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# Gifts of Capital and Communities of Valuation: The Project To Popularize Startup Investing

A Dissertation submitted in partial satisfaction of the requirements
for the degree Doctor of Philosophy

in

Communication

by

Jacob Hellman

Committee in charge:

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Professor David Serlin

2022

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University of California San Diego

2022

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# VITA

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ABSTRACT OF THE DISSERTATION

Gifts of Capital and Communities of Valuation: The Project To Popularize Startup Investing

by

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Doctor of Philosophy in Communication

University of California San Diego, 2022

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The entrepreneur figures centrally in understandings of contemporary societies. Often left unexamined is its necessary corollary, the angel investor: an amateur financier who invests not just money, but self. This dissertation shows how specific financial instruments and corporate forms work to turn the uncertainty of early-stage business into a terrain where people make friends, hone knowledges, and take joy in "irrational" expenditure. While angel investing has traditionally been an elite pursuit, recent U.S. securities deregulation has encouraged its widespread uptake through internet platforms, a process which has encountered frictions. My analysis demonstrates that financialization proceeds not only through the expansion of anonymous markets and powerful institutions, but also through

affective ways of knowing, doing, and relating. In doing so, I make visible a new way that capitalism accommodates critiques of perceived lacks — and in the process transforms what capitalism itself is.

# CHAPTER 1: INTRODUCTION

The founder of a startup company which whose app allows people to find breweries from their smartphone spoke to an audience of local entrepreneurs and investors in San Diego. Asked about the source of her entrepreneurial drive, she answered "Ultimately I want to be an angel investor — that's my end outcome. I remember how it felt when investors wrote me my first checks — especially being a woman, that comes with a lot of other feelings. At the end of the day I want to be able to sit across the table from other deserving founders — I want to give back to that ecosystem."

A former biologist also in San Diego told me about why he enjoys his current role as volunteer chairman of an association of people who invest in startups. "The difference between angel investing group and the corporate environment is that there's no hierarchy. It doesn't matter if you are a senior VP at Qualcomm or Sony, because you have no power over me. Still, the social relationship is fundamental. You're not going to be successful as an angel investor by yourself; you need to be part of a larger community."

On the White House lawn in 2012, President Obama signed a law which deregulated startup investing. Up to that moment, he said, startups could "only turn to a limited group of investors—including banks and wealthy individuals—to get funding. Laws that are nearly eight decades old make it impossible for others to invest." But the legislation he was signing changed that. "Because of the JOBS Act," Obama continued, "startups and small business will now have access to a big, new pool of potential investors—namely, the American people. For the first time, ordinary Americans will be able to go online and invest in entrepreneurs that they believe in."

* * *

The figure of the entrepreneur figures centrally in understandings of contemporary societies. People, it is said, strive to treat themselves as enterprises, invest in their own capacities, and view their social relations as capital (Rose 1999; Neff 2012; Gershon 2016). This way of being a person facilitates political-economic and affective governance (Foucault 2008; Brown 2015; Irani 2019). Yet widespread critical discourses on entrepreneurship leave unexamined its necessary corollary: a society cannot be comprised of entrepreneurs only; a supply of investors is also needed. We have in mind here not the entrepreneur who "gets [their] side hustle on," as a recruitment ad for gig-work company Uber put it, but the one who starts a business with the ambition to grow into a large public company. And we have in mind not the investor who trades on global financial markets, for this is not where such entrepreneurs get capital, but rather one who becomes a personal benefactor to others in their own local contexts. These people are called angel investors. What they invest is not just money, but selves. And that changes everything.

In the rare appearances made by the angel investor thus far in sociocultural analyses of economy, they act as a mute, profit-maximizing source of funds who entrepreneurs must impress with a business plan (Tsing 2000; Muniesa et al 2017; Shapin 2009). But this misunderstands the encounter. The misconstrued is based on a lack of empirical scrutiny of investors' social world, which leads researchers to impose pre-made categories of financial action onto a practice which expresses a distinct logic of recognition and attachment (see Gomart and Hennion 1999).

On the one hand, the "neoliberal subject," coterminous with the entrepreneur, is one who "seeks to appreciate and to value themselves, such that their life may be thought of as a strategy aimed at self-appreciation" (Feher 2009, p.28). The insidiousness of this ideology is that "appreciation" is not just monetary — that would be the regime of classical capitalism. Appreciation entails, rather, "the psychological discourse of 'self-esteem'" (ibid). And yet critics enthralled by the spiritual violence of this hail to egoism fail to appreciate the basic insight of all post-dualist epistemologies: the knower and the known co-constitute each other. Applied to the social world, this means that self-appreciation must be appreciated by another.[1] Put differently, "self-esteem" entails society's approval, however internalized.

The investor is the entrepreneur's corollary, then, not only mechanically as a supply of capital — but each validates the other as a contemporary mode of subjectivity.  For all those individuals who find entrepreneurial striving meaningful, an irreducible part of that experience is entering into relationships with investors and undertaking projects together. "Self-appreciation" must be recognized by another, and recognition properly understood requires reciprocity. Being recognized as an investor — which makes it meaningful mode of subjectivity — is an unavoidable consequence of the investor's recognition of the entrepreneur.

Angel investors do the meta-thing: they supply capital and mentorship to multiple startups. They make statements like: what every entrepreneur really wants, even if she doesn't know it, is to become an investor.  The dissertation contends that angel investing as a social practice and subject position offers one escape from disaffections of late modern subjectivity such as social

[1] And if indeed we are talking about *society*, then by definition algorithms and ranking ledgers — the things by which gig workers and content-creators know themselves as "entrepreneurs"  — cannot be what does that work.

alienation and diminished agency. And yet through their activities as angel investors, the dissertation shows, people reproduce conditions of those disaffections, as they also become agents of the expansion of capital into new domains. This is a regular feature of how capital operates. Sometimes, encountering opposition, capital flees to locales with cheaper labor (e.g. Cowie 1999). Sometimes, it incorporates workers' critiques by introducing more flexible organizational arrangements (Boltanski and Chiapello 2005). Understanding the discursive, technical, and affective formation of angel investment will shed light on a newly coalescing front in the ongoing project to renew legitimacy of capitalist economies.

Let us provisionally specify some characteristics of the angel investor as an ideal-type, characteristics which make the status desirable and the practice compelling. First, by facilitating entrepreneurship through their money, the angel investor can feel that they have helped bring new things into being (see Arendt 1958). By funding new ventures, they get to experience entrepreneurship vicariously. Second, because these "markets" exist only through networks of social capital, the angel investor finds friendship and community through financing startups alongside others. What are ostensibly market interactions become at the same time subjectively meaningful social relationships. Third, the profit motive is sublimated into a normative discourse which construes funding startups as helping others, contributing to innovation, and changing the world. These dispositions and sentiments stand at odds with the characterization of neoliberal subjectivity as competitive individualism, and of social belonging fragmented by markets.

For decades, angel investing was the province of elites in major cities. But cultural and regulatory agendas are seeking to make it widespread. Following the stock market crash of 1929,

federal securities regulation in the U.S. limited investments in startups and other private companies to the wealthy, who, it was reasoned, could withstand high rates of failed ventures. But in 2012, this protective legislation was rolled back. Everyone was granted the right to invest in startups. Furthermore, for the first time, they could do so online, via a new kind of financial intermediary, the equity crowdfunding platform[2]. This "democratization" of angel investing, as advocates described it, can be seen as the latest instantiation of a project of popular investment ongoing since the 19th century. State and private actors in the U.S. and Europe have repeatedly undertaken to turn average people into fractional owners of corporations via stock markets. Their goals have ranged from encouraging forming large pools of investment capital and the creation of market liquidity, to ambitions more governmental: the bolstering of wartime national morale, and the promotion of free markets in the face of swelling communist parties (Ott 2011, Preda 2001, Aitken 2009). More recently, popular investment has been described as a form of financialization — a variegated process which is itself central to the trajectory of modern capitalism. Financialization sometimes denotes the augmented power of financial markets and banks in determining public priorities and shaping corporate governance. But it also denotes, as with popular investment, the extension of financial markets into everyday life: exposing working classes to financial instability through market-based savings accounts and mortgages, and, as a corollary, making stock prices a topic of common conversation and generally reaching deeper into individual subjectivity (Preda 2009, Langley 2008, Martin 2002). The growth of angel investing can be understood as a moment within this process of financialization.

[2] Advocates claimed that deregulating private capital formation would encourage entrepreneurship and create jobs, a promise which has largely proven hollow (Langley and Leyshon 2017). See Chapter 7.

But angel investment sits uneasily within the rubric of financialization. For one, transactions are not localized in a central market space. There is no formal financial exchange, no traders yelling, no fast-moving screens. Second, a market exists only in the abstract sense of a network of people and media, conveying information coordinating transactions. Investments are also illiquid; they can't be bought and re-sold at will, and as we will see, this has crucial implications for the temporality and affect of the practice. A third point of friction concerns "finance" as a rationality which submits decisions to statistical modeling of risk, where knowledge of aggregate volatility supersedes that of individual cases (Chiapello 2015). Yet angel investing is not amenable to such quantification: nascent ventures inherently lack past data for analysis, and the lack of a centralized exchange means price data is difficult to model. As I show in chapter 3, angel investors embrace intuition and embodied judgment over calculation in their decisions. Yet Chiapello and others specify a second aspect of financial rationality, which is that it enacts "the point of view of the investor," meaning that value is determined by privileging the future over the present (see also Muniesa et al 2017). This sense of finance aligns well with angel investing, where the willingness to accord value to a startup rests not on any present or even future profits, but on a belief in its potential to grow and be sold in the future. Angel investing thus offers a way to think finance outside of the formal markets and mathematical modeling, and according instead to a future oriented toward value.

I raise the issue of "finance" vis a vis "investment" to interrogate a more general assumption in both practitioner and critical discourse. Common linguistic usage treats the terms "investment" and "finance" interchangeably; you become an investor by transacting in financial markets. But this equivalency belies an important distinction in the modes in which people use

capital to make more capital. Etymology provides a clue: investment is a putting-on of garments (vests), or an investing-oneself-into, whereas finance is a fin or ending, a settling of debts or contracts, a being at quits. These contrasting senses align, respectively, with a habit of "active care" which Alexis de Tocqueville observed in the way Americans maintained personal property, and which he believed to be central to the 19th century republic's stability and wealth (qua investment) — and with the embrace of market flux as opportunity to buy or sell (qua finance). This is not to endorse, as recent volume problematizes, an ontology of the "real" economy vs. that of speculative finance (Neilburg & Guyer 2020). The point is rather to reconceptualize investment and finance as antithetical social logics: one encouraging the deepening of a relation; the other, its end. Angel investing expresses in an etymologically faithful sense the logic of investment: the practice depends on and encourages long-term commitment of investors and entrepreneurs to each other and to growing a nascent enterprise. This more literally embodies the Tocquevillian ideal of "active care" of property than in its metaphorical invocation to describe minute fractional ownership of public corporations.

Following this etymology, I wish to draw attention to investing as the infusion of oneself, one's energies, affect, skills, professional networks — not just one's money — into the object, the startup. This is to open up the category of investment. The ambitiously titled Investment: A History, written by business school academics, defines the investor as one who "commits resources for future return" (Reamer & Downing 2016). Yet even in this abstraction, "resources" retains a limited sense, as something inert and external to the person of the investor. I wish to approach investment it as a category of acting which involves the whole person, beyond markets (exchanges) and profit (calculation) — but remains firmly within the ethos of capital, as a social

relation and process which organizes people into world-making projects for the extraction of value.

To think investment within a wider social field, consider several questions: what transfers or conveyances count as investment? And, what do acts of investment produce besides the accumulation of capital? In other words, first, what can we see differently by abstracting "investment" from the context of global financial markets and grasping it as a social relation and self-relation?

**Angel investment: venture capital's amateur double, and the significant absence of fiduciary duty**

Angel investors make long-term commitments of their own money to fund nascent private companies, hoping to eventually sell their equity either to venture capitalists, or through an acquisition, or, in rare cases, through an IPO. Coffee shops and other "small businesses" do not pique the interest of angel investors; their strategy requires startups with radical growth ambitions, and historically these have been computer technology or biotechnology companies. As such, angel investing is imagined as, ipso facto, the funding of (what they call) innovation, and entails the associated cultural valorization (see Godin 2015; Irani 2019).

Compared to conventional stocks and bonds, equity in early-stage companies is cumbersome and esoteric. One doesn't call up a broker and place an order; to get involved, one must engage with the social order of angel investing. People often come to the practice through friends, seeking to become part of something rarified and elite. And because angel investments are not traded on a market, they are illiquid. Once you invest, you're generally stuck holding ownership

certificates for years. The most significant parameter of angel investments is their risk — in fact, they constitute the highest-risk "asset class." This is because most startups fail, and when they do, nothing is left as collateral. So traditionally, those who invest have had money they could afford to lose.

Angel investing is a lot like venture capital. VCs are popularly imagined as "kingmakers" (Southwick 2001) who grow startups into large public corporations. Unlike the majority of mere stockholders in on public markets, VCs are active investors. They bring management expertise as they push to startups grow, participate in company governance, and direct startups toward an "exit" where they make money. Venture capital imposes an operational and cultural model on angel investors, shaping how they act and identify. Funder's Club, a site for online angel investing, offers an instructional document whose title, "VC 101: The Angel Investor's Guide to Startup Investing," frames these categories in terms of aspirational advance, not as an absolute boundary.

Angel investing also differs from venture capital. It is considered an amateur form of investing, whereas VC is a professional investment practice. This pertains not, in the first instance, to the skill or accreditation of the practitioners, but to whose money is being invested: angels invest their own, while VCs invest money entrusted to them by others. This gives rise to a crucial difference, under United States law, VCs are fiduciaries, that is, they are legally required to maximize investment returns for their clients. The duty, unsurprisingly, orients their vision toward large-scale commercial success (I discuss the methods of assessment later). It makes VCs unsentimental and unforgiving in their corporate governance, and ready to withdraw support

from startups when eventual profitability seems too uncertain.  In contrast, angel investors' lack fiduciary of obligation opens up their practice to different meanings, rationales, and consequences — such as having fun, making friends, and feeling ethically fulfilled. This ambiguous position vis a vis economic rationality make angel investing generative to study.

Many scholars have critiqued the notion of a universal and natural propensity to maximize profit, a conceit of Enlightenment political economy. Marx finds the profit drive to be "the effect of a social mechanism in which [the capitalist] is merely a cog" (1867, p. 739), and Weber saw its genesis as the effect of Protestant anxiety over predestination. The critique is picked up from other disciplinary locations, for example, in Malinowski's (1922) presentation of the kula as an economy where circulation of goods followed ritual and traditional hierarchy, not individuals' needs and desires. Over the past two decades, STS-inflected studies of markets have shown how calculative behavior that appears as an attribute of the individual, is actually produced through material agencies — mathematical formulas, for example, or the arrangements of trading space. Things and people are "economized" or made economic (Çalışkan and Callon 2009). In other words, profit maximization as expressed in individual habits and desires is not the explanation, but the effect, the thing to be explained.  My contribution to this thematic offers a novel denaturalization of economic behavior, in its relation to legal regulation (and their absence).

To be sure, the angel investors I spoke to all claim to seek maximal returns on their capital, just like any other investors.  But the things they actually do — and (other) things that they say — do not enact a strictly marketplace rationality. For one, they have great latitude in deciding in what and why they invest. This is not to suggest that a philanthropic ethos fills the fiduciary

vacuum. Rather, the lack of fiduciary obligation liberates people to make investment choices according to idiosyncratic rationales. Abstract analysis might gloss this as a factor of risk tolerance or even foolhardiness, but this misses an important affective dimension. Many people invest because a startup's vision strikes them as something that "should exist." In this dissertation, I am not interested in how latitude in decision-making affects the content of investments (i.e. "what kinds of startups do certain people invest in?"), but rather how it affects the form (see below on willingness to take risk and write off loss). Whereas professional investors (VCs, hedge funds, pension managers) engage in financial intermediation, we can view angel investing an immediate financial practice — where the coincidence of principle (owner of money) and agent (manager of money) allows the investment practice to be experienced as an enactment of authentic selfhood. I will explain this further in Chapter 3.

Lack of fiduciary obligation is not unique to angel investing; this freedom is shared by the approximately 50 million Americans who invest by themselves in stock markets. While we expect that every such stock investor is foremost concerned with making money, this is not always the case. Social scientists have observed that, in situations where people invest within a group or discursive community — for example, in a local investment club or community of online traders — they may participate for the sake of sociality and challenge, and remain agnostic to profit (e.g. Harrington 2008 p.21). Preda describes this tendency among retail (non-professional) stock traders by comparison to a logic of means-ends adequacy. If an activity's goal is to make money, but people mostly lose money, then they will consider themselves failures and quit. But not all pursuits are like this; people enjoy fishing, for example, even if they don't catching a fish. "While goals are intrinsic to the definition of activities, [merely]

sporadic practical accomplishments of the goal will not change the character of the activity or diminish the participants' commitment to it or define participants as failing" (Preda 2017, p.11). This holds true for angel investing. Its orientation is accentuated, moreover, by the particularities of the investment object (startups tender intimacy, unlike public companies) and the market structure (informal; no trades or price discovery mechanism) to produce a nominally financial practice which challenges conventional assumptions about the categories of the 'financial' and 'economic.'

**Who are angel investors?**

To be an angel investor is a self-ascribed status, not an institutionally designated position. It is an activity that one chooses to engage in, and an identity that one chooses to inhabit. The Wall Street Journal glosses the term angel investor as "wealthy individuals who buy stakes in startups" (Simon 2016). The wealth condition has meant that until recently, they came from one of several broad lineages: those entrepreneurs who got rich from their own startups, and those who made their money elsewhere in the economy or inherited wealth. The wealth criteria is not merely a practical necessity, but was, for 80 years, federally mandated. As I have indicated, recent deregulatory changes along with cultural shifts are bringing the practice to the middle classes. It remains to be seen how widely will people will take up the practice. But let me introduce you to a few angel investors I met.

Desi is a youthful-looking man of about 40 years who attended business school, worked at two startups, and launched a hip hop record label. Yet living in New York, he was "driven but disconnected" and felt "a need to prioritize my social and emotional health." So he sold his business and moved to San Diego without a job. "Basically, I had some money to play around

with," he said, "so I decided to dabble in angel investing." He invested in a company being started by an acquaintance, and, finding himself "surrounded by good people," he helped them develop the business. Soon after, he joined angel investing group Tech Coast Angels, and is now its president.

Virginia is an engineer who worked for Qualcomm for two decades. As one of few women employed there, she found the company alienating and hostile. When company-side layoffs left her unemployed, she was anxious and skeptical about finding a new job in the technology industry: "women in high tech who are over fifty are not welcome," she said. "But I still wanted to be intellectually stimulated and contribute in some way. To me, angel investing was a way to combine my technical skills with my wanting to continue my intellectual curiosity of learning." Virginia joined Tech Coast Angels as well, and within three years, made investments in about 80 companies, all for less than $2,000.

Judd is a retired fire chief in San Diego with a penchant for gutsy investing. He took a home equity loan to play the stock market, watched his investment double to $90k, and then lost nearly all of it. He also started a granite countertop fabrication business that lost $250k. At a Christmas party, his girlfriend introduced him to the head of a local startup accelerator, Marco, who, upon hearing Judd's background, introduced him to a startup entrepreneur developing artificial intelligence sensors for hydraulic machinery. "I met with the co-founder, from MIT or something. Very very intelligent man. It was super cool, he grew up in Tijuana — I was like, I get that." Judd invested $50k on the spot. While he doesn't have more money at the moment, he

said, “I’m looking forward to it - not like a second job, but something I’m going to do for years to come.”

These three people were different, but also similar. Their professional backgrounds were diverse, but they all could afford to put tens of thousands of dollars to put into investments that were likely to fail, and they all liked being vicariously involved with starting new technology-based businesses with ambitions to grow very fast. Each also sought They are representative of the kind of people who historically have made angel investments, although the legal conditions have changed, and its popular appeal is broadening.

**Why angel investing matters to the economic order and to social inquiry**

A doubt hung over me during my research: angel investment, it might be said, amounts to nothing more than rich people (and until recently, mostly retirees) playing with their disposable assets. Put in analytic terms, one might question this study’s generalizability, especially given its unusual eschewal of the profit motive. There are two intertwined concerns here: whether angel investing matters as a vector within contemporary capitalism, and whether it matters to social inquiry. For as I have indicated, angel investors are relatively few in number, they are involved with businesses only in the nascent stages, and anyway most of these businesses fail. Also potentially compromising their analytic relevance issue is their epistemological and institutional statures. For many, the practice is akin to a hobby. It is not quantitatively or technologically complex, nor does it mediate access to consumer credit or sovereign debt. This places angel investment outside recent scholarly and popular scrutiny of the role of financial markets, models, and expertise in shaping contemporary societies.

Certainly, if scale of capital flows indexes sociopolitical and analytic import, then we might question angel investing's relevance. The practice mobilizes relatively small amounts of money: in the US in 2018, investments totaled $4.3 billion, across twenty-one hundred "deals" or startups selling equity (Angel Resource Institute 2019). This amounts to only three percent of the $131 billion raised by professional VC firms that year (Pitchbook 2019) — yet VC itself comprises only about ten percent of the dollars invested in private equity more broadly — a category encompassing non-liquid assets like corporate buyouts, private debt, real estate, and natural resource investments, only available to the wealthy and institutional investors. So angel investments amount to a small piece of one slice of the pie — and still this does not count money invested in stock markets.

Scholars who study "retail" or "popular" investors — all those individuals who enter public markets alongside experienced professionals, making small trades against the great movers of capital — have confronted a similar need to justify the systemic relevance of their research. Sociologist Alex Preda began his book about these retail traders, Noise, by recounting skeptical responses to his research from audiences at business schools and sociology departments. "But what is relevant about them?," he was asked. "Can they move markets?'" (Preda 2017, p.5) The assumption here, analogous to the concern about angel investors, is that only high volume and mathematically sophisticated institutional traders matter to understanding the dynamics and consequences of financial markets. Preda responded that institutional traders build "noise" (retail) traders into their own financial models. If amateurs traders' behavior is internal to the decisions of professionals, then they are necessarily relevant to understanding financial markets as a whole.

Similar processes imbricate angel investors and professional venture capitalists, and, by extension, establish angels' practical and analytical import. Angel investors work "upstream" from VCs. They provide initial funding for a wide swath of startups, and VCs come in later to take over, financing the few successful companies with larger amounts of capital. So angel investors effectively de-risk venture capital, while venture capitalists often provide the liquidity (i.e. cash) for angel investors to "exit" their investment and make a profit. While the two are divided by the demarcation of "professional" finance based to fiduciary duty, they together constitute a single food chain, or pyramid, of funding. And as angel investing has grown over several decades, the stages at which startups raise financing has become more fine-grained. What was in the 1990s a category of "seed capital," has now divided internally into a distinct "pre-seed" tier, as well as does a tier of "super-angels," who sometimes become "micro-VCs." I write about this segmentation process in Chapter 5.

The object of angel investing furnishes some additional claims for the practice's broader relevance. First, the nascent startup sits at the threshold between an idea and a financialized object. Making intelligible this process by which a promissory vision is stabilized and made to have a monetary value itself furnishes a useful theoretical contribution to pragmatist-inspired approaches to the economy (see Muniesa 2014; Dewey 1939). Second, the startup business model is predicated on defining, establishing, and eventually monopolizing new markets. This critical-analytic construal is frequently voiced from an emic perspective as well. Mai, a small-scale investor we will encounter later, described her criteria for an investable startup in this way: "the product has to be such a huge market and magnitude…a product that I foresee will be

everywhere, used by everyone." Thus the amount of money invested is not commensurate with the object's potential to intervene in, or destabilize, economic life. Such outcomes, however rare, nonetheless mobilize people to try — and, in doing so, to probe for new sources of value for the capitalist economy. This probing, in investors' own discourse, is also what becomes through a quick elision "innovating" — which, one might say, lays an additional claim to societal relevance. However, I refrain from analytic use of this category given the methodological problems of judging what counts as innovative.[3] For even many critiques of existing "innovations" still tacitly endorse a problematic model — a "vision of the inventions of the few replicated for the benefit of the masses - innovators' others." And in doing so, they "still render the definition of innovation—a valorized category in need of revaluation or supplement—as unproblematic in itself" (Irani 2019 p. 7, p. 173)

Finally, angel investing also matters for the way its trajectory is partially constitutive of the contemporary unfolding of social relations under capitalism. This is a prospective claim. I have in mind here the way Hardt and Negri positioned immaterial labor[4] at the turn of this century as "not dominant in quantitative terms, but hegemonic in qualitative terms" (Hardt and Negri 2004, p. 109). They referred to the status and value of immaterial labor, and the way its currently limited presence foretold what was to come, and what was to become more "general" or

[3] Innovation's cultural and political salience is banal. In part, it lies in its seeming answer to economic and ecological crises — which "result, respectively, [in] the construction of ever-greater systemic demands for, and fetishization of, 'innovation' together with the tendential conflation of science with ('hi-tech') commercialized innovation" (Tyfield 2018, p.11). Maintaining a critical viewpoint here entails both recognizing the ways that successful angel-backed companies have indeed reconfigured economies and polities, subjectivities and social relations — for example, the ways gigwork platforms have normalized precarious work and inserted their agendas into national policy-making — and on the other hand, recognizing the rhetoric of angel investors and startups as self-justifying ideology, and as myopic and proprietary future-making (see Suchman and Bishop 2000; Irani 2019; Goldstein 2018).

[4] Immaterial labor is the production of codes, symbols, and emotions, but also, following anthropologist Paul Kockelman (2006), "the inhabiting of reciprocal social roles…and hence being a self in relation to an other" — a sense which captures the way certain socioeconomic roles like angel investing shape personhood itself.

widespread. The significance of angel investment lies not in mere quantitative growth of a financial category, but in the type of person becoming generalized. The affective appeal of angel investing encompasses more than the desire to profit. As I have indicated, as a role and social practice, angel investing partly negates certain felt lacks in liberal-capitalist subjectivity like alienation and the incursion of market rationalities into all areas of life. Instead, it finds ethical life internal to the market.

If angel investing offers a salve from instrumentalized relations even while helping to sustain capitalism, then it also problematizes our category of the market. This dissertation, in other words, contributes to an ongoing critique of the political and analytic bifurcation between market and society. This tradition spans Marx's response to classical political economy that capital is a not a thing but social relation, to Polanyi on the societal embedding of the market, to the feminist critique of the division between productive and domestic labor. These analyses all share the method of probing conditions of possibility, to expose that which markets actually depend on, but which is discursively and organizationally excluded from them. Or, what is the same thing, this dissertation contributes to a body of broadly pragmatist scholarship, aligned with science studies' performativity program, which has inquired into how markets assemble and how things are configured as "economic."

But in another way, the following chapters invert established understandings of the imbrication of these categories of modernity. Rather than highlighting unacknowledged social dependencies of markets and economy, the chapters show how markets can generate social connectedness which is not reducible to its instrumentality in markets' smooth operation (Whyte

1981; Granovetter 1985). This amounts to more than the ability of monetary exchange to bear personal meaning (Zelizer 2017). It points to the way the whole analytical division between economy and society is itself a construct of capitalism, and the erasure of their connectedness is how such categories are made (Berman 2019).

**Reading practitioner texts**

Like many domains of contemporary practice, angel investors sustain a loquacious culture of writing and audiovisual media. In tweets, blogs, podcasts, and "articles" on sites liked LinkedIn and Medium, participants reflect, inveigh, and seek to distill lessons from their experiences for the purposes of educating and edifying real and imagined others. For Benedict Anderson, the significance of reading publics was their ability to engender, and become, imagined communities of affect. For Michael Walzer, the force of a reading public was its political potential as a counter-public. Both these models depend crucially on the fact that people not only publish, but read. Yet many of angel investors' texts, I believe, never get read. A disaffected tech worker, in her memoir, implies this in much as well:

> Venture capitalists have spearheaded massive innovation in the past few decades, not least of which is their incubation of this generation's very worst prose style. The internet is choked with blindly ambitious and professionally inexperienced men giving each other anecdote-based instruction and bullet-point advice. 10 Essential Start-up Lessons You Won't Learn in School. 10 Things Every Successful Entrepreneur Knows (Wiener 2016).

To some degree, texts like these do reach readers, engendering affect and identity crucial to the practice's ongoing existence. But this stabilizing effect even happens in a solipsistic vacuum — by transforming the individual who writes. In short, people convince and inspire themselves that they are learning, helping others, refining their craft, and inhabiting expertise as they publish and podcast.

I examined hundreds of these texts during my research. Banality abounded. Informative ones — with titles like "A Founder-Friendly Term Sheet" (Altman 2013) and "Angels and VCs: Don't Be Greedy, Even If You Can" (Berkus 2015) — taught me about the financial technicalities and ethical norms of startup investing. They are hardly neutral documents, of course, and even when offering useful advice, they also build the author's reputation, which can help them access more exclusive investment opportunities. But attuning to the authorial voice, and to the desire which impels investors to write for their imagined peers, helped me construct the ideal-type subject-position of the angel investor which I refer to throughout this dissertation. I sometimes cite these texts, but they also inform the background of my analysis. Startup discourse is universalizing, and, as such, placeless. Thus the practitioner texts I draw on can be authored from anywhere, and still complement my San Diego-based fieldwork.

**Place, and a privileged periphery**

The door to my fieldwork site opened to me where I was studying, at the campus of University of California San Diego, in La Jolla. The choice to use San Diego as a fieldwork site was thus pragmatic, but it offered more than an arbitrarily suitable perspective for the study of startup investment. Contingencies of the city's economic development made it a particularly apt place to observe the culture of startup investing.

Much private wealth in San Diego was accumulated through cut-rate land sales to insiders, and that private wealth has long continued to shape the agenda of municipal government. The city's substantial military bases led to the growth of a large military-related manufacturing sector during the mid-20th century. As signs of its waning appeared, the more far-sighted business and city elites planned a transition to a "high-tech" economy. It is not surprising then that the city's

premiere research university, from its inception, has been closely tied to the city's business and investment sector. University of California, San Diego, was launched as a science research campus, and since the 1980s, local venture capital has commingled with federal support to fund and commercialize (and militarize) its research, turning scientists into entrepreneurs (Mike Davis p.131; Walshok; Shapin). In 1985, the university launched the country's very first startup incubator, CONNECT, aiming to establish connections with the local business community and privatize university science. Still, San Francisco Bay Area remains the historical caldron of the transistor, software, and internet industries which accumulated vast wealth, and the ongoing epicenter of venture capital investing into the churn of new startup companies. And indeed for many San Diego investors, their identity was mediated by a consciousness of San Francisco, and some ambitiously star-chasing entrepreneurs abandoned San Diego and moved there to raise capital. Would I, too, have profited by following them north to conduct my research?

To study a phenomenon, it is not necessarily advantageous to go to its center; "vision is better from below the brilliant space platforms of the powerful" (Haraway 1988, p.583). Marginal people and locales can offer insight into the centers of power only visible from their standpoint. While San Diego's investment community is hardly a locus of the subaltern, compared to San Francisco and Silicon Valley, it is a relative backwater. And the people I studied maintained a reflexivity about their position with respect to the northern juggernaut. San Diego investors embraced their second-tier status. Knowing that they could never compete with Silicon Valley, they turned to affirm other values which they saw neglected, or lost, in the rush for money and scale at the center.

But the analytical usefulness of being marginal goes beyond seeing how people act differently when differently situated. Haraway's point is more thoroughly epistemological: it is about gaining an understanding the whole that is occluded from the center.  My peripheral site offered an advantage in this respect. I was able to grasp angel investing as a phenomenon whose relevance lay in its generalizing or expansionary movement — thus de-centering Silicon Valley as the relevant focus. Legions of researchers have made pilgrimage to Silicon Valley, seeking what understand and replicate its success. And for several decades, it was unusual both for the things and the wealth it produced. But to continue to dwell on the region as essential to understanding contemporary capitalism is to accept too easily the inhabitants' self-declared prerogative of making futures for everyone else. What I saw from San Diego is that the social practice of startup investing is of broad relevance precisely because it is now being promulgated universally.

In fact, this dissertation endeavors to distance its object from knowledge-making about Silicon Valley. Indeed angel investment there is different — it is not animated by the ethical norms which I describe, but rather adopts the competitive and profit-maximizing mode of professional venture capital.

Pragmatically, San Diego's position facilitated my fieldwork because power and status are more subdued than at the center. While San Francisco would have supplied a research field with a dazzling array of possibilities, in San Diego, people are approachable. They are not as monomaniacally focused on their valuations, and competition is less fierce. And yet five hundred miles to the north, Silicon Valley remains within envy's reach — and so San Diego's identity is

conflicted. On the one hand, I heard frequently the lament that San Diego can't supply capital on the scale that San Francisco can, and so startups can only grow so big before moving north. "San Diego sucks for raising money," one investor said publicly. Yet for the most part, San Diego defined itself positively through opposition to that center, embracing its status. It understands itself as having a more grounded ethic. Participants in the startup sector self-consciously positioned themselves as more supportive and less cut-throat than peers in San Francisco, and celebrated the cost and quality of living. One investor named Rick, who we will encounter again, defended the city when speaking to the audience at a startup event: "our ecosystem is just as complex as any other. The [investment] round sizes differ, so do the skill sets and access to talent…in the Bay, it's super competitive. Here, we can pay people less because it's cheaper to live. And they get sunshine and clean beaches." Over the audience's laughter, Rick insisted, "I'm serious! it's no joke."

Not all peripheries, of course, are equal in their distance from center, and San Diego occupies a more privileged status than most other cities, usually ranking 5th or 6th nationwide in dollars invested. The years of my fieldwork coincided with a global boom in venture capital, which inflated startup valuations (cites). Many San Francisco investors, feeling they had to pay too much for equity, looked beyond the Bay Area for the next big company at a more affordable valuation. Mike Kren, the director of the city's venture capital association, speaking at a 2018 startup conference at UCSD, announced that it was now easier than ever before for local startups to raise capital. "Lots of VCs have been calling, looking for deal flow, and we really didn't have that few years ago." In short, San Diego offered a locale distant enough from Silicon Valley to perceive its excesses, and yet close enough to be mediated by them. But ultimately

Place was simultaneously important and not important in this case study. The specificity of San Diego imbued the local practice, lending a climatological affirmation to the world-improving ideals of startup investing. The people I studied arranged their lives such that they spend their time moving up and down the coast north of the city center, in one of the world's most moderate climates, never far from ocean views and ocean air.  They passed between expensive homes and low-slung office complexes, often driving late-model electric sedans. Only a well-funded county bus network that transports domestic help, and the ubiquitous older pickup trucks loaded with lawnmowers and garden trimmings, serve as reminders of the working class populations elsewhere in the city.  On the other hand, capital is abstract value, agnostic to the intermediate forms it takes to reproduce. And technology startups work by imagining new futures, severed from existing ways of doing things. So the particularity of San Diego seems also to be unimportant to the social processes I describe.

**Gaining access, studying up**

This dissertation is not an ethnography, but it is ethnographic. I did not embed myself in a sustained manner in the daily lives of those I studied, or become particularly close to them, but I hung out with angel investors, attended their events, and interviewed several of them over repeatedly over four years. I attended several genres of gatherings.  The first were informational and pedagogical panels and symposia which offered lessons on the financial, legal, and product development aspects of starting and investing in companies. Initially, making these excursions didn't strike me as ethnography, because I saw the panels only as occasions to learn the information being presented — their intended function. Ethnography seemed to require participation more substantial than sitting in on seminars.  And yet I soon saw that informational

sessions were not simply means to the practice of investment which happened elsewhere. Rather, I saw, the startup world takes shape, in large part, through events where people instruct other people on how to enact entrepreneurialism (which always already implicates investment). Instruction went along with inculturation. There was no absolute separation between the training and the act itself.

Ethnographies of elites in advanced capitalist economies customarily reflect on gaining access. Mitchel Abolafia's essay on researching market cultures notes that "market-making is the province of corporate elites….They are insulated from observation and pro-tective of their time. The researcher must often pass through several levels of gate-keepers to gain access and may be rebuffed" (Abolafia 1998, p.78). My experience was different. Angel investors in San Diego are an elite, but not especially exclusive, social group. That is, they are wealthy, professionally networked, and reflexive about their status, but they are also reasonably accessible. If you come to San Diego, and start attending pitch competitions and other public events, you will meet many investors. This study is based on episodic fieldwork over four years around these sites, with these people. I met a number of them, both investors and other professionals and intermediaries within the local startup "ecosystem," eventually conducting about forty interviews. After repeatedly showing up and encountering them at events, I was able to gain the trust of several high-profile investors, and was invited to attend several of their private meetings with entrepreneurs.[5]

[5] Even professional venture capitalists make a virtue of being accessible; one reputed VC speaking at at Stanford University told the hopeful entrepreneurs in the audience "I'm at events, I'm on Twitter — if you can't connect with me, you're not working hard enough." And when I cold-emailed famous San Francisco angel investor Dave Berkus, he returned my email immediately.

For my fieldwork, I followed the investors. I drove my beat-up convertible around towns with names like Del Mar, Carmel Valley, Solana Beach, and La Jolla for my fieldwork. Often, as I pulled into parking lots, the high-pitched whir of an electric motor in the adjacent parking spot signaled to me the sound of money. Angel groups like TCA often convened in space loaned by local law firms (some open-corridor and stuccoed, nearly mediterranean, others in modernist glass boxes). Larger gatherings, such as the San Diego Venture Guild's annual address, or pitch competitions, were held at auditoriums in private biotech research facilities in the same area. My interviews were conducted mostly at coffee shops. Sometimes I rode my bicycle there. I would announce this mode of transport, to mark myself as different from them. I stated explicitly that I had no ambitions of joining their world, that this was not an "informational interview" being conducted by a job seeker, that I was not studying business to do it myself. I hoped that this would make the interview more candid, that it would encourage guards to be dropped. This worked sometimes, but more often, it elicited from them a neat and idealized description of their practice.

"Studying up" is endemic to ethnographies of finance and markets.[6] The term emerged from the politics of ethnographic representation, and drew attention to anthropology's fraught history of construing its subjects as primitive others, often to facilitate colonial projects. As the discipline undertook self-critique, anthropologists became reflexive about how they had physically imposed their presence in their subjects' lives, and denied them the chance to participate in how they were represented. Studying up, in contrast, makes privileged people the objects of analysis — people whose privilege lies, importantly, in the ability to deny access to

[6] One significant exception is studies of microfinance schemes in the global south, and how they play out on the ground among recipients.

their worlds (Laura Nadler 1972; Cerwonka & Malkki p.88). As I noted, I rarely had difficulty getting investors to talk to me. Yet I found myself challenged when, not infrequently, I was asked about they could instrumentalize my research — and was forced reckon with the epistemology of studying up: not a concern of misrepresentation, but of the usefulness of my critique-as-knowledge-production.

I was often asked "how can your research help me?" The question confounded me. For individuals of practical-rational disposition like investors and entrepreneurs, people who are relentlessly engaged in doing in the world of affairs, it is tough to convey a scholarly desire to contribute to social scientific critiques of transforming relations within capitalism. With their question, investors imagined I was producing research that could help them invest more successfully. I never answered this question by feigning the value of my scholarship to them. I often stated that I was interested in the culture of angel investment. Sometimes I presented myself as "an anthropologist," explaining in jest that angel investors were the strange tribe I was studying. I hoped that this would be legible enough to place my research in a standard of legitimacy, while simultaneously conveying its irrelevance — and thus innocuousness — to them. It worked, sometimes. During one of my more intimate fieldwork encounters, as I crossed a parking lot with an investor named Larry who had offered me a ride, I explained that my interest in his world was "like a cultural anthropologist's." When got into his car and he turned the ignition, the radio came on. A sober voice was speaking about opposition to President Erdoğan in Turkey. Larry, playing along as the native informant, turned to me and said, deadpan, "all VCs listen to NPR."

But the anthropologist's rationale did not always work. I was sometimes denied access when the non-instrumentalizable quality of my research became evident. For example, I had a long-scheduled an interview with Christy, the director of a regional business development forum which brought startups and investors together. When I confirmed by email a few days prior, and re-stated my epistemological stance, I received the following reply: "Jacob - Timing is really tight right now. I am a little troubled about your previous comment, 'To be clear, my research is not policy-oriented, and my work won't have direct practical application.' With so many of the projects we're working on having the potential for global implications to help or solve pressing problems, I'm having a hard time dedicating any time to projects that don't have policy impacts or practical application." She cancelled the interview. Christy's time was surely limited, but perhaps she also sensed, consciously or not, some skepticism I'd given off (Goffman 1959) towards my research object. Elites are often well aware that academic analyses may render them uncharitably. An anthropology professor at my university related to me how he was accidentally copied on an email from bank executives deliberating whether to grant him interviews; one had skimmed his faculty profile page and concluded "he's capitalism-friendly." But the question of how my research would help my interlocutors placed me in an uneasy position in a more profound way. The fact was, I faced the dilemma of studying people who expended significant resources toward ends whose "global implications" were of questionable good: while one startup was designing hemp-based menstrual products, another made an app to order popcorn to your movie seat. Yet all the people involved saw themselves as heroic in their work. And so I had to mask the critical intent of my project.

**Plan of chapters**

Chapter 2 is titled "Formations of angel investing and venture capital." It begins with a selective history of the intertwined practices of professional venture capital and angel investment. On the one hand, angel investment, as an amateur form, is practiced aspirationally in relation to VC. On the other hand, it seeks to define its own values differently, through ideals of reciprocity and doing good. The second part of the chapter describes angel investment in relation to the culture of entrepreneurship at UC San Diego, and provides an introduction to the events and entities (like pitch competitions and accelerators) that make up the city's investment "ecosystem."

Chapter 3, "Techniques of participation: valuations and contracts," examines the financial instruments of angel investment. It argues that the technical structure of the asset generates affective energy, a sense of collective participation, and long-duration relationships. These make angel investing an ethically meaningful practice to participants, beyond the always-elusive financial reward. More specifically, the discussion of the financial structure examines the logic of the portfolio, the procedure of valuation, and the contractual terms of investment.

Economic sociology generally analyzes social relationships in terms of how they serve market stability. Chapter 4, "Inverting embeddedness: finance and community," inverts the explanatory priority of this "embeddedness" thesis, examining how investment can become a means to community. It provides three pieces of evidence. Investors frame their work as "helping" entrepreneurs, which encompasses business mentorship, but also produces relationships. They value the "flatness" of the investment community, in contradistinction to the

corporate work cultures many of them have left, because this allows everyone to relate as individuals, equally. Finally, they describe investment as "giving back." Gift-giving in the West is generally confined to intimate spheres. The chapter concludes by proposing an alternative to the bifurcation between market and gift exchange, showing how capital itself can be subsumed into gift logic.

Chapter 5, "Evaluating pitches and deciding what should exist," focuses on the experience of agency in deciding what should exist. I analyze the central ritual of the startup world, the pitch. People become investors, in part, because this interactional event enables them to seek and find satisfaction as arbiters of entrepreneurial ventures, in a manner not available to atomized investors confronting anonymous public markets. Rather than seeing the pitch as a persuasion device, it analyzes the pitch as productive of a listening subject, who finds its identity in assessing business strategy and reckoning with speculative claims.

Chapter 6 is titled "Doing good and divining futures." It examines how startup investing is figured as 'the good' regardless of what the business in question actually does. It offers a rejoinder to recent focus on explicitly social and environmental 'impact' investing. It shows how capitalism can renew its legitimacy and assuage consciences of the investor class without reference to external ends (e.g. 'entrepreneurial citizenship' or 'clean tech'), but rather through developing virtues internal to the practice of investment itself. I focus on the practice of divining what should exist, and on producing a market through the Lean Startup methodology.

Chapter 7, “Deregulation: ‘Democratizing’ investment?” examines recent securities deregulation intended to spread angel investing online. It argues that these platforms could not sustain the social interactions which inspired participation previously.

Chapter 8, “Dreaming of a Big Tech acquisition” describes the way the broader technology industry and its political economy generates a demand for acquirable startups. It argues that this, in turn, fuels and legitimates the entrepreneurial hopefuls at the top of the funnel. The desire to be acquired shifts the analytic focus away from angel investing’s ethical appeal to participants, towards a financial rationale. The chapter concludes by examining CBInsights, an information service about the startup market. It proposes that CBI enables the spread of the thing which it works to know, that is, the practice of investing in early-stage companies.

# CHAPTER 2: FORMATIONS OF ANGEL INVESTING AND VENTURE CAPITAL

Angel investing sometimes appears to be without history, in two senses: practitioners, preoccupied with innovation and the next new thing, are unconcerned with the past, while observers imagine raising capital to be a timeless need. In other words, angel investing is either as new as Silicon Valley, or else it is simply a case of a perennial business problem. But of course, these positions are inaccurate. Angel investing is not only a historically specific technique of furnishing capital, but other historical contingencies have made it also the ethical practice which I center in this dissertation. Still, neither of those popular imaginations are entirely incorrect, so let us begin with their strand of truth.

"Most young companies are forever in need of money," writes the author of a popular history of the 2001 dot-com crash (Cassidy 2002, p.79). How far back can we trace something akin to a "company?" A state science council report on venture capital in California, after repeating the standard narrative of the VC industry's origins in the 1950s, noted "of course, some forms of venture capital existed even in the earliest economies." The author, a Stanford University economist, then invoked the Old Testament: "friends-and-family financing, the practice of raising capital to start a new business," he said, appears when "Jacob received flocks of sheep and goats from his father-in-law, Laban, which propelled him to great wealth, a great deal of which was appropriated by his backer" (California Council On Science And Technology, 1999). Similarly, industry crossover academics Richard Florida and Martin Kenney (2000, p.103) wrote that "Even before the dawn of capitalistic enterprises, wealthy persons (often merchants) were willing to invest in business start-ups promising significant capital gains." These accounts suggest a generic truth: that a social role of the investor must always have been around. What

they all fail to convey is any sense of the social relationships involved — as if, from antiquity, investment relationships unfolded on the model of contractual finance.

Can venture capital be placed in such a narrative?[7] Far from being a response to a timeless need for capital, the rise of the contemporary venture capital industry was conditioned by geopolitical fears, and even by an ambivalence toward concentrated corporate power. In particular, it arose as a response to economic and policy strategists who fretted, in the years following World War II, about the future of American innovation. In 1946, Ralph Flanders, who would later found the first VC firm, put it in these world-historical terms:

> The postwar prosperity of America depends in a large measure on finding financial support for that comparatively small percentage of new ideas and developments which give promise of expanded production and employment, and an increased standard of living for the American people. We cannot float along indefinitely on the enterprise and vision of preceding generations. To be confident that we are in an expanding instead of a static or frozen economy, we must have a reasonably high birth rate of new undertakings. (quoted in Nicholas 2019, p.116)

Why was this "birth rate" of companies a matter of concern? After all, America appeared a technological powerhouse. But recent innovations had been funded either by the government and

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[7] A recent popular history of venture capital locates a significant precedent in 18th and 19th century whaling business (Nicholas 2019). Whaling agents intermediated the investment relation between wealthy families and the ship captains — just as VCs pool capital from institutional investors and invest it in companies. Whaling was a high-risk, high-return pursuit in which it was difficult to predict success. Captains and crew were incentivized with a share in the return upon a voyage's completion, similar to the equity held by startup founders and employees. Profits in whaling were justified — translated into the language of contemporary management science — as "payments for bearing uninsurable risks, rents on knowledge and managerial skill, and returns to innovation" (Davis, Gallman & Gleiter 2007, cited in Nicholas 2019). Though I follow Nicholas when discussing the portfolio strategy in Chapter 2, he presents no evidence of any historical continuity between whaling and VC as historically specific practices.

or by existing corporate research facilities during the war effort. Despite — or because of — the country's base of successful and established large industry, there were few institutionalized sources of capital for new technology businesses. Bankers, for one, offered the predictable complaint that the Roosevelt-era tax structure disincentivized risk-taking by financial institutions:[8] while individual persons could invest in ventures and use any losses to offset their other taxes, corporate capital gains did not enjoy this treatment. More revealing, Flanders, when chair of the Boston Federal Reserve, posed the existing configuration of institutional capital as a problem:

> "I became seriously concerned with the increasing degree to which the liquid wealth of the Nation is tending to concentrate in fiduciary hands. This in itself is a natural process, but it does make it more and more difficult as time goes on to finance new undertakings…" (quoted in Nicholas 2019, p.116).

Flanders meant something more general than the fiduciary duty of all professional financiers to maximize returns, as mentioned in the introduction. For venture capital firms are, legally, "fiduciary hands" too. He meant that because traditional banks and investment trusts erred toward financial prudence — as he saw they ought to be — they were reluctant to invest their clients' money in new ventures. His response, along with others, was to professionalize existing informal networks of venture capital: thus allowing financial institutions to take risks in a rationalized manner which aligned with their fiduciary duty. Modern venture capital, in other words, is a financial innovation, not a timeless pursuit.

[8] The lament by the wealth against taxes is familiar; what is notable here is the appearance of the term "venture capital" in 1939: "In 1939, the president of the Investment Bankers Association of America lamented this situation, stating: 'No one in the high income tax brackets is going to provide the venture capital and take the risk which new enterprises and expansion require, and thereby help create new jobs, if heavy taxes take most of the profit when the transaction is successful.'" (cited in Nicholas 2019, p.110).

The venture capital firm in its currently recognizable form is generally traced to the formation of American Research and Development Corporation (ARD) in 1946. Though a private entity, it was conceived and organized from within a New England regional economic development council. Its founders were a microcosm of the VC industry's future entanglements: an industrialist who became a senator and head of the Boston Federal Reserve Bank (Flanders), a president of MIT; and — foremost among them — George Doriot, who worked for the military and who, as a professor at Harvard Business School, denied women access to his course in industrial management. ARD was the first to systematize and expand the haphazard venture investing practiced previously by family dynasties like the Rockefellers and Whitneys. In doing so, it made three main innovations. First, as an intermediary, it reached beyond the informal networks of wealthy individuals to pool capital from institutional investors. Second, it used industry experts to select investments, and built a portfolio strategically across an industry sector. Third, it made its financing contingent on the right to participate in corporate governance — allowing it to force management of the new company toward what it perceived to be the most profitable outcomes. (Nicholas 2019, p.80; Florida and Kenney 2000, p.103).

Into the 1970s, mainstream finance viewed venture capital as on a continuum with corporate "junk bonds." Both were categorized as dubious for their risk profile. This manifested the same concern Flanders had voiced earlier regarding the excessive conservatism of financial fiduciaries — even though, in the intervening decades, the number and scale of venture capital firms had grown.  VC firms faced stricter regulations than other financial institutions, which limited the sources of capital they could access. This changed in 1978, when the Employee Retirement Income Security Act (ERISA) was amended to allow pension funds and insurance companies to

invest a portion of their holdings in risker assets. This act of deregulation allowed them to become the clients of VC firms, who took their capital and invested in startups.

**Angel investing, mediated by the ideal of venture capital**

What of the history of modern angel investing itself, as distinct from venture capital? Likely it has no single origin point, but took root in the Silicon Valley area as the wealth was extracted from the early transistor companies like Fairchild Semiconductor. Eugene Kleiner and Don Valentine, two of Fairchild's engineer-founders, invested the money the made through informal partnerships in other local startups whom they could offer technical and operational assistance to (Saxenian 1994, p.39) — what I describe as "gifts of capital" in Chapter 4. According to people I interviewed, the term "angel investor" itself originally denoted individuals who personally funded Broadway theater and Hollywood films in the early 20th century. The term crossed sectors mid-century, and people began to speak of "business angels." A 1983 article in the Sloan Management Review, "Angels and Informal Risk Capital" (Wetzel 1983) truncated the compound term and brought "angel" into wider circulation.

Wetzel's article at once celebrates what he sees as a hidden and unsung population of angel investors, and also calls for a systematic expansion of the work they do. He begins by referencing the popular notion that a "gap" exists in the capital market for new technology firms that are too small to attract venture capitalists. This is essentially the same concern for national industrial dynamism that weighed on the post-war instigators who institutionalized venture capital. But Wetzel announces that this "funding gap" is fabled. In fact, a sizable if informal sector of risk capital exists in the U.S.; he estimated the existence of 100,000 "business angels" circa 1983. That they are often invisible to economic analysts is an artifact of measurement, of

the federal reporting requirements on private capital investment. And while policy discussions at the time recognized the crucial role of angel investors in “energizing” the American technology economy, Wetzel found standard policy prescriptions misguided. What was needed was not more small business development institutions to help entrepreneurs. Rather, he argued, “mobilization of the pool of ‘angel money’ appears to be impeded by the absence of systematic, efficient channels of communication between entrepreneurs and investors” (Wetzel 1983, p.33).

Wetzel’s call would be answered. Over the next two decades, angel groups became popular in major cities. They brought investors and entrepreneurs together in a single room — an efficient mode of coordination, if locally circumscribed. And thirty years later, his dream was more fully realized through internet-based investment platforms, themselves a product less of technical innovation than of deregulation. Of course, new means of communication tend not to only facilitate existing practices, but expand those who participate — this is the nature of infrastructures. Chapter 5 deals with this “democratization of investment.”

From Wetzel’s text, we can extrapolate a parallel origins narrative to that popular story centered on Silicon Valley luminaries like Kleiner and Valentine. While Wetzel begins by announcing that “success stories like DEC and Apple have stimulated expectations for an economy energized by technology and entrepreneurs,” he says nothing else about famous tech IPOs, or of the two hubs of venture capital, Boston and Silicon Valley. A penultimate section, sub-titled “Nonfinancial Rewards,” proposes that what distinguishes angels from VCs is (not fiduciary obligation but) “social responsibility” and “psychic income.” These derive from investing in ventures which e.g. promote “urban revitalization” and “create jobs in areas of high

unemployment." This paints a picture of angel investors as modest local capitalists in dispersed rustbelt locales, not power brokers in technology epicenters. Wetzel makes little reference to geography at all; his interest lies in promoting angel investing nationally. We should see this both as symptomatic of the fact that Silicon Valley had not yet come to dominate imaginaries of angel investment — and simultaneously as a partisan construal of angel investing's wider remit.

So we have a simplified three-part timeline. First, stretching back to the biblical era, people of means funded others' risky commercial undertakings. Then, in the mid-20th century, a group of Boston elites rationalized this activity, bringing in business expertise and drawing on a wider pool of institutional capital — in short, forming a new financial profession. Only in the third phase do proper angel investors appear. They resemble those early wealthy individuals, but their existence is mediated through the middle term. That is, angel investment holds professional venture capital — its expertise, its "kingmaker" status, and its financial success — as a model, even while seeking to define its own values differently, through ideals of reciprocity and doing good. And angel investors' wealth, at least initially, was derived from their own success in VC-funded technology companies, rather than from old business empires. Angel investing is the amateur mimicry of venture capital, not a genealogical predecessor which happens to still hang around. That is why some of the data for this dissertation derives from the discourse of venture capitalists (rather than exclusively angels).

I've now offered a simplified history of angel investing. It leaves many gaps, which is not the place of this dissertation to fill in. But we will note a few hallmarks of angel investing's growth, both causes and signs. One has been the media attention, since the 1990s, to the garage-to-IPO

narrative of entrepreneurs like Steve Jobs and Marc Zuckerberg. More recently, the television shows Silicon Valley and Shark Tank gave more intimate, if fictionalized or dramatized, perspectives into the relationship between the entrepreneur and investor. Taken together, these put the power and status of the venture capitalist — who is, recall, a relatively small player compared to mainstream institutional investors — into the public imagination. Of course, anyone outside of the elite professional networks who actually tries become a venture capitalist will learn quickly how exclusive and pedigree-based those networks are. The point is, it's easy to want to be a VC, and the way to begin, it seems, is as an angel investor — even if, to beginners, the difference in high stakes and fiduciary duty isn't so salient. But as people approach the social world of angel investing through word of mouth, investor groups and internet representations, they see the chance to make friends, experience agency, and "give back." To summarize, angel investing is a practice conditioned by imaginaries of venture capital, but constitutes a distinct social and economic formation.

Little statistical data is available on the demographics of accredited angel investors. The reason is twofold: angel investing is loosely regulated, and transactions are not centralized. Startups are private companies, and unlike public companies, they are not required to disclose their stock offerings to the Securities and Exchange Commission. The trade group Angel Resources Institute publishes an annual report providing estimated data on the sector. It is concerned primarily with who is investing what quantities of capital, and in what regions of the country. The 2019 report leads with demographic categories it deems most pertinent: first, most angel investors are former entrepreneurs (55% launched startups before investing); second, while women comprise only 22% of investors, the report emphasizes that this is a more equitable ratio

than that of women in professional venture capital firms. California leads the country in dollars[9] invested (43%) and number of deals (21%). New York follows: 16% of dollars in 15% of deals. All other locales are aggregated by region; the entire South East of the U.S. takes third place with 10% of dollars invested in 7% of deals. The dollar value of angel investments varies with the stage of the startup and the whims of the investor. Some may be as little as $500, ranging up to several hundred thousand dollars.

**The rise of entrepreneurship**

The recent cultural and political valorization of entrepreneurship, in a sense, supplies the raison d'etre of this dissertation: more entrepreneurs need more investors. Much has been written about the figure of the entrepreneur, which I pointed to in the introduction. Here we will focus on the significant role played by universities in promulgating this entrepreneurial mandate.

At a startup pitch competition at UCSD's Rady School of Business in 2017, Paul Roben, who holds the title of Associate Vice Chancellor of Innovation and Commercialization, offered a prophecy-as-institutional-imperative. The university, he said, was committed to "preparing our students for this disruption economy, where more and more people are creating their own jobs rather than having others do it for them." His use of "disruption" carried a positive sign, but it also implicated another economy being disrupted, where the stable American corporation is "vanishing" (Davis 2016). The university's chancellor, Marvin Khosla, followed Roben at the dais. "About 5 years ago," he said, "we saw a transformation in this country — the fundamental nature of jobs was changing — no longer would you get at bachelor degree and go work for a big company." He then invoked "what people call a gig economy — wherever you are, you can start

[9] This reflects not only the concentration of investors there, but also the inflated valuations the competitive and hype-laden Silicon Valley region.

something.” A gig economy? These two administrators had in mind a quite different vision than that sponsored by companies like Uber, whose ad campaigns positioned everyone as a potential gig worker ready to “get their hustle on” (as an Uber advertisement put it). Gig labor in the 2010s was the object of a legal classification battle, but whether regarded as independent contracting or waged employment, it cannot properly be called not entrepreneurship: it involves no investors or speculative capital, only a platform boss and task-based remuneration. Khosla’s word choice was imprecise, but his intentions were not. He did not mean that students should become app-based delivery workers; rather, he indicated that seeking investment capital for one’s startup was the new career common sense.

More extensive and comparative sociological research conducted at UCSD and several dozen other universities on “undergraduate startup cultures” shows the extent to which this rhetoric is inscribed in the curriculum, extra-curriculum, and students’ sensibilities. The incubators and accelerators now ubiquitous on campuses provide programmatic support, but also affective instruction.  While administrators say they responding to student demand, first-year students generally arrive with only vague notions of entrepreneurship, and subsequently learn to view risk-taking as exciting, and actively devalue the prospect of working a conventional job, managed by someone else (Davis and Binder 2016).

For the promise of entrepreneurship as a career path to be tractable to young people emerging from universities or elsewhere, they must find waiting for them their corollary, angel investors, who are willing to watch them pitch, indulge their hopes, and throw them some capital. Most startups will soon fail, but what happens a year or two later is not my concern here. The point is

that entrepreneurs must be visibly receiving funding in order for the institutional imperative to appear valid. Indeed, universities like UCSD work to involve the regional business community in their programs and events, aiming to match the entrepreneurs they produce with investment.

# Chapter 3: Techniques of participation: valuations and contracts

The financial instruments and contracts of angel investing do more than organize the transaction of money. They constitutively mediate the practice's social dimensions, which are crucial to its expansion. In the past two decades, a research program on "market devices" has analyzed the diverse ways that material and discursive assemblages — ranging from the physical arrangement of desks to the quality grading of strawberries — participate in the construction of and expertise about markets (e.g. Beunza and Stark 2004; Garcia-Parpet 2007). The present chapter follows this methodological attention to market devices, but looks to effects other than how they enable exchange. It examines how apparently technical procedures promote affective engagement and the formation of social bonds. These make angel investing ethically meaningful to participants, beyond the anyway-elusive financial reward.

I begin with a discussion of portfolio-based investing. The portfolio is a device for managing risk though diversification; I show how it also functions to organize subjectivity and affect. By investing in many startups which will mostly fail, investors must treat each as if it will yield orders-of-magnitude returns (10x), raising their affective response. I approach portfolios not only as abstract techniques for distributing financial commitments, but also in their semiotic element, as a numerical rhetoric which represents to investors ambitious goals without referencing dollar values. Participants experience these high stakes as exhilarating, which binds them to the social practice.

The second half of the chapter examines the social process of making numbers. I begin with an account of how the inherent indeterminacy of nascent businesses makes it difficult to value

them in any objective manner. Social researchers in recent years have put forth case studies that show how diverse institutionally authorized measures of "value" are, in practice, merely the mundane achievements of contingent sociomaterial processes. Startup investors understand this. They are reflexive about value's performative status, for example, in their recognition of the role of negotiation in settling and unsettling startup values. I argue that valuation processes do not only produce numbers (values), but can become occasions for the formation social relationships — precisely as participants grapple with value's indeterminacy. These relations themselves help reproduce angel investment as a whole. I call this the discourse community of valuation. A third and final section briefly examines the ways social relationships are written into and shaped by the contractual language of startup equity.

**The portfolio logic and "10x-ing" your investment**

Finance's core problematic is risk. Portfolios are devices for managing risk by hedging bets and diversifying investments. The past two centuries have seen both progressive and neoclassical critiques of finance for overstepping its proper domain of lending money, to fueling and profiting from speculation. However, and to the contrary,[10] Giovanni Arrighi (1994), Panitch and Gindin (2005) and others maintain that speculative finance is internal to capitalism's normal operation because capital's expansionary tendency necessarily creates risk which must be managed. Startup equity sits in the highest-risk asset class — it is far riskier than most exchange-traded instruments. But this risk is not on the order of nature, that is, it cannot be explained simply by saying that "most attempts to create something new fail." Rather, the very riskiness

[10] As Martijn Konings points out, "The critique of speculation harkens back to an older critique…of chrematistics in antiquity, as well as…of the idolatrous worship of money in premodern Christianity….That the orthodoxy of the past is today's heterodoxy is an al- most too obvious clue as to the conservative and anachronistic character of the critique of speculation" (Konings 2018, p. 3).

which the portfolio mitigates is, at the same time, generated by the portfolio logic itself when it becomes the normative way of investing.

Put differently, one could point to the sheer number of hopeful startups and the limited capacity of venture capitalists to capitalize them (and of public markets to eventually absorb their IPOs), conclude that by necessity few startups will succeed as they ascend this financing pyramid, and then pronounce the structural fact of risk. Risk, in that telling, emerges from a process that crosses scales — scales of people, corporations, and markets. It is irreducible to a single scale or level of the financing pyramid. This is not incorrect. Still, that larger process must also manifest empirically at each scale. Here, at the scale of early-stage finance, it is expressed concretely in the practices surrounding the portfolio. We can thus nuance the claim that risk is internal to capitalism: it results not only from extending credit to businesses who push into uncertain new frontiers, but arises also because risk is installed in the micro-level strategies of finance, such as the portfolio. And, arguably, the portfolio facilitates the risk taking which it is supposed to mitigate; the cause can also be the effect.

It has been financial common sense at least since Shakespeare's era that any sober investment strategy ought to embrace diversification: that is, to spread bets across a portfolio of assets. While the origin of modern mathematical portfolio theory is generally dated to a 1952 article in an journal of financial economics, that article itself reaches back to quote Antonio in The Merchant of Venice, who notes: "My ventures are not in one bottom trusted, nor in one place" (Markowitz 1999). The strategy is straightforward: all investments are uncertain; by building a portfolio of assets with different risk profiles, then statistically speaking, the gains of some

should compensate for losses of others. Early-stage investing in particular calls for a portfolio approach, because, as texts about early-stage investment perennially reiterate, most startups fail. Alone, each is a risky investment, but in a portfolio of investments, one or two successful startups will hopefully cancel out other losses[11].

This high risk / potentially high return variant of the portfolio strategy has a notable precedent in the financing of 19th century whaling expeditions. Many of these vessels never returned from sea and their financiers lost their money, but the few that did return were wildly profitable. In the recent book VC: An American History, Tom Nicholas (2019), a professor at Harvard Business School, compares data compiled by historians of the New England whaling trade to data on contemporary VC firms to illustrate continuity of strategy (Nicholas 2019). He shows, for example, that the distribution of profitability rates of whaling voyages resemble that of VC portfolios portfolios. About 30% of the whaling expeditions and VC funds returned between negative 25% and zero capital; and about 2-3% returned profits over 100%. It is unclear whether Nicholas intends to suggest any historical transfer of financial strategy from whaling to venture investing. I invoke his comparison to point out that an underlying financial logic for extracting profit from risky undertakings arises at different times and places, even while the attendant meanings differ. In the case of angel investing, the portfolio incites in many participants an affective relationship to their practice which exceeds the prima facie purpose of hedging risk. The remainder of this section substantiates this claim.

[11] Technically, a portfolio of early-stage startups is not actually "diversified," because they are all of the same 'asset class.' True diversification comes from investing across asset classes - stocks, oil futures, state bonds, etc.

Whereas stocks and bonds in a common retail investor's retirement portfolio might appreciate several percent each year, early-stage investment portfolios see more vertiginous performance. Investors seek startups which will return, in under a decade, orders of magnitude more than the principal invested. This dream organizes desires, and stories about such investments circulate. It is widely reported, for example, that venture capital firm Sequoia Capital made a return of fifty times its investment of $60M when WhatsApp was acquired by Facebook (CB Insights 2021). And prominent angel investor Jason Calacanis famously turned a $25k early investment in Uber into $100m on paper after its IPO (Manjoo 2017). Amateur angel investors speak more commonly of "10x-ing" or "20x-ing" their principal, and they relish verbalizing such multiples. Yet the goal of seeking orders-of-magnitude returns is not a natural or obvious mode of investment. Nor should not be understood as unmediated lust for money or simple rapaciousness. It arises once investors start thinking in terms of a portfolio rather than individual company, which represents and rationalizes to them the necessity that one success be so staggeringly large that it makes up for all the other losses. And this goal of "10x-ing" has effects, furthermore, that are not reducible to risk mitigation.

Financial futures are often conjured through narrative (e.g. Tsing 2000, Chong and Tuckett 2014), but numeric forms do powerful imaginative work as well. Anthropologist Jane Guyer (2014) highlights the "poetic and rhetorical forms" of numeracy operative in both non-western and western cultures. Public use of the percentage sign %, for example, from national debt indicators to storefront sale banners, gestures toward a state of wholeness not yet achieved. We must understand the orders-of-magnitude multiples like "10x" or "100x" to be enacting such rhetorical power. Invoking these concise algebraic expressions — speaking of a "10x" return —

abstracts the financial goal from particular dollar values; what matters instead is the multiple. This has two consequences.

First, because it is not a determinate number but a scalar signifier, “10x” allows talk about investment to circulate across levels of practice, from amateur seed-round investors to professional venture capitalists, and over time, as valuation ranges differ. From this we get a related analytical insight: the nuancing of the notion of the capitalist search for profit, which is not only a simple quantity magnitude. Second, the abstraction from dollars does just that: to some degree, for those involved, it weakens the fixation on money, and translates the financial problem into one of helping nascent entrepreneurs grow into big business. As we will see, this then becomes a virtue internal to the practice of investment, distinct from making money, which supports my broader claim about startup investing as an ethical project.

The portfolio and the “10x” strategy structures early-stage investing as much as aspiration as in their successful realization. That is, novice investors generally lack the expertise, deal access, wherewithal, and cash on hand to make many investments, yet for precisely this reason, the wisdom and virtue of building a portfolio has become an object of continuous discussion in investor discourse. Consider that a startup pitch is an exercise in persuasion which, when well done, can make an unseasoned investor feel quite sure that the venture will succeed. Investor pedagogy warns about this siren song, calling on novices to resist the temptation to put all one’s capital on a single startup. It is particularly common among men, recently retired from business, to be overconfident in their judgment. And so in portfolio discourse we frequently hear that one should disabuse oneself of the belief that one can “pick winners.” In other words, only rash

novices think they can out-smart the risk endemic to startups. Thus the pursuit of a portfolio becomes a marker of becoming a serious angel investor. And it is in encountering the portfolio and its normativity that new angel investors learn to seek high growth ("scalable") startups that might "10x" their capital. These encounters happen through reading practitioner texts, at pedagogical workshops, and in interactions with other investors and entrepreneurs.

At a day-long angel investing seminar offered by the national Angel Resource Institute at San Diego startup incubator CONNECT, the presenter named Susan offered a word of caution to the room full of attendees. As novices, she said, they might find themselves enticed by a single charismatic entrepreneur to commit all their money to one venture. But their odds of success when making one or two investments are exceedingly small. Invest in at least three, ideally ten startups. If they want to take themselves seriously as investors, Susan intimated, they must attend to the aggregate dollar yield across their entire portfolio, called the "blended return." Do you hope to triple your invested capital in five years, she asked? — and then conjured a scenario to illustrate the dramatically uneven win/loss dynamics which make spreading risk prudent. In a portfolio of ten startups, seven will likely fail within the first year, yielding a total loss. Two startups may generate modest revenue, and get acquired by a competitor at a valuation that only returns the principal invested. Finally, after four years, a single portfolio company launches a successful product and, poised for future growth, raises a new round of investment from a venture capital firm; as part of this deal, the early angel investors get bought out. For them to achieve the desired 3x blended return, the acquisition price paid by the VCs must be nearly 30x as large as the angel's initial investment. "You need to find deals that will scale," the presenter

insisted. “More than a 3x - sometimes a 10x, sometimes a 20x. It’s crazy that people want to be in this space. But we do, because there’s that possibility.”

More than technical instruction was going on here. Susan’s “because there’s that possibility” layered onto the potential 30x return a prestige which signified independently of the net profit a hypothetical investor would actually make in such a situation. After accounting for the other portfolio companies whose value went to zero, that 30x return would yield more modest profits. Yet still this terminology has power. We see in her remark that achieving orders-of-magnitude returns has become a good internal to the investment practice itself, organizing desire in pursuit of it.

Investing by portfolio, then, is both a response to a particular condition and a cause of it. One the one hand, this accounting device offers a way to manage high risk by spreading bets across many startups. But that high risk is not a phenomenon in the natural order of the market. It is true that there are more hopeful startups than public markets could ever absorb without disturbing profitability norms — but this gatekeeping function, like the credentialing of doctors and lawyers, partially creates the demand that it bottlenecks. Investors’ demand for outsize returns — which causes many startups to fail because they can’t “scale” fast enough — is itself an artifact of the expectations set up by the portfolio. My claim, then, is that portfolio-building is an aspirational practice which, independently of its risk mitigating function, becomes a standard for the virtuous performance of the angel investor role. With a portfolio, the investor gets to do the meta-thing, presiding over a court of entrepreneurs and participating vicariously in multiple innovation projects.

*A financial instrument that generates affect*

The portfolio logic shapes, in significant ways, the affective order of startup investing. Because investors can't know which of their portfolio companies will succeed, they must treat every startup as if it is the big winner. Susan, the presenter at the training workshop, articulated this tension by affirming a contradiction: "I expect 20x return on each of my investments; I am also expecting seven out of ten to fail." In practice, the strand of hope in her statement trumps the strand of realism. The ever-present possibility of future success charges the social interactions of investor and entrepreneur with felt urgency. Here, the affect casts early-stage investment as a virtuous pursuit by framing investors as enablers and cultivators of world-changing startups, defined circularly by the capacity to scale. (I take up this line of reasoning in chapter 6.) This emphasis on orders-of-magnitude renders angel investing meaningful in a way that draws people to the practice.

The method by which one builds a portfolio matters. It registers ethically. Certain investors, often those flush with cash, accumulate investments in a manner which others judge rash and wasteful of capital. This is evidenced in several clichés characterizing those who add companies to their portfolios haphazardly: one accuses such investors of following a "spray and pray" strategy; another derisively describes this approach as "throwing darts." These sentiments tap an ongoing cultural anxiety regarding the distinction between finance and gambling, present from 19th century futures trading through contemporary critiques of "casino" finance (e.g. Strange 1986; see de Goede 2005). And so angel investors who critique"throwing darts" shore up the legitimacy of their practice. But why should one investor care about others' strategies for allocating capital?  As I argue throughout this dissertation, angel investment is not just a private pursuit of making money; it is also a practice of ethical self-fashioning in community with

others. And one does this, in part, by publicly critiquing others' shortcomings with reference to angel investing's highest self-ideal as the measured use of one's skills and capital to mentor entrepreneurs and change the world.

We can observe this dynamic in a commentary posted to the professional networking site Linkedin, where a San Diego investor and consultant called out those who build a portfolio by wantonly picking startups in trendy technology areas, hoping to hit a jackpot. Instead, he counseled, "spread [your investments] across a carefully selected portfolio until a scalable business model has been discovered and a dedicated juggernaut makes sense." Otherwise, you "waste venture [capital] resources, infrastructure, connections and leadership" (Dos Santos 2014). The author performs the communality of the angel investor "ecosystem" by insisting that capital shouldn't be squandered, regardless of whose money it is. But what is the standard for a "carefully selected portfolio?" In a sponsored post on the news site VentureBeat, a venture capitalist voiced dissatisfaction with a "mob of aspiring angels and VCs rushing in…hoping to strike gold with the next Facebook." These new entrants to the practice followed "a traditional approach of portfolio diversification, looking for the equivalent of an early-stage index fund. This wave of 'spray and pray' investing will leave…carnage in its wake" — in other words, copiously accumulating investments undiscerningly, leading to financial loss. The right way of practicing, this VC wrote, is to invest only where one has specific expertise, can help company founders grow the business, and provide access to their professional network (Renert 2012). What we see here is modern individuals elevating an ideal of skillful frugality and ethic of cultivation, through the use of their capital.

Neoliberal policies are commonly associated with the promotion of institutional market structures. Foucault suggested a different emphases: neoliberal societies are "societies oriented toward the multiplicity and differentiation of enterprises" — that is, they are fundamentally interested in promoting "competition." (Foucault 2008, p.149). The portfolio logic, operating on the scale not of macroeconomy, but of individuals' financial techniques, subtends competition. It embeds competition in the startup's will to exponential growth — but is not reducible to competition. I heard the claim frequently in my interviews that the entrepreneur's ultimate goal, whether they know it or not, is to become an investor. Investors, in other words, do the meta-thing. They set in motion this "multiplica[tion] of enterprises," by setting a number of startups against each other, each seeking to "scale" most rapidly. And the investor sits above this fray of competition, waiting to extract profit from the most successful entrepreneur. The portfolio logic organizes this financial process and enables this subject position.

**Communities of valuation**

If Foucault emphasized the principle of competition, scholars working within the more recent pragmatist turn in science studies write that "in so-called advanced liberal societies, 'economic' often refers to the establishing of valuation networks, that is, to pricing…that render[s] things economically commensurable and exchangeable" (Muniesa, Millo, Callon 2007). The two perspectives on the conditions of possibility for liberal capitalism are hardly at odds. Having begun this chapter by placing the affect of the portfolio as logically prior to money exchange, let us now ask: how is a startup's value determined for the purpose of investing in it?

The answer is, in short, that a startup is valued only by way of ambiguity, artistry, and arbitrariness. Lacking recourse to a stock exchange where a price could be discovered through

bidding and asking, the startup must undergo a process of valuation. A valuation is far from an objective procedure calculated swiftly by parties that are at quits. “Valuation is more art than science” was a phrase I heard invoked most frequently to describe the process. Industry terminology refers to the resulting numbers as a valuation as well, not a value. This is telling; the action suffix indicated that these numbers are practical achievements. Valuations represent agreements and not measurements in any positivist fashion — and investors are reflexive in recognizing this status.

Valuations matter as semiotic activities, not just economic ones. Their intricacies and always-shifting norms are a constant topic of discussion. They anchor discourse communities, and give rise to morally laden debates about hype, inflated prices, and greed. As numbers, valuations become themselves status objects, and so they are inflected not just by calculative rationality, but by ego. Finally, valuations set expectations for future performance. It is these achievements of valuation, and how they help interpellate people as investors, that this section will examine. But let us first examine what a valuation is, and how it is arrived at.

Financial assets are things that generate income for their owners, sometimes as an ongoing stream, or sometimes only when sold. The “value” of an asset is a dollar amount which corresponds to the total future income it is predicted to yield, adjusted for risk — that is, for the likelihood that this prediction will prove correct.[12] Given the future’s necessary uncertainty, all asset values are essentially asserted, based on some combination of calculation and hype. People can, and do, disagree about them. Values are forever stuck in the realm of potentiality and promise. Prices, on the other hand, are demonstrable. They are actualized at the moment when

[12] Or, in financial terminology, an asset’s future value is “discounted to the present.”

two parties agree to an exchange, and do not exist until that moment. Why, then, speak about asset values at all?[13] For some, it opens up a metaphysics of “intrinsic value” which exists outside of and objectively beyond the market price. This, by extension, allows one to call a price wrong: “the notion of a right, true, accurate value is invoked in order to criticize that price” (Muniesa 2020; see also Foucault 2008, p.31). In the case of angel investing, such critiques fuel debate and discussion, and participation in them then becomes a form of belonging in its own right.

The question of how to determine an asset’s value is a “persistent puzzle in finance” (Svetlova 2018). For exchange-traded securities, a material apparatus such as a trading floor or a limit order book sets the price, in response to “demand” — i.e. the aggregate of market agents’ individual assessments (whether intuited or calculated) of an asset’s future value. For custom-tailored financial products like mortgage-backed securities, the seller sets a price, and justifies it by a formal analysis of risk. Businesses are treated as income-generating assets, which are fractionally bought and sold. Established businesses are valued based on existing, quantifiable accounting data such as physical assets and past revenue. Startups challenge these methods. First, as we know, their shares are not traded like public stock, and so no empirical “market price” can be established. Second, little past data exists on which their value can be modeled; they offer no historical revenue figures that could feed the valuation formulas used for established companies. As one venture capital guidebook put it, “startup valuations are problematic, if not speculative” (McKaskill 2016, p.31).

[13] Neoclassical economics banishes the problem by assuming that whenever a fundamental “value” deviates from the market price, this is an abnormal and ephemeral situation — and presuming markets with rational actors and perfect information, the value and price will soon enough come into line.

The solution to valuing startups is ultimately not quantitative. It is, rather, fundamentally discursive. This becomes evident through a contrast with another calculation-resistant asset, the "coco" or contingent convertible bond. The asset managers who peddle these exotic instruments essentially stamp a value on them; Svetlova (2018) calls this "value without valuation." Here we have value by fiat followed upon by marketing — whereas startup equity values are arrived at through discussion and interaction. Let us draw out the comparison.

The coco is a hybrid financial product invented in Europe after the 2008 crash as a tool to stabilize banks' balance sheets. A coco begins its life as a bond, paying interest. If, however, the issuing bank undergoes financial distress, the coco converts into equity shares in the issuing bank — stabilizing the bank, but reducing its value for the purchaser. The political and macro-economic events which would trigger a conversion are fundamentally unpredictable, and so for cocos, "stringent mathematical valuation is impossible due to its contingent nature" (ibid, p.69). Radical contingency of external events bears on startups, too, but this is not, I propose, why startups elude formal valuation. The issue, rather, is that startups are entities which remain in formation. Put differently, whereas the coco is an instrument to hedge risk and exists only in the contract that creates it (like a derivative), startup equity is an ownership claim on an unfolding entrepreneurial project.

At this point, one might reasonably think to analyze startup valuation, following Frank Knight's (1921) influential distinction, as a process of turning "uncertainty," which is not quantifiable, into "risk," which can be quantified and thus statistically predicted. But Knight's framework has little purchase here. For startup investors are well aware that the predictive

comfort had in more quantifiable domains of finance is simply out of the question — and this doesn't bother them. To understand what is at stake in startup valuation, we must look beyond the paradigm of calculation, and beyond the framework of risk. We must look instead to the subjective and conventional, and the role of a community of discourse in stabilizing valuations. In coping with the uncertainty of valuation work, investors forge relationships, hone skills that become part of their identities, and build egos. But before exploring these, let us first look at the representational structure of a valuation, which involves more than a single number.

*The format of the valuation: a multiplex sign*

Social studies of valuation processes have sought to explain how agents distill complexity into a single number, for example, in arbitraging financial securities or creating a metric for a business's social impact (Buenza and Stark 2004; Barman 2016). In contrast, the outcome of a startup valuation takes a multiplex form. A dollar price tag never stands on its own, but is always arrived at in relation to two other factors. The first is the number of shares being issued, a negotiated and temporally complex decision involving tacit wagers about how future investors will act at subsequent fundraisings. The second is the set of contractual terms specifying investors' rights to participate in company governance, and the protections they enjoy in adverse circumstances. These terms are considered more important than the dollar amount in determining gains and losses. We will examine them in the following section.

What is being valued here is not the security to be transacted, but the company itself. The price paid for fractional equity is then calculated from that whole. Thus valuation is a necessary condition for the investment transaction, but does not directly appear in the transaction itself. In

other words, an investor doesn't pay what the valuation is; she invests a chosen amount, at a given valuation of the startup. But this does not directly determine what percentage she'll get. Complexity arises because two variables are set independently of each other: the dollar amount of the valuation, and the total number of shares issued. This follows from a crucial norm within the practice: each time a startup raises capital, it doesn't sell existing shares, but writes new shares into existence. The number of additional shares issued, and on what terms, affects existing and future investors. These negotiations are a constitutive part of valuation — which is thus hardly a straightforward exercise in dollar-value accounting.

To be invested in a highly-valued startup carries caché, and to outsiders, appears to indicate financial success. However, speaking on a panel at Startup Week San Diego, Jack, a senior director at Tech Coast Angels, stressed something counter-intuitive to the audience of novice entrepreneurs and investors. In negotiating valuations, he said, one should be focused not the dollar number, but rather on dilution. Each time a startup raises capital, the new shares it issues dilute, or shrink, existing ownership stakes as a percentage of the company. To illustrate, consider in comparison a stock market: there, the price per share is given, and the investor chooses how many shares to buy. She is unconcerned with the fraction of ownership she receives because this won't effect her eventual sale of the stock.[14] But for an angel investor who wishes to invest $50k in a startup, it matters very much whether the company is valued at $1m or $1.5m. In one case she'll get a 5% stake, in the other, 3.3%. If the company is ever acquired — say, for $5m three years later — her returns will differ considerably. Furthermore, in the meanwhile, the startup will raise additional rounds of capital, re-valuing the company and issuing new shares each time. This will dilute early shareholders to a greater or lesser degree. One guidebook warns

[14] The exception is the relatively rare cases where the stock "splits."

of “the risk that a startup will…get millions of downloads” and become a huge success, after which venture capitalists invest at a $100 million valuation and “wash out” the angel investors, who are left “owning a tiny fraction of the company despite having taken a big risk” (Romans 2013, p.39). True, they’re left with a smaller piece of a bigger pie. But the contentious question, as Jack warned them, is how much smaller. Anti-dilution protections are the answer. We will explore these in the section on contact terms below.

In summary, the dollar amount of a company’s valuation does not directly index an investor’s monetary wealth. Rather, it is a sign whose meaning is incomplete without accounting for shares outstanding, and the terms on which they are owned. Jack intended his admonition to shift novice perception of where stakes lie — from money quantity, which is the presentist orientation of the consumer, to ownership percentage, which is the future-orientedness of the investor. The cognitive techniques to balance present and future do not come intuitively to most people, and for this reason generate ongoing discourse — which itself becomes constitutive investors as a community.

*Making numbers: getting it right is not the point*

I have referred to the startup valuation as both a set of numbers, and a technique to produce those numbers. Correspondingly, we can ask: What do numbers do? And — a distinct question — what does the process of making and articulating those numbers do? In angel investing, these questions have distinct answers, and neither are reducible to making money. Taking the first question first: what numbers do, primarily, is set expectations for future performance. In

conjunction with the portfolio logic and the contract structure, these expectations elicit hustle and concomitant anxiety from both investors and entrepreneurs involved.

Rarely do startups take investment just once; they do so repeatedly, following a rhythm of increasing valuations. By industry norm, entrepreneurs solicit capital every twelve to eighteen months as they iteratively demonstrate progress in realizing their speculative business plan. [15] Each financing round looks both backwards and forwards in time. Investors want to see that entrepreneurs have used previous investment capital to do things like acquire new customers; they also assess the startup's ability to continue to grow. And if they decide to commit more capital, they re-value the startup. That is, they invest at a higher valuation than the prior financing round (assuming all is going well), paying more for a given ownership stake.[16] The re-valuation has consequences for the affective life of investment.

Above, I described the vertiginous growth expectations created by the portfolio logic. They find concrete expression in a norm whereby successful startups can expect each additional funding round to (re-)value them at four to five times the previous round. This multiple, as far as I can tell, is entirely arbitrary, yet it is also undergirds the entire speculative edifice of startup investing. At each round, new investors can expect, also by norm, to get a 15% to 25% ownership stake for their capital. This means that the amount of cash a startup raises is always only a fraction of the (nominal) valuation. For example, a nascent startup with zero assets that receives its first $250k in exchange for 20% equity during a "seed round" is thereby valued at

[15] I repeatedly asked my interlocutors why this particular periodicity. The answer was that it seems to be a suitable duration for judging progress in a human endeavor like building a business — but like so many norms of startup investing, it is also arbitrary convention.

[16] In part, this increase in valuation over time represents the lower likelihood of failure as a startup becomes more established; investors consider it "de-risked," and are willing to pay more for the shares.

$1.25m ($250k / 0.20). I use “thereby” to underscore that the valuation has no reality until the signing of the investment contract, and exists only in reference to it. If the startup grows considerably over the next year, the entrepreneurs and existing investors may believe the company has come to be worth $5m. To actualize this valuation (qua number), they must convince subsequent investors to give them $1m in exchange for 20% equity in the company[17]. The process of reaching these agreements — which may involve a ten minute pitch or three months of negotiations — constitutes the valuation (qua activity) of the company.

Note that high valuations in the present set up expectations for even higher valuations in the future. This is the answer to my question “what do numbers do?” The valuation escalator demands rapid business growth, and provokes personal hustle and anxiety. Often enough, new investors are not sanguine on the startup’s progress, and don’t readily accede to a five-fold increase. Regardless, the norm has effects. If entrepreneurs don’t grow the startup fast enough, they not only fail themselves, but they also disappoint their existing investors, people with whom they often have close relationships. The stakes of ambitious valuations were revealed in a comment made by the successful entrepreneur-cum-investor Naval Ravikant, at an on-stage interview in San Francisco, as he discussed the merits of “lifestyle” startups which don’t take venture investment. Without such commitments, he said, “you don’t have to stay up nights or vomit in the shower because you’ve convinced everyone else it’s going to be a billion dollar business, but you yourself are not convinced.” The audience laughed, but there was a knowing tone to Ravikant’s voice. He turned away from his interlocutor to the full auditorium and said, jabbing his finger at them, “don’t tell me you haven’t had that moment!” (PandoDaily 2012).

[17] Recall that the 20% stake sold to new investors are shares created out of thin air, augmenting the existing total, and thus diluting existing shareholders, both earlier investors and entrepreneurs.

And yet Ravikant wasn't truly complaining; he was doing something closer to boasting. As we have seen, despite this anxiety, the high stakes are simultaneously alluring for many people, drawing them to the practice.

The power of valuations to enroll affect depends, in part, on the way they are presented as numbers in investment contracts. As I've said, the startup's valuation itself does not appear in the contract, it is only implied. What appears is the specification of a sum of money being exchanged for a block of shares of the company. The way this block is enumerated — as a quantity of shares — is not semiotically neutral. The legal documents which write into existence a new corporation could, by norm, create a total of only several hundred ownership shares. But they don't. They divide the equity into millions of shares, with tens of thousands going to each investor. Initially, these shares are worth very little — several dollars, or perhaps only cents. What matters to early investors, then, is the quantity of shares purchased — visible as an inscription, on a contract, of a number with many trailing zeros. Consider someone habituated to trading small quantities of public stock for modest gains; for her first angel investment, she might see e.g. $1 share price and hope that one day, someone might buy her shares for $12 each — small numbers, but a staggering 12x return. But what really stimulates the imagination are the numbers on her contract representing ownership of thousands of those shares. Taken singly, their monetary value is insignificant; what is palpably exciting is the sheer number of those casino tokens that could pour out of the slot machine. A contract might read "…agrees to purchase 15,000 shares at $1 per share"; these numbers conjure imaginaries, and the imaginaries help stabilize value that exists only as potential.

Above, I proposed that to understand the hail of startup investment culture, we must consider numbers like the 10x return multiple from a rhetorical point of view — as Jane Guyer puts it, for their "persuasive as well as instrumental power" (Guyer 2014, p.156). Enumerating stock in high volume works to the same effect. To be sure, this norm has a pragmatic aim, to ensure flexibility in future trading. But as numerical inscription on investment contracts, it also contributes to a semiotic field which de-centers dollar values, and directs attention to scale. Receiving thousands of shares does more to the end than would the promise of a brute lump sum of money. This numerical sign doesn't so much indicate what exists now, as point to a potential in the future. It prompts the investor who interprets it to work toward realizing that state of affairs. In doing so, it simultaneously tests and solidifies the relationship between investors and entrepreneurs, committing them to the expansion of capital even as it leaves some sleepless and vomiting. And yet, still, they find fulfillment in this process — in part through discourse about valuation, as we will see below.

*Rehearsing valuation methodologies at an investor training workshop*

Financial practitioners and academics use mathematical modeling to turn uncertainty into risk, based on the assumption that once quantified, market actors can rationally calculate an asset's value. The social studies of finance has critiqued the claims of this epistemology, showing that even in the most allegedly rational of modern institutions, sense-making under conditions of uncertainty still relies on narratives and affect (Pixley 2004; Chong and Tucket 2014). Traders in the recently-shuttered Chicago futures pits read bodies and affect to help interpret numbers (Zaloom 2006). Svetlova ultimately explains the valuation of cocos, which resist statistical methods, by reference to persuasive marketing strategies — which decenters the

"calculative regime of valuation" and emphasizes instead the "consumptive regime of valuation" (2018, p.74) But it is also true that no hard dichotomy separates math from narrative, affect, and persuasion. When central bankers forecast macroeconomic conditions, quantitative modeling is not sufficient to set policy — they also rely on "para-ethnographic" reports of individuals' sentiments and expectations gathered by staff members from across their national territories (Holmes and Marcus 2006). The cumulative lesson from these studies is that numbers alone underdetermine calculative acts.

But narratives, too, underdetermine value — perhaps especially where investors are thoroughly reflexive about an asset's recalcitrance to quantitative valuation. Certainly, persuasive stories are the essence of the investment pitch, but people disagree about narratives. And so we find training workshops, conferences, books, and internet commentary all teaching quantitative approaches to valuation. What is noteworthy here is not the attempt to rationalize something that is contingent and arbitrary. Rather, it is that producing numbers serves as an occasion for constructing identity in and through rehearsing expertise, and for social bonding. It allows people to say I'm a diviner of the future, and I was there from the beginning (see chapter 6). The remainder of this section highlights how the process of making numbers can serve ends quite distinct from the referential and performative functions of the numbers themselves.

Despite its un-amenability to risk modeling, advocates of startup investment persevere in promulgating quantitative valuation procedures. Angel Resource Institute (ARI) teaches a formalized approach to valuation at workshops around the U.S. many times a year. I attended one of their full-day training events in San Diego in 2016. It drew about 80 people with backgrounds

in business, finance, and entrepreneurship, each paying $150 to attend (I talked my way in). They gathered in a spacious conference room of a suburban office building. During an afternoon session, the instructor, a well-known investor named Bill Payne, introduced the attendees to three different methods for obtaining a valuation.[18] They were to be used in conjunction and triangulated, Payne explained — no single method should be taken as absolutely correct. But plurality of procedures achieves other ends. It gives investors techniques to master, legitimizing as expertise what always threatens to reveal itself as whimsical hobby. And it feeds discourse, multiplying the occasions for questioning, comparison, and opinion-giving about how companies ought to be valued. We will consider these effects shortly. For the moment, let us examine some procedures taught, which enact two aspects of financial logic — first, discounting future value into the present, and second, probability-based estimation of value (see Chiapello 2015).

Payne first presented the "VC method" of valuation, which is notable for how it effaces particular qualities of the startup by imposing on it the investor's performance demand, and by calibrating value to market averages. The investor begins by stipulating their desired financial return, based on the size of their broader portfolio and the (likely) losses this investment must balance out. Then, based on a cash value that they hope their equity will fetch at some future "exit," they calculate backwards to reach a present valuation. Note that the startup here is worth roughly what the investor wants it to be.

Payne offered a scenario: "I'm putting a million dollars into a company" — he had decided that a priori — and assumed he'll have to wait five years until exit. He wanted to know what

[18] I use this indirect wording — rather than simply writing "methodologies for valuing startups" — to emphasize the gap between the number produced and any objective properties of the thing measured.

percentage ownership his $1m must buy today to suit his return schedule, according to the VC method. To predict the valuation in five years, Payne drew on the projected earnings figures provided by the entrepreneur, but "ratchets them down" because, from the investor's viewpoint, these are always optimistic and inflated. The next step tethers valuation to a second arbitrary standard. He predicts what his equity will eventually fetch by applying a price-to-earnings (P/E) ratio to those projections. The P/E ratio is a multiplier applied to a company's earnings to yield a share price (valuation). Notably, this ratio is based entirely on how much coverable companies have sold for. For example, public software companies tend to trade at higher price-per-share than public automobile companies, given similar earnings figures. This discrepancy expresses the physicalist notion that software's low marginal unit cost and low capital requirements yield high profit margins. [19] Once Payne has a future valuation that satisfies his return demands, he calculates backward to a present valuation, and then must get the entrepreneur to accept it.

Whereas the VC method abstracts from particulars of the company, the "scorecard method" accounts for the startup's specific strengths and weaknesses. As such, it makes risk more visible. This approach takes a standard set of elements held to correlate with business success, and asks the investor to "weight" each one: out of 100%, what portion she intuitively believes this factor contributes under generic conditions. Then, she "scores" this particular company on that element. For example, an investor might feel that the founding team of entrepreneurs usually accounts for 50% of a company's success. And if these particular entrepreneurs have experience with other startups, she might assess them as 30% more likely than median to succeed. So, she multiplies

[19] Normative price-to-earnings ratios are notoriously open to interpretation. Software companies have higher P/E than hardware because are perceived to be more capital-efficient (*cf. Mason?*), but ambiguous cases, such as a temp labor provider, fight to classify themselves as software companies to get more favorable investments (*cite Irani*).

50% x 1.3, and then repeats for other “scorecard” elements like product innovativeness and current competitors. The resulting percentages are summed to get a score: say, in this case, 90%. The score is multiplied by an average valuation for comparable companies to produce a value for the startup under consideration.[20]

Payne told attendees to embrace the fact that weight and score are highly subjective. He emphasized that investors they will have idiosyncratic perspectives on e.g. how heavily to weight management relative to the product. Furthermore, depending on predilection for risk-taking, each will ascribe higher or lower “scores” to each quality being valued: scoring a startup’s app prototype at 200% more “innovative” than competitors means that the investor will accept a higher valuation and a lower equity stake for a given sum of capital — a concession that might be necessary if the startup has a strong negotiating position.

Yet even as he presented these valuation methods, at moments Payne acknowledged the futility of reliable quantification. Speaking to the imprecision of tethering a startup valuation to the industry median, he said “The range in 2015 was pretty varied — from $2.5 to $6 million; the median was $4 million. A lotta variables go into valuation - we do use market comparables.” An attendee spoke out: “the whole point is to make it appear not completely arbitrary.” “Yes, exactly,” Payne replied, “even though it is!” In other words, valuation methods are subjective, and they defer to convention. This “appearing” matters to all involved: it is not that one side of the transaction disguises arbitrariness, but that both sides, in order to get on within a collectively

[20] This begs the question: how to define a comparable? It is usually based on data from e.g. ARI’s annual reports, which are compiled by polling investors across the country about their recent investments.

performed order, must mutually accept certain anchors. Reflexivity is double-edged; in the dance of valuation, partners bow to arbitrariness and then lock step to stabilize it.

Angel Resource Institute's work promulgating startup valuation methodologies has a precursor nearly a century before, at the Harvard Business School. Working from the school's archives, Fabian Muniesa reconstructed the spirit of its pedagogy during the 1920s, emphasizing how it strove to inculcate a feel for business valuation. The curriculum did not prioritize the memorization a set of formulas. Rather, it aimed to transform students' vernacular concept of value, such that they learn to see it not as market price but as future earning power. Muniesa calls this the "habit of capitalization." The category of "habit" emphasizes the school's concern not with procedures for establishing objective truth in business valuation, but for arriving at common judgments (Muniesa 2016, p.214). This is a useful characterization of the pedagogical apparatus which promulgates angel investing. Harvard's curricular examples from the interwar period include a grocery store and a natural gas property, both physical assets with reliable future productivity. Such businesses are amendable to "intrinsic valuation" derived from formulas involving measurable factors like revenue, expenses, and assets. In contrast, startup valuation is speculative, and so pedagogy must be adjusted. The ARI workshops take an experiential approach like HBS's, but the "feel" that matters is getting comfortable with the ambiguity, contingency, and risk specific to contemporary startup businesses.

For the last hour of the workshop, participants engaged in a group valuation exercise with others at their tables. They were instructed to apply the three methods just introduced to a hypothetical startup, following a scenario in their conference workbook. I watched the people I

sat with smoothly taking up the investor's point of view. Their discussion about the scorecard method sounded like this: "Technology risk? I'd say it's neutral?" "No, negative - anything dealing with medical records is risky." "….Hmm, 15 years experience — should we give him a 1.25x factor for that?" "….Would you say software company is more valuable than a medical device company?" After following the different methods, they triangulated outcomes to reach a final valuation. The table where I sat settled on $2.8 million. But turning the page in workbook scenario, they read that the fictive entrepreneur counter-proposed $9 million. Indeed in reality, neither party to the transaction usually dictates a price. At this point in the workshop, each table was instructed to into two groups, to role play investors and entrepreneurs and negotiate a final valuation.

If, in general, valuations are performed through speech acts which constitute realities, in this workshop valuation was, literally, play-acted. Such exercises help potential investors learn experientially that calculation never has the final say, but is amended through negotiation. They teach investors to be flexible when encountering ambiguity. And, finally, they encourage new investors to feel comfortable with valuation that is not based in objective or empirically verifiable truth: that is, valuation without any underlying "fundamental" value.

Valuation pedagogy takes many forms, often more abbreviated. In 2021, a suddenly-popular startup called Clubhouse, whose product was a voice-based chatroom app, raised capital at an ambitious $4 billion valuation. Jason Calacanis, the well-known San Francisco angel investor we have already met, wrote on Twitter that he'd "been getting a ton of questions from founders about the $4 billion Clubhouse valuation," and — though himself not party to the deal — offered

a lesson:  "here's how to do the math" (Calacanis 2021). His improvised reconstruction began by estimating Clubhouse's annual revenue: he multiplied the per-user subscription price ($10) by an estimate of total users ("5-10m") to get $50-100 million. Then he introduced a 10x "revenue multiplier" — unexplained, and assumed knowledge — which, by industry convention, gets applied to early-stage company revenue to yield a valuation (see above). This gave a valuation range of $250m to $1b. "So why $4b??," Calacanis asked, and answered: because investors are susceptible to hype like everyone else, and will pay a premium to join the cap table — for the prestige as much as financial returns. "In a hot market," he explained "people give credit for 2-5x performance in order to 'get the deal.'" So we have a hype multiplier compounding a revenue multiplier, which leads to a valuation range of $500 million to $5 billion — and, after always-undisclosed negotiations and contingencies, "in this case it landed at $4b."  Note that in demonstrating "the math," Calacansis necessarily must bring in arbitrary industry norms, the multipliers — grounded in nothing but prevailing sentiment and any ground-level accounting measurements.

In practice, investors talk about quantitative valuation methods more than they practice them. Indeed, I repeatedly heard people characterize valuation as more financial "art" than financial "science." Jack, who we saw above emphasizing the danger of dilution at Startup Week, was asked his opinion about hiring a valuation consultant. He responded like this: "what you guys have to realize is that there isn't a science; there isn't a right answer on valuing a company." It's all about continually having one's nose to the ground, he continued — being aware of market activity and talking to others. A short primer on valuation from a Silicon Valley law firm pushed this view to a tongue-in-cheek extreme:

> How is pre-money value determined? On each full moon that falls on the 29th day of February, a night rainbow will appear somewhere near Sand Hill Road [epicenter of Silicon Valley VC] and guide those who know to look for it toward an ethereal portal flanked by golden unicorns wearing VR headsets. Those who pass through that portal may briefly gaze upon a book, bound in banana leaves and shimmering in the moonlight, which lays out instructions for arriving at a pre-money valuation for a pre-revenue company. (DLA Piper 2017)

This joke is revealing precisely in how it gets the issue wrong. The mystical insight we want to hear is that, under the full moon, some VCs stir a cauldron and utter some gibberish and a number arbitrarily appears; this would be an "art." But instead, the myth suggests that there is a set of rules that will unambiguously yield a number ("a book…instructions"); unfortunately, it's kept secret. A more fitting myth would describe rituals that stabilize arbitrary market norms.

This primer goes on to explain what we have laid out: "For those of us who miss the above opportunity, it may be most useful to think of pre-money value as a negotiated number," one which depends on "market forces." These include things like popular sentiment about which kind of startups are hot. Whereas in the early years of smartphones' popularity, social media app startups could easily raise capital, one investor told me in 2018 that "apps are now considered so trite that it would be difficult to get one financed." More quantitatively, "market forces" refers to comparables: establishing the value of one company depends on valuations of other companies. Sales of fine art depend on comparables, too — but valuations of art are mediated by utterances of critics, collectors, and historians. These agents construct "communally accepted classifications of value" (Pardo Guerra 2011, p. 218). What constitutes an "accurate or trustworthy" valuation depends on the conventions of the community.

One the one hand, the deference to comparables makes valuation a self-referential system (like meaning more generally) — but not deterministically so. In art markets and in startup

investing, people debate and dispute valuation. To call startup valuation "an art" is to understand it as the sort of thing which by nature resists rationalization — and such resistance generates ongoing discourse. That is the topic of the next section.

**The discourse community of valuation**

However diligently investors follow the valuation procedures taught in the workshop described above, all they get is an estimated value. The market may not agree with them (Foucault 2008, p.32). Hence when a user on message board Reddit asked if they ought to hire an accountant to certify a book value for their startup[21], a respondent highlighted the "notorious difficulty" of valuation, then invoked this truth-making capacity of the market: "nobody will 'sign off' on your valuation unless they actually invest at that value" (Atomic1221, 2020). In other words, the valuation is only realized at the moment of exchange.

The inherent uncertainty in valuing startups generates widespread discussion about the process, in multiple media. This discourse, in turn, stitches together collectivity, rehearses norms of behavior, and provides individuals a domain to develop and perform technical mastery. Muniesa emphasized how, a century ago, pragmatist-inspired business pedagogues used the case-study method for learning to think value as earning power. As I argue in this section, learning to value nascent businesses — a key part of becoming an investor — does not happen only as an imaginative exercise between individuals and their case study texts. It also happens as participants grapple with valuation's ambiguities and negotiate its ethical norms, as a public, through conversation, disputation, and reflection.

[21] The question displayed ignorance of the fundamental difficulty in valuing a pre-revenue company.

The sociology of knowledge has shown how expertise arises within communities of inquires, who establish epistemic validity through shared research into a common problem (Peirce 1958). But in the culture of authoring and circulating texts about valuation, establishing truth is not what is at stake. In my analysis below, I show that valuation discourse functions only superficially to hone techniques for the quantification of startup values. More fundamentally, I propose, valuation work, and conversation about it, is the very activity which allows people to experience themselves as investors. Thus my focus is not on whether participants actually gain or build lasting formal knowledge within this milieu. Rather, I ask how it is that people come to find it fulfilling to take up the problem of valuation.

This discourse community of valuation sometimes fixates on the technical, but more often elevates the anecdotal, affective, and moralizing. It takes shape as books, as blog posts and internet discussion forums, and at seminars which are a regular feature of the angel investing world. Valuation's indeterminacy is tackled not by mathematical modeling, but by incitation into chatter. Investors and entrepreneurs do not disclose the dollar values of their deals, and because, as was explained to me, talking about money openly is considered "gauche." But they are loquacious in prescribing procedures and issuing commentary on others' and their own investment transactions. They offer advice, mansplain, and brag to each other. Some recount personal experiences, others transmute experience into generalized lessons.

We can see this in a series of responses to Jason Calacanis's (2021) account of Clubhouse's $4 billion valuation described above. Having demonstrated "the math" that generated that number, Calacanis immediately brought reflexive doubt to bear: "This makes no sense…unless

you invested in Facebook…!" Here is the necessary tension that keeps early-stage investing going: a simultaneous acknowledgment of unlikely odds of success, while maintaining hope by invoking outlier triumphs of investment history. Continuing his Twitter post, Calacanis offered advice to those desirous of achieving such a valuation. Two points are noteworthy. First, he highlighted that such valuations only happen in inflated business sectors: "you need to [be in] a competitive marketplace/bubble," he told them.  Note how the forward slash establishes equivalency between the technical category of "competitiveness" and the moralized category of "bubble" — acknowledging that an active market in early-stage equity tends, inherently, toward speculative over-reach. Calacanis's second point of advice even more baldly acknowledges the lack of underlying "fundamentals" that would justify such a valuation: "You don't want revenue because it pins the valuation to reality." Is this a critique of valuation norms? Perhaps, but not one which he stands by, because he profits from its institutionalization. Regardless, we learn that any empirical grounding in accounting statements correlates inversely with investors' willingness to imagine, to go along with speculative promises.

Investors discuss, challenge, and try to make sense of valuations; this is evident in the way Calacanis began his post: "Been getting a ton of questions about the $4b Clubhouse valuation." Similarly, the collegiality of his concluding salutation, "Wish them [Clubhouse] luck! Will look choppy for a year or two…" indicates the shared practical experiences which the discourse community orients toward. And his sign-off, "any questions?," is at once a rhetorical question — that is, a QED implying all has been made clear  — and also an opening to keep the discussion going. Nearly all responses on Twitter fixated on his reflexivity about the necessary performativity of valuation. One interlocutor, Subodh, took Calacanis's endorsement of

investors' willing disregard for "reality" to its logical conclusion, and cited (or, hyperlinked to) a scene from the satirical television show Silicon Valley. In a jab at a generation of highly-valued but profit-less tech startups, the scene has a high-flying consultant tell an earnest CEO "no one [i.e. investors] wants to see revenue…it's not about how much you earn, it's about how much you're worth." So this parody of empty speculation, a reification of real life, itself comes to authorize further speculative valuations by its citation on Twitter — even as everyone involved is reflexive all the way down. "In case you want to reinforce point (d) [disregard for reality]" is Subodh's terse gloss to his Silicon Valley citation; life and art imitate each other iteratively over time.

An angel investor on Twitter named Pradeep Padala, also referencing point (d) on revenue and reality, adds "Unfortunately [that's] how VC investing works, but it's just the way everyone roles." Pradeep's "unfortunately" affirms the ethical stance of angel investing in contrast to the venture capitalists Calacanis is discussing. Another user, Alex Carrabre, offers this: "crazy to me that the idea is to have no revenue - makes sense though because you can go as big as you can spin up an investors [sic] imagination - or your own for that matter." Another restatement of Calacanis' point, which invokes "imagination" as indispensable accompaniment to hi talk about (lack of) "reality." And, indeed, unlike the con artist, the entrepreneur rarely stands outside their own trick; as I have argued, the affective order of startup investment reinforces this buy-in.

Aside from one earnest question about the valuation[22], none of these comments tell anyone anything they don't know, nor do their authors seem to be learning anything new themselves. As

[22] This question from Twitter user Stoxdox asks "Does Clubhouse produce revenue now? If so, how much trailing 12 months?" The question also betrays nativity of the norm that those figures are undisclosed for private

per usual on social media, comments often simply affirm others. “SUCH A GOOD POINT” was a response to the statement about valuations “detached from reality.” But utterances like this also affirm — to the authors themselves — their own belonging as investors: in this case, they get it that only through their very own collective buy-in do speculative valuations become real, even if they’ll never play at the billion-dollar tier league themselves.

*Cautionary tales and morality tales about valuations.*

One perennial topic of discourse concerns the merits of high versus low valuations. Raising capital at a too-high valuation sets up unreachable expectations for incrementally higher future investment rounds, and may sabotage its own future. Texts reflecting on this problem often take the imperative form of address, and speak in the second person singular. A section heading in The Entrepreneurial Bible, published under McGraw-Hill’s Education imprint, warns “Don’t Raise Angel Funding At Too High A Valuation.” It enjoins the reader to recognize that a high valuation does not mean the startup raises more capital. A high valuation means only that current equity holders — both founders and early-stage investors — retain a larger percentage of ownership than at a lower valuation. This situation is not as favorable as it seen, for it poses a significant risk.

Cautionary tales about valuations comprise their own sub-genre. Consider an email newsletter from Fortune Magazine with the headline “When Angels Reach Too High, Startups Can Fall” (Primack 2013). t grapples with notions of fairness in investment through a hypothetical scenario featuring a male-gendered “young tech entrepreneur” who raises angel

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companies like Clubhouse; still, it indicates an earnestness to get to a rational quantified understanding of early-stage valuation which can be generalized.

funding at an ambitious $4 million valuation (meaning he sold, say, 25% of the company for a $1 million investment). A year later, he and his angel investors court professional venture capitalists for the next round of capital. One VC likes the business, but finds the "valuation hurdle" prohibitive — that is, thinks initial investors started the valuation escalator too high. The VC could negotiate to "recapitalize" the company at a lower valuation, but doing so would have social consequences which become financial disincentives. By eroding the value of founders' and existing investors' equity, it could damage the reputation of the VC, who is "wary of being portrayed as a villain in blog posts written by the disenfranchised angels (since that could hurt the VC's rep among other entrepreneurs)." The author of this tale imagines that the entrepreneur would wish to avoid souring the relationship with those who had faith in him early on (see Chapter 4 on investing as friendship), so would reject a lower offer. Thus investment has been thwarted by reputational concern (reluctance to appear extortive) and concern for relationships (reluctance to financially harm someone who risked capital and offered mentorship), and, in the scenario, the startup fails. Technical primers on valuation abound, but texts like this have a different function: they introduce readers to norms of reciprocity and loyalty within a financial community.

High and low valuations become moralized objects which articulate hierarchies among investors. As more people dabble in the practice, experienced angels complain that amateurs and novices are pushing valuations too high. At issue here is not the mechanics of supply and demand. Rather, it is that amateurs, eager and susceptible to hype, misunderstand the measured temporal strategies which project forward alliances with investors in future rounds. Naval Ravikant, well-known founder AngelList, offered this wisdom on Twitter: "Optimize valuation at

venture round, not angel round" — in other words, give angels a good deal, and wait to inflate the share price until later-stage professionals invest. Lesser-known venture capitalist "JoshSteinVC" replied: "No. Optimize valuation at exit, on people until then" — i.e. pick smart and dedicated investors, agree to a modest valuation, and don't worry that this cedes them a larger equity share because their mentorship will make you richer in the end (Stein 2012). Ravikant's stance advocates for angel investors over VCs; Stein pushes the valuation spike forward in time, to be borne by an acquiring company; both men are responding to novices rashly jacking up valuations too early. But beyond their immediate message, such utterances about prudence and restraint perform group belonging which draw those very novices closer to the core of skilled practice.

Some texts written by novices show them learning to become investors by grappling with valuation norms. One new investor in California, Tony Karrer, inquired in a blog post about a perceived contradiction in the imperative of rapid growth (Karrer 2010; see 'portfolio' section above). Noting his planned attendance at an upcoming Tech Coast Angels social gathering, he cited TCA's own criteria for entrepreneurs wishing to pitch its members: their business plans should show near-term revenues around $50m. He then referenced a podcast hosted by TCA's own chairman, Frank Peters, which espoused valuations in the $10m range — because they lead to smaller but more consistent returns. Peters scoffed at entrepreneurs' hyped revenue projections of "$50m, $60m, $70m, to $161m in year 5!…These are so detached from reality." Karrer asked, in his blog, "isn't Frank contradicting himself?" The question expresses the tension between the portfolio logic, which guides investors to view each startup as the rare high-growth investment, and the skepticism trained into them after sitting through countless pitches whose nature is to

hype. One comment on the blog explained that some investors simply have lower risk preferences and longer time horizons. Peters himself added a reply — he and Kerrar surely knew each other offline — saying, "contradicting myself? that wouldn't be the first time." His evasion of the question is telling; it suggests that discourse about these inconsistencies fuels speculative hope. This clash of opinions on valuations maintains a productive tension in the market. And this makes sense: only given a spectrum of positions on risk does speculation become possible at all.

Some investors take it upon themselves to school an imagined audience of novices on valuation techniques. These texts allow the author to develop and demonstrate mastery, affirming their own identity as an angel investor. And they enjoy it. Leo Polovets, a low-profile VC, offered a lengthy response to a question posted on website Quora about valuing startups so nascent that they are "pre-revenue." Speaking to the generalized reader, in a narrative style which figures valuation as a choose-your-own-adventure (note my italics), he asks "you" to "pretend you've been approached by [an e-commerce] startup called ShopBetter, and you have the opportunity to acquire a 10% stake. Your goal is to determine how much that 10% should be worth." He proposes five "thought experiments" assessing different facets of the business. For example, "#4: Market Size" shows how to adjust valuation based on the company's potential user base: ranging from 500k, to ten million, to 50 million users, he explains that under each condition, the investment is "worth" an order of magnitude more. In the latter case, the value is "limited only by your optimism and bank balance" (Polovets 2014). Having taught the reader techniques to perform a valuation, Polovets then qualified this by affirming two potent forces bearing on one's calculation: the "market" (what other investors believe), and comparables (the

valuations of related companies in investment transactions[23]). This is the enduring problem of financial analysis — the tension between modeling and market veridiction — arising again, it keeps discussion going.

Why do all these people speak their beliefs and debate about valuation? It is a firmly established notion that utterances help perform economic reality. When Svetlova describes valuation of contingent convertible bonds as a "discursive practice," she means that those numbers are constituted by language, by interaction. I interpret the conversations presented above somewhat differently. They demonstrate the way that the pragmatics of high-risk finance give rise to discourse which then becomes a social condition for people to engage in that economic activity at all.

The move valuation studies made was to say value wasn't an attribute of an object but the result of a process (e.g. Garcia-Parpet 2007). I propose momentarily inverting this, seeing valuation as a means, or occasion, for another process. Nor does it grasp the situation to say: valuation is distributed actors and material objects (e.g. Buenza and Stark 2004). In the analysis presented above, valuation also becomes an occasion for discussion, for teaching people, for epistemic community.

[23] In other words, despite internally coherent valuation of this startup at $5m, if sentiment about what's hot has recently shifted away from e-commerce apps, and comperable startups have raised capital at only $3m valuation, then that's the final word.

## The formal structure of the contract

Rent has become the dominant mode of extracting profit in technology and science-based industries (Birch 2019). The ability to collect rents requires turning things (information, resources, people) into assets — that is, subjecting them to rights of ownership. Assets, in this sense, construct and enforce scarcity of a given resource. The biotechnology industry has boldly turned things like genetic sequences into assets. Some critics have found intellectual property (IP) regimes insufficient to understanding this process, and invoked "liveliness" of life in explaining how biological entities can generate streams of value (Birch 2017; see Sundar-Rajan 2006). Birch and others, critical of this fetishizing of biology, highlight instead the role of practices which quite literally count and manage future earnings in the present (for example, as discounted cash flow) (Birch 2017; Doganova 2018).

In fact, both positions are true. Accounting techniques, while crucially performative, are inert by themselves; human desire — as the liveliness inherent in all cultural practice — is needed to bring forward future revenue into the present. This section attempts to bridge these analytic approaches. I focus on the parameters of investment contracts which encode and incentivize long-term relationships. These, in turn, foster that which will yield value. Investigating these social effects of contracts further develops the theme that people invest in startups for reasons beyond profit.

### *Duration and illiquidity, and their consequences*

Startup investments are not amenable to fast finance. They follow a slower temporality than that of the markets which have captivated much sociocultural scholarship on finance. Kaitlin

Zaloom's (2006) descriptions of traders in the Chicago futures pits of the early 2000's remain essentially unchanged from those a century earlier, which depict the financier's body as "tense, watching the cascading tape intently," waiting to buy and sell until "the first volley had been fired…and the market began to go his way" (Lefevre 1907, quoted in Preda 2005). As I have discussed, early-stage equity is not traded. After investors commit capital, it is not up to them to select an opportune moment to sell; they must wait until an acquirer approaches the company, or later-stage investors buy them out. Angel Resource Institute warns novice investors that they should plan for their money to be inaccessible for at least several years[24]. Investors' bodies are not here entrained to the visceral thrill of rapidly gyrating markets. But money is still on the line, and a slower temporality only shifts the quality and locus of the accompanying affect.

The non-liquid status of startup equity shapes the sociality of the practice; it invites investors to develop relationships with each other and with the entrepreneurs. Certainly, other securities such as treasury bills also remain illiquid for decades. But those who hold them are not positioned to intervene in the underlying entity — say, the US government's fiscal operations — to help achieve a successful outcome. Early-stage investment, in contrast, is premised on such collaboration in the growth of value. Two key analyses in the literature of the investor-entrepreneur encounter misunderstand this, as they focus only on the moment of transaction. The first is Shapin's (2009) highlighting the role of character judgment. The second is Muniesa et al's (2017) showing the clash between present and future value. Yet many early-stage investors define themselves precisely by this capacity to strategically intervene over the life of an

[24] Professional VCs funds lock up clients' capital for seven to ten years.

investment. Their provision of networking and operating guidance in addition to capital is popularly glossed as “smart money.”[25]

Yet entrepreneurs do not always want investors’ input, and, to be sure, not all investors are competent to help. Nonetheless, the ideal circulates, and calls upon investors to imagine themselves as participants. The relationships encouraged by investment duration is figured as “mentorship.”[26] As I explain in Chapter 4, mentoring involves things like helping an entrepreneur hone her pitch, and providing emotional support. Illiquidity sets aside time the asset holders an opportunity to invest themselves into the nascent entity — creating affective and social entanglements atop the financial contract. This contrasts starkly with the ideal of market exchange from classical economics, where parties are “at quits”: i.e. once the transaction is finished, no further obligations remain.

The illiquidity of startup investments is a function not only of the absence of a secondary exchange, and of the time required to “scale” a company so it can be sold. It is also inscribed in contractual language. Corporate equity is a complex form of ownership, where up to a dozen contractual documents may mediate a single professional VC transaction. The monetary exchange itself is delineated in the Stock Purchase Agreement, but the term sheet is the legal centerpiece of early-stage investing. It specifies things like the distribution of profits at a “liquidity event,” the order of losses in case of a failure of the venture, and, most importantly, the rights of investors to maintain their equity position in future fundraising rounds. Durkheim

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[25] Business scholars even attempt to quantify how much “value” investors add: see, for example, a 2004 article titled “What do entrepreneurs pay for venture capital affiliation?” in *The Journal of Finance*.

[26] Mentoring is lower-stakes than the relationships of venture capital, largely because investors are not bound by fiduciary law to grow the startups (whereas VCs sometimes oust founding entrepreneurs).

(1893) drew attention to the "non-contractual element of the contract," i.e. the social customs presupposed in order for people to obey them. My analysis below reverses this framework. I show how term sheet parameters shape participants' interactions during the long wait for liquidity.

The social bonds of startup financing find alternate expression in the legal language of the term sheet. There, they take a more adversarial or punitive form. Parties negotiating an investment transaction often fixate on valuation, a dollar-number, as the fulcrum of the deal. Venture Deals, a book referenced by many people I spoke to, warns readers against doing this. Its author, Brad Feld (2016), urges them instead to attend to other terms more consequential to ultimate financial outcome. One of these, "pay-to-play," incentivizes investors to renew their commitment even if the startup fails to grow as desired. The threat here is a "down-round": when new investors re-value the company downward as a condition of their investment, thereby de-valuing the equity of early investors. In this situation, those early investors will not want to put more money into the company. A pay-to-play clause threatens to convert these early investors' preferred stock to common stock — meaning (1) they lose priority in receiving proceeds from any future "liquidity event," and (2) they surrender voting rights as means to influence corporate governance. To avoid this, they must re-invest at the lower valuation (and cannot abstain from the round).

Pay-to-play has four consequences which exceed its narrowly financial aims. First, insofar as the clause perpetuates investors' monetary support, it also obligates them to a future state of galvanized affect and being-in-relation which, as I have argued, is the normative way of being an

angel investor.In the financing of capital-intensive industries in late 19th century, “equity subscribers” were expected to kick in more money as needed — similar to angel investing. “Consequently, promoters [intermediaries] screened out ‘dummies,’ that is, speculative subscribers who could not be relied upon to meet any future calls.” Yet, as historians of modern finance Baskin and Miranti write, these “contingent claims” for ongoing support “impeded the formation of broad, impersonal markets for common shares” (1997, p. 178, emph. added). Pay-to-play in angel investing revives this old-fashioned norm of commitment in finance, and helps to uphold more personal markets.

As a second consequence, by committing one to remain committed in an unknown future, pay-to-play fosters investors’ reflexivity about the faith which animates startup investing. In Venture Deals, Feld shames, and calls out the illogic of, investors who refuse to include a pay-to-play provision when negotiating the term sheet. “When our co-investors push back on this term, we ask: “Why? Are you not going to fund the company in the future if other investors agree to?” (Feld 2016, p.55). If they don’t believe in the company’s long-term growth potential, Feld reasons, they shouldn’t invest to begin with.

As a third effect, this commitment fosters a faith-based ontology of value. As time goes on, existing investors are often reluctant to re-invest alongside new ones investors (which ipso facto constitutes market price). To abide by a pay-to-play clause is essentially to say: I see that things that aren’t going well right now - but I know that that’s not the essential truth. And I can see past this contingent fluctuation to see that you still have value as an entrepreneur, to be actualized in the future. The pay-to-play clause de-links value from what “the market” believes, encouraging

initial investors to discard doubt and perceive latent value. Finally, pay-to-play orchestrates relations between investors over time. (Recall that each financing round involves multiple investors.) This affects not only profit distribution, but control. In Feld's gloss, pay-to-play "reshuffles the future preferred shareholder base by ensuring only the committed investors continue to have preferred stock and the corresponding rights" (Feld 2016, p.55). And the activity of corporate governance is itself a substrate for sociality: making decisions, developing strategy, negotiating intrigue — being part of this makes people want to become angel investors

Anxiety permeates the ways financial traders relate to and cope with markets. Will the market rise, hesitate, or fall? "The market" in mainstream finance is perceived as a third-person collective agent whose moves participants anticipate (Lee and LiPuma 2002). What I will call dilution anxiety, in contrast, has a less diffuse object. For angel investors, dilution anxiety concerns not "the market" at large, but concrete others — investors in their community, or professional venture capitalists — whose future investment may, depending on valuations and dilution protections, chip away at their own ownership percentage. And so the affective experience of risk is more personified than when concerning an abstract "market". As much as does friendship and trust, i.e. positive forms of relation, this anxiety toward a specific other helps constitute early-stage investing as a thoroughly social practice.

Vesting is a legal tool which establishes entrepreneurs' obligations, as pay-to-play establishes those of investors. While investors are bound to the startup insofar as no market exists to sell their equity, entrepreneurs are, in theory, free to leave if a better opportunity arises. They've only sunk in time; their ownership shares were created out of thin air, not paid for. The vesting clause

impedes their departure. It is a contractual attempt to bind startup founders to pursue growth by delayed incentive. Supplementing any sentimental attachment they may feel to their startup, vesting legally reenforces their "elusive moral obligation," in Feld's words, to see it through. Founders' share of future liquidity derives from the stock they granted themselves when they incorporate their startup. Vesting delays their ability to sell that stock, requiring that they remain as a company executive for several years (typically four) to take full possession, as it incrementally accrues.

**Conclusion**

This chapter has argued that the particular forms taken by financial techniques and contracts in angel investing shape its social dimensions. First, I have shown how the portfolio device manages risk but also organizes affect, in part through the rhetorical performance of enumeration. Second, I showed that the process of valuing startups, or making numbers, becomes an occasion for participants to form relationships. This is something that critical studies on valuation have not attended to: how valuation processes can produce not only a value, but also a discourse community. Third, I have showed how contractual structure encourages duration of investment relationship. Duration allows relationships to develop. All these social dimensions, as I will present in the next chapter, are themselves crucial to the practice's reproduction and expansion.

# CHAPTER 4: INVERTING EMBEDDEDNESS: FINANCE AND COMMUNITY

Social action in markets is classically understood as impersonal and instrumental (Weber 1922, p.65). Yet even within the most ostensibly rationalized and atomized of institutions, electronic financial markets, researchers discover social "micro-structures" persisting: anonymized traders assert identity with numerical signatures at the end of their orders, i.e. always ending their bid with a specific number of cents (Knorr-Cetina and Bruegger, 2002). But that's a pale version of being-in-relation, isn't it? Could financial exchange facilitate personal investment?

When we step outside of formal securities exchanges, into the loosely organized markets of angel investment, investors speak sentimentally of relationships with their peers. New angel investors often articulate their experience of joining a community of investors like this: "I became part of a group — individuals generous with their own experience and knowledge - so I've learned a lot from them….They're not just my colleagues and fellow investors - but good friends" (Ontario Angels 2015). This utterance comes from a man named Benton Leong, interviewed in a promotional video for an angel investor group in Ontario. It is consistent with French sociologist Michele Lamont's (1992) observations of financially successful American professionals for whom "behaving in a friendly way makes others feel 'comfortable.' It means ostentatiously giving up 'fronts' and interacting as 'human begins' — 'relating' — while bracketing or dissimulating regard for financial standing. Lamont is characterizing community relationships, not business relationships, of the upper-middle class. However, her observation anticipates the social culture of angel investment, which aspires to jettison both anonymous modes of relating typical of markets, and hierarchal modes typical of corporations, in favor of

those which achieve “comfortability” and “inclusiveness” (pace Lamont’s subjects). Meanwhile, this very ethos helps sustain the mode of finance which produces, on different time horizons and at different scales, a political economy antithetical to it.

This chapter elaborates the claim that what attracts people to angel investment is not, primarily, the potential for profit, but rather the encounter with community. By community, I mean an affective form of relating whose ends lie not elsewhere, but in only those relations. It is hardly novel to point out that what goes on in exchange cannot be reduced to instrumental ends. Early modern scholarship in particular makes it very clear that “a market can be a setting in which to pursue other kinds of ends and enact other kinds of social relationships.” As Carruthers (1996, p.21) shows — to offer just one example — in early modern English financial markets for sovereign debt, traders pursued strategies that aligned with and supported the interests of their political parties. Furthermore, Weber took interest in studying the “market community” — as the antithesis of traditional community — because it displayed a stability and regularity which belied its transactional aspect. Market relations, in this way, can be usefully understood through the metaphor of kinship: familiarity and moral responsibility produce efficiency as well as exclusions (Pardo-Guerra 2019, p.44).

Understanding market relations as more-than-instrumental offers an alternative perspective to the paradigm of economic sociology which — itself critiquing neoclassical economics’ assumptions of rational, atomized agents as the unit of analysis — reified a binary of the “social” and the “economic” spheres in order to show how one embeds the other. But even sociocultural scholarship which attempts to overcome, rather than contain, the neoclassical perspective still

often foregrounds the social basis of economic action. "The market" is predicated of "social relations." Economy is positioned as the explanandum. I wish to invert these assumptions. What if we begin from the premise that social connectedness is an end, a goal, that modern individuals are intuitively seeking? And what if we take certain forms of economic action as openings for entering into those relations?

Viewing markets as means to community is not to fall into what Caliskan and Callon (2009) warn against: entirely dissolving the economic into the social, and erasing what is particular to the power of market devices and economic knowledge. Indeed economic cognition has an irreducible moment of its own, distributed across materialities, techniques, and models (e.g. Callon 1998). (Chapter 3 examines the financial and legal techniques of angel investing.) But still, this "market devices" framework is fundamentally an inquiry into the conditions of possibility for market exchange. This chapter asks, rather, for what is (financial) exchange the condition of possibility? More specifically, where in an allegedly fully neoliberalized society might we see the recrudescence of non-instrumental sociality in and through the market itself? We can see it in angel investment, in three facets investigated in this chapter: in the way investors reject the primacy of profit, in the popularity of angel groups for investing, and in a kind of gift exchange which reproduces the practice over time. But before proceeding, I will first elaborate the critique of the embeddedness thesis I just offered in order to highlight my contribution

**Non-instrumental relations in / as investment**

Sociocultural scholarship on markets tends to give tacit priority to the market itself as the thing to be explained. It makes the basically causal move of imputing a directionality: social

relations serve market stability.[27] The remainder of this chapter ask the opposite question: how, under concrete historical conditions, does investment become an occasion for people seeking social connectedness to form relationships?

Steve Shapin's A Scientific Life: The Moral History of a Late Modern Vocation is one of the few academic texts in which angel investors make an appearance. Shapin argues that the personal virtues of trust and charisma underpin modern science's ideals of objectivity and detachment. The book includes a chapter on scientist-entrepreneurs who raise capital at small, intimate pitches. Five times, he quotes (and quotes his subjects quoting) maxims about how investors privilege the entrepreneur's charisma over the particular business idea in their judgments.[28] Qualities of individual character, to be sure, matter. But in framing his observations this way, Shapin reproduces the popular and uncritical fascination, endemic from business journals to the television show Shark Tank, with questions like "what do angel investors look for?" and "how do they decide?" Such an approach implies — incongruously — that investors judge personal charisma from a stance of detached objectivity. To the contrary, we might say, it takes one to know one. Qualities of the judge and the judged come into alignment. After all, this only expresses science studies' core principle that objects and facts are dependent on the methods of observation.

After a panel presentation at the city-wide entrepreneurship event Startup Week San Diego, I stood next to the investor we've met named Rick, as a middle-aged entrepreneur updated him

[27] This framework is often put in such causal terms. (All italics in the following examples are mine.) Tim Mitchell's summary of Granovetter: "Rational economic action *is supported and restrained by* ties of friendship, shared experiences, professional associations…" (Mitchell 2006). Similarly, Granovetter provides "the social *basis of* economic behavior" (Caputo-Levine *et al* 2007).

[28] Shapin's maxims all come from George Doriot, progenitor of the VC industry in mid-century (see Chapter 2).

about the entrepreneur's hotel-booking website. Rick expressed enthusiasm, and threw him compliments. Later, as Rick and I walked out, he turned to me. "That guy I was like 'oh you're killing it!'? He's a total dick. He doesn't take guidance, he doesn't — ok, that's why I don't invest. Is he gonna make money? Absolutely. Coachability? Fuck 'em, he's out the door. He sat down in front of us [Eric's angel group] and said basically he doesn't need our help, he just needs our money." The personal virtues like trustworthiness, determination, and receptivity to mentorship that investors seek — allegedly as signs of entrepreneurial acumen — equally indicate the kind of person an investor wants to spend time with.

*Rejecting the primacy of profit*

Social structures in markets may be reduced to the role of trust in lubricating transactions. And yet, there is a remainder in this reduction. In angel investing, it manifests in a social code, bearing on investors, to reject the primacy of profit. As it is articulated in texts and in interviews I conducted, investors should preserve relationships and honor one another by choosing, when appropriate, to leave money on the table. These competing values play out in negotiating investment contracts, and in eventually executing the terms pertaining a liquidity event — terms which, at the time of writing, pertained only to a speculative future.

Leaving money on the table is an explicitly recognized, though informal, social code. It is an object of frequent ethical reflection by investors in their discourse. Consider a blog post titled "Angels and VCs: Don't be greedy even if you can." Its author, Dave Berkus (2015) is past chair of Tech Coast Angels, and has written ten books on angel investing, mostly self-published. The post examines a hypothetical financial unwinding of multiple tiers of investors in a failed startup.

After liquidation, equity holders are repaid according to individually negotiated terms which specify their priority and other preferential treatments. This hierarchy of claims (called the "capital stack" and inscribed on the "capitalization table") can become ambiguous and messy, and under duress investors sometimes litigate against one another. This is especially so when the sale brings marginal or negative gains, as in the case here. Evidently, despite my contention that angel investors seek ends beyond profit, many also remain committed to extracting financial value.

Berkus's post is notable because it grapples precisely with competing values within market relationships. Initially, he enjoins others to "[not] be greedy" with this rationale: extracting a little extra money won't make a significant difference to one's returns at the scale of one's portfolio. In other words, so long as the investor has spread their capital across many companies, profits will derive from a few outsize returns, and fiddling at the margins won't help. As we saw in the prior chapter, this logic encourages investors to treat all their investees as if they are the big winner, creating an atmosphere of general excitement. In Berkus's commentary, the portfolio generates another affective modulation of profit-seeking. It encourages investors to let go of relatively small amounts of money — and not only from a calculative standpoint. For Berkus's quantitative rationale then shifts into a moral register, placing collective interests above individual ones. He applauds investors who volunteer to nullify their "participation rights" — a contractual clause which bumps up their returns at the expense of other equity holders i.e. less-protected investors, and entrepreneurs. If the startup is facing liquidation, he says, investors ought to "give up a [contractual] right for the good of the investor and management community."

Berkus doesn't bother justifying this collective interest itself; he takes it for granted that money and good will circulate or stagnate together.

The social code to reject the primacy of profit also appears in prescribed behavior concerning how fanatically to enforce the letter of the contract. The "no-shop agreement" is a standard clause which bars an entrepreneur from soliciting better offers once an initial agreement (a term sheet) has been signed, but before the deal has closed and money has been wired (often a duration several weeks). Brad Feld, in his widely-read book explaining contract terms for a non-legal audience, encourages investors to be generous, act with grace — and allow startups to back out of the no-shop agreement if a better offer materializes. The clause is intended to prevent entrepreneurs from wasting investors' time. For entrepreneurs who violate such a clause and "get caught cheating," the financing may be called off, Feld writes, just as would an imminent wedding "for a groom or bride-to-be" (Feld 2016, p.99).

Feld sees the no-shop clause as primarily an "emotional commitment [rather] than a legal one." He recalls a startup which received an acquisition overture from another company after entering into a no-shop agreement with his VC firm. Feld and his partners chose to allow the entrepreneurs to back out, and even offered advice on the relative merits of the offers. "We told them 'no problem'—we'd still be there to do the deal if it didn't come together." In a similar situation, Feld held equity in a startup that was about close on an additional investment round when it received an acquisition offer — which would give him a profitable "exit." The new investors "graciously suspended the no-shop agreement." The acquisition proceeded, and "the

new investor was disappointed in the outcome but happy and supportive of what we did" (Feld 2016, p.99)

A species of generosity underlies the new investors' willingness to break the contract and let existing investors "exit" profitably. But it is not general, abstract generosity — it has the specific goal of helping certain others to get very rich, just like oneself. Insofar as these entrepreneurs get rich, new investors are minted (see next section on "giving back"). Thus foregoing profit extraction becomes a means to grow the community of investors — what Berkus alludes to above with "the good of the investment community."

This willingness to take sacrificial losses happens in epicenters of global finance as well. Zaloom tells of Chicago Board of Trade traders who remained in the pit providing liquidity even when bond prices fell — that is, buying assets to meet sell orders at their own expense. They were willing to lose money because they "identify with, and develop responsibilities to the market" (Zaloom 2006, p.52). For angel investors, the willingness to take losses or forego profits is importantly different. It is not born of professional pride in making markets. It is a rather a matter of concern for their reputation in a financial community which, unlike the CBoT, lacks formal institutionalization and so depends on elective social relationships.

Investors, by making these concessions in money and contract, perform honor and virtue — forms of value which, for wealthy people like them, are created precisely through the negation of money value. "The quality and the character of the people involved," Feld reflects on his past investments, "were much more important than the legal terms" (Feld 2016, p.99). "Character"

here is defined by the relinquishing of money, as not being greedy. And investors accumulate "character" insofar as they don't act as a self-interested financial actor, but help their peers in the "community." And in doing so, they generate the conditions for others to become investors and entrepreneurs.

*Helping others makes markets assemble*

Whether a startup exits profitably or not is beyond one's control; what one can influence is the quality of relationships formed through one's investing. Investors spend time doing work whose value, or meaning, is created in and through "helping" colleagues — a word they frequently invoke. The investment becomes a means of teaching and doing favors for others, and the market assembles along these lines. A venture capitalist in Silicon Valley characterized a famous angel investor like this: "Ron [Conway] does what he does because he likes helping people succeed in business. He gives most of the money that he earns away to charity, so greed never clouds his mission. In fact, the investment component is almost an aside to his primary purpose" (Horowitz 2010, emph. added). Note that "helping" and "charity" in this utterance do not index the same objects. Charity's ethical value is accidental; Horowitz could have written that Conway "burns his money," and the point would remain: what matters is de-centering money in order to center the act of helping (privileged) friends in business. Invoking the category of "helping" is another way that angel investment rhetorically effaces, and in practice partly escapes, orientation toward financial gain. Let us consider three forms that helping takes: teaching new investors, mentoring entrepreneurs, and growing the startup investment "ecosystem."

First, '"helping" as teaching and learning (which is to say, reproducing) this form of economic conduct. Amateurs on global financial markets learn to trade in a largely solitary mode, by reading, watching, and doing from their screens.[29] Eighty percent of angel investors, in contrast, learn their practice by investing alongside others in angel groups (Angel Capital Association 2017). This is not surprising, since no organized exchanges exist for early-stage equity in the U.S.[30] Angel groups provide easy access to potential investments ("deal flow"), because entrepreneurs come to pitch their members.  But beyond pragmatics, recall how Leung, at this chapter's beginning, spoke of his experience with Ottawa Angles in terms not of financial return, but of learning from peers. What, generally, is being learned? Not primarily technical skills, because angel investment is not a technically complex form of finance. Rather, it involves developing a sensibility for which entrepreneurial ideas might be profitable, and which bodies and personalities can make startup succeed (see Chapter 5).

To appreciate the social dimension of how investors help others become investors, we should approach learning not as a fundamentally cognitive process — but as what Lave and Wenger (1991) call a "community of practice."  The framework de-centers skills acquisition, focusing instead on the novice's quest to have their contributions valued by others, and to secure acceptance into a community. For our purposes, this highlights how helping, learning, and identity are bound up together in reproducing and expanding angel investment over time, as it incorporates new people and refines the goods internal to it as a tradition (MacIntyre 2007).

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[29] But cf. Preda (2017), who visits the large in-person conventions held for day traders.

[30] In the UK, the Alternative Investment Market is an exchange for new and often obscure startup company stock; the market is governed by reputation and social relations instead of public regulations.  See Roscoe and Willman, forthcoming.

Communities of practice are sites of apprenticeship, a word which often indicates the acquisition of manual dexterity in craftsmanship or fluency in symbolic labor. But one can also apprentice oneself to a practice where the thing produced is identity, a transformed relationship to one's self — the outcome being, in part, a new attachment to a community. For example, at Alcoholics Anonymous, one learns from and with others to reinterpret one's behavioral patterns in light of accepting the identity label "alcoholic" (Lave and Wenger 1991, p.79-83). For novice angel investors, the skills acquired by working alongside other investors involve things like analyzing pitches conducting valuations. But over time, one does more than hone such practical aptitude: "the meaning of learning is configured through the process of becoming a full participant in a sociocultural practice" (op cit p.110). Joining others in doing deals and making and losing money — and finding this a satisfying pursuit — we can speak of this not only as learning to invest, but also as becoming a contemporary ethical subject for whom market activity is only the contingent mode of expression.

When investors turn teaching into helping, they make their practice a medium for meaningful relationships which, as such, help proliferate the practice. We can see this dynamic unfold through Virginia, who encountered the social milieu of angel investing after a career spent in "isolation" at a large microchip developer headquartered in San Diego [Qualcomm]. There, she confronted entrenched gender discrimination, both in professional advancement and interpersonally. "I was there for 18 years," she said, "and I didn't have friends to eat lunch with." After losing her job during company-wide layoffs, Virginia attended a meeting of Tech Coast Angels, and was drawn to the "intellectual challenge" of evaluating startups, as well as to the group's non-hierarchal organization. But men still dominated, numerically and in their ways

of being public. The meeting participation format intimidated her. Against about one hundred men, she found only two other women members. And in personality and manner of dress, they were other to her: Virginia self-describes as casual, "looking like an engineer" — while the two women investors wore designer clothing. "I thought, to be a lady in this group you're supposed to look sharp and all this crap? Wow, I am so not that." But those women surprised her; they took her aside and made her feel welcome. They did not flaunt their expertise or "make [her] feel stupid." Her concerns of fashion and financial competency receded, and she paid membership fees and joined for the year. And as she gained practical understanding about investing, she took it upon herself to welcome and teach other women as she'd been helped. One becomes committed to helping others as the very substance of learning to do and be an angel investor.

This category of helping becomes affectively powerful, furthermore, because people freely choose to participate. As a corollary, it is crucial that angel groups are without hierarchy. Certainly, differences in status mark novice from accomplished investors, but as Luca underlined, "nobody is anyone else's boss," and nobody is paid to teach others or do the work of vetting startups. This "flatness" is made salient for and valued by investors in contradistinction to the corporate hierarchies that many of them have either retired from, or are otherwise looking to escape. They experienced how such hierarchies alienated them from themselves and from others, and feel that becoming part of an angel community negates all that: "it doesn't matter if in your previous life you were a senior VP at Qualcomm or Sony, it's irrelevant because you have no power over me, no authority over me," said Luca, a past president of the angel group TCA. Everybody comes together to hear pitches, eat dinner, do due diligence, share knowledge, and

conduct valuations, but ultimately everyone chooses who they spend time helping, and to whom they write their checks.

"I like helping entrepreneurs." Angel investors often say this when asked why they invest. They speak and write publicly as a pedagogical service, and they help entrepreneurs directly through relations of mentorship. (For money-as-help, see the next section.) The content of their help pertains to business strategy. But helping is also a technique for producing valued relations with others. And these relations are valuable independently of their content — contributing to participants' felt sense of community, and for the reproduction of the practice.

Usually, what investors teach is how to hone an investable startup. But sometimes the content being taught is how to establish relations. Brad Feld, the reputed VC, speaking on a panel to a roomful of hopeful entrepreneurs, preached the "magic in engaging other people." Success in entrepreneurship, he said, involves meeting lots of people without an explicit agenda. Asked by an audience member how to do that, he offered this advice: "Don't ask someone else for something; instead, do something useful for them that is positive or impacts their world. That's the way to engage. And keep showing up, and before you know it, it'll start to develop a relationship" (Startup Grind 2015). Feld was not encouraging friendships as quid pro quos. His statement indicates, rather, that sociality, like economy, is performed and can be provoked. Real social relations are nothing other than this. Participants in this financial-entrepreneurial world feel that it's not enough to make money. Acts of helping and being helped make it worthwhile for them, and distinguish what they do from other kinds of finance.

Duration nurtures social relationships. And yet investors, like most other contemporary professionals, maintain a discourse about time scarcity, sometimes flaunting how many pitches they've heard in a given week or year. Insofar as time is a luxury — especially for the high earners, prone to measuring their time by the monetary value of its opportunity cost — the choice to slow down an activity endows value on the people and processes involved. Thus Feld reflected to the group of entrepreneurs about operating his venture capital fund:

> We chose not to raise bigger [from clients] each time because we didn't want to spend time...we did 14 investments one year, it was too many. That was a deeply held belief of ours — we wanted to spend the max amount of time working with founders and companies we were invested in…We don't want to spend any of our time managing our organization (Startup Grind 2015).

Feld's refusal to stretch himself too thin is an ethical choice, and doubly so. First, he values being in direct relation with those like himself, and devalues dealing with administrative overhead — thus figuring "management" as a lesser art, and those who do its labor less deserving of his time. Furthermore, it is a choice to forego potential profit, an assertion of freedom of choice over enslavement to bottom line. This, in turn, creates a distinction internal to the capitalist class, between greedy investors for whom the stress of playing the markets wreak havoc on their bodies (Zaloom 2006), and those of that temperament "essentially aristocratic, in whatever class of society it may be found" — as Kitto describes Athenians of Pericles' era — "which puts quality before quantity, noble struggle before mere achievements, and honor before opulence" (1951, p. 117) — here, ironically, within and through investment.

**"Giving back": gifts of capital.**

Gift-giving creates and maintains social, economic, and kinship relations in traditional societies around the globe. While in Western modernity codes and practices of the gift persist,

they are relegated to domains of the personal and intimate. Scholars generally concur that gifts in modernity function precisely to demarcate those latter domains from the economy and the state. "The gift testifies to…the absence of calculation, by the refusal to treat close friends and relatives as a means to one's own ends. In our culture, gift-giving continues to partake of an ethic and logic which are not those of the market and of profit, which are even opposed to them and resist them" (Godelier 1999, p.208). Even where gift-giving operates through the purchase of commodities, thus shading into market consumerism (Miller 1998), its telos is still taken to reside in values outside the economy proper. But if capital and finance have consistently demonstrated the tendency to subsume resources, skills, and relations into their own logic (e.g. Chiapello 2015; Tsing 2015), we shouldn't assume gift-giving and the market to continually constitute two statically demarcated modes of exchange. Below, we see that in angel investing these two modes are not neatly bifurcated.

Could capital itself be subsumed into a gift logic? And what would it then become? The warm social relations between early-stage investors are complimented by the capacity of capital itself to become a medium for gifts — and the reciprocity it calls forth. In parallel with the discourse of "helping" others described above, early-stage investors often frame the work they do as "giving back." And as with "helping," the phrase does not denote charity, but nor does it dissimulate. What, then, are investors giving back, and to whom? And why giving back? This section attempts to answer these questions.

To summarize: first, the thing given back is capital; it is also often time and expertise in the form of mentorship. Second, gifts are articulated as being given to an entity they call the startup

“ecosystem,” which is concretely expressed in the persons of entrepreneurs and novice investors. And finally, giving back indicates that one has been successful in business and recognizes that this success is due to the help of others. Unlike in traditional gift-based relations, no structured social arrangement obligates investors to reciprocate for their financial success. Compared to the established analytic notion of the “counter-gift” which is understood to be compulsory, the phrase “giving back” nuances reciprocity, implying a freely made choice — especially insofar as the act of recognition it designates requires a volitional subject if it is to be meaningful. In giving back, furthermore, investors stabilize the “ecosystem,” a network of mostly privileged people who find social recognition through that belonging.

The felt desire to reciprocate for one’s business success is perhaps counter-intuitive in capitalism, where success is ideologically justified as the result of disciplined work, or explained as the result of inherited capital (Weber 1922; Picketty 2014). Why not just give to charity? Why give back to other entrepreneurs? Because, as I have argued throughout this dissertation, startup investment provides a venue for people to experience forms of connectedness felt lacking in their lives, and giving back capital and mentorship facilitates those relations. I am not interested here in speculating on any psychological need felt by the successful to express gratitude. Nor should we assume that one’s impulse to “give back” precedes their exposure to the social world of angel investment. As they begin to practice with others, however, and inevitably hear the phrase invoked, then whatever sentiments they already harbored may be given expression as “giving back.” Furthermore, the choice to give back is not purely affective. It is significantly bolstered by a quasi-scientific discourse about innovation economies, which we will turn to next.

"Giving back" in relation to expertise about seeding startup economies

Randy Brown is an angel investor who managed an investor group in Reno, Nevada. He described the origins of his own investment practice with a term I heard repeated by others: "[it was] the cycle of the entrepreneur with an exit doing investing, giving back on that." I asked for clarification — giving back? "Giving back to the community," he said, "helping out where I could." Randy had started an internet technology company in the backwater of southern Illinois during the late 1990s, and later sold it and became rich. He moved to Reno and used some of his money to fund other entrepreneurs there. Randy's reference to a "cycle" indicated that he was reflexively pursuing the proliferation of startups, and, in turn, of newly-minted investors. Indeed the notion of "giving back" in startup investing runs together a structure of reciprocity — something affectual and in part unconscious (Bourdieu 1977) — with empirical social scientific knowledge about proliferating startup investment in new places.

Let us turn first to this circulation knowledge, both popular and social scientific, about seeding and growing startup "ecosystems," and to angel investors' role in consuming and operationalizing that knowledge. For decades, cities and regions have laid envious eyes upon Silicon Valley. Local politicians, business leaders, and city boosters seek methods for becoming a similar locus of dynamic businesses. This desire to foster economic activity in one's geographic locale is mediated through the notion of an "ecosystem," a category gleaned from consultancy and academic knowledge aimed at replicating them. These sources teach that the presence of a university and a cultural of risk-taking are crucial "ingredients." Another, obviously, is capital, but not all money is equal. The best capital comes specifically from entrepreneurs who've had "exits," that is, who've gotten rich and are ready to become investors

themselves — which involves, crucially, mentorship. I often heard angel investors cite this knowledge/discourse in narrating their own practice.[31] And over 50% of angel investors self-report as having been a founder or CEO of their own startup (Angel Resource Institute 2018).

After gaining experience as an investor, Randy Brown launched an organization called City as a Startup (CaaS), which participates in the codification and operationalization this knowledge about ecosystems. CaaS undertook such quasi-scientific projects as determining the frequency of spontaneous interpersonal interactions necessary to hit a critical mass of "information flow" to kick-start an investment ecosystem. Randy describes this in terms which are both quantitative and affectual:

> "We identified 3 stages of a relationship - first a collision - meta - an interaction point — even eye contact. …Interventions to create relations We measured in Vegas - the collisions per square foot. Those collisions are just opportunities - a vast majority of the time they go unrealized. When it does something more - you have opportunity to create an interaction. A comment about a weather….My definition [of a relationship]: getting to know someone well enough that they're comfortable sharing problems and you're willing to offer to help."

CaaS is only one example of a widespread popular discourse which builds on the theories from scholars like Saxenian (1994), which link Silicon Valley's technical achievements to pervasive casual socializing between tech workers. CaaS's enactment of this knowledge as prescriptive guidelines tacitly encourages reciprocity within the investment community. For example, by proliferating moments of interaction, Randy says, "even early-stage entrepreneurs can still mentor others because there's always someone at an earlier stage." This role-transition is offered as an explanation of Silicon Valley's success, and is upheld as a model for investors everywhere who imagine re-making their own communities as "innovation ecosystems." When

[31] At a SEED meeting, one entrepeneur, visiting from Los Angeles, reported "LA is going *nuts* - the whole DollarShave exit, Snap — the amount of attention is crazy. Randy laughed, and replied: "So, more there's more [investment] funds being created than startups."

investors describe what they do as "giving back," this is both a spontaneous expression of feeling, as well as an artifact of that knowledge framework about growing startup ecosystems.

*Giving back to the ecosystem: performing belonging*

Reciprocity stitches together what are typically equivalent social units — whether people, families, or tribes. But there is also a tradition of thinking reciprocity between an individual and a collectivity. When Socrates in The Crito speaks to the personified laws of Athens from his jail cell, he acknowledges how the city provides for the individual's flourishing, and also the tacit debt that is established thereby.[32] The polarity of this obligation can just as well be inverted. In his conclusion to The Gift, Mauss proposed that society owes the individual a debt. He offered a reciprocity-based interpretation of the emerging Fordist welfare state: social safety net qua solidarity exchange, giving back to workers for their career-long expenditures of vital energy into the national economy.

This municipal ethos casts further light on who giving back is a giving back to. Investors reciprocate by teaching other investors, they mentor entrepreneurs, they invest in startups. Immediately, particular individuals are the recipiants; more mediately, and in the real the meaning of the phrase, the recipiant is that collective entity to which one owes one's success. Investors call it the "community," or the "ecosystem." Rob Kunz is a "serial" entrepreneur who sold three successful in startups Salt Lake City, and could have easily retired. "I got to point where financially I could decide what I wanted to do, but still wanted to stay active in the

[32] "Tell me, Socrates…Did we not, first, bring you to birth?…After you were born and nurtured and educated, could you deny that you are our offspring and servant?….We have given you and all other citizens a share of all the good things we could….Wouldn't [you] appear to be an unseemly kind of person [i.e. by fleeing the city which has condemned him]…if you depart after shamefully returning wrong for wrong…after breaking your commitments with us" (Crito 50a-54c).

entrepreneurial community — so I started to do angel investing - take my money that I made from my startup exits and put that to work with other entrepreneurs." This only down-shifts the scale and allegience of Mauss's framework, moving to the local economic community. Civic pride for many investors runs strong, and so "giving back" is always aimed at growing one's own ecosystem (see chapter x). It creates locally situated reciprocity, vis a vis the national reciprocity of the welfare state. And as I have shown elsewehre in this dissetation, giving back is another facet in the process whereby investmetn become a substrate for sociality (in distinction to the affordances of finance on global markets)

*Gving back is not philanthropy*

In the aftermath of World War II, Mauss optimistically called forth the generosity of the rich, renewing the spirit of the gift against the "cold reasoning of the merchant, the banker, and the capitalist." Andrea Muehlebach (2012) addresses the late 20th century erosion of the ethos of redistributional reciprocity, and sees "the rise of another in its wake": moral neoliberalism, which rehabilitates as it transforms the spirit of the gift. In The Moral Neoliberal, Muehlebach describes "ethical citizens" who perform free care work for and with others. As a regime of accumulation, th[is] unwaged labor regime produces and accumulates the value of the relation" (p.7, emph. added). Care work here means volunteering as charitable workers within the domain of civil society, (and thereby propping up the market from the outside). But what would a really fully neoliberal subject be? It would be one who accumulates valued relations as and through the expansion of capital — by investing and mentoring others in reciprocation for their own success. "Helping" no longer has as its object the needy and destitute. Instead, ethical action is internalized into the expansion of capital.

Unlike moral neoliberals, angel investors who "give back" — even as they will likely lose their money — cannot be construed as acting philanthropically, in the accepted sense of "private giving for public purposes" (Barman 2016), or, in the legal sense of money given to 501(c)(3) . Yet among the investors I met, some described their work in philanthropic terms. Above, we met Virginia, who joined Tech Coast Angels after getting laid off from Qualcomm. She had previously enjoyed volunteering; she mentored at-risk youth. But after joining TCA, she shifted some of that time and energy to mentoring and investing in entrepreneurs. A realist about financial risk, she "has no expectations" that these early-stage investments will even return principle. "I look upon this as donations; I'll be lucky if I get any of it back." She laughed — more at the absurdity of knowingly risking her money, than at the label "donation" to describe equity investments in for-profit companies.

We should not interpret Virginia's categories as "false" ideology — i.e. functioning to assuage the guilt of privilege, or as to pass off speculative investment as philanthropy. Virginia expected to face age and gender bias if she tried to return to the tech labor market. So she now finds fulfillment by advising entrepreneurs as they build their businesses. This, in turn, answers to her belief in free enterprise as the preferable way to address social needs. As she told it, she convinced a local philanthropist friend to join TCA by positioning charities and startups on a continuum. "Startups have a technical focus, and they're about invention. Hopefully you're creating something and it's not just a handout. But it absolutely is a type of philanthropy." My point here is not to highlight the flexibility of signifiers like "philanthropy" and "impact

investing" (cf. Hochstadter and Scheck 2015), but to point out that in practice, people will act in ways that are meaningful to them, and do not care so much what the categories say.

A sociological literature on philanthropy has critiqued the methodological individualism which looks to explain philanthropic behavior through individual intentions and meanings (see Barman). Virginia works with other investors through TCA to assess potential investments, creating relations through this activity. I asked her if she considered investing on online platforms. "Me personally, no," she responded. "I'm more interested in helping companies in the San Diego area, where I'd have potential opportunity for direct impact, to do something for job creation locally." She invests alongside other members of her community, in her community. The gift of capital opposes not only commodity exchange, but also (conventional) investment on global markets.

*Giving back as the making of a free choice.*

For successful entrepreneurs and other wealthy professionals, no social sanctions oblige reciprocity for their financial success. Giving back capital and mentorship is a freely made choice. Yet as an analytic concept, gift exchange foregrounds the compulsory character of reciprocity established by apparently free gifts. Bourdieu (1977) points out that the requirement to return a gift must not become conscious to social agents as a determinate rule, for if it were, the structure would break. "If the system is to work…the agents must refuse to know and above all to recognize it" (p.6) Among the Kabyle people, while reciprocity appears (to us) as structured and constraining, the subject can assert agency by playing on the interval and the object given back. For financially successful entrepreneurs, in the absence of sanction, the

decision to reciprocate opens up a space of agency. The choice to invest in new startups performs one's freedom, just because it is recognized by others as a freely made choice. ("There are easier ways to make money," they all say.) It is a choice which constitutes one as a contributing member of the "ecosystem," whereas to remain forever an entrepreneur is to occupy a lower status. A prominent venture capitalist was introduced before a keynote speech at an entrepreneurship conference like this: "He got his education right here in San Diego at UCSD. And today he spent two hours at The Basement [a UCSD startup incubator] talking with students, so he's giving back in that way." (Need better example.).

The choice to give back capital and mentorship brings to fruition a relation of reciprocity which was only potential, established earlier in time, when others helped you. Though Virginia was not an entrepreneur herself, she had a financially successful career. She is now at a stage where she finds herself with the capacity to give: she has skills she wants to share, and surplus wealth that she can part with. By giving, she becomes part of a community — her investor colleagues at TCA, and the entrepreneurs whom she mentors.

Giving back establishes the early-stage investor's belonging to a community; such belonging is not generally available to investors in global financial markets. Historically, stock exchanges like the LSE have operated as tight-night communities of elite traders (Pardo Guerra 2019). Zaloom tells of open-outcry pits traders taking losses to prop up liquidity because they themselves identify as the market — but this is a closed, formal exchange. Sociologists imagine an "'imagined community' of market actors" encompassing "the grand speculator and the small investor, the full-time professional and the amateur alike" (Preda 2005, p.148). But this

imagined community is, precisely as Benedict Andersen (1983) theorized it, one where members will never know the vast majority of their compatriots. Nor, surely, will they suffer themselves for the sake of others' financial well-being, as ties of the imagined national community mobilizes members for war. We see these differences reflected in grammar: whereas the citizen-state takes first-person collective form ("we the people"), the public stock market is generally perceived as a third-person agent "to which first-person agents, such as 'We the investors,' respond but do not necessarily identify with" (Lee & LiPuma 2001). Angel investors belong to a more concrete and delimited community. This belonging rectifies alienation many of them have experienced: in corporate careers, in the "post-social" order (Knorr-Cetina) of global financial markets, or even perhaps in the abstract belonging of the nation-state.

**The instrumental assumptions of "embeddedness"**

Having described the surplus of meaning in nominally market-based relationships, we must now return briefly to the axiom of economic sociology, raised in the chapter's introduction: that social relationships within markets provide trust between buyers and sellers that makes markets efficient — rather than, as neoclassical economics assumed, undermining efficiency. But trust that what? I am not asking the network analysis question, who trusts who. For trust is a triadic relation — between two people concerning a third condition, i.e. that something will (or will not) come to pass. This takes many forms: for example, trust that bond agencies' ratings are reliable, or that product safety certifications are truthful. So the embeddedness paradigm implies a view of trust as not getting screwed over. Fear of manipulation, certainly, is a valid concern. But as a dominant analytic orientation, it reproduces the view from orthodox economics of individuals as Hobbesian egos, and the market as a state of nature — contradicting the market's actual emergence out governed territories and police power (eg Polanyi, Foucault, History Corp

Finance p90, Joyce). By focusing on trust, then, we get an impoverished conception of markets' social content — undermining embeddedness's sociologizing conceit.

Notwithstanding the above criticism, the instrumental account does capture one dimension of trust relevant to this study. Early-stage investors' own discourse classically articulated questions of trust in terms of a dyad wherein entrepreneurs occupied the structurally weaker position. This positionality arose because investors were repeat players in the market, while many entrepreneurs only raised capital once. Investors sometimes wrote extortionate terms into contracts whose consequences were lost on entrepreneurs until later. Especially after the 2000 dot-com crash, some venture capitalists sought to wrest control of portfolio companies in order to force a liquidation against entrepreneurs' wishes. A lawyer I spoke to began receiving calls asking him to do things with contracts he'd never considered before; callers asked things like "we've got to get rid of the CEO and we don't want to pay him [his contractually guaranteed] severance; can you do that?" Glaser framed this as symptomatic of a general "loss of trust." In 2009, two high-profile ex-entrepreneurs launched a VC fund with a then-novel strategy: to build a reputation on being nice to investees. When they announced "trust is essential to building a great company," this was not a general platitude of business ethics, but a rather a gesture toward not screwing over entrepreneurs (A16Z, 2009).

Investors screw each other over, too. Later-stage investors, those with more money and more power than angel investors, can force new contract terms which erode the equity positions of the initial angel investors (see Chapter 3 on down-rounds). Equally revealing are efforts to prevent these tactics. Naval Ravikant, a well-regarded super-angel (see chapter x) spouts pop Buddhism

and promotes ethical practice. "If you cut fair deals, you will get paid in the long run," he begins a brief manifesto at the memorable web address "http://nav.al/ethics". Early-stage investments are mostly negotiated, he notes, and those who push only to maximize their own benefit will eventually gain a bad reputation, and be excluded from other deals. People who transact fairly — not forcing legal terms which either financially disadvantage others, or wrest away their control — will be trusted by others to orchestrate investment rounds. "Everybody will want to deal with you," Ravikant instructs his readers; "you end up being a market hub." Having others' trust makes one privy to (their) market information — so you benefit (Ravikant 2019). And n a Twitter statement, he mused "lopsided deals are fragile and most value accumulates in long-term trust relationships." Interwoven with this self-interested rationality, we can sense a valorization of such trusting relationships, which we will explore momentarily.

Trust in angel investing also functions as a judgment device, or "social decision heuristic," as I heard investors call it. This utilitarian interpretation of trust also appears in the economic sociology literature. The idea is trivial: you don't know everything, and it is too onerous to try to verify unknowns yourself, so you rely on the authority of others' judgments. Judd, the fireman, explained to me how he made his first investment in a hydraulics AI startup: "I'm just a fireman, a normal guy. The fact that Rory and Marco picked these guys [to be in a selective accelerator program] means it's one out of hundreds. I like the product and I like that there's some really really smart people behind this that I trust." In addition to sourcing deals, trust also aids in assessing whether valuations are inflated or not. This is particularly important insofar as startups lack the standardized qualities of commodities and appear as "singular" goods (Karpik 2010).

Without comparables against which to unambiguously measure a good's value, trust networks substitute, as market agents to draw on each others' expertise (but see also ch. 2 on valuation).

But this analysis of trust reduces too easily to a rational self-interest model, where one values one's relations for the information they provide.[33] After all, what exactly does such a "social tie" actually consist of? Here is the crucial point: in the social world of angel investing, there is a surplus of meaningful connection in what one could call market trust. So we need to construe the category of trust more broadly than do most social analyses of markets. Anthony Giddens' formulation in The Consequences of Modernity adds two helpful elements. First, trust pertains not primarily to the present, but to "reliability in the face of contingent outcomes" (p.33) That is, trust entails duration, and as such, it is relevant to long-term relationships as much as at-quits transactions. Such durational trust aligns with the long-term investments of capital and of self which, as we know, define startup investing. Ironically, then, whereas trust is conventionally understood as making exchange safe, we see that it is also consistent with encouraging risk. The value of startup equity is realized, if ever, years in the future. People are liberated to speculate as they build trusted relations — as and through investment.

A second point on trust from Giddens. A concept of trust centered on securing material outcomes (wrongly) abstracts from social recognition implicit in its relations: "The presumption

[33] To be sure, in conventional financial markets, and also in startup investment, the heuristic of networks does usefully capture the ways investors themselves reflect on the social dimensions of their practice. CBOT traders claimed that working "face-to-face" helped them "maintain stability in turbulent times" (Zaloom 2006, p.55). Trust here is bound up with mutual surveillance. While exchange managers and designers alleged that electronic trading would provide superior market transparency, traders maintained that "the social environment of the pit, where traders know and watch each other, is a more effective forum for identifying illicit market activity. The responsibility shared by competitors and friends alike creates *a social transparency that no accounting procedure can match*" (emph. added). For CBOT traders, the embodiedness of these ties were clearly crucial. Bodies matter in different ways for different markets. But outside of formal exchanges, concerns other than surveillance reign.

of reliability involves the attribution of 'probity' (honor) or love. This is why trust…is psychologically consequential for the individual who trusts: a moral hostage to fortune is given" (Giddens 1990, p.33). To trust a peer in angel investing engenders a simultaneously commercial and ethical relation. Elsewhere, I explain how Judd the fireman met Marco at a Christmas party, was impressed by his standing in the business community, felt flattered when Marco asked him to invest, and planned to drink beer with him in the future. Judd was seeking ethical recognition, not just valid market information.

Investment relations are not the social epistemology of innovation

To conclude this chapter, I wish to distinguish my argument from an established and superficially similar narrative about the social structure of the Silicon Valley technology industry. The narrative surfaces early, in accounts from journalists like Don Hoefler who visited the region in 1979 and described a "tightly knit group" which, while "fiercely competitive" in business remained "the greatest of friends" — "they eat in same restaurants…and their wives all know each other and are friendly" (quoted in Saxenian 1994, p.32).[34] Today, CEOs of its dominant firms sometimes refer to each other by first name only in media interviews. I have suggested a similar image of angel investing communities. However, highly particular historical-geographic conditions made Silicon Valley's culture what it is (or, was), while the expansion of angel investing beyond California reflects instead broader transformations in the corporate form, financial markets, and forms of subjectivity. Still, as anthropologist David Pedersen has described, stories about a place can circulate as one-sided abstractions of certain qualities of that place — "becoming remarkably portable, informing other meta-models of the future in contexts

[34] The sexist and chummy overtones in Hoefler's quote have only marginally attenuated in the intervening decades; venture capitalists still finance the same companies and invoke each other by their first name in media interviews.

worldwide" — even as these "dominant stories contribute to perpetuating conditions that actually contradict their accounts." (Pedersen 2013, p.10). To all those outsiders who become curious about early-stage investing, the stories about Silicon Valley's intimacy offer an archetype for how to perform investment, even under radically different conditions.

The narrative of Silicon Valley exceptionalism has also inspired social scientific interest in replicating its "culture" elsewhere. Economic geographer Annalee Saxenian's influential account of Silicon Valley's innovative and commercial vitality linked its social networks to rapid development of new industrial techniques.[35] She argues that a culture of open socializing encouraged diffusion of information; lack of corporate hierarchies and porous boundaries between firms promoted "collaborative practices" (Saxenian 1994, p.3).[36] But the quasi-social scientific posit that innovation is a function of "high velocity of information" exchanged through social interaction gives a reductively epistemic account of the actual social relationships of startup investing. It is rooted in an impoverished model of communication as information transfer, and is un-attuned to the work done by affect to make capital flow. Affect matters once we shift from building technoscientific knowledge to interpellating people as early-stage investors. Investing alongside your friends — people you trust — soothes the stress of high risk finance. Especially in group-based investing, ties of affect open up wallets.

But we should not conflate forms of trust specific to markets with those specific to community described in the preceding section. Sociologist Robert Putnam in the 1990s helped

[35] For a different account that emphasizes the role of state funding in the development of technology in Silicon Valley, see Mazzucato (2015).

[36] At least up through the 1990s, Saxenian argued, this pattern helped firms remain competitive in a changing global economy, while, in contrast, Boston's Route 128 science-industry corridor, with a more secretive and regimented corporate culture, declined.

popularize a belief that long-term social ties spanning family, civic, and political life are crucial ingredients of economic development. His account was empirically grounded in an analysis of 14th and 15th century Italian city-states (Putnam 1993). Saxenian and others drew on Putnam's concept of "social capital" to explain Silicon Valley's success. But as geographers Fields and Cohen argue, Putnam wrongly generalized late medieval social structure into prescriptions for regional economic growth in the present. Rather than sustaining substantial civic engagement, Silicon Valley by the 1990s comprised "a world of independent, even isolated newcomers." People drive everywhere and they don't play soccer; no extra-market relationships ground trust and exchange. Social capital there is really "commercial trust" based on business performance. That is, the causal link goes "from performance to trust, not from community" as per Putnam (Fields and Cohen 2000, p. 216).

The normative model of social capital thus projects a romanticized form of community anachronistically onto Silicon Valley, while obscuring the actual social ties on which it was built and through which it continues to reproduce. "There is no Gemütlichkeit in Silicon Valley," Fields and Cohen write (2000, p.205) — invoking the German word which, Wikipedia defines as "a sense of belonging and well-being springing from social acceptance." I invoke their critique because I am concerned that my account of angel investing may appear aligned with Putnam's, and I would like to insist on its difference. Yet I wish also to differentiate my account from Fields and Cohen's. It is true, I have described both an ethos resembling Gemütlichkeit, and interactions based on commercial trust, among angel investors. But I am not interested in explaining economic dynamism in relation to either of these. I am concerned in this dissertation with angel investment as a phenomenon becoming widespread, which appeals to people regardless of the

economic conditions of concrete places where it appears. The social relations which I foreground emerge around things like asset illiquidity and valuation practices — which I describe in the next chapter — and these relations become valuez independent of their commercial instrumentality.

# Chapter 5: Evaluating pitches and deciding what should exist

Participation in startup investing yields ethical rewards. One of these rewards is the creation of community, examined in the preceding chapter. Another is the experience of agency in deciding what should exist. In this chapter, I attempt to convey this experience by painting a picture of the central ritual of the startup world, the pitch — examining it as a media form through which a nascent business is represented and judged. People become investors, in part, because this interactional form enables them to seek and find satisfaction as arbiters of entrepreneurial ventures, in a manner not available to investors in conventional financial markets. Put differently, the entrepreneur's pitch to investors is a social ritual that shapes its listeners into subjects who discern and judge. The chapter argues that the process of assessing and evaluating nascent entities offers an ethically fulfilling exercise in asserting one's values and performing one's expertise — in and through economic activity.

## The pitch is a ritual for becoming an investor

The event of the pitch is a social occasion, performance, advertisement, and rallying point in the circulation of capital. It does crucial work to enchant the experience of making investments, in a manner that deflects and de-prioritizes the reality of investment risk. The term "pitch" generally refers to the entrepreneur's presentation. But in practice the pitch always contains two inseparable parts: this presentation and the scrutiny it receives by investors. I will use the term "pitch-event" to denote this reciprocally constituted interaction, as well as to highlight the embodied convening of investors and entrepreneurs at an event which also functions as an opportunity to network and often to eat food.

A model pitch demonstrates an unmet need in a market, proposes a monetizable product, and argues that the individuals in question are well-poised to execute it. It is metonymic for all entailed by entrepreneurship: when an NGO's diplomacy-by-business-mentorship program brought Saudis to a two-week startup incubator in Washington DC, a news headline described "15 Women Entrepreneurs From Saudi Arabia Visit U.S. To Develop Their Pitches (NPR 2018, emphasis added). But as this section argues, the pitch does more than sell an investment. As a structured presentation form, it demands engagement not only from those pitching, but also from those pitched — furnishing roles and meanings through which the latter can recognize themselves as investors.

Mountains of practitioner-produced texts — from blog posts to books to online videos, as well as a perpetual consulting and conference industry — advise and instruct entrepreneurs on how to pitch. Equally voluminous research from business schools and management science attempts to establish what makes investors tick: publications with titles like "Venture Capitalists' Introspection: A Comparison of 'In Use' and 'Espoused' Decision Policies" (see Hudson et al 2005). Critical scholarship interprets these texts as e.g. functioning to establish "conviction narratives" in the face of uncertainty (e.g. Chong and Tuckett 2014). Yet such analyses largely say what investors themselves already know to be true. That is, investors are well aware of nontrivial role of rhetoric and belief. My inquiry runs oblique to the manifest purpose of the pitch. I am interested, rather, in the will behind the prolific discourse about pitching. Why is it produced; why is it taken up as meaningful? The reason is not simply that entrepreneurs desire coaching in how to impress investors. The focus on best practices for pitching overlooks its internal corollary: the desire to be pitched, the desire to critique pitches, the desire to discipline

entrepreneurs. That is to say, the interactional form of the pitch gives rise to an affect and selfhood which does more to organize angel investing than the thin principle of business risk assessment.

The pitch is readily understood in terms of spectacle and persuasion. It involves an audience, a performer, a script, visual projections (slides), and sometimes even a stage. I will examine these techniques of the pitch below. But to see them primarily as virtuosic acts of salesmanship like those performed by hawkers in street markets, which Clark and Pinch (1995) claim to be a generalized form of social interaction, would be to misconstrue two things. First, it gets the hierarchy of the encounter backwards: it is the audience who has the upper hand. Second, and more importantly, investors are never passive recipients of pitches; they are subjects who evaluate and judge. The active enrollment of investors means that the pitch-event has social consequences independent of its putative function of enticing people to commit capital to a venture. Consider a kindred sociotechnical ritual, the "demo," or public demonstration of research or invention. Typically, demos are understood as tools of proof and persuasion, not just in sales, but in publicly-funded science to provide accountability of the researchers to their overseers. But demos work in subtler ways to "help manage social and political orders" (Rosenthal 2013, p. 359). Whereas sales pitches are intended to trigger an immediate response, demos mediate between the uncertainty of the laboratory and the demands of managers and funders. Rosenthal construes the demo as "a transaction…a medium for exchanges at the performance site." The demo establishes relationships and mediates communication, "coordinating demonstrators and audiences" (ibid, 353). Through assessment and feedback, engineers refine and revise their projects, and so the demo influences how the research unfolds.

Clark and Pinch recount how market hawkers reflexively deem their art “to be a social and communicate skill rather than a purely ‘economic’ act.” The authors implicitly construe this as one-way communication, where the one hawking monitors and adjusts to audience feedback. While Rosenthal draws attention to possibility of feedback, he frames the pitch, or demo, as essentially about transfer of information. Neither of these analyses perceive how the communicative interaction of the pitch molds the participants in their very encounter. People stage pitches (and demos), and pitches then shape new people in that image, as social forms that endure for a time.

In summary, the familiar way to make sense of the pitch either takes the audience as dupes, and foregrounds skilled rhetoric and “almost alchemical ability” of the (e.g.) market hawkers to implant desire (Pinch and Clark, 1995) — or, it positions the audience as the cold, astute eyes of the shark in the tank, on the model of the TV show. Novice investors may indeed get swept up in pitches, and, as I will show in chapter 7, opponents of deregulation feared precisely that the general public would be duped and defrauded if startup entrepreneurs were allowed to pitch online to raise capital. Critical approaches have delineated the “point of view” of the investor, the financial subject who locates value in assets which produce future revenue streams (Muniesa et al 2017, Chiapello 2015). Yet how does the investor come to inhabit that; how is that subject position made meaningful to them? The meaningfulness is does not reside only in the potential for financial return. To dwell on the dimensions of either of persuasion or calculation is to naturalize the social apparatus and the expert discourses through which the pitch is materialized. More that than profit-seeking causes this social machinery of communication and semiosis and business-making to function.

Rituals of dialogic interaction like the demo and pitch are sedimented within modernity. Foucault reads the Catholic confession as an originary "ritual of discourse" (1978, p.61) which produces truth from the speaking subject by compelling him to articulate his feelings in the presence of an other. For us, this model can illuminate entrepreneurs' work of tuning up their own affective state of authenticity in preparation to pitch (as we will see below, entrepreneurs don't just prepare business plans and stand up to speak; to pitch one must become a true believer in oneself). This entails an audience capable of appreciating and responding to such affect. Foucault, for his part, takes as a given the figure of church authority who listens. To understand how rituals like the demo or pitch work as capitalization devices within the market sphere, where the authority of the listener owes not to religious power, nor even to their mere possession of capital, we must examine how that listener gets constituted. The listener-investor is compelled to attend to the affect of the presenter, just as much as to narrowly financial considerations. In taking this position, they must produce themselves as evaluators of truth: not only of the investability of the startup, but the person of the entrepreneur. And they do so by methods which are emotional and embodied as much as cognitive-rational. The startup pitch-event passes through two moments of constituting the investor-subject: inward before outward. Following a dialogic format, the investor first listens, and then speaks. In the former, the investor attunes to herself, sensing the modifications produced in her by the pitch. In the latter, the investor performs expertise, attaining recognition qua investor. The inner moment tends to focus on the person of the entrepreneur, while the outer moment expresses judgements of the business plan.

**The pitch format**

Before proceeding, let us provisionally describe the pitch as a startup's business model rendered into oral presentation. What, then is a business model? It is a schema for making money that operates higher level of abstraction than a business plan, i.e. a 40-page prospectus dissecting costs and revenue (Feng et al 2001). Some view them with suspicion, insofar as they offer "narratives without numbers," by which businesses may fulfill corporate reporting requirements in place of transparency (Abela, 2020). But for early-stage investors, their veracity and representational accuracy is not the point. Pragmatist-inspired critical scholarship understands this: business models' power lies not in quantitative precision, but as devices which performatively stabilize markets for innovation capital (Doganova and Eyquem-Renault 2009). For example, Google's most consequential innovation was not its page-rank search algorithm, but its transformation of the classic revenue model based on banner advertizing, into one which converts data generated by users into commercial value.

The calculative power of business models been debunked, but, as Doganova and Eyquem-Renault note, investors continue to use them. They accounts for this persistence by arguing that the business model is not intended as a "transparent vehicle of the representation and appraisal of an entrepreneurial project" but rather a "market device…built for producing encounters" (2009, p.1559; p.1568), like the 'demo' (cf. Rosenthal 2009). This draws attention to the pragmatic, even mundane ways that they work to assemble actors, construct enterprise, and make money flow. What this analysis leaves unexplored is how the encounter transforms the persons who enter into it. If we are to take seriously a foundational premise of science and technology studies — that the subject is not external to the device — then individuals do not simply step into a role

which offers particular affordances, but they become a new kind of subject, with certain value-orientations, and with full reflexivity and will. One way this happens is through the experience of evaluating the business model. Money alone doesn't make people into early-stage investors; people become investors through transformations in their own subjectivity by engaging in the practical labor of listening, evaluation, and critiquing. In my fieldwork, I never heard of angel investors or venture capitalists invest because they received a document. An investment relationship alway passes through an embodied presentation. To understand how the business model functions in early-stage finance, we must go to its enunciation in the pitch.

The pitch is a disciplining device, and its format is not open to innovation. Through ongoing reflection by entrepreneurs and investors in writing and conferencing since the 1990s, as well as through the proliferation of opportunities for pitching, the ideal early-stage startup pitch has congealed into a prescriptive format; instructional materials abound. The format expresses a response to the portfolio logic of venture capital firms, and the expectation that startups grow by orders of magnitude (see chapter 3). The entrepreneur begins by showing she has located a substantial "problem," that is, an unmet market demand or "market opportunity." (We will explore the salience of this rhetorical formulation in the next section.) She then explains how the startup will address the problem, and why others haven't already done it this way yet. Her case is aided if the startup has attempted to prototype its product already, or has any preliminary "traction" with customers (see Lean Startup, chapter 6). Graphs will project growth three to five years out, with upticks keyed to "milestones" the startup hopes to hit, such as landing a distribution partnership or hiring a marketing officer. Then, because ideas and numbers are cheap, she will conclude with the startup "team" — headshots of the two or three founders, with

education and past employment credentials listed — as well as several “advisors” with relevant professional backgrounds who were sufficiently impressed to sign on.

In part, the pitch formats heterogeneous business ideas into equivalency for judging.

The omission of financial details is the expectation for the pitch. To recite granular data would signal turn off an investor audience, for several reasons. First, a material constraint: nascent enterprises simply do not yet have much to report. Early-stage investors understand the speculative nature of risky ventures, and take detailed projections of revenue as folly, as a waste of time. Thus, while they expect to be presented with slides of projected growth, they refer to these as “the obligatory hockey stick” (i.e. a sharply rising slope). Additionally, it is telling that investors like to describe their practice as an “art and not a science.” So pitches omit details because they must, but thusly underspecified, the pitch also becomes an object amenable to intuitive modes of evaluation. And people become investors by developing this intuition. This is not to make a virtue of quantitative imprecision, but to say that early-stage investors are listening for — intuiting — other things in the pitch. The pitch opens up a terrain to for them to perform evaluation and critique.

**Judging by intuition**

Several scholars have remarked that investors privilege intuition over rationality in assessing early-stage ventures. But there are different kinds of intuitions, each of which presume different objects. Shapin quotes a life science angel investor downplaying the importance of a formal business plan. In Shapin’s gloss (2008, p.283), this investor intuition equals a tacit sense for what technoscientific discoveries might be made profitable. Muniesa makes a similar point, resurrecting a textbook on corporate finance popular in the 1930s by A.S. Dewing, which

describes how the investor values an enterprise as “a matter of business intuition.” This person, Dewing writes “‘must feel, with extreme sensitiveness, the intangible atmosphere that surrounds every enterprise” (Dewing 1920, 33). This “innate business judgment” seems to be a kind of microeconomic forecasting: the ability to assess whether the market will demand the product proposed, and if it can be profitably produced. Muniesa astutely emphasizes this role of “feel” in judging investments potential. But if we follow Dewing a page further[37], he further specifies this ability to “scent intuitively” commercial success as additionally consisting of “insight into the business ability and integrity of the promoter [i.e. the entrepreneur].” Note the shift from qualities predicated of the business, to qualities predicated of the person: “the intellectual and moral capacities of the men associated with the prospective enterprise” (ibid 34). This is the second reason that detailed data is not welcome in the pitch. The presenter’s real goal is to demonstrate qualities of her own person. These qualities cannot be conveyed through numbers, but must be embodied and personified, and become known intuitively.

These intuitable qualities of the entrepreneur figure centrally in the narrative Shapin offers about funding technoscience startups in his book about the modern vocation of the scientist. He calls these qualities “character virtues.” Technoscience is shot through with uncertainty, and the virtues of character offer something stable when assessing a potential investment. This, indeed is an axiom of startup investing that I found ubiquitously invoked — ideas are cheap and plans are contingent; what matters is resoluteness of ‘founders’ to make a business out of nothing — making whatever changes (“pivots”) are necessary to do so. Especially at early-stage, human

[37] Analytic references to Dewing must be historicized, because, as Donald MacKenzie has shown, for a half-century ago the methodological apparatus of academic financial economics shifted its approach on determinants *internal* to corporations and financial institutions, to the broader financial markets and investors which constrain them. This was accompanied by another shift from description to mathematics. (MacKenzie 2008 p.38, p.72) However, as I have shown in chapter 3, startups are inherently not amendable to quantified finance.

qualities, and not technical inventions or business models, are taken to be crucial determinants of success.

One ubiquitously sought-after virtue which the entrepreneur's person must express is "passion." When Shapin finds this too — "would-be high-tech entrepreneurs sometimes are told, and come to believe, that VCs respond to embodied displays of passion" (2008, p.296) — he takes passion to mean something like charisma, and it does, in part. But charisma in itself does not indicate value. In Max Weber's classical framing, charisma wins political adherents. Investors look for individuals with stores of energy, ready to give over their waking lives to realizing that vision, and therefore to make the venture successful. Passion signifies this ethic of self-expenditure.[38] Patrick Anding, a lawyer and startup consultant in San Diego, instructed entrepreneurs at a local event that their pitches must accomplish two things: inspire trust, and not be boring. "Boring is if you're not passionate about something. If you're going to spend the next five years of your life sweating, nearly at bankruptcy before receiving each new round financing, laying off employees — if investors think you are not that interested, why would they want to give you your money? So many risks will come up, you need all that passion, excitement."

It's no surprise that qualities like passion matter in business. So critical scholarly reports of the role of intuition and character virtues in early-stage investment only repeat what investors already know and say about themselves. Such scholarship only reproduces its subjects' own heuristics of value. And by reproducing what investors say about themselves as fact and leaving it at that, they naturalize the practice, and fail to produce any new knowledge. Rather than

[38] "Passion" is also performatively invoked as a sign and then instrumentalized to convince private-sector professionals and local publics to contribute their skills and energies to projects for civic betterment. See Sarkar (20I7) and Irani (2020).

noting the curious fact, we should ask how it is that human qualities like passion come to serve as signs of value to people at the heart of financial practice? And how does the investor locate authentic passion (and the ability to "execute" which it is taken to denote), and see through the inauthentic performance of it? I argue below that people learn to sense passion in the interaction — and in learning, people become investors. We can observe this evaluative practice in the mutual labor of producing passion, on one side of the pitch encounter, and sensing it, on the other.

In Foucault's reading of the confession, truth is produced as the confessor struggles with his own conscience to articulate his acts and desires. In this ritual, "the expression alone…produces intrinsic modifications in the person who articulates it: it exonerates, redeems and purifies him, unburdens him of his wrongs, liberates him, promises him salvation" (1978, p.62). This model illuminates how in the pitch, too, the entrepreneur struggles to produce a truth of herself. This is not a matter of furnishing a credible business plan. Rather, she asks herself: how do I convince investors of my vision of technology and market, and how do I convey that I am capable of realizing that vision? This is the work of tuning up one's own affective state of passion in preparation to pitch. At the reception following a pitch competition, I watched an entrepreneur confess to Rick, the SEED investor, that he felt he'd done a lackluster job at convincing the crowd that a real market need existed for his product. "The thing I learned the most, and where I've been failing, is describing the pain.…I did a really bad job conveying the pain to you. You didn't understand the pain. And the pain is that every realtor needs a website…and you couldn't understand why. To me, that's totally obvious. But you're not the only one who didn't feel it." This was not a failure in presenting 'information' about an existing state of affairs, because the

proposition is speculative. The entrepreneur believed in his own plan (i.e. in the potential market demand for a product like his, i.e. the "pain" of an unmet need), but hadn't learned to embody this conviction sufficiently to persuade others. And he experienced this passion deficit as an ethical failure — a failure to realize a potential in himself. As the religious confession aims not to advance the subject's standing in an external classification, but rather to reach into and transform his own subjectivity, so with entrepreneur's truth. To become an authentic entrepreneur, one must work on the self in order to outpour passion. The goal here was not better acting, but actual becoming.

Foucault, for his part, makes little of the dialogic quality of the confession. But structured dialogic encounters can transform aspects of the listener's self — erasing their particularity, for example, in order to listen universally (Berman 2020)[39]. If the pitch provokes from the entrepreneur emotional expressions of self, then it is reasonable to assume that attending to pitches calls forth an openness to such affect. (In other words, value / knowledge of character virtues isn't an a priori, but is provoked through sensing it in interaction.). Such demonstrations of emotion effect a reciprocally engaged evaluation from the investor. To watch a pitch is to both attune to the embodied qualities of the presenter, and, in doing so, to reference one's own embodied sense-making. To become an investor is (to open oneself and) to continuously query one's own visceral reactions to the pitch, and ask oneself if this presenter's got the right stuff. For us, this entails de-centering analysis from the object (the entrepreneur) to the subject's own reaction. It means asking not if the entrepreneur performed the virtues, but how the investor comes to sense and judge that performance. Reference to the qualities of the person expands

[39] Contemporary faith workers in Japan, for example, are taught to express sympathy for suffering through listening — in a manner that negates their own cultural specificity as they strive to become an "ear from nowhere."

accounts of capitalization which focus on the technical constitution of assets by formulas and devices. Accounts such as Chong's about "conviction narratives" in investment decisions attend to the role of affect, but only as an artifact of narrative persuasion. Yet there is a methodological difficulty in turning to the subject of judgment. Luca used the phrase "gut judgment" to explain how he assesses subjective qualities like passion. The "data" the entrepreneur provides "only moves the needle" on his decision. But does invoking the 'gut' only beg the question, displacing reasoned strategy with personal feeling about which no more can be said?

Shapin offers a productive analysis of judgements of entrepreneurial character which doesn't yet follow through fully on its own premise. He proposes that character virtues are central not only for investment, but for modernity itself. At the heart of technoscience, "the greater is the acknowledged role of the personal, the familiar, and the charismatic." These virtues of the person must figure centrally in late modern settings of industry research and entrepreneurial financing. Why? Because "late modernity proliferates uncertainties" and so mobilizes these "supposedly pre-modern resources" (Shapin 2008, p.5). Personal virtues proliferate in the managing of risk. This is an insightful critique of objectivity. But it is also one-sided, insofar as it also makes these virtues instrumental to material life — it operationalizes them for science and capital. For it is equally plausible that another hallmark of modernity — alienation from oneself and others — spurs people to seek out, cultivate, and take pleasure in appreciating these "supposedly pre-modern" virtues. As I suggested in the introduction, the quest for agency, authenticity, for negating managerial life leads people to early-stage investment. In late modernity, people desire to be connected to one another; one of the ways they achieve connection, even within domains like finance, is through this evaluation of character, in seeking virtues like passion in others, and

knowing it by feeling its resonance in themselves, that makes them feel connected. What investors actually sense in the encounter is as much bodies, eyes, and voice, as it is business value.

Perhaps, therefore, the demand for affect hides a yearning to be affected. The injunction to entrepreneurs to nurture and perform passion intimates how investors take pleasure in watching such demonstrations. And so the proliferation of discourse about the norms for the pitch, and the participation in disciplining subjects, implies a desire to be pitched. I was not able to get a first-hand account of this inner experience of the investor. But they report on it. James, an investor, advised an audience of entrepreneurs at Startup Week how to make their pitch appeal. He first drew an equivalency between consumption and investment: “everything you buy in life is an emotional decision. Angels or even VCs are not any different.” James here reverses the epistemology of marketing discourse. Instead of attempting to know the consumer as object, he is here publicizing his own reflexive sense-making. Mario Abela (2020, p.2), attending to the rhetorical strategies of business models, invokes Samuel Johnson epigraphically: “To convey his moral there must be a fable, a narration artfully constructed so as to excite curiosity, and surprise expectation.” This indicates a concern with veracity in representation — losing one’s self, becoming caught up, being duped. But James’s reflexivity about being pitched shifts the goal: for him, the test is, can you make me feel it? To demonstrate, he narrated how his own emotional excitation builds during a well-delivered pitch as if giving play-by-play commentary of a sports event: “that crescendo builds during slides: oh, they’ve got a great team. Oh, it’s a big market. And wow, they have revenue.” The mode of evaluation is about affect, embodiment, and enjoyment, and the reflexive monitoring of those experiences. In the pitch, more than ideas are

under evaluation. What's being judged is the entrepreneur's ability to master the form itself. And this entails not a box-checking exercise, but feeling it.

Character virtues are not limited to qualities of voice and body. They can also be exhibited through formal strategies when delivering the pitch. Charisma, as embodied, is also mediated through (for example) rhetorical strategies like framing one's business in terms of "features" vs. "benefits." Christy, at SDAC's "Pitch Deconstruction Workshop" told attendees, "if I were pitching SDAC to investors from a feature standpoint, I'll say: We're funded by government contracts to provide training to small businesses…. Ok? that's boring as hell. If I flip it and emphasize benefits , I'm going to say Hi my name's Misty Rusk…We have 14 of the most brilliant consultants that I pay so you don't have to; we offices services to businesses like yours that are working hard to save the world." Such rhetorical techniques are intended to encourage investment. But that investor's gaze, the gaze which wants to be convinced, is too quickly naturalized — that is, assumed to exist as a given in the market — even in the critical accounts I reference here. To the contrary, we might ask: aren't these investors supposed to be smart? Shouldn't they be able to perceive potential value regardless of presentation format, regardless of whether framed in terms of "benefits"? Christy's teachings, and the many others like it, imply an audience which desires to be thusly regaled as a precondition for bestowing business credibility on entrepreneurs. Inquiring down this path, we see that the whole pedagogical discourse to align the pitch with hypothetical investors' expectation does something else. Yes, it aims to cultivate entrepreneurial character virtues. But not, as Shapin holds, to signal stability in the face of risk; rather, because to perform them and recognize them provides welcome home for late modern subjects adrift in corporate alienation.

**The listening subject' desire to be regaled**

One investor I interviewed directed me, straight away as we began talking, to read a book called The Psychology of Persuasion. His implicit reasoning was that I should inform myself about persuasive techniques which entrepreneurs ought to incorporate in their pitches, in order that I understand how investors make decisions. He didn't realize the depth of his own insight. He intended to inform me that pitches which follow the psychology of persuasion will appeal to investors. But his suggestion disclosed how shot through the situation is with reciprocal reflexivity. Investors don't keep their criteria secret. Not only does the entrepreneur know what the investor wants to hear, but the investor judges based on how well the entrepreneur signals that they are aware of being judged in this particular way. Furthermore, by suggesting I read up on persuasion, that investor was signaling that he, and investors generally, enjoy being subjected to entrepreneurial persuasion. Shapin describes "coaching manuals advise how to perform an effective pitch remind [them to] communicate excitement [through gestures]." "The credibility of an uncertain future," he concludes, "resides in the performer's body and its use to communicate pertinent emotions" (Shapin 2008, p.296, emph. added). Invoking Goffman, he notes that investors are watching for impressions "given" and "given off" — even as they understand that such bodily signs gauge an entrepreneur's abilities only imperfectly.

Those observations of how investors operate are astute, and in line with what I observed. But they only shift into an academic register the emic expertise of venture capitalists. I have additionally suggested that in sensing the body of the entrepreneur, the investor also senses her own. Now, will their embodied resonance add certainty to their judgement; will it de-risk their

investment? Perhaps, perhaps not. My point is that this encounter performs a different sent of effects: through it; listening individuals come to fully inhabit the subject position of the early-stage investor — one in which feeling doesn't just aid financial calculation (Pixley 2004; Zaloom 2006), but the investment encounter sparks affect and connectedness.

Recall that the pitch-event is a dialogic encounter. Speaking back to a pitch calls forth two simultaneous modes of engagement from the investor: both the pragmatic financial point of view — assessing for potential for return on capital — but also an ethical mode of creating the self through performing expertise. Foucault notes a shift in European "rituals for the production of truth" from, in the medieval period, procedures like the dual and the sworn statement, or signs taken to come from God and official accusations, to, in the modern period, techniques of interrogation (1978, p.58). His exemplary case is the religious confession. The startup pitch follows a similar structure. The investor participates in an inquisition, where their ability to ask the right questions, as witnessed by others, partly constitutes themselves as legitimate investor subjects. The confession is an interrogation, though the listening authority does not speak. At a pitch, the investor does the inward work of querying their own truth-as-business-expertise, and the outward work of interrogating the entrepreneur.

The pitch calls forth listeners who are not just calculative and judging audiences, but startup critics. And so the pitch-event is a crucial ritual in spreading angel investment: nascent investors, after all, don't just want to make money; they want to feel like — by acting like — investors. Most immediately, investors wish to clarify financial details and challenge claims made about, for example, projected rates of growth. Yet in doing so, and in this public venue, the

investors also demonstrate — to themselves, to peers, to entrepreneurs — their own mastery of the code of how markets ought to be disrupted through the vehicle of a startup.  They reference the shared set of expectations and knowledge about what an investible company should be and how this should be signaled in the pitch.  Put differently, grandstanding often accompanies their feedback. We must invert our expectations about the polarity of the pitch-event in order to grasp its consequences for investors. The entrepreneur is not the only performer; investors themselves perform. They work to demonstrate their own savvyness and expertise, and inhabit the identity of the investor.   The angel group is the ideal setting in this respect. Between judged pitch competitions, where audience-investors keep their evaluations silent, and one-on-one meetings, the angel group provides a semi-professional space while maintaining the public stage.

To watch angel investors perform and affirm their expertise, let us step into a monthly meeting of the angel group Kieretsu Forum which I attended in 2016. Erik of Orison Energy launches into his pitch, the second of three that afternoon, and sets out his startup's "mission to bring equality and flexibility to the energy space."  He begins big: statistics on world urban population growth projected out to 2050, and claims of global consumption shifts away from fixed ownership to subscription access. Orison is selling battery panels, large and sculpted, to be mounted in domestic space, for balancing peak grid demand. They store energy when plentiful, and offload it when scarce. Erik referenced patents and partnerships underway. I listen, and was convinced: he seemed credible, the product and market opportunity made sense. But an audience member's hand shot up immediately following the pitch: "I missed something — I wasn't sleeping, I don't think — what does the product do; what does it cost; what is the return for consumers?"  True, the pitch hadn't specified precise costs. But what had this investor, a sharp-

looking man in a blazer, missed, that I was able to follow? His snarkyness was on display as much for his peers, as it was directed at the entrepreneur. His fluency with the grammar of the normative pitch signaled to others his expertise. The entrepreneur began to answer him by providing the unit costs of production, only to be interrupted: "No, what does it do!? Is it a battery?" "Yes, it's a battery." "For backup?" "No, more for arbitraging energy off the grid." I saw this repeatedly: investor disciplining entrepreneur, and taking pleasure in it. And it is in doing so successfully that one inhabits the role of the investor.

At angel group gatherings I attended, after pitches concluded, the entrepreneurs were escorted from the room, and investors held a de-briefing session. Some offered earnest observations from "the investor's point of view" (Chiapello 2015) i.e. questioning financial viability, while others enjoyed hearing themselves talk. But the two modes intertwined. This work of airing expertise and offering opinions feels meaningful because investors are weighing in on what should exist — which Muniesa (2020) locates as the essence of investment valuation work generally. One is conjuring a cosmology of markets and innovation to determine if and how the pitched idea fits in (see also Chapter 6). As a novice investor, what expertise do you have to offer? Three points here. First, many attendees — often without significant empirical knowledge of investing — draw on the repertoire of common startup maneuvers which they've culled from reading tech blogs and attending other pitches. As everyone knows, startups frequently pivot en route to discovering their market. Thus, after Orison Energy's pitch (above), one attendee aired: "I think if he pivots to generators…." — an idea which blatantly disregarded the company's focus on batteries and fossil fuel reduction. Such a "pivot" was clearly (to me) senseless for Orison. It wasn't this attendee's place to formulate business strategy, but he enjoyed exercising

of his own imagination and imagined expertise — and did so narcissistically, because his comment did not take the presentation on its own terms. He derived gratification from making that utterance — which did not offer helpful expertise.

Another attendee offered his reflections to the group : “This may be just a license play — get it to the next stage and then sell it to SDG&E [the local utility]. Or, is it a Brookstone play?” The term “play” here means something like “strategy for commercialization.” This statement at least had more meaningful content than the pivot to generators. He was taking the investor’s point of view: developing a product and licensing it to other companies could supply lucrative long-term revenue. The question of whether it was “just” a licensing proposition likely reflected a habitus formed in the upper echelons of financialized high tech, where companies like San Diego’s Qualcomm famously designs semiconductors but fabricates nothing itself, deriving tremendous profits from its patents (see Tyfield 2012, ch. 4). He was also drawing on his own habitus as a high-end consumer. Impressed with the battery panel designs, he naturally thought of selling it through Brookstone, a retailer of high-end home gadgets. But he, too, was essentially doing make-believe business consulting. The point here is that this novice made sense of being an investor by invoking what he was familiar with — and in doing so, reproducing the forms of corporate life and consumption which angel investing offered an escape from. But here —and this is my gloss — he is the one making the “license play,” as opposed to an employee designer who does’t hold the patent; he is the one getting a superficially green product into a retailer’s catalogue, rather than buying it as a consumer.

A third attendee's comment, which took Orison's pitch on its own terms, came from a man who announced his professional background in semiconductor materials, and so claimed special aptitude to evaluate this business. "We're talking a lot of variables here that I find concerning," he said, and began enumerating technical details questioning claims made about the battery in the pitch. Another attendee with more investment experience responded: "those are all things we'll find out later in due diligence." This both steered the conversation to assert his own mastery — as if to say you don't yet understand the flow of evaluating investments; you're asking the wrong questions for this stage — but also, speaking in the "we" form, he bound those present together in the communal activity of inquiring and evaluating. This is an activity unto itself, through which one becomes an investor, yet is distinct from the commitment of capital.

Embodied co-presence is another aspect rarely remarked upon in academic analyses of the pitch.[40] Yet the pitch-event aligns bodies in space in ways that supplement dialogic interaction, and contribute to transformations of selves into investors. I attended three versions of the pitch-event: the university competition, the angel group convening, and the private meeting. Settings correspondingly varied, from an auditorium and dais, to a small room with a conference table. An angel group meeting provides ideal conditions, landing midway between the celebratory atmosphere of university competitions and the more guarded — because higher-stakes — demeanor of private meetings. I consider all these spaces "public," following Rosenthal (2013) on the interactional openness of scientific demonstrations — though the exclusivity of the social space varies. Like other credentialed-access events in the public sphere — the classroom, the business meeting, the courtroom — bodies, voices, the energy of the room take on a heightened sensitivity. As an investor, someone comes before you and presents to you. And then you speak

[40] Foucault, similarly, does not remark upon the spatial intimacy of the confessional encounter.

back. Reinstantiating the gendered history of the public sphere, these interactional spaces in early-stage investment enforces normatively masculine ways of interacting. Several women investors I interviewed found it fraught to speak at these meetings — to perform in the way I describe men doing above. Virginia described an austere room at the law firm where TCA holds due diligence meetings which, like pitches, foster performances of expertise. Bodies are spaced apart around a conference table; there is no possibility to lean over and confer to a colleague in a whisper. "It's a raise-your-hand-and-speak situation," she said, and found it initially unwelcoming. "It's an intimidating format if you don't know the people."[41] In this sense, angel investing reproduced her experience working at Qualcomm (see Chapter 4 on social relations of investing). "In tech, usually there's 18 people in the room at a meeting, you're the only woman. You have to careful about not taking notes so you won't be viewed as the secretary; ; you've got to make sure you don't ask questions might be viewed as naive."

Let us now step in to a private meeting of SEED San Diego, a federation of four successful investors, three men and a woman, who see themselves as installing a more humane regime of angel investment compared to their competitors — treating entrepreneurs people decently, give advice, being quick about decisions. They desire to support San Diego as a place, as an identity which needn't bend to the gravitational pull of San Francisco. They use the occasion of meeting with an entrepreneur to comment on trends, reference other startups and invoke aphoristic principles in relation to their own opinions and experiences — essentially, to chatter and reflect. In other words, the invoke and perform market imaginaries. Each utterance I list here was not original to the investor, but expressed a trope of startup discourse, something commonly said. I

[41] As an outsider, I also found it intimidating, as did Jesse Goldstein, a sociologist who conducted fieldwork at a green technology angel group in New York City. "When I first arrived…an intimidating space of (mostly) men in suits, the majority of them seemed already to know each other" (Goldstein 2018.)

joined them for a three-hour session in an innocuous office complex near the coast and shared mostly with psychologists and architects. I alone was wearing a button-down shirt; all of them were dressed in upscale athleticwear-cum-business-casual. For the first pitch of the morning, a young man introduced his software startup called Dopamine Labs. The app — which didn't yet exist — would send health-aspiring users congratulatory text messages, tailored to their personality traits, when they dieted or got themselves to the gym. He framed this as behavioral modification, which prompted Rick, the most outgoing investor, to immediately interrupt with a grin: "ok, no!" In the common wisdom of contemporary venture investment, businesses which aim to change habits for their commercial success typically fail. This position congealed out of the many failed startups which prioritized tech-centric innovation over market research about what people actually want. Rick obliquely invoked that latter methodology of following customer desires — which prioritizes "product forms…that glide along these grooves of practice rather than fighting against their grain" — as Irani describes hegemonic forms of innovation in India (Irani 2019, p.143; see also Chapter 6 of this dissertation on Lean Startup). Alison, another SEED partner, followed on Rick's comment, noting with expressive horror that Snapchat had infiltrated kids' behavior by getting them hooked on the "streak" function each morning. This observation wasn't Alison's own; it was a story which had recently circulated in the tech press.

The Doapmine Labs entrepreneur attempted to continue his presentation after being temporarily sidelined. Responding to these interjections, he re-framed his app: it harnesses people's cell phone addictions towards beneficial ends. This prompted a second series of interjections. Rick recalled other startups he'd recently seen pitch — an app to control kids' phone usage, and a device to disable the phones of everyone seated at a table, creating a "quiet

space." Kelly, a third investor, then began speaking: "my parents' generation — they're on their phones all the time, they've got nothing to do but check golf scores like every ten seconds." And he offered a prognostication: "at some point, there's going to be a detachment movement — I just don't know how soon." Randy, the fourth investor, then called on a trope of futurism, declaring cell phones a "transitional technology" on the way to a more humane interface. He ended by citing a famous lament by famous venture capitalist Peter Thiel, "but we still don't have a flying car." Everyone laughed.[42] The conversation spiraled further away from Dopamine Labs before, eventually, returning. I do not know whether they invested; my interest has been in these reflections and prognostications themselves.

I have focused on the pitch as productive of a listening subject, who finds its identity in identifying exceptional human characters, and through reckoning with speculative business proposals. In all this evaluating work, what matters is not actually trying to predict with any seriousness the success of the startup — such uncertainty anyway cannot be calculated. What matters is the forging of the subject position which feels emboldened to sink capital into risky ventures.

[42] Thiel was complaining about the slow rate of technological innovation. The full statement — the subtitle of a blog essay written by Thiel, was " "We wanted flying cars, instead we got 140 characters." See https://www.businessinsider.com/founders-fund-the-future-2011-7

## Higher callings as drivers of expansion of capital

Capitalist actors frequently justify their practice to others and to themselves by reaching beyond the utilitarian framework of production. Invocations of higher principles have motivated their work and legitimated accumulation, from capitalism's historical origins to recent neoliberal transformations. In recent decades, a series of legitimation crises touched off by wealth inequality, environmental collapse, and racial and post-colonial subordination have pushed capitalists to justify anew their accumulation of wealth and expansion of power, in rhetoric and action. In doing so, and belying notions that capitalism now reproduces on a "mechanical foundation" (Weber 2007, p.124), they have mobilized social and ethical ideologies that lie outside the terms of economy. A robust critical literature has shown how such ideologies discipline the ideals of those who wish to help the poor or save the environment, and channel their activity toward reproducing existing regimes of accumulation and class hierarchies.[43]

This chapter investigates some of the ways that startup investing is represented and experienced as an inherently good thing to do with one's money — which, in turn, furthers the project of popularizing angel investment. We are by now familiar with the narratives of technology as social salve emanating from Silicon Valley. The intertwined ideologies of entrepreneurship, innovation, and disruption have been extensively critiqued (e.g. Suchman and Bishop 2000; Turner 2009; Sims 2017; Sarkar 2017; Irani 2019), and it is not the purpose of this

[43] Under liberalization reforms in India, for example, an elite-sponsored discourse of "entrepreneurial citizenship" has directed the desires of progressive middle-class citizens away from oppositional politics, toward enterprise (Irani 2019). Or, inventors and idealistic entrepreneurs pitch ecologically transformative technologies to investors who marshal their creative abilities toward producing conventional economic value (Goldstein 2018).

chapter to add another one. Rather, this chapter offers a supplemental direction for critiques of innovation and disruption by turning to dynamics internal to startup investing itself. That is, I do not take any substantive moral position on what “the good” is. Nor am I interested in critiquing from an external standpoint investors’ self-conceptions about the societal value of their work. I only investigate the instruments and forms that produce an experience of doing good.

In his ethnography of green technology startup investing, Jesse Goldstein writes of his subjects “I mean to offer a constructive analysis that honors their environmental intentions while critiquing the market relations they operate within” (2018, p.5). The situation I analyze here is different. Startup investors often talk about changing the world, even when not articulating a social or environmental mission. My goal, then, is to show how people can seek to do good through capitalism, without the mediation of any explicit ideal other than allegiances to each other and the growth of new businesses. Early-stage investing as such is an activity that is felt by many participants to be ethically oriented, and assuages their consciences.

To make this argument, this chapter abstracts from the content of any particular startup’s project or business, and shows how the formal procedures of developing a startup enact an image of the good. It examines three ways this signification is achieved. First, funding startups offers the experience of natality, of participating in a the beginning of something new in the world. Second and third are the methodology of Lean Startup, and the injunction to solve problems at scale: these procedures simultaneously locate a problem in the world, and call forth a subject who finds meaning in funding ventures that are likely to fail. As investors experience themselves as co-producing the good, the practice of early-stage investing is sustained and proliferated.

**Entrepreneurship and innovation**

One mode by which angel investing becomes ethically meaningful is through the cultural valorization of entrepreneurship. Discourses promoting entrepreneurship have been thoroughly critiqued; we will briefly review their strategies of appeal to indicate the affective power of directly funding entrepreneurs relative to e.g. investing in "social impact" securities after comparing social value metrics in a glossy report (see Hellman 2020).

First, entrepreneurship connotes more than simple industriousness. The category accumulates its meaning, in part, by contrast to what it is not: those who take initiative and those who labor; those who create new beginnings and those who do jobs given to them. Locke's derivation of private property from mixing one's labor with nature-given materials entails neither the relations to others, nor the telos or temporality, necessarily involved in entrepreneurship. The word was French before it was English, and its literal translation is undertaker: suggesting someone who takes on a project. When Cantillon speaks of the day laborer in 18th century Paris who rises to become a boss, more important than the requisite discipline of saving and frugality is a tireless engagement with mundane affairs to "undertake" projects. A translation from 1900 reads "the multitude of Undertakers is much greater among the Chinese, as they all have…a genius for enterprises and great perseverance in carrying it out" (Cantillon 1964 [1755], emphasis added). We can tentatively link this notion to the self-reliance enshrined two centuries later in neoliberal economic policy, just as we can see it informing a tacit moralization of entrepreneurship — which rubs off on those who invest.

Second, it is an old and platitudinous justification of capitalism that new technologies improve people's lives. Even for Marx, the bourgeoisie, by instituting new forces of production, transformed the relations of production which overcame the fetters of feudal society. It would be anachronistic, however, to label the bourgeoisie as an "innovative class" in this respect, as the word "innovation" never appears in translations of Capital. Irani describes a break between 19th century notions of the entrepreneur as "someone who managed an enterprise, undertaking projects financed by others," to a 21st century "mythic [figure], symbolically bound to social progress through invention, production, and experiment" (2019, p.1). These technological advances need not be spectacular. Schumpeter, in fact, emphasizes that they justify the capitalist order insofar only insofar as they are universalizing. "Queen Elizabeth owned silk stockings. The capitalist achievement does not typically consist in providing more silk stockings for queens but in bringing them within the reach of factory girls in return for steadily decreasing amounts of effort" (1943 (2003) p.67). So we have the series of connected terms technology, entrepreneur, innovation. If one takes innovation to be inherently good, and believes that any exciting startups are by definition pursuing innovation, then angel investing becomes an enabler of the good.

Speaking about innovation today is always to enter a political field. Amidst crises of multiple orders — economy, ecology, inequality, and global health — the default response of neoliberal regimes has been more technology-based entrepreneurship. Operationalized in state policies, innovation turns "public, politically-debatable collective order…to opportunities for endless private entrepreneurial risk-taking, which, by deepening the reorganization of society as the market" (Tyfield 2018, p.37). In other words, neoliberalism depends on innovation to forestall current system destabilizations that previous innovation has itself produced.

**Natality and divination: being an arbiter of what should exist**

To be an early-stage investor is to wield a world-making power. The ideal-type, at least, gets to preside over pitches and survey a landscape of nascent innovations, before selecting which startups to fund and to mentor. The prerogative of one who evaluates a request for capital is to "determine what should be done and how, and what should exist (i.e. receive investment) or not." Muniesa (2020, emph. added) made this point with regard to procedures of valuation. But the early-stage investor asks this existential question not only in terms of financial gain. Additionally, I will argue, every choice to invest essentially asserts that "this is something good which I want to support." What are the conditions for this affective relation of investor to security?

Markets are not all designed the same way (Nik-Khah & Mirowski 2019), and their structural features shape the meaning of buying and selling. In a public stock market, the investor buys minute fractional ownership of a large company. At best, she may identify with that company in the manner that a consumer identifies with a brand (Harrington 2008), while at most detached, algorithms select which stocks she buys. Economic theory ascribes agency to such decisions — market participants are nominally "market agents." Yet they confront goods which are inert to their presence; agents are atomized "price takers." In contrast, selecting startups to finance offers a form of agency with more determinate content, and positions the investor more intimately vis a vis the market.

Behavior in the startup investment "market" is characterized by the unusual parameter that investors do not make their decisions based on price. As we have seen, this condition follows in

part from the legal requirement that angel investors have surplus capital to lose.[44] To the extent that startup investors do foreground financial return, they are concerned less with current valuations of securities, than with contract terms that afford them protection (see chapter 3). But investors also choose startups when the prospect of the entrepreneurs succeeding and the idea becoming actualized makes them feel good. In the popular imaginary of economics, the invisible hand of "the market" decides what businesses succeed and fail. Among startup investors, individual allocative fiat replaces the notion of the market as a great emergent collective agent.

The popular television show "Shark Tank" presents a one-sided imaginary of being an arbiter of what will exist. Each episode, three celebrity investors, each seated on a chair as if it were a throne, summon an entrepreneur to come before them and pitch. They react to the pitch with with questions — sometimes challenging and sometimes condescending — then, with the sneer of cold command, signals her decision. This representation of angel investment circulates. Several prominent angel investors offered me the hypothesis that Shark Tank's popularity has incited popular interest in their practice, inspiring people to join groups like TCA, or try out online platforms. Jesse Goldstein (2018) invoked Shark Tank in analyzing his fieldwork with an angel investor group in New York City. He interprets the show's allure for at-home audiences: "to play along with this performative version of venture investing, to become imaginary investors-by-proxy — 'I'd invest in that one', or 'No chance I'd give that one money.' The audience is put in a position to internalize, deploy, and even rework the logic of Shark Tank." In this vicarious activity — placing oneself in the investor's shoes, as the arbiter — one is not only taking pleasure in choosing, but one is developing one's own judgment apparatus for what should exist.

[44] This fact hangs as a structural determinant over the much of the analysis offered in this dissertation; see discussion of the 'accredited investor designation' in Chapter 7.

But in fact “Shark Tank” offers only a caricature of the experience of being an angel investor. It teaches investment as spectacle of judgement, not a durational practice situated in a community. It portrays the command of the king from his throne, a pronouncement rather than the result an interaction. Power operates in a more sublimated manner for most angel investors: theirs is a power realized through helping others, and helping things come into being, which simultaneously affirms one’s own individuality. What Shark Tank gets wrong is the portrayal the investor as an a priori and stable locus of judgment. In fact, the early-stage investor is constituted as a subject through participating alongside other investors and entrepreneurs — not simply by the capital burning a hole in their wallet.

Here is the mode of vision of professional venture capitalists: a partner at a top firm sees several thousand pitches a year. This is how they do business. The fact of it also circulates widely as a trope, and has taken on status of myth: top firms invest in less that 1% of entrepreneurs who succeed in getting a “meeting” with them. It produces a notion that investors have “vision,” and supports the position of the investor as one who brings things into being. We can contrast one approach to societal transformation through collective acts of deliberating, mobilizing, and building coalitions, qua politics — with another led by exceptional individuals, entrepreneurs “who influence others to take up their vision of change” (Irani 2019, 78). The entrepreneur has a vision; the investor is the arbiter between multiple visions.

Investors' encounter with startups generates an excitement which can be helpfully likened to what Hannah Arendt (1958) calls natality — something quite different from the power-trip of judging pitches from on high, as represented on Shark Tank. For Arendt, natality denotes the drive to create new political beginnings in the world, as a privileged form of activity of human communities. I invoke it to describe the way investors talk about the pleasure of bringing companies into being: aligning themselves with innovation projects, mentoring young entrepreneurs, and taking risks for imagined futures. The good achieved through investing simultaneously affirms both themselves and others — a quasi-civic outcome within the market sphere.

A San Francisco-based investor wrote about his practice in these terms. "What's always mattered to me is working on something I enjoy that creates something new and positive for the world…the desire to turn nothing into something that solves a real problem and creates real value" (Max 2015, np, emphasis added). The statement is banal; I highlight it for articulating a value that is reducible neither to "innovation" nor to social or environmental capitalism. And indeed, this was no social impact investor: his portfolio consisted of media, consumer durables, and financial software companies. Natality entails taking pleasure in new beginnings as such, and in their processual unfolding.

In her ethnography of investment bankers Karen Ho writes that her informants — who the public often viewed as financial parasites — "viewed themselves as gatherers and purveyors of the capital that…enables the growth of our largest corporations…and public works" (2009, p.27). This sense of self-efficacy is similar to, but different from, that afforded by natality. Natality

follows from the temporal condition of the startup. As nascent entities from which value can only be extracted through equity appreciation after significant growth, startup shareholders must stick around for years. Such commitment is not demanded from investment bankers, or in liquid stock markets. The website of crowdfunding platform Republic (see chapter 7) references this temporality obliquely: "Join an exciting journey…fund the companies you want to see succeed in the future." There is a strong consciousness of this speculative teleology — an anticipatory relation to time, to future growth which confers grandeur on the small beginning in the present.

Investing early in a company that later becomes successful retrospectively endows a special kind of status, apart from the financial windfall that accrues. It indicates that you, an investor, were smart enough to identify early on a potentiality that would become great, where greatness is defined in terms of commercial success. Those elite angel investors who can, credential themselves as "early investor in PayPal [e.g.]" or other leading companies. This makes what was a single lucky investment decision — recall, angel investing is fundamentally uncertain — metonymic for their entire professional expertise. The implication is that other investors failed to sense future value and passed on opportunity. Prominent angel investor Jason Calacanis, who was an early investor in Uber, among others, explains in his memoir that he is "willing to take a chance on companies…when almost everyone else has said no" (2017, p.12, emph. added). So the thrill of natality is linked to wielding the power of redemption — a power which is bivalent - both giving and supportive, but also which establishes hierarchy between investor and entrepreneur.

If the activity of selecting startups is semiotically encoded as professional virtue, then we can characterize how investors do this work as divining the future. Here I follow Laura Bear (2015), who described how Indian liberalization policies pressure the Kolkata Port's mid-level bureaucrats to proactively raise revenue. To attract stimulate business from shipping entrepreneurs, these bureaucrats conjure religious and mystical signs to auger developments relevant to port commerce. Such "capitalist divination," Bear argues, equally describes what Wall Street and central bankers do — they too "reveal hidden realities and combine disconnected signs into truth events." And angel investors, too, divining future states of affairs — not forecasting for other economic actors, but creating a teleology that gives meaning to their acts of natality in the present.

We see something akin to divination in investors' descriptions of how they select startups. Mai Chang, describing her criteria, said that she asks herself "is this an investment that will have a huge market and magnitude? It has to be a product that I foresee will be everywhere, used by everyone." Displaying a similar orientation, a venture capitalist reflected, "When I saw Flipboard, I knew it would be a big deal. I had no idea who the team was. Who the investors were. Who else was interested. In fact I was the first external person to see it that I know of" (Bryce dot VC, 2010). Mai and Robert are doing more than "predicting" or "speculating." By comparing such financial activity to divination, I mean to convey an affective quality that I felt from her, and from other early-stage investors I spoke with, which is produced by reference to a larger cosmology. Market traders, to be sure, have an "abstract sense" of how markets should move, and "cannot put into words what they have done" (Abolafia 1998, p.75). But predicting the movement of interest rates or commodity prices is, as Abolafia says, "abstract," whereas

assessing a startup for capacity to grow by orders of magnitude in five years (see chapter 3) is to call on one's intuition about the intangible capacities of other human beings and about large-scale societal trends. And it is to allow oneself, consciously or not, to feel something external to the market that can be backed up neither empirically nor statistically, and then meld that feeling to a financial rationale.

**The Lean Startup Methodology**

"Lean Startup" is a business methodology that establishes its own internal goods. It provides an operating procedure that many startups follow as they attempt to develop a commercially successful product without expending money and time on a speculative prototype that may flop. The technique, and the fact of its wide circulation, was invoked succinctly at an investor training I attended. "Everybody here's heard of The Lean Startup, right? You don't have to have read the book to understand the concept: don't build it unless you understand what the market wants; go out and test the market." Lean Startup principles are inscribed in the operating expectations of startup incubators globally (Haines 2015). They form the backbone of the curriculum at I-Corps, the NSF-funded entrepreneurship training program…. Lean Startup — or simply "Lean" — is of interest to us in insofar as it signifies a powerful ethical content of startup investing. It elevates conventional for-profit startup investing into a form of "ethical investing" where people put their capital to use in projects they hope will achieve social ends in addition to financial gain.

Traditional corporate research and development departments operated in insular labs and invested heavily to develop new products which sometimes turned out to be commercial failures. As a product development methodology, Lean is the antithesis of that model. The goal is to discern iteratively how to configure a product that will sell, and to never invest money and time

in something that customers don't like. As one of its main advocates Eric Ries tells it, he developed Lean after working for companies where he helped develop products that no one wanted. He repeated invokes witnessing "waste" as that which inspired his consulting crusade. Ideally, Lean techniques are integrated with financing rounds (see chapter 3). You raise capital, you build additional features, and then, in order to raise further capital, you demonstrate to investors that customers will pay for the product (and simultaneously demonstrate your own virtue as an entrepreneur). The ideas originated with Steve Blank, an entrepreneur who lectured at Stanford's business school, and were codified in an eponymous book by Ries in 2011. Both men had worked as software engineers in Silicon Valley, where they found themselves dissatisfied with the frequent waste of time and money in building products that nobody wanted. They undertook a mission to purge entrepreneurship of the tendency to expend capital on dumb ideas. As Ries put it, "we're trying to create a science of entrepreneurship that will help us to stop wasting people's time" (Reis 2011b). And so Lean becomes a procedure to produces anew the allure of startups to investors.

The historical context of Lean's emergence illustrates ethical aspirations of investors through the revival of an old cultural dichotomy of "real" finance versus speculation (de Goede 2005). We can locate three strands of a genealogy. First, the name "Lean Startup" was derived from 'lean production,' a set of manufacturing techniques dating from the 1980s, and linked to the popularized concept of Toyota's just-in-time production (Holweg 2007). Global trade advocates like Tom Friedman marveled at this social arrangement of labor for flattening the earth and, implicitly, for overcoming inefficiencies of labor unions. Lean Startup embodied these associations. Second, its specific prehistory lies in the software engineering technique Agile,

which dictate that one should program in very tight loops with customer feedback. Lean transformed this software engineering method into a value engineering method, lifting engineers out of their coding trances and orienting them to the market. Third, Lean techniques especially began to resonate with startup actors as a consequence of the market crashes of the 2000s. The resonance of Lean at this conjuncture reveals two pivotal anxieties of the venture capitalists: first, regarding the systemic financial loss which accompanies period deflations of their market value, and second, regarding how they position their own legitimacy as financial actors by contributing to the 'real' economy. One investor I spoke to, Greg Horowitt, recalled its rise following the 2008 "downturn" in the investment market, as an interviewee put it: "when capital becomes scarce, you look to become more capital efficient." But its ethical stakes are more significant than capital efficiency, evident in relation to the 2001 crash.

While the 2008 cash triggered a loss of so-called risk appetite among global investors, the 2001 crash, though less systemic, represented a post-lapsarian loss of euphoria following the 'new' economy collective dream. Jason Calacanis, the widely-known angel investor, recalled this decade "the first bubble — [he checks himself, having himself profited wildly] — or the first wave, you could say — there was tons of money being poured into silly projects, so you'd get literally $100 million behind something that just made no sense - had no chance of ever making that kind of money back" (Calacanis 2013). The first wave of the commercial internet, accompanied by Alan Greenspan's announcements of alleged structural transformations — new rules of economic growth based in new digital efficiencies, led to foolish investments in tech companies who, lacking sales revenue, promoted "business models" which recovered expenditures not through revenue, but by raising more money from investors (Feng et al 2001).

Pets.com was a favored laughing-stock of journalistic accounts like John Cassidy's 2002 dot.con: How America Lost Its Mind and Money in the Internet Era. The 2001 crash event, traumatic for the self-images of a generation of venture investors, left a hole to be filled by the sobriety of Lean. As a practical business heuristic, Lean claims to de-risk startup investments, but it also assures venture capitalists and angel investors that they are investing in something real, not a gold rush. Investors' proximity to the performance of Lean methods convinces them that they are not falling into a herd mentality or "FOMO", nor that they are falling for an entrepreneur's folly. This sobriety counterbalances any fears that may arise for investors that their activity is, in fact, mere "gambling" or "philanthropy", anchoring startup investing it as a valid form of finance.

Investors did not create the Lean method; entrepreneurs did. But investors encounter it inscribed in the business plan, vouched for during pitches, and as practiced over the course of an investment relationship. And it signifies for them in crucial ways. At the accelerator Connect, Hansol, the 25 year old robotics education startup founder, was updating his mentors as he would investors. When he mentioned that his video content was currently hosted by third-party platform Udemy, the mentor registered surprise. Wasn't Robolink supposed to sell a proprietary service? Hansol answered:

> "Yes, we thought we'd put everything our platform, but as we talk to educators, we've seen challenges. So, before we build a full SAAS model [i.e. proprietary], we put it on Udemy first, to check for traction on this premium content. We made something quick, to see if there's validation. If it works we'll take further actions; if it doesn't work it's better to fail fast."

Note how he reproduced the language of Lean with fluidity. The three mentors at the table nodded their approval. Lean is a tool of market semiotics, a way of representing to investors the promise of a successful startup. It signals responsibility as a counterpoint to risk. According to

Ries (2011b), Lean aimed to "put the practice of entrepreneurship on more rigorous footing". To do so, it prescribes the use of quotidian metrics to track how customers respond to iterations of product design. These metrics, advocates imagine, also provide a standard by which investors can compare different startups, adding "rigor" to what Shapin (2008, p.283) described as the "folksy heuristics" used by investors.

**An empirical epistemology of the market**

Lean's methodology amounts to an ethical stance. First, it prescribes a savvy attentiveness to customers rooted in a "para-ethnographic" method. I take this term from anthropologists Holmes and Marcus (2006) who describe how central banks, when setting monetary policy, supplement macroeconomic models with qualitative reports drawn from widely scattered informants. In the present study, it looks like this: a successful entrepreneur in San Diego narrated the saga of his startup in a Linkedin post. The company had developed an AI technology to locate correlations in medical literature, but found neither academics nor health insurance companies willing to pay for the first version of the service. The startup faltered. To discover where to "pivot," they followed prescriptions of Lean. "My partner Sanjit interviewed hundreds of potential customers and discovered dozens of use cases that were far beyond our imaginations. Our technical lead Sean watched dozens of users interact with DeepFind and discovered ways to make machine learning really easy to use. Our CTO met with beta testers to observe how they worked. Most importantly, he learned why the status quo technologies worked so well with the customers we wanted to pursue" (Hyde 2014). In other words, to follow Lean Startup is to enact a quasi-scientific methodology. Lean calls it "experimenting." In other words, a technical blueprint does not suffice for entrepreneurs to receive financing; depending on the social and racial hierarchies in which they operate, they must attain epistemic credibility as well (Mukerji 2009, ch. 3).

Finally, as I argue in chapter 5, the investors, as audience for this performance of the pitch, get interpellated into its field. In practice, Lean Startup exceeds its intended purpose of disciplining entrepreneurship, and does the ideological work of allowing investors to see themselves as doing finance grounded in the real — in a proven "market" rather than an entrepreneur's whimsy.

Lean Startup is therefore an exemplary device for sensing and materializing the truth of the market. A properly liberal society allows individuals to pursue their own versions of the good. By extension, preferences expressed on the market are sacrosanct. The claim of startups who follow the Lean method is: we're letting people tell us what they want. Just as investment bankers express moral preference for doing "fundamental" valuations over short-term market trading (Ortiz 2014), Lean methodology, figures startup investing as ethical because through its procedures to test, sense, and respond to the market.

Investors conscript the Lean doctrine to classify what counts as a startup, and to position themselves in an ethical hierarchy of finance: they fund nascent entities and iteratively developed products, while others those who deploy a torrent of capital without regard for empirical market heuristics. In 2020, a new media company producing short-form video for smartphones launched with $1.8 billion in financing. A widely read tech newsletter offered this comment: "This is a total un-Silicon Valley way to do things - betting billions before any contact with the customer, and going for a huge fully-formed product rather than experimenting and iterating" (Evans 2020). Quibi and investors — who included several conventional VC firms as well as Time Warner, Sony, and Disney — sunk tremendous capital into a product without submitting it to market veridiction. The press glossed Quibi with ideological commonplaces: the company

“looked to revolutionize how people consume entertainment” (Mullin 2020). But Evans dismissed any relevance to startup logic because, he says, though Quibi depends on streaming, cell bandwidth, and a slick app interface, it’s not “tech” company proper — but an entertainment company. Therefore “the questions that determine [its] success are all Los Angeles questions, not Silicon Valley questions.” These two epicenters of their respective industries are figured as having a divining power of a different order than the empirical, market-tested, sober strategy. It creates an ethical ordering between dropping a new thing on the market (and bearing significant debt), and figuring out what people (or “the market”) really want.

In other words, it’s ethical to do Lean Startup. It doesn’t waste investors’ capital, and it doesn’t presume to know what people want. Of course, most startups fail even when applying Lean principles, but — implicit in Evans rationale — at least they’ve tried The fact that Quibi is an entertainment company is not, ultimately, what makes the crucial distinction. What perturbed Evans was the hubris of financing such a large-scale venture without first submitting it to the veredicting — and humbling — power of the market. As it happened, Quibi, which had installed prominent tech executive Meg Whitman (formerly of HP) as CEO, shut down six months after its launch.

And, from its open letter to employees following its decision to shut: “We opened the door to the most creative and imaginative minds in Hollywood to innovate from script to screen….We challenged engineers to build a mobile platform that enabled a new form of storytelling…. And yet, Quibi is not succeeding. Likely…because the idea itself wasn’t strong enough to justify a standalone streaming service.” This subtext of this statement is a recognition of Evans critique.

Chapter 4 of this dissertation argues that relationships matter more than money, particularly in unwinding a failed startup. By taking product development at a measured pace, Lean de-risks investment. But more importantly, it preserves norms of propriety between investors and entrepreneurs, and counterbalances the sting of financial loss.

**The critique of Lean: disarming innovation?**

An apparent contradiction lingers in the background. Innovation, in its popular Euro-American imaginary, creates a rupture with with what exists in order to offer something new. But the Lean method, by preemptively verifying demand for a new product by iterative testing on the market, seems to cater to status quo expectations and thus only to reproduce what already exists.

Steve Jobs famously, perhaps mythically, claimed to possess an aesthetic sense superior to any knowledge market research might yield, and so dictated how products would be designed. Lean, in contrast, represents the liberal virtue meeting the market where it stands. Part of its appeal to investors, therefore, is the nullification of any entrepreneurial fiat. Instead, it makes the market king. Lean's iterative methodology is anti-visionary. Ries upends the norms of startup discourse by emphasizing the role of mundane accounting practice: "measure progress, set up milestones…hold innovators accountable…focus on the boring stuff' — this will "improve entrepreneurial outcomes" (2011, p.9). In this sense, Lean disarms the law-giving visionary entrepreneur — such a subject is not amenable to working together, to sharing control. This matters for angel investors, who involve themselves with the startup's development, through mentorship and friendship (see chapter 4). It's tough to share, even vicariously, in the will of a visionary individual. Yet both sociological analysis (Goldstein 2018) and the reflections of

people I studied note that investors often move to “kill the entrepreneur” and replace them with experienced executives, given that few individuals possess both the gift of vision which initiates a startup, and the techniques of management required to scale it to profitability. but also cf. Fred Wilson - don’t “rip that out” too profitability.[45]

Lean Startup’s “disciplining” of entrepreneurs, then, has a social as well as financial meaning. The methodology holds them accountable to standards of commercial viability, but also reigns in inspired vision which does not answer to other mortals, is not open to quasi-collaboration with investors which, as I’ve argued in ch x. on sociality and mentorship, provides the relational infrastructure that makes angel investing compelling to people. Finally, the goal of iterative design is what Lean calls “getting to product-market fit.” Yet this state is elusive; the startup can always keep altering the design, seeking a bigger market. Importantly, then, Lean methodology organizes activity around a quest, an epic search. And so Lean “gamifies” startup investing, further contributing to its universalizing appeal.

[45] As a famous venture capitalist Fred Wilson (2008) wrote in a blog entry titled “The Human Piece Of The Venture Equation”:

> “I’ve learned that nothing can replace the entrepreneur’s passion and vision for the product and the company. If you rip that out of the company too early, you’ll lose your investment. I think it’s best to wait until the initial product has succeeded in obtaining a critical mass of users and a business model has been developed that works and make sense for the business and is scaling. Then, if its warranted, you can sit down and have the conversation about bringing in experienced management.”

Note that “passion” is defined through an opposition to managerial expertise. (See https://avc.com/2008/08/the-human-piece/)

## CHAPTER 7: DEREGULATION: "DEMOCRATIZING" INVESTMENT?

I have proposed that the relevance of angel investing for social research lies, in part, in its ongoing tendency to become more widespread. It has grown, I have argued, by virtue of the social and ethical experiences it offers participants, rather than due to any centralized program of expansion. In the chapters above, I have shown how people discover investing and learn to practice alongside their friends in local angel groups. This is a lateral and decentralized process, quite different from the deliberate planning entailed by new communications infrastructure. It is also free of the normative connotations of "democratization," which implies a previously excluded population gaining new rights. But recently, a top-down project to popularize angel investment has emerged. Federal securities legislation has sponsored angel investing's expansion via online platforms, and encouraged its uptake among new segments of the population, under the mantle of "democratizing investment." The present chapter explores the origins and consequences of this undertaking.

The people who have appeared in this dissertation thus far have all been wealthy. This is not a coincidence. For much of the 20th century, the legal right to invest in private companies in has been limited to those with financial means. This restriction began in the aftermath of the 1929 stock market crash, when the U.S. Congress passed The Securities Act of 1933. This law was intended to protect non-professional or "retail" investors from financial ruin. Persisting into the twenty-first century, the law had the effect of barring the middle classes from investing in entrepreneur-led technology startups, which had become a touchstone of the American imaginary of wealth creation. Then, in 2012, this securities regulation was rolled back. Congress passed the JOBS Act, legalizing equity "crowdfunding" platforms which allowed anyone, wealthy or not, to

pool capital and fund an entrepreneur via online intermediaries. Accompanying rhetoric heralded a "democratizing" of angel investment and the "disruption" of entrenched venture capitalists.

For the remainder of this chapter, I will refer to as "classical" angel investing all I have hitherto described, differentiating it from online investing or "equity crowdfunding." I make claims about crowdfunding in general, although I present evidence mostly from one platform, AngelList, which I take as exemplary of the trend. Amidst other crowdfunding platforms — StartEngine, Republic, and WeFunder — AngelList maintains the highest profile, having hosted early fundraising campaigns for Uber and AirBnB, and possessing a doctrine-wielding and vocal CEO.

I begin in the next section by examining how the 2012 JOBS Act provoked controversy between advocates of financial protection and financial liberty, when it deregulated the long-standing securities law governing classical angel investing. In the third section, I examine the new equity crowdfunding platforms which the JOBS Act legalized, approaching them as representational technology and as infrastructure. I also analyze their discursive strategies for hailing investors, which made explicit the sorts of ethical appeals of classical angel investing. The fourth section traces a development whereby these platforms retracted their democratic intent, and introduced forms of exclusivity. The outcome, I show, is that this online form of finance reproduced offline norms and accentuated hierarchies existing there. In highlighting this stratified outcome, my purpose is not to endorse crowdfunding advocates' initial vision of enabling the many to invest in startups. Rather, I point to the internal contradictions which arise in attempting to generalize this privileged form of contemporary investment. Nor do I accuse the

boosters of "democratizing" investment of false rhetoric. Instead, I wish to show how an ideology of popular investment can become compromised by finance's sociotechnical organization.

**Who gets to invest? The JOBS Act and legalizing crowdfunding**

American securities law is structured by a core antagonism between financial liberty and protection (Rogers, 2015, p.350). For nearly eighty years, the selling and buying of corporate stock was governed by the Securities Act of 1933. The law, drafted in response to the 1929 stock market crash, aimed to stabilize markets and protect investors (Carruthers, 2012). It instituted a distinction between public and private companies; the former were permitted to sell stock to the general public, but faced significant disclosure and reporting requirements. Private companies, while less stringently regulated, could make offerings of stock only to the wealthy — those who met the "accredited investor" designation, defined as earning $250k annually and holding $1m in assets. In 2015, this amounted to 3% of the American population. The 1933 Act, passed in an atmosphere of moralizing critique of financial speculation (De Goede, 2005), thus effectively barred the majority of Americans from investing in privately-held companies. Three generations later, at a moment of cultural valorization of startup entrepreneurship, this regulation generated unforeseen resentment: it made technology startups, a key species of private corporation, off-limits to most investors.

To further safeguard the non-accredited public from risky investing schemes, the 1933 Securities Act prohibited the advertising of equity offers. (Imagine the consequences, for example, if companies could sell stock on television while promising to become "the next Facebook.") This prohibition shaped the embodied sociality of classical angel investing, with

future ramifications for crowdfunding. It required anyone selling securities to know that they were soliciting accredited investors. An efficient way to comply was to privately convene a roomful of accredited investors, and make a securities offering. (This was the genesis of the angel investor groups like Tech Coast Angels and Keiretsu.) The SEC subsequently interpreted these requirements, originally targeted at print and broadcast advertising and requiring face-to-face dealing, to rule out investing via the internet as well. Thus the medium which promised to rendered geography and gatekeepers irrelevant was shackled (some felt) by paternalistic regulations.

Why, then, did equity crowdfunding appear at the particular time that it did? Was the move to "democratize" angel investment a consequence of developments in technology, in politics, or in investing itself? As indicated earlier, the history of the expansion of financial markets has been underpinned by developments in communications. And while platforms that organized equity crowdfunding indeed spoke of using the internet to transform investment, in fact they provided the straightforward service of matching buyers and sellers on a website — this technology had been commercialized more than two decades earlier by marketplace websites. And the generic crowdfunding campaign — referred to as "rewards" or "donation" crowdfunding — had been popularized as a financial device a full five years earlier by sites like Kickstarter. Equity crowdfunding's rise must thus be attributed to favors beyond the technological.

Securities deregulation was the legal precondition for equity crowdfunding's emergence, and it was bound up with politics. Whereas financial advocacy groups have long promoted "access to credit as of right" to build working class wealth and stability through e.g. homeownership

(Langley 2008, p. 14), deregulating private equity represented a new right for the middle classes with a distinct flavor —the right to invest like venture capitalists, with high risks and high potential rewards.

Thus a populist rhetoric concerning a specific kind exclusion in financial markets preceded the roll-out of equity crowdfunding. It emanated largely from industry advocates and politicians, rather than from the excluded themselves. An accredited investor I interviewed recalled that, prior to deregulation, "we had this weird phenomenon — if you weren't wealthy, you were forbidden by law to have the same investment opportunity that accrediteds had." Wealthy himself, he gave a genuinely-felt endorsement of the universal right to financial liberty.

This situation was made more acute by the popular media, which had for two decades reported on high profile IPOs beginning with biotech firm Genentech and later Netscape (cite Dot.con). These had made venture capital firms and their wealthy clients fabulously wealthy, but that in itself wasn't surprising. What made these financings notable to the public imagination, perhaps, was the way VCs took private startups which only they had access to, and in a mere few years, flipped them to public markets to realize orders-of-magnitude gains. As VC Ben Horowitz frankly stated in a media interview:

"people complain that companies remain private for too long…then all the profits are going to Sand Hill Road [address of top VC firms] as opposed to the general public….It takes the investing opportunity away from, you know, regular people and puts it all in the hands of the

elite….I think we have to close the gap between what it means to be private and what it means to be public." (Horowitz 2019).[46]

Equity crowdfunding promised to let average investors "get in on the ground floor of the next Google or Facebook" — a phrase connoting the right to financial inclusion, invoked by The Wall Street Journal (Brown 2016). The founders of a Los Angeles crowdfunding company that promotes pre-IPO startups added a righteous spin to this promise. They point out that in recent high-profile IPOs, while the companies' customers enthusiastically followed these financial unfoldings in the media, they were unable to participate themselves as investors:

> "We got sick and tired of seeing companies that we all know and love and are customers of – Uber, Lyft, Sonos, Beyond Meat, Aribnb, DoorDash, Pinterest – going public, but where we were locked out," one founder said (Blake 2021, emph. added).

And elsewhere:

> "Retail investors deserve an opportunity to gain ownership in the companies whose growth they are largely responsible for." (Crush 2021, emph. added).

Whatever rhetorical appeals statements like this had, they were clearly one-sided. They did not acknowledge the risk that was involved in such investments, the fact that for every familiar company's IPO mentioned, hundreds never made it to that stage.

So when the 1933 Securities Act was repealed in the 21st century, the surrounding controversy illustrated tensions inherent in financial democratization. The argument against financial exclusion did not, in fact, drive the initial advocates of the JOBS Act. Rather, during the post-

[46] Horowitz is speaking here to a more recent and particular development with inflated private markets. The problem, as he diagnosed it, lay not with VCs like himself, but with recent government interventions including the Sarbanes Oxley Act, which, by stiffening disclosure requirements for IPOs, raised the cost of going public. This put pressure on startups to remain private longer, until they were established enough to shoulder such costs — but during this time, they took on more private capital — cheap under current conditions — and so by the time they were ready to IPO, their growth had slowed, leaving little opportunity for further gain by new public investors.

2008 recession a group of Silicon Valley actors, believing that a market in startup financing for retail investors would generate macroeconomic stimulus[47], lobbied Congress to roll back securities regulation. Multiple bills were introduced, generating an anxious public response. "There's this populist notion that we have to let everyone invest in these new startup companies" said the director of the Consumer Federation of America to the The Wall Street Journal, "but the problem is most people can't afford to take that risk" (Rusli, 2015). Also registering opposition was the AFL-CIO, the Association of State Securities Regulators, and current and former chairpersons of the SEC, all skeptical of the rollback of requirements on corporate financial disclosure. Regarding the provision allowing securities offerings (investment opportunities) to be advertised, as NYT puts it, "regulators contend it will mainly benefit the sale of worthless securities by bucket-shop brokerage firms." Finally the American Association of Retired Persons was concerned that the JOBS Act would make the elderly easier targets of securities fraud (Wyatt, 2012).[48] Proponents included, unsurprisingly, stock exchanges, VC trade associations, startups, and investment banks — who claimed the JOBS Act would facilitate raising capital and thus hiring more workers.

In 2012, Congress passed the JOBS Act, allowing the general public to invest in private companies via platform intermediaries. To accommodate the opposition, it created a two-tiered

[47] Crowdfunding thus exemplifies the 30-year trend of neoliberalism to "manage crises by turning them into opportunities for private entrepreneurial risk-taking, deepening the reorganization of society as a market" (Tyfield, 2017, p. 36). Meanwhile, there is little hard social science demonstrating a link between entrepreneurship and job creation, contrary to the acronym JOBS (Jumpstart Our Business) Act. Critical management scholar Peter Armstrong wrote in 2001 of "a BBC interviewer [who] asked Sir Keith Joseph (then Trade and Indus- try Secretary and plain Keith) how the encouragement of entrepreneurship would arrest the growth in unemployment. Plainly under some pressure, Sir Keith's reply was that it was not for you or I to understand how entrepreneurs create jobs. This was a mysterious process not to be apprehended by people who were not themselves entrepreneurs" (Armstrong 2001, p.534).

[48] "The ideal fraud victim is an older male conservative who sees wealth as a success measure, prefers unregulated investments, usually invests remotely, and makes frequent trades. He will likely be contacted by phone, email or regular mail (Gaetano 2018).

structure for platforms. The upper tier, referred to as "Title II platforms," would be open only to accredited (wealthy) investors. AngelList, which I focus on, is a Title II platform. The lower tier, "Regulation Crowdfunding (CF) platforms," invited participation by all, but capped the amount individuals could invest. Republic, which I turn to in the final two sections, is a Regulation CF platform. Whereas Title II only transposed an existing practice onto the internet, Regulation CF, in a breathless press account, "aim[ed] to build out entirely new capital markets infrastructure" (Eakin 2015).

Yet the SEC, administering the new law, hesitated to clear Regulation CF platforms for operation. One contested legal term crystalized the issue of representation in "democratized" finance. This was the Special Purpose Vehicle (SPV), an instrument which consolidates many individual investors into a single financial entity which buys startup shares. SPVs matter for later-stage fundraising, because institutional VCs are often deterred by companies with too many shareholders. This situation, metonymically termed a "messy cap [capitalization] table," complicates corporate governance and hampers VCs' control of the startup. The SEC proposed banning SPVs from Regulation CF platforms, concerned that small investors, once consolidated, would lose the governance rights that ought to accompany equity ownership.[49] Yet without SPVs to "clean up" cap tables, some crowdfunding advocates predicted, then the most promising startups would raise only through Title II (accredited) platforms — where SPVs are permitted — leaving Regulation CF platforms with unambitious startups more likely to fail. Inveighing on his blog, the CEO of non-accredit platform WeFunder called this outcome "ludicrous." "The rich will be able to invest in the next Zenefits [a now-lucrative crowdfunded startup]," whereas

[49] Legal scholar Heminway (2012) playfully labels this 'unequity,' because Reg CF investors get different terms than others.

“normal Americans” will be left to invest “in coffee shops.” Another proposed rule would have capped startup fundraising at $1m. That limit, many believed, would dissuade promising startups from raising capital on crowdfunding platforms altogether. In a letter to the SEC, WeFunder’s CEO warned that with such a limit, “only companies who are rejected by professional investors [VCs] – and have no other option - will raise funds from the crowd” (Tommarello, 2015).

In summary, the move to “democratize” investment engendered protections for the popular investors which simultaneously threatened to reinscribe the division between them and the wealthy. The issue was fraught; it took the SEC four years after the JOBS Act passed Congress to clear Regulation CF (non-accredited) platforms for operation. In the final rules, individuals who make under $100k may invest only 5% of their income annually — hardly a path to VC-style accumulation. But in any event, it wasn’t yet clear that the non-wealthy wanted to invest in risky startups. We will next see how crowdfunding platforms strove, and largely failed, to attract participants.

### The crowdfunding platform as visual technology and infrastructure

Visual representations of financial markets have become notoriously complex. Professional traders configure multiple computer monitors with dozens of widgets and scopes, and the “flickering, colored numbers, [the] continuously moving…brave new world” of daytrading screens takes amateurs months to learn (Preda, 2017, p. 20; see also Knorr-Cetina & Bruegger, 2002; Stark, 2011). Crowdfunding platforms, in contrast, visualize the market in an entirely different modality — one of qualitative, rather than quantitative visual representations. And

while we conventionally speak of de-skilling as a transformation of manual labor (see Braverman 1974), crowdfunding platforms de-skill startup investing vis a vis its classical, embodied incarnation, replacing the process of developing social relationships a graphical interface of ready-made investment opportunities.

AngelList's website design invokes familiar interaction patterns and borrows aesthetics from e-commerce and social media interfaces. The user browsing prospective investments sees a cornucopia of stylish logos: disruption with a friendly face, scrolling endlessly down on a background of white. On the non-accredited platform StartEngine, a green "Invest Now" button[50] — like Amazon's "Buy Now" — glows on every startup's offering page. By presenting investments in the idiom of consumerism, platforms make the practice familiar, and encourage its uptake. Like shopping websites, AngelList allows users to filter startups seeking funding. Categories include sector (such as consumer or medical), rounds of capital raised, and "Bonus points" — offering attributes such as "Blockchain," "India," and "Minority Founders." This capacity to dial in one's investment preferences contrasts with local angel groups, where choice is limited to the several entrepreneurs who pitch the monthly meeting. Meanwhile, short videos replace the in-person pitch. "People love the videos," Rick told me. Rick is the classical angel investor I have previously introduced, and is now active on AngelList. "I've sat for four hours straight and listened to them pitch," he said. Online, startup investing is thus subsumed under the semiotics of entertainment. Evaluating pitches becomes understandable as a form of "binge watching," the self-indulgent mode of spectatorship done from the comfort of one's couch.

[50] The fine print under it reads "this investment is speculative, illiquid, and involves a high degree of risk including the possible loss of your entire investment."

AngelList also exhibits traits of a social network site, as it attempts to scaffold the sociality crucial to early-stage investing. Each investor is represented by a cleanly-designed profile page, where they normatively display a headshot and list their professional experience.  Below, a collection of startups' logos indicates the investments they have made the platform.  This format imbues the "user experience" with the aspirational and self-regarding tendencies of social media. However, unlike most social networks, the site offers no message boards or chat features. In 1999, observers of the new online commerce, anticipating a trust deficit between distant buyers and sellers, interpreted eBay's choice to supplement their auctions with discussion forums as a way to personalize anonymous exchange and "produce trust" (Kollock 1999). Profile pages allow reputational dynamics to emerge, for example, as individuals accrue successful investments, but no channels for discourse.

Visibly, the platform connects transacting parties; invisibly, it facilitates legal and accounting paperwork, which in conventional (off-line) angel investing was esoteric and a barrier to participation.  AngelList "Docs" provides a suite of standardized contract templates, required for all transactions.  This work to "invisibly support tasks" (Star & Ruhleder, 1996) reduces delays, and cuts startups' legal fees by approximately $20k (Rao, 2012). But its significance goes beyond efficiency.  Classically, legal terms were deliberately opaque. Experienced investors sometimes wrote preferential terms into contracts, prioritizing repayment of their equity under adverse conditions, while leaving novice investors' stakes to be depreciated or "diluted." Entrepreneurs, too, sometimes signed away more equity, and ceded more control, than they realized (see Chapter 2). Contractual documents, once standardized, become transparent. Pushing transparency on the market highlighted AngelList's "democratizing" intent.

AngelList also streamlined the SEC filings required for JOBS Act compliance. "The labor can be onerous," Ravikant said of verifying tax returns and credit reports, "and we're automating that and building into AngelList" (Calacanis, 2013). Standardization and automation make it unnecessary to retain a lawyer, lowering the barrier to participate. And, insofar as it helps "structure and close deals faster, cheaper, and with more transparency," according to the company handling this back-office work for AngelList (Assure, 2019), the platform pulls in more capital, and more entrepreneurs, proliferating the investment practice. During fieldwork at the in-person angel group TCA, I watched one faction of members grow dissatisfied with the slow pace of screening startups, scheduling pitches, and conducting due diligence. They feared that entrepreneurs would shift to raise on platforms instead, where an offering can become "fully subscribed" in days, or, when promoted by a celebrity, raise $350k in 53 minutes (Koetsier, 2013). As a result, TCA now guarantees entrepreneurs an answer in 30 days, down from several months. The temporality of online platforms had reached out to restructure offline practice.

**Interpellating Investor-Subjects**

To entrepreneurs, the advantage of crowdfunding platforms was obvious: a larger audience of investors, effortlessly reached. But to the majority of American adults who were now, legally, crowd investors in potentia, it was hardly self-evident that they ought to become one. This is unsurprising; from 19th century railroad stock to late 20th century online trading, boosters have understood that popularizing investment entailed not just building financial infrastructures and disseminating techniques, but also shifting individuals' identities (Preda, 2001; Heuman, 2012). The project to form crowdfund investors appealed, first, to social inclusion among financial elites, flipping the hail of Althusser's policeman from accusation to inclusion: not a "Hey you!"

but a “You, too!” (Althusser, 1971/2014). Hitting on both the anxiety of geography and the temporality of “FOMO” (fear of missing out), The Wall Street Journal dangled the populist bait, “You don’t have to be a Silicon Valley venture capitalist to invest in hot new technology startups” (Geron, 2018). This article, running under the headline “How Individuals Can Get a Piece of Startups,” focused on AngelList, hence addressing accredited (wealthy) investors. Republic, a Regulation CF platform for the non-accredited, announced on its website that “Angel investing was previously available to only the wealthiest 3% of the US population.” In thick, friendly Helvetica font, it continued: “With Republic, everyone can invest in private startups for a chance to earn a return” (emphasis added). These appeals, while making tempered references to financial reward, reach deeper into subjectivity, provoking feelings of class belonging.

The hail to investment also works by inviting participation in innovation cultures: investors align themselves with technology startups, mentor entrepreneurs, and take risks for imagined futures. This feature of classical angel investing I have previously described is here made explicit. In Republic’s website copy, an unnamed investor says “This could be a story I tell my future kids one day — hey, we were there in the beginning.” Crowdfund investors are encouraged to chose startups which elicit an affective connection. At the JOBS Act signing ceremony, President Obama announced, "For the first time, ordinary Americans will be able to go online and invest in entrepreneurs that they believe in” (The White House, 2012, emphasis added). These injunctions de-center financial calculation. “For me,” a crowdfund investor wrote in a Reddit discussion, “it was money that I mentally wrote off…..I just invested in ideas that I found really cool and worth supporting” (Sleuthi, 2017). Conventional stock market investors who pick stocks based on their consumer identities (Harrington, 2008) stand in a more distant

relationship to a mature corporation. Finally, because value can only be extracted through equity appreciation after company growth, startup shareholders must stick around for years — a commitment not demanded in liquid stock markets. Republic's website references this temporality obliquely: "join an exciting journey…fund the companies you want to see succeed in the future."

**Resistance to an inclusive crowdfunding market**

We must now fill in some details of this story which I omitted for clarity, yet which subtly shift the power balance in this narrative. In my account above of equity crowdfunding's emergence, I identified, first, a discourse of populist exclusion from venture capital gains, and second, the claim that deregulating investment would create jobs. But additionally, enduring hierarchies within the investment sector further conditioned the rise of equity crowdfunding — which we must now turn to.

Circa 2013, peer-to-peer platform businesses were claiming to cut out entrenched middlemen across many industries. Venture capital itself, which long operated through "fraternal and internecine relations" (Gerken, 2014, p. 9), was poised to be disrupted as well. Aspiring VCs have been on the rise as more startup IPOs and acquisitions are generating "freshly-minted high net worth individuals ('exited entrepreneurs')" (Angel Resource Institute, 2019, p.24). These entrepreneurs often become angel investors, reinvesting their gains into new startups (see chapter on "giving back"). But doing so has brought them into conflict with insular VC networks. This has fomented resentment, expressed in a story recounted publicly by Naval Ravikant who, prior to founding AngelList, was himself an entrepreneur-cum-angel investor. In a public interview, he recounted a 2010 coffee meeting with a peer who invited him to participate in a "hot deal," and

said “we should move on it” before others were tipped off. It struck Ravikant that angel investment, long characterized by informality and camaraderie, was starting to mimic venture capital’s exclusivity. Ravikant found this distasteful, and reflected: “I was like, ‘Really, at this point, it still works like that? You can use proprietary information to get an advantage? That doesn’t make sense.’ So I talked to Nivi [AngelList cofounder] — I said ‘I know a bunch of investors, I do deals, so lemmie take my deal flow and start sharing it’” (Calacanis, 2013). They did, first by email list, and soon after launched the AngelList website[51]. This dissatisfaction with venture capital’s exclusivity shaped crowdfunding’s development.[52]

Yet five years following the passage of the JOBS Act, crowdfunding had not disrupted the venture capital industry as its boosters had imagined. In 2015, The Wall Street Journal profiled a prominent AngelList investor under the headline “VC Club gets less exclusive” (Rusli, 2015). Yet by 2018, the Journal could pronounce that “Challengers to VC Model Find It Easier Said Than Done” (Chernova, 2018). According to the narrative in the financial press, AngelList’s launch had made venture capitalists nervous because it threatened their exclusive access to deals — maintained through professional networks of camaraderie and reciprocity. The prospect of an open platform, where social capital and geographic proximity were not required to participate, portended their meritocratic disruption. But only as unrealistic simplification does industry

[51] Two additional factors in equity crowdfunding’s rise are beyond the scope of this article. First is the proliferation on the demand side. Around 2010, commentators noted a “Cambrian explosion” of startups, invoking the prehistoric period of proliferating animal life (Schonfeld, 2011). A common narrative attributed this to the falling cost of launching a technology startup — from $5m in the 1990s to $50k in the 2010s — enabled by open source software and cheap cloud hosting. Second is the rise of the 1%, with disposable capital for speculative ventures.

[52] While most equity crowdfunding platforms appeared immediately following the 2012 deregulation, AngelList was founded before JOBS Act, existing in a legal grey zone. Ravikant himself would subsequently lobby Congress to re-write securities regulation

"disruption" lead to quick obsolescence of incumbents. Rather, the question of who can participate in popular finance admits of a range of answers: a few, many, or all.

In fact, AngelList founder Ravikant never targeted a broad demos for financial inclusion. The platform's ideal users were, rather, successful entrepreneurs and other wealthy individuals who had long felt excluded by the VCs atop Silicon Valley's power structure — The Kingmakers, as a popular history eponymously mythologized them (Southwick, 2001). Contingent events of Ravikant's personal history shed light on this hierarchy. During the 1990s dot-com bubble, Ravikant launched a product-rating startup called Epinions. The controlling VCs, to facilitate a sale of the company, withheld information that lowered its valuation, and cut Ravikant out of all profit.[53] Then, in an highly unusual upsetting of Silicon Valley norms, Ravikant sued his investors, and won (Rivlin, 2005). As an acquaintance later reflected, "[everyone] assumed that Ravikant had made a dangerous gamble with his reputation and connections by suing…[and might] never work again" (Loizos, 2010). Ravikant was already wealthy; he seems to have been motivated by status resentment. He saw the lawsuit as an encounter of value-creating entrepreneurs demanding justice from powerful venture capitalists, a moralized economic conflict between innovators and rentiers. Ravikant's class background likely sensitized him to this hierarchy. He emigrated from India as a child, and spent his youth moving frequently between apartments in Queens, New York. In Silicon Valley, despite entrepreneurial success, he felt disregarded by the VC elite. Ironically, venture capitalists were themselves disregarded by the east coast financial establishment they left behind to fund the nascent

[53] In order to for the sale to go through - which offered a lifeline for the then-unprofitable Epinions, and the only way for the investors to recoup their capital - the VCs allegedly manipulated Ravikant to relinquish his shares, making the deal more attractive for the buyer. Navikant claims they didn't disclose to him a partnership Epinions had recently established with Google, which would have boosted the value of the company. (Epinions 2005)

semiconductor industry in the 1960s, and this foundational exclusion informs their own identity myth (Saxenian, 1994, p.30)[54]. In this context, the founding of AngelList represented a campaign of the nouveaux nouveaux riches against the nouveaux riches.[55] As we will see below, the platform did not open up broad popular participation, but rather enabled a new set of wealthy angel investors to consolidate power adjacent to the VC establishment.

Leads, Syndicates, and the closing of the open platform

Immediately following the passage of the JOBS Act, Title II crowdfunding platforms drew wealthy individuals from across the country for whom startup investing was new. Yet many of them quickly lost money, and did not return (Rusli, 2015). A common explanation would propose that these crowdfund investors lacked the knowledge and discipline to follow a portfolio approach, whereby they make many bets and expecting most to fail — and this is partly true. "It turns out it's hard do to this well," said Vishen, the director of angel group ACT. "A lot of people enter angel purgatory…they make few investments thinking they'll have a big exit, and they don't. They realize they've put $500k into private marketplace that's totally illiquid - and they walk away and say 'that was a mistake!'" To be sure, these atomized investors lacked networks of trust to exchange information and build resilience — which exist both in classical angel investing, and among successful small stock market investors who remain in markets after crashes (Schimank 2011). And yet new popular investors' quick attrition from AngelList cannot

[54] citing Tom Wolff, "Tinkerings of Robert Noyce, *Esquire* Dec. 1983):
"A number [of early Silicon Valley figures] had grown up in small towns in the Midwest and shared a distrust for established East Coast institutions and attitudes. They repeatedly expressed opposition to 'established' or 'old-line' industry and the "Eastern Establishment"

[55] Both Title II and Regulation CF platforms accrue additional moral authority by foregoing the management fees charged by VC firms (between 2% and 5%, even if they lose money). Platforms take a modest 5% of profits compared to VC's standard 20%.

be understood apart from simultaneous changes the platform made to its transparency structure, which prevented novices from interacting with the experienced and successful.

Initially, AngelList exemplified the popularizing intent of securities deregulation: everyone could browse offerings, and accrediteds could invest in whichever startups they fancied. But within two years, the open platform began to close. First, the "lead" position was introduced for select platform users. Leads act like investment fund managers writ small: they scout promising startups, conduct due diligence, and make investments available to those in their "syndicate," or group of followers they've selected, taking 15% of any profits (AngelList itself takes an additional 5%). A self-help guru and a Google Ventures partner were among the first leads on the platform. Reversing AngelList's founding principles, investments brought by leads to the platform became invisible to the browsing public. Crowd investors must apply to join a syndicate; acceptance depends on the whim of the lead, who, I was told, will query their LinkedIn profile and assess professional status.

Platform owners took a further step to consolidate AngelList into a restricted-access market. "There's a secret part of a platform," Robb, an investor close to AngelList's founders, told me. "You have to be invited in. I forget the name — but if you don't have access, you're not seeing the real deal flow. You're just seeing some entrepreneur in Arizona whose company isn't vetted." AngelList's website hints at such a "private deal environment": in addition to its userbase of 20,000 "retail investors," it describes "a small batch of professional investors that invest over $50K per month" — and adds "all investors in this category are under confidentiality agreements." Robb estimates that "small batch" to be 300 investors. "They haven't

democratized investing, but made it a VIP club," he said of AngelList. The platform originally encouraged users to message one another and make "introductions" like in classical angel investing, but top investors were soon inundated. "They didn't want all these notifications from third-tier investors. It was annoying for them, right? They just wanted to do deals with their private networks." Robb is himself a geographic outsider, based in Utah, and reflected, "It's not really fair to the rest of the ecosystem. They're taking the top 10 percent of the deals." For him, a bifurcation of the crowd amounts to a distortion of the market. The concern echos WeFunder CEO Tommarello's above — that small investors would be left with only "coffee shops" to invest in. For Tommarello, the fear was SEC interference, while for Robb, it was platform owners' fiat.

All money is not equal in startup investing. On platform, entrepreneurs learned to discriminate against novice investors. Influential startup incubator Y-Combinator advised entrepreneurs against raising capital on Regulation CF (non-accredited) platforms; amateurs, they warned, might grow impatient and not "be there" to reinvest when the startup needs more capital. Even on AngelList, they continued, "we recommend that founders be wary of certain syndicates….Consider how much capital they've raised in the past, and who the members are" (Friedman, 2016). Equity crowdfunding thus rehabilitated an old distinction from the professional venture capital sector — the sector that it purported to "disrupt" — between "smart" and "dumb" money. "Smart money" investors provide strategy and networking to aid growth — i.e. "value" beyond money capital (Goldstein 2018, p.99). The "dumb money" label conventionally denoted outsider institutional investors like banks without expertise in startups.

Now, “dumb money” came to stigmatize novice crowd investors too — precisely those who securities deregulation intended to benefit.

Transposing existing networks and instruments onto the platform

Rather than nurturing new investors, AngelList has provided a supplementary medium for existing offline networks of finance to expand. Activity on the platform maps onto elite cities with robust startup investing communities (like San Diego), mirroring the way deregulation and interconnection of global capital markets consolidated power in just a few financial centers (Sassen, 2005, p.24). Gender participation on AngelList also mirrors offline bias; as of 2019, three of the top fifty most active investors, listed publicly, are women. And an aptitude for monetizing one’s social network has further advanced the standing of incumbents. Gil Penchina, among the most successful deal leads, is a former Ebay executive and CEO of Wikipedia’s for-profit subsidiary; upon assuming the latter role, a board member commented “Gil's experience…gives him a unique understanding of the key ingredients for online community success” (Wikia, 2006). Indeed: Penchina drew on those professional connections to bring desirable startups to the platform for syndicate members to invest (Rusli, 2015). He was among the mostly white men with backgrounds in tech — but not professional investing — who consolidated power as a deal lead.

Embodied social ritual has stubbornly asserted its hold as startup investment expanded onto digital media. Rick, the San Diego classical angel investor we have met before, joined three AngelList syndicates operated by leads in San Francisco, six hundred miles to the north. Most syndicate members lived there too, and leads hosted regular in-person gatherings. Rick flew up the California coast bi-annually to attend — upending an old ideological pillar of electronic

communication, the death of distance. At these events, syndicate members wore name tags saying "I'm an investor." They consumed pizza and beer, and formed friendships which would embolden them to sink money into always-risky assets.

This hybridity of interactional forms in popular investing has precedents. Harrington (2008) shows that online trading tools helped in-person investment clubs flourish; Preda (2017, ch.3) describes how online traders convene seminars and competitions as the backbone of their practice. In a situated study of a professional arbitrage trading desk, Beunza and Stark (2004) make much of their subjects' reflexivity about the strategic importance of being in a room together and reading each others' body language as each reads his respective screen. The authors invoke what they call "Castells' paradox:" "as more information flows through networked connectivity, the more important become the kinds of interactions grounded in a physical locale" (Beunza and Stark 2004, p.381). None of these analyses, however, consider that the embodied-networked hybridity might be unequally distributed. Arbitrage traders and those in investment clubs will both be advantaged vis a vis others who are atomized behind their screens and solitary in the market. AngelList's hybridity discloses the dimension of access and hierarchy latent in embodiment: in-person socializing constricts the popularization of equity crowdfunding on equal terms.

A final development, which requires further study, is the entrance of large-scale institutional investors with no experience doing venture capital, onto equity crowdfunding platforms. In 2015, Chinese private equity firm CSC Capital entered an agreement with AngelList to invest $400m over several years. By 2016, institutional investors accounted for a staggering 50% of capital on

the AngelList platform (Mims, 2015).  A similar transformation has occurred on peer-to-peer lending platforms, where a 'social' model of credit between individuals has been 'financialized,' with upwards of 80% of capital now coming from institutional firms (Aitken, 2015; CCAF, 2020 p.53). These large financial entities had no interest in either individual lending or angel investing when it was decentralized and involved off-line legwork. Their entrance onto the platforms highlights the user-agnostic nature of infrastructures: here, making a niche financial practice more accessible to retail investors also facilitated the participation of more powerful professionals —  thus complicating any simple causality between provisioning access and equitable outcomes.

**Naivety and drama on the message boards**

AngelList fell short of the intent of the JOBS Act Title II, to render the wealthy demographic at large into startup investors.  But what of the Act's Regulation CF, and investment opportunities for the non-accredited majority?  Platforms do not release participation data; to qualitatively gauge engagement, we can examine the non-accredited public's sense-making about the practice through their trails of discourse online.  The SEC requires that platforms provide means for investors to communicate with startups. Platforms have complied by mimicking the comments section ubiquitous on e-commerce websites. Below the startup's pitch and financial information, investors can post questions, and entrepreneurs may respond. The threads are public. Consider Knightscope, a startup developing autonomous surveillance robots which rove corporate parking lots.  On their fundraising page on Regulation CF (non-accredited) platform StartEngine, dozens of potential investors have posted questions. Some signal inattentiveness: one user asks, "IS THERE AN OFFERING DOC AVAIL?"; another announces, "I would like to follow."  Replying

to each, the CEO amicably points out the appropriate link already present atop the web page. Another user asks "Has the company 'break even' [sic] as of today?" But it is axiomatic in early-stage investing that startups remain unprofitable for years. The CEO patiently explains as much, then offers sales data predicting imminent profits. The non-expertise indexed by such questions confirms the fears of all those who opposed the JOBS Act and deregulation.

If, ideally, message boards were informational conduits for investment decision-making, they also become a stage for enacting (an unsatisfying substitute for) the relations and affect which I have argued is crucial to enrolling investors in this high-risk asset class. One individual — listed as having made 25 StartEngine investments, but not yet in Knightscope — chimes in: "THIS IS AN AWESOME PRODUCT. THE POTENTIAL IS ENORMOUS: SCHOOLS; MALLS; ETC." No question was posed. Still, the CEO bothered to gloss the comment, situating its enthusiasm within the ethical ideology of innovation: "with support from folks like you…we can really make a difference in society." The attentiveness of the entrepreneur-CEO in personally responding to questions attempts to perform online the more intimate lines of communication typical of offline investment practice. During cosmetics startup Aavrani's fundraising campaign on the Regulation CF platform Republic.co, a user named Mitchell provoked a dramatic scene over a technical detail called the valuation cap. This contractual term protects early investors against excessive dilution if further capital is raised (see Chapter 2). Aavrani had raised its valuation cap midway through its four-month campaign, making terms less favorable for subsequent investors. Mitchell accused Aavrani of a bait-and-switch. "I just heard about this deadline [to invest at the favorable cap]. Very unfair as I have asked questions and it's clear I've been contemplating an investment." This expression of dissatisfaction rehearses the posture of the irate customer, a

familiar presence on online reviews. As if threatening to never again patronize a restaurant, Mitchell announced "I'll invest in Carson Life Skincare instead. Extremely disappointed." An Aavrani employee offered a legalistic defense, and added that cliché of customer service, "we appreciate your feedback." These message boards seem ultimately to contribute a structure of alienated consumption, where the investor becomes a flaneur wandering the arcades of the platform.

Some crowdfund investors engage more reflexively with the risky market. Let us listen in to a conversation on internet message board Reddit, where we find a novice— precisely one who opponents of deregulation feared would get fleeced — in dialogue with crowdfunding skeptics. A thread begins when user Dremotion asks, "Have you ever made money (or atleast [sic] invested) from a crowdfunding platform such as republic.co?" Simply posing this question flouts the first rule of all investing: past performance does not guarantee future returns. The top-voted reply likens crowdfunding to "gambling" — an analogy familiar from historical critiques of financial speculation (De Goede, 2005). This respondent advises Dremotion to proceed only if he can absorb a financial loss, and only as long as he is "having fun" and "doesn't see it as an investment." This utterance exemplifies a crucial strategy for promoting crowdfunding: to transform the anxiety of risk into curiosity and ethical self-development. A more optimistic interlocutor maintains that, with preparation, one can pursue crowdfunding gainfully — and advises Dremotion to study "Investments by Bodie et al", rather than "self-help-ish books." But Investments is a 700-page university-level textbook detailing bond markets and interest rates, useless for this context. Dremotion ponders these opinions, and amicably denies any impulse to "gamble." Then, acknowledging uncertainty, he asserts his conviction that diligent research will

increase his chances of "winning." The injunctions to build expertise and to "have fun" here come into conflict. A final interlocutor takes the stance of deregulatory opponents like the Consumer Federation of America. "Retail investors," explains a user named Kitykatz-meowmeow, were previously assumed not "sophisticated" enough to value startups or calculate risk. Deregulation has not changed this. "What has changed is they can now throw their money away much easier through crowdfunding." The comment implicitly voices a politics of risk — a call to consider who's likely to lose when investment is universalized.

Who are these nascent crowd investors? Dremotion is a party DJ in Southern California, and did not return requests for an interview. We find further clues by following another Reddit thread headlined "Have been hearing great things about [non-accedited platform] Republic.co for smaller investments. Anyone tried it? Results?" (After a year, nobody had responded.) Other posts by this user, Wilson, trace a portrait of an earnest young man, stymied as he hustles in an unforgiving labor market. Once employed as a phlebotomist, Wilson answered a question in separate Reddit forum about hospital pay rates: Stanford offers $25/hr, but less prestigious hospitals pay lower. "After taxes, it's not enough to get by :/ but it does help you build up that experience." But inquires about fish protein for muscle growth disclose that Wilson had suffered an injury: "Best muscle to train for stairs after leg surgery?" he asked a physical therapy forum. Impaired and under financial strain, Wilson turned to gig work. "Whats the most distance you drove for a single trip?", he posted in the "Lyftdrivers" forum. And then, in "BusinessHub," Wilson posted seeking to hire an "esports writer and game analyst" at 5 cents per word, followed by a request for recommendations for website hosting. Wilson, it seems, wanted to build a media content startup. In a society where work is becoming scarce, individuals like Wilson

simultaneously seek to become entrepreneurs, and to hedge their own prospects by betting on others through crowdfund investing.

### Jana, the financialized subject of Republic

Ironically, I found it easier to interview millionaire angels in San Diego than to contact popular investors on internet platforms. As I indicated above, crowdfunding platforms do not allow strangers to message one another. Jana was the single platform user out of a dozen I contacted via their LinkedIn profiles who responded. And she kindly agreed to speak with me.

Jana had worked for the past fifteen years as a supply-chain manager for a gold mining company. She was nearing her retirement, and had long been amassing savings for that phase of her life. Around 2015, she began to feel she owed it to herself to take a small portion of that savings and invest in alternative assets with a potentially higher payoff than her conventional retirement accounts. And equity crowdfunding caught her attention.

Jana began investing on Republic, and understood what she was doing. She knew she likely wouldn't make any money. Earlier in her career, she had started a small business which became a total loss, and reasoned that equity crowdfunding was no different. She also understood that small investors like her lose out on the opportunity for really significant appreciation of equity if they wait until a company goes public. And Jana is no less sophisticated than successful angels and venture capitalists in choosing investments: just like them, she prioritizes the personal virtues of the entrepreneurs. Since she can't meet them, she relies on the videos they post, and their resumes. To be sure, subjective quirks shaped her investment choices, and she found the

process enjoyable, but the same can be said of individual stock market investors. Even though she reads financial contracts for her job all day, when choosing investments, she said, “I go on instinct, I go on gut.” She recently invested a thousand dollars in an electric car start-up because she “loved the car and it just looked so cool.”

Jana didn’t know anyone else who did equity crowdfunding. “A friend I work with, she’s so risk-averse. When Newmont [the mining company] offered to relocate me to South Africa, she said ‘but it’s so dangerous.’ She was so clueless!” Jana made sense of the fact that she alone did startup investing by deeming her friends’ risk perceptions as knee-jerk. As she saw it, her friend’s uninformed fear blinded her to the beauty of South Africa. Analogously, she felt angel investing was enjoyable as risk if done responsibly. Jana wasn’t reckless. “I’m not afraid of investing,” she added, “but I think people who hike up Everest are insane.” There is no contradiction here with her method of “go[ing] on gut.” It’s not how you make decisions; it’s how you contain your losses.

“I’m not one of those people with $100k lying around,” Jana said, but decided to allocate a small enough fraction of her savings that, if it went to zero, wouldn’t diminish her retirement comfort — just as all angel investment instructional material advises. While this was money she could afford to lose, it was not, by that account, an expenditure of surplus which contravened financial logic. To the contrary, she framed this precisely following a normative approach to diversification, where a high-risk, high-return asset ought to comprise a small slice of one’s portfolio. In other words, by doing crowdfund investing, she was performing as a responsible financialized self — just as the critics of popular stock market investment saw it (e.g. Martin

2001; see my introduction). "It's a way to supplement my savings," Jana said. She was not trying to make friends, develop skills, or "give back." In a sense, she represents the success of equity crowdfunding. in allowing people beyond elite networks to participate. But she also represents its failure, what angel investment is changed in the process.

**Conclusion**

Financial markets are not just instruments to allocate capital, they are themselves communities of practice. This has a double, and double-edged significance: they are forms of social life which participants defend against transformation; however, in order to grow, financial markets must initiate outsiders into their core social structure — not just grant them formal access (Zaloom 2006; Pardo Guerra 2019). Foregrounding this tension, this chapter has analyzed the creation of equity crowdfunding platforms as an attempt to take classical angel investment, a restricted practice, and make it universal. Yet eight years after the JOBS Act legalized equity crowdfunding for popular investors, its "democratizing" promise stood unfulfilled.

This chapter has suggested several reasons why. It argued that the relations of embodiment, commitment, and duration of classical angel investing (elaborated in chapter 3) were not easily popularized online. To be sure, angel investing is an idiosyncratic case, a consequence of the illiquidity of the assets, and the difficulty in valuing them. Not all forms of "investment" embody the relational logic which I adduced from the word's etymology, nor are they inherently the preserve of elites. But by attuning to this ideal-type distinction between investment and finance, I hope I have contributed to the critique of financialization by specifying more precisely the

different ways that people get enrolled into circuits of capital. That is, financialization does not always follow the model on the "responsibilized" individual entrained to the pulse of global markets. Furthermore, I have shown that projects to popularize finance sometimes encounter internal limits.

Marx, critiquing liberal notions of rights in On the Jewish Question (1843/1972), contended that the abolition of religious and property qualifications for citizenship did not render religion or private property irrelevant to social life, but only re-located their effects from the political sphere to civil society. Thusly naturalized, they tacitly continued to generate exclusions. Applied to financial markets, this critique of abstract rights illustrates the error in imagining that by equally provisioning formal access, all may prosper through markets. In the case of angel investing, deregulation and a platform infrastructure was insufficient to recruit popular participation. Instead, the platforms embraced, and were embraced by, the elite and expert networks of incumbent investors in Silicon Valley. On the one hand, then, the equity crowdfunding project demonstrates that financial logics do not smoothly colonize all domains (cf. Chiapello, 2015). On the other hand, it also exemplifies the financialization of everyday life through popular investment (Langley, 2009; Aitken, 2007).

Equity crowdfunding's trajectory continues to unfold at the time of this writing. The U.S. House Financial Services Committee has encouraged the SEC to loosen protective measures governing Regulation CF (non-accredited) platforms in order to expand "investment opportunities" (McHenry, 2021). In addition, platforms have introduced index funds, further assimilating to the modalities and experiences of traditional retail investing. Going forward, then,

if more popular investors are indeed drawn into equity crowdfunding, they will effectively be conscripted as the first line of sacrifice capital facing the widespread proliferation of entrepreneurship. Most startups they finance will fail, but the best will be cherry-picked by upper-tier angel investors and professional venture capitalists — who will have thereby externalized their risk onto those new ranks of equity crowdfunders. We may then say that angel investment has been "democratized." But as with other forms of financialization, it will not have been on equal terms.

# CHAPTER 8: DREAMING OF A BIG TECH ACQUISITION

At a conference of technology entrepreneurs in 2015, a moderator introduced a panel of executives in charge of mergers and acquisitions (M&A) for Facebook, Google, Twitter, and Yahoo. "We put it on the Eventbrite invitation: 'What one question do you want answered?,'" he announced. "By far, the audience's most common response was 'how do we get on your radar?'" (Foundersuite, 2015, 8:30) This event was not atypical; law firms who conduct and profit from corporate acquisitions host such panels regularly, and archive them on Youtube for consumption by hopeful entrepreneurs everywhere. They indicate that dominant technology firms have become so not by internal expansion alone, but also by acquiring others. Between 2015 and 2020, Amazon made 42 acquisitions; Apple 33; Facebook 21; Google (Alphabet) 48; and Microsoft 53 (Motta & Peitz, 2020, citing multiple sources). These companies, colloquially referenced as "big tech", have come under public and regulatory scrutiny for anti-competitive practices. What is rarely recognized is that big tech's tendency to acquire startups and absorb their intellectual property, workers, and user base owes not only to its own "voracious appetite," as both the popular press and scholars describe its anticompetitive tactics (Tiku, 2017; Glick et al., 2021). This tendency is also driven by the supply side: many founders of technology startups — and their investors — want to get acquired.

I have argued in this dissertation that angel investing comprises a tradition with its own internal goods that offers to participants an ethically fulfilling experience, independent of the possibility of financial reward. This final chapter fills in an additional piece of the story of angel investing's growth. The practice proliferates not only due to its immanent appeal, but also because it exists in a rapturous relation to the larger technology industry. The prospect of an

eventual acquisition by a global technology company like Google provides an ostensible rationale and a telos for the activity, drawing investors and entrepreneurs toward it, even as it under-determines the value of activity to participants.

The possibility of an "exit", in other words, always on the horizon, tethers the social logic of investment to market rationality. And, because the political economy of the technology industry currently favors growth by consolidation, the preferred exit strategy has become the acquisition. So the non-market rationality I have emphasized — of investing one's self into a project that forges relations and makes something good — unfolds, in practice, under an aspirational imaginary of business elites at the top of the tech ecology who might one day acquire you. In this sense, the social relations and attachments that make angel investing compelling, and seem to be ends in themselves, also work in to produce the consolidated power of dominant technology companies.

A popular but increasingly anachronistic view of competition holds that entrepreneurs invent new products to win market share from incumbents. But in the contemporary technology sector, this process is often short-circuited. The desire to be acquired now commonly leads startups to develop products which deliberately aim to compliment or enhance the offerings of established companies. For these startups, the goal is not to compete with, but to get incorporated into, incumbent corporations.

This chapter follows a long-standing commitment of science and technology studies to "ma[ke] thoroughly ambiguous the difference between the self-developing and the externally-

designed" (Haraway, 1985, p.69). Taking Haraway's cyborg as an analytic prompt helps elucidate the distributed nature of a power which only appears to be localized in the agencies of large corporations. In fact, the power depends on the capital and affective energy of small investors at the financial pyramid's bottom. Consider one startup called Xoxco whose conversational AI bot to help schedule meetings was acquired by Microsoft for integration into its Office software, or another called Senosis whose smartphone app to diagnose pulmonary function was acquired by Google's health division (Miller, 2018; Ong, 2017). Whatever their initial plan may have been, these entrepreneurs developed products which slotted seamlessly into the acquiree's expansion agenda. As these cases suggest, the conventional critiques of anticompetitive practices mentioned above mistakenly reify dominant corporations and upstart competitors as independent and self-contained units of analysis. Such a tacit ontology obscures the fact that Big Tech's growth is not external to all the entrepreneurs who deliberately dream up acquirable ventures, and the active role of investors in helping them "get on M&A executives' radar."

The remainder of this chapter elaborates these claims. I first lay out the structural conditions for the recent ascendency of acquisitions as an exit strategy. I then examine how acquisitions have become markers of status for entrepreneurs and investors. The final section analyzes a technical device (in the form of a commercial market information service) which helps organize and instigate the market for acquisitions.

**Acquisition as exit strategy**

When technology entrepreneurs pitch startups to investors, their slide decks normatively conclude with a plan to sell the company and return investors' money; this is their "exit strategy." As legal scholars Lemley and McCreary (2021, p.1) put it, "In Silicon Valley, the most important thing to think about when stating a company is how you're going to end it." An initial public offering (IPO) on a stock market is the most fabled way of exiting, but it also uncommon. For those startups that make it to an exit — and the vast majority fail beforehand without ever returning money — the more common route is through a merger or acquisition. And for reasons we will see, investors who previously treated M&A as a fall-back exit plan now pursue them as an ideal outcome. This phenomenon is encapsulated in a cliché, as satirical as it is realistic: 'our exit strategy is to get acquired by Google' (Artiman, 2018).

In the U.S., industrialists have long relied on mergers and acquisitions to build corporate empires; in the late 19th century, the first decade following the legalization of this maneuver saw 1,208 mergers consolidate $2.26 billion in assets (Heilbroner and Milberg, 2002, p.82). These maneuvers typically joined like with like, consolidating (e.g.) independent steel mills across a region. In the contemporary technology sector, acquisitions serve power differently. They do not lead to the additive agglomeration of mature companies. Rather, the dynamic resembles that identified in Mirowksi's (2018) critique of 'open science,' where scientists are incentivized to align their research programs with agendas of dominant corporations to receive funding. Among startups, the goal of getting acquired directs entrepreneurial activity toward incumbent market actors – even as the latter's strategies are often shaped in response to nascent competitors.

Several structural transformations in the financial and technology sectors have created the conditions for the rise of acquisition culture. The first was the dot-com crash of 2000-2001. During the late 1990s, the perception that information technology would fuel endless capital accumulation persuaded stock market actors to absorb new company offerings at a pace of several per week (Cassidy, p.x). Venture capital-backed tech companies could go from startup to IPO in several years. In the two decades since the crash, IPOs of VC-backed companies have steadily declined, from an average of 200 per year in the 1990s to 83 in 2019. This is reflected in how investors got their money back: one in two startups exited via IPO in the 1990s, but only one in ten do so today (Lemley & McCreary, 2021). Additionally, historically unprecedented cash reserves held by major corporations make acquisitions an attractive option. So do (currently) high prices for their stock, as stock often form part of the acquisition offer (S&P Global, 2020).

A second factor favoring acquisitions is a historical shift in how firms pursue research and development. Traditionally, large corporations funded their own R&D labs; now, they effectively outsource R&D to startups. This allows them to avoid the risks associated with experimentation and innovation, and to cherry-pick the results through acquisition. This strategy is not entirely novel. As Baran and Sweezy's 1966 book Monopoly Capital notes,

> When a new industry or field of operations is being opened up, the big corporation tends to hold back deliberately and to allow individual entrepreneurs or small businesses to do the vital pioneering work. Many fail and drop out of the picture, but those which succeed trace out the most promising lines of development for the future. It is at this stage that the big corporations move to the center of the stage (p.49).

What is different today are the symbiotic relations and cultural alignment between entrepreneurs, investors, and dominant tech companies.

Finally, investors find acquisitions attractive because they happen relatively early in the life of the startup. Reaching an IPO may take ten or fifteen years, but in the best cases companies can be acquired within a few years of their founding. Ricardo Dos Santos, an experienced San Diego investor, told me "As an investor I always ask, 'let's talk about exit strategy — what about if it's not an IPO — do you think there are companies hungry to acquire things like yours?" He takes as a marker of competence those entrepreneurs who've done "done their homework and can show me examples."

**If you build a startup, will they come?**

Let us look at two cases of a bid to be acquired, one from a less credible candidate than the other. At the San Diego startup accelerator Connect, I watched Brianne, a novice entrepreneur and one-person startup, pitch a smartphone app to seven mid-to-late career members of the local business community. They volunteered at Connect as advisor-mentors, which meant that they inhabited the position of the angel investor as they listened and gave feedback to Brianne. The penultimate slide of Brianne's pitch announced her exit strategy: to gain one million users in five years and "get acquired by a large media company." Her product was a photo-sharing app called Save-It, targeted at parents to share and comment on images of their kids. The problem was, the year was 2017. Facebook had years earlier acquired the photo-sharing app Instagram, and other dominant social media companies already offered similar functionality.

Buying oneself proximity to "innovation" is one reason why people do angel investing. In this dissertation, I have generally not examined the content of startups' claims to be innovative, preferring to leave the term as a native's category. This avoids the value-laden and

methodological morass of taking a position on what is and isn't innovation. But it is here relevant to discuss the provincialism of Brianne's startup Save-It and its interlocutors at that pitch, in order to highlight the power of acquisition dreams, especially for those outside the "space-platforms" of Silicon Valley (Haraway).

As I sat in the back of the room while Brianne pitched, it was clear to me that her idea didn't stand a chance of succeeding, and indeed within a year, the one-person startup folded. But at that moment, her audience of seven at Connect was more sanguine than I. They described her as "passionate." They picked up on her cue to think towards an acquisition. "Is this just a product that belongs in a bigger suite or is this a standalone company?," one asked. Another answered: "It's not going to be standalone, but you could see this getting integrated into Apple as a set of features." Connect's project manager Petra encouraged this consensus to build: "it may be a very short-lived company — maybe three years, then the big guys come in and don't want to do it themselves but are willing to drop some cash to acquire her." Wendy, who had the most professional poise of them all, was the only one who seemed skeptical. She doubted people would pay a repeating fee to use it, and when Petra asked her to at the meetings end if she would "sign on" as a continuing mentor, she remained silent.

Another photo-sharing app? People in that room liked the idea, and three of them said they could imagine using it with their kids and grandkids. They found Brianne to be "passionate," even if, as they indicated, she needed business help. Did they mean what they said? Did they really believe a larger company would acquire Save-It for millions of dollars? I don't know if they believed their own words. But they treated her credibly, and were willing to give her their

time. Whatever skepticism they may have had, they simultaneously harbored a willingness to engage, to mentor, and potentially invest in the company. Such is the internal dance of angel investment more generally: knowing the startup will likely fail, but treating it as if it is the big winner.

In federal policy debates over the regulation of monopoly power, advocates argue that big tech companies' market power effectively maintains a "kill zone" wherein investors decline to fund potentially competitive companies. But Save-It was not a case of a new product killed by monopoly power — but rather an entrepreneur's derivative idea which invoked signs of Big Tech in an attempt to raise capital, establish a career, and get acquired. What this case demonstrates is dominant technology corporations' tacit power to shape imaginaries of what innovation could look like — not, by direct domination in the market, but through its cultural influence on the gestation of entrepreneurs' ideas, and by holding out hope for an acquisition.

I want to make clear that it isn't necessary that a startup will actually be acquired, or that anyone investors have had experience knowing that it will be acquired. As with the possibility of actually making a lot of money, everyone knows it is unlikely. What matters is that they see that it happens (cite data on GAFAM acquisitions) and this makes investing in a risky startup tractable to them.

Some startups don't only hope to be acquired, they carefully plan it out from their inception. Several tech workers I interviewed spoke of a niche variant of entrepreneur who identifies a specific technology possessed by one dominant firm but not others, and creates a built-to-acquire

startup to fill that lack. Around 2018, Google developed a computational process called federated learning; its purpose was to maintain data privacy in machine learning by accessing that data in a distributed manner. I spoke to a young engineer who worked briefly at a startup building its own federated learning tool with the specific goal of being acquired by Apple.[56] "There was an assumption that Apple would be doing it [federated learning] soon, that if we positioned ourselves correctly, Apple would just do that through us rather than internally," he said. "Our business model was almost tacked on to the end — the focus was on acquiring data assets, and being in a competitive enough place where it'd be cheaper for them to acquire than compete." Clearly, this was an especially strategic entrepreneur who wanted to "pull some money out of that space," as Roderic put it. It is not a given, however, that the investors were similarly profit-oriented: the startup never grew past several employees, and after two years, it folded; most professional VC firms would never have taken interest in such a nascent company. The investors may have been amateur angels, desirous of becoming vicariously involved in an entrepreneurial project, and been taken in by the prospect of an acquisition.

**Acquisitions as status indicators**

An acquisition also bestows significant professional validation. In the 1990s, the epitome of entrepreneurial success consisted in ringing the Dow Jones' opening bell on the day of the company's IPO, flanked by employees with a logo backdrop. Today, piloting one's startup into an acquisition by big tech has come to rival the IPO as a status symbol. Not all acquisitions target a company's technology or successful product, in the way that e.g. Microsoft acquired

[56] As the engineer I interviewed named Roderic put it, Google, for its part, "google has a history of acquiring rather than meeting competitive pressure." When the AI startup Deepmind "kicked the Google team's ass" in a competition, Google acquired them for $500m.

LinkedIn to secure its dominance.  Startups also get bought as a human resources maneuver — to acquire their workers. These "acqui-hires," as they are called in industry discourse, typically involve smaller startups, at lower dollar valuations (Coyle and Polsky, 2013). Still, we should take seriously the allure, especially in the era of big tech's cultural hegemony, of being absorbed by Facebook or Google.

Acqui-hires enact forms of corporate soft power over the workforce. Investment banks recruit young graduates through lavish recruitment rituals that perform their exclusivity as elite institutions, and justify their power through meritocratic claims that flatter recruits' intelligence (Ho, 2009). Big tech firms similarly recognize their desirability to potential acquirees, and their HR departments work to maintain it.  Startup founders and employees —  derive caché from working for a company which gatekeeps with famously difficult coding interviews. Prestige travels on resumes and investment portfolio lists of entrepreneurs and investors of acquired startups; they typically attach the parenthetical suffix '(acquired by Google)' to the startup's name in such documents, as a sign of their validation.

The status of the acqui-hire is also reflected in valuation metrics. Acquisition price tags are rarely disclosed, but it is common practice to derive the amount from a "per head" or "per engineer" dollar value, ranging from several hundred thousand to over one million dollars (Naftulin, nd).  Engineers seem to relish having their expertise quantified in a single number which will necessarily stand in comparison to that of other acquired companies.  In practice, remuneration is not a simple "per head" value; it is comprised of stock options, a salary, and a retention bonus paid over several years.  As one acquisition executive told a group of

entrepreneurs, "the million-dollar-a-head number is only true in TechCrunch headlines" (Orrick, 2014, 36:50). But its mythical status diminishes nothing of its performative force in orienting the desire of startup employees to seek and embrace acquisition as a goal.

One ideal-type way to be an entrepreneur is to start a company and remain its chief executive in perpetuity. Yet expectations for entrepreneurial lives include demanding schedules and self-punishing work regimes that leave human energies depleted (Guiliani and Torrès, 2018). By getting acquired, one can have it both ways: the prestige of being a "founder," and an escape from the formidable stress of running a company. After a few years spent feverishly establishing one's startup, many entrepreneurs welcome the opportunity to merge their company into a tech behemoth and join its payroll. They trade sweat for stability, and no longer must periodically raise capital or hit exponential growth targets demanded by venture capital. For acqui-hires, this status carries into the new workplace, where it produces social difference. For example, a dispute routinely pits managers of engineers against the M&A team: the former advocates for a lower price in acquisition negotiations, concerned that high valuations will cause resentment with existing workers (engineers) hired through conventional channels, with conventional salary packages. Those who arrive via an acqui-hire are awarded potentially millions of dollars for the equity they held.

Despite their clout in the market, Big Tech does not drive a hard bargain when shopping for startups. Google has said on record that with tens of billions in the bank, it could, if it wanted, out-bid competitors on every acquisition deal in the market. So it is striking, and contrary to conventional economic wisdom, that acquisition price tags depend not on fundamental or

intrinsic valuation (that is, an "objective" assessment of the technology and the business's future revenue) — but rather on "who the VCs are, what kinds of returns they expect, and how much money has gone into the company," according to Google M&A VP Zoufonoun (Foundersuite, 2015, 21:35). In other words, Big Tech will pay whatever VCs require in order to make a handsome profit — even if the VCs originally invested at an inflated valuation. Why are they so deferential? Because norms here are not those of a large, anonymous market. Elites of tech company finance know each other and engage in repeat transactions, and acquisitions are subject to the scrutiny of industry press and professional network gossip. VCs sit on acquirees' boards, and can block future acquisitions if they felt strong-armed in a previous deal. As Yahoo's M&A VP Barada put it, "due to the nature of the venture world, sometimes we may need to stretch a bit to keep all the stakeholders happy" (ibid. 23:40). Furthermore, VCs act as intermediary and agent in locating nascent startups and scaling them up until ready for acquisition. They do the reproductive labor, we might say, in the lifecycle of startup. And so Big Tech pays their asking price, making acquisitions a desirable outcome for investors.

**CB Insights, and constructing a middle-tier market for acquisitions**

So far I've told a story structured around the two poles of corporate scale, dominant firms and startups. But the many mid-sized and large firms outside the pantheon of big tech firms account for significant acquisition activity as well. While M&A has been a tool of corporate growth for a century, in recent years, big tech's activity has spurred mid-sized firms to acquire startups in order to remain competitive. A Google acquisition may be the highest ideal, but in practice investors and their startups imagine and plan for acquisitions from different corporate scales.

Through what media do signs in about acquisition opportunities travel, and shape investors' and firms' decisions? As with angel investments, there exists no transparent price information for the M&A market, nor is there a centralized exchange. For elite corporate acquisitions, transaction overtures are made through professional networks: corporate development arms of companies like Google hear from top venture capitalists about the companies the latter have financed, and they hear from their own engineers about startups developing intriguing products. But again, as with angel investing, making conditions for acquisition more widespread entails either replicating such professional networks over geographical and social space — or introducing platform mediation. Unlike AngelList, however, the case I am concerned with here is not a platform to intermediate the financial transactions, but to otherwise help proliferate them.

Markets do not spontaneously emerge; they are made through technical devices and models (Callon, 1998). Consider the role of CB Insights (CBI), a subscription service that provides information on startups, investors, and mergers and acquisitions. CBI aggregates previously opaque and dispersed information from sources such as SEC filings, earning transcripts, patent filings, and industry press into structured data. Its clients are predominantly venture capitalists and M&A arms of firms of all sizes, who use the service to watch market trends and target acquisitions or acquirees. Below, I present a brief interpretive reading of CBI's rhetoric and data tools to argue that they have facilitated the expansion of the corporate acquisition market, and with it, the possibilities for investors to imagine and negotiate exits.

CBI makes two levels of knowledge claims about the market. The first pertains to society as a whole — the claim to make known broader trends, and thus become an instrument for promoting corporate acquisition and growth in general. In 2017, for example, its CEO Anand Sandwal repeated the message in public speaking engagements and in the company's widely-read newsletter that "there is no tech bubble." Accusing bloggers of predicting bubbles to get attention, he used CBI data to compare acquisition activity to corporate ambitions to support his claim.

From its inception, CBI aspired to do more than report data. In a 2010 application to the National Science Foundation's small business grant program, Sandwal proposed building a database of private company financings paired with AI analytics. These tools, the application promised, would help "financial institutions look at private companies in a fundamentally different, smarter, more scalable and data-driven way" and thus facilitate "critical financing and capital allocation decisions" (National Science Foundation, nd). The NSF awarded CBI $1.125m in seed funding. Ten years later, thousands of companies were paying CBI for its data, and industry journalists frequently cited it.

I have repeated emphasized how the social relations of angel investment exemplify a logic of gift-giving. But when larger corporations acquire startups, a market logic takes over. For example, it becomes expedient for acquiring companies to be able to assess the many available startups in a less qualitative way that do early-stage investors. CBI foresaw that need. In its NSF application, it proposed developing a single metric distilling information about each startup relevant to investment decisions. Although this single metric was never introduced — the fantasy

of total commensuration was overblown — CBI offers many data analysis tools to discern (or, materialize) local market conditions in particular sub-sectors; this is CBI's second level of knowledge claim, examined next.

The platform brings together instrument and affect to provoke the market for acquisitions. Users of the service need only come with the sense that they ought to be acquiring; if they don't know what strategy to pursue, CBI takes care of that: "we put a wide array of topics in front of you — new techs, trends, key players," its demo video says. On CBI's platform, users are invited to interact with data about which tech startups are receiving investment, for example, and to fiddle with sliders to produce pleasing visualizations of market 'heat maps.' They may search transcripts of public company earnings calls — "a tunnel into the minds of top executives" — cross-referencing findings with companies' patent filings and investments (CB Insights, 2018).

CBI regularly conjures in its corporate clients the fear that they are missing out ("FOMO") in an active acquisitions market. CEO Anand Sandwal strolled on stage at one of many industry speaking engagements in 2018 and announced that the world is "moving fast." "What are the impacts," he asked, "of failing to respond as a tech incumbent? I'm going talk about what you should be watching, and how and where to look". And again in a promotional video: "the large tech players are making moves that can affect entire markets." Claims like this are substantiated through research reports, written using their own data and released to subscribers. On the eve of Facebook's IPO, a new report identified 60 investors who'd funded startups founded by former Facebook companies, suggesting a coming deluge that will render as has-beens those without a social media strategy — and implying acqui-hiring (see above) is the quickest solution).

As a visual mediator of a market, CBI's platform has significant predecessors. In the 1990s, for example, scholars proposed that electronic financial markets only existed through their representations on screens, as traders watched numbers move and executed orders (Knorr-Cetina). However, unlike these "scopic devices," CBI's platform is not for making trades. Furthermore, its representational tools track the fundamentally slower temporality of corporate acquisitions. Other commercial software packages visualize bonds and futures markets, "empowering financial market participants with new eyes" (Pryke 2010, p.430). These tools offer a qualitative and human understanding of what are otherwise exceedingly complex risk dynamics. Yet here, too, CBI does something essentially different: rather than adding a visualizing layer to an existing financial exchange — CBI (and the information workers who cull data into its databases) concretizes a market that only existed as diffuse transactions beforehand.

So CBI functions as an information infrastructure. But it did not just fill a gap in the market for market information. As models of economic reality actually provoke the kind of behavior they describe (Muniesa, 2014), CBI has in part provoked the growth of the thing which it works to know, i.e. investments in early-stage companies. In other words, my claim is that CBI does not just provide existing competitive agents (e.g. corporate M&A and institutional investors) with new information, but also that it incites those flesh-and-blood individuals to seek to "know the market" more completely and continuously than before, and to have an affective orientation to that knowledge. It is well-established that emotions underly markets' normal operation (Pixley, 2004); my claim is that the M&A market as a site of emotion and fear (of missing out) did not exist prior to its representation by CBI. CBI's market devices provoke firms to find value in the

information it produces and sells, and in so doing, helps bring the market for startup acquisitions into being.

## Conclusion

Angel investing as a tradition with powerful internal goods which make the practice compelling to people despite likely financial loss. This chapter has situated the practice within a larger political economic context: a pyramidal structure with many small investors and their startups at the bottom, intermediate and more exclusive tiers of both venture capitalist and mid-sized acquiring companies, and a top tier of big tech behemoths. Most startups fail, but the few that grow ascend the pyramid as they do so. The chapter has shown that the potential of an acquisition by a larger company fuels and legitimates hopes of investors and entrepreneurs at the bottom.

As long as the GAFAM firms rely on acquisitions to grow, a viable business model will exist in the lower tier of the tech ecology, flipping startups into the jaws of apex predators. These entrepreneur under-laborers, and the investors who finance them, stand in a symbiotic relationship to big tech and its expansion.

# Chapter 9: Conclusion

In this dissertation, I have positioned angel investment as a peculiar practice which plays a historically specific role in the contemporary political economy of entrepreneurship, venture capital, and big tech. But I have also presented angel investment as a case study highlighting a more general aspect of the entwining of meaning-making and pecuniary gain in the expansion of capital. I have argued that while, abstractly, finance capital expands through investment to produce more money — what Marx formalized as M-M' — in practice, some forms of "investment" also entail entering into affective and ethical relations with others which are irreducible to a profit logic. These dynamic is not contingent or accidental; it is how capitalism works.

Decentering the profit motive, therefore, has been a core concern in my empirical analysis. Yet alongside the data which I gathered to make this claim, I also present two exceptions — two people for whom monetary gain did fundamentally motivate investing in high-risk startups. In chapter 8, I introduced Jana, a corporate manager who invested on the Republic platform from her home in Spokane. And here, I will introduce Andrew, a startup executive whose investment intertwined with his professional life in San Francisco. They embody two edge cases for non-arbitrary reasons. As different as they were, their positions have a crucial factor in common which affirms my central thesis about angel investing as a community of practice oriented toward its own conception of the good.

Long prior to her small investments on the non-accredited platform StartEngine, Jana had taken an active role in investing her retirement savings on the stock market. She was seeking something more than money, but in a different sense than the others I describe in this dissertation. What people like Jana enjoy in equity crowdfunding is risk itself; it made made her feel more alive, as market volatility does for amateurs traders. Unlike for other people I describe, angel investment does not pose community as a response to whatever her felt lacks, desires, and ambitions. Why? Because of the medium. There is one angel investment group in Spokane, but like all such groups, it is open only to accredited investors. Jana's access to investing was via online platform, not via a group of acquaintances. Even as she enjoyed taking bets on startups that piqued her fancy, she saw herself as apportioning a small segment of her portfolio to a high-risk asset class on the off-chance one of them became wildly successful. That is, Jana was acting as a financialized subject: she felt she was being responsible by taking, rather than avoiding, risk. And so she treated angel investment like finance.

Although angel investing is historically rooted in the financial and technical culture of Silicon Valley, in my research I interviewed only one investor who is situated there. That person, Andrew, was an ambitious mid-level executive at a rising social media company. His friends were his colleagues at other startups and at VC firms, and they often invested together.[57] Speaking to Andrew, I repeated the phrase I'd heard expressed frequently by others I'd interviewed. "No one I know is investing to give back," he replied dismissively. He clearly recognized that phrase, and took it to carry a disingenuous affect. For him, angel investing was a

[57] One of them will get an "allocation" - the invitation to invest in a hot startup raising money - for, say, $50k, and will invite ten friends to split it up. To manage the capitalization table and keep track of shares, they use tools on AngelList. This illustrates my argument in Chapter 7: while AngelList was originally designed to geographically "democratize" investing, it has become a tool for elites in Silicon Valley who already know each other to enhance and facilitate their existing investment strategies.

professional hustle. And though Andrew was in his 30s, it would be erroneous to interpret this rejection of reciprocity as due to career stage or lack of accumulated wealth (see chapter 4). Any mid-level engineer or executive in San Francisco is paid enough to make small angel investments — and opportunities surround them.

In a prior role as an executive at Lyft, Andrew had consulted with a startup whose software Lyft used internally. Andrew chose to work with them because he liked their product, and when the company raised capital, he requested to participate in the round alongside the famous VC firm Sequoyah (and putting in far less money). They said yes — granting him an enviable privilege. This stands as a counterpoint to the many people I have described in previous chapters who began investing through existing social ties: "my connections didn't help me as much as helping them helped me," Andrew reflected. Indeed this comment precisely reflects Gary Fields' claim about how social capital works in Silicon Valley: the causality goes "from performance to trust, not from community to trust" (Fields p.216; see chapter 4 of this dissertation).

Andrew and his friends are all playing the Silicon Valley power game. They are already inside the world of elite startups, and are caught up in the aspirational striving of that specific geographical place. For them, unlike for others I have described in this dissertation, angel investing is not an escape from a career in a staid corporation in some unrelated industry — it is coterminous with and enhances their careers.  The reasons Andrew gave for why he and his friends invest contradicts all my data portraying angel investing as an ethical pursuit which brackets financial gain. And yet this very contradiction confirms my thesis. The key is proximity. For I have been describing the popularization and spread of a phenomenon, rather than its

archetypical form. Those at the center like Andrew are not animated by an aspirational imaginary of venture capital which they try to reproduce in their own communities; they are players in the real thing; they are the instantiation at the epicenter. The peripheral investors outside Silicon Valley, the ones who can only aspire to the ideal, are the ones I have interrogated, because they embody a more general phenomenon.

Even if they get lucky, all those investors outside of Silicon Valley will never attain financial success on the scale of "exits" at the center. They might make a few million dollars, but they won't make a hundred million. However, the distance from all that wealth makes salient those other ethical aspects of the practice I have emphasized in this dissertation. Outside the center, angel investing can become elevated from the money. Its appeal lies instead in forging attachments, giving back, and participating in new beginnings. Andrew and his friends never meet for lunch as a group to watch entrepreneurs pitch; they don't need to a product "demo". They meet startups as part of their jobs, and invest on the side. It is people like Rick and Victoria who turn to groups like TCA as a way to make friends, exercise their talents, and do something fulfilling with their disposable assets. This notion, which I mean as an analogy to disposable income — and thus a partner concept to lack of fiduciary duty to maximize profit — leads me to my concluding proposition.

I have argued the proliferation of angel investing to be a cultural response to a cultural situation: that is, to feelings of dissatisfaction among certain moderns for connectedness and fulfillment. But I have also shown that angel investment spreads in response to a structural "need" within the contemporary unfolding of capitalism and finance. This has several parts.

First, as I described in Chapter 2, the institutional emphasis being placed on entrepreneurship as a career path calls forth, as its corollary, people to invest in them. Second, as I explain in Chapter 8, as top venture capital firms invest more money in later-stage startups, they open up below them differentiated tiers and niches for other investors to specialize in earlier stage startups. New angel investors pulled in to the bottom of the funding hierarchy become sacrificial risk capital, enabling concentration of wealth at the top. Finally — and I cannot fully develop this point here — as many commentators acknowledge, the extraction and concentration of wealth in recent decades has produced too much money chasing too few opportunities for reliable returns. Wealthy investors who feel public stock markets are too inflated enter private markets and push up startup valuations there. The phenomenon of so-called "unicorns" — billion-dollar-plus valued private companies which scuttle investors's chances for profitable IPO "exit" because they are so over-valued — present as a symptom of this excess of capital. [58]

How about, then, posing angel "investment" as a ritual expenditure of excess wealth? By expenditure, I mean neither "productive" investment, nor consumption, nor even speculation, but dissipation and waste. George Bataille's The Accursed Share (1967) offers a guide for this line of thinking. In the book, Bataille surveys ethnographic accounts of ritual sacrifice practices and potlatch ceremonies of indigenous civilizations of the Americas. We hear of kings and chieftains who gratuitously slit the throats of slaves or dump valuable copper into the sea, in conspicuous ceremonies presented either to their own subjects or in competition with a rival leader. Of these public acts, Bataille says, the chieftain "enriches himself with a contempt for riches" (69).

[58] For example, a law firm that caters to startups and releases its own quarterly "Venture Financing Report" explained in 2020 that "The amount of capital in the system is so high…and some of these rounds that were done based on forward multiples last year are going to be hard to clear if growth expectations aren't met or customer demand tapers off." See https://www.cooleygo.com/q3-2020-quarterly-vc-update-logan-bartlett-on-the-state-of-venture-capital-investing/

Bataille frames his review of these ethnographic accounts through a discussion of what he calls "general economy." If we draw the analytical bounds of any organic system (biological or social) or wide enough, he writes, the problem of reproducing life becomes not scarcity of resources, but excess. Organisms either grow, or must get rid of excess energy. The foundational case of excess is the surplus of energy from the sun.

This returns us to the question of why angel investors invest if they generally lose money. Bataille sees potlatch and similar institutions as rituals for getting rid of excess. My contention is that angel investment, similarly, enables the ceremonial destruction of excess — at the level of individual wealth and of capital in the broader economy. However, this differs in at least one significant respect from Bataille's analysis. As Bataille emphasizes, in the sacrifice of e.g. a slave, a chieftain accumulates glory precisely in the negation any material gain that might be accrued from its possession: "a surplus of resources, which societies have constantly at their despoil at certain points…cannot be the object of a complete appropriation, but the squandering of this surplus itself becomes an object of appropriation" (72). The indigenous rituals depend on profit not being realized. In angel investment, to the contrary, sometimes the profit is realized, but this does not negate the ethical goods and relations which are accumulated.

Wasting energy, resources, or capital is a luxury. It is also helps destroy accumulated capital that has no productive use. In this sense, the notion of ritual expenditure brings together both the cultural account and the economic-structural account of the practice of angel investment. Of course, I cannot prove any of this. And anyway, I pose Bataille only as a speculative exercise.

But I will note briefly how Mai, who we met above, once invested in an apparel startup that failed. She reflected on it to me, laughing:

> I still have clothing that I wear from the line. Like the other day, I put my sweatpants on and I'm like 'these are my $25,000 sweatpants!' So I'm going to enjoy my $25,000 sweatpants right now.

Amy wasn't savoring them as one would a luxury good; she was laughing about losing money, and the sweatpants were the corpse of the sacrifice, as it were. To be able to distance herself from her money — that is a kind of aristocratic joy in expenditure.

Chandra Mukerji (2017) has argued that if we locate modernity's origins in the historical contingency of the black plague's aftermath, then we can reconceptualize its essence: modernity, initially, entailed a new attitude of self-fashioning and improvisation which followed from a cultural break with institutions received order and privilege. Only with time did these new modern attitudes give rise to structures of rational capitalism, as people strove to invest in themselves and better their stations in the world.[59] Angel investing, as an empirical case, can refresh our vision to see how capitalism and modernity, which we habitually run together, can in fact be discerned as distinct categories. Angel investors are capitalists, but they also want two things at odds with modernity: they want belonging and attachment, as I have described, and they also want the joy of irrational expenditure — even though, behind their backs, this reproduces capital at the larger scale.

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[59] "It was the responsibility of all modern selves to "invest" in themselves and their futures. Speculating on economic futures even became standard practice in the 19th century as capitalists placed bets on the future value of commodities" (Mukerji 2017, p.xxvi)

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