and a box asking for a destination, similar to the competitors Wonderings had criticised earlier, took centre stage. According to the Wonderings team members, they came up with this idea because 'this made sense' - when travelling, people want to have other things, not just a flight:

"[we] rationalised it in a way that travelling involves multiple verticals- it means hotel, it means food, etc., and the aggregator of all this data usually is a travel agency. And this is a new business model because no one is really collecting all the tour packages online."

In order to respond to the biggest weakness in their commodification process - a meaningful enough revenue model - Wonderings had transformed their product completely. When asked if investors were fine with such a dramatic change (after all, they had invested in a very different idea, hadn't they?), Quentin told me that during the first months after the pivot, the investors were interested in seeing how the new product was designed and developed, but when they saw that Wonderings was executing the product side well, they lost interest in the product itself and grew more interested in the metrics. As David explained to me about the investor's openness to the change over

a coffee at a local cafe in 2014, he emphasised that at that early stage, everything was still possible - they could go in so many ways. The easy part of that, according to David, was that they could 'rationalise everything' - they could easily introduce any idea and 'make it seem a rational, natural choice that needs to be made'. He also recognised that the part that made such a shift and rationalisation of it 'easy' was that both he and Ryan were "good at it" - "Good at bullshitting", he added and laughed about this exaggeration. What he meant was they were always good in the construction of social reality in a way that presents the need for intervention, as discussed in the previous section on pitching. Then he switched to a more serious note and explained to me that part of the job of an entrepreneur is to make people believe in the things that don't exist yet.

When storytelling falls short - the end of Wonderings

Despite securing the funding and continuing to work on Wonderings, after a few exciting months, the mood at Wonderings wasn't positive. The new version of Wonderings was working, but also not spectacularly. They were working hard to expand beyond Singapore - making trips to Indonesia, Malaysia, and the Philippines, applying the Lean Start-up methods in understanding their customers, as well as trying to get connections to local travel agencies there that could supply them with new travel package deals to display on the site. David felt increasingly unhappy. The way he explained it to me later was that "he couldn't pitch himself to himself anymore" - he couldn't 'bullshit' himself any more about why he is doing this. In December 2014, in an email where we discussed burn-out, he admitted: "I'm often close to the line :) mostly by lack of 'meaning'... knowing why to do something...I'm getting there... 2015 will be awesome!"

He felt increasingly uninterested in the development and future of the new product and eventually made the decision to leave the company. When explaining his state of mind at the time, he often used expressions such as "I didn't see myself in the product" and "I felt no passion for it". Crucially, he admitted:

"For the first product, I understood the customer, it was myself. For the second product - I didn't have that." and concluded that "when you feel like life sucks for a longer period of time, then you need to change something."

From other conversations later, I learned that he felt quite depressed and, after quitting, was actively finding ways to recover - ranging from going on a meditation retreat

to experimenting and reinventing himself through various personal projects, including various diets. He was working on multiple other projects and hoping to come up with a new, great idea.

In a conversation about the split, David argued that there are two things that motivate people - one is a passion for a project, while the other one is an accomplishment - in terms of growth or in terms of financial revenue. He felt that his teammates didn't really have the necessary passion for the product, and thus, when the second motivator - growth - was not kicking in, they were losing their motivation. Maybe they didn't "trust the product", David was pondering, reflecting on the idea, which was so close to him personally that it bore a resemblance to his name - Wonderings - David's locations.

His teammate Ryan shared a somewhat similar opinion about motivation, albeit with a different preference: He also thought that there are two primary motivations, but according to him, passion is "a load of shit". As he wrote in a blog post:

"Having a passion and pursuing it blindly as a business can be like being in an abusive relationship. In both cases, you delude yourself into thinking that it will work out if you keep working hard at it. You think it will get better if you try harder, and you will ignore the obvious metrics (like a fist to the face) that tell you your passion or business is not working. But you keep going back to that passion and putting resources into it even though it's a dead end. When you have emotion in business, it can be a powerful incentive but also a dangerous delusion - sometimes don't see straight and might lead you to lose more than you were anticipating."

In a post on his blog, he asked rhetorically - what motivated him? And his answer was straightforward: "I seek success, not passion. I seek having the option to have unlimited options on which life to live." For Ryan, then, the goal was to keep an open future with a sense of continuous growth.

A similar concern was expressed by another The Accelerator alumni entrepreneur who had decided to shut down his company. To me, it wasn't really clear why they would need to close down the company because they had to pay customers generating revenue. Yet, as we sat over early dinner eating chicken rice in 2015, he explained that to him, continuing the business means 'opportunity costs' - what else could he be potentially doing at this moment of his life, and how much returns would that bring him? Looking at the rate at which they acquired new customers, he expected that within the next three years time, he would be able to develop the company to a particular valuation, which would also mean that his share at the company would decrease. Dividing

how much money he would earn by the years he would have spent working on it; he calculated that it didn't make sense for him to continue doing this particular company any more. Thus, the future they had started materialising by stepping into The Accelerator was imagined to be foreclosing itself in the near future for this entrepreneur.

The endings of Wonderings and new beginnings

In May 2015, headlines celebrated what seemed like a success - Wonderings was acquired by a Japanese company, Summit Ventures Alliance (SVA). "Wonderings becomes the first The Accelerator start-up to exit", a post by The Accelerator shared on their website and Facebook page; TechinAsia reported, "Japanese travel operator acquires tour package search start-up Wonderings". It was argued that by this acquisition, SVA could expand in Southeast Asia, and Wonderings would only benefit by joining this company that already had great experience in the travel industry. While it did look good 'on paper', as the acquisition is typically understood as a great finale for a start-up, in reality, there wasn't a big cheque accompanying the acquisition, nor did it mean any further development of Wonderings. Quentin and Dhruv joined SVA and started to work on a new travel start-up idea within the company, while Ryan left to work at another start-up.

In a post on his personal blog, Ryan announced the acquisition with a brief entry thanking his teammates for their support and commenting on how it has been a hard and long process. It is difficult not to read some ambiguity in the post despite its reference to being a success:

"I'm a bit flabbergasted as it's been a tough journey. There's so much emotional investment in something like this that it can sometimes be debilitating. Luckily I always had my cofounder Dhruv Govindan and Quentin Qian that always stayed calm and followed me even in some bad decisions. David Taureau was also an awesome support as a cofounder and later as a board member. Thanks to everyone for this success."

Almost exactly four years after starting, Wonderings was gone and all the founders were working on other things. Wonderings, rather than bringing a new future forth, had transformed into a personal experience that can be capitalised on further in the development of the personal futures of the founders. In an interview in 2018, Dhruv and Quentin said that the decision to join SVA was an easy and quick one, as even the last version of Wonderings wasn't really growing in the way they wanted. Acquisition then

provided a 'good closure'. When asked why it was considered 'good', Dhruv explained that 'it looks good on CV' - if you can say that your start-up was acquired, it indicates to everyone that you have gone through and endured 'the whole circle'. Implicit in such a view was an understanding of a start-up as being part of an ecosystem and the founder's experience of going through it as transformative and empowering. When asked to reflect on the value they think was created through Wonderings they told me that they thought there was 'some value' created for the users, but mainly they saw value in their own experience - now they knew so much more about running a company, teamwork and had developed a sense that they can face any challenge. David saw it similarly and admitted that financially, for them, there was not much value created. When reflecting on the lack of financial value he laughed and said that if one wanted to earn money, they should "Go work for a bank, not a start-up!" All of them agreed, some with more regret than others, that the first vision of Wonderings was not "pushed far enough" to really make it into a business.

9. Conclusion

I started this chapter by explaining that start-up futurities promise to deliver value across multiple registers—they supposedly bring economic value through the product, social value through technological and social progress, and personal fulfilment to the founders who can pursue something they care about. Through this chapter, I showed how all of these registers of value were important for the start-ups, yet they did not align neatly. Instead, they often clashed and made the founders feel like they had to reconcile forces pulling in opposite directions as they brought their start-up ideas to life as commodities.

I argued that the best way to understand value in start-up space is to approach it through the notion of potential value. Potential value indexes three distinct potentialities - the scale of the potential value - how much revenue will it generate? Secondly, the probability of this revenue materialising and thirdly, the ease with which this value will be accessible - its liquidity - either in forms of social capital (which will be discussed in the next chapter) or in terms of financial capital such as further investment stages, acquisitions or 'exits'. Such an understanding of potential value allows us to focus on the labour of speculation that is put into stretching the ideas to find the most profitable paths ahead, backcasting and forecasting, as well as into presenting a particular vision of social reality and its future in the form of the business pitch.

Even though it is commonly assumed that it is the introduction of the product that

creates the value, through this ethnographic study, we see that the product was subsumed twice - first, through the extreme malleability exercises in order to find the scale in the potential value, and the second time through the mapping of company's growth with back-casting and forecasting exercises which were aimed at establishing the probability of the potential value coming through.

Through an incorporation of potential value, which explicitly gestures towards future, we can understand why all the meetings, lean start-up exercises, mapping and tracking of key performance indicators and pitching were conceived as 'adding value' even in a context where the start-ups had no functioning product. The main contribution of this chapter is to highlight the crucial role future expectations play in shaping the understanding of value for start-up entrepreneurs and investors. It was not the expectation that the value would be delivered in the future, but the increasing potential that it could be delivered in the future and the convincing performance of this speculative labour mattered. This was conceived as 'de-risking'. So when the Demo Day came, at the end of the accelerator program on the huge stage welcoming the investors, Oscar explained that the main value of The Accelerator's accelerator has been that, through the mentor advice and lean start-up methodology, they have 'de-risked' the start-ups for the investors. He presented the eleven start-ups as safe for investment:

"(...) they're all companies that we think have a fantastic future, because they have been de-risked, and because their business models have been proven."

Oscar presented that, through the mentor experience and the Lean Start-up methodology, the start-ups had browsed the possible futures, tested them against the market, and found the ones that promised the highest potential value. The main structuring force in this chapter is the context of The Accelerator and one could argue that not all start-ups need to join an accelerator or an incubation program. Yet, as I already argued in Chapter Three, the start-up ecosystem is structured to serve the needs of financial capital, and its influence spans much wider than just the start-ups that participate in such programs. As seen by the pervasiveness of the pitch and practice of pitching that asks to imagine a social world, the past, the present and the future in a specific way, we can easily conclude that the cultural significance of high-growth entrepreneurship and speculative labour that needs to conjure *potential value* is much wider.

In this chapter, I often referred to the start-up founders themselves being surprised about the processes they were subjected to. Part of that might have to do with the accelerator format being rather new, and the whole notion of ecosystem rather recent. Yet, another part of the answer lies in the way these start-up futurities entice and mobilise

people. Using the language of value, care, passion and social change, portraying the events as 'fun hanging out with like-minded people,' they unimagine the hierarchical relationships between the various forms of value they promise to deliver.

Looking at the Wonderings case shows that the answer to this question about what value start-ups are creating is much more ambiguous than the narratives about progress, technology and economy would suggest. Despite David's disillusionment and possible depression after abandoning his vision and stepping down, the founders still saw the greatest value in the accumulation of their own personal experience. The next chapter will zoom in on the kind of subjectivities that the start-up futurities cultivated in order to explain this paradox.

This chapter illustrated how important it is to pay attention to the futurities at play ethnographically. By doing that, I paid attention to the open and empty forms of futurities. Open futurities were crucial for imagining the multiple ways start-up ideas could be developed. I described how the daydreaming sessions that the entrepreneurs engaged in relied on treating the future as open for intervention and imagining. I illustrated how these sessions required the entrepreneurs to treat their products and businesses as malleable and how these sessions, having little connection to the complexities of the present state, gave relief and energised them. The chapter also showed how at the same time, the daily practices relied on emptying future of its content and creating punctuated time that anthropologist Jane Guyer has described as event time - "time that is punctuated rather than enduring: of fateful moments and turning points, the date as event rather than as position in a sequence or a cycle, dates as qualitatively different rather than quantitatively cumulative." (Guyer 2007, 417) Start-ups relied on specific terminology to talk about the time and future - passage into the future was conceived as a 'runway' supposedly leading to an eventual take-off, and the 'remainder of the time' was expressed as a 'burn rate' showing how notions of time in the start-up world are merged with capital.

The Entrepreneurial Ideal

1. Introduction. Endless Malleability

Start-up futurities seem available to everybody. Anyone can start a start-up; everyone even *should* think like an entrepreneur. It seems such an empowering offer as it invites one to think about shaping the world and about self-making in the same process. Future is imagined as wide open for intervention. This transformational and seemingly limitless self-making potential where one has all the agency is a crucial part of the appeal of entrepreneurialism. This chapter contextualises how the promise of the entrepreneurial ideal resonated in Singapore and discusses what transformations were deemed necessary to pursue this ideal and what limitations my interlocutors encountered.

I will argue that cultivating entrepreneurial subjectivity meant treating oneself as a ‘project in the making’, focusing on understanding oneself as building up capital that needed to be capitalised on in the future. This commodification of the self required not only seeing the future as open but also constant management of oneself and performance of a particular style - one that embraced flexibility, projected certainty about the future, and constantly performed itself for potential value. This subjectivity was characterised by a tension which I will address in this chapter—the promise of entrepreneurial life as a life of great freedom and potential to become whoever one wants to be on the one hand and disciplining and self-management on the other to the point where one’s whole life needs to be subjected to the entrepreneurial pursuit. To illustrate this, let me introduce you to Melody, who worked in a start-up at Blk 71.

A few days before our casual lunch conversation in the early days of February 2012, Melody was told by her boss that the company she was working for wouldn’t have any funds to pay her salary in less than two months’ time. Their professional relationship had been rocky, and she doubted that they would continue working with her even if the company managed to secure extra funds. However, she appreciated the warning and that her boss was being transparent about it. Now, at least, she could actively ‘explore her options’. She did that by networking - meeting various acquaintances for coffee and sharing her ideas, telling about her work experiences so far and generally ‘putting her-

self out there'. Just before we came out for our lunch, she asked one of the investors who was working with her current employers if he'd have a moment to chat with her later. According to Melody, she wanted to see if he had any ideas or suggestions on what she could do afterwards, or maybe he could introduce her to someone else who might interest her. I had an impression that Melody took the precarity of her job as an opportunity to change something about her life and was generally quite excited about the potential ways in which she could shape her life once this job ended. She was contemplating moving countries, joining another business, this time maybe even as a co-founder, or even starting her very own business. While Melody foresaw that later in her life, there would be responsibilities she would have to take care of, such as supporting her ageing parents and having a family of her own, now, at the age of 24, she felt free to explore.

At this moment, Melody had identified obstacles that she thought she had to overcome and 'fix' in order to pursue this path. This lunch conversation eventually turned to some of these issues. First, she said energetically, leaning against the concrete wall and chewing on her salad - she needs to get rid of her 'terrible voice'. Hearing that, I chuckled and wanted to know what was wrong with her voice, exactly. I remembered her mentioning that already a couple of times before. Melody explained that she thinks she has 'this childish voice that is emotional'. To illustrate to me the voice she would want to have, she said a few words in a lower pitch, more reserved and slower. Then, in her, what I thought of as a 'normal voice', she repeated that her voice is 'so emotional and silly' and she has to 'get rid of it'. She shook her head disapprovingly as she continued eating.

I was amused - aren't emotions part of who we are, I asked. Just recently, we had attended a talk on team dynamics and conflict resolution for start-ups led by a psychologist. The initial response from many (male) participants was that 'emotions do not govern us, but reasons and facts', so conflict resolution by many of the budding entrepreneurs was approached as the simple weighting of objective facts. Me and Melody had discussed that as quite lacking, and now I found it intriguing that she seemed to want to follow what we both had concluded was a particular 'masculine denial of emotions'. She agreed that ok, that was not right, but emphasised that she simply has 'too many' emotions. She wanted to manage them better and not to be affected by anxious people around her. To give more proof to her self-diagnosis, she also explained to me that her personality type is 'ENFP'. With ENFP, she was referring to Myers and Briggs's psychological categorisation of people into 16 possible personality types depending on how they perceive and process information. ENFP stands for "extroverted, intuitive, feeling, and perceiving". As if it wasn't enough, in a book about emotional availability that she was reading now, she filled out the test and scored '4' on a scale from 1 to 4 on how emotionally involved she is. As Melody saw this, these results should clearly con-

vince me that she is 'too emotional' and that it also manifests through her voice.

She continued with the next problem she had identified - she has to find her 'passion' and what she 'is good at'. Such self-knowledge was often discussed as very essential for entrepreneurial success. Melody believed that and explained that once she figured that out, she could decide on a career path or strategy for how to move forward. She was reassuring herself that now, at the age of 24, she should still have enough time to choose from multiple options and pursue the most rewarding option as compared to just settling for a job that she doesn't care about as much. We briefly discussed her strengths in 'execution' and decision-making that often become apparent in her current work, where she seemed to be able to react to changing circumstances very quickly. All of these were highly esteemed qualities in the start-up scene, and Melody was happy to hear that I thought she was good at it. Melody shared her concern that maybe she would be a better 1st employee rather than a founder since she is good at executing but doesn't have the skills or 'smartness' to start a great start-up for which she would need an 'ingenious insight' into a problem/solution. She added that she hadn't spent the 10,000 hours on something because she hadn't found what she was passionate about yet. The assumption popularised by marketing guru Malcolm Gladwell in his book "Outliers" (2008) claims that spending 10000 hours on a particular matter turns the person into an expert on that matter. The 10,000-hour reference was often used to claim authority over the subject matter in the start-up discussions or point out the lack of it - e.g., "Have you spent the 10,000 hours necessary on this?"

Melody also knew the people running The Accelerator and told me that for her, Wei is the example of a 'type who starts a start-up' - someone who is 'brilliantly smart' and 'has read all the books' and 'knows stuff'. I knew that she thought of reading as a struggle - something that she needed to do more of, so on her daily to-do list, she tried to incorporate 30 minutes of reading every day. She added that she also has to learn from Oscar the skill of storytelling, which she also believed was an essential part of being able to push forward a business. While this was where our conversation ended as we went back inside, in our other conversations, Melody had also complained about her being too short, her hair being too blond, and her having too much weight to be 'taken seriously' if she wanted to be an entrepreneur.

This brief lunch conversation not only summarised the popular assumptions about the many things one should do and the many ways how one should become an entrepreneur but also revealed the promise start-up entrepreneurship holds - that one can become seemingly anything one wishes as long as one works on it. Melody did experience some anxiety caused by the precariousness of her work and because she didn't feel that she was all she should be, but importantly - she was determined that all of those aspects about herself could be transformed if she worked with herself strategi-

cally and managed herself accordingly. She could find her passion by being reflexive, and she could read more and invest 10,000 hours in a subject matter. She could become better at storytelling by practising, develop a career path by networking, change her voice through discipline, lose weight through diet, increase her height by wearing high-heeled shoes, dye her hair darker and learn to manage her emotions by starting therapy. The future for Melody was open and filled with possibility - better than the present.

Melody's story is illustrative, as it shows how the self emerges as a project in the making, where all aspects of oneself - social relationships, body, emotions and ways of thinking, feeling and being in the world are subjected to strategic adjustments and management in the name of increasing future potential. On the one hand, there is the openness and seeming possibility to become and do seemingly anything that you want to, and on the one hand, the strict planning and disciplining of oneself in the name of the desired future on the other hand. I will argue that at its basis, the entrepreneurial self is an example of the commodification of self, where the aspiration for the ability to capitalise on oneself in the future continuously shapes one's actions in the present. Just like they had to prepare their companies and products for *potential value*, the aspiring entrepreneurs treated themselves similarly - as someone whose value accumulated through experiences to be capitalised on some time in future. As this chapter will show, the limitations my interlocutors encountered suggested that the ideal was not necessarily as open as it seemed, nor did it acknowledge all the resources one needed to rely on in the self-making process. Chapter Five goes hand in hand with Chapter Six, which will further explore this transformational potential in relation to the entrepreneurs' bodies, problematising further the imperative of malleability (also of individuals) contained in start-up futurities and showing the implicit normative assumptions that shaped the ideal. Melody's story already reveals that, despite the apparent openness of self-transformation, it was shaped by implicit norms that valorise capitalist, masculine ideal—one that prioritises rationality over emotion, values intellect and storytelling, and maintains disciplined control over the body and diet.

2. The Entrepreneurial Self and Human Capital

This conversation with Melody illustrates an understanding of the self that scholars would describe as 'entrepreneurial self' - a particular form of subjectivity or selfhood characteristic to neoliberalism where people see themselves as constantly adapting, changing and optimising themselves in order to compete (Bröckling 2015). This concept is also referred to as the 'neoliberal self,' 'enterprising self,' or 'commodified self' (Rose

1992; Foucault 2008), emphasising the dominance of market logic in the way people think of themselves and how they guide their actions. Start-up entrepreneurs present a case of a more intense version of the pressures and pulls that many are subjected to under neoliberal capitalism.

Neoliberalism, as Foucault describes in his lectures on “*La Naissance de la Biopolitique*” (2008), applies economic principles to all aspects of life - people internalise norms and values that align with market logic and evaluate decisions, relationships, and behaviours based on cost-benefit analyses, treating every aspect of life as an investment to be maximised. Not surprisingly, start-up entrepreneurs I worked with easily subscribed to this kind of thinking, as evident also in my conversation with Melody, where, for example, she contemplated her life choices and abilities to succeed in relation to her own particular perceived flaws and strengths. However, as many scholars have convincingly argued, viewing the neoliberal self as merely utility maximising is a limited perspective on this form of subjectivity and doesn’t encompass “the risk-loving, extra-calculative side” (Christiaens 2020, 493) where hope, imagination and aspirations are crucial in sustaining and continuously reinventing neoliberalism (McRobbie 2015; Alacovska 2019; Berlant 2011). For example, also Melody saw passion as a crucial element for the entrepreneurial journey even as she deemed herself ‘too emotional’. Moreover, as I will describe in more detail later in this chapter, most of the entrepreneurs would argue that potential financial rewards were secondary in their decision to start or join a start-up, clearly challenging assumptions about entrepreneurial subjectivity relying on purely rational cost-benefit calculation.

Importantly, this form of subjectivity has a peculiar relationship with the future, that is not often fleshed out in academic exploration - it relies on the ability to envision an open future and work towards it. As Rose states, the entrepreneurial self will “make an enterprise of its life, seek to maximise its own human capital, project itself a future, and seek to shape itself in order to become that which it wishes to be” (Rose 1998, 154). The self, in that sense, is always realised in future. Also, Melody imagined multiple scenarios for her own future - starting a start-up herself or being an early employee, and in the process, she reflected on how those would require her to change herself and her life - from moving countries to changing the way she talks. Within this form of subjectivity, the self is imagined to be open for unlimited transformation - you are what you can make of yourself. Melody saw herself as malleable - both her physical appearance as well as her skillset and thinking. Anthropologist Clara Freeman, who has studied entrepreneurs in Barbados, has described poignantly that futurity and imagination are central to the construction of entrepreneurial subjectivity:

“Entrepreneurialism denotes action and imagination, an ongoing

process of envisioning and becoming (...). In this dynamic sense, entrepreneurial self-making is always work *in formation* - akin to the processual work of class, gender, race, and culture - and inextricably bound up with these dimensions of identity." (emph.origin. Freeman 2014, 2)

Scholars studying labour in creative industries over the past decades have critiqued how the promise of success in future and glorification of creative labour is instrumental for the exploitation of people in these industries and perpetuate and normalise precarious work and life conditions (Neff 2012; Gill 2011; Ross 2003; Bridges 2018; Alacovska 2019). I wholeheartedly subscribe to this critique, and in this chapter, I foreground how an essential part of this entrepreneurial subjectivity is also a commodification of self, which relies on speculation about possible futures and invites a particular, culturally specific performative style (Ferguson 1999). While in the previous chapter I described how speculative labour was crucial for conjuring potential value for the start-up, in this and the next chapter, I want to focus more on speculation as not 'just calculation', but as an "affective, physical and intellectual labour" (Bear 2020, 2-3) that is oriented towards future.

In *The Birth of Biopolitics* Michel Foucault argued that the expansion of neoliberal theory to include labour was in part possible due to the incorporation of the idea of 'human capital' - a notion developed by Chicago School economists - most notably T.W. Schultz (1960) and G.S. Becker (1962) - highlighting "capital, as a source of satisfaction and earnings in the future, and human, because of it is inseparable from a man." (Perepelkin, Perepelkina and Morozova 2016, 7651) The basic premise of the notion of 'human capital' is that all the skills, knowledge, life experiences, motivation, energy, and everything else a person has all contribute to the person's ability to produce goods and services. Thus, they are part of her unalienable capital. It is through one's life that one increases or decreases one's 'human capital'. The perceived need to maximise human potential arose alongside thinking about the economy in terms of the knowledge economy, where immaterial investments in education, nutrition, health and alike, are comparable to material investments in manufacturing and thus, in the late 1960s and early 1970s the notion of 'human capital' quickly spread from economic theory to policy practices ranging from education to population management. As Michel Feher has aptly summarised:

"The things that I inherit, the things that happen to me, and the things I do all contribute to the maintenance or the deterioration of my human capital. (...) the return on human capital (...) refers to all that is produced by the skill set that defines me. Such that

everything I earn – be it salary, returns on investments, booty, or favors I may have incurred – can be understood as the return on the human capital that constitutes me.” (Feher 2009, 26)

As such, I believe this notion helps to understand how the ‘entrepreneurial self’ is simultaneously a ‘commodified self’. Human capital, understood as an ability to apply oneself as capital in order to produce new capital, is unlike other forms of (economic) capital since it can not be separated from the human itself (as opposed to labour that can be bought). Foucault explains:

“This is not a conception of labor power; it is a conception of capital-ability which, according to diverse variables, receives a certain income that is a wage, an income-wage, so that the worker himself appears as a sort of enterprise for himself.” (Foucault 2008, 225)

Importantly, when everything one does contributes to one’s capital-ability, then consumption is also a simultaneous act of production. As we’ll see later in this and the following chapters, such a basis of subjectivity played an important role in the way my interlocutors related to themselves, their racialised and gendered bodies, and the activities they undertook.

Pierre Bourdieu also used the idea of various forms of capital (distinguishing between economic, cultural and social capital) to explain the reproduction of social structures, especially in relation to class relationships and how the bourgeoisie maintains its position (Bourdieu 1983). He emphasised how cultural capital exists in three forms - embodied (long-lasting dispositions of mind and body), in objectified form through objects or goods and institutionalised form such as educational qualifications. He argued that ‘human capital’ is primarily an economic understanding of human development and critiqued how the concept ignores the wider sociocultural context and aspects that shape the ability to capitalise on the human capital one has. Using an example of education, Bourdieu argued that the concept of human capital does not acknowledge, for example, the impact of the inherited social, economic and cultural capital within a family (Bourdieu 1983).

My interlocutors implicitly and oftentimes even explicitly thought of themselves in terms of ‘capital’ and ‘commodities’, and more subtly, they showed fluidity in how they identified and introduced themselves to others depending on the circumstances and with whom they were talking. Identifying with ‘being an entrepreneur’ was a choice that was exercised contextually and situationally. Time and time again, I saw my inter-

locutors selectively choose how to identify themselves when for example introducing themselves to new people - sometimes the same person would be identified as an entrepreneur, sometimes as a programmer, start-up founder, hacker, storyteller, or investor, differentiating based on the context and what forms of identification they had access to and deemed useful. Attending then to the ways in which my interlocutors judged their opportunities in relation to human capital shows how economisation spread into the subjective understanding of oneself and one's position in society. Thinking of oneself as capital shaped the thinking about the future and, correspondingly, how people make decisions and act every day, and vice-versa.

In this chapter, I'll show how identifying as an entrepreneur and actively crafting oneself as such required commodification of one's self and important aspects of one's identity. Moreover, it relied on a central tension between the possibility of becoming anything on the one hand and the need for strict disciplining and planning on the other. In the process, being an entrepreneur emerged as embracing a particular style - one that celebrates 'meaningful work', flexibility, self-awareness and confident performance of life-planning, and where nearly all aspects of life were subject to considerations about potential value. This style was developed in culturally specific ways rather than following a generic pattern imposed by 'neoliberalism'. Here, I draw upon Ferguson's understanding of cultural style as one that allows one to situate oneself in a social context:

"Cultural style thus implies a capability to deploy signs in a way that positions the actor in relation to social categories. It is a form of signifying practice—a form of practical signifying activity." (Ferguson 1999, 96)

Paying attention to the cultural style that the entrepreneurs were learning to master and perform allows me to examine the performative nature of positioning and drawing boundaries around who gets to be a start-up entrepreneur and who does not.

3. It's Not About Money: Doing More Meaningful Work

I argue that entrepreneurship seemed an interesting career for many because it enabled one to accrue a lot of very different experiences very quickly, thus adding to one's human capital. Entrepreneurial subjectivity meant embracing the uncertainty of the future head-on by trying to accumulate as many experiences as possible with the expectation that this will allow oneself to capitalise on some of it in the future in one way or another. For that, not only the future had to be imagined as open for speculation but also

oneself, seeking out opportunities that could be actualised later in the future. It seemed that experiences that enhanced one's ability to withstand risk-taking - self-awareness, flexibility, building resilience, embracing speed, etc. were appreciated more.

In her study of New York's Silicon Alley in the 1990s, Gina Neff (Neff 2012) showed how it was already the experienced insecurity in the corporate world that rendered risk-taking more socially acceptable and encouraged people to embrace it further by working at a start-up. The account of Wonderings in the previous chapters also indicated how many of the aspiring founders had already experienced less secure labour settings - by being freelancers, working for a start-up or a corporation that was contracting - which also made pursuing a start-up seem an acceptable choice. Relating this to studying futurities, it was the recognition that the future is uncertain that made my interlocutors embrace this uncertainty proactively, hoping that by accruing different experiences quickly, they will be able to somehow capitalise on this in the future when the need may be. This embrace of the open, even if uncertain, future also meant a social positioning in which the people who worked for the government and large corporations were seen as the ultimate 'Other'.

More meaningful work - open future and the corporate 'Other'

One of the striking things about many of my interlocutors was that implicitly and explicitly, they discussed being involved with technology start-ups as 'doing something more meaningful' with their lives. What constituted 'something (more) meaningful' for my interlocutors? Rhetorically, 'impact' and having a chance to 'change the world' seemed to be very important for entrepreneurs' motivations in the start-up world. The famous quote by Steve Jobs: "We're here to put a dent in the universe. Otherwise, why else even be here?" was used in talks and blog posts routinely. In practice, though, what exactly constituted 'meaningfulness' was not so clear. For some, it was not being subjected to hierarchy; for others, it was the ability to decide on how to spend one's time, for others it was the chance to travel, meet interesting people from around the world, to develop oneself in many ways, to be known for developing a cool service, and so on. It actually didn't seem to be so much about the content of what is 'meaningful' but more about a certain style - one in which doing 'meaningful' things was seen as important and appreciated by others.

When my interlocutors spoke of doing *more* meaningful work, I was curious to learn - what was 'more' referring to? More than who? *More* in Singapore was defined by contrast to wage labour by working at a large corporation or for the government. Becoming an entrepreneur was seen as 'going against the grain' and a practice of a dif-

ferent way of being in society and the world. It meant taking up an agency to determine things for oneself rather than waiting for directions from others; it also meant embracing more risks and proactively engaging with uncertainty. The 'open' future that participation in the start-up culture seemed to make possible was in direct contrast to the well-established corporate, bureaucrat paths or the typically well-regarded professions of lawyer or doctor that were the more aspirational professions. Additionally, those associated with the start-up culture then considered themselves pursuing higher-order ethical values - self-development and 'changing the world' rather than merely fulfilling their personal materialistic desires. Emily Chua, also studying technology startup founders in Singapore, similarly has argued that start-up founders saw themselves as involved in a "morally worthier form of work". She describes:

"The time and money that the founders poured into their startups was, at one level, an investment on which they hoped to make some returns, but, at another level, also a price that they were willing to pay for the chance to try their hand at this more potentially impactful and future-worthy kind of endeavour." (Chua 2023, 273).

Even those who had never had job experience in a corporation or government institution argued that '9 to 5 work' under the surveillance of uninterested managers is not for them. Doing a start-up or being part of an early-stage start-up within the ecosystem was considered to be more than 'just a job' - it was seen as having a mission and simultaneously pursuing a path of self-improvement. Sociologist Nikolas Rose has highlighted the way one's identity and the 'discovery of self' in late capitalism is closely tied to the workplace: "The prevailing image of the worker is of an individual in search of meaning and fulfilment, and work itself is interpreted as a site within which individuals represent, construct and confirm their identity, an intrinsic part of a style of life" (Rose 1992, 14).

'Working for the corporates' or the 'government' was often discussed as a 'mainstream' experience, seemingly 'vegetation' as opposed to the 'progressing' that was happening in the start-up. The only way working for corporations or the government could be legitimised was because it could add to one's capital later in the forms of acquiring industry experience, gaining contacts or accumulating savings. There were associated risks as well - having had a corporate or bureaucratic job could mean that people gain bad habits. This corporate/start-up divide was well articulated in a discussion between The Accelerator team regarding one of the founders participating in the program - he was thought of as 'not working hard enough' - or, as the manager of the program put it - 'not rocking his brains out' to make his start-up succeed. The

understanding was that this entrepreneur had worked for the corporates for too long, and that had made him unfit for start-up life which in turn requires full commitment as opposed to treating start-up as a 'mere job'.

Such othering, as scholars have shown, is not a side effect of neoliberal subjectivity but rather constitutive of it (Scharff 2016). By contrasting themselves with others, entrepreneurs in Singapore could establish themselves as driven and meaningfully contributing to Singapore's and the world's at large future. Ghosh, for example, describes how for the Indian start-up founders' it was *jugaad*, the practice of circumventing constraints and 'making do' with what one has, and family businesses which were constructed as the central "others" in order to establish the start-up cultures legitimacy and superiority (Ghosh 2020). The Indian founders engaged in discursive rejection of *jugaad* and family business practices as incompatible with the vision of a modern, technologically driven Indian economy while simultaneously co-opting certain elements of both to navigate the realities of the Indian business landscape.

Even though the manager at a multi-national corporation or bureaucrat at a governmental institution was often presented as the ultimate 'other' of the start-up entrepreneur, the work of sociologist Weida Lim (2010), who described the attitudes towards work-life balance amongst junior managers (aged 21-35) at financial institutions in Singapore, points also towards similarities. Lim depicts what would be considered 'corporate' employees as making little distinction between work and not-work time, actively incorporating effective time management as one's individual responsibility, and working long hours that never appear on the paycheck. As structural reasons for such attitudes towards work, Weida, echoing many other scholars, highlights the task-oriented nature of work, the neoliberal policies of the Singaporean government and increasing competition. Yet Weida contextualises this willing 'normalisation of long working hours' by the workers themselves as a way to ensure that materialistic needs are fulfilled. By doing this, he explains how this commitment to work in Singapore should be seen in the context of Singapore as an increasingly consumerist society that praises material well-being over other qualities in life. In this regard, start-up entrepreneurs differentiated themselves very clearly from their 'Others'. Conspicuous consumption was not part of the start-up life and would be looked down upon as I will discuss in Chapter Six in relation to the pursuit of the so-called '5Cs' (cash, car, credit card, condominium and country club) constituting 'the Singaporean dream'. Similarly, Marwick has described how in Silicon Valley, spending that wouldn't contribute to personal growth or work was not socially approved (Marwick 2013, 83).

This differentiation, in particular, allowed those pursuing technology entrepreneurship to differentiate themselves from the 'typical Singaporeans' involved in what was perceived as mindless shopping of meaningless status symbols and goods. For exam-

ple, Wei often used the example of his mother wanting him to buy a more prestigious car, such as a black Mercedes, to create an enticing impression about him for potential suitors, as a funny example of how his mom's values differed so much from his own. It was clear that the consumption of prestige goods carried very little clout.

Even if ambitious youths worked hard and long hours across the borders of public, private, large, small, self-employed, or employee, the rationale behind their work differed. While fulfilling material needs might have been the rationale for managers at larger companies, most start-up entrepreneurs argued their interest in starting their own business in more spiritual and ambitious terms - it was a way to create an impact in the world, and it was seen as something through which to do something meaningful, to challenge and develop oneself. In this manner then the start-up founders I met in Singapore resembled the knowledge workers Ross described where

"the zeal of employees was more like a quest for personal and existential stimulation, closer in spirit to extreme sport or adventure travel than to the sobriety of the self-dependent man who saw himself as a pious and productive member of society" (2003: 12).

Experiencing the results of one's labour

For example, the lack of external hierarchy and a chance to try out various roles, accumulate various experiences quickly and see direct results from their own actions were central to the many ways people explained how being involved with technology start-ups made them feel they were doing something more *meaningful*. For example, Talia, in her early 20s, was interested in psychology and innovation management. She worked at The Accelerator's cafe as a barista and, during her time off, played guitar. In a conversation with me, she said she is having great fun learning how to make coffee. It was clearly a position she didn't plan her life around or to develop a career in, yet she enjoyed the work because she met many interesting people around her, was exposed to different ideas and doing work and having fun seemed to go hand in hand. When talking about her future plans, she said that she doesn't want to start her own start-up because she has no idea about what it would be, but also, the concept of working under someone else doesn't seem acceptable to her. She looked at me through her thick-brimmed glasses and said:

"So if I just work all day a job that I don't care about, then I

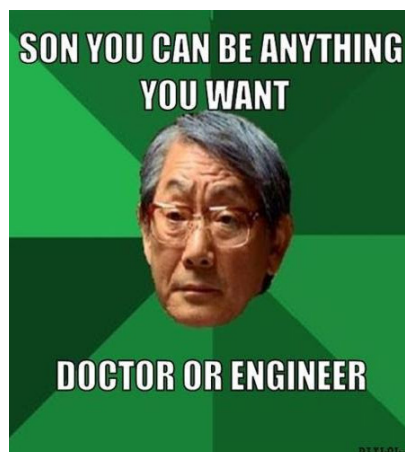
just exchange my time for money. But that is meaningless and I want to do something that has a meaning.”

A start-up ecosystem also provided space for people who did not want to start a company themselves but who could try out being ‘enterprising’ subjects whose positions were multiple and often changing within the course of my fieldwork: many were blogging, organising events, took roles of support staff for and about the start-up culture and while they not necessarily thought of themselves as entrepreneurs, they were an essential part of the start-up culture and saw themselves as related to it. To a great extent, participation in start-up culture offered them opportunities to develop non-determined roles, which was especially attractive for many young people in the early stages of their careers or still pursuing university education.

Especially those who were born in Singapore felt that entrepreneurship provided a way out of a pre-described career path where they would be ‘mere clogs’ in the larger machinery of large corporations. For example, Grace Sai, a co-founder of one of Singapore’s co-working spaces, was interviewed for an online blog and explained, “Singapore has a very traditional definition of success — being a banker.” She went on: “In the last six years, that’s shifted as young people look for more meaning.” (Jean 2015)

Referencing and simultaneously teasing this limiting view on what life is about was a printout of a popular internet meme called ‘High-Expectations Asian Father’ on one of The Accelerator office walls in 2013. This meme reuses a face shot of South Korean actor Mu-Song saying, ‘Son, you can be anything you want—Doctor or Engineer.’ Emphasising that the parent expectations involve very clearly defined futures with little space for alternatives.⁵

High-Expectations Asian Father’ Internet Meme. Source: <https://makeameme.org/meme/son-you-can-e6ad855e72>



⁵ The popular discussion on Asian parenting, often revolving around the popular book “Battle Hymn of the Tiger Mother” published in 2011 by Amy Chua, which emphasises strategic investment and cultivation of various skills as part of a child’s upbringing can also be seen as part of expansion of economic rationality to sites such as family in combination with Asian American family becoming a model minority unit in USA for competitive advantage in global knowledge economy. See for example Koshy 2013 and Rhee 2013.

While much of the literature discussing changing labour practices laments the fleeting opportunities to develop a stable career path (Anagnost 2013), many of my interlocutors felt a direct need to escape the constraints set by following and developing strict career paths. Part of the dissatisfaction was the 'rigid hierarchies' that larger companies seemed to have for young, ambitious people. Embracing precarity then went along with an open future filled with many possibilities.

Through the discussion of doing 'meaningful work', I am trying to illustrate how the subjectivity of the enterprising self saw intrinsic value in the various experiences through which people built their 'human capital'. Rose, at the time of his article, argued that contemporary individuals are enticed to "develop a 'style' of living that will maximise the worth of their existence to themselves" (Rose 1992, 9) Indeed, I could see that. For example, one start-up employee, Lucia, told of the limiting dress code in a large multinational company she had worked at before. There, wearing shorts would not be acceptable, she explained to me, simultaneously pointing to the white, almost knee-length shorts she was wearing now as a way to contrast her experiences. But it wasn't only the strict dress code through which she tried to articulate how her work there 'just felt empty'. She also told me that she felt removed from seeing her work turn into results and that getting any initiative moving would take a really long time as it would cycle through rounds of bureaucracy. Again, she contrasted that with her job at the start-up where, according to her, she sees 'immediate' results of her actions. The big company she had worked for before had a wider reach, and therefore, her work could be potentially seen as having a 'bigger impact', yet for her, the impact didn't necessarily relate to 'meaningfulness'. She told me that in a big company, she created five to six events a week, always rushing and outsourcing other people to do the actual events. Now, she could talk directly to people, and even if the scope was smaller, it gave her a sense of having an impact. Thus, it was about her ability to see and experience the way her work has an impact on others rather than having a possibly bigger impact without her seeing and feeling it - being a 'clog' in a system. Start-ups offer to experience the immediate fruits of one's labor in terms of experience (not necessarily financially) and seemingly get away from the alienation that Marx criticised as central to labor under capitalism.

Considering the need for the self to accumulate experiences and connections that can be capitalised later on, it is not surprising then that the experience of intensity and speed was another aspect that appealed to many of my interlocutors in their start-up life. For one, it allowed them to accumulate many more experiences in a shorter time. It was equally as much the sense that the world is rapidly changing and providing opportunities that need to be grabbed. In this context of a sense of fleeting opportunities, many felt they were not satisfied with the rigid, slow-moving structures that do not

favour their inexperience or their wish for change.

For example, Marco, a Filipino developer I met in 2012 in Manila during the drinks that followed a start-up meet-up, shared that he had done software development work for larger companies. Still, according to him, they had no interest in ‘developing him as a person and professional’. For example, an incredibly important aspect for him was the possibility of travel. Now, he was working for a start-up based in the Philippines and Canada. As a result, he had to travel to Canada, but also importantly, the small but dynamic team was well known for its adventure and action-packed team-building trips around Southeast Asia. At the start-up, he felt he was growing as a person - both professionally and individually. He shared with me that he absolutely loves his job at this small start-up - ‘it’s much more exciting, more intense’. I felt his pride when he commented about people working ‘start-up hours’.

Such accounts resonate with the narratives of entrepreneurship in general, but in particular also with a technology start-up culture that is particularly obsessed with ‘making a dent in the universe’ as the often quoted motto of Steve Jobs claims. This resonates with what Andrew Ross in his book “No-Collar Work: The Humane Workplace and Its Hidden Costs” (2003) describes as a trend in the United States where start-up jobs seemed to offer an alternative to the work at large corporations that seemed to shape people into an ‘Organisation Man’ working a mindless white collar assembly job. In that context (and partially in relation to already increasing job instability gaining ground since the 1980s), the start-up industry appealed by providing employment opportunities with lots of space for self-improvement, initiative and flexibility. Ross also notes that this “work culture that embraced openness, cooperation, and self-management” (Ross 2003, 9) simultaneously opened up doors for bottomless 80+ hour work weeks and lack of social security. He highlights that the working ethos in start-up companies is equalled with “a quest for personal and existential stimulation” (Ross 2003, 12) and understood as an antithesis to work at cooperations. Yet this totalising nature of work in one’s life was and is seen as a positive thing because in the words of Ross: “Work was no longer something you performed for a fair wage; it was an investment, an opportunity, an asset that you or someone else could leverage as a means to boost a stock holding.” (Ross 2003, 19)

Speculating futures

While Ross sees the investment as related to obtaining shares in the start-ups, based on the understanding of entrepreneurial self and human capital, I argue that it is not even the investment in obtaining stock that my interlocutors appreciated but the way

the experience added to their own human capital which then could be appreciated in further ventures. This required continuous speculation about possible futures in which one could capitalise on the obtained experiences. In doing this, my interlocutors constantly judged their experiences in the moment in relation to their potential meanings and value in future.

For example, as one participant at The Accelerator accelerator, only after 1 week of the 100-day program, announced that it was a 'success' for him and his team. He explained to me :

"The way I see it, it's like getting an MBA degree in 100 days. Having the chance to do something great. (..) The other day, I was talking with the team...I was telling them that whether or not we come out of the BootCamp still doing [this start-up], we are in the position to do something great. Already, I can declare success... because my team and I, we work really well. We have a few other ideas we would like to work on, so for me, that's already a big success. I would consider it a failure if I don't learn anything, but already it's ... just the fact that we are being mentored that's already something I can consider a success. .. But of course, the goal is to get funding. So if we don't get funding, it's not necessarily a failure. ..eh.. that's a cherry on top. But for me, personally speaking, the whole experience is already .. being included in the program, that's already a success for me."

When asked what would happen if they didn't get funding at the end of the Bootcamp he explained:

"The lessons learned will only serve to improve everything we set out to do, all the other projects that we try to set out to do... it's gonna be great, it's still a great experience because I got to meet so many people from all the continents. You know, I like meeting people from other places..."

He and his teammates had discussed the possibility of returning to their home country and organising a similar accelerator program by themselves. The experience they obtained in Singapore allowed them to differentiate themselves from many other enterprising subjects in their home country and, in this way, provide opportunities to capitalise on this experience in the future. Similarly, another founder explained that he might take part in a couple of more such programs, learn from the mentors, and then become what he called an 'acceleratopreneur' or 'sort of a consultant' in other countries

in Southeast Asia where similar projects would be started but yet not so common.

This perpetual planning ahead and speculating about different scenarios was even more striking in conversations with start-up founders who had secured funding to develop their start-ups. Even some of the teams that were funded were open about the fact that the product they were working on at the time was just a small step, a learning experience that would allow them to build larger and more world-changing companies in the future. Also, the Wonderings team, as described in the previous chapter, appreciated the experience that starting and exiting Wonderings had brought them and saw this experience as the main value that Wonderings had brought. It was a vehicle for personal development that was expected to bring them value in future. Therefore, the main value was the experience they obtained for the future.

Expanding one's network was also something crucial for the enterprising subjects, as discussed in greater detail in Chapter Three under the start-up sociality. A close interlocutor of mine insisted that one should surround oneself only with smart and ambitious people because that will inspire oneself to want more and to 'think bigger'. In contrast, people who were 'simply living' would bring you down. Constantly looking for ways to grow and become more was seen as an imperative. Silvia Lindtner discussed in her ethnography of a Shenzhen hardware accelerator (Lindtner 2020) that people were invited to view themselves and each others in terms of 'value' - what value were they "adding"? Similarly, Lily Irani, in her ethnographic study of the development of entrepreneurial subjects in India, argued that "adding value" was seen as a moral prerequisite for entrepreneurial subjects:

"Value was far more than a measure, made concrete in price. It was also a word with moral and promissory charge. Those who added value to the nation, to the design studio, and to client projects were those to cultivate and include. Those who failed to add value were understood instead as sinks, as mouths to feed, as jobless masses, and as failed potential." (Irani 2019, 85)

The worth of oneself aimed to maximise was not only for oneself as Rose would posit and the story of Lucia illustrated, but actively cultivated also for attractiveness for financial capital. For example, when I asked David how he would explain to their investors that he wanted to leave the company, he said to me that he had to tell them that he was not doing anything that was 'adding value' to the company. Such a stark categorisation of people according to their 'value' made me anxiously examine what value I bring to my interlocutors. I'll discuss how this social environment made me reflect upon my value and how I was performing in the next section of this chapter.

Another The Accelerator team, when asked about The Accelerator experience nearly a year after it, revealed that when they arrived in Singapore, they did “what entrepreneurs do” - they started networking, and even if they didn’t receive funding, they were now working on projects for the people they got to know in Singapore. Thus, they were already capitalising on their experience in Singapore. Similarly, many of the participants explained to me that even if at the end of the program they do not attract funding, the lessons learned here at The Accelerator will set them apart from their peers, and that will create new opportunities for them even if it’s hard to tell what these opportunities are at the time.

While these cases illustrate how people were able or expected to capitalise on their experience in terms of knowledge, networks and affiliation status, other The Accelerator alumni have pointed out to me the more internal sensibilities they feel participation at The Accelerator allowed them to develop or discover. So, for example, a participant from France who relocated to Singapore explained that starting a company in a foreign country was much better than doing it at home because being in an unknown environment made him more alert and resilient. In a related manner, another participant explained to me that now, after his experience at The Accelerator he feels life is much easier because he has realised he actually doesn’t need as much security as he thought he needed before, so for example, he has discovered that a regular salary is not a must for a good life, because he has learned to live frugally.

In general, people were willing to accept and go along with a lot in the name of gaining experience, and claiming the value of acquiring an experience was always a handy ‘way out’ when things did not work out as they wished. Treating oneself as a never-ending project in the making made all the experiences, including the ‘bad’ ones, potentially useful in yet another speculative imagination of a possible future.

To summarise, the promise of entrepreneurship required imagining the future as open to speculation—all the experiences in the now were seen as holding potential value in the future. In Singapore, entrepreneurship emerged as the antithesis of government and bureaucratic careers which were perceived as being pre-scripted and lacking openness.

4. Commodifying One’s Human Capital

Embracing entrepreneurial start-up futurities required not only embracing various experiences and speculating about possible futures in which one could capitalise on them but also a simultaneous commodification of oneself. That meant understanding

how to position and differentiate oneself in a social context and seeking out the value one could be adding. This required showing both passion as well as control and self-management. The Accelerator and the social online and offline spaces facilitated and cultivated this economisation of life.

Love, self-awareness and intensification of work

The founders' personal experiences, relationships and skills had to be turned into usable resources for building their start-up. For someone to be able to capitalise on their capital effectively, becoming aware of oneself was often seen as the first step in 'figuring out' one's entrepreneurial journey. During the Bootcamp, the participants were often reminded that they should think about "What is that *one* thing you are really good at? What is that *one* thing that makes you better than anyone else?" That was seen as the first step in trying to understand where to apply one's energy. If viewed through the lens of human capital, it can be seen as an evaluation of one's assets and distinguishing those that could produce the highest returns, essentially turning them into commodities through a self-assessment and evaluation against others.

A discussion on The Accelerator online forum was telling of the kind of commodification process that took place as part of this process. In a discussion group on May 14, 2013, a newcomer introduced himself and asked for advice on how to "break into the start-up scene of Singapore". Not long after, an active member of the group, who apparently specialised in career coaching, wrote a lengthy response. He advised the newcomer to "think of yourself as a 'product' to be sold" and explained that "The objective is to sell your talent as a set of acquirable business benefits that you confer through joining a team." The related advice was to think of his CV as a list of 'product features' and highlight the value they would deliver to the future employee.

Concern about the 'meaning' of one's work and caring for one's work was also central to The Accelerator BootCamp program. One of the first talks given by the main organisers at the beginning of each program was on 'what it takes to be an entrepreneur'. In these talks, Wei asked the budding entrepreneurs what they care about so much that they are willing to dedicate the next five years of their lives to? Is the problem that the start-up is tackling *big* and *important* enough to be *worth* this effort? On the one hand, the question of *worth* had to be weighted in terms of ethics of social change rather than financial rewards. Entrepreneurs were expected to find answers to these existential questions and realise that being an entrepreneur is not about becoming rich. Instead, it is about bringing about substantial social change - they were expected to search for issues that they felt enough passion for to be willing to work hard. Money was presented

as a secondary byproduct of doing something worthwhile.

Working hard and smart were seen as important prerequisites for becoming successful entrepreneurs. So, for example, shortly after the beginning of The Accelerator Bootcamp, in the weekly meeting, one of the mentors took the stage to warn the team members that they need to work harder, otherwise, it undermines the fact that they are here for their passion:

"You need to understand the dynamics of what business is about - which is about, you know, generating more money incoming than it is outgoing. But what you have to be best at is this thing that Wei has talked about a number of times, [it] is this thing that you are actually doing, and you have to love it so much that you are actually willing those 100, 120 hours a week that you gonna have to do. [...] if you wanna win this race, and I know that there's a number of you in here that can win this, but you gonna have to put in the time, and you gonna have to love what you're doing. So, pivot the thing, do whatever it takes until you find something that you really love and, sure, that will make a ton of money. We'll help you make sure that you don't choose something else - that is what we are here for now."

For this mentor, the most important part about the business was being the best at what one was doing, and the financial part of the business was dependent on *love* for the issue that the start-up was solving. Someone passionate about the idea and having an affective vision for change was understood as being willing to work harder and put up with more challenges. Which, in turn, would benefit venture capital. Not only did this mean additional security for the investors and their potential returns, but also that this affective connection one has to be feeling is supposed to deliver strategic competitive advantage in the market, as the founders have a better understanding of the customers' needs and the industry.

Through the notions of love and passion, an intensification of work was legitimised and normalised and a particular time discipline was instilled. In his seminal essay on the changing experience of time with the development of industrial capitalism, Thompson has described how the changes in working conditions also affected how people related to time and how they experienced it (Thompson 1967). He describes how industrialism promoted a certain time discipline that was based on clock time rather than the task-focused experience of time characterising work and life in agrarian societies. In start-up space, the intensification of work was seen as a logical result of entrepreneurs being passionate about their work and the labour invested in the start-up bringing meaning

to one's life, and that also meant changing the way they dealt with time.

The investor quoted above spoke of working 100 and 120 hours a week as a logical, inevitable reality if one wanted to succeed. Such intensification of work was expected in this context. Especially towards the end of The Accelerator program, clock time seemed to be losing its importance - it was more the number of hours left and how much one could still make happen before the showcase on the Demo Day that mattered. Budding entrepreneurs kept working through the night, sleeping weird hours the moment they had a chance or simply couldn't go on otherwise, sometimes not even leaving and sleeping seated by their desks. Day and night did not structure how one lived; life was entirely subjected to the tasks at hand. Most participants agreed that it was not sustainable in the long term but many said they appreciated this experience because it showed how much they could push themselves and achieve over a relatively short period of time.

While start-ups promise social progress, the intensification of work that they embody requires undoing many of the safeguards that labour unions fought hard for in the previous century, such as a 5-day work week and an 8-hour work day. Adhering to these principles, in fact, was seen as antithetical to being an entrepreneur. The organiser of The Accelerator regularly lamented how empty the Blcock 71's parking lot is during weekends, arguing that the empty parking lot illustrates how Singaporeans are 'not entrepreneurial enough'. Being entrepreneurial would require to be working also on the weekends and long beyond 5 pm.



Approaching Demo Day. Haphazard naps on office chairs without stepping away from their laptops. Photo by author.



Powernap in a meeting room on a beanbag. Photo by author.

It was often implied that love and passion, in combination with hard work, would inevitably produce financial success, which, while not a goal in itself, will ‘simply’ follow. Alice Marwick, in her study of the role of status in Silicon Valley, draws continuities with earlier work done by (English-Lueck 2002) and notes that it is typical of Silicon Valley idealism to equate one’s passion with the rewards that one is entitled to:

“If one is truly “changing the world,” then one probably deserves the millions of dollars that may come with achieving that goal. Those who chase wealth for its own sake, though, seem much less deserving.” (Marwick 2013, 83).

In a related way, Karen Ho has demonstrated how the emphasis on ‘smartness’ and bankers self-identifying as the ‘smartest’ was crucial for their agency and audacity to “enact their worldviews, export their practices, and serve as models for far-reaching socioeconomic change.” (Ho 2009b, 40) This self-identification also resulted in a sense of justification for the excessive remuneration.

Acceleration score

One of the ways in which The Accelerator tried to promote higher self-awareness was through the development and application of what they called the ‘Acceleration Score’. Based on the answers to 32 questions, The Accelerator would score ‘the team’, ‘the idea’, ‘fit between the team and the idea’, ‘idea and The Accelerator fit’ and ‘team and The Accelerator fit’ from 0 to 10. The scores would then be visualised in a graphic way, allowing to quickly establish which areas need more work and which less.

As Wei, who had developed the score together with a few other team members, explained:

“It’s very nice because when you look at the Acceleration Score, you very quickly get an impression of a team, so you can quickly see who is stronger, weaker and in which areas. And it is really interesting to look at all of these teams at once. Sometimes what you get is a strong team with a weak idea and a weak idea with a strong team. So the other thing that we look at is the fit between the team and the idea. Because when its gonna get tough, if there is no fit between the team and the idea, the team will just say ‘this is too hard - I quit, I give up’. And that is why investors

look for passion. Passion is what gets you through the tough bits.”

The use of such tests was not limited to the Acceleration Score. Melody already had classified herself according to the Briggs-Meyers classification. This personality test was often referred to and used in The Accelerator application forms. Silvia Lindtner has described how also the participants of the hardware accelerator program in Shenzhen were subjected to a personality test developed by the program managers, which she views as ‘market devices’ (Lindtner 2020) - “devices that aim at rendering things more ‘economic’ or, more precisely, at enacting particular versions of what it is to be ‘economic’ (Muniesa, Millo and Callon 2007, 4). Lindtner explained that “These market devices are instruments and methods that render things attractive to the logics of finance capital—they assign them an affect of promise and anticipation; they have become common in tech entrepreneurship and design consulting.” (Lindtner 2020, 132) Similarly, the Acceleration Score was imagined to be an evaluative tool to decide whether the team gets selected for participation at the accelerator or not. As Wei explained in an interview for Digital News Asia:

“Our mission is to help the largest number of innovative business start-ups in Southeast Asia succeed,” he said. “We do not claim we have a magical sixth sense for ‘spotting winners’, but we do feel confident about our ability to spot issues that will very likely trip up a team during an accelerator program or later when they try to raise investment. “Knowing what needs to be fixed is the first step to making yourself a winner,” he added.”

However, Wei also saw the Acceleration Score as something that can and should be used as part of the learning process for the teams - it helps the teams to identify which ‘areas’ they need to develop. So, for example, going through an Acceleration Score for one of the teams that The Accelerator rejected, Wei explained to me:

“All these dimensions are arguable, subjective, but something to start with. ... (..) These are all things that can be learned...(.) all these thing can change, and it is instructive to compare [the Acceleration Score] when the team comes in and when the team goes out [of The Accelerator]”

In this way, Wei emphasised again the potential to become anything you want as long as you work hard on it - no matter that the Acceleration Score could be used to deny your access to the program, you could still use it to work on yourself, and who

knows - maybe apply again for the next program. Wei liked to call the Acceleration Score a 'GMAT for Start-ups', referring to the popular standardised test typically used for assessing analytical skills before admission to business schools. Such a comparison was enthusiastically embraced by the start-up people around him. For example, a start-up entrepreneur and investor writing for Tech in Asia in 2013 explained:

"And even if you don't get in, The Accelerator is happy to give you free feedback on your ideas and team, which are delivered on The Accelerator's signature "Acceleration Score" infographic. Some of my friends have showed me their scores, and they said it was enlightening for them to see how they measured up to startups in the region."

The Acceleration Score was just one such device that was used. A poignant example of thinking about the self in terms of capital that needs to be managed and cultivated was my housemate Conor.

Planning and accounting

I had gotten to know Conor through Hackerspace SG and was lucky he agreed to sub-rent out one of the rooms in the spacious but rather bare three-bedroom apartment he was renting in central Singapore. During the day, Conor worked as a Chief Technology Officer for an international educational institution, and in the evenings, he usually pursued many of his personal projects. Some of these projects provided him with additional revenue streams, but many were mainly aimed at satisfying his intellectual curiosity (for example, coming up with a plan about how to invade Somalia). He was an avid reader and spent the weekends on the couch reading various historical and economics books and reports he borrowed from the National Library. Often, intellectual curiosity was combined with ideas of how to profit from them.

When I returned back to the shared apartment one evening after a day of fieldwork in the spring of 2012, my housemate Conor raised his eyes from his laptop and cheerfully greeted me. As usual in the evenings, he was lying on the black leather couch in the living room with his feet extended to the coffee table in front of the couch, his light button-down shirt open, displaying his skinny chest and typing away on his laptop that he was holding in his lap. The air-conditioning was silently cooling the room. Walking to my room, I casually asked how he was doing and what he was up to. He raised his eyes from the screen again and told me he was writing his quarterly report. "What?" I

paused, stopping in the middle of the living room: “Your quarterly review?” I wanted to clarify. Conor was not writing a review of his business but of himself. He devoted his evening hours after work to managing his life by writing a formal report of *himself as an enterprise for himself as an investor*.

Yes, Conor explained - why not? There seemed to be some mischievous intellectual pride when he explained that, essentially, he is his own most valuable ‘asset’. If one acknowledges that, according to Conor, it is almost silly and wasteful not to manage oneself explicitly. For him, that meant detailing what he has achieved so far in the year and what needs to happen in his life in the coming years, as well as identifying what kind of key performance indicators would be appropriate. His report covered not only his work in his formal business ventures but also his livelihood in general, encompassing even the management of private intimate relationships.

His endearing Singaporean girlfriend chimed in to our conversation as she emerged from the kitchen. According to her, in his last report, Conor detailed that they should reduce the number of fights between them to increase his satisfaction with the relationship. Linda seemed to be somewhat ambivalent about being subjected to this formal management of their relationship. While Conor didn’t go into details, he confirmed that in the past quarter, they had succeeded in reducing the frequency of conflicts. I didn’t ask what would have happened if they hadn’t, but it did seem possible that if the formal requirements had not been fulfilled, there could have been a discussion about the termination of the relationship. At the moment, though, they were still together, and with their ups and downs and occasional fights, Conor kept count on.

While Conor was exceptionally clear, structured and articulated in the way he treated himself as an ‘asset’, the notion of the self as an entity that needs to be managed was much more pervasive throughout my field, even if in a more dispersed and less organised manner. Elaborate goal setting at various temporal scales, ranging from life goals to detailed plans for daily accomplishments, were the common and more obvious practices through which this self-management manifested itself. These practices and methods Foucault addresses as “technologies of the self” allow people to self-fashion and cultivate themselves in ways that they aspire (Martin et al. 1988). In this case, we see the role of specific tools that allow one to economise oneself as they are used as part of the technologies of the self.

Cultural style of control over time and speculative futures

At a time when many people in the world found themselves in positions and circumstances where they were utterly unable to plan their futures (Appadurai 2004; Piot

2010), my interlocutors seemed to be extremely comfortable at explicitly planning their lives and using their aspirations, hopes and plans to situate themselves in the present. In fact, their planning practices were crucial in defining their ambitions and, therefore, also crucial for their belonging to this loose group of people involved in start-up entrepreneurship. Planning one's future was a prerequisite for a successful performance of the self. This planning was largely based on an understanding of oneself as an asset and enabled by a sensed need to position oneself according to the principles of the market and its ever-shifting demands.

Appadurai, in his influential essay on the capacity to aspire, has convincingly argued that the relationship to futurity is part of culture and showed how aspirations, as well as the practices of aspiring and working towards aspirations, are collective - "Aspirations are never simply individual (as the language of wants and choices inclines us to think). They are always formed in interaction and in the thick of social life" (Appadurai 2004, 67). Appadurai also pointed out that the relatively rich and powerful, which I would argue most people involved with start-ups were, are "more able to produce justifications, narratives, metaphors, and path-ways through which bundles of goods and services are actually tied to wider social scenes and contexts, and to still more abstract norms and beliefs" (Appadurai 2004, 68). It was common for my interlocutors to embed their needs and wants in a wider social context of market logic and assumptions about progress in a way that their life plans seemed to make sense, even when they were saying things that seemed far fetched like - "by the time I'll be 40, I will have an asteroid mining business" or scheming how "we can arrange to bring Singapore over to India in case the climate change causes it to sink". Assertions like this were not treated with doubt or concern about the person's sanity but as evidence of the daring, ambitious and limitless mindset and the brave character the entrepreneur had. Even though entrepreneurial self foregrounds the role of imagination, for start-up entrepreneurs, this imagination had to align with the principles of the market. We can understand better the constrained nature of this ideal by observing how the start-up entrepreneurs were expected to deal with time, which had to be used efficiently and intensely, maximising what can be gained from each moment, rather than wasting or just allowing the time to go by. Time had to be strategically managed, and one's performance through time analysed and evaluated. One had to exercise control over how one passed through time.

It was part of the entrepreneurial style where one had to demonstrate control over time and present a vision of the future that performed skill in the labour of speculation - speculation about the social world and about oneself as capitalising on it. In my field notes, time and time again, I notice myself asking if I am performing well enough and attempting to position myself better and plan my future better. At one moment, while in the field in 2014, I shared these concerns with my fellow PhD student Andrea Cerda,

who invited me to see if these questions I am asking myself are related to the social environment I was in and to examine 'the stickiness of ambition'. Here are my notes from that day:

Over the last 3 days, I have been having a lot of personal reflections about myself - how I treat myself, my work, what can be improved in how I do my work, and where I could go in the future. I think, to a larger extent, these thoughts I am having are a reflection of the environment that I am in, the kind of reasoning that surrounds me, and the type of people and their aspirations that I encounter. In this way, it answers Andrea's question about how sticky ambition is. All the things I am feeling and worrying about - how I am NOT a successful human if I don't do extra work if I don't start my own initiatives, how my chances for a better future are diminished unless I engage in extra activities such as networking and making sure that people know me and what special value I can 'bring to the table' [are part of the social expectations]. The whole point is that it's not only me [feeling that way]. On Thursday evening, at the event that I went to, there was this girl with red hair and thick-rimmed glasses. She works in marketing or a digital agency or something like that, and when I asked her what she thought of the talk, she answered it was nice, but it also made her think about what she is doing in her life, what are her goals and where is she going to do. This goes beyond just me questioning myself. Sunday 11.05.2014

What stands out to me from these notes, and I remember clearly from my field experiences, was that sense that one had to present confidence and ambition to be seen as worthy of interaction. These qualities were best projected by identifying one's unique worth in a speculative future that was seemingly within reach. The redhead I had met and referred to in the notes similarly started to contemplate her life's direction when she realised that she was expected to have it clearly identified. The budding entrepreneurs were constantly surrounded by this expectation, and those who didn't feel they 'had it in the bag', as one of my interlocutors admitted, often felt as if needing to catch up. In the next chapter, I will be discussing how my interlocutors differentiated between embodying 'American style' or 'Asian style', where the 'Asian style' allowed for lesser certainty, but also then was not as much appreciated by investors.

Among the more senior and experienced entrepreneurs, I often encountered discussion of their future in terms of how many start-ups they think they will still be able to create - "I will work in this start-up until I will be around 40, which will give me a chance to do only one more start-up." It was part of the style to be projecting in this way, but it is not unimportant that the projection of life was viewed in terms of economic productivity.

Avoiding wasting time was a commonly discussed aspect of entrepreneurship, which was deeply tied in with the earlier discussions of business ideas. What was that powerful idea that one would be willing to spend five years of their life on? It is an expression of the economisation of life and explains why people were propelled to view their own life in terms of productive capabilities. As one entrepreneur put it, "There is plenty of money. What we do not have is time".

In these discussions, the notion of 'opportunity costs' was central - deciding to focus on one thing meant excluding many others. Applying metrics to their start-ups also allowed them to get a sense of progress and, as managers of their own capital, to decide if it is *worth* continuing to pursue that particular start-up idea. For example, talking with the founders of Beanees in the period after The Accelerator, they explained to me that they have been "giving themselves metrics", and they "don't want to be just joking around" - they need to be measuring their progress and "if stuff is not working out then they should just give it up". So they had given themselves the time until August, roughly 3-4 months, and planned to then evaluate what has happened so far and whether "success is really happening". It was important that success was not just growing the number of users, but they had to achieve growth at a certain rate- so that it "really leads somewhere where it is worth carrying it on". As they explained, that was the appeal for the metrics because "otherwise the opportunity costs of continuing get too high!".

This notion of thinking through one's lifetime in terms of how many successful business ventures one can produce and in terms of opportunity costs was central to the new notion of entrepreneurship, which defined it as 'serial high growth entrepreneurship', as described in Chapter Three. Being rational and efficient about using time as a finite resource required paying attention to "scaling" - scaling business through automation so that it runs by itself, thus giving the entrepreneur a chance to move on to the 'next thing'. This allows one to engage with multiple things simultaneously and thus expand one's own breadth of experience and human capital. E.P. Thompson discussed the role of a Puritan ethic in the internalisation of new time discipline at the turn of 18th Century England, where merchants would emphasise the limited 'market time' that a man has before Judgement day and the eternity which follows (Thompson

1967). As Wei explained to me one February evening in 2013, one thing that differentiates freelancers from entrepreneurs is that when freelancers fall sick, their businesses have to stop. In that sense, they are not scalable. However, when an entrepreneur falls sick, their business continues running because it is set up as a system (I described this in more detail in Chapter Five when discussing the commodification of the start-up itself).

Such an approach to time and work in start-up social space also manifested itself in a more demanding time discipline on a daily basis. There were a lot of strategies my interlocutors used for greater self-awareness and time management. Most of these strategies relied on speculative imagination of possible and desired futures followed by quantification and calculation as a way to track and display the progress towards the desired futures. Daily and weekly goal setting was a routine practice that, within the accelerator program, was institutionalised in the weekly check-in meetings. The entrepreneurs were trained to apply techniques that came from the corporate and coaching practices - for example, the GROW method that asks to identify the goal (G) where the team wants to arrive, then consider the realities (R) that they have to deal with in the process, think of the options that are available (O) and what way forward (W) actions will bring the team to the goal. Another popular method used and popularised by corporate giants such as Google was the Objectives and Key Results framework (OKRs), which promised to align teamwork efforts and provide a clear path that connects the larger strategic vision and daily, measurable actions.

Popular were also various tracking applications that monitored the online and offline activities of the entrepreneurs at intimate levels, ranging from devices to measure and optimise their sleep, food and exercise regimes as well as their working habits on and off their devices to make sure that no 'time was wasted'. Sharon and Zandbergen have argued that such self-tracking and self-quantification practices should not be viewed only in terms of 'data fetishism'; instead, they could also be seen "as a practice of mindfulness, as a means of resistance against social norms, and as a communicative and narrative aid." (Sharon and Zandbergen 2016, 1695). Indeed, for many, the various tracking tools made sense in order to enhance their reflexivity and self-awareness in order to manage themselves as capital and, most importantly, as communicative tools to be used to show their time discipline and mastery of their self-management.

Yet, this intensification of work, while glorified and appreciated, was also exhausting and limiting. For example, one of my interlocutors used a service which tracked his activities on his computer. When asked if he was getting meaningful insights from it, he gestured his hands in a motion to signal that he is giving up on trying to have insights from it. He explained that constantly seeing that he is spending 16 hours in front of his screen daily makes him feel even more overwhelmed as he recognises this is not sustainable but he doesn't know how else to proceed. In his words, he felt "maxed out".

Sustained intense work also made other aspects of life very hard to maintain - such as relationships with friends, families and even their own hobbies. For example, one interlocutor who had been running her business for nearly a decade explained how her entrepreneurial pursuit didn't leave space for her hobbies, which actually were important for her:

"After I started [my company], it was, hem...even before I started [it] it was like "I wanna start a business let me get my feet wet in this" - I always believed in focus in life, and it is about picking... picking your balls to juggle. So when I became more serious about the [company] part, I stopped dancing already for quite a while. I climbed, still regularly climbed here and there, but I also stopped after some time. I stopped doing a lot of other stuff, you know, just sports from time to time, or whatever. And yeah, I was starved. My soul was starved (..) so I had stopped dancing, right? I stopped dancing seriously for more than 10 years. So... that's why 6 months ago I started dancing again. I felt really starved. And I had to make a decision to consciously put dance back into my life, so I think that's the difficult part, I think, [about] being an entrepreneur..." She concludes: "Time is a zero-sum game - you do this, you can not do that."

Despite the idea that start-up work brings fulfillment, it was clearly visible that my interlocutors were trying to come to terms with the totalising nature of it.

5. What enabled the pursuit of the entrepreneurial dream

The promise inherent in start-up futurities that one can become anything they wish to be also invites the question: What resources and enabling contexts would make that seem likely? In Singapore, for those with a good education, the expected career path typically led them to work for the government or large corporations. My interlocutors often explained to me that in Singapore, 'as a Confucian society', it was the scholars and officials that experienced the highest social standing, and therefore, becoming an entrepreneur after receiving a good education was regarded as not following the social expectations of how one's life should develop. While scholars such as Pinches have argued that in the 1990s, Confucianism has shifted to elevate "the successful capitalist to the top of the status hierarchy" (Pinches 1999, 18), in their explanations, my interlocutors would draw on and lament the more classical interpretations. Government or

corporate positions would pay well and also provide high security and social status - something that many parents wished for their children. Yet, my interlocutors who associated themselves with the start-up culture saw those career paths as 'boring' and 'limiting'. In contrast, becoming an entrepreneur was seen as 'daring' and 'risk-taking'. I was curious - what about their lives allowed them to embrace this more insecure career path and one that, at least within Singapore, was not necessarily associated with high social status? Many of these aspects have been already discussed in the previous chapters, but here I provide my attempt at summarising some of the more important ones in order to highlight that start-up futurities actually relied on drawing upon a lot of resources - in terms of energy, capital, imagination and so on.

For one, the context of Singapore's thriving economy at the time was crucial for enabling people to experiment with starting up. The unemployment rate in Singapore throughout the 2010s was around 2% (Ministry of Manpower, Republic of Singapore 2025), and it wasn't uncommon to leave well-paying jobs after accumulating financial capital to start a start-up. For many of the well-educated and young people who joined the start-ups, positions in government and corporations were readily available at the moment they chose to pursue them. This sense of an easy 'backup' option certainly took away a lot of worry and provided more space for experimentation. To my question, 'What if this doesn't work out?' it was common to hear that the experiences gained at the start-up would make them only more valuable at the corporate jobs they could easily go to.

Secondly, and very importantly, many of those involved with the start-ups were quite young, many fresh out of university, in their 20s and 30s. For them, it was still rather easy to push back their family's expectations and socially more acceptable to 'experiment'. Crucially, being young and at an early stage of developing one's career, it was easier to conceive that all the investment in oneself would be capitalised on in the future. Youthfulness provided more space for speculation with fewer demands on the promises coming through. Being older would require seeing the results of this capitalisation.

For example, in an interview with a female entrepreneur, I asked if she feels she is taking a lot of risks pursuing her start-up. She explained:

"Yeah, yeah, but actually, well no...What's the worst that can happen? I'm not going to die, just taking a very pragmatic view, in the worst case I just delay my career for a couple of years, but if not now, then when? What are the risks- it's fear of falling behind - that your friends proceed with their corporate jobs, and you are doing this thing."

I enquired what her friends think of her doing the start-up.

“Well, yeah, they think it’s cute: you made it! Even though I can’t explain how far I am from making it. They think it’s cute [that] I am doing this thing, in comparison to them, who are complaining about their boring work at corporates.” (Celeste 25.02.2013)

Additionally, being young meant that they did not have dependents to sustain. As many said themselves, as long as they didn’t have a family with children of their own that they needed to support, it was okay to give the start-up life a try. I used an example of Melody to open this chapter - she felt the urgency to pursue her start-up aspirations at this time of her life exactly because she was certain that this wouldn’t be compatible with her other aspirations to be a mom later in her life. Many foresaw that the moment they would start their own family, a start-up wouldn’t be an option anymore - both in terms of the time it took on a daily basis, leaving little for family, but also because of the financial risks involved. Another interlocutor, who was 35 years old, said that for him, it is ‘now or never’ - he was married, and his wife was occasionally ‘feeling insecure’ because his business was not bringing any money in. To him, that indicated that starting as early as possible is better (Levi 19.10.2014). This, to me, indicates an important reason why start-up futurities, despite their perceived openness, are very limiting, something I will come back to again and in more detail in the next chapter.

Thirdly, as already discussed in Chapter Three, universities were proactively engaging students in various ‘start-up exercises’ such as business plan competitions, pitching sessions, and exchange programs such as the National University of Singapore Overseas Colleges (NOC). Those successfully exposed the students to an entrepreneurial context and normalised starting up and routine speculative labour as a legitimate and fruitful activity. Silvia Lindtner has similarly argued that programs such as incubators and Start-up weekends play a big role in “training people to see themselves as human capital and to channel their commitments to justice and technological alternatives as attractive to finance capital.” (Lindtner 2020, 13) For example, one of my interlocutors told me how the Silicon Valley experience exposed him and his co-founders to a very “entrepreneurial spirit” that also inspired personal changes in the way he lived. When asked what he meant, he explained:

“It just becomes part of life, like, over dinner, out of nowhere we would be talking - hey, could this idea work, and stuff like that. And ideas just keep coming. (...) we were roommates, so, you know, we spent a lot of time just bouncing ideas around. In fact, with Igor, we had.. this is probably our third or fourth idea; the first

three never took off kind of thing, so it's just like a hobby to us - bouncing ideas around and eventually, we got [the name of the company] going. In fact, maybe you can censor out some words, but we were, this, [the name of the company], was born from us, me and Julian, smoking in the balcony. So it's just like, we are talking about it, and suddenly, we just..got this idea. So yes, that's how [the name of the company] came about. We were actually talking on the balcony, and suddenly - boom - we had it!"

Similarly, start-up weekends and hackathons were open to everyone, and these events suggested that doing a start-up was 'fun' - as described in Chapter Four - hanging out with your friends can lead to changing the world and becoming rich in the process.

Fourthly, many of my interlocutors were already embracing less secure career paths by being freelancers or having a company on the side that was doing 'client' work. In a thriving economy, these jobs came rather easily and gave space to pursue a start-up idea 'on the side' where work for reliable clients brought in the necessary income to cover the basic costs of development. Additionally, not all, but many of those who saw the possibility of start-ups came from wealthy enough families to absorb the financial risk of not earning a regular income. In this context, some of my interlocutors aspired to become '*independently* wealthy', meaning that their family wealth could support them, but they aspired to achieve their own capital. Crucial in this regard is also the role the Singaporean government was playing in absorbing the actual financial risks by offering various start-up seed-funding grants. The variety of financial grants available for start-ups provided a lot of room both for entrepreneurs as well as investors to experiment, such as Ace Startups scheme, the SPRING Seeds program, the iJAM program, and the NRF TIS scheme for investors, where the National Research Foundation (NRF) provided 85 per cent of funding, with the investors paying the remainder.

Additionally, the government actively promoted start-up entrepreneurship as a desirable career choice, and in combination with the pervasive digitalisation and globally circulating celebration of Silicon Valley success, being involved with a technology start-up then didn't seem a crazy idea. Many I met were inspired by the success stories of American technology companies. For example, one of my interlocutors at the age of 20 saw how YouTube, which he didn't consider a particularly sophisticated product at the time, was bought by Google for 1.3 billion US dollars. Having thought about it, he started searching for technology start-up ideas that he could implement. Another two friends who moved to Singapore from India to pursue education spoke about how the rapid growth of Groupon — a daily deals website that started as a simple blog and grew to a company valued at more than 1 billion dollars over the course of a mere two

years — left a huge impression on them. They agreed that they would start their own company before they turned 30. Similarly, the story of Seth and John, the founders from the Philippines, that I referred to at the opening of this dissertation, also showed how the rise of Facebook - a mega platform that was started by one person in a dorm room - had inspired the team members to aspire to achieve something similar.

This is not an exclusive list of the factors that contributed to people being able to embrace the entrepreneurial promise. Still, it certainly captures some of the more important aspects that stood out during my fieldwork - for some people, some factors were more enabling than others. What is important to emphasise is that the people didn't simply 'choose' to become entrepreneurs or become involved in the start-up space. They surely had to have the interest, but also, importantly, the possibility - an enabling context to be able to do that. It also should be emphasised that many chose not to pursue the flexible paths offered by start-ups. For example, one of my interlocutors, who worked briefly at a start-up in a supportive role when we met, left it, explaining that for her, the start-up space was too uncertain. She already struggled because she had not finished her university education, and in this context, the way she saw it, being involved with a start-up created too much uncertainty in her life. As she put it, she simply wanted a clear "career path and growth" so that after, say, three years, she could look at her CV and "have something there that people understand and recognise" (Amalia, 19.03.2013). I take Amalia's concerns to emphasise how important it was to have substantial resources on which to rely when pursuing start-up entrepreneurship.

Describing these facilitating contexts is not to say that the people who pursued start-up entrepreneurship could all do it playfully and with ease. Even the ones who enjoyed the overlapping privileges of wealthy families and easily accessible opportunities elsewhere felt the start-up journey demanded a lot of them. Many felt they were risking their reputation, their livelihood, their mental well-being, and their relationships with their friends and loved ones. The stories of Seth and John, as well as David from Wondering's, attest to that. Start-up futurities were not sustainable by themselves, and they had to draw on resources elsewhere. Therefore, outlining the important contexts which allowed, to some extent, to absorb some of these risks is crucial.

6. Conclusion

The previous chapter concluded with a question - how come the Wonderings founders deemed that the most value that their start-up had created was primarily for them at a personal level, even though it also brought personal disillusionment and struggles?

This chapter suggested that the way to understand why start-up entrepreneurs argue that the biggest value is in obtaining an experience, even if it is one that is painful, is to explore the entrepreneurial subjectivities cultivated and how they were commodified with a sight for future. In this chapter, I described how my research interlocutors saw entrepreneurship as a way to live a fulfilled and meaningful life. The story of Melody illustrated how many of my informants saw themselves as nearly infinitely malleable - they could become and shape themselves into seemingly whatever they wished. This seemed to be an incredibly enticing offer.

Entrepreneurship seemed to offer intense and varied experiences that would contribute to the buildup of human capital, which could be both enjoyed at the moment and lead to an appreciation sometime in future. I argued that it is a commodified form of subjectivity where one constantly speculates about futures which could help realise the value one has accrued in terms of experiences. I argue that this is part of the speculative labor that entrepreneurs, but increasingly also people outside entrepreneurial circles, are expected to do. In Singapore, that resonated in particular ways as a response against the predetermined career paths in government or established industries, such as medicine or law, that would typically offer chances for social mobility. Start-up entrepreneurs distinguished themselves as being driven by passion and motivated by higher-order values rather than monetary rewards, showing how the entrepreneurial subjectivity and the labour of speculation exceed purely rational cost-benefit calculation.

While the promise captured in the start-up futurities was that one could limitlessly develop oneself, it also went hand in hand with tight management of one's actions, task-oriented time discipline and all aspects of life were subjected to calculations about potential value. The language of 'care' and 'love' legitimised the intensification of work that was part of the entrepreneurial journey. I argued that entrepreneurial subjectivity also required presenting oneself in a particular style, building up from the discussion on the need to perform speculative labour convincingly through pitch, as described in the previous chapter. Also, in this chapter, we see that an entrepreneurial style is required to show control over oneself and confidence in mapping out various futures and paths to reach them, projecting certainty about the future and control over one's life as it is progressing through time. However, on a more intimate level, despite the often-promoted belief that entrepreneurship is one's life, many of my interlocutors struggled to maintain other aspects of their lives in the face of the demanding work.

Even though entrepreneurship presented itself as a chance to develop oneself in many possible ways, it also was an incredibly demanding and limiting way to relate to oneself and the world. One in which many aspects of the self had to be commodified and subjected to strategic management. In the discussion of the socioeconomic aspects that enabled the pursuit of entrepreneurship for my interlocutors, I illustrated how,

despite its seeming openness, the pursuit of the entrepreneurial dream also relied on drawing upon various resources that were typically imagined as outside of the start-up future itself - such as government funds, family support, availability of corporate jobs, etc. Many already foresaw that start-up life was not compatible with their aspirations to become parents or obligations to sustain their own families. Those who came from wealthier families were able to absorb the financial risks more easily, but importantly, they also developed a more convincing performance of the entrepreneurial style, which relied a lot on the labour of speculation. In summary, the entrepreneurial ideal in Singapore is marked by a tension between the promise of freedom through one's ability to act on one's aspirations on the one hand and the necessity of tight self-discipline and monitoring in order to reach one's plans. Entrepreneurs like Melody navigated this landscape by constantly managing and commodifying themselves, seeking meaningful work that transcended traditional corporate roles, in the process subjecting all aspects of her life to potential transformation.

The next chapter will focus on the embodied aspects of this entrepreneurial style and grounding analysis in body and will further highlight the limitations. I will zoom in on one of the central practices through which my interlocutors expressed their entrepreneurial aspirations - the business pitch - and explore the kind of body discipline and control that was expected from entrepreneurs to perform successfully and attract the potential for capital. We will see how the entrepreneurial ideal, despite seeming accessible to everyone, favoured certain bodies over others.

Embodying the Entrepreneur

1. Introduction. Managing One's Capitalability

In this chapter, I continue to explore the promise of start-up futurities in terms of what sort of subjectivities and transformations they promote and explore their limitations. The previous chapter detailed how embracing entrepreneurial subjectivity meant embracing seeming openness, flexibility and risk-taking on the one hand. On the other hand, it also meant strategic management and control of oneself. I explained that it can be understood as a result of thinking of oneself as capital that one needs to speculate with to generate value in the future. In this chapter, I zoom in on how this entrepreneurial ideal required a mindset change and control over one's body to illustrate the implicit biases in this ideal. In this way, I want to highlight not only the amount of work that goes into sustaining this entrepreneurial ideal but also its limitations. The chapter shows how the contradictions held within the neoliberal ideal work out in practice as people struggle to realise this ideal. In particular, by approaching futurities ethnographically as they relate to the body and mind, it becomes visible how this ideal is steeped in global power relations and puts bodies that have a harder time adhering to it at a disadvantage. This chapter will address, in particular, how race and gender became issues as they were less malleable in the transformation that these start-up futurities called for.

The process of commodification of the self I started describing in the previous chapter happened neither effortlessly nor smoothly. Different identity markers were seen as having different values - race and gender, in particular, caused different levels of friction in the commodification process, and when commodified, they seemed to have different market values or abilities to attract attention and, along with it, potential financial capital. Melody's story at the beginning of the previous chapter illustrated how she deemed her body as in need of transformation to fit the entrepreneurial ideal - her voice had to change, she had to be taller, she had to be thinner, and the way she experienced and expressed her feelings had to change. Yet, unlike narrative futures expressed through pitches as described in Chapter Four, these embodied futures described in Chapter Five and here were less malleable. Therefore, we will see the attempts to strategically man-

age one's 'race' and 'gender' in a way that would yield some capital rather than entirely exclude them.

Nigel Thrift has pointedly articulated how the new economy at around the millennium was not only rhetoric but also was actively embodied and performed through bodies that were increasingly expected to display the ability to do more, be adaptable for ever-changing situations, be passionate and participative (Thrift 2001, 2000). Thrift also points out that the successful performance of such subjectivity and involvement in the new economy was harder for females (Thrift, 2001). In this chapter, I want to highlight how the discourse and practice of entrepreneurship are not only gendered but also implicitly racial, and I hope to show how my interlocutors explored strategies to deal with race and gender ideologies in ways that aimed to contribute to their capital rather than diminish it. I rely on Ferguson's notion of 'cultural style' (Ferguson 1999) to emphasise how culture is embodied and performative, but unlike the notion of 'habitus' developed by Bourdieu (Bourdieu 1977, 1984), cultural style allows me to explore the signifying practices that start-up entrepreneurs were learning to use and used, without necessarily having shared the same social-structural location. Moreover, the cultivation of cultural style allows space to account for both one's agency as well as structural constraints. As Ferguson explains,

"The idea of style as a cultivated competence implies an active process, spread across historical and biographical time, situated both within a political-economic context and within an individual life course. Such a complex process involves both deliberate self-making and structural determinations, as well as such things as unconscious motivations and desires, aesthetic preferences, and the accidents of personal history" (Ferguson 1999, 101)

I will start by discussing how aspiring entrepreneurs' minds and bodies were seen as needing transformation. This dominant narrative speaks back to the global power hierarchies addressed already in Chapter One but reveals more closely how the 'entrepreneurial subjectivity' is not neutral but racialised and gendered. While I attended to it as a discourse, the main contribution of this chapter is to show how my interlocutors tried to navigate this environment where their bodies were not seen as 'capitalable' enough because they were racialised and gendered.

2. Transforming the Asian subject - The Shithole State of Mind

“Get out of your shithole state of mind!” was the call made by Khailee Ng to more than 500 people who had come for his keynote presentation titled “Dear Southeast Asian Founder” during the last day of the Startup Asia Singapore conference in 2014. Khailee is a Malaysian-born entrepreneur who started his first business in Malaysia and later became a managing partner in a popular venture capital investment firm in Silicon Valley. At the time of this event, he spent his time traveling between various countries in Southeast Asia and San Francisco, linking the ecosystems by introducing people and deciding on the investments to make. During the talk, he was bursting with energy, not unlike some popular self-help gurus one can see online, and he didn’t shy away from using strong words to illustrate his simple message: Southeast Asian start-up founders need to change their mindset. Khailee presented his own life story as an example of the necessary transformation that other founders should also undergo. Fitting well within confessional narrative structures, Khailee’s previous self was unhappy and didn’t have much agency; the new Khailee, as we all could witness, was full of energy and excitement and fulfilled.

He told us how he, born in Malaysia, previously only used to complain about all the things that were not good instead of taking matters into his own hands. Through building his businesses, he gradually underwent a mindset transformation that allowed him to see that instead of complaining, he could change the things that bothered him. Along with this major sense of empowerment also came a realisation that currently, we live in “the world of abundance”, and to capitalise on it, people need to “work at the speed of the internet” - “think faster and act faster.” In order to see this abundance, succeed in this global world, and to “not be left behind” Khailee encouraged entrepreneurs to embrace a different, new mindset - the Silicon Valley mindset. His talk was accompanied by visuals asking, “Do you have a Shit Hole State of Mind or a Silicon Valley State of Mind?”, as if these two were the only possibilities. Khailee invited the people to initiate a “consciousness shift that we need to undergo as founders in Southeast Asia”. (Thursday 08.05.2014).

While Khailee’s talk was brash, he was articulating something that I encountered in the field on a daily basis in more or less subtle ways - ‘Asianness’ was something that needed to be transformed in order to pursue start-up futurities. It was clear that the golden standard regarding how one should be was defined in reference to an ideal Silicon Valley subject or what Nigel Thrift has aptly called - *Homo Silicon Valleycus* (Thrift 2000, 688) - one that is incredibly mobile, always learning, always improving, one who is (or shall we say has the resources to be) creative and innovative, one who grabs op-

portunities and moves fast.

The idea that Silicon Valley is not so much a place as a mindset has been increasingly popularised by US tech elite directly benefitting from such framing and was addressed already in the earlier chapters, most clearly in Chapter One. What stands out in the context of this chapter is that in order to repeat the success of Silicon Valley, not only do cities and buildings need to be transformed into arrangements like Silicon Valley's, but people also need to embody this new subjectivity. As Khailee was arguing, the 'Southeast Asian mindset' belonged to the past, not to 'the world of the internet', while the 'Silicon Valley mindset' was presented as the mindset of the future. While the previous chapter explained the principles of this subject position and how it resonated in Singapore, this chapter will zoom in on what it meant when one had to embody this subjectivity.

'Asianness' as a problem

These ways of describing how one needs to adopt the Silicon Valley state of mind and become daring and risk-taking informed a wider narrative about 'Asianness' as a problem. During the early stages of my research, I was often struck, later upset by stories told by Singaporeans as well as foreigners that framed 'Asians' as 'risk avoidant', 'not creative enough', and favouring the rule of government, hierarchy and family over 'creativity', not challenging existing norms, not working hard enough, being too *kiasu*, etc. These 'Asian' shortcomings were explained interchangeably as a result of Singapore's overbearing and controlling government, rote education systems, or Confucian values, as well as a society based on communitarian rather than individual values. "Asianness" was seen as a problem addressed in conference talks, such as the one by Khailee, written about in blog posts and used as a way to explain to me the necessary interventions through government investment or educational policies or mentoring. Such essentialised orientalism (Pinches 1999, 2) dominated many of the analyses performed by start-up founders, investors, and bloggers and was actively recycled also in US-based or international media.

Over and over again during my fieldwork, I came across discussions that implicitly and explicitly assumed that 'Asians' (in start-up context usually assumed to be male, with females being rather invisible in this discussion, unless 'the gender' issue was the central one, as I will discuss later in this chapter. This contrasts earlier constructs where women were seen as the carriers of 'Asianness' (see, for example, Hudson 2013) were 'not good enough' entrepreneurs and needed to transform themselves. Instead of taking such claims at face value and assuming that there is an 'Asian' particularity, I

wanted to understand why such qualities as ‘creativity’, ‘risk-taking’, and ‘embracing failure’ were framed as not inherent to ‘Asians’ as opposed to ‘the Westerners’. Why were the boundaries of creativity, for example, drawn around racial and nation-state categories, and what effects did such culturalist narratives have on the decisions my interlocutors made when they had to present themselves? I argue that to understand this, we need to understand two important discourses that inform the discussion about the ‘Asian’ entrepreneurs in Singapore. One is an older nation-building discourse in Singapore that constructed the ideal subject and citizen in terms of ‘Asian values’. The new, entrepreneurial subject was introduced as antithetic to the older ‘Asian values’ subject and, therefore, was understood through the lack of necessary values. The other thread informing the claims about ‘Asianness’ as a problem was the Western capitalist discourse of ‘creativity’ that is based on the Western romantic tradition. When applied globally, it is highly exclusive and limiting. Understanding how and why such culturalist paradigms have spread can help to understand their particularity and question their validity.

Asian values and the new national subjects

The ‘Asian values’ discourse was popular in Singapore and Southeast Asia from around the late 1980s and tried to construct ideal citizens by defining them in terms of innate adherence to Confucian values. Political elites across East and Southeast Asia used the notion of ‘Asian values’, but Lee Kuan Yew and Malaysia’s Prime Minister Mahathir Mohamad were the most famous for eagerly embracing them as part of their nation-building efforts (Pinches 1999). In Singapore, it was an attempt to “evolve and anchor a Singaporean identity” in a context of globalisation and a perception that Singapore’s new generations are being exposed to predominantly “alien lifestyles and values” from the West (Prime Minister’s Office 1991). The White Paper in which Asian values were institutionalised in Singapore argued that “Traditional Asian ideas of morality, duty and society which have sustained and guided us in the past are giving way to a more Westernized, individualistic, and self-centred outlook on life” and in order to “not to lose our bearings” suggests the following core values shared by all Singaporeans:

“placing society above self, upholding the family as the basic building block of society, resolving major issues through consensus instead of contention, and stressing racial and religious tolerance and harmony.” (Prime Minister’s Office 1991, 1)

Rooted in Confucianist ethics, they prioritised focus on community, family, obedience to authority, and thrift. They also framed Singapore as part of the East Asian country group that was experiencing rapid economic growth at the time. Beng Huat Chua, among many other scholars, has well argued how 'Shared values' were essential ideological tools in Singapore's nation-building efforts, to create a distance from undesirable 'Western values', as well as to draw limits to how far the state needs to be involved in social security provisions (Chua 1995). 'Asian values' discourse was also actively embraced and amplified in the West to explain the success of economic growth across East and Southeast Asia during those years, as well as to criticize the authoritarian tendencies that the discourse seemed to legitimize (Chua, 1999). As Pinches has argued, one of the most powerful cultural constructions of the so-called Asian economic miracle is the idea, that it can be explained through 'Asian Values' (Pinches 1999, 2). The Asian values discourse lost its popularity with the Asian financial crisis, yet its moralising effects had not disappeared, as was evident in my fieldwork. My interlocutors often explained themselves or others in these culturalist terms that referenced Confucian values, such as respect for hierarchy and communal values, as opposed to individual values.

The coming of the new economy, which followed the Asian Financial crisis of 1997/1998 as a new focus for Singapore's national future, needed to build upon a new subject, an entrepreneurial one (Wong and Bunnell 2006; Olds 2007), which came to be understood as *unlike* the previous set of values. Deputy Prime Minister Tony Tan described how:

"for Singapore to transit effectively to a knowledge based economy, we must infuse our society with a culture of creativity, entrepreneurship, enthusiasm for change, an appetite for risk and a tolerance of failure'." (Quoted in Coe and Kelly 2000, 418)

Discursively, this call for more entrepreneurial Singaporeans then framed the previous subject as 'not creative', 'not entrepreneurial', etc. For example, Clancey describes how in Singapore, the entrepreneurial subject seemed to be less compatible with the historical imagination than it was in Hong Kong:

"Here was a major divergence from Singapore's Anglo-Chinese sibling Hong Kong, where labour, sweat, hard work and rags-to-riches narratives would long remain operative, even in the biographies of the elite. Hong Kong could nurture and celebrate the imagery of the strong-armed and the risk-taking, the gangster and the entrepreneur, but Singaporeans would become post-industrial 'brain workers'." (Clancey 2012, 16)

Lee Kuan Yew, one of the most prominent spokespersons for Asian Values, in a 2002 lecture titled “An Entrepreneurial Culture for Singapore”, argued that entrepreneurship based on profits from technological innovation is what will make the country wealthy, and for this to happen, values had to change. He explained:

“In Singapore many of those who were most likely to succeed have been inducted into politics, the bureaucracy and the army, navy and air force. Hence, too few are in business on their own, and even fewer are entrepreneurs. However, Singaporeans can slowly change with changing circumstances. Our values and culture are not as deeply embedded because we are a young society of immigrant stock. Nevertheless, it will take time and effort to change them through education.” (Yew 2002)

Education was perceived to play a crucial role in positioning Singapore as a knowledge economy and cultivating new citizen-subjects suitable for the new economy, as already addressed in Chapters One and Two. Despite this seeming break from the past in the way relevant subjects in Singapore’s economy were reorganised, there were also continuities, and those can be understood through the notion of human capital. Despite the shift from Asian values to the new, risk-embracing entrepreneurial subject, from the perspective of the Singapore state, both have been thought of in terms of their capital and their ability to produce economic growth.

Lee Kuan Yew is also quoted as explaining that the production of entrepreneurs in Singapore is a matter of a next stage, possibly more difficult:

“Where do you produce your entrepreneurs from? Out of a top hat? There is a dearth of entrepreneurial talent. We have to start experimenting. The easy things—just getting a blank mind to take in knowledge and become trainable—we have done. Now comes the difficult part. To get literate and numerate minds to be more innovative, to be more productive, that’s not easy. It requires a mind-set change, a different set of values.” (Quoted in Thrift and Olds 2005 from Hamlin, 2002)

As argued by Chua, the technopreneur is “contributing to the shaping of a broader form of governmentality in Singapore” (Chua 2019) The clashing ideal subjectivities identified for changing modes of economic production are not experienced only in Singapore. (Allison 2009) describes a similar situation in Japan, where it is described predominantly in terms of generational conflict. Similar problems have been described

by (Ross 2003) in the United States of America. The question then is - how are these narratives used to legitimise particular interventions? In Chapters Two, Three and Four, I already addressed the various spaces for work and education that were created for the cultivation of these entrepreneurial subjectivities - such as Blk 71, The Accelerator and entrepreneurship training programs and events such as Startup Weekends.

Many of my interlocutors were beneficiaries of these educational reforms and had either arrived in Singapore because of them or participated in internship and exchange programs that were set up to ensure exposure to entrepreneurial and technology business practices elsewhere. Most notable of such programs was the Overseas College program (NOC) at the National University of Singapore (NUS) which allowed students from the NUS Business School to apply for a semester or a whole year to study and work at 'leading entrepreneurial hotspots' such as Silicon Valley, Stockholm, Beijing, Shanghai, Israel or others. I have already addressed their significant impact in Chapters One and Three. Multiple central players in the start-up scene referred to their exchange program as a formative experience that inspired them to pursue technology businesses and/or start organising activities to strengthen the start-up scene in Singapore upon their return. Also, shorter-term exchange programs for entrepreneurs were set up, such as going to San Francisco and programs that brought Silicon Valley mentors and entrepreneurs to Singapore. Just like Khailee, they had observed and absorbed the mindset modelled by entrepreneurs in these spaces, and these experiences shaped their practices upon their return.

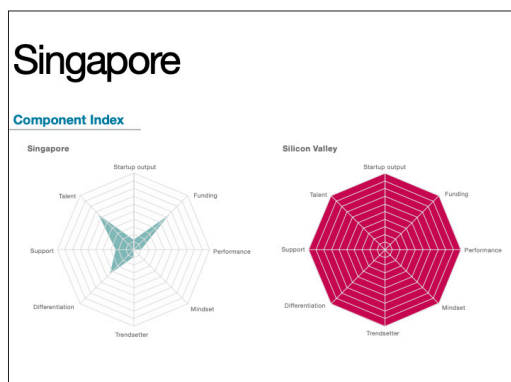
Such programs can be understood as creating such spaces for transforming the 'Asian subject' into an entrepreneurial one and implicitly positioning the 'Homo Silicon Valley' as the holder of the knowledge 'Asian' subjects need to obtain, simultaneously rendering the 'Asian' subject as lacking the *right* entrepreneurial qualities. What characterised these programs, despite their differences, is that Western entrepreneurs and investors were seen as having knowledge and know-how. They were on the stage telling 'how things should be' and how entrepreneurs should think reinforcing again a particular social hierarchy.

Contesting the notions of creativity

While the 'Asian values' discourse functioned as background to which the new subject could be compared and thereby turn 'Asianness' into a problem, another important aspect to problematise is the nature of the tropes such as 'creativity', 'risk-taking' and 'fear of failure', which relied on an idealised, rather than empirically grounded, Silicon Valley example that was hiding behind a seemingly universal depiction of what a 'true

start-up entrepreneur' should be like. Their application always rendered the oppositional 'Asian' subject incompatible and lacking.

For example, the annual Start-up Genome report I described earlier in Chapter Three, in 2012 as part of the report created what they called entrepreneurial 'mindset index' - to compare how closely people of various locations around the world resemble a "great entrepreneur", which they defined as "visionary, resilient, has a high appetite for risk, a strong work ethic and an ability to overcome the typical challenges startups face" (Startup Genome 2012, 3). Such a definition, positioned as seemingly objective and universal, was then applied to many places around the world to conclude, with no irony or reflection, that Silicon Valley fulfills this definition fully, while all the other locations in the world are failing to achieve this ideal.



An example of Singapore being compared to Silicon Valley in Startup Ecosystem Report illustrates how Silicon Valley as an ideal is constantly positioned in contrast to other 'lacking' ecosystems. In this case, Singapore is deemed to have no entrepreneurial mindset whatsoever (100).

Such reports that aligned with and simultaneously enforced these culturalist narratives had their effects, amongst which the most obvious was the legitimisation of various 'interventions' and training programs by people representing the Silicon Valley success in Singapore. They reinforced neocolonial and neo orientalist social hierarchies where the Asian subjects were seen as lacking in comparison to their Western, in this case, American counterparts.

Moreover, the lifestyle associations that come along with creativity, as postulated by Richard Florida (Florida 2002), for example, were modelled on a history of artists and hippies in Europe and the USA. I want to point out that the application of a typi-

cally Western understanding of creativity that is linked to democracy, playfulness and challenging authority is, by definition, going to exclude and render 'different' everyone who can't share that context. A good example of this is the small turmoil following an announcement by Steve Wozniak, the co-founder of Apple, who in 2011 commented in a BBC interview that in "structured societies such as Singapore ... all the creative elements seem to disappear". Wozniak's claim that Apple could not have been started in Singapore spurred a debate about whether or not Singapore is 'creative' and what accounts for it. Many agreed and added to Wozniak's analysis. For example, Willis Wee, the founder of 'Asia in Tech' start-up blog, wrote: "We're smart, but we are not the most open-minded and creative people because we've been stuck on this small island for so long" (Wee 2011a). The small size and short history of the independent nation, its educational system, fear of failure, and authoritarian government were all used as explanations as to why Singapore is 'not yet creative enough'. Again, just like in the government's approach, the transformation would be possible by 'leaving' Singapore or by incorporating foreign talent within it. This transformation also relied on a particular temporal politics - the 'Asian' subject was framed as a subject of the past, while the new, entrepreneurial one was the subject of the future. The 'Asian' subject emerged as the subject of tradition, while the entrepreneurial one as one of disruption. Another blogger commenting on Wozniak's comments wrote:

"[...] ...everything is orderly and we have obedient citizens who learn all the rules and are afraid to break them. This is great if we make our living working at assembly lines, doing routine work and the world never changes. Unfortunately, that is not the reality we are in [...]" ("Singapore: Why can't we seem to Innovate," 2011)

Here, the author argued that Singapore's authoritarian rule stifles creativity and innovation, which were seen as inherently connected to democracy. Another commentator contested who gets to define creativity yet by the end, still conceded that Singapore simply needs more time to reach it:

"Seems like anything to do with creativity is measured by the American Standard of creativity and people everywhere are so keen to lap it up, even if they are not American. My take is that Wozniak, as creative as he is, is narrow minded and fails to see the big picture: that Singapore is a young nation and is still developing its own culture and the corresponding industries which will serve to support and boost the creative sector in time to come. Compared to the 200+ years America has had (since 1776 A.D.) to develop and

come into her own – what is 50 years? So yes, of course we are boring and uncreative compared to the likes of Silicon Valley and her awesome tech and Broadway with its fantastical musicals!” (Wee 2011a)

Equating creativity and innovation with the nation-state and situating Singapore as ‘newly innovative’ this author’s challenge to the ‘American standard of creativity’ also unfortunately did “reinforce a center-periphery dynamic, with the West (or more specifically, Silicon Valley) standing as the global center of technological innovation around which these sites coalesce or move toward.” (Avle and Lindtner 2016, 2234)

There were also people who disagreed and challenged Wozniak’s authority and expertise to say anything about Singapore. Counter reactions typically called upon the need to have national pride and believe in Singapore’s potential. The most notable counter-reaction to Wozniak’s claims was a campaign called WEare.sg that was started by a few people who felt that this characterisation was unfair. They aimed to showcase the “ordinary Singaporeans who are doing extraordinary things” and challenge the stereotypical view of Singaporeans as a country of managers with little or no agency. As the founder of Weare.Sg explained, “Once we get to a hundred [profiles], we’ll send this site to Mr. Wozniak, saying: Dear Mr. Wozniak: here they are. Kthxbye.”⁶

Risk-taking and fear of failure

Fear of failure and risk-aversion often discursively emerged as the central ‘Asian’ problems, typically explained as a result of family pressure to take well-proven jobs in medicine or law, an educational system based on memorisation rather than critical thinking, social relationships that favour respect for authority and status quo, over-controlling government, and too comfortable economic climate to need to take risks. The assumption was that by fearing failure and not taking risks, entrepreneurs in Singapore were not able to challenge existing norms, innovate and introduce creative commercial solutions in comparison to Silicon Valley.

For example, in 2013 Singapore was represented by one of the leaders of Singapore’s start-up community in prestigious South By SouthWest (SXSW) conference in the United States in a discussion panel: “Asian Entrepreneurs Struggle with Fear of Failure” accompanied by representatives from South Korea and China. The introduction to

6 Kthxbye is an abbreviation of “OK! Thanks! Bye!” commonly used online to abruptly or dismissively conclude a discussion while being facetiously polite.

the event read:

"To many young Asian entrepreneurs, starting a company is an act of rebellion. It means defying the lessons of parents, teachers, and culture, who say: Be proper. Find a stable job. Don't take risks. It means - in many cases - feeling uncertainty, shame, and fear of failure. It's a struggle that will continue as these entrepreneurs gun to compete with US companies, get funding from US investors, and partner with US corporations." (https://schedule.sxsw.com/2013/events/event_IAP3940)

As later reported online at politic365.com the 'Asian' experience of failure is diametrically opposed to the one in USA:

"The basic premise was that a fear of failure in Asian culture hampers entrepreneurs and startup culture in a way that is different from Silicon Valley's "badge of honor" for failure. In that sense, people in Silicon Valley value failure because it leads to triumph, whereas in Asia the idea of failing is an aversion for many people, according to the panelists." (Calderón 2013)

One of the panelists explained to me in a conversation that they were not particularly happy with the title of the panel and instead wanted to treat it as an open question rather than a statement describing a reality. However, from the reports covering the panel, this aspect doesn't seem to have come through. For example, CNBC featured an article asking "What are Asian Entrepreneurs Afraid of?" that one of my interlocutors shared on social media. The answer the article offered was not surprising:

"Asians are scared of failing, experts told CNBC, adding that this fear of failure is the biggest obstacle in the path of Asia's entrepreneurs and the one thing that separates them from their U.S. peers." (Ranasinghe and Holliday 2013)

While all of the identified aspects can be true, and indeed, many interlocutors did have experiences that had swayed them in those ways, the aspect that I am curious about is why certain traits labelled as problematic were framed as particularly 'Asian', as something that had to do with 'tradition' and the past. If anything, stories of Seth as well as David earlier in this thesis attest that the experience of failing is painful no matter the race. Moreover, Seth's story also showed how his former experience in the

new start-up he joined was appreciated in the Philippines in ways that seem likely to be somewhat similar in the USA. It seems peculiar that I have heard similar comments about fear of failure and lack of creativity in relation to Canadian as well as German entrepreneurs, suggesting that it is certainly not a particularly 'Asian' problem. More comparative research around various locations would, I suspect, reveal discursive similarities as a result of Silicon Valley's dominant position and the temporalising strategies underlying technoorientalism I addressed in detail in Chapter One.

Moreover, one should question why the fear of failure was positioned as a problematic issue that needed to be overcome. Or, more precisely, in whose benefit was it that aspiring entrepreneurs take on risks that come with failing individually? Gina Neff has written her monograph about the dot com bubble burst in New York and has argued that the dot com bubble and frenzy in the late 1990s was fuelled by a new framing of "economic and financial risks as inevitable, necessary, and beneficial for one's career and companies, reinforcing cultural messages about the attractiveness of risk." (Neff 2012, 3) Neff also points our attention to the "symbiotic relationship between the risks that companies and their investors take and the risks borne by labor." (Neff 2012, 5) Karen Ho, in her stellar analysis of the Wall Street practices, has convincingly shown how investment banking operates under the auspices of 'managing risk' while in her view, it is more about "leveraging and spreading it out" in a way that makes sure 'others' absorb the risk (Ho 2009a, 259). Similarly, Silvia Lindtner, in her monograph on hardware start-ups in Shenzhen, argued that the stories of both the success as well as the failure are essential for finance capitalism:

"Both the story of success and the story of failure are crucial market devices of finance capitalism; while success stories produce feelings of promise and progress (and thus lure investment), stories of failure enable investors to reduce risks and legitimize the redirecting of investment to the next success story, the next promising start-up, the next "big idea." (Lindtner 2020, 136-137)

Being able to emotionally deal with the sense of risk was also a capacity that the entrepreneurs were learning in the start-up sociality. Within The Accelerator context, the mentors played a crucial role in helping the nascent entrepreneurs cultivate their 'capacity to aspire' as I described in the previous chapter when discussing the ways in which potential value was linked to embracing an extreme malleability of the product idea. Here, I want to develop that idea further by pointing out how the mentors also legitimised the insecurities of the nascent founders in a way that enforced my interlocutor's willingness to subject themselves to stressful conditions. An illustrative example

of this comes from Seth. Within The Accelerator, he had taken the engagement with the mentors as his primary task, allowing John more space for programming. He explained:

“the experience of the mentors is actually very important because they bring a lot of knowledge with them. And I think it’s... it also brings comfort and confidence to the students that somehow they can [also do this]. (...) Basically when, when the younger generation talks to the older generation, they realise that ‘we have a similar problem’. ‘Don’t worry about it. If you’re having a problem developing your business model, it happens all the time.’ I think it brings confidence to the students that they are experiencing those kinds of things. And eventually, the mentors still came out successful. He experienced that before. We’re experiencing it right now. It’s part of the deal. We have to go through it. And yeah.”

By referring to the entrepreneurs as ‘students’, he was pointing out that the older generation was ‘teaching’ the younger ones. Moreover, by approaching mentors as ‘idols’ and the senior generation teaching the founders as ‘students’ of the younger generation, he was embracing the narrative of succession at the core of the ‘ecosystem’ ideal as described in Chapter Three. Similarly, my discussion of daydreaming in the previous chapter highlighted that the mentors were teaching how entrepreneurs should imagine the world. In this example, it is visible that the teaching also here is not about the specific ‘in’ and ‘outs’ of business, but rather it is about how one should *feel* about his or her own insecurities, doubts and worries. One needs to accept the unknowns, the struggles, and the worries. Importantly, they also legitimised the struggle by suggesting that the nascent founders would ‘come out successful’.

This section on the changing Asian subject then speaks to the everyday forms of violence that the state-endorsed discourses of the necessary change for the new economy caused. This need for transformation seemed totalising as it was not only endorsed by Singapore’s nation-building efforts but also by financial capital that sought to de-risk its investments and enterprising institutions and individuals looking for opportunities by offering to facilitate this necessary transformation.

3. Transforming and Controlling One’s Body - Business Pitch

In her 1983 book “The Managed Heart: Commercialization of Human Feeling”, Arlie Russell Hochschild pointed academic attention to the degree with which emotions

and emotion management are used and expected to be used at work, calling it 'emotional labour' (Hochschild 1983). She described how airline stewardesses were trained to employ their smiles to assure and please their customers on the plane. As Mears, following a long line of other scholars, has argued: "One can't speak of either emotions or bodies in labor, because emotional labor enlists the body, just as body work requires the mind." (Mears 2011, 106) Similarly, becoming an entrepreneur meant learning to manage one's emotions and body according to certain ideas about what constitutes good entrepreneur.

I started the previous chapter by describing Melody's concerns about all the things she needed to change about herself to pursue an entrepreneurial career. Such concerns were not unique to her. The embodiment of entrepreneurial subjectivity required embracing certain flexibility on the one hand and tight control and management on the other. Body and emotions were the fields that were subjected to routine transformational work at The Accelerator programme as well as many other start-up related events.

Control over one's body

In the previous chapter, I addressed how The Accelerator mentor, Lars, required the entrepreneurs to figure out what they love doing and then focus on that. Love and passion were expected not only to be felt by entrepreneurs but also to be displayed in an appropriate way - in a way that created affect. Such a display of passion was supposed to attract and convince investors in the new business ventures. During entrepreneurial training sessions, I routinely heard comments from investors who acted as jury members advising entrepreneurs to express their energy and passion in the way they speak and move their bodies as they pitch their businesses. Comments such as "you are talking with very low energy - you've got to be excited!" were common. The audience had to be engaged with and 'kept on their toes'.

Metaphors that were used to describe the entrepreneurial journey often revolved around professional athletes who were seen as disciplined and had to be coached for victory. Entrepreneurs were introduced to running a start-up being like running a marathon to emphasise the needed resilience or a sprint to emphasise the needed intensity. Either way, both required the entrepreneurs to understand that they must 'give all' of themselves for this. Additionally, both metaphors emphasise physical transformation and mastering of one's body. For example, a coordinator of another five-week entrepreneurial training program told me at the end of this program that he noticed differences in the way people *are* when they enter the program and when they leave it. While changing mindset is one thing, he told me that he could even *see* this difference in the

photographs he took of the entrepreneurs when they graduated. He commented, “their bodies have changed”. After I asked him to tell me more about this, he explained that humans communicate not only with words but also with body language: “We communicate 70% with our body language.” According to him, after the training program, the entrepreneurs feel more confident about their business, and therefore they also carry their bodies differently - “they look in the camera, they stand straight” - all signs of conviction.

I encountered similar comments multiple times. An investor who had invested in The Accelerator and joined the program for mentorship at the beginning and end of the program also argued that he could *see* the transformation the budding entrepreneurs have experienced by how they carry their bodies. He told me that when the program started, he saw ‘those young kids who didn’t understand anything’, but now, at the end of the program, he saw how they performed. At this moment in our conversation, the elderly investor straightened his back, pushed his chest to the front and raised his chin, all to illustrate the transformation that can be visually seen through the way the entrepreneurs carried their bodies. After his short performance, he added that he thinks this transformation is comparable to those seen on TV reality shows of singing idols who learn to sing and perform for the audiences. In these accounts of visible transformation, entrepreneurs’ bodies signal one’s ability to produce capital.

Business pitch, one of the central performances through which entrepreneurs tried to impress and entice their audiences about their businesses, was also the performance where convincing mastery over emotions and body had to be displayed. In Chapter Four, I described how the pitch was central for displaying the speculative labour and focused on the contents of the pitch — how the narrative constructed a social world, past, present and future, that needed the start-up’s intervention. In this Chapter, I want to highlight how entrepreneurs needed to embody their visions and perform them through their bodies, as well as to highlight the labour that went into training one’s body for successful performance.

In what follows, I will describe some of the experiences during the training that entrepreneurs underwent at The Accelerator as they prepared for Demo Day. While the intensity of The Accelerator training is somewhat exceptional, I encountered very similar advice in almost every single context where entrepreneurs were receiving feedback on their pitches. Pitch training was central to the transformation within these various training programs. At The Accelerator, too, the first moment the entrepreneurs got together and introduced themselves, it happened through a business pitch. As mentioned in Chapter Four, The Accelerator had even hired a professional actor and storyteller who worked exclusively with entrepreneurs to prepare them for this performance. Dave, an Australian actor in his 50s who had moved to Singapore and now ran his media com-

pany, explained to the entrepreneurs that, initially, they would practice every week, but towards the end, they would practice every day. Drawing on his theatre acting and rehearsal experience, he explained that preparation is “absolutely the key” to being able to connect with the audience and present ‘with life, with passion’. Dave explained that unless entrepreneurs exercise to the point where they are able to forget about the pitch, the memorisation will interfere with being able to convey the message and truly connect with the audience.

“One has to use the body to tell the story”, argued Dave, and he gave an example of how to tell a story where lions attack their prey - a story which can be embodied by its narrator in the way the narrator moves, pauses, raises their voice and suddenly silences it. In a similar way, the entrepreneurs were expected to embody the story of their business through the use of their gestures, mimics, voice tones, and the way they moved around or stayed put in the space. Their body had to convey the drama of opportunity, the potential for change and the promise of bringing it to life. Moreover, this performance had to work within a strict time-saving regimen - capturing the audience within the first five seconds and maintaining their attention through skilled use of one’s body and storytelling was seen as central for a successful pitch delivery. If done well enough, the pitch should eventually lead to investors wanting to meet again. “Content is one thing, but it is largely the body with which you convey the message”, Dave explained.

Dave’s training included watching videos of well-known excellent public speakers such as Steve Jobs and Bill Clinton and even watching movies such as “King’s Speech” (2010) that showed how King George VI overcame stammering with the help of a speech therapist in order to fully become the leader of the nation that he needed to become. What Dave wanted the budding entrepreneurs to understand was that in all the successful performances, the ‘connection with the audience’ could be achieved only through carefully planned and orchestrated bodily performances. The fact that all the examples of ‘good speakers’ were white males and native speakers of English somehow didn’t seem to be an issue, even though most attendees were not.

“Let’s design every second of that 10-minute journey”, said the trainer to one of the entrepreneurs whose performance was deemed to be ‘uncertain, lacking eye contact and showed the audience that the entrepreneur is out of his comfort zone’, all characteristics which were seen as unwelcoming to investors and therefore also diminished the chances to attract capital. The pitch was scripted word for word, the necessary changes in the tone were discussed, and appropriate gestures were practised for the last 10 days of the program almost non-stop. I was often invited to act as an audience and support the memorisation as the entrepreneurs were practising. Approaching the Demo Day, it was a common sight to see someone standing with his eyes closed, gesturing, shifting his body and reciting their pitch again and again as a routine practice in order to

achieve the best result on the Demo Day.

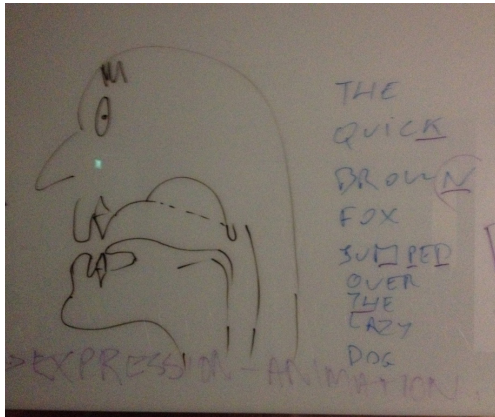
In order to do that, bodily transformation was a necessary process, where the body would learn to feel and 'be' the story of the business. That could be achieved by learning to control the body. To gain control over their body, according to Dave, the entrepreneurs first had to become more aware of it. One of the tools they used was grounding yoga exercises. Entrepreneurs would lie on the floor of the conference room in a Shavasana position, breathe, and follow Dave's guidance in connecting with themselves. Another exercise involved exercising their vocal cords and getting acquainted with the range and power of their voice - from whispering to shouting.



Part of the training at The Accelerator. Aspiring entrepreneurs practicing bodily awareness that will be the basis for embodying the business. Photograph by author.

Another important area that the entrepreneurs had to practice was pronunciation and articulation. Most of the participants spoke English as their second or third language; some had what were deemed to be 'thick accents' that needed correction. The reasoning was that you simply don't want it to be difficult to understand what you are saying - one's performance had to be friction-free to attract capital. Various exercises, such as quick repetition of phrases such as 'The quick brown fox jumps over the lazy dog', were used to practice clear pronunciation of English. Dave drew an anatomical depiction of a head with a mouth and vocal cords to explain to the entrepreneurs how the body generates sound. In situations where the teams were not of one mind about who of their team was the best performer, the organisers took the freedom to step in and direct who should be the person pitching on the Demo Day - the one who was

more assertive, more clear in their pronunciation, not necessarily the CEO or the person whose idea informed the beginning of the start-up. To attract the capital, the providence mattered only briefly.



Dave's drawing on a whiteboard explaining how bodies generate sound. "The quick brown fox jumps over the lazy dog" pangram he invited the entrepreneurs to practice for sound articulation. Photograph by author.

In these exercises of increasing self-awareness and exploring the limits of one's body, I see a similar pattern as described in the previous two chapters that discussed the commodification process of ideas and commodification of the self. In this chapter, we see that the entrepreneurial body also had to undergo a commodification process that first stressed the importance of greater self-awareness, then explored flexibility and followed it up with strict control over one's movements, emotions and gestures.

Pitching the 'Asian way'

A conversation during one evening back in 2012 when I was 6 months into my fieldwork brought out how the discourse regarding 'Asianness' related to the practice of pitching. With a group of start-up entrepreneurs and some investors, we were sitting in the Hackerspace neighbourhood, smoking shisha. All of us were in our late 20s and early 30s, all well-educated and well-travelled; some were Singaporeans, some from Europe, some from the USA, some had lived in Singapore for just a few months, and others for more than a decade. As the night progressed, we talked more and more about our lives and the experiences shaped by our work. I knew most of the people rather well, but I hadn't spoken yet to one of the guys - Dong. Amongst the start-up entrepreneurs, he was a celebrity and also a 'Hero' mentor at The Accelerator because a couple of years ago, he had sold his start-up company to a large, rather well-known American company. At the time, he represented the ultimate start-up success story in Singapore. He had started his start-up with his university friends, and they had built it up to be

a company whose value was recognised by an American tech giant. Now, he was investing in other start-ups in Singapore and was often invited to give speeches at events discussing Singapore's high-tech aspirations. He mentored new start-ups and shared his feedback as a judge at various start-up pitching events.

His parents were Indonesian Chinese who had fled Indonesia at the time of racial unrest in 1997 and moved to Hong Kong. When the sovereignty of Hong Kong was transferred to China, his parents wanted to 'secure a way out' in case that was necessary. Therefore, Dong had to study abroad. As he told it, the choice back then was between South Africa, Hawaii and Singapore. Since Singapore gave him a scholarship, his family chose Singapore. In an interview we had later (19.07.2012), he explained that he sees his path to entrepreneurship as consisting of three major steps. The first was studying engineering at NUS; the second was reading books like *The New New Thing: A Silicon Valley Story* by Michael Lewis (1999) and watching movies like "The Pirates of Silicon Valley" (1999), where he could understand 'who are the people and how do they do things'. The third step was his participation in the NOC exchange program, during which he went to Silicon Valley. He compared these three stages as first 'seeing a car, then understanding the engine' and being in Silicon Valley as 'seeing the whole garage where the car is built' and getting a sense that "yes, this actually can be done!".

That particular night, though he wanted to tell me about something else - he leaned towards me so that I could hear him well over the chatter and noise around our table:

"Ok, I will tell you a secret. I tried pitching the 'American style'. But I can't. So, I made a conscious choice to pitch in a humble way. I knew that from 10 investors, 8 will write me off, but 2 will feel that there is more at what we can, and that will stimulate the mentor and support type of attitude. See, when I try the American way, it comes out inauthentic."

Overhearing this, another start-up entrepreneur from France added that this is exactly why it is good that his own team has a North American member. 'He is a professional bullshitter,' he added, laughing. The conversation went on about the various choices Dong made in building their business, but this note on pitching his business in an 'Asian' way stuck with me. Dong identified presenting the business in a humble way by not exaggerating its potential too much, neither in words nor in the way he carried his body and used his voice as an 'Asian' way of presenting the business. What he also meant was that he presented himself not as someone who has mastered the labour of speculation and was knowledgeable and in control of everything, as would be seen as the default, aka the American entrepreneurial style, but as someone who needs men-

torship and guidance from the investors. His modesty would be carried in his body with less assertive motions and gesticulations. His comment not only distinguished 'American' and 'Asian' ways of presenting the future and distinct ways of presenting and positioning oneself but also acknowledged that the 'Asian' way of being and carrying oneself had a lower ability to attract capital. In fact, he was rather specific that the 'Asian way', despite being more authentic, would reach only 20% of the investors because eight investors would not recognise his performance as convincing enough.

On the one hand, Dong's awareness of these differences in entrepreneurial style, which would also manifest in different ways in carrying one's body, and how they are being appreciated by capital, shows great affluence and space for cultural improvisation. On multiple occasions, my Asian interlocutors described themselves as "bananas - yellow outside, white inside", meaning that even though they 'look Asian, subjectively and intellectually, they identify more with white Western culture. On the other hand, Dong's conclusion that doing it 'the American way' felt inauthentic, and the comment by the white French male, to me shows the limitations of the entrepreneurial ideal and the chances to successfully enact it by those who do not match the white American male ideal implicitly inherent in it.

Many of my interlocutors also pointed me to the fact that the evaluations 'local' start-ups receive are much lower than similar start-ups in Silicon Valley would have, and that many Singaporean investors would pay much more to include a 'Silicon Valley' start-up, just to have a 'SV' company in their portfolio rather than a Singaporean company which provides similar services. While I have not analysed the information in this way and can't approve or disprove such claims, the fact that these complaints circulated indicated to me that at the level of perception, there was a sense of being de-valued or under-appreciated as Singaporean or, as it was often put, 'Asian' founders.

In a related way, this sense of Singapore-based entrepreneurs not being skilled at appreciating and showing off their own success was also a matter of discussion between investors. For example, one afternoon at The Accelerator before the start of the program, Wei was discussing with one of The Accelerator's mentors, who was also an entrepreneur and investor, the fact that Singaporean start-ups don't announce their exits - meaning they don't share online how much money they have made. They both felt that 'people in the ecosystem' should be told and celebrate the fact that others have 'made it' and that 'people get a lot of money out of that'. Wei explained to the mentor that Oscar, at that moment, was in a meeting with the government officials to improve the story about the ecosystem because, as Wei put it:

"in the States, when somebody has a minor success, [they show it to everyone as] "look everybody, I had a baby!"."

"Oh my God, I sold it for two peanuts and a youtiao" The mentor in an exaggerated squeal of excitement added to this imaginary baby announcement emphasising that even if it isn't sold for too much (youtiao is a donut-like pastry), in the United States that would be a source of pride. To which Wei agreed saying that "Here, we need to have some of that."

The mentor continued the spiel by now switching to Singlish and pretending to be a humble Singaporean talking about a big exit in an evasive manner: "No, lah, I don't...very little, lah, 45 million dollars, lah, not like you lah,"

Wei laughed, entertained by this little show of national differences. The mentor then switched to an American accent and, in an aggressive, bragging tone, continued: "45 bucks, yeah! I will be a very successful entrepreneur and exit, hei, hei, ho...this is very important". Wei nods in agreement - "Yes, indeed, so we need to change that."

Here, the sense was that even if Asian founders are rewarded, they will not celebrate it or appreciate the value that they have generated publicly by making themselves loud and visible, perpetuating this socially enforced belief that they are not worthy.

A conversation with one of the Singapore-based investors, Vijay, who was supporting The Accelerator, also made clear the sentiment that 'Asian' founders are 'lacking something intrinsic'. Expressing his concern that he expects The Accelerator start-ups to show actual revenue rather than just growth in users, he explained that he doesn't see 'phenomenal ideas' coming from Asian founders and alluded to an 'entrepreneurial gene' that Asians seem to lack in comparison to founders in Silicon Valley or Israel:

"...if you are in Silicon Valley, you are a smart guy. You understand creative IP [intellectual property], you create it, and users want it, and therefore, you have a huge user base, and then you monetize it. But here, where is that earth-changing idea? Where is that creative IP? Where is that phenomenal idea.. which I can't stop myself from using? It's not there. So it's a mediocre idea following the same Silicon Valley process, and they will run out of money and out of business. (...) There are only two places in the world - Silicon Valley and Israel - where you see the marrying of technology and economics. Every guy in Silicon Valley understands economics, investor deck. Somehow, every Silicon Valley guy who is ...they are born with it...that gene is given to them. Because of the ecosystem, they grow up with it."

In this section, I have described how the body had to be transformed in order to attract capital and entice the investors through a carefully planned and orchestrated bodily performance. It required both an increased bodily self-awareness and control and management of every move, every pronounced word. Through the story of Dong we also learn that not all bodies were deemed equal in this process and in their ability to attract capital. 'Asianness' was seen as less compatible with entrepreneurial subjectivity and, therefore, struggled to be appreciated also in terms of capital. This highlights how start-up futurities, despite their seemingly universal accessibility, were, in fact, unable to escape the reality of particular bodies that tried to embody them. Racialised bodies found it harder to adhere to the 'white youthful American male' ideal that seems inherent to start-up futurities. The next section will discuss another important aspect, namely gender.

4. Masculinity & Entrepreneurship

Entrepreneurship as a practice and economic activity is interlaced with gender ideologies and is typically seen as a masculine activity that favours the male body. In economic theory, the entrepreneur is typically implicitly assumed to be male, or if it is a female, then she is mostly discussed through her lack of participation and, therefore, implicit incompatibility with entrepreneurship: "Masculinity constructs the definition of entrepreneurship, and male entrepreneurship is used as the benchmark for entrepreneurship as a whole." (Bruni, Gherardi and Poggio 2004, 16) Despite assumptions that the new economy is more inclusive and democratic, the prototypical successful start-up entrepreneur is a young, well-educated, English-speaking white male. The gender biases, but also age biases, were so widespread that they were barely noticed. For example, the Straits Times featured an article discussing people who work at Blk71 as the 'whiz kids', which seemed really appropriate, considering that, indeed, many of those who worked at Blk 71 were either still or freshly out of the university. Yet, it also overlooked the many entrepreneurs who were married and much older and would never be addressed as 'kids', enforcing the message that start-up life is a youthful and playful activity.

If we take the Startup Ecosystem Report to be indicative of any sort of reality, then their estimate is that in Singapore's 'start-up ecosystem', 5% of the involved are females and 95% males (Startup Genome 2012, 99). It is not clear when someone was counted as part of their data set and when not. If I were to make my own estimates, the attendance at events would be closer to 20% women to 80% male, with certain events and places

more popular for females. While I did encounter some conscious discussions about how to engage more female audiences, for the most part, 'the boy's world' was quite unselfconsciously taken as a norm. In the stories of success and failure shared in public events, the entrepreneurial persona would almost always be addressed as 'he'. A telling example is how at the Echelon 2014 conference Mohan Belani, one of the founders of e27 in his opening remarks starting the two-day conference which at the time claimed to be the largest Asia's Tech conference, argued that one of the trends they have noticed over the years is the increasing maturity of the start-up entrepreneurs who are "growing literary from boys to men" ("Echelon 2014 Opening Remarks: Mohan Belani, CEO and Co-Founder, e27," n.d.). Wearing scruffy sneakers and a jacket over a t-shirt, Mohan himself, a Singaporean male in his early 30s, definitely signified this transforming figure from a boy to a man.

Unproblematic masculinity and the problem of 'women in tech'

In much of the literature, especially scholarship stemming from economics and management, concerning entrepreneurship, gender is an issue framed mainly as 'the problem of women' or 'how to increase women's participation in entrepreneurship', arguing that entrepreneurship and femininity are somehow incompatible and the women studied are compared as outliers. While I will turn to this issue later, now I want to attend to the flip side of such an assumption, which is rarely interrogated - that masculinity and entrepreneurship are compatible in frictionless ways. While quite a few scholars criticise the implicit definition of entrepreneurship as almost effortlessly compatible with masculinity (Bruni, Gherardi and Poggio 2004), it is rare to see the interrogation of the ways in which males are struggling to perform their masculinity for entrepreneurial success appropriately. Yes, it is true that most technology entrepreneurship spaces were geared towards males and celebrated values and characteristics typically assumed to be masculine, but by zooming in closer to the actual contexts and understanding that gender and race intersect in crucial ways that can rarely be disentangled, will allow us to explore the tensions that pervade the crafting of the entrepreneurial subjectivity and embodying it that is always unavoidably gendered. Again, we will see the varied ways in which racial and gender ideologies play out, shaping the possibilities for my interlocutors to capitalise on their bodies and selves. While 'women in technology entrepreneurship' has been a hot topic in international media, 'men in technology' is so much taken for granted that it is perceived as a non-issue.

Paying attention to how masculinity features in the discussions and performances of the entrepreneurial project can problematise this assumed conflation between entrepreneurship and masculinity not by pointing towards the lack of gender diversity, but by showing the particular gender specific challenges that are typically faced by men and women. To open up the discussion about major ways in which entrepreneurship didn't align with the dominant ideology regarding masculinity, I'll start by re-telling one of my interlocutors' complaints about how hard it is to be a Chinese guy in Singapore.

One evening in 2013, Elijah, a Chinese Singaporean in his early 30s, told me, "There is nothing worse than to be a Chinese man in Singapore". We were sitting on a bench outside a massive shopping mall, snacking on finger foods, and had just amused ourselves by discussing the worst ethnic and national stereotypes one can be subjected to. Elijah was an active member of the start-up community and was always involved in one or multiple start-ups. I found Elijah's emphasis on the combination of his ethnicity and gender interesting and asked Elijah to explain to me what he meant. I was especially intrigued because Chinese men compose the majority of Singapore's political and economic elite, and hearing someone argue that being a Chinese male in Singapore is 'the worst' possible option was therefore peculiar.

According to Elijah, being a Singaporean Chinese man is the worst thing for multiple reasons. One of his first concerns was that Singaporean girls prefer Caucasian partners, but Malay and Indian girls are more likely to choose partners within their own ethnic groups. This, according to Elijah, places Chinese males at a disadvantage when it comes to chances of finding a partner. This inequality is further exacerbated by the compulsory two-year military service that all male citizens and permanent residents above the age of 18 in Singapore are subjected to. According to Elijah, even if doing military service is rhetorically positioned as an honourable duty, in the everyday experience, family members and female partners do not show recognition that it also means taking more time to establish oneself financially. To illustrate this, he caricatured a typical situation at home where a mother and sister are watching TV news coverage about a successful Malay entrepreneur and then scorn that their son and brother has not yet achieved anything. On the one hand, military service meant a delay in establishing oneself financially in a context where being 'the breadwinner' was ideologically positioned as the core of Singaporean masculinity. On the other hand, Elijah also felt that telling his family members how hard it is to combine military service with his start-up aspirations could potentially be seen as not masculine, as not fulfilling his duty. Interestingly, Israel, a country with also a mandatory military service, was often used as a comparison

for Singapore to aspire, arguing that Israel's military culture was actually encouraging traits necessary for start-up entrepreneurship (see, for example, Yap 2013).

Elijah felt that as a Chinese man, he had to play a game with unfair rules because of the asymmetry between the expectations put forward by family and the state, and the position in the hierarchy where "ang-mohs dominate". Ang-moh was a term often used unofficially to refer to white people in Singapore. It originates from Hokkien and literally means 'red hair(ed)'. Following Hudson's analysis of gender representations in Singapore, Elijah's concerns about women who don't prefer to date Chinese men and mothers and sisters who are not appreciative of male contribution to the family could also be read as a result of the more "general climate of anxiety about loss of narrative control" over the gender representations, where the emancipated 'new Singapore woman' refuses and challenges to reproduce the masculine nation (Hudson 2013, 164). Yet, it also indicates that the supposed alignment between entrepreneurship and masculinity is not as even as commonly discussed.

This sense of vulnerability was exacerbated because by doing a start-up, Elijah's ability to conform to expectations became even harder. This had much to do with his cramped and irregular income, which limited his ability to lead a lifestyle that a middle-class, university-educated person of his age is expected to lead - to take out his girlfriend to restaurants and shopping, to entertain his friends, and ultimately to purchase an apartment and car. Nirmala PuruShotam has argued how being middle class in Singapore means continuous work towards improving life, where "the production of upward mobility is understood and judged in terms of the consumption of 'better' goods, services and ideas than 'before'." (Puru Shotam 1998). Another male interlocutor answered when asked how his start-up journey influences his relationships with his female partner: 'Oh, we're fine, as long as I can take her out shopping in the weekends, she is good [with me doing the start-up]'. According to Elijah, while he could argue with his family about his career choice, his girlfriend's parents were even more sceptical. In his case, he thought they would have recommended their daughter not to go out with him unless they were wealthy themselves.

My interlocutors often lamented that in Singapore, success is measured by having the 5Cs - Condominium, Credit Card, Car, Country Club membership and Cash. Daniel Goh has described how the 5Cs make up the 'Singapore dream' (as distinct from the American dream) (Goh 2010, 25) For example, Chua and Ean describe how in Singapore, "A car is a high-status positional good which can be afforded only by those in the middle class or higher, making it the premier cultural icon of the middle class in Singapore." (Chua and Ean 1999, 141). Moreover, they have described the high rates of inter-generational upward social mobility in Singapore where children have higher education and better pay than their parents. It is important to recognise that parents

also expect their children to do better. Yet, start-up entrepreneurship did not promise a clear path to financial success. Even 'worse' - as discussed earlier in the chapters - discursively, it was 'not about money' or becoming rich. Neither does entrepreneurship hold the prestige that working for a well-known global brand would hold. Therefore, it is fair to say that embracing the entrepreneurial path meant breaking with middle-class expectations.

Breadwinner and family life

Entrepreneurship, according to my interlocutors, often clashed with their ability to confirm their gender roles. This clash was particularly pronounced in the area of familial relationships. A large majority of the people involved were without their own families, or if married, then without children. Many of them also had additional income that they could spend on travelling and living rather mobile lives. As mentioned in the previous chapter, many younger interlocutors reasoned that 'trying out' entrepreneurship right after university was the best time to experiment before they got married and had a family to take care of. Such reasoning incorporated a typically gendered imagination of a life trajectory, where entrepreneurship didn't necessarily seem to sit as comfortably with masculinity as commonly assumed in literature.

One of my interlocutors, who was in his 40s and, in contrast to many others, had children, admitted, 'this start-up life is for single, young guys'. He was referring to how he found that the family man's lifestyle did not match the kind of lifestyle start-up entrepreneurs are expected to lead - working nights and very long, unpredictable hours, attending networking sessions in the evenings, and sleeping in late. He had to wake up early to drop his kids at school, work during the days and in the evenings pick his children up and spend time with them, bringing them to extracurricular activities. A lifestyle that is more in line with the 9 to 5 work routine rather than the hectic and intense start-up work where hours in the office blur together with conversations over food and drinks. After struggling for a while, he decided to find a 'regular job' both to match his and his children's schedules, but more importantly, also to be able to 'provide regular income for his family'. He maintained his connections to the start-up world through his friends who were hanging out at Hackerspace.

When it comes to parents, the lifestyles and relationships of foreigners and Singaporeans were dramatically different. In Singapore, where housing availability is closely tied to the establishment of a heteronormative family (PuruShotam 1998; Oswin 2010), many of my Singaporean interlocutors were living with their parents. Some were living with their parents rather than spouses as they were in the queue for when their apart-

ment would be built. Interlocutors who had travelled to Singapore were predominantly living together with people from work or renting out rooms and maintaining their relationships with families through the convenience of smartphones.

Especially those who had travelled to Singapore and had to give up the comforts of their families suddenly found themselves in charge of their own laundry, food and shopping, which was a new situation to many of the entrepreneurs who had been raised in families where their mothers or maids would take care of such matters. An email from one of my interlocutors shows how entrepreneurship can break with a typical gendered task division in a household. I asked Ben to tell me how his everyday life has changed after he finished taking part in the very intense 100-day start-up accelerator program. After detailing his work-related experiences, in the last paragraph of the email, he also came to discuss his life at home:

"So back to day to day life, another big difference is that I'm actually home in the evening now. Before, I'd usually get back home around 9 or 10 at night. My girlfriend has a normal job, so she usually gets home from work at around 7ish. That worked out fine, but these days we've got a sort of 'stay at home Dad' type of feeling going on, where when she gets back home I'm already at home. And since I'm home a lot, I may as well do the washing etc. etc. That's a weird feeling--maybe there's something to be looked into in start-up/self-employment and it's effects on gender roles? No big difference in day to day life, but it definitely feels different."

In the email, Ben indicated that the generated task division that used to work 'fine' had shifted the moment he started to work from home while his partner went off to work.

Many struggled with managing the distance and closeness to far-away families since family seemed to be both a source of support as well as of pressure. The following conversation with one of my interlocutors from the Philippines who moved to Singapore to pursue his start-up was telling of the complex ways in which entrepreneurship clashed with and fuelled his aspirations to adhere to gender roles.

J: as much as possible, I just want to separate the family thing from here...I mean, I came in here...it shouldn't be...basically, the personal thing shouldn't bother this thing [start-up].

Z: are they?

J: I kind of regret...so basically I bring in the paper [money] at the family, so I'm worried that I'm not earning anything right

now...but it's like this...I mean, I came in here with all the thinking that I will have this risk and will have to explain to them why am I doing this.... It's because of them also...I mean, I came in here with an idea; hopefully, I would have an itch to scratch. But at the same time, I wanted to scratch the itch with some benefits, hopefully for my family, too...I mean, I don't care whatever happens to me as long as they are ok...well...I don't need to get rich-rich...I just want to support my family.

Z: are you in contact [with your family now]?

J: always, actually. Actually, I just want to do it like once a week, because if I do it like more often, [I'm] starting to like break down...this is my first time abroad, and I haven't been away from them like forever...like...so, especially when they talk about my dog - he's always waiting on my door....

The distance from the family was also experienced as a painful loss and an important resource that allowed them to deal with the failure and risk that the entrepreneurs were expected to embrace. Seth, John's partner, for example, explained it in this way:

"So when I think... It's easier to fall here in the Philippines, but there are a lot of people who get you up on your knees. But when you're in Singapore, you feel alienated. Not so much because people there don't care, actually. A lot of people are kind in Singapore, but [it's] extremely different when you're talking about longtime friends and longtime family members for the longest time. Sometimes, you don't even have to ask them, and they'll be there for you. And I think that's, that's a huge difference between what Singapore was rather what the Philippines is."

Yet, overall, family and the need for it were not necessarily addressed as something to reminisce about or long for. Interestingly, for example, an archive search on the history of Blk 71 reveals that at the time of it being a manufacturing industrial estate, it had children's day-care centres to take care of the babies while mothers were working. In my experience over the years, I saw just one toddler at one of the events during evening hours. In start-up-related conversations, typically, family was featured in a positive way only when it was a resource to draw upon - in terms of networks, introductions, places to stay or, importantly, experiences that shaped some insights and could be commodified. For example, how an entrepreneur's father's illness inspired him to build a service that takes care of your parents who live far away from health checkups. Another team in The Accelerator was developing an online service designed to help parents stay

connected to their child's life moments—events often missed due to demanding work schedules and long work hours. Such a situation was acutely familiar not only for the entrepreneur leading the project but also for investors who seemed to share similar experiences.

Another team in The Accelerator was working on an online service that would help parents to maintain a connection with their child's life moments, which were introduced as missed because parents are working too much - a situation familiar to the particular entrepreneur as well as investors.

Military service

I would like to turn to Elijah's complaint about military service, which he experienced in relation to his entrepreneurial journey as time on hold, paused when the world kept moving, and him not being able to act on his (professional) life. In Singapore, men who are citizens and permanent residents aged 18 and above must do a mandatory two-year national service (NS) plus serve an additional week every year. That week is considered paid leave. A lot of the discussions in the entrepreneurial circles posited military service as a hindrance to the entrepreneurial career because it either interrupted the entrepreneurial journey that one had started or delayed it and added extra pressure for males to succeed financially after their return from NS, thus leaving less space for 'exploration' of an entrepreneurial career. Additionally, military service is seen as yet another instance where Singaporeans are encouraged to mindlessly follow orders and rules instead of following their interests and passions. For example, the article "Want a top-notch start-up sector? Reform the Singapore Armed Forces" at SGentrepreneurs argues that in comparison with Israel, Singapore's military service does not encourage risk-taking, competition and creativity.

Concerns about how military service will affect one's ability to continue a start-up were in the minds of many of my interlocutors and on the agenda in entrepreneurial forums. For example, an Open Forum discussion of how to cope with entrepreneurship during the national service and whether that can be done at all, an aspiring entrepreneur shared his experience that:

"A lot people I know in my social circle are really do [sic] keen to start something but due to national service, they pushed their plans 2 years back. I personally feel it is very wasted. As this 2 years could possibly boom a company and make a company profitable."

Someone who was writing drew upon the experience of their younger brother who was also his co-founder and explained that:

"He was unable to help much in the business when he entered NS a year ago. He still has 1 year more. Initially before he got his vocation (do you call it vocation?), he's always in [...] and can never use computer much except for NS stuff. [...] he also rarely has time for the business. The only time he tries to help out is during weekends when he gets to come home. But even then its really tough as he does need to juggle business, rest more, getting back to friends etc. I think his vocation is too heavy. So despite his workaholic nature, facts are facts. We just have to be realistic on the level of commitment between NS & business requirements."

Another member joined the discussion, explaining that he managed to start his current start-up while at the NS:

"I actually just went through this myself. completed 2 years of army myself and managed to start my company ([the name of the company]) over the 2 years. Almost got into some troubles with the military moonlighting laws but the risks and sacrifice were totally worth it :) Also if you have a team things become exponentially easier since you can be there to support each other"

One of my interlocutors recalled how his earlier business failed once he went off to do the National military service and left the day-to-day activities of the business to be maintained by his parents. That turned out to be too demanding for his parents, and being unable to attend to it himself, he was forced to close down his start-up. On the other hand, many of my interlocutors also agreed and often recounted how the military has been a unique experience of networking and getting to know the various facets of Singaporean society and life. Even more so, many of my interlocutors had actually gained their technical training and chance for experimentation with computers and programming *exactly* during their military service. The connections established during the service were long-lasting for many and played a role in their future. Similarly, Lowe has argued that military service contributes to

"cultural capital that allows Singaporean males to construct masculinity and assert a male identity in various social settings whilst gaining access to elite networks of power." (Lowe 2019, 687)

To summarise, despite the seemingly unproblematic affinity between masculinity and entrepreneurship, many of my interlocutor's experiences attest to the complex ways in which being an entrepreneur clashed with their gender roles. This invites us to pay more attention to entrepreneurial subjectivity and identity in intersectional terms, recognising that not all bodies are seen as equal in their ability to attract capital.

5. Femininity: Professionalism Before Gender

In Singapore, whenever a question about 'gender' was raised during my fieldwork in start-up spaces and various meetups, it was usually in the context of the 'lack of women in the technology space'. It also immediately involved a sense of unease amongst the people who discussed it. The attitudes ranged from an exhausting despair of not knowing how to 'make it better' to a downright rejection of any 'problem'. This was reflecting what Kelan has termed "gender fatigue" - a situation in which "they [in her study ICT workers in Canada] are tired of seeing gender discrimination and prefer to see a world that is gender egalitarian, where gender no longer matters" (Kelan 2009, 198).

"I'm not a woman in tech"

Coinciding with my first extended fieldwork period in 2012, two women-specific groups were started - Geek Girls and Girls in Tech, both aimed at providing 'space' for women to share, learn and discuss matters about technology and business. Despite the existence of such initiatives, I was continuously struck by how insistent my female interlocutors were on *not* being 'framed as women'. For example, Rhia, who was a well-known female start-up entrepreneur, was invited to speak on International Women's Day in a large international technology company. Feeling unsure about what exactly to talk about, she turned to her Facebook friends and asked for advice:

"Speaking at a [name of the company] event this Tuesday for International Women's Day but I have no idea what to talk about. Suggestions? Some facts: First, I'm a human. Secondly, there are many other nouns I would use to describe myself before including "woman". Even though it's International Women's Day, and it's all about highlighting women in the tech sphere, women-focused topics need not come to the fore. I don't really like such topics either; it is really a noun I don't think much of, and [it] doesn't drive much of

what I do. (...) Perhaps, despite all, why I still chose and accepted to speak at this women-focused event (and a handful of others, including another upcoming one next month). Cuz different variables matter differently to different people, and I'm highly aware that "being a woman" matters more to some. For whom that's true, and to whom I may be able to share parts of the learnings of my life that they may learn from, why not? Effectively finding a commonality to this "they" - which consist predominantly of women - and connect by way of that."

Reducing one's gender to a 'noun', a 'variable' that does not define one's actions, and actively speaking against being labelled as a 'woman in tech' was outspokenly done by also another female participant when she was included in a list of "Singapore's Influential Women in Tech'. She asked to be taken out of that list and explained her position in a blog post:

"Some weeks ago my picture was included in a FB photo album on women in tech. I was very, very uncomfortable with that idea and had it's owner to take my picture down.

Recently the topic of women in tech came up again, so I wanted to address this - *I'm not a woman in tech*.

I've played that "women in tech" card before, getting into press and taking advantage of the affirmative action made available to me simply because my biological sex makes me a minority in the community. I mean, the benefits are out there and I didn't want to short-change myself by not grabbing it.

But I've since grown to hate it - I know I'm more than the makeup of my chromosome. *I want to be recognised, to be respected for my work, for the results I bring, and for the impact I've made in people's lives... not for my boobs (ok, figurative, not literal boobs).* *So don't call me a woman in tech.*" [Emphasis in original]

She explained that she had "played that women in tech card", but now she didn't want to. Why resist the commodification of one's gendered identity in the pursuit of entrepreneurship when other aspects of identity (e.g. fatherhood, being a child, parent, someone who cares about travelling, etc., as described before) were routinely commodified and presented to attract capital? My analysis suggests that being seen and labelled as a 'woman' seemed to be too much of a threat to their ability to perform themselves as an entrepreneur, even to try to commodify it. Ghosh's ethnographic account of female entrepreneurs in India in 2017 similarly describes how women entrepreneurs often

found themselves fulfilling the task of 'gender representation' in start-up pitch competitions without their work being seriously considered for investment (Ghosh 2022).

An interlocutor I met in 2013 felt that her work as an entrepreneur was not being recognised because she focused on addressing a problem that was experienced and viewed as a superficial female issue. Celeste began a start-up that focused on helping users discover fashion brands and new styles, focusing on Singapore's young fashion-focused female market. She had some users sign up, yet in pitching sessions, she found it very hard to communicate the opportunity and relevance of her idea to the all-male investors. In training, the need to make the investors 'feel the pain' that the start-up is addressing and solving was emphasised. Yet, it made Celeste wonder how she could convey that her start-up addresses 'a real' opportunity rather than a 'frivolous female issue'. In the pitch event where we met (21.02.2013), she was the only female founder presenting her business. Also, the audience of investors was male, with one exception. It seemed that her attempts to communicate the struggle many women have in deciding what to wear daily didn't resonate with them. Celeste felt that the investors were unable to appreciate the opportunity she knew was there simply because the concerns that she was addressing didn't relate to their life worlds. Recognising that investor perceptions and understandings of social worlds, in combination with how they value the performance of entrepreneurial style, shape their investment decisions, it is not surprising that women-led start-ups would find it harder to attract funding. As yet another male investor explained to me in a lengthy conversation about the power dynamics in board discussions after the start-up has received the investment - the best thing for him, as an investor, is to be working with *great people*, "the ones who are taking your advice, with whom you share the vision and thinking about things." (Kartik, 20.03.2014) and while such formulation might sound neutral and meritocratic, the chances that a 20-year-old female is going to be viewed by a 40 or 50-year-old man as someone he shares vision and thinking with, are in fact rather low.

Additionally, in Chapter Three, in describing the hierarchies of the start-up ecosystem, I attended already how networking and partying with 'those in the club' into the night were common features. I was told that a lot of 'relationship building' between the male entrepreneurs and investors was also happening at places such as strip clubs, for many women partaking in these activities would risk being misread as 'not professional' and interpreted in sexual terms. Thus, paradoxically, in order to access the networks, they would have to render themselves unprofessional and disqualify themselves. Ghosh, who unlike me encountered almost an equal distribution of male and female founders, describes how the female entrepreneurs struggled to be recognised as such:

"The gendered divide in investment was therefore not due to a lack

of women entrepreneurs but a small minority of women venture capitalists and investors. Investors are almost always men and most find it difficult to strike up the kind of informal relationships that they do with male entrepreneurs. Masculinity therefore does not necessarily translate to only to innovativeness in the start-up field. Rather, it translates to an ease of doing business. Investors know how to read, assess, develop relationships with male entrepreneurs. They know the cues to look for, the questions to ask and the networks to ply." (Ghosh 2020, 76)

Many women felt they had to actively resist sexist stereotyping, which also could hide behind naturalised interpretations of how femininity could be rendered compatible with entrepreneurship (thus, in fact, first assuming it is not compatible) - for example - 'because women are caring, they do a good job at managing employees', or because 'women are nonconfrontational', they are better at conflict resolution and strategy, etc. A good example comes from Melody, who sent me a furious e-mail describing how such gendered stereotyping happens in mundane contexts. In the e-mail, she described how during a lunch meeting, her male boss had interpreted her quick reactions to an accident in terms of her potential motherhood rather than recognising her as a professional. Email titled "Stereotypes" sent to me April 18, 2012:

"Ugh.... For your anthropological databank:

Today when I grabbed a napkin after someone spilled something on him during a daily meeting [he said] "you're going to be such a good mom! Now all you need is for us to find you a man who can give you that."

I brushed it off bc I was focused on work...but omg. Someone is competent and knowledgeable in anticipating needs and comes prepared- if I was a guy, Would I be told aww how great, you'll be a great dad! And aww, let's get you a baby making machine (..)

Actually if I was a guy I'd probably be told: Wow you would be a great biz guy for a start-up bc you can get shit done! WTF"

Melody felt that her quick thinking and acting, her anticipatory skills, all of which would suit entrepreneurial traits, were not recognised; instead, her qualities were tied to a gendered future role that she was without a question assigned to. Moreover, her male boss further removed her agency in that matter by suggesting that it was his responsibility to find her a partner so that she could fulfill her role as a mother. Being female, she was not recognised as an 'entrepreneurial' subject in that sense. In a similar way, Wang and Keane in their study of female start-up entrepreneurs in China have

argued that

“besides the difficulty to sustain a creative-based entrepreneurial identity, the hyper-competitive and masculinist fields of digital entrepreneurship and technical fields, combined with traditional gender roles and family responsibility, results in a devaluation of female entrepreneurship.” (Wang and Keane 2020, 407)

Resistance to gender-specific allotments became apparent in an interview with another female entrepreneur. A journalist reported:

“In a sea full of male technopreneurs, Krystal is akin to a mermaid. However, this constant ‘mythical-creature-like’ portrayal seems to be a *bête noire* for her.

“I’m constantly being asked on what it is like to be a woman in the male-dominated tech industry and I’ve difficulty answering that,” Krystal confesses, her voice slipping into a slightly vexed tone.

“I see myself as an individual and my traits are not gender-specific. I don’t think I bring any ‘feminine’ traits to the industry.” (Yap 2015)

Here, Krystal, similar to many other women in technology, denied having any specific feminine qualities; she emphasises her humanness above all. The article itself, though, goes to great lengths to comment on Krystal’s looks, emphasising her ‘beauty’, ‘vulnerability’ and ‘hourglass figure’:

“Her vulnerability doesn’t go unnoticed; underneath her auburn tresses, sultry gaze and impressive hourglass figure. Going by Krystal’s appearance, it is easy to make assumptions: cue the side-eye glances and snide undertones. However, as a CEO of a start-up called Wander, Krystal seems free of artifice – zipping around her office on a scooter in a white bodycon dress and red puma high-top sneakers. Her positivity is infectious as she introduces her team and makes light-hearted comments on how she cannot sit still. (..) She’s a triple threat with beauty, brains and personality.” (Yap 2015)

I do not recall any article discussing male entrepreneurs that would go to such great lengths to describe the figure, the hair, the eyes and handsomeness of male entrepreneurs. Also, Alice Marwick, describing sexism in Silicon Valley, remarks how the

media's depictions of female entrepreneurs pay an inordinate amount of attention to looks and "base a woman's worth of her looks rather than accomplishments, lessening women's contributions to the scene and positioning them as objects rather than actors." (Marwick 2013, 266)

In their content analysis of the portrayal of female entrepreneurs in the two leading newspapers in Singapore - The Straits Times and The Business Times starting 1987 till 2020, the researchers Ling Han, Chengpang Lee and Gracia Jieyi Lee note that while the emphasis on women entrepreneurs as also being caring mothers and dutiful wives seems to loose its strong grip starting 2000s, nevertheless "it is still implied that marriage and motherhood are the preferential life goal for women." (Ling, Lee and Lee 2021, 54) They note an increase in the depiction of women entrepreneurs starting around 2010, but then as 'mumpreneurs', where the flexibility of entrepreneurship to combine it with motherhood allows to have both professional and emotional fulfilment. Strikingly, they also observe that unless women entrepreneurs can be embraced simultaneously as mothers, their gender is not mentioned, arguing that

"This obscuring of young female entrepreneurs by de-linking them from their gender in the news media further reinforces the dominant image of the female entrepreneur as one that embraces her gender role as a mother." (Ling, Lee and Lee 2021, 54)

Unfortunately, in paradoxical ways, this denial often also meant an insistence of start-up space as a 'gender-neutral' space that was both reinforced as well as reinforced the belief in meritocracy. This was very evident in my conversation with Ananya, a very well-known community member, after I asked her opinion on the fact that there are not many girls in the tech community. She seemed somewhat upset about me enquiring on this and went on a long speech:

"Oh boy! You are going to record this, right? Ok, I think I will just say it straight away. I am kind of anti-everything-girls-in-technology-kind-of-thing. This is my take in it. I believe in once again that mankind and humanity are at a stage where, where let's say, a significant percentage of women can say in their life that "I've never been sexually harassed," "I've never been made to feel that I am a girl and hence I am supposed to do that". I know the percentage is small, but maybe 20% or 30% of the world can say this because of all the women in the past century who did that for us. The bra burning and whatever. Significant percentage of human[kind]. And I believe that I am part of that percentage of women that has

never been sexually harassed, never molested, my husband never made me feel so, my father never made me feel so, and I have been given the chance to have the best education in my life to go to an engineering school. (...) I may be the only girl in the world but I believe that because of the women, what they did in the past century, I am one of the fortunate ones not to feel so at all. (...) And when I see women in tech group in situations that girls like me have been brought up I kind of think that there is a better use for it.

Secondly, the tech groups that I go to - they are free and open. If the women really wanted to learn programming, they jolly well go and find these groups.

And thirdly. If you want to be the best painter or singer in the world - don't look for your own race, don't look for your own gender, don't look for your own family, look for the best ones. That's how you will learn. And I don't know. Yeah, I mean, I am working with men in so, in my life, and I have never found the need to create this [division based on gender]. And all I can ever say is that if you are a girl, yes, come and ask me how you do it, but look at all these groups and attend these meetings instead of creating these groups which are for women-only. Go and talk to groups which are the best in what you are doing." (Ananya, 12.07.15)

It felt like Ananya had given this a lot of thought, as she spoke to me without needing a moment to think. Paradoxically, even though she recognised that her privileged position was a result of the political actions of other women in the past, she refused to describe her experiences in the technology community as political or to acknowledge any need for any collective organisation based on gender. Ananya embraced the meritocratic ideal as a description of reality by claiming that the spaces she used, as she saw them, were open to all, and one should learn from the best rather than associate based on gender. This corresponded to the two strategies Kelan has identified women in Canadian ICT use to navigate the ideological dilemma of "constructing the workplace as gender neutral and acknowledging gender discrimination", namely, constructing gender discrimination as happening in the past (not anymore) and as an individual problem, that can be overcome with appropriate behaviour rather than a structural issue (Kelan 2009). Similarly, PuruShotam's analysis of the middle class and gender in Singapore also depicts very well how the sense of increased choices for middle-class women also goes together with a sense of gender equality:

"There is little sense of gender-based discontent within the dominant texts of middle-class modernity. The perception is that women

have advanced and will continue to do so. Equality has happened and will continue to happen.” (PuruShotam 1998, 142)

Also, Hudson, in her analysis of gender representations in Singapore, has argued that the male anxiety over the ‘new Singapore woman’ has to do with the perception that emancipation has happened (Hudson 2013). This resonates with Ananya’s argument that one shouldn’t focus on women-specific events in technology, as well as Rhia’s outcry to her Facebook friends when she was asked to share her experiences on International Women’s Day. In addition, this emphasis on ‘gender neutral’ spaces was reinforced by the belief in meritocracy that my interlocutor was also expressing by saying that one should ‘just learn from the best’. Alice Marwick notes a similar pattern in Silicon Valley:

“Although even successful women in the scene will say they do not want to be a “woman in tech” but just a woman “in tech,” their gender affects how people perceive their accomplishments. While the technology industry is supposedly egalitarian and democratic, it privileges the voices and experiences of men.” (Marwick 2013, 270)

She also argues that this belief in meritocracy undermines meaningful attempts to address gender inequality “because it implies—incorrectly—that those who do not rise to the top are less capable than those who do.” (Marwick 2013, 272). In this context, where women had a harder time being recognised as entrepreneurial, and the value of the speculative labour they were investing was devalued, insisting that they are not being viewed as ‘women in tech’ made sense.

Strategies of managing femininity

Despite these assertions that start-up entrepreneurship has nothing to do with gender, throughout my fieldwork, I encountered many strategies that were adopted by females to manage their everyday lives. Commonly, these strategies involved close monitoring of one’s own behaviour and looks, and they stemmed from a recognition that the female body is an intruder in this masculine space and will naturally be understood as a sexual object.

An interlocutor, for example, though disagreeing with sexism in the industry earlier in our interview, later continued to explain to me that especially newcomers have to be very clear that ‘they are not here to search for a husband, because otherwise, it

will be only natural that guys will test her and approach'. Referring to her conversation with one girl who recently had become part of a specific circle of entrepreneurs, she explained:

R: "And I was like, you know what - you gonna be inundated with people going after you, because, just because in such an environment whereby, whatever, you know...in a seventy to thirty or even eighty to twenty percent [male to female ratio], you are gonna be seen as a 'potential', but ahm... (..) it depends on how you adjust your own behaviour."

Z: but then it depends on your own behaviour?

R: Ya! Exactly, right? So... and the behaviour part - like what we talked about the last time - who you are seen with, how even just casual interactions [can be misinterpreted]... how.. yeah ... does that answer your question?"

She explained that because she herself has been around here for long enough and has monitored how her acts are seen publicly,

"People have established from my behaviour, that, hopefully, you know, I am not a sexual object, so it helps."

While agreeing that women are being firstly seen as sexual objects in the male-dominated environment, she also attributed the ability to change this perception over time to the women themselves. For that, they had to be cautious about the kind of signals they send out. Thus, by strategic and careful management of what they wear, where they go and with whom, they could gradually convince people that they are 'professional'. "Even casual interactions", she noted, are always up for at least internal scrutiny of "what kind of impression they might give" and how that could potentially threaten her image as 'professional'. This corresponds with what Nadesan and Trethewey have argued, that especially for women, "negotiating and performing a 'professional' identity is a process requiring much time, energy, and self-surveillance" (Nadesan and Trethewey 2009, 223).

As a researcher 'hanging out' with the start-up entrepreneurs and investors, I encountered a fair share of sexist advances, including friendly yet unwelcome touches and comments that I felt the need to jokingly brush off, all while knowing that they were inappropriate. For example, on one occasion, I was told that the possibility of interviewing some people working for a gaming start-up was a gift that their male boss gifted to them because the boss knew that the male employees would enjoy being

interviewed by a 'cute' woman. I was also asked why I was spending time in the evenings with some male interlocutors, implying that there must be 'more' to it. Also, Rhia, a well-established female founder, recognised some of my experiences. After I told her about an investor hugging me in a way that made me feel uncomfortable, she acknowledged that such situations happen and comforted me saying "I know what you mean, and sometimes you know, it feels fairly friendly, you know, but sometimes not ...". Just like my interlocutors I too thought carefully about what I wore and how much of my skin was exposed.

For example, another female working in a start-up training program in anticipation of the new run of the program starting and the incoming group of mostly men told me that she would dress 'very ugly' from now on. I asked why, and she said that she would do so because she doesn't want guys to ask her out because she feels bad about saying no to people (19.01.2012). Note that she was already anticipating that this is how she will be viewed.

Another female interlocutor, who however took a lot of pride in her looks by dressing very feminine, told in an interview that if you are a female in the technology industry and you look good, and you take care of how you look and what you wear, people assume that you are not smart or 'that you are trying to get something based on your appearance'. She went on:

"I always preach to all the girls at Girls in Tech - Don't lose your femininity! Like, you can have, you can be in tech, and you can be, you can dress up and wear make-up and be feminine and, but also to, like, play sports, you know, you shouldn't limit yourself based on stereotypes and based on what other people think. And I have never let myself in that trap, but many other women do. Because they are afraid that, one, they won't be thought of as smart, two, they will be sexually harassed, and three, competition from other women at workplace. I don't care about any of that. I mean, you shouldn't care about any of that."

It was clear that Gabriela spoke from a very privileged position in which she could afford 'not to care' about not being respected. Yet the fact that she recognised that because of her looks, she also has a harder time being viewed as a professional is important. Before I had met her, I had already people - men and women - discussing whether she was a 'tai tai': a woman married for her looks by a rich husband, or was she really 'someone'.

Another example of how work and lifestyle intersect with the practices associated with gender and relationships is regarding the intensity of work. In an interview with a

female-oriented news portal, Quing Ru recounted their story of hard work that turned into success when her start-up exited in 2014. In a section where she recalls the suffering and sacrifices that she had to undergo before turning a millionaire, her experience is captured by the journalist in the following way:

"Stress and long working hours turned her skin sallow. She talks self-deprecatingly about how she stopped bothering with makeup and haircuts, and wore cheap, baggy pants ("the sort from the pasar malam!") to work as she had no money to shop. "I would think, 'How can I care about clothes when I have sh*t to do!?' " she says with a laugh. Even her boyfriend started hinting about her sloppy dressing. "He met sharply dressed women in his investment banking job... and then he'd meet me," she deadpans. The two broke up several times, partly due to the strain of their jobs, but they always got back together; they're still dating now." (Tai 2015)

Especially telling is the section where she contrasts herself to other females through the gaze of her boyfriend. She was not dressing up and taking care of herself in the way that other 'professional women' do. The emphasis on looking good and taking care of her role as a female is one of the defining characteristics of 'middleclass femininity' in Singapore. Taking care of oneself and family has been the dominant narrative in constructing how women should play role in the nation: "Women are also expected to cultivate themselves, as national and family subjects." (Hudson 2013, 22). Not adhering to the class expectations is also hinted in the reference to the cheap pants bought at *pasar malam* (night market in Malay).

Thus what we see is that working in the technology scene seemed for many incompatible with femininity both due to the lifestyle it required, but also due to the kind of expectations tied to being feminine. Many of my female interlocutors had to actively work to decrease their sexuality to emphasise professionalism. Yet, a conversation with two male investors in their 30s and 40s, made me wonder to what extent can this be regulated, since in the sexist stereotypes they shared with me I sensed an ingrained disbelief in the capacity of women to even have a 'true', innate drive for change. Each of the investors provided a different story to make their point. One drew upon a thought exercise that his wife had also confirmed to be true, and it involved a woman and a man falling into a deep pit. In this scenario, according to the investor, the man will do all he can to get out of the pit, but the woman will supposedly focus her energy on making the pit nice and comfortable. In his narration, this is simply how humankind has always been - the men went out to hunt, while the women stayed in caves and took care of the

‘home’. The other story similarly challenged the female propensity to envision and act for change because from puberty on, regardless of their own will, women are subjected to menstrual periods that ‘simply happen to them’, so they learn to accept ‘life as it is’. The implicit part of the story is that there is nothing that happens to men’s bodies without their own will, and therefore, they don’t settle and are always ready to transform the world. If these are the lenses through which they saw women’s contribution and agency, then I suspect the chances for women to be recognised as entrepreneurs were slim no matter the management of their looks and behaviours.

Girls in Tech and Geek Girls - fostering the neoliberal feminist subject?

Late 2011 and 2012 was a special time in Singapore because, along with many events for technology start-ups also, two initiatives aimed at addressing female audiences, in particular, took off the ground. One was called “Geek Girls” and the other “Girls in Tech”. The titles of both emphasise the less sexual and also more youthful notion of ‘girl’ rather than ‘woman’. By using these two examples I want to show how gender inequality was dealt with and argue that they promoted what other scholars have called a ‘neoliberal feminist subject’ -

“this subject is feminist in the sense that she is distinctly aware of current inequalities between men and women. This same subject is, however, simultaneously neoliberal, not only because she disavows the social, cultural and economic forces producing this inequality, but also because she accepts full responsibility for her own well-being and self-care, which is increasingly predicated on crafting a felicitous work-family balance based on a cost-benefit calculus. The neoliberal feminist subject is thus mobilized to convert continued gender inequality from a structural problem into an individual affair.” (Rottenberg 2014, 420)

Both organisations wanted to encourage the presence of females in technology circles, yet each had different strategies and also ‘audiences’. SG Geek Girls wanted to increase the female presence by focusing on technical skills acquisition - inspired by the international Rails Girls initiative that focuses on building up technology skills of women, they were offering introductory level courses in programming, working with Photoshop and other technical engagements, next to events that featured panels of ‘role models’ - females who were already technology entrepreneurs or had high standing

positions in technology corporations. Their mission statement read:

"SG Geek Girls is a local initiative that serves as a platform for females to share, contribute, mentor and learn from each other. We want to empower the next generation of women in technology through fun, informal and interactive activities."

Girls in Tech, however, focused more on a skill set related to entrepreneurship and networking. Thus, rather than identifying the problem as a matter of lack of technical skills, they emphasised the entrepreneurial knowledge and social capital building for females. Events usually featured lengthy drinks and conversations with some inspirational panels and Girls in Tech explained their *raison d'être* as:

"Girls in Tech is a social network enterprise focused on the engagement, education and empowerment of like-minded, professional, intelligent and influential women in technology. (..) GIT was born out of a need to provide a place for women to cultivate ideas around their careers and business concepts involving technology." (<https://www.eventbrite.com/org/333203209?s=6784443>, last accessed 15.02.2012)



Logos of the two
female oriented groups.



Not surprisingly, they also attracted overlapping but also slightly different audiences. Girls in Tech seemed to be the choice for women, mostly already practising marketing or other 'softer' professions related to the technology world. Geek Girls, however, seemed to be more popular with younger, often high school and university level students who thought that programming would make the 'male world' more accessible to them if they would pick up programming. It was not rare to meet young girls at events organised by both of these organisations. One girl whom I met for the

second time explained that she is really enjoying these meetings and having the chance to listen to female entrepreneurs in technology - that for her it is something new, 'not a mainstream in Singapore' according to her.

Yet both of them were based on increasing the networking possibilities of women or improving their skills or access to capital. Thus, all these events try to incorporate market rationality in their ways to correct inequalities. The proposed solution to the inequality then was increasing individual women's capacities. Even more so, both these organisations emphasised that they have *nothing* to do with 'politics' and avoided discussions about larger political agenda or structural inequality. Women spoke about their and other women's *choice* to become entrepreneurs and their own individual responsibility to combat the obstacles that they are facing.

With the lack of any coherent larger political agenda, most female-oriented, specific events can be seen more as a niche market orientation rather than a feminist call for female empowerment and gender equality. Scholars call this 'neoliberal feminism' - a feminism that offers no critique of neoliberalism and the wider context of production (Rottenberg 2014, 419). It seemed that this niche market involving females in technology was quite interesting for many who were trying to build their businesses around the start-up ecosystem.

For example, in 2013, I was told by an active mentor in the start-up ecosystem in his 40s that he was considering developing a new start-up training program, one that focuses on young women in Singapore. As he saw it, young girls are an 'unrealised market' for start-up education - a market niche that hasn't been 'tapped'. According to his analysis, the 'female market' should actually make sense because, according to the way he saw it in Singapore, there is quite a substantial group of well-educated and 'fairly wealthy' girls. Additionally, girls have less pressure to perform career-wise, have no Military Service requirements and thus might have more time and leeway in the eyes of their families to try start-ups. However, while detailing his plans, he was also quite explicit that the kind of female entrepreneurship that he knew at the moment in Singapore did 'yield nothing'. Referring to one co-working space that attracted a predominantly female audience, possibly thanks to it also being run by a female founder, he pointed out that 'they are just hanging out there, and nothing comes out of it' (21.02.13), making me wonder how able he was to actually see the value of the people he wanted to 'transform'.

Later in 2014, a new network for women was started called Woomentum. During the public event I attended on 22.04.2014, the founder explained that Woomentum is not only about women, even if its title drew on the terms 'Women' and 'Momentum'. In a one-on-one conversation after the official opening, the founder was more open

about the inequality in access to funding that women entrepreneurs face. However, as she reverted back, the mission is about spotlighting females rather than initiating political change. The strategy that Woomentum wanted to employ was to highlight the contributions of women entrepreneurs and, by giving more attention, render their presence more normalised in these masculine spaces. Here, I saw some potential for a more political approach since the organisation seemed to want to expose more women to male-dominated spaces and thus transform the masculine gaze, yet my fieldwork had come to an end by the time Woomentum started to operate. I would expect that the start-up space has changed somewhat in the years since the end of my fieldwork in this regard.

To summarise, women's bodies were 'othered' in the otherwise masculine spaces. They were read primarily in sexualised terms, and women's motives for partaking in the start-up events were questioned based on whether they were here primarily to 'find a husband'. Being a 'woman' seemed more of a liability than something that successfully added to their 'capital'. This information was about the strategies that women entrepreneurs employed in return. First and foremost, they insisted on not being singled out as 'women in tech' but recognised as 'humans' and 'professionals'. Additionally, they tried to enforce this message through tight self-management - of how they dressed, where they went and with whom and so on, which also meant that they were excluded from important networking and relationship-building contexts. Embodying the entrepreneurial dream was caught up in the fact that bodies were gendered and the ideal did not align with socially expected gender roles. Addressing this, though, was challenging as the promise of meritocracy was not inherent only in the start-up futurities but also was one of the central tenets of Singapore's nation-building. The women-focused events avoided addressing this as a political issue of inequality and instead focused on enhancing individual women's capabilities - either in terms of networking or by providing technical knowledge.

6. Conclusion

Chapter Six focused on the entrepreneurial subjectivity paying attention also to bodies, expanding on the previous chapter that showed how embracing an entrepreneurial mindset means embracing openness, flexibility, risk-taking, and strategic self-management. This chapter focuses on how these ideals demand a transformation of both mind and body, highlighting the labour involved in sustaining this entrepreneurial ideal.

Becoming an entrepreneur means not only particular ways of thinking and working as described in previous chapters, but also specific ways of engaging with one's body. In this chapter, I describe how it also means learning to project the potential value through how one moves one's body and uses one's voice and emotions. Embracing entrepreneurial subjectivity means displaying passion and adaptability, as seen in the training sessions at The Accelerator accelerator, where entrepreneurs were coached to embody energy and excitement in their pitches. This process involved meticulous training in body language, voice modulation, and physical presentation, highlighting the extensive labour required to meet entrepreneurial expectations.

The material shown in this chapter further challenges the feasibility of start-up futurities as bodies were less malleable in the face of future expectations. It particularly examines how global power relations manifest in racial and gender inequalities within entrepreneurial contexts, emphasising the challenges and frictions encountered by bodies that do not conform to the normative entrepreneurial ideal. Bodies are racialised and gendered, and this chapter examined the ways in which my interlocutors tried to account for this. Some strategies involved tight monitoring, such as women entrepreneurs who tried to always be conscious of how their actions, dress and decisions about with whom to socialise in which contexts will be perceived. Female bodies were treated by men and women as transgressors in entrepreneurial spaces. Many female entrepreneurs resisted being labelled as 'women in tech,' as a gendered reading of their presence was seen as a threat to their professional abilities. Despite the rise of female-oriented initiatives like Geek Girls and Girls in Tech, these efforts often focus on enhancing individual skills rather than addressing structural gender inequalities. Other strategies meant embracing the social reality that racialised bodies will be attributed different abilities to project the potential value and working with that.

Even though entrepreneurship is often seen as a masculine activity, by looking at the intersection of masculinity and race, this chapter also shows the ways in which it clashes with gender roles in Singapore and how this shapes the experiences of male entrepreneurs. It recounts Elijah's lament about the difficulties faced by Chinese men in Singapore, highlighting the societal expectations of financial success and breadwinning that clash with the uncertain and financially unstable nature of start-up life. The chapter also discusses the impact of compulsory military service on Singaporean men's entrepreneurial journeys, noting how it delays their professional progress and adds pressure to succeed quickly.

While the start-up ecosystem promotes a seemingly universal entrepreneurial ideal, it fails to account for the fact that this ideal is steeped in power relations and is biased in particular ways. The promise of meritocracy inherent in entrepreneurial narratives and Singapore's nation-building discourse often masks the structural inequalities that

impede the full participation of diverse bodies in the entrepreneurial space.

This way, the chapter again highlights the work that goes into pursuing an ideal and how people tried to absorb these frictions in an individualised way. The categories of gender were also deeply entwined with race, age, and social class, pointing us to the importance of examining the patterns of inequality and opportunities intersectionally.

CONCLUSION

1. Ethnography of Start-up Futurities

I started this dissertation with the goal of exploring the cultural significance of future, aiming to examine how peculiar it is that futurity is so crucial in shaping day-to-day experiences. As sociologist Barbara Adams has said, “One defining quality of our current moment is its characteristic state of anticipation, of thinking and living toward the future.” (Adams, Murphy and Clarke 2009, 246) While all humans live towards a future, I aimed to highlight that we do this in culturally specific ways. Throughout the dissertation, I made a point by not using the definite article for the term ‘future’ in the descriptions of encountering futures in ethnographic contexts to emphasise the ever-present multiplicity of futures. I used the term ‘the future’ with the definite article only in cases where I wanted to emphasise that there is a process of claiming and controlling ideas about future unfolding. To underscore an analytic approach to future, I used the terms ‘futurity’ or ‘futurities’ (plural). Following a typical association between technology and future I set out to explore the space of technology enthusiasts in South-east Asia and explore how they relate, build and act on various futurities. In this dissertation, I argued that we may better understand technology start-ups if we recognise the significant role futurities play in their day-to-day activities. Throughout this thesis, I explored how futurities shape everyday experiences from the macro level, such as global and regional imaginary geographies (Chapter One), to the national level (Chapter Two), the level of social organisation (Chapter Three), the start-up company (Chapter Four) and the individual both in terms of subjectivity (Chapter Five) and embodied experiences (Chapter Six). I focused on the political, social, and economic contexts, discourses, practices, subjectivities and materialities involved.

It is a common claim by many that a techno-capitalist future is unfolding as a force, and those who are not trying to catch up and stay with the changing times will be just washed over and left behind. This technological and market determinism narrative is very alive in Singapore – the small city-state tries to position itself as a global player in a fast-changing world. It tries to attract capital and people to build a knowledge economy and expects its citizens to become creative entrepreneurs. This dissertation showed time and time again the hard labour that building and sustaining the promise of start-up

futurities requires, and by doing that, this dissertation aimed to challenge the deterministic idea of neoliberal and technological developments sweeping the world like an unstoppable wave, remaking everything it encounters in its own image. Entrepreneurs themselves contribute to and coconstruct a discourse that frames technological progress and economic growth as natural and inevitable. At each level, this dissertation revealed a variety of contradictions and local particularities that these future-making practices created in practice, even as people tried to absorb these frictions as individual shortcomings.

Open but hard to reach

As described in the chapters of this dissertation, start-up futurities promise so much: empowerment, perpetual betterment of life, fulfilment, unlimited progress and economic growth, social change, new, more equal social relationships, and private financial wealth. All one supposedly needed was good ideas and hard work, and the world of unknown potential and excitement would open up. Everything that start-up futurities promised seemed so reachable, almost inevitable, yet proved so very hard to reach. Throughout the chapters in this dissertation, I explored the promises start-up futurities held for my interlocutors and revealed the transformations that were deemed necessary in order to embrace those futures. They demanded the transformation of culture, people, and places while simultaneously producing the very same differences that they presented as in need of change.

At the global level, start-up futurities in Singapore required imagining 'Asia as an opportunity' for technology entrepreneurship (Chapter One) and flexible regionality as a way to access resources beyond the borders of Singapore. At the national level, they legitimised urban transformations (Chapter Two). At the social level, they welcomed new norms and values of how to structure social relationships (Chapter Three), where a constant flow of people, ideas, and capital through the ecosystem would make itself sustainable. At the company level, they required a transformation in thinking about what constitutes value (Chapter Four). They demanded extreme malleability of the product in the name of finding the highest potential value. At the individual level, they required changing one's subjectivity and controlling one's own body (Chapters Five and Six), where again, both subjectivity and body were imagined as highly flexible and able to accommodate and perform speculations about potential value.

The dissertation showed not only what these futurities invited us to see - the promise of limitless growth, the always-changing self, the creative flows of ideas and capital and people- but also the exclusions: what they needed to unimagine and needed to

erase to appear attainable. Chapter One described how, in order to imagine the scale of Asia as an Opportunity, it needed to unimagine the regional diversity and local particularities, economic and social inequality rooted in economy and colonial history, as well as national borders, all of which entrepreneurs who tried to run businesses from Singapore encountered in their daily practices. Chapter Two described how the urban transformations pursued by Singapore's government needed to imagine one-north as being built from scratch, unimagining the futurities set in motion by older infrastructure projects and the social constellations that supported them, such as the working hours of food courts. More generally, Chapter Two described how excluding other possible futures from their discursive space helped Singapore's political elites to control power. Chapter Three problematised how social hierarchies and frictions in converting ideas and relationships into commodities had to be 'unseen' to imagine sustainable and organic production within an ecosystem. Chapters Four and Five similarly show how start-up futurities unimagined the personal dramas, stress and heartbreaks, the families that absorbed the risk the entrepreneurs took and the resources that went into making entrepreneurship seem like an attainable ideal.

This all points to a larger problem with start-up futurities - even though they seemed to be inclusive and available for anyone, endorsed by the government and gaining increasing cultural approval and appreciation, they did not recognise where the resources necessary to develop them actually came from. Moreover, they often demarked these areas of life as 'external' or even 'problematic' the moment they did not directly contribute to the potential value. In Chapter Four, I describe how the affective investment in one's business idea had to be disregarded the moment it didn't promise further economic potential value, even when it was a prerequisite for starting the business in the first place. Similarly, as described in Chapters Five and Six, people's life experiences, hobbies, social relationships, familial ties, national duties, etcetera, were subjected to being assessed as 'problematic' and as 'external' to the practice of entrepreneurship if they interfered with the imperative to contribute to building economic value, even when they formed the basis for the start-up ideas and provided the social and material fabric that enabled the entrepreneurs to pursue their dreams. The youthful energy brought by the entrepreneurs was especially important in this regard - so many of the promises start-up futurities held seemed attainable only because of the energies and social support younger people in Singapore enjoyed, as described in Chapter Five.

Recognising that start-up futurities draw on the youthfulness of their subjects makes it rather easy but important to argue that they are not sustainable over the course of one's life. Flexible bodies and malleable ideas channelled the desire for limitless applications to whatever profitable future scenario might develop. As Ryan very articulately summarised it in Chapter Four, he was seeking "*the option to have unlimited options*

on which life to live.” However, malleability and flexibility have their limits, whether imposed by the durable legacies of materialised infrastructures (Chapter Two) or even more structurally gendered and racialised human bodies (Chapter Six).

The unimagining, externalisation and the constant demand for malleability, which seemed to be structural parts of start-up futurities, were also the source of suffering for many involved. In her analysis of maker culture in China, anthropologist Silvia Lindtner argued that:

“When technological promise is at last granted to places and people that long yearned to be seen as just as innovative and creative as places like Silicon Valley, acts of violence and control in the name of innovation become less noticeable, occluded by the promise of modern technological progress and its associations with the good life—the promise to be at last freed from colonial and racial “othering.”” (Lindtner 2020, 5-6)

Indeed, in each chapter, I also attended to the routine forms of violence that embracing these futurities required—self-orientalisation, doubt, uncertainty, individualised self-blame, the denial of the importance of family and economically ‘non-productive’ forms of social relationships and activities, and so forth. Chapter Six, in particular, described how the pursuit of the entrepreneurial ideal simultaneously constructed the ‘Asian’ subject, which, in contrast, was deemed as ‘lacking’, ‘slow’, ‘non-creative’, and ‘non-daring’ and in need to be transformed to be able to pursue start-up futurities.

Above all, the chapters in this dissertation showed the amount of work people were willing to put into making these futurities seem reachable and advance towards them, illustrating the effort that goes into claiming, aligning with and also challenging larger narratives about what the future holds. Chapter Four’s description of day-dreaming sessions revealed how start-up futurities could also provide a safe space from the daily troubles the entrepreneurs were facing, energising them through the promise of success in the future. Moreover, my interlocutors, through their practices, were developing their “capacity to aspire”, and skilful handling of projecting into the future had become part of their cultural style, which was essential for their ability to perform potential value.

On the un-attainability of start-up futurities

The notion of ecosystem presented start-up futurities as sustainable over the course of one’s life - serial entrepreneurs would turn into investors and would pass on their knowledge and capital to the newcomers and would be able to retire supposedly with

solid financial gains. Even though this goes beyond the scope of my research, as far as I could observe, in practice, it didn't seem to be the case for most. Many I knew returned to corporate jobs after trying a few business ideas, failing, and even after being investors in other businesses. Those who had started to reckon with their ageing also had given a thought to how to retire. In 2016, I attended a conference in Singapore and used this as an opportunity to visit Blk 71 again. The Accelerator had stopped running the accelerator program, and Oscar was looking at how to re-position the company. Wei had started a new start-up that he hoped would become the billion-dollar unicorn Singapore's 'ecosystem needed' to convince people about the viability of these start-up futurities. Yet another former factory building on the block was re-modelled, expanding the space for start-ups even further. In the hours leading up to the opening of this new space, I ran into Mike - the investor and entrepreneur whose insights and experiences I drew upon in Chapter Three, describing the implicit hierarchies within the start-up ecosystem. It was lovely to see a familiar face. He noticed the laptop I was using and commented that my laptop must be very old. Indeed, back when doing fieldwork in 2012, I had placed the stickers with logos of the start-ups I met on the cover of my laptop, and now, in 2016, Mike was looking at them one by one, pointing out the stickers of the start-ups that had already disappeared or closed. "This is gone, this is done, this is out," he went on. Only one was what he recognised as 'going strong'. On this reflective note, we started talking about his future. In a matter-of-fact manner, he explained that he was not wealthy enough to retire in Singapore, so he saw no personal future for himself here in the long run. According to him, only the 'very wealthy' can retire here. He described himself as 'simply wealthy' and therefore unable to be here later in his life. I was struck by this. Even more so because Oscar, with whom I had met earlier, also had explained a very similar point to me - unless he was economically active, he couldn't afford to stay in Singapore; thus, retiring there was not an option for him. The future of secure retirement in Singapore was not attainable for the very same people who had been inviting others to come to Singapore to access 'the future' from here. Just like the foreign workers, foreign talent also had a limited future in Singapore. In Chapter Two, I described how a metaphor of Singapore as a hotel had gained popularity to discuss increasing inequality in Singapore. Now, at the end of my fieldwork, it seemed to have a ring of truth to it - even the wealthier business class could not have a future here unless they were 'super wealthy'. They had contributed to Singapore's development on the terms that the state had deemed necessary, and as they would not be economically active, their presence was not supported. Start-up futurities in Singapore, in this sense, clearly show their alignment with national economic pragmatism.

In the Introduction of this thesis, I outlined five propositions regarding studying futurities that, based on existing literature, instruct my work. They proved to be invaluable in examining the field of start-up entrepreneurship in Singapore, and I argue that they provide a good starting point for critically examining futurities, particularly within neoliberal contexts.

The starting point that futurities are social constructs is essential for recognising and challenging the seeming inevitability and ‘naturalness’ of neoliberal futurities. It invites us to inspect and interrogate the various elements that construct them in deterministic ways and question their claims of universal appeal by examining how they are constructed to be ‘appealing’ in various socio-political and economic contexts.

The second proposition regarding the materiality of futurities allows researchers to ground their analysis of often abstract and seemingly intangible visions and concepts in the thickness of everyday life. This is particularly relevant in a context where part of the process is to ‘hide’ and unsee the ways in which understanding capitalism as an abstraction - capitalism tries to abstract from the materiality of its own creation (Pels 2023, Bear 2015).

The recognition of multiple, co-existing futures directly challenges the market and technology determinisms inherent in claims that present the vision of the future as singular and dominant. By attending to the diversity of future imaginaries held by different actors, anthropologists can highlight the existence of alternative pathways and challenge the perceived inevitability of neoliberal globalisation.

Understanding that claims about the future are inherently claims to power is essential for a critical analysis of neoliberal governance. By examining who has the authority to define and shape the future, anthropologists can expose the unequal power dynamics that underpin these processes. Governments, corporations, and other powerful actors deploy techno-optimistic narratives to legitimise their agendas, often co-opting the labour and aspirations of individuals in the process (Avle et al. 2020).

Finally, by examining the various forms of futurities, anthropologists can study the persistence and particularity of them at different moments of time and contexts. This research, following Pels (2015) highlighted the role of open and empty forms of futures in a start-up context, where the perceived openness of futurities was central for the entrepreneurial agency, the basis for technological optimism and energised the founders even at the moments of hardship. The open form of futurity allowed entrepreneurs to imagine various scenarios of social change that incorporated multiple registers of value, simultaneously creating space for speculation. Within the context of the start-up ecosystem, and The Accelerator in particular, the involvement of investors meant that these

futurities had to be emptied out of the content and evaluated in terms of their financial potential. The prioritisation of empty futurities often eroded a lot of the energies that open futurities had created space for.

Thus, paying attention to how futurities are used in order to negotiate power and define what is possible is crucial when studying futurities ethnographically. In conclusion, studying futurities historically, locally, and through their spatial materialities allows us to develop ethnography-based insights into how future visions are constructed, contested, and realised. Singapore's technopreneurship and knowledge economy are not just products of global trends but are deeply rooted in the country's historical and local contexts, resulting from overlapping interests of differently situated players. The analysis of projects like one-north and Blk 71 highlights the importance of considering durability and a multiplicity of futurities as analytical starting points. The ethnographic examination of Blk 71 and one-north in general is that futurities are always multiple, dynamic, context-dependent, and subject to contestation.

2. Anthropology of Capitalism and Future

The two excellent ethnographies that study start-ups in the years of 2010-2020, albeit in India (Ghosh 2022) and China (Lindtner 2020), both argue that we can't understand the appeal of the neo-liberal call that is embraced by entrepreneurs by only viewing it through a neoliberal prism. Lindtner proposes to address this through the notion of a 'socialist pitch' to emphasise that a large part of the appeal for the people to embark on start-up journeys comes from the promise of a larger social good - community, togetherness, and social change - that will be reached through start-up activities and technological tinkering. In a related way, Ghosh suggests using the notion of 'entrepreneurial humanitarianism' to explore the entrepreneurial aspirations of bringing social changes that go far beyond the simple economic motives of accumulating wealth (Ghosh 2022). In this, they align with the feminist approach to studying capitalism, which emphasises that capitalism is "formed through the relational performance of productive powers that exceed formal economic models, practices, boundaries, and market devices" (Bear et al. 2015).

In this dissertation, I have continued this line of scholarship by exploring the 'relational performances of productive powers' by attending to the sociality underlying the production, and, in particular, by drawing attention to how start-up futurities constantly needed to draw upon resources typically seen as 'outside' of them - Singapore needed to imagine its market and talent coming from beyond itself; the initial spark and

value of the start-up idea had to come from the founders' affective personal experiences and unpaid labour in playful events such as 'start-up weekend' and hackathons. The resources to start the business came from families, government and corporations even when they were publicly often discussed as 'incompatible' with the start-up way of forging futures. Despite being so dependent on these, start-up futurities also constantly worked to exclude and 'unsee' these areas, rendering them the 'Other', especially at any moment they threatened to create friction and challenge the start-up's feasibility.

I further contribute to the scholarship promoted by the works of Lindtner and Ghosh by highlighting the role the 'start-up ecosystem' ideal played in coordinating the labour of otherwise disparate actors and facilitating the conversion of non-economic social relationships and practices into economic ones. Through the ecosystem, 'gifts' such as ideas, knowledge and experiences freely shared by participating people through networking and venture capital support were expected to turn into 'commodities' - high-growth start-ups. The ecosystem metaphor mobilised the language of care, passion, community, and fulfilment to search for ways of commodifying and monetising them. Organising oneself into an 'ecosystem' provided the social context in which ideas could rather easily start to materialise in their commodity form supported by the commodification of entrepreneurial subjectivity.

Relying on the natural biological metaphor of the ecosystem enabled an imagination of starting and developing high-growth start-ups as a sustainable and systematic practice. The Accelerator's practices were aimed at structuring and facilitating this conversion, yet their own struggles to make ends meet as described in the example of Café membership and construction of the secret office and eventual stopping of the programme were illustrative of the limitations of this ideal. I argued that the sociality within the 'start-up ecosystem' provides another example of a peri-capitalist site of production (Tsing 2015) where capitalism capitalises on value generated outside of it. Seeing the ecosystem this way allows us to place these practices in a longer history of economic production patterns and challenge the claims of 'newness' often associated with the practice of digital starting-up. These claims to break with the past, innovate and disrupt are handy tools to produce social differences, which are at the basis of entrepreneurial practice and the grounds for attracting capital.

Accelerators and incubators, more specifically, but start-up social spaces described in detail in Chapter Three more generally, can be understood as peri-capitalist sites of extraction where new subjectivities were trained to labour for multinational capital in ways that required little direct control. One of the more striking aspects during my research was that investors representing venture capital were given the position to judge what is seen as a 'good' start-up idea and what as 'not good'. Their institutionalised interests in financial rewards to be gained from scalable growth shaped both how the

start-ups and their entrepreneurs were valued not only in terms of the potential value they could bring but also as people and professionals. This also points attention to the fact that even though it is often thought that in the digital economy, anyone who can code can start a technological service, technological development, more often than not, happens in a business context where it's intertwined with the expectations set by investors (Shestakofsky 2024). Seeing them as apart or not acknowledging these influences is problematic as financial speculation fuels and shapes this process in many meaningful ways as described in this thesis and most poignantly in Chapters Three and Four. Understanding these structural pushes and pulls that the web technology businesses are subjected to also allows us to think critically about how we can develop technologies that are not 'addictive' or exploitative of their users (Zuboff 2019).

Labour of speculation

The labour of speculation, I argue, is central to the entrepreneurial subject and start-up ecosystem. As I show through the chapters, one had to master how to speculate through the ways of thinking about the social world and about oneself, including also moving one's body. The labour of speculation relied on an ongoing process of commodification of the self, and a successful performance was necessary in order to attract financial capital. In this context, one's perceptions and ideas of specific social changes were framed in terms of business activities in a market context rather than alternative avenues like political activism or non-governmental involvement, both of which areas are particularly sensitive in Singapore. The labour of speculation was most noticeable in the pitching practice entrepreneurs did routinely. Through the pitch, an idea was shaped into its commodity form. It constructed 'the problem' the start-up wanted to address, how the start-up wanted to address it, and reasoned about it economically. Pitches were structured to construct a particular social reality and an opportunity for intervention. They affectively illustrated what needed to be imagined as well as 'photo-shopped' what needed not to be seen. Tsing has described such processes as 'conjuring' (Tsing 2000).

Importantly, to gather support in terms of labour or capital, it was necessary to induce and generate affect, inducing desire and excitement. Rhetorical skill in generating affect, conjuring a specific vision of social reality and a future of opportunity, was an expression of the mastery of the entrepreneur. As such, the skill expressed through the performance could also be a sufficient reason for investment (Ghosh 2020). Speculation, therefore, can be seen as central to the work that is performed by start-up founders. In the start-up terminology, it was often called 'Fake it till you make it'. The scandals

surrounding the fraudulent practices and collapse of Theranos in 2018 and FTX in 2023 in the USA have raised sobering questions about how start-up speculative practices can lead to a global bust, but as long as labour and expression of one's skill are going to rely on pushing the boundaries at creative and affective speculation, there is little reason to expect change.

Even if seemingly less structured, the labour of speculation was an intrinsic part of socialising amongst entrepreneurs in general, where intense networking was in constant tension with the need for deep, concentrated, solitary work. The tensions surrounding The Accelerator's café described in Chapter Three illustrated how social relationships and people were judged on the perceived value they could add. The organisers wished the café to be a social point, one that brought people together and fostered a sense of community. Yet, as the chapter showed, it turned out that not everyone was valued equally - there was a sense that some people 'add value', while others do not. Judging social relationships and the self in this way - according to the 'value' one can add, predominantly measured in economic terms - emphasised the importance of particular ways of performing. As I showed, my interlocutors were very skilled at flexibly projecting into the future, something I recognised to be part of the necessary cultural style (Ferguson 1999) of entrepreneurs, which expanded beyond just mere ways of thinking and reasoning, also shaping the ways how to speak, carry one's body, etc. The labour of speculation drew upon my interlocutors' 'capacity to aspire' as described by Appadurai (Appadurai 2004) and the aspirational landscape was charted in the social spaces in the interactions with the mentors and media products that celebrated entrepreneurs and investors.

More profoundly and intimately, speculative reasoning about one's life choices, in general, was characteristic of entrepreneurial subjectivity. Drawing on the affective resources of entrepreneurs and their life experiences to provide ideas for the businesses seemed to be an empowering offer. Yet, this also required commodifying one's experiences, inviting the question, "What room is left for political collective protest against the conditions of one's work when you are the one trying to capitalise on yourself?" In such conditions, any failing, as the stories of my interlocutors indicated, was treated as an individualised and personal failing rather than a structural issue. On occasion, some entrepreneurs acknowledged that by accepting investment from venture capital, they have transformed the nature of their work and that there was a potential for their interests to clash. As one interlocutor remarked - 'we are the workers'. However, more often than not, there was little sense of potential fallout or politically inspired resistance or even search for alternatives as a political act. I do not wish to suggest that the financial investment tainted the 'pure' ideas of my entrepreneurial interlocutors once they started to build them out. This would require reifying false dichotomies. Many of my

interlocutors were truly inspired by ideas of social change and progress, but, importantly, achieving the successful spread of these ideas precisely in their commodified forms and market context was seen as the epitome of entrepreneurial success and ingenuity. It is in this way that the futurities pursued by my interlocutors gained their neoliberal character. As I argued through Chapters Three and Five, these social spaces cultivated and often even explicitly trained subjectivities in a way that people would reason as investors in themselves and view others likewise. In that sense, then, despite the talk of innovation, disruption and change, the transformations brought by start-ups were always necessarily imagined in commodified forms and, therefore, would be conditioned to bring limited social change (see, for example, Lepore 2014). Start-up entrepreneurship uses a rhetoric of disruption and changes that it supposedly brings in to produce the difference, which allows start-up entrepreneurs to position themselves in the very same system and maintain the status quo.

Anthropologist Sarah Kelman has argued that we need to study how “that which has come to be understood as ‘entrepreneurial’ is formed within circumstances of particularity, contingency, and historicity” (Kelman 2018, 60-61). In this case, this dissertation shows that in Singapore, start-up entrepreneurship emerged within a wider national context, where the government was trying to shift its economic policies and invested a lot of resources in rearticulating what ‘entrepreneurship’ should be – emphasizing, rather than the small and medium-sized businesses, but instead a high growth, innovation and technology-driven scalable businesses. I examined it as a cultural construct that gained culturally particular meanings in relation to other dominant forms of economic production and employment in Singapore, where start-up entrepreneurship was defined in contrast to the work in large corporations, ‘lifestyle’ businesses or within government. It was valorised by the globally circulating success stories and the rising impact of social media and other web technology companies such as Facebook, YouTube, Instagram, and Groupon. Locally, it was endorsed, made to appear more feasible and solidified by the various grant programs and social events and spaces as described in Chapter Three.

On potential value

In Chapter Four, I introduced the notion of potential value as a concept that allowed me to understand the often contradictory ways my interlocutors thought about value and what practices they saw as ‘building value’.

Potential value is a future-oriented concept that emphasises that value is a source of speculation. It indexes three distinct potentialities: the scale of the potential value and

how much revenue it will generate. Secondly, the probability of this revenue materialising and, thirdly, the ease with which this value will be accessible - its liquidity - either in forms of social capital or in terms of financial capital such as further investment stages, acquisitions or 'exits'. It highlights the role future expectations play in shaping the understanding of value for start-up entrepreneurs and investors. It was not the expectation that the value would be delivered in the future, but increasing the potential that it could be delivered in the future that mattered. Therefore, it is fair to say that potential value required both open and empty forms of futurities - future had to be imagined as open in order to project into it the various scenarios. However, it also needed to be imagined as empty of its content, and the likelihood of it coming through was weighted in probabilistic terms, as evident, for example, in investor reasoning about the success of start-ups within their investment portfolios (Chapters Three and Four).

Moreover, this question of potential exchangeability was central to entrepreneurs when they were thinking about their own experiences and judged them on how easily they would be able to convert them into something that they could capitalise on. This showed how people's understanding of their present moment was constantly modulated and evaluated by their ideas about potential futures.

One of the central practices in the articulation of potential value was pitching. Business pitching was one of the core practices for both the materialisation and commodification of entrepreneurial ideas, as described in Chapter Three, as well as simultaneously a performance of and a claim regarding the potential value that the start-up was offering. The pitch was also a subjectivity training and an expression of entrepreneurial skill. However, as Chapter Six showed, start-up futurities, despite their seemingly universal accessibility, were in fact unable to escape the reality of bodies that tried to embody them or do the pithces. Racialised bodies found it harder to adhere to the 'white youthful male' ideal that is implicit in the start-up futurities. The story of Dong illustrated poignantly how racialised bodies were associated with different abilities to attract capital. The same was evident also in relation to gender, where women's bodies were treated as transgressors within the start-up spaces and felt the need to invest extra effort to be seen as 'professionals' rather than their gendered selves. As economic anthropologists Bear (2020) and Tsing (2015), amongst others, have repeatedly argued, capital accumulation unfolds by generating and capitalising on differences and inequalities rather than equalising them. Despite the promises of the new knowledge economy being more democratic and fair, throughout this thesis, I show that it relies on old power hierarchies that continue to be entrenched in new ways.

BIBLIOGRAPHY

Abdul Rahman, Noorashikin. 2010. "Managing Labour Flows: Foreign Talent, Foreign Workers, and Domestic Help." In *Management of Success: Singapore Revisited*, edited by Terence Chong, 123-138. Singapore: Institute of Southeast Asian Studies (ISEAS).

Abidin, Crystal. 2015. "Communicative Intimacies: Influencers and Perceived Interconnectedness." *Ada: A Journal of Gender, New Media, & Technology* 8. <https://doi.org/10.7264/N3MW2FFG>.

———. 2016. "Aren't These Just Young, Rich Women Doing Vain Things Online?: Influencer Selfies as Subversive Frivolity." *Social Media + Society* 2 (2): 1–17. <https://doi.org/10.1177/2056305116641342>.

———. 2021. "Mapping Internet Celebrity on TikTok: Exploring Attention Economies and Visibility Labours." *Cultural Science Journal* 12 (1): 77–103. <https://doi.org/10.5334/csci.140>.

Abram, Simone, and Gisa Wieszkalnys. 2013. "Introduction." In *Elusive Promises: Planning in the Contemporary World*, edited by Simone Abram and Gisa Wieszkalnys, 1-33. New York and Oxford: Berghahn Books.

Abram, Simone, and Gisa Wieszkalnys, eds. 2013. *Elusive Promises: Planning in the Contemporary World*. New York: Berghahn Books.

Adam, Barbara. 2004. Towards a new sociology of the future. Unpublished paper. Retrieved from: <http://www.cf.ac.uk/socsi/futures/newsociologyofthefuture.pdf>.

Adam, Barbara, Richard Whipp, and Ida Sabelis. 2002. "Choreographing Time and Management: Traditions, Developments, and Opportunities." In *Making Time: Time and Management in Modern Organizations*, edited by Barbara Adam, Richard Whipp and Ida Sabelis, 1-28. Oxford: Oxford University Press

Adam, Barbara, and Chris Groves. 2007. *Future Matters: Action, Knowledge, Ethics*. Leiden and Boston: Brill Academic Pub.

Adam, Shamin. 2013a. "Singaporeans Plan Protest as Lawmakers Debate on Population." *Bloomberg*, February 6. <https://www.bloomberg.com/news/articles/2013-02-16/singaporeans-protest-plan-to-increase-population-by-immigration?embedded-check-out=true>.

———. 2013b. "Singapore Protest Exposes Voter Worries About Immigration." *Bloomberg*, February 18. <https://www.bloomberg.com/news/articles/2013-02-16/singaporeans-protest-plan-to-increase-population-by-immigration?embedded-check-out=true>.

Adams, Vincanne, Michelle Murphy, and Adele E. Clarke. 2009. "Anticipation: Technoscience, Life, Affect, Temporality." *Subjectivity* 28 (1): 246–265. <https://doi.org/10.1057/sub.2009.18>

Alacovska, Ana. 2019. "Keep Hoping, Keep Going: Towards a Hopeful Sociology of Creative Work." *Sociological Review* 67 (5): 1118–1136. <https://doi.org/10.1177/0038026118779014>.

Aldrich, Howard E. 2005. "Entrepreneurship." In *The Handbook of Economic Sociology*, 2nd ed., edited by Neil J. Smelser and Richard Swedberg, 451–477. Princeton and Oxford: Princeton University Press.

Allison, Anne. 2009. "The Cool Brand, Affective Activism, and Japanese Youth." *Theory, Culture & Society* 26 (2–3): 89–111. <https://doi.org/10.1177/0263276409103118>.

"All Together Now: What Entrepreneurial Ecosystems Need to Flourish." *The Economist*, January 18, 2014. <http://www.economist.com/news/special-report/21593582-what-entrepreneurial-ecosystems-need-flourish-all-together-now>.

Andreessen, Marc. 2014. "What It Will Take to Create the Next Great Silicon Valleys, Plural." June 20. <https://a16z.com/what-it-will-take-to-create-the-next-silicon-valleys-plural/>.

———. 2023. *The Techno-Optimist Manifesto*. <https://a16z.com/the-techno-optimist-manifesto/>.

Aneesh, Aneesh. 2015. *Neutral Accent: How Language, Labor, and Life Become Global*. Durham, NC: Duke University Press.

Anagnost, Ann, Andrea Arai, and Hai Ren, eds. 2013. *Global Futures in East Asia: Youth, Nation, and the New Economy in Uncertain Times*. Stanford: Stanford University Press.

Appadurai, Arjun. 1988. "Introduction: Commodities and the Politics of Value." In *The Social Life of Things: Commodities in Cultural Perspective*, edited by Arjun Appadurai, 3–63. Cambridge: Cambridge University Press.

———. 2004. "The Capacity to Aspire: Culture and the Terms of Recognition." In *Culture and Public Action*, edited by Vijayendra Rao and Michael Walton, 59–84. Stanford, CA: Stanford University Press.

———. 2013. *The Future as a Cultural Fact: Essays on the Global Condition*. London: Verso Books.

Ardévol, Elisenda, and Débora Lanzeni. 2017. "Ethnography and the Ongoing in Digital Design." In *The Routledge Companion to Digital Ethnography*, edited by Larissa Hjorth, Heather A. Horst, Anne Galloway, and Genevieve Bell, 448–457. New York and London: Routledge.

Arrington, Michael. 2011. "Brilliant, Crazy, Cocky: Sarah Lacy's New Book Is All That. But..." *TechCrunch*, February 7. <https://techcrunch.com/2011/02/07/brilliant-crazy-cocky-sarah-lacy/>.

Avle, Seyram, Cindy Lin, Jean Hardy, and Silvia Lindtner. 2020. "Scaling Techno-Optimistic Visions." *Engaging Science, Technology, and Society* 6: 237–254. <https://doi.org/10.17351/ests2020.283>.

Avle, Seyram, and Silvia Lindtner. 2016. "Design(ing) 'Here' and 'There': Tech Entrepreneurs, Global Markets, and Reflexivity in Design Processes." In *Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems (CHI '16)*. ACM. <http://doi.acm.org/10.1145/2858036.2858509>.

Baas, Michiel. 2017. "The Mobile Middle: Indian Skilled Migrants in Singapore and the 'Middling' Space Between Migration Categories." *Journal of Transient Migration* 1 (1): 47–63. http://doi.org/10.1386/tjtm.1.1.47_1.

Baas, Michiel, and Brenda S. A. Yeoh. 2018. "Introduction: Migration Studies and Critical Temporalities." *Current Sociology Monograph* 67 (2): 161–168. <https://doi.org/10.1177/0011392118792924>.

Barbrook, Richard. 1998. "The Hi-Tech Gift Economy." *First Monday* 3 (12). <http://dx.doi.org/10.5210/fm.v3i12.631>.

Barbrook, Richard, and Andy Cameron. 1996. "The Californian Ideology." *Science as Culture* 6 (1): 44–72. <https://doi.org/10.1080/09505439609526455>

Barendregt, Bart. 2009. "In the Year 2020, Muslim Futurities in Southeast Asia." *International Institute for Asian Studies Newsletter* 50: 26–27.

Barendregt, Bart, and Florian Schneider. 2020. "Digital Activism in Asia: Good, Bad, and Banal Politics Online." *Asiascape: Digital Asia* 7: 5–19. <http://doi.org/10.1163/22142312-BJA10004>.

Barker, Joshua. 2005. "Engineers and Political Dreams." *Current Anthropology* 46 (5): 703–727. <https://doi.org/10.1086/432652>.

Bateson, Gregory. 1979. *Mind and Nature: A Necessary Unity*. New York: Dutton.

Baxstrom, Richard. 2013. "Even Governmentality Begins as an Image: Institutional Planning in Kuala Lumpur." In *Elusive Promises: Planning in the Contemporary World*, edited by Simone Abram and Gisa Weszkalnys, 137–153. New York and Oxford: Berghahn Books.

Bear, Laura. 2020. "Speculation: A Political Economy of Technologies of Imagination." *Economy and Society* 49 (1): 1–15. <https://doi.org/10.1080/03085147.2020.1715604>.

Bear, Laura, Karen Ho, Anna Lowenhaupt Tsing, and Sylvia Yanagisako. 2015. "Gens: A Feminist Manifesto for the Study of Capitalism." *Theorizing the Contemporary. Fieldsights*, March 30. <https://culanth.org/fieldsights/gens-a-feminist-manifesto-for-the-study-of-capitalism>.

Beck, Ulrich. 1992. *Risk Society: Towards a New Modernity*. London: Sage.

Berlant, Lauren. 2011. *Cruel Optimism*. Durham, NC: Duke University Press.

Bird, John, Barry Curtis, Tim Putnam, and Lisa Tickner, eds. 1993. *Mapping the Futures: Local Cultures, Global Change*. Reprint, London and New York: Routledge, 2005.

Blank, Steve. 2010. "Make No Little Plans – Defining the Scalable Startup." <https://steveblank.com/2010/01/04/make-no-little-plans-%E2%80%93-defining-the-scalable-startup/>.

Bloom, Paul N., and Gregory J. Dees. 2008. "Cultivate Your Ecosystem." *Stanford Social Innovation Review*. https://ssir.org/articles/entry/cultivate_your_ecosystem

Boellstorff, Tom. 2021. "Rethinking Digital Anthropology." In *Digital Anthropology*, edited by Haidy Geismar and Hannah Knox, 44-62. London: Routledge.

Boo, Krist. 2000. "On the Cards: Life in the Fast Lane of Tech Hub." *The Straits Times*, October 11.

Boon-Hiok, Lee. 1978. "Singapore: Reconciling the Survival Ideology with the Achievement Concept." *Southeast Asian Affairs*: 229-244. <https://www.jstor.org/stable/27908349>.

Bourdieu, Pierre. 1977. *Outline of a Theory of Practice*. Cambridge: Cambridge University Press.

———. 1983. "The Forms of Capital." In *Handbook of Theory and Research for the Sociology of Education*, edited by J. Richardson, 241-258. New York: Greenwood

———. 1984. *Distinction: A Social Critique of the Judgement of Taste*. Cambridge, MA: Harvard University Press.

Bridges, Lauren E. 2018. "Flexible as Freedom? The Dynamics of Creative Industry Work." *New Media & Society* 20(4):1303-1319. <https://doi.org/10.1177/1461444816688920>.

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

Bruni, Attila, Silvia Gherardi, and Barbara Poggio. 2004. *Gender and Entrepreneurship: An Ethnographic Approach*. Routledge Studies in Management, Organizations and Society. London and New York: Routledge.

Bruun, Maja Hojer, and Ayo Wahlberg. 2022. "The Anthropology of Technology: The Formation of a Field." In *The Palgrave Handbook of the Anthropology of Technology*, edited by Maja Hojer Bruun, Ayo Wahlberg, Rachel Douglas-Jones, Cathrine Hasse, Klaus Hoeyer, Dorthe Brogård Kristensen, and Brit Ross Winthereik, 1-33. Singapore: Springer.

Bryant, Rebecca, and Daniel M. Knight. 2019. *The Anthropology of the Future*. Cambridge: Cambridge University Press.

Bunnell, Tim. 2016. *From World City to the World in One City: Liverpool Through Malay Lives*. Hoboken, NJ: John Wiley & Sons.

Bunnell, Tim, Daniel P. S. Goh, Chee-Kien Lai, and Choon-Piew Pow. 2012. "Introduction: Global Urban Frontiers? Asian Cities in Theory, Practice, and Imagination." *Urban Studies* 49 (13): 2785–2793. <https://doi.org/10.1177/0042098012452454>.

Burnett, David. 2000. "Technopreneurship in Singapore: Alive, Well, and Roaring for More." *Technopreneurial.com*. http://technopreneurial.com/articles/technopreneurship_singapore.asp.

Calderón, Sara Inés. 2013. "In Asia, Fear of Failure Hampers Startup Culture." *Politic365*, March 12. <http://politic365.com/2013/03/12/in-asia-fear-of-failure-hampers-startup-culture/>.

Carland, James W., Frank Hoy, William R. Boulton, and Jo Ann C. Carland. 1984. "Differentiating Entrepreneurs from Small Business Owners: A Conceptualization." *The Academy of Management Review* 9 (2): 354–359. <https://doi.org/10.2307/258448>

Carver, Terrell. 2010. "Materializing the Metaphors of Global Cities: Singapore and Silicon Valley." *Globalizations* 7 (3): 383–393. <https://doi.org/10.1080/14747731003669768>.

Castells, Manuel, ed. 2004. *The Network Society*. Cheltenham: Edward Elgar

Cervantes, Ruy, and Bonnie Nardi. 2012. "Building a Mexican Startup Culture Over the Weekend." In *ICIC '12: Proceedings of the 4th International Conference on Inter-cultural Collaboration*, March 21–23, Bengaluru, India. New York: ACM. <https://doi.org/10.1145/2160881.2160884>.

Cheok, Jacquelyn. 2015. "SGX to Deepen Ties with Local Startups." *The Business Times*, January 20. <http://business.asiaone.com/news/sgx-deepen-ties-local-startups#sthash.gmLMdcn7.dpuf>.

Chong, Terence. 2010. "Introduction: The Role of Success in Singapore's National Identity." In *Management of Success: Singapore Revisited*, edited by Terence Chong, 1-18. Singapore: Institute of Southeast Asian Studies (ISEAS).

Christiaens, Tim. 2020. "The Entrepreneur of the Self Beyond Foucault's Neoliberal Homo Oeconomicus." *European Journal of Social Theory* 23(4): 1–19. <https://doi.org/10.1177/1368431019857998>.

Chua, Beng Huat. 1995. *Communitarian Ideology and Democracy in Singapore*. New York and London: Routledge.

———. 1999. "Asian-Values Discourse and the Resurrection of the Social." *Positions* 7 (2): 573–592. <https://doi.org/10.1215/10679847-7-2-573>.

———. 2003. *Life Is Not Complete Without Shopping: Consumption Culture in Singapore*. Singapore: Singapore University Press.

———. 2004. "Conceptualizing an East Asian Popular Culture." *Inter-Asia Cultural Studies* 5 (2): 200–221. <https://doi.org/10.1080/1464937042000236711>.

Chua, Beng Huat, and Tan Joo Ean. 1999. "Singapore: Where the New Middle Class Sets the Standard." In *Culture and Privilege in Capitalist Asia*, edited by Michael Pinches, 138–159. London and New York: Routledge, 2005.

Chua, Emily Hui Ching. 2019. "Survival by Technopreneurialism: Innovation, Imaginaries, and the New Narrative of Nationhood in Singapore." *Science, Technology and Society* 24 (3): 527–544. <https://doi.org/10.1177/0971721819873202>.

———. 2023. "The New Monies of the Startup World: Future-Focused Tech Ventures as Experiments in Personal Worth." *Journal of the Royal Anthropological Institute* 29: 268–285. <https://doi.org/10.1111/1467-9655.13912>.

Clancey, Gregory. 2012. "Intelligent Island to Biopolis: Smart Minds, Sick Bodies, and Millennial Turns in Singapore." *Science, Technology & Society* 17 (1): 13–35. <https://doi.org/10.1177/097172181101700102>.

Coe, Neil M., and Philip F. Kelly. 2000. "Distance and Discourse in the Local Labour Market: The Case of Singapore." *Area* 32 (4): 413–422. <https://doi.org/10.1111/j.1475-4762.2000.tb00157.x>.

Coleman, Gabriella. 2010. "The Hacker Conference: A Ritual Condensation and Celebration of a Lifeworld." *Anthropological Quarterly* 83 (1): 47–72. <http://doi.org/10.1353/anq.0.0112>.

———. 2014. *Hacker, Hoaxer, Whistleblower, Spy: The Many Faces of Anonymous*. London and New York: Verso Books.

Coleman, Gabriella E. 2010. "Ethnographic Approaches to Digital Media." *Annual Review of Anthropology* 39 (1): 487–505. <https://doi.org/10.1146/annurev.anthro.012809.104945>.

Coleman, Gabriella E. 2013. *Coding Freedom: The Ethics and Aesthetics of Hacking*. Princeton and Oxford: Princeton University Press.

Coleman, Gabriella E., and Alex Golub. 2008. "Hacker Practice: Moral Genres and the Cultural Articulation of Liberalism." *Anthropological Theory* 8 (3): 255–277. <https://doi.org/10.1177/1463499608093814>.

Corey, Kenneth E. 1991. "The Role of Information Technology in the Planning and Development of Singapore." In *Collapsing Space and Time: Geographic Aspects of Communications and Information*, edited by Thomas R. Leinbach and Stanley D. Brunn, 217–231. London: Routledge.

Coupland, Douglas. 2018. *Machines Will Make Better Choices Than Humans*. Rotterdam: V2_Publishing.

Coyle, Diane. 2015. "A Shift to a Decluttered Digital Economy." *Financial Times*, November 3. <https://www.ft.com/content/b7fbd124-8238-11e5-a01c-8650859a4767>.

Crang, Mike. 2009. "Home@ Singapore. World: Spatial Imaginaries of a Mediated World." *Mediengeographie: Theorie - Analyse - Diskussion*: 539–564. <https://durham-repository.worktribe.com/output/1686193/home-at-singaporeworld-spatial-imaginaries-of-a-mediated-world>.

Curtis, Adam. 2011. *All Watched Over by the Machines of Loving Grace. Part Two: The Use and Abuse of Ecological Metaphors*. Documentary. BBC.

Davis, Mike. 1990. *City of Quartz: Excavating the Future in Los Angeles*. New Edition. Verso Books, 2006.

Department of Statistics, Singapore. 2013. *Population Trends 2013*. Singapore: Department of Statistics. https://www.singstat.gov.sg/publications/publications_and_papers/population_and_population_structure/population_trend.html.

Dijk, José van. 2013. *The Culture of Connectivity: A Critical History of Social Media*. Oxford and New York: Oxford University Press.

Dijk, José van, and David Nieborg. 2009. "Wikinomics and Its Discontents: A Critical Analysis of Web 2.0 Business Manifestos." *New Media & Society* 11 (5): 855–874. <https://doi.org/10.1177/1461444809105356>.

Do, Anh-Minh. 2013. "With Southeast Asian Web Entrepreneurs Eyeing the Region, You Better Learn This Stuff." *Tech in Asia*, July 1. <https://www.techinasia.com/south-east-asian-web-entrepreneurs-eyeing-region-learn-stuff/>.

Dyer-Witheford, Nick. 1999. "The Work in Digital Play." *Journal of International Communication* 6 (1): 69–93. <https://doi.org/10.1080/13216597.1999.9751883>

Dzenovska, Dace. 2012. *Aizbraukšana un Tukšums Latvijas Laukos: Starp Zudušām un Iespējamām Nākotnēm*. Rīga: Biznesa Augstskola Turība.

e27. 2014. *Echelon 2014 Opening Remarks: Mohan Belani, CEO and Co-Founder*, e27. [YouTube Video]. <https://www.youtube.com/watch?v=1pdveP82fZQ&list=PL6zz-jMotZHq1n8u8-Fj2EClc2-jcXQJXm>.

Eng, Teo Siew. 1992. "Planning Principles in Pre- and Post-Independence Singapore." *Town Planning Review* 63 (2): 163. <https://doi.org/10.3828/tpr.63.2.vr76822vu248631x>

English-Lueck, June Anne. 2002. *Cultures@ Silicon Valley*. Stanford, CA: Stanford University Press.

Escobar, Arturo, David Hess, Isabel Licha, Will Sibley, Marilyn Strathern, and Judith Sutz. 1994a. "Welcome to Cyberia: Notes on the Anthropology of Cyberculture [and Comments and Reply]." *Current Anthropology* 35 (3): 211–231. <http://www.jstor.org/stable/2744194>.

———. 1994b. "Welcome to Cyberia: Notes on the Anthropology of Cyberculture [and Comments and Reply]." *Current Anthropology* 35 (3): 211–231. <http://www.jstor.org/stable/2744194>.

Fabian, Johannes. 1983. *Time and the Other: How Anthropology Makes Its Object*. New York: Columbia University Press, 2002.

Feher, Michel. 2009. "Self-Appreciation; or, the Aspirations of Human Capital." *Public Culture* 21 (1): 21–41. <https://doi.org/10.1215/08992363-2008-019>.

Feld, Brad. 2012. *Startup Communities: Building an Entrepreneurial Ecosystem in Your City*. Hoboken, NJ: John Wiley & Sons.

Ferguson, James. 1999. *Expectations of Modernity: Myths and Meanings of Urban Life on the Zambian Copperbelt*. Berkeley, Los Angeles, and Oxford: University of California Press.

———. 2008. "Seeing Like an Oil Company: Space, Security, and Global Capital in Neoliberal Africa." *American Anthropologist* 107 (3): 377–382. <https://doi.org/10.1525/aa.2005.107.3.377>.

Florida, Richard. 2002. *The Rise of the Creative Class, Revisited*. New York: Basic Books, 2012.

Foucault, Michel. 2008. *The Birth of Biopolitics: Lectures at the Collège de France 1978–79*. Edited by Michel Sennellart. New York: Palgrave Macmillan.

Freeman, Carla. 2014. *Entrepreneurial Selves: Neoliberal Respectability and the Making of a Caribbean Middle Class*. Durham and London: Duke University Press.

Frey, Bronwyn. 2020. "Platform Labor and In/Formality: Organization among Motorcycle Taxi Drivers in Bandung, Indonesia." *Anthropology of Work Review* 41 (1): 36–49. <https://doi.org/10.1111/awr.12187>.

Friederici, Nicolas, Michel Wahome, and Mark Graham. 2020. *Digital Entrepreneurship in Africa: How a Continent Is Escaping Silicon Valley's Long Shadow*. Cambridge, MA: MIT Press.

Fuchs, Christian. 2009. "Some Reflections on Manuel Castells' Book *Communication Power*." *TripleC* 7 (1): 94–108. <https://doi.org/10.31269/triplec.v7i1.136>.

Furlow, Christopher. 2009. "Malaysian Modernities: Cultural Politics and the Construction of Muslim Technoscientific Identities." *Anthropological Quarterly* 82 (1): 197–228. <https://dx.doi.org/10.1353/anq.0.0056>.

Gell, Alfred. 1992. "The Technology of Enchantment and the Enchantment of Technology." In *Anthropology, Art and Aesthetics*, edited by Jeremy Coote, 40–63. Oxford: Clarendon Press.

Getzoff, Joseph. 2020. "Start-up Nationalism: The Rationalities of Neoliberal Zionism." *Environment and Planning D: Society and Space* 38 (5): 811–828. <https://doi.org/10.1177/0263775820911949>.

Ghosh, Ipshita. 2020. "Investment, Value, and the Making of Entrepreneurship in India." *Economic Anthropology* 7 (2): 190–202. <https://doi.org/10.1002/sea2.12179>.

———. 2022. *Startup Futures: Entrepreneurs, Investors and Imaginaries of Care in Global India*. PhD diss., Syracuse University.

Gibson, William. 1993. "Disneyland with the Death Penalty." *Wired* 1 (4). http://www.wired.com/wired/archive/1.04/gibson_pr.html.

Giddens, Anthony. 1990. *The Consequences of Modernity*. Cambridge: Polity Press.

Gill, Rosalind. 2011. "Life Is a Pitch: Managing the Self in New Media Work." In *Managing Media Work*, edited by Mark Deuze, 249–262. Thousand Oaks, CA: Sage.

Gill, Rosalind, and Ned Rossiter. 2007. *Technobohemians or the New Cybertariat?: New Media Work on Amsterdam a Decade After the Web*. Amsterdam: Institute of Network Cultures. https://www.networkcultures.org/_uploads/17.pdf

"Go East, Young Moneyman." *The Economist*, April 14 2011. <http://www.economist.com/node/18560501>.

Goh, Daniel P. S. 2010. "The Third Phase of Singapore's Multiculturalism." In *Singapore Perspectives 2010: Home. Heart. Horizon.*, edited by Tarn How Tan, 19–35. Singapore: World Scientific Publishing.

Goh, Daniel P. S. 2014. "The Little India Riot and the Spatiality of Migrant Labor in Singapore." *Society and Space*, September 8. <https://www.societyandspace.org/articles/the-little-india-riot-and-the-spatiality-of-migrant-labor-in-singapore>.

Greenhouse, Carol J. 1996. *A Moment's Notice: Time Politics Across Culture*. Ithaca, NY: Cornell University Press.

Gregg, Melissa. 2006. "On Friday Night Drinks: Neoliberalism's Compulsory Friends'." Paper presented at the *UnAustralia Conference of the Cultural Studies Association of Australasia*, December.

Gupta, Akhil, and James Ferguson. 1992. "Beyond 'Culture': Space, Identity, and the Politics of Difference." *Cultural Anthropology* 7 (1): 6–23. <https://doi.org/10.1525/can.1992.7.1.02a00020>.

Guyer, Jane I. 2007. "Prophecy and the Near Future: Thoughts on Macroeconomic, Evangelical, and Punctuated Time." *American Ethnologist* 34 (3): 409–421. <https://doi.org/10.1525/ae.2007.34.3.409>.

Geismar, Haidy, and Hannah Knox, eds. 2021. *Digital Anthropology*. London: Routledge.

Hallam, Elizabeth, and Tim Ingold, eds. 2007. *Creativity and Cultural Improvisation*. Vol. 44 of *ASA Monographs*. Oxford and New York: Berg.

Handler, Richard. 1988. "Authenticity." *Anthropology Today* 2 (1): 2–4. <https://doi.org/10.2307/3032899>.

Hart, David M. 2003. "Entrepreneurship Policy: What It Is and Where It Came From." In *The Emergence of Entrepreneurship Policy: Governance, Start-ups, and Growth in the U.S. Knowledge Economy*, edited by David M. Hart, 3–16. Cambridge: Cambridge University Press.

Hart, Stuart, and C. K. Prahalad. 2002. "The Fortune at the Bottom of the Pyramid." *Strategy+ Business* 26: 54–67. <https://www.strategy-business.com/article/11518>.

Heng, Toh Mun, and Linda Low. 1993. "Development Planning in Singapore." In *Development Planning in Asia*, edited by Somsak Tambunlertchai and S. P. Gupta, 223–254. Kuala Lumpur: Asian and Pacific Development Centre.

Heok, Adrian, and Brendan Luyt. 2009. "Perceptions of Education, Learning and Access: Public Libraries and the Internet in Singapore." In *Asia-Pacific Conference on Library & Information Education & Practice (A-LIEP 2009)*. [https://tsukuba.repo.nii.ac.jp/record/25101/files/Track-B\(1\)_3.pdf](https://tsukuba.repo.nii.ac.jp/record/25101/files/Track-B(1)_3.pdf).

Hetherington, Gregg. 2016. "Surveying the Future Perfect: Anthropology, Development and the Promise of Infrastructure." In *Infrastructures and Social Complexity: A Companion*, edited by Penelope Harvey, Casper Jensen, and Atsuro Morita, 40-50. London: Routledge.

Hill, Michael. 2000. "Asian Values as Reverse Orientalism: Singapore." *Asia Pacific Viewpoint* 41 (2): 177-190. <https://doi.org/10.1111/1467-8373.00114>.

Hochschild, Arlie Russell. 1983. *The Managed Heart: Commercialization of Human Feeling*. Berkeley and Los Angeles, CA: University of California Press, 2012.

Holmes, Douglas R., and George E. Marcus. 2004. "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, 235-252. Malden, Oxford, and Victoria: Blackwell.

———. 2006. "Fast Capitalism: Para-Ethnography and the Rise of the Symbolic Analyst." In *Frontiers of Capital: Ethnographic Reflections on the New Economy*, edited by Melissa S. Fisher and Greg Downey, 33-57. Durham, NC: Duke University Press.

Hong, Lysa, and Jianli Huang. 2008. *The Scripting of a National History: Singapore and Its Pasts*. Hong Kong: Hong Kong University Press.

Hope, Wayne. 2006. "Global Capitalism and the Critique of Real Time." *Time & Society* 15 (2-3): 275-302. <https://doi.org/10.1177/0961463X06066943>.

Hornidge, Anna-Katharina. 2010. "An Uncertain Future: Singapore's Search for a New Focal Point of Collective Identity and Its Drive Towards 'Knowledge Society'." *Asian Journal of Social Science* 38 (5): 785-818. <https://doi.org/10.1163/156853110X522939>.

Horst, Heather A., and Daniel Miller. 2006. *The Cell Phone: An Anthropology of Communication*. Oxford and New York: Berg.

Hudson, Chris. 2013. *Beyond the Singapore Girl: Discourses of Gender and Nation in Singapore*. Copenhagen: Nordic Institute of Asian Studies (NIAS) Press.

Hwang, Victor W., and Greg Horowitz. 2012. *The Rainforest: The Secret to Building the Next Silicon Valley*. Los Altos Hills, CA: Regenwald Los Altos.

Ingold, Tim. 1997. "Eight Themes in the Anthropology of Technology." *Social Analysis: The International Journal of Anthropology* 41 (1): 106-138. <https://www.jstor.org/stable/23171736>.

Irani, Lilly. 2015. "Hackathons and the Making of Entrepreneurial Citizenship." *Science, Technology, & Human Values* 40 (5): 799-824. <http://www.jstor.org/stable/43671232>.

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

Isaacson, Walter. 2011. *Steve Jobs*. New York: Simon & Schuster.

Jameson, Fredric. 2005. *Archaeologies of the Future: The Desire Called Utopia and Other Science Fictions*. London: Verso.

Jasanoff, Sheila, and Sang-Hyun Kim, eds. 2015. *Dreamscapes of Modernity: Sociotechnical Imaginaries and the Fabrication of Power*. Chicago and London: University of Chicago Press.

Jean, Sheryl. 2015. "Dispatch from Singapore: Building an Entrepreneurial Culture." *The Dallas Morning News*, Biz Beat Blog, May 7. <http://bizbeatblog.dallasnews.com/2015/05/dispatch-from-singapore-building-an-entrepreneurial-culture.html/>.

JTC Corporation. n.d. *One-North*. Accessed October 8, 2013. <http://www.jtc.gov.sg/RealEstateSolutions/one-north>.

Jurriëns, Edwin, and Ross Tapsell, eds. 2017. *Digital Indonesia: Connectivity and Divergence*. Singapore: ISEAS-Yusof Ishak Institute.

Jussawalla, Meheroo, and Chee-Wah Cheah. 1983. "Towards an Information Economy: The Case of Singapore." *Information Economics and Policy* 1 (2): 161–176. [https://doi.org/10.1016/0167-6245\(83\)90025-2](https://doi.org/10.1016/0167-6245(83)90025-2).

Keane, Michael. 2011. *China's New Creative Clusters: Governance, Human Capital and Investment*. London and New York: Routledge.

Kelan, Elisabeth K. 2009. "Gender Fatigue: The Ideological Dilemma of Gender Neutrality and Discrimination in Organizations." *Canadian Journal of Administrative Sciences* 26 (3): 197–210. <https://doi.org/10.1002/cjas.106>.

Kelly, Kevin. 1998. *New Rules for the New Economy: 10 Radical Strategies for a Connected World*. Reprint, Penguin Books, 1999.

Kelman, Sarah. 2018. "The Bumipreneur Dilemma and Malaysia's Technology Start-up Ecosystem." *Economic Anthropology* 5: 59–70. <https://doi.org/10.1002/sea2.12102>.

Kelty, Christopher M. 2008. *Two Bits: The Cultural Significance of Free Software*. Durham and London: Duke University Press.

Kingsland, Sharon E. 1994. "Economics and Evolution: Alfred James Lotka and the Economy of Nature." In *Natural Images in Economic Thought: Markets Read in Tooth and Claw*, edited by Philip Mirowski, 231–246. Cambridge and New York: Cambridge University Press.

Knox, Hannah, and Haidy Geismar. 2021. "Introduction 2.0." In *Digital Anthropology*, edited by Haidy Geismar and Hannah Knox, 1–18. London: Routledge.

Koh, Kheng Lian. 2000. "Singapore: Fashioning Landscape for 'The Garden City'." In *Landscape Conservation Law: Present Trends and Perspectives in International and Comparative Law*. IUCN - The World Conservation Union.

Koh, Winston T. H., and Poh Kam Wong. 2005. "Competing at the Frontier: The Changing Role of Technology Policy in Singapore's Economic Strategy." *Technological Forecasting and Social Change* 72 (3): 255–285. <http://doi.org/10.1016/j.techfore.2004.08.006>.

Koselleck, Reinhart. 1985. *Futures Past: On the Semantics of Historical Time*. Translated by Keith Tribe. New York: Columbia University Press, 2004.

Koshy, Susan. 2013. "Neoliberal Family Matters." *American Literary History* 25 (2): 344–380. <http://www.jstor.org/stable/43817573>.

Koskinen, Henri. 2023. "Outlining Startup Culture as a Global Form." *Journal of Cultural Economy* 16 (6): 812–828. <https://doi.org/10.1080/17530350.2023.2216215>.

Kristensen, Glen. 2015. "The Subway System That 'Oozes Future'." CNN, October 7. <http://edition.cnn.com/2015/06/17/travel/singapore-mrt-future/>.

Kuo, Eddie C. Y., Linda Low. 2001. "Information Economy and Changing Occupational Structure in Singapore." *The Information Society* 17 (4): 281–293. <https://doi.org/10.1080/019722401753330878>.

Lacy, Sarah. 2011. *Brilliant, Crazy, Cocky: How the Top 1% of Entrepreneurs Profit from Global Chaos*. Kindle ed. Wiley.

Larkin, Brian. 2008. *Signal and Noise: Media, Infrastructure, and Urban Culture in Nigeria*. Durham and London: Duke University Press.

Lee, Kuan Yew. 2000. *From Third World to First World: The Singapore Story: 1965–2000*. Philadelphia: HarperCollins Publishers.

Lee, Kuan Yew. 2002. "An Entrepreneurial Culture for Singapore." *The Ho Rih Hwa Leadership in Asia Public Lecture*. Suntec Singapore: Singapore Management University (SMU). <http://qeducation.sg/economics-resources/mr-lkys-views-on-entrepreneurialism-in-singapore/>.

Lee, Oo Gin. 2001. "Buena Vista Like You've Never Seen It." *Straits Times*, December 5.

Lee, Terence. 2004. "Creative Shifts and Directions: Cultural Policy in Singapore." *International Journal of Cultural Policy* 10 (3): 281–299. <https://doi.org/10.1080/1028663042000312525>.

Lee, Terence. 2012. "For the Sake of Singapore's Entrepreneurial Future, Don't Put 'Sticker Lady' in Jail." *Tech in Asia*, June 5. <https://www.techinasia.com/for-the-sake-of-singapores-entrepreneurial-future-dont-put-sticker-lady-in-jail>.

———. 2014a. "Singapore Government Reveals Latest Measures to Turn Country into an Innovator's Haven." *Tech in Asia*, March 10. <https://www.techinasia.com/singapore-government-reveals-latest-measures-turn-country-innovators-haven>.

———. 2014b. "'Inculcating' Creativity: Culture as Public Pedagogy in Singapore." *Discourse: Studies in the Cultural Politics of Education* 35 (5): 718–732. <https://doi.org/10.1080/01596306.2014.921992>.

Lee, Terence, and Denise Lim. 2004. "The Economics and Politics of 'Creativity' in Singapore." *Australian Journal of Communication* 31 (2): 149–165. <https://search.informit.org/doi/10.3316/ielapa.200411991>.

Lengauer, Dayana. 2016. "New Media in Southeast Asia: Concepts and Research Implications." *ASEAS – Austrian Journal of South-East Asian Studies* 9 (2): 187–194. <https://doi.org/10.14764/10.ASEAS-2016.2-1>.

Leong, Bernard. 2011. "Advice to Startups: Get Out of Singapore ASAP." *Tech in Asia*, July 26. <https://www.techinasia.com/advice-to-startups-get-out-of-singapore-asap>.

Lepore, Jill. 2014. "The Disruption Machine - What the Gospel of Innovation Gets Wrong." *The New Yorker*, June 23.

Lim, Linda Y. C., and Soo Ann Lee. 2010. "Globalizing State, Disappearing Nation: The Impact of Foreign Participation in the Singapore Economy." In *Management of Success: Singapore Revisited*, edited by Terence Chong, 139–158. Singapore: Institute of Southeast Asian Studies (ISEAS).

Lim, Merlyna. 2017. "Freedom to Hate: Social Media, Algorithmic Enclaves, and the Rise of Tribal Nationalism in Indonesia." *Critical Asian Studies* 49 (3): 411–427. <https://doi.org/10.1080/14672715.2017.1341188>.

Lim, Raymond. 2002. *Report of the Entrepreneurship and Internationalisation Subcommittee, Economic Review Committee*. 30 May. Entrepreneurship and Internationalisation Subcommittee (EISC), Economic Review Committee. <https://www.nas.gov.sg/archivesonline/data/pdfdoc/2002053002.htm>.

Lim, Yung-Hui. 2012. "Meet Hot Asian Tech Startups at Echelon 2012." *Forbes*, May 30. <http://www.forbes.com/sites/limyunghui/2012/05/30/meet-hot-asian-tech-startups-at-echelon-2012/>.

Lindtner, Silvia M. 2020. *Prototype Nation: China and the Contested Promise of Innovation*. Princeton, NJ: Princeton University Press.

Ling, Han, Chengpang Lee, and Gracia Jieyi Lee. 2021. "Caught Between State and Motherhood: The Public Image of Female Entrepreneurs in Singapore." *Asian Women* 37 (2): 35–60. <https://doi.org/10.14431/aw.2021.6.37.2.35>.

Lowe, John. 2019. "Masculinizing National Service: The Cultural Reproduction of Masculinities and Militarization of Male Citizenship in Singapore." *Journal of Gender Studies* 28 (6): 687–698. <https://doi.org/10.1080/09589236.2019.1604329>.

Lüthje, Boy, Stefanie Hürtgen, Peter Pawlicki, and Martina Sproll. 2013. *From Silicon Valley to Shenzhen: Global Production and Work in the IT Industry*. Lanham, MD: Rowman & Littlefield.

Marston, Sallie A. 2000. "The Social Construction of Scale." *Progress in Human Geography* 24 (2): 219–242.

Martin, Luther H., Huck Gutman, and Hutton Patrick H., eds. 1988. *Technologies of the Self: A Seminar with Michel Foucault*. London: Tavistock Publications.

Marvin, Carolyn. 1988. *When Old Technologies Were New: Thinking About Electric Communication in the Late Nineteenth Century*. Reprint, Oxford University Press, 1997.

Marwick, Alice E. 2013. *Status Update: Celebrity, Publicity, and Branding in the Social Media Age*. New Haven, CT: Yale University Press.

———. 2018. "Silicon Valley and the Social Media Industry." In *The Sage Handbook of Social Media*, edited by Jean Burgess, Alice Marwick, and Thomas Poell, 314–329. Thousand Oaks, CA: Sage Publications. <https://doi.org/10.4135/9781473984066.n18>.

Massey, Doreen. 1998. "The Spatial Construction of Youth Cultures." In *Cool Places: Geographies of Youth Cultures*, edited by Tracey Skelton and Gill Valentine, 121–129. London: Routledge.

Massey, Doreen, Paul Quintas, and David Wield. 1992. *High-Tech Fantasies: Science Parks in Society, Science, and Space*. London and New York: Routledge, 2004.

Massachusetts Institute of Technology. 2013. *MIT REAP Brochure: Acceleration Through Collaboration*. Cambridge, MA: Massachusetts Institute of Technology, Martin Trust Center for MIT Entrepreneurship. <http://reap.mit.edu/assets/pdf/brochure.pdf>.

Maurer, Bill. 2006. "The Anthropology of Money." *Annual Review of Anthropology* 35: 15–36. <http://doi.org/10.1146/annurev.anthro.35.081705.123127>.

McKendrick, David, Richard F. Doner, and Stephan Haggard. 2000. *From Silicon Valley to Singapore: Location and Competitive Advantage in the Hard Disk Drive Industry*. Stanford, CA: Stanford Business Books.

McRobbie, Angela. 2015. *Be Creative: Making a Living in the New Culture Industries*. Cambridge, Oxford, Boston, and New York: Polity.

Mears, Ashley. 2011. *Pricing Beauty: The Making of a Fashion Model*. Berkeley, CA: University of California Press.

Medina, Eden. 2011. *Cybernetic Revolutionaries: Technology and Politics in Allende's Chile*. Cambridge and London: MIT Press.

Meng, Choy Keen. 2010. "Singapore's Changing Economic Model." In *Management of Success: Singapore Revisited*, edited by Terence Chong, 123-138. Singapore: Institute of Southeast Asian Studies (ISEAS).

Miller, Daniel, Elisabetta Costa, Nell Haynes, Tom McDonald, Razvan Nicolescu, Jolynna Sinanan, Juliano Spyer, Shriram Venkatraman, and Xinyuan Wang. 2016. *How the World Changed Social Media*. London: UCL Press.

Miller, Daniel, and Don Slater. 2000. *The Internet: An Ethnographic Approach*. Oxford and New York: Berg.

Ministry of Manpower, Singapore. n.d. *EntrePass*. <https://mom.gov.sg/pass-es-an-permits/entrepas>.

Ministry of Manpower, Singapore. 2025. "Labour Force Survey, Summary Table: Unemployment." Released January 27. Accessed February 4, 2025. <https://stats.mom.gov.sg/Pages/Unemployment-Summary-Table.aspx?utm>.

Ministry of Trade and Industry, Singapore. 2013. *A Sustainable Population for Dynamic Singapore: Population White Paper Executive Summary*. <https://www.strategygroup.gov.sg/images/chart7.png.pdf>.

Miyazaki, Hirokazu. 2005. "The Materiality of Finance Theory." In *Materiality*, edited by Daniel Miller, 165-181. Durham and London: Duke University Press.

———. 2006. *The Method of Hope: Anthropology, Philosophy, and Fijian Knowledge*. Stanford: Stanford University Press.

———. 2013. *Arbitraging Japan: Dreams of Capitalism at the End of Finance*. Berkeley, CA: University of California Press.

Moisio, Sami, and Ugo Rossi. 2020. "The Start-Up State: Governing Urbanised Capitalism." *Environment and Planning A: Economy and Space* 52 (3): 532–552. <https://doi.org/10.1177/0308518X19879168>.

Moore, James F. 1993. "Predators and Prey: A New Ecology of Competition." *Harvard Business Review* 71 (3): 75–86. <https://hbr.org/1993/05/predators-and-prey-a-new-ecology-of-competition>.

- Morgan, Gareth. 2006. *Images of Organization*. Thousand Oaks, CA: Sage.
- Morley, David, and Kevin Robins. 1995. *Spaces of Identity: Global Media, Electronic Landscapes, and Cultural Boundaries*. London and New York: Routledge.
- Mosse, David. 2005. *Cultivating Development: An Ethnography of Aid Policy and Practice*. London and Ann Arbor, MI: Pluto Press.
- Muniesa, Fabian, Yuval Millo, and Michel Callon. 2007. "An Introduction to Market Devices." *The Sociological Review* 55 (2): 1–12. <https://doi.org/10.1111/j.1467-954X.2007.00727.x>.
- Munn, Nancy D. 1992. "The Cultural Anthropology of Time: A Critical Essay." *Annual Review of Anthropology* 21: 93–123. <https://www.jstor.org/stable/2155982>.
- Nadesan, Majia Holmer, and Angela Trethewey. 2009. "Performing the Enterprising Subject: Gendered Strategies for Success (?)." *Text and Performance Quarterly* 20 (3): 223–250. <https://doi.org/10.1080/10462930009366299>.
- Nager, Marc, Clint Nelsen, and Franck Nuoyrigat. 2012. *Startup Weekend: How to Take a Company from Concept to Creation in 54 Hours*. Hoboken, NJ: John Wiley & Sons.
- Neff, Gina. 2005. "The Changing Place of Cultural Production: The Location of Social Networks in a Digital Media Industry." *The ANNALS of the American Academy of Political and Social Science* 597 (1): 134–152. <https://www.jstor.org/stable/25046066>.
- . 2012. *Venture Labor: Work and the Burden of Risk in Innovative Industries*. Acting with Technology. Cambridge and London: MIT Press.
- Niederer, Sabine, and José Van Dijck. 2010. "Wisdom of the Crowd or Technicity of Content? Wikipedia as a Sociotechnical System." *New Media & Society* 12 (8): 1368–1387. <https://doi.org/10.1177/1461444810365297>.
- Nisa, Eva F. 2018. "Social Media and the Birth of an Islamic Social Movement: ODOJ (One Day One Juz) in Contemporary Indonesia." *Indonesia and the Malay World* 46 (134): 24–43. <https://doi.org/10.1080/13639811.2017.1416758>.
- Olds, Kris. 2007. "Global Assemblage: Singapore, Foreign Universities, and the Construction of a Global Education Hub." *World Development* 35 (6): 959–975. <https://doi.org/10.1016/j.worlddev.2006.05.014>.
- Olds, Kris, and Henry Yeung. 2004. "Pathways to Global City Formation: A View from the Developmental City-State of Singapore." *Review of International Political Economy* 11 (3): 489–521. <https://www.jstor.org/stable/4177508>.
- Ong, Aihwa. 1999. *Flexible Citizenship: The Cultural Logics of Transnationality*. Durham, NC: Duke University Press.

Ong, Aihwa. 2004. "Intelligent Island, Baroque Ecology." In *Beyond Description: Singapore Space Historicity*, edited by Ryan Bishop, John Philips, and Wei-Wei Yeo, 176-189. London and New York: Routledge.

———. 2006. *Neoliberalism as Exception: Mutations in Citizenship and Sovereignty*. Durham, NC: Duke University Press.

Onneweer, Maarten. 2007. "An Ecology of Prospects: Time and Nature in Dutch Landscapes." *Etnofoor* 19 (2): 23-46. <https://www.jstor.org/stable/25758119>.

———. 2009. "New Nature: On the Production of a Paradox." In *Virtualism, Governance and Practice: Vision and Execution in Environmental Conservation*, edited by James G. Carrier and Paige West, 45-65. New York: Berghahn Books.

Ooi, Can-Seng. 2010. "Political Pragmatism and the Creative Economy: Singapore as a City for the Arts." *International Journal of Cultural Policy* 16 (4): 403-417. <https://doi.org/10.1080/10286630903118071>.

Oswin, Natalie. 2010. "The Modern Model Family at Home in Singapore: A Queer Geography." *Transactions of the Institute of British Geographers* 35 (2): 256-268. <http://www.jstor.org/stable/40647323>.

———. 2014. "Queer Time in Global City Singapore: Neoliberal Futures and the 'Freedom to Love'." *Sexualities* 17 (4): 412-433. <https://doi.org/10.1177/1363460714524765>.

Ouroussoff, Nicolai. 2008. "The New, New City." *The New York Times*, June 8. <https://www.nytimes.com/2008/06/08/magazine/08shenzhen-t.html>.

Pels, Peter. 2015. "Modern Times: Seven Steps Toward an Anthropology of the Future." *Current Anthropology* 56 (6): 779-796. <https://doi.org/10.1086/684047>.

———. 2023. *The Spirit of Matter*. New York: Berghahn Books.

Pels, Peter, and Birgit Meyer, eds. 2003. *Magic and Modernity: Interfaces of Revelation and Concealment*. Stanford, CA: Stanford University Press.

Perepelkin, Vyacheslav A., Elena V. Perepelkina, and Elena S. Morozova. 2016. "Evolution of the Concept of 'Human Capital' in Economic Science." *International Journal of Environmental & Science Education* 11 (15): 7649-7658. <http://www.ijese.net/makale/1054.html>.

Persoon, Gerard A., and Diny M. E. van Est. 2000. "The Study of the Future in Anthropology in Relation to the Sustainability Debate." *Focaal* 35: 7-28. <https://scholarlypublications.universiteitleiden.nl/handle/1887/12317>.

Pfaffenberger, Bryan. 1988. "Fetishised Objects and Humanised Nature: Towards an Anthropology of Technology." *Man, New Series* 23 (2): 236-252. <https://doi.org/10.2307/2802804>.

Pfaffenberger, Bryan. 1992. "Social Anthropology of Technology." *Annual Review of Anthropology* 21: 491–516. <http://www.jstor.org/stable/2155997>.

Pfeilstetter, Richard. 2017. "Startup Communities: Notes on the Sociality of Tech-Entrepreneurs in Manchester." *Journal of Comparative Research in Anthropology and Sociology* 8 (1): 1–15.

Pfeilstetter, Richard. 2021. *The Anthropology of Entrepreneurship: Cultural History, Global Ethnographies, Theorizing Agency*. London: Routledge.

Phillips, Su-Ann Mae, and Henry Wai-chung Yeung. 2003. "A Place for R&D? The Singapore Science Park." *Urban Studies* 40 (4): 707–732. <https://www.jstor.org/stable/43084826>.

Pinches, Michael, ed. 1999. *Culture and Privilege in Capitalist Asia*. Reprint, London and New York: Routledge, 2005.

Piot, Charles. 2010. *Nostalgia for the Future: West Africa After the Cold War*. Chicago: University of Chicago Press.

Polanyi, Karl. 1944. *The Great Transformation: The Political and Economic Origins of Our Time*. Reprint, Boston: Beacon Press, 2001.

Pollio, Andrea. 2020. "Making the Silicon Cape of Africa: Tales, Theories and the Narration of Startup Urbanism." *Urban Studies* 57 (13): 2715–2732. <https://www.jstor.org/stable/27028379>.

Porter, Michael E. 1998. "Clusters and the New Economics of Competition." *Harvard Business Review* 76 (6): 77–90. <https://hbr.org/1998/11/clusters-and-the-new-economics-of-competition>.

Postill, John. 2014a. "A Critical History of Internet Activism and Social Protest in Malaysia, 1998–2011." *Asiascape: Digital Asia* 1 (1–2): 78–103. <http://doi.org/10.1163/22142312-12340006>.

———. 2014b. "Freedom Technologists and the New Protest Movements." *Convergence: The International Journal of Research into New Media Technologies* 20 (4): 402–418. <https://doi.org/10.1177/1354856514541350>.

Prahalad, Coimbatore Krishna. 2006. *The Fortune at the Bottom of the Pyramid: Eradicating Poverty Through Profits*. Upper Saddle River, NJ: Wharton School Publishing.

Prime Minister's Office. 1991. *White Paper on Shared Values*. Singapore: Government of Singapore. https://www.nas.gov.sg/archivesonline/government_records/record-details/a472b486-7aea-11e7-83df-0050568939ad.

PuruShotam, Nirmala. 1998. "Between Compliance and Resistance: Women and the Middle-Class Way of Life in Singapore." In *Gender and Power in Affluent Asia*, edited by Maila Stivens and Krishna Sen, 127-166. London and New York: Routledge.

Putnam, Robert D. 1995. "Bowling Alone: America's Declining Social Capital." *Journal of Democracy* 6 (1): 65-78. <http://doi.org/10.1353/jod.1995.0002>.

Rafael, Vicente L. 2003. "The Cell Phone and the Crowd: Messianic Politics in the Contemporary Philippines." *Philippine Political Science Journal* 24 (47): 3-36. <https://escholarship.org/uc/item/5t1376v0>.

Rajaratnam, Sinnathamby. 1975. "Singapore: Global City." In *The Future of Singapore—The Global City*, edited by Wee Teong-Boo, 15-24. Singapore: Democratic Socialist Club, University of Singapore, University Education Press.

Ranasinghe, Dhara, and Katie Holliday. 2013. "What Are Asian Entrepreneurs Afraid Of?" *CNBC*, April 29. <http://www.cnbc.com/id/100682512>.

Rencher, Marlo. 2012. *Crossing the Valley of Death: A Multi-Sited, Multi-Level Ethnographic Study of Growth Startups and Entrepreneurial Communities in Post-Industrial Detroit*. PhD diss., Wayne State University. https://digitalcommons.wayne.edu/oa_dissertations/616.

Rhee, Jeong-eun. 2013. "The Neoliberal Racial Project: The Tiger Mother and Governmentality." *Educational Theory* 63: 561-580. <https://doi.org/10.1111/edth.12042>.

Ries, Eric. 2011. *The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses*. New York: Crown Business.

Rifkin, Mark. 2017. *Beyond Settler Time: Temporal Sovereignty and Indigenous Self-Determination*. Durham, NC: Duke University Press.

Ringel, Felix. 2018. *Back to the Postindustrial Future: An Ethnography of Germany's Fastest-Shrinking City*. New York and Oxford: Berghahn Books, 2020.

Rocha, Zarine L., and Brenda S. A. Yeoh. 2021. "Managing the Complexities of Race: Eurasians, Classification and Mixed Racial Identities in Singapore." *Journal of Ethnic and Migration Studies* 47 (4): 878-894. <https://doi.org/10.1080/1369183X.2019.1654159>.

Roitman, Janet. 2014. *Anti-Crisis*. Durham and London: Duke University Press.

Roh, David S., Betsy Huang, and Greta A. Niu, eds. 2015. *Techno-Orientalism: Imagining Asia in Speculative Fiction, History, and Media*. New Brunswick, NJ: Rutgers University Press.

Rose, Nikolas. 1992. "Governing the Enterprising Self." In *The Values of the Enterprise Culture: The Moral Debate*, edited by Paul Heelas and Paul Morris, 141-164. London and New York: Routledge.

Rosenberg, Daniel, and Susan Harding. 2005. "Introduction: Histories of the Future." In *Histories of the Future*, edited by Daniel Rosenberg and Susan Harding, 3-18. Durham and London: Duke University Press.

Rosenzweig, Roy. 1998. "Wizards, Bureaucrats, Warriors, and Hackers: Writing the History of the Internet." *The American Historical Review* 103 (5): 1530-1552. <https://doi.org/10.2307/2649970>.

Ross, Andrew. 2003. *No-Collar: The Humane Workplace and Its Hidden Costs*. New York: Basic Books.

Rothschild, Michael. 1990. *Bionomics: The Inevitability of Capitalism*. New York: Henry Holt.

Rottenberg, Catherine. 2014. "The Rise of Neoliberal Feminism." *Cultural Studies*. doi:10.1080/09502386.2013.857361. <https://doi.org/10.1080/09502386.2013.857361>.

Roy, Ananya. 2009. "The 21st-Century Metropolis: New Geographies of Theory." *Regional Studies* 43 (6): 819-830. <https://doi.org/10.1080/00343400701809665>.

Bishop, Ryan, John Philips, and Wei-Wei Yeo, eds. 2004. *Beyond Description: Singapore Space Historicity*. London and New York: Routledge.

Said, Edward. 1978. *Orientalism*. Reprint, London: Penguin, 2003.

Salazar, Juan Francisco, Sarah Pink, Andrew Irwing, and Johannes Sjöberg, eds. 2017. *Anthropologies and Futures: Researching Emerging and Uncertain Worlds*. Bloomsbury Publishing.

Saloner, Garth. 2010. "The Entrepreneur and the Venture Capitalist." In *The Masters of Private Equity and Venture Capital*, edited by Robert Finkel and David Greising, 141-150. New York: McGraw Hill Professional.

Sam, Jackie. 1965. "A Pledge by Lee: We Want to Co-Operate with Central Govt." *The Straits Times*.

"Samantha Lo." 2024. *Samantha Lo*. Accessed August 9, 2024. <https://peoplepill.com/i/samantha-lo>.

Sassen, Saskia. 2000. "Spatialities and Temporalities of the Global: Elements for a Theorization." *Public Culture* 12 (1): 215-232. <https://muse.jhu.edu/article/26188>.

Savage, Victor R. 1992. "Singapore's Environmental Ideology." In *Imagining Singapore*, 2nd ed., edited by Ban Kah Choon, Anne Pakir, and Tong Chee Kiong, 210-239. Singapore: Eastern Universities Press, 2004.

Scharff, Christina. 2016. "The Psychic Life of Neoliberalism: Mapping the Contours of Entrepreneurial Subjectivity." *Theory, Culture & Society* 33 (6): 107-122. <https://doi.org/10.1177/0263276415590164>.

Schneider, Florian. 2023. "The Shape of the Asiascape: Ten Years of Digital Asia Research." *Asiascape: Digital Asia* 10: 5–29. <http://doi.org/10.1163/22142312-bja10039>.

Scott, James C. 1998. *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed*. New Haven, CT: Yale University Press.

Segovia, Oliver. 2013. "Think Before You Drink the Southeast Asia Startup Kool Aid." *e27*, July 9. <http://e27.co/think-before-you-drink-the-southeast-asia-startup-kool-aid/>.

De Seta, Gabriele. 2020. "Sinofuturism as Inverse Orientalism: China's Future and the Denial of Coevalness." *SFRA Review* 50 (2–3): 86–94. <https://sfrareview.org/2020/09/04/50-2-a5deseta/>.

Sharon, Tamar, and Dorien Zandbergen. 2016. "From Data Fetishism to Quantifying Selves: Self-Tracking Practices and the Other Values of Data." *New Media & Society* 19 (11):1695-1709 <https://doi.org/10.1177/1461444816636090>.

Shestakofsky, Ben. 2024. *Behind the Startup: How Venture Capital Shapes Work, Innovation, and Inequality*. Berkeley: University of California Press.

"Silicon Valley Can Be Created Anywhere: Vinod Khosla." 2014. *The Economic Times*, May 16. <https://economictimes.indiatimes.com/tech/ites/silicon-valley-can-be-created-anywhere-vinod-khosla/articleshow/35199374.cms?from=mdr>.

"Singapore: Why Can't We Seem to Innovate." 2011. *Diary of a Singaporean Mind*, December 15. <http://singaporemind.blogspot.nl/2011/12/singapore-why-we-cant-seem-to-innovate.html>.

Sinpeng, Aim. 2020. "Digital Media, Political Authoritarianism, and Internet Controls in Southeast Asia." *Media, Culture & Society* 42 (1): 25–39. <https://doi.org/10.1177/0163443719884052>.

Sivers, Derek. 2011. "I Moved to Singapore." *Sivers.org*, April 6. <http://sivers.org/singapore>.

Slater, Don. 2002. "Markets, Materiality and the 'New Economy'." In *Market Relations and the Competitive Process*, edited by Stan Metcalfe and Alan Warde, 95–113. Manchester and New York: Manchester University Press.

Smith, Neil. 1993. "Homeless/Global: Scaling Places." In *Mapping the Futures: Local Cultures, Global Change*, edited by John Bird, Barry Curtis, Tim Putnam, and Lisa Tickner, 87–120. London and New York: Routledge, 2005.

Sommer, Theo. 2006. "Is the 21st Century Going to Be the Asian Century?" *ASIEN: The German Journal on Contemporary Asia*, no. 100: 70–78.

Srinivasan, Ramesh. 2017. *Whose Global Village? Rethinking How Technology Shapes Our World*. New York: NYU Press.

Startup Genome. 2012. *Startup Ecosystem Report Part 1 v1.2*.

Stivens, Maila, and Krishna Sen, eds. 1998. *Gender and Power in Affluent Asia*. London and New York: Routledge.

Sturken, Marita, Douglas Thomas, and Sandra Ball-Rokeach, eds. 2004. *Technological Visions: Hopes and Fears That Shape New Technologies*. Philadelphia: Temple University Press.

Suchman, Lucy. 2000. "Embodied Practices of Engineering Work." *Mind, Culture, and Activity* 7 (1–2): 4–18. <https://doi.org/10.1080/10749039.2000.9677645>.

———. 2007. "Anthropology as 'Brand': Reflections on Corporate Anthropology." *Colloquium on Interdisciplinary and Society, Oxford University*. Accessed from <http://www.lancs.ac.uk/fass/sociology/papers/suchman-anthropology-as-brand.pdf>.

———. 2011. "Anthropological Relocations and the Limits of Design." *Annual Review of Anthropology* 40: 1–18. <https://doi.org/10.1146/annurev.anthro.041608.105640>.

Suchman, Lucy, Randall Trigg, and Jeanette Blomberg. 2002. "Working Artefacts: Ethnomethods of the Prototype." *British Journal of Sociology* 53 (2): 163–179. <https://doi.org/10.1080/00071310220133287>.

Tai, Jeanne. 2015. "This Lady Became a Millionaire at 28, but It Came with a Price." *Her World Plus*, February 24. <http://www.herworldplus.com/lifestyle/women-now/millionaire-28#.VO3OQrPF83R>.

Takhteyev, Yuri Vladimirovich. 2009. *Coding Places: Uneven Globalization of Software Work in Rio de Janeiro, Brazil*. PhD diss., University of California, Berkeley.

Tan, Kenneth Paul. 2003. "Sexing Up Singapore." *International Journal of Cultural Studies* 6 (4): 403–423. <http://ics.sagepub.com/cgi/content/abstract/6/4/403>.

Tan, Tony Keng Yam. 2001. "Speech at the Launch of Science Hub Held on Tuesday, December 4, 2001, at 7:15 PM." *Singapore Government Press Release, Media Division, Ministry of Information, Communication and the Arts*. Accessed from <http://stars.nhb.gov.sg/stars/public/viewHTML.jsp?pdfno=2001120402>.

Tapsell, Ross. 2021. "Social Media and Elections in Southeast Asia: The Emergence of Subversive, Underground Campaigning." *Asian Studies Review* 45 (1): 117–134. <https://doi.org/10.1080/10357823.2020.1841093>.

Terranova, Tiziana. 2000. "Free Labor: Producing Culture for the Digital Economy." *Social Text* 18 (2): 33–58. <https://muse.jhu.edu/article/31873>.

Thomas, Douglas, and Marita Sturken. 2004. "Introduction: Technological Visions and the Rhetoric of the New." In *Technological Visions: Hopes and Fears That Shape New Technologies*, edited by Marita Sturken, Douglas Thomas, and Sandra Ball-Rokeach, 1-18. Philadelphia: Temple University Press.

Thompson, Edward P. 1967. "Time, Work-Discipline, and Industrial Capitalism." *Past & Present*, no. 38: 56-97. <https://www.jstor.org/stable/649749?origin=JSTOR-pdf>.

Thrift, Nigel. 2000. "Performing Cultures in the New Economy." *Annals of the Association of American Geographers* 90 (4): 674-692. <https://doi.org/10.1111/0004-5608.00217>.

———. 2001. "'It's the Romance, Not the Finance, That Makes the Business Worth Pursuing': Disclosing a New Market Culture." *Economy and Society* 30 (4): 412-432. <http://doi.org/10.1080/03085140120089045>.

———. 2005. *Knowing Capitalism*. London: Sage Publications.

Thrift, Nigel, and Jon May, eds. 2001. *Timespace: Geographies of Temporality*. London and New York: Routledge.

Thrift, Nigel, and Kris Olds. 2005. "Cultures on the Brink: Re-Engineering the Soul of Capitalism on a Global Scale." In *Knowing Capitalism*. 93-111. London: Sage Publications.

"Tiger Traps." *The Economist*, November 17, 2011. <https://www.economist.com/news/2011/11/17/tiger-traps>.

Tsin, Ong Peng, Virginia Cha, Tom Clayton, Chong Tow Chong, Leong Tze Yun, Balaji Prabhakar, Sim Kai, Ted Tschang, Meng Weng Wong, and Steven Wong. 2013. *Creating a Vision for Information & Communication Technologies (ICT) and Computer Science (CS) Research and Commercialization: Report of the National Research Foundation (NRF) Study Panel*. Singapore: National Research Foundation (NRF).

Tsing, Anna Lowenhaupt. 2000. "Inside the Economy of Appearances." *Public Culture* 12 (1): 115-144. <https://doi.org/10.1002/9780470774274.ch5>

———. 2003. "Natural Resources and Capitalist Frontiers." *Economic and Political Weekly* 38 (48): 5100-5106. <https://www.jstor.org/stable/4414348>.

———. 2004. *Friction: An Ethnography of Global Connection*. Princeton: Princeton University Press.

———. 2015. *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins*. Princeton: Princeton University Press.

Tulshyan, Ruchika. 2012. "Why Eduardo Saverin Moved to Singapore." *Forbes*, November 5. <http://www.forbes.com/sites/worldviews/2012/05/11/why-eduardo-saverin-moved-to-singapore/>.

Turner, Fred. 2005. "Where the Counterculture Met the New Economy: The WELL and the Origins of Virtual Community." *Technology and Culture* 46 (3): 485–512. <https://www.jstor.org/stable/40060901>.

———. 2006a. *From Counterculture to Cyberculture: Stewart Brand, the Whole Earth Network, and the Rise of Digital Utopianism*. Chicago and London: University of Chicago Press.

———. 2006b. "How Digital Technology Found Utopian Ideology: Lessons from the First Hackers Conference." In *Critical Cyberculture Studies: Current Terrain, Future Directions*, edited by David Silver and Adrienne Massanari, 257–269. New York: NYU Press.

———. 2009. "Burning Man at Google: A Cultural Infrastructure for New Media Production." *New Media & Society* 11 (1–2): 73–94. <http://doi.org/10.1177/1461444808099575>.

———. 2016. "Prototype." In *Digital Keywords: A Vocabulary of Information Society & Culture*, edited by Benjamin Peters, 256–268. Princeton and Oxford: Princeton University Press.

Valentine, David, and Amelia Hassoun. 2019. "Uncommon Futures." *Annual Review of Anthropology* 48: 243–260. <http://dx.doi.org/10.1146/annurev-anthro-102218-011435>.

Wajcman, Judy. 2008. "Life in the Fast Lane? Towards a Sociology of Technology and Time." *The British Journal of Sociology* 59 (1): 59–77. <http://doi.org/10.1111/j.1468-4446.2007.00182.x>.

Wallman, Sandra. 1992. "Introduction: Contemporary Futures." In *Contemporary Futures: Perspectives from Social Anthropology*, edited by Sandra Wallman, 1–20. ASA Monographs. London and New York: Routledge.

Walters, Matt. 2013. "An Investor's Take on the 'Southeast Asia Kool-Aid'." *Tech in Asia*, July 19. <https://www.techinasia.com/investors-southeast-asia-koolaid>.

Waltorp, Karen. 2017. "Digital Technologies, Dreams, and Disconcertment in Anthropological World-Making." In *Anthropologies and Futures: Researching Emerging and Uncertain Worlds*, edited by Juan Francisco Salazar, Sarah Pink, Andrew Irwing, and Johannes Sjöberg, 101–116. London: Bloomsbury Publishing.

Wang, Qing, and Michael Keane. 2020. "Struggling to Be More Visible: Female Digital Creative Entrepreneurs in China." *Global Media and China* 5 (4): 407–422. <https://doi.org/10.1177/2059436420969624>.

Wee, Willis. 2011a. "Apple Co-Founder Steve Wozniak Questions Singapore's Creativity." *Tech in Asia*, December 15. <https://www.techinasia.com/wozniak-questions-singapore-creativity>.

Wee, Willis. 2011b. "Drop Your Arrogance, Entrepreneurs." *Tech in Asia*, July 26. <https://www.techinasia.com/drop-your-arrogance-entrepreneurs>.

———. 2012. "Angel's Gate: Good or Bad?" *Tech in Asia*, March 21. <https://www.techinasia.com/angels-gate-good-bad>.

Winner, Langdon. 1993. "Technology Reweaves the Fabric of Society." *Education Digest* 59 (3): 4–31.

Wong, Kai Wen, and Tim Bunnell. 2006. "'New Economy' Discourse and Spaces in Singapore: A Case Study of One-North." *Environment and Planning A* 38 (1): 69–83. <https://doi.org/10.1068/a37229>.

Wong, Poh Kam. 2011. "Overview of Angel Investing in Singapore." *Tech in Asia*, May 28. [https://www.techinasia.com/overview-of-angel-investing-in-singapore#:~:text=The%20Business%20Angel%20Scheme%20\(BAS,%2410%20million%20over%20five%20years](https://www.techinasia.com/overview-of-angel-investing-in-singapore#:~:text=The%20Business%20Angel%20Scheme%20(BAS,%2410%20million%20over%20five%20years).

Wong, Poh-Kam, and Annette Singh. 2011. *Public Innovation Financing Schemes in Singapore*. Draft report for the project *Towards Effective Policies for Financing of Innovation in Asia*, funded by the International Development Research Centre. <http://hdl.handle.net/10625/49222>.

Worldwide Cost of Living 2014: Which City Is the Most Expensive to Live in? Which City Is the Cheapest? A Summary from The Economist Intelligence Unit. 2014. The Economist Intelligence Unit Limited. https://ciaotest.cc.columbia.edu/wps/ei-u/0030358/f_0030358_24532.pdf.

Xiang, Biao. 2007. *Global "Body Shopping": An Indian Labor System in the Information Technology Industry*. Princeton: Princeton University Press.

Yap, Shiwen. 2013. "Want a Top-Notch Startup Sector? Reform the Singapore Armed Forces." *Tech in Asia*, September 6. <https://www.techinasia.com/singapore-israel-and-the-importance-of-culture-to-the-start-up-sector>.

Yap, Wy-Lene. 2015. "Krystal Choo: A Triple Threat. CEO & Founder, Wander." *High Net Worth*, April 23. <https://hnnworth.com/article/become/trendsetters/krystal-choo-a-triple-threat-ceo-founder-wander/>.

Yeoh, Brenda S. A. 2004. "Cosmopolitanism and Its Exclusions in Singapore." *Urban Studies* 41 (12): 2431–2445. <https://www.jstor.org/stable/43197065>.

Yeoh, Brenda S., and Theodora Lam. 2022. "Managing the Non-Integration of Transient Migrant Workers: Urban Strategies of Enclavisation and Enclosure in Singapore." *Urban Studies* 59 (16): 3292–3311. <https://doi.org/10.1177/00420980221114316>.

Yew, Leong. 2011. "A Brief History of the Hub: Navigating between 'Global' and 'Asian' in Singapore's Knowledge Economy Discourse." In *Singapore in Global History*, edited by Derek Heng and Syed Muhd Khairudin Aljunied, 269-290. Vol. 14 of ICAS. Amsterdam: Amsterdam University Press.

Yue, Chia Siow. 2005. "The Singapore Model of Industrial Policy: Past Evolution and Current Thinking." *Singapore Institute of International Affairs*: 29. <http://dx.doi.org/10.18235/0006828>.

Yue, Chia Siow, and Jamus Jerome Lim. 2003. "Singapore: A Regional Hub in ICT." In *Towards a Knowledge-Based Economy: East Asia's Changing Industrial Geography* edited by Seiichi Masuyama and Donna Vandenbrink, 259-298. Singapore: Institute of South-east Asian Studies (ISEAS).

Yuen, Belinda. 1992. "Singapore High Technology Cluster: Origin and Present Situation." *Journal of Property Research* 9 (3): 247-260. <https://doi.org/10.1080/09599919208724070>.

Zafar, Nazish. 2016. *Synergy between Government and Small Business*. PhD diss., Johns Hopkins University. <https://jscholarship.library.jhu.edu/items/4212010f-70af-41c8-9230-e140b9402824>.

Zaha Hadid Architects. n.d. *One-North Master Plan*. Accessed August 25, 2012. <http://www.zaha-hadid.com/masterplans/one-north-masterplan/>.

Zandbergen, Dorien. 2011. *New Edge: Technology and Spirituality in the San Francisco Bay Area*. PhD diss., Leiden University. <https://hdl.handle.net/1887/17671>.

———. 2012. "Acceleration and Gnostic Timelessness in Silicon Valley: How Gnostic Spirituality Has Come to Matter in the 'Information Age'." *Etnofoor* 24 (1): 29-55. <https://www.jstor.org/stable/23217870>.

Zider, Michael. 1998. "How Venture Capital Works." *Harvard Business Review*. November-December. Accessed from <https://hbr.org/1998/11/how-venture-capital-works>.

Zuboff, Shoshana. 2019. *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*. New York: PublicAffairs.

SAMENVATTING

Deze dissertatie onderzoekt de culturele betekenis van de toekomst door de dagelijkse praktijken van technologie-start-ups in een vroege fase in Singapore in de jaren 2010 tot 2016 te bestuderen. Het onderzoekt hoe de toekomst etnografisch kan worden bestudeerd door start-up *futurities* te analyseren – verschillende soorten toekomsten die verbonden waren met, en noodzakelijk waren voor, de praktijk van het bouwen van technologiebedrijven. Hoewel de antropologie bekendstaat om het bestuderen van cultuur en traditie – zaken die doorgaans met het verleden worden geassocieerd – zijn *futurities*, of verschillende manieren waarop de toekomst wordt voorgesteld, net zo cultureel geladen als elke andere vorm van temporaliteit.

Neoliberale denkbeelden stellen technologie-start-ups voor als motoren van groei en innovatie, door superster-ondernemers die claimen de toekomst te kunnen ‘uitvinden’ en een ‘deuk in het universum te slaan’. Singapore, vaak gezien als zowel een wereldwijd innovatiecentrum als de “Ander” van Silicon Valley, biedt een interessante context om te onderzoeken hoe representaties van de toekomst worden geproduceerd, verspreid, betwist en onderhandeld door de verschillende ondernemers die betrokken zijn bij de opbouw van de nieuwe digitale economie.

Dit onderzoek is gebaseerd op etnografisch veldwerk dat tussen 2010 en 2016 in Singapore is uitgevoerd, aangevuld met kortere onderzoeksreizen naar de Filipijnen, Indonesië, Maleisië en Birma. Het veldwerk in Singapore concentreerde zich rond een start-up incubatorprogramma, ‘The Accelerator,’ en combineerde participerende observatie, semigestructureerde interviews met ondernemers, investeerders, mentoren en managers, evenals deelname aan evenementen zoals Start-up Weekends, hackathons en netwerksessies. De studie maakte ook gebruik van digitale bronnen, waaronder start-up media, overheidsbeleidsdocumenten en teksten van de gesprekspartners zelf.

De analyse toont zes onderling samenhangende domeinen, elk in een afzonderlijk hoofdstuk, waarin start-up *futurities* vorm kregen en werden betwist: de verbeelding van mondiale en regionale verhoudingen, nationale agenda’s, sociale organisatie, de start-upbedrijven zelf, en het individu in termen van zowel subjectiviteit als belichaamde ervaring. Bij elkaar genomen laten de hoofdstukken zien hoeveel arbeid nodig is om start-up *futurities* als haalbaar in stand te houden, welke grenzen ondernemers tegenkwamen, en welke specifieke inzichten dit biedt voor het etnografisch bestuderen van *futurities*.

Hoofdstuk 1 onderzoekt de verbeelding van de geografie van technologisch ondernemerschap die Singapore positioneerde tussen Silicon Valley en Azië. Silicon Valley fungeerde als een sjabloon voor de toekomst, terwijl Azië werd neergezet als “inhaalregio.”

Ondernemers in Singapore voelden zich zowel aangetrokken tot deze visie als geconfronteerd met de tegenstrijdigheden ervan: beloftes van schaalvergroting temidden van Westerse economische achteruitgang trokken mensen en kapitaal aan, maar tegelijkertijd reproduceerde dit narratief neokoloniale en techno-orientalistische tropen die gelijktijdigheid ontkenen. Het hoofdstuk laat zien dat claims over de toekomst ook claims over macht zijn.

Hoofdstuk 2 plaatst technologisch ondernemerschap binnen de politieke agenda en geschiedenis van Singapore en toont hoe de staat de ‘kenniseconomie’ voorstelde als de onvermijdelijke toekomst van de natie, waarmee ze haar aanspraak op vooruitziendheid en controle versterkte. De etnografische focus op projecten zoals *one-north* en *Blk 71* illustreert hoe infrastructuur werd ingezet om *futurities* te construeren, terwijl zorgen over overbevolking en ongelijkheid de grenzen van deze visie blootlegden. Het hoofdstuk betoogt dat de strakke bestuurlijke nadruk op bepaalde *futurities* alternatieve toekomstën maskeerde en onderstreept de noodzaak om toekomstvorming historisch, lokaal en materieel te bestuderen.

Hoofdstuk 3 belicht de rol van gedeelde toekomstën in het organiseren van de sociale relaties van start-ups via het concept van het ‘ecosysteem.’ Evenementen zoals start-up weekends en netwerksessies genereerden enthousiasme, boden een sociale context voor de vercommercialisering van ideeën over sociale verandering, en disciplineerden ondernemers tot een door durfkapitaal gedreven benadering. Hoewel dit werd voorgesteld in termen van delen, passie, en openheid, maskeerde het de ongelijkheden en hiërarchieën die het ondernemersleven vorm geven en naturaliseerde het de extractie van onbetaalde arbeid en affectieve investering. Het hoofdstuk stelt dat het ecosysteem functioneerde als een *ideaal* dat de uitbreiding en reproductie van kapitaal faciliteerde.

Hoofdstuk 4 onderzoekt hoe start-up ondernemers waarde creëerden en onderhandelden terwijl ze ideeën transformeerden tot bedrijven. Het laat zien hoe waarde werd begrepen in persoonlijke, sociale en economische registers, maar steeds sterker werd gedisciplineerd door de verwachtingen van investeerders omtrent schaalbaarheid. Ondernemers werden getraind om radicale maakbaarheid te omarmen – producten te heroriënteren en toekomstën opnieuw te formuleren in een zoektocht naar “potentiële waarde.” Deze speculatieve oriëntatie betekende dat ideeën, hoe persoonlijk of sociaal betekenisvol ook, moesten worden opgegeven als ze niet economisch opgeschaald konden worden. Open *futurities* voedden ondernemersoptimisme, terwijl lege *futurities* – gefocust op louter financieel potentieel – dit vaak ondermijnden.

Hoofdstuk 5 onderzoekt hoe start-up *futurities* de subjectiviteit van ondernemers vormgeven en hen neerzetten als “projecten in wording.” Gericht op imaginaire toekomstën leerden zij ervaringen en identiteiten te vercommercialiseren tot speculatieve waarde, waarbij flexibiliteit, optimisme en het herdefiniëren van falen als kans werden gecultiveerd. Toch vroegen deze open *futurities* ook om strikte zelfdiscipline, constante presentatie van verze-

kerheid, en voortdurende beheersing van tijd en emoties. Het hoofdstuk toont dat start-up *futurities* worden geleefd door ondernemende zelden – gedreven door ambitie en aspiraties, maar gesteund door vaak verborgen sociale, staats- en bedrijfsbronnen.

Hoofdstuk 6 verschuift de aandacht van subjectiviteit naar lichamelijkheid en benadrukt hoe *futurities* werden beleefd en betwist via *gendered* en geracialiseerde lichamen. Terwijl van ondernemers werd verwacht dat ze zich presenterden als flexibele, toekomstgerichte subjecten, bleken aspecten van identiteit zoals gender en ras minder kneedbaar. Aziatische lichamen en geesten werden vaak voorgesteld als gebrekkig: zij moesten hervormd worden om te voldoen aan ondernemingsnormen die impliciet gebaseerd waren op Westerse, witte mannelijkheid. Door die strijd over lichamelijke discipline, genderverwachtingen en geracialiseerde prestaties te volgen, laat het hoofdstuk zien hoe *futurities* zich materialiseren in belichaamde contexten, waarmee mondiale hiërarchieën en structurele ongelijkheden worden gereproduceerd.

Deze dissertatie draagt bij aan de antropologie van temporaliteit en kapitalisme door te laten zien hoe start-up *futurities* – cultureel specifieke manieren om de toekomst voor te stellen – werden beleefd, betwist en gematerialiseerd in Singapore. Start-up *futurities* beloofden *empowerment*, innovatie en groei, maar in de praktijk berustten ze op harde arbeid, verborgen hulpmiddelen en praktijken die dezelfde ongelijkheden reproduceerden die ze beweerden te overstijgen. Een centrale paradox loopt door de hoofdstukken heen: *futurities* leken open en toegankelijk voor iedereen, maar waren moeilijk te verwezenlijken.

De analyse volgt deze dynamiek op verschillende schaalniveaus: mondiale verbeeldingen van “Azië als kans,” nationale stedelijke projecten, sociale ecosystemen, start-upbedrijven en het “zelf” van de ondernemers. Op elke schaal vroegen start-up *futurities* om radicale maakbaarheid van ideeën, plaatsen, subjecten en lichamen. Toch bleken ze fragiel. Infrastructuren hadden blijvende grenzen, The Accelerator worstelde om basisuitgaven te dekken, en gender en ras van ondernemende lichamen konden niet eindeloos worden hervormd. De zoektocht naar start-up *futurities* genereerde zowel optimisme als leed, aangezien ogenschijnlijk onbeperkte mogelijkheden botsten met materiële realiteiten en structurele ongelijkheden die ondernemers vaak internaliseerden als persoonlijk falen.

In het geval van Singapore waren start-up *futurities* cruciaal voor het in stand houden van het optimisme dat nodig is voor het nemen van ondernemersrisico, terwijl ze ook fungeerden als instrumenten van staatsplanning en kapitalistische waardering. Verre van onvermijdelijk of universeel, waren de hier beschreven start-up *futurities* contingente uitkomsten van overlappende staatsagenda's, mondiale discoursen en individuele aspiraties. De dissertatie pleit er daarom voor om *futurities* niet te bestuderen als universeel of tijdperk-bepalend, maar als meervoudig, betwist en cultureel en historisch gesitueerd.

SUMMARY

This dissertation explores the cultural significance of *future* by examining the daily practices of early-stage technology start-ups in Singapore in the years 2010 to 2016. It examines how to study future ethnographically by researching *start-up futurities* - different types of futures that were related to and necessary for the practice of building technology start-up companies. While anthropology is known for studying culture and tradition - things typically associated with the past, futurities or differing types of how future is conceived, are as culturally charged as any other temporality.

Neoliberal imaginaries cast technology start-ups as drivers of growth and innovation, with celebrity entrepreneurs claiming the power to 'invent the future' and 'make a dent in the universe'. Singapore, often viewed both as a global innovation hub and as the "Other" of Silicon Valley, provides an interesting ground to explore how entrepreneurial imaginaries of the future are produced, circulated, contested, and negotiated by the various actors involved in fostering the new, digital economy.

This research is based on ethnographic fieldwork conducted in Singapore between 2010 and 2016, supplemented with shorter trips to the Philippines, Indonesia, Malaysia, and Burma. Fieldwork in Singapore centred on a start-up incubator program, 'The Accelerator,' and combined participant observation, semi-structured interviews with entrepreneurs, investors, mentors, managers, and participation in events such as Start-up Weekends, hackathons, and networking sessions. The study also engaged digital sources, including start-up media, government policy documents, and writings by interlocutors themselves.

The analysis reveals six interrelated domains where start-up futurities took shape and were contested, each addressed in a separate chapter: global and regional imaginaries, national agendas, social organisation, start-up companies, and the individual, both as subjectivity and embodied experience. Across these domains, the chapters reveal the labor required to sustain start-up futurities as attainable, the limits entrepreneurs encountered, and specific insights for studying futurities ethnographically.

Chapter One examines the imaginary geography of technology entrepreneurship that positioned Singapore between Silicon Valley and Asia. Silicon Valley served as the template that set the future, while Asia was cast as catching up. Entrepreneurs in Singapore were both attracted to this vision and confronted with its contradictions: promises of scale amid Western economic decline attracted people and capital, yet the narrative reproduced neo-colonial and techno-orientalist tropes that denied temporal coevalness.

The chapter shows how claims about the future are also claims about power.

Chapter Two situates technology entrepreneurship within Singapore's political agenda and history, showing how the state framed the 'knowledge economy' as the nation's inevitable future and bolstered its claim to foresight and control. Ethnographic focus on projects like one-north and Blk 71 illustrates how infrastructure was used to engineer futurities, even as anxieties over overcrowding and inequality revealed the limits of this vision. The chapter argues that tightly managed futurities masked alternative futures and underscores the need to study future-making historically, locally, and materially.

Chapter Three highlights the role of shared futures in organising start-up sociality through the concept of the 'ecosystem.' Events such as start-up weekends and networking sessions generated enthusiasm, provided a social context for commodifying ideas about social change, and disciplined entrepreneurs into a venture-capital-driven approach. Framed in the language of sharing, passion, and openness, it masked the inequalities and hierarchies shaping entrepreneurial life and naturalised the extraction of unpaid labour and affective investment. The chapter argues that the ecosystem functioned as an ideal that facilitated the expansion and reproduction of capital.

Chapter Four explores how start-up entrepreneurs created and negotiated value as they transformed ideas into businesses. It shows how value was understood across personal, social, and economic registers, yet was increasingly disciplined by investors' expectations for scalability. Entrepreneurs were trained to embrace radical malleability—pivoting products and reframing futures in pursuit of "potential value."

This speculative orientation meant that ideas, even deeply personal or socially meaningful ones, had to be abandoned if they did not promise economic scalability. Open futurities energised entrepreneurial optimism, while empty futurities—focused narrowly on financial potential—often eroded this vitality.

Chapter Five examines how start-up futurities shape entrepreneurial subjectivity, casting entrepreneurs as "projects in the making." Oriented toward imagined futures, they learned to commodify experiences and identities into speculative value, cultivating flexibility, optimism, and the ability to reframe failure as opportunity. Yet these open futurities also demanded strict self-discipline, constant performance of certainty, and relentless time and affective management. The chapter shows that start-up futurities are lived through entrepreneurial selves—fueling ambition and aspirations but sustained by often hidden social, state, and corporate resources.

Chapter Six turns from subjectivity to embodiment, highlighting how futurities were lived and contested through gendered and racialised bodies. While entrepreneurs were expected to perform as flexible, future-oriented subjects, aspects of identity such as gender and race proved less malleable. Asian bodies and minds were often framed

as deficient and needing transformation to meet entrepreneurial norms implicitly modelled on Western white masculinity. Tracing struggles over bodily discipline, gendered expectations, and racialised performances, the chapter shows how futurities materialise in lived bodily contexts, reproducing global hierarchies and structural inequalities.

This dissertation contributes to the anthropology of temporality and capitalism by showing how start-up futurities—culturally specific ways of imagining the future—were lived, contested, and materialised in Singapore. Start-up futurities promised empowerment, innovation, and growth, but in practice, they depended on hard labour, hidden resources, and practices that reproduced the very inequalities they claimed to overcome. A central paradox runs through the chapters: futurities appeared open and available to all, yet were difficult to attain.

The analysis traces these dynamics across different scales: global imaginaries of “Asia as opportunity,” national urban projects, social ecosystems, start-up companies, and entrepreneurial selves. At each scale, start-up futurities demanded radical malleability of ideas, places, subjects, and bodies. Yet they proved fragile. Infrastructures had enduring limits, the Accelerator struggled to cover basic costs, and gendered and racialised bodies could not be endlessly reshaped. The pursuit of start-up futurities generated both optimism and suffering, as seemingly limitless possibilities collided with material realities and structural inequalities that entrepreneurs often internalised as personal failure.

In Singapore’s case, start-up futurities were crucial in sustaining the optimism necessary for entrepreneurial risk-taking while also serving as instruments of state planning and capitalist valuation. Far from being inevitable or universal, start-up futurities described here were contingent outcomes of overlapping state agendas, global discourses, and individual aspirations. Therefore, the dissertation argues for studying futurities not as universal or epochal, but as multiple, contested, and culturally and historically situated.

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CURRICULUM VITAE

Zane Kripe was born in Valmiera, Latvia, on August 8, 1985. She obtained her pre-university education in Valmiera State Gymnasium in 2003 and her BA in Political Science with specialisation in International Relations from Riga Stradins University in 2007. During her studies, she participated in an Erasmus exchange program in Poland at Wyższa Szkoła Biznesu – National-Louis University, where she pursued courses in economics and business. In addition to and after her bachelor studies, she worked at Red Cross Latvia, the National Youth Council and the Ministry of Foreign Affairs. She was also the founding president of the first Leo youth club of Lions Clubs Latvia, Valmiera chapter.

After obtaining her bachelor's degree, she moved to the Netherlands and graduated with an MSc in Media Technology at Leiden University in 2010. Next to her studies, she worked at the International Institute for Asian Studies (IIAS).

In August 2010, Zane started her PhD at the Institute of Cultural Anthropology and Development Sociology at Leiden University. Over the years, she developed and taught courses on digital anthropology, information society and notions of technological freedom at Leiden University and the University of Amsterdam. During her employment as a PhD researcher (from 2010 – 2015), Zane was an active contributor to the Leiden Anthropology Blog and presented her work at several international conferences such as the EASST-4S, AoIR and EASA.

At the time of her PhD thesis defence Zane is a lecturer at the Leiden Institute of Advanced Computer Science (LIACS) at Leiden University, where she teaches courses with a critical and socially informed perspective on technology.

