Peter Thiel, *Zero to One*

Chapter 3—All Happy Companies Are Different

The business version of our contrarian question[57] is: *what valuable company is nobody building*? This question is harder than it looks, because your company could create a lot of value without becoming very valuable itself. Creating value is not enough—you also need to capture some of the value you create.

This means that even very big businesses can be bad businesses. For example, U.S. airline companies serve millions of passengers and create hundreds of billions of dollars of value each year. But in 2012, when the average airfare each way was $178, the airlines made only 37 cents per passenger trip. Compare them to Google, which creates less value but captures far more. Google brought in $50 billion in 2012 (versus $160 billion for the airlines), but it kept 21% of those revenues as profits—more than 100 times the airline industry's profit margin that year. Google makes so much money that it's now worth three times more than every U.S. airline combined.

The airlines compete with each other, but Google stands alone. Economists use two simplified models to explain the difference: perfect competition and monopoly.

"Perfect competition" is considered both the ideal and the default state in Economics 101. So-called perfectly competitive markets achieve equilibrium when producer supply meets consumer demand. Every firm in a competitive market is undifferentiated and sells the same homogeneous products. Since no firm has any market power, they must all sell at whatever price the market determines. If there is money to be made, new firms will enter the market, increase supply, drive prices down, and thereby eliminate the profits that attracted them in the first place. If too many firms enter the market, they'll suffer losses, some will fold, and prices will rise back to sustainable levels. Under perfect competition, in the long run *no company makes an economic profit*.

The opposite of perfect competition is monopoly. Whereas a competitive firm must sell at the market price, a monopoly owns its market, so it can set its own prices. Since it has no competition, it produces at the quantity and price combination that maximizes its profits.

To an economist, every monopoly looks the same, whether it deviously eliminates rivals, secures a license from the state, or innovates its way to the top. In this book, we're not interested in illegal bullies or government favorites: by "monopoly," we mean the kind of company that's so good at what it does that no other firm can offer a close substitute. Google is a good example of a company that went from 0 to 1: it hasn't competed in search since the early 2000s, when it definitively distanced itself from Microsoft and Yahoo!

Americans mythologize competition and credit it with saving us from socialist bread lines. Actually, capitalism and competition are apposites. Capitalism is premised

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[57] "*What important truth do very few people agree with you on?*" (*Zero to One*, pp. 12)

on the accumulation of capital, but under perfect competition all profits get competed away. The lesson for entrepreneurs is clear: if you want to create and capture lasting value, don't build an undifferentiated commodity business.

Lies People Tell

How much of the world is actually monopolistic? How much is truly competitive? It's hard to say, because our common conversation about these matters is so confused. To the outside observer, all businesses can seem reasonably alike, so it's easy to perceive only small differences between them.

But the reality is much more binary than that. There's an enormous difference between perfect competition and monopoly, and most businesses are much closer to one extreme than we commonly realize.

Reality: Differences Are Deep

The confusion comes from a universal bias for describing market conditions in self-serving ways: both monopolists and competitors are incentivized to bend the truth.

Monopoly Lies

Monopolists lie to protect themselves. They know that bragging about their great monopoly invites being audited, scrutinized, and attacked. Since they very much want their monopoly profits to continue unmolested, they tend to do whatever they can to conceal their monopoly—usually by exaggerating the power of their (nonexistent) competition.

Think about how Google talks about its business. It certainly doesn't claim to be a monopoly. But is it one? Well, it depends: a monopoly in what? Let's say that Google is primarily a search engine. As of May 2014, it owns about 68% of the search market. (Its closest competitors, Microsoft and Yahoo!, have about 19% and 10%, respectively.) If that doesn't seem dominant enough, consider the fact that the word "google" is now an official entry in the *Oxford English Dictionary*—as a verb. Don't hold your breath waiting for that to happen to Bing.

But suppose we say that Google is primarily an advertising company. That changes things. The U.S. search engine advertising market is $17 billion annually. Online advertising is $37 billion annually. The entire U.S. advertising market is $150 billion. And global advertising is a $495 billion market. So even if Google completely monopolized U.S. search engine advertising, it would own just 3.4% of the global advertising market. From this angle, Google looks like a small player in a competitive world.

What if we frame Google as a multifaceted technology company instead? This seems reasonable enough; in addition to its search engine, Google makes dozens of other software products, not to mention robotic cars, Android phones, and wearable computers. But 95% of Google's revenue comes from search advertising; its other products generated just $2.35 billion in 2012, and its consumer tech products a mere

fraction of that. Since consumer tech is a $964 billion market globally, Google owns less than 0.24% of it—a far cry from relevance, let alone monopoly. Framing itself as just another tech company allows Google to escape all sorts of unwanted attention.

Competitive Lies

Non-monopolists tell the opposite lie: "we're in a league of our own." Entrepreneurs are always biased to understate the scale of competition, but that is the biggest mistake a startup can make. The fatal temptation is to describe your market extremely narrowly so that you dominate it by definition.

Suppose you want to start a restaurant that serves British food in Palo Alto. "No one else is doing it," you might reason. "We'll own the entire market." But that's only true if the relevant market is the market for British food specifically. What if the actual market is the Palo Alto restaurant market in general? And what if all the restaurants in nearby towns are part of the relevant market as well?

These are hard questions, but the bigger problem is that you have an incentive not to ask them at all. When you hear that most new restaurants fail within one or two years, your instinct will be to come up with a story about how yours is different. You'll spend time trying to convince people that you are exceptional instead of seriously considering whether that's true. It would be better to pause and consider whether there are people in Palo Alto who would rather eat British food above all else. It's very possible they don't exist.

In 2001, my co-workers at PayPal and I would often get lunch on Castro Street in Mountain View. We had our pick of restaurants, starting with obvious categories like Indian, sushi, and burgers. There were more options once we settled on a type: North Indian or South Indian, cheaper or fancier, and so on. In contrast to the competitive local restaurant market, PayPal was at that time the only email-based payments company in the world. We employed fewer people than the restaurants on Castro Street did, but our business was much more valuable than all of those restaurants combined. Starting a new South Indian restaurant is a really hard way to make money. If you lose sight of competitive reality and focus on trivial differentiating factors—maybe you think your naan is superior because of your great-grandmother's recipe—your business is unlikely to survive.

Creative industries work this way, too. No screenwriter wants to admit that her new movie script simply rehashes what has already been done before. Rather, the pitch is: "This film will combine various exciting elements in entirely new ways." It could even be true. Suppose her idea is to have Jay-Z star in a cross between *Hackers* and *Jaws*: rap star joins elite group of hackers to catch the shark that killed his friend. That has definitely never been done before. But, like the lack of British restaurants in Palo Alto, maybe that's a good thing.

Non-monopolists exaggerate their distinction by defining their market as the *intersection* of various smaller markets:

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British food ∩ restaurant ∩ Palo Alto
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Rap star ∩ hackers ∩ sharks
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Monopolists, by contrast, disguise their monopoly by framing their market as the *union* of several large markets:

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search engine ∪ mobile phones ∪ wearable computers ∪ self-driving cars
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What does a monopolist's union story look like in practice? Consider a statement from Google chairman Eric Schmidt's testimony at a 2011 congressional hearing:

> We face an extremely competitive landscape in which consumers have a multitude of options to access information.

Or, translated from PR-speak to plain English:

> Google is a small fish in a big pond. We could be swallowed whole at any time. We are not the monopoly that the government is looking for.

The problem with a competitive business goes beyond lack of profits. Imagine you're running one of those restaurants in Mountain View. You're not that different from dozens of your competitors, so you've got to fight hard to survive. If you offer affordable food with low margins, you can probably pay employees only minimum wage. And you'll need to squeeze out every efficiency: that's why small restaurants put Grandma to work at the register and make the kids wash dishes in the back. Restaurants aren't much better even at the very highest rungs, where reviews and ratings like Michelin's star system enforce a culture of intense competition that can drive chefs crazy. (French chef and winner of three Michelin stars Bernard Loiseau was quoted as saying, "If I lose a star, I will commit suicide." Michelin maintained his rating, but Loiseau killed himself anyway in 2003 when a competing French dining guide downgraded his restaurant.) The competitive ecosystem pushes people toward ruthlessness or death.

A monopoly like Google is different. Since it doesn't have to worry about competing with anyone, it has wider latitude to care about its workers, its products, and its impact on the wider world. Google's motto—"Don't be evil"—is in part a branding ploy, but it's also characteristic of a kind of business that's successful enough to take ethics seriously without jeopardizing its own existence. In business, *money is either an important thing or it is everything*. Monopolists can afford to think about things other than making money; non-monopolists can't. In perfect competition, a business is so focused on today's margins that it can't possibly plan for a long-term future. Only one thing can allow a business to transcend the daily brute struggle for survival: monopoly profits.

Monopoly Capitalism

So, a monopoly is good for everyone on the inside, but what about everyone on the outside? Do outsized profits come at the expense of the rest of society? Actually, yes: profits come out of customers' wallets, and monopolies deserve their bad reputation—*but only in a world where nothing changes*.

In a static world, a monopolist is just a rent collector. If you corner the market for something, you can jack up the price; others will have no choice but to buy from you. Think of the famous board game: deeds are shuffled around from player to player, but the board never changes. There's no way to win by inventing a better kind of real estate development. The relative values of the properties are fixed for all time, so all you can do is try to buy them up.

But the world we live in is dynamic: it's possible to invent new and better things. Creative monopolists give customers more choices by adding entirely new categories of abundance to the world. Creative monopolies aren't just good for the rest of society; they're powerful engines for making it better.

Even the government knows this: that's why one of its departments works hard to create monopolies (by granting patents to new inventions) even though another part hunts them down (by prosecuting antitrust cases). It's possible to question whether anyone should really be awarded a *legally enforceable* monopoly simply for having been the first to think of something like a mobile software design. But it's clear that something like Apple's monopoly profits from designing, producing, and marketing the iPhone were the reward for creating greater abundance, not artificial scarcity: customers were happy to finally have the choice of paying high prices to get a smartphone that actually works.

The dynamism of new monopolies itself explains why old monopolies don't strangle innovation. With Apple's iOS at the forefront, the rise of mobile computing has dramatically reduced Microsoft's decades-long operating system dominance. Before that, IBM's hardware monopoly of the '60s and '70s was overtaken by Microsoft's software monopoly. AT&T had a monopoly on telephone service for most of the 20th century, but now anyone can get a cheap cell phone plan from any number of providers. If the tendency of monopoly businesses were to hold back progress, they would be dangerous and we'd be right to oppose them. But the history of progress is a history of better monopoly businesses replacing incumbents.

Monopolies drive progress because the promise of years or even decades of monopoly profits provides a powerful incentive to innovate. Then monopoles can keep innovations because profits enable them to make the long-term plans and to finance the ambitious research projects that firms locked in competition can't dream of.

So why are economists obsessed with competition as an ideal state? It's a relic of history. Economists copied their mathematics from the work of 19th-century physicists: they see individuals and businesses as interchangeable atoms, not as unique creators. Their theories describe an equilibrium state of perfect competition because that's what's easy to model, not because it represents the best of business. But it's worth recalling that

the long-run equilibrium predicted by 19th-century physics was a state in which all energy is evenly distributed and everything comes to rest—also known as the heat death of the universe. Whatever your views on thermodynamics, it's a powerful metaphor: in business, equilibrium means stasis, and stasis means death. If your industry is in a competitive equilibrium, the death of your business won't matter to the world; some other undifferentiated competitor will always be ready to take your place.

Perfect equilibrium may describe the void that is most of the universe. It may even characterize many businesses. But every new creation takes place far from equilibrium. In the real world outside economic theory, every business is successful exactly to the extent that it does something others cannot. Monopoly is therefore not a pathology or an exception. *Monopoly is the condition of every successful business*.

Tolstoy opens *Anna Karenina* by observing: "All happy families are alike; each unhappy family is unhappy in its own way." Business is the opposite. All happy companies are different: each one earns a monopoly by solving a unique problem. All failed companies are the same: they failed to escape competition.

Chapter 4—The Ideology of Competition

Creative monopoly means new products that benefit everybody and sustainable profits for the creator. Competition means no profits for anybody, no meaningful differentiation, and a struggle for survival. So why do people believe that competition is healthy? The answer is that competition is not just an economic concept or a simple inconvenience that individuals and companies must deal with in the marketplace. More than anything else, competition is an ideology—*the* ideology—that pervades our society and distorts our thinking. We preach competition, internalize its necessity, and enact its commandments; and as a result, we trap ourselves within it—even though the more we compete, the less we gain.

This is a simple truth, but we've all been trained to ignore it. Our educational system both drives and reflects our obsession with competition. Grades themselves allow precise measurement of each student's competitiveness; pupils with the highest marks receive status and credentials. We teach every young person the same subjects in mostly the same ways, irrespective of individual talents and preferences. Students who don't learn best by sitting still at a desk are made to feel somehow inferior, while children who excel on conventional measures like tests and assignments end up defining their identities in terms of this weirdly contrived academic parallel reality.

And it gets worse as students ascend to higher levels of the tournament. Elite students climb confidently until they reach a level of competition sufficiently intense to beat their dreams out of them. Higher education is the place where people who had big plans in high school get stuck in fierce rivalries with equally smart peers over conventional careers like management consulting and investment banking. For the privilege of being turned into conformists, students (or their families) pay hundreds of thousands of dollars in skyrocketing tuition that continues to outpace inflation. Why are we doing this to ourselves?

I wish I had asked myself when I was younger. My path was so tracked that in my 8th-grade yearbook, one of my friends predicted—accurately—that four years later I would enter Stanford as a sophomore. And after a conventionally successful undergraduate career, I enrolled at Stanford Law School, where I competed even harder for the standard badges of success.

The highest prize in a law student's world is unambiguous: out of tens of thousands of graduates each year, only a few dozen get a Supreme Court clerkship. After clerking on a federal appeals court for a year, I was invited to interview for clerkships with Justices Kennedy and Scalia. My meetings with the Justices went well. I was so close to winning this last competition. If only I got the clerkship, I thought, I would be set for life. But I didn't. At the time, I was devastated.

In 2004, after I had built and sold PayPal, I ran into an old friend from law school who had helped me prepare my failed clerkship applications. We hadn't spoken in nearly a decade. His first question wasn't "How are you doing?" or "Can you believe it's been so long?" Instead, he grinned and asked: "So, Peter, aren't you glad you didn't get that clerkship?" With the benefit of hindsight, we both knew that winning that ultimate competition would have changed my life for the worse. Had I actually clerked on the Supreme Court, I probably would have spent my entire career taking depositions or drafting other people's business deals instead of creating anything new. It's hard to say how much would be different, but the opportunity costs were enormous. All Rhodes Scholars had a great future in their past.

War and Peace

Professors downplay the cutthroat culture of academia, but managers never tire of comparing business to war. MBA students carry around copies of Clausewitz and Sun Tzu. War metaphors invade our everyday business language: we use *headhunters* to build up a sales *force* that will enable us to take a *captive market* and *make a killing*. But really it's competition, not business, that is like war: allegedly necessary, supposedly valiant, but ultimately destructive.

Why do people compete with each other? Marx and Shakespeare provide two models for understanding almost every kind of conflict.

According to Marx, people fight because they are different. The proletariat fights the bourgeoisie because they have completely different ideas and goals (generated, for Marx, by their very different material circumstances). The greater the differences, the greater the conflict.

To Shakespeare, by contrast, all combatants look more or less alike. It's not at all clear why they should be fighting, since they have nothing to fight about. Consider the opening line from *Romeo and Juliet*: "Two households, both alike in dignity." The two houses are alike, yet they hate each other. They grow even more similar as the feud escalates. Eventually, they lose sight of why they started fighting in the first place.

In the world of business, at least, Shakespeare proves the superior guide. Inside a firm, people become obsessed with their competitors for career advancement. Then the

firms themselves become obsessed with their competitors in the marketplace. Amid all the human drama, people lose sight of what matters and focus on their rivals instead.

Let's test the Shakespearean model in the real world. Imagine a production called *Gates and Schmidt*, based on *Romeo and Juliet*. Montague is Microsoft. Capulet is Google. Two great families, run by alpha nerds, sure to clash on account of their sameness.

As with all good tragedy, the conflict seems inevitable only in retrospect. In fact it was entirely avoidable. These families came from very different places. The House of Montague built operating systems and office applications. The House of Capulet wrote a search engine. What was there to fight about?

Lots, apparently. As a startup, each clan had been content to leave the other alone and prosper independently. But as they grew, they began to focus on each other. Montagues obsessed about Capulets obsessed about Montagues. The result? Windows vs. Chrome OS, Bing vs. Google Search, Explorer vs. Chrome, Office vs. Docs, and Surface vs. Nexus.

Just as war cost the Montagues and Capulets their children, it cost Microsoft and Google their dominance: Apple came along and overtook them all. In January 2013, Apple's market capitalization was $500 billion, while Google and Microsoft combined were worth $467 billion. Just three years before, Microsoft and Google were *each* more valuable than Apple. War is costly business.

Rivalry causes us to overemphasize old opportunities and slavishly copy what has worked in the past. Consider the recent proliferation of mobile credit card readers. In October 2010, a startup called Square released a small, white, square-shaped product that let anyone with an iPhone swipe and accept credit cards. It was the first good payment processing solution for mobile handsets. Imitators promptly sprang into action. A Canadian company called NetSecure launched its own card reader in a half-moon shape. Intuit brought a cylindrical reader to the geometric battle. In March 2012, eBays PayPal unit launched its own copycat card reader. It was shaped like a triangle—a clear jab at Square, as three sides are simpler than four. One gets the sense that this Shakespearean saga won't end until the apes run out of shapes.

The hazards of imitative competition may partially explain why individuals with an Asperger's-like social ineptitude seem to be at an advantage in Silicon Valley today. If you're less sensitive to social cues, you're less likely to do the same things as everyone else around you. If you're interested in making things or programming computers, you'll be less afraid to pursue those activities single-mindedly and thereby become incredibly good at them. Then when you apply your skills, you're a little less likely than others to give up your own convictions: this can save you from getting caught up in crowds competing for obvious prizes.

Competition can make people hallucinate opportunities where none exist. The crazy '90s version of this was the fierce battle for the online pet store market. It was Pets.com vs. PetStore.com vs. Petopia.com vs. what seemed like dozens of others. Each company was obsessed with defeating its rivals, precisely because there were no substantive differences to focus on. Amid all the tactical questions—Who could price

chewy dog toys most aggressively? Who could create the best Super Bowl ads?—these companies totally lost sight of the wider question of whether the online pet supply market was the right space to be in. Winning is better than losing, but everybody loses when the war isn't one worth fighting. When Pets.com folded after the dot-com crash, $300 million of investment capital disappeared with it.

Other times, rivalry is just weird and distracting. Consider the Shakespearean conflict between Larry Ellison, cofounder and CEO of Oracle, and Tom Siebel, a top salesman at Oracle and Ellison's protégé before he went on to found Siebel Systems in 1993. Ellison was livid at what he thought was Siebel's betrayal. Siebel hated being in the shadow of his former boss. The two men were basically identical—hard-charging Chicagoans who loved to sell and hated to lose—so their hatred ran deep. Ellison and Siebel spent the second half of the '90s trying to sabotage each other. At one point, Ellison sent truckloads of ice cream sandwiches to Siebel's headquarters to try to convince Siebel employees to jump ship. The copy on the wrappers? "Summer is near. Oracle is here. To brighten your day and your career."

Strangely, Oracle intentionally accumulated enemies. Ellison's theory was that it's always good to have an enemy, so long as it was large enough to *appear* threatening (and thus motivational to employees) but not so large as to actually threaten the company. So Ellison was probably thrilled when in 1996 a small database company called Informix put up a billboard near Oracle's Redwood Shores headquarters that read: CAUTION: DINOSAUR CROSSING. Another Informix billboard on northbound Highway 101 read: YOU'VE JUST PASSED REDWOOD SHORES. SO DID WE.

Oracle shot back with a billboard that implied that Informix's software was slower than snails. Then Informix CEO Phil White decided to make things personal. When White learned that Larry Ellison enjoyed Japanese samurai culture, he commissioned a new billboard depicting the Oracle logo along with a broken samurai sword. The ad wasn't even really aimed at Oracle as an entity, let alone the consuming public; it was a personal attack on Ellison. But perhaps White spent a little too much time worrying about the competition: while he was busy creating billboards, Informix imploded in a massive accounting scandal and White soon found himself in federal prison for securities fraud.

If you can't beat a rival, it may be better to merge. I started Confinity with my co-founder Max Levchin in 1998. When we released the PayPal product in late 1999, Elon Musk's X.com was right on our heels: our companies' offices were four blocks apart on University Avenue in Palo Alto, and X's product mirrored ours feature-for-feature. By late 1999, we were in all-out war. Many of us at PayPal logged 100-hour workweeks. No doubt that was counterproductive, but the focus wasn't on objective productivity; the focus was defeating X.com. One of our engineers actually designed a bomb for this purpose; when he presented the schematic at a team meeting, calmer heads prevailed and the proposal was attributed to extreme sleep deprivation.

But in February 2000, Elon and I were more scared about the rapidly inflating tech bubble than we were about each other: a financial crash would ruin us both before

we could finish our fight. So in early March we met on neutral ground—a café almost exactly equidistant to our offices— and negotiated a 50-50 merger. De-escalating the rivalry. post-merger wasn't easy, but as far as problems go, it was a good one to have. As a unified team, we were able to ride out the dot-com crash and then build a successful business.

Sometimes you do have to fight. Where that's true, you should fight and win. There is no middle ground: either don't throw any punches, or strike hard and end it quickly.

This advice can be hard to follow because pride and honor can get in the way. Hence Hamlet:

> *Exposing what is mortal and unsure*
> *To all that fortune, death, and danger dare,*
> *Even for an eggshell. Rightly to be great*
> *Is not to stir without great argument,*
> *But greatly to find quarrel in a straw*
> *When honor's at the stake.*

For Hamlet, greatness means willingness to fight for reasons as thin as an eggshell: *anyone* would fight for things that matter; true heroes take their personal honor so seriously they will fight for things that *don't* matter. This twisted logic is part of human nature, but it's disastrous in business. If you can recognize competition as a destructive force instead of a sign of value, you're already more sane than most.

Haonan Li and Victor Yaw, "*The True Story of Lee Kuan Yew's Singapore*"

Palladium Magazine, August 2020 (link)

There is no authoritarian in modern history as well-regarded as Lee Kuan Yew among the Western elite. Henry Kissinger called Lee "one of the asymmetries of history." Margaret Thatcher once remarked that Lee was "never wrong." Out west, Netflix executives study Lee's life in their leadership course. On the East Coast, Harvard Kennedy School pores over the "Grand Master's insights."

The Western student of international politics knows to nod approvingly when Lee's name is mentioned. Frustrated by the sludge of partisan politics in his own country, he sees in Lee's legacy a kind of exotic escape. If asked, he remarks sagely: Singapore is proof of what enlightened authoritarianism can achieve.

On this alone, the Chinese elite agree with their Western counterparts. For them, early Singapore is proof of the effectiveness of one party rule. Let the West squabble over legislatures and obsess over separated powers, while China moves boldly to reclaim its rightful place on the world stage. Africa is no exception to this consensus. In Rwanda, Paul Kagame styles himself in Lee's image. In the words of The Washington Post: "to really understand Rwanda is to study Singapore."

A broad consensus has solidified among elites that early Singapore should serve as a model for other developing nations to study and replicate. At a time when Western democracies are under stress and challengers from Chinese socialism to 'illiberal democracy' are ascendant, this consensus deserves to be examined carefully. China in particular has become something like a case study for Singapore-inspired technocracy, and the Chinese Communist Party itself reinforces the link between the two.

What exactly is the Singapore Model? Beyond the crude label of enlightened authoritarianism, what are the philosophical assumptions that underlie the Singaporean approach to governance? What are the limitations of these assumptions? What has happened when foreigners have attempted to replicate the Singaporean model, or when Singaporeans try to export it?

Both official and dissident accounts of early Singaporean history reveal a model with three key elements: high modernism, centralized authority, and weak civil society.

However, these accounts also provide a challenge to the idea that Singapore's model can be exported. In fact, it was highly conditioned by Singapore's own context, and how Lee and the People's Action Party (PAP) responded to the political dynamics of the time. The resulting model is effective in Singapore itself, yet inevitably limited by scale. Large social processes are more complex than any schemata can capture—and yet, authoritarian high modernist states must rely on schemata to make centralized decisions. This leads to its failure in larger geographies, since abstractions and errors inevitably compound as the distance from ground reality increases. Soviet agricultural collectivism, the Chinese Great Leap Forward, and the Le Corbusian projects in Brasilia and Chandigarh are haunting reminders of the limitations of the model.

But the rise of Singapore provides compelling lessons of a different sort, ones which help us understand how the city-state was built in its unique conditions. Today, the new U.S.-China rivalry is playing out in the divergence between different development paths—a divergence which may end the mythos of a universally applicable model. While Lee's admirers in the art of statecraft cannot import a Singaporean model, they can learn from the ardent pragmatism which drove him to reject the easy solutions of outsiders and build a state which defied all conventions.

The Gospel According to the People's Action Party

The current consensus around Singapore is the product of careful narrative by the PAP, Singapore's governing party. This version of history revolves primarily around the figure of Lee Kuan Yew.

The construction of this national narrative begins in Singaporean schools, where every student studies the Singapore story under the National Education program. Students learn that Singapore began as a sleepy Malay village until Stamford Raffles arrived in 1819 to set up a British trading post. Raffles' colony thrived, attracting hundreds of thousands of Chinese immigrants, as well as Malays and Indians. But the Japanese subsequently humiliated the British in World War II, captured Singapore, and subjected its residents to trauma and oppression from 1942-1945.

With the end of World War II, Britain returned and set about executing a "painless exit strategy" of gradual decolonization. In the 1950s, Lee Kuan Yew and his colleagues in the PAP outmaneuvered a violent Communist party to emerge victorious in the election of 1959. From 1963-1965, Lee attempted to integrate Singapore into the Malaysian Federation in order to fend off the Communists and maintain economic and political stability. The merger proved to be temporary and by August 1965, Singapore separated from Malaysia and became independent. A short clip of Lee at the press conference announcing separation, overcome with emotion and crying openly, is familiar to every Singaporean.

Miraculously, Lee overcame this setback and took Singapore from Third World to First. Lee built modern flats to replace squalid shophouses and kampongs. He created a conscription army and built an officer corps from scratch. He prioritized education and built a world class education system. He soothed racial discord and social disharmony with smart housing policy and a firm criminal justice system. In the PAP's telling, the Singapore story is the story of Lee Kuan Yew.

When Lee died in March 2015, Singapore's military activated Operation White Light. Within three hours, a state funeral was underway. So much manpower was thrown at the operation that colonels were acting as drivers. Tens of thousands stood in the heavy rain to pay tribute to him. His son, current Prime Minister Lee Hsien Loong, remarked: "The light that has guided us all these years has been extinguished."

This version of the Singaporean story has several advantageous features. First, it collapses the accomplishments of many individuals into the single figure of Lee Kuan Yew. There is a reason, after all, that Hollywood makes use of composite

characters—they make the story easier to tell. Second, it makes the implicit case that the early authoritarianism of the PAP was a desirable quality. Without it, Singapore would not have been able to enact sweeping reforms. By this logic, illiberal leaders in countries like Zimbabwe and North Korea have failed despite the centralization of power in their countries. If only Mugabe and Kim had the character, intelligence, and statecraft of a Lee Kuan Yew, their countries would develop rapidly.

The Struggle for Modern Singapore

On the other side of this narrative conflict are those aligned with the various factions of the opposition. Historians on this side tell a different story. Rather than analyzing Singapore's climb from Third World to First, the opposition instead focuses on the early days of Singapore where political norms were nascent and the leadership of Singapore contested. In particular, they see the period of struggle as culminating with Singapore's "original sin": Operation Coldstore.

Three political parties dominated Singapore in the early 1950s: the People's Progressive Party, the Democratic Party, and the Labour Front. The first two parties were widely seen as out of touch British stooges dedicated to preserving the interests of the rich. The Labour Front was interested in labor issues, but was led by, in Lee's estimation, a "bunch of clowns." The political landscape was ripe for disruption.

Lee Kuan Yew and his fellow English-educated socialists wanted to seize this opportunity. But Lee and his broken Mandarin could not win the support of the mass of Chinese speaking laborers alone. Beijing-led Communist ideology resonated deeply with the Chinese working class in Singapore. After their humiliating defeat to the Japanese in World War II, the British had lost their mandate to rule. Yet to be a Chinese laborer in 1950s Singapore was still to be a "second-class citizen in the land of your birth." Singaporean Chinese citizens were no longer willing to tolerate forms of colonial exploitation, massive inequality, "structural wage discrimination, and unsafe labor conditions. Trade unionists and pro-Communists who articulated these frustrations in fiery rhetoric were political dynamite. "Any man who wants to carry the Chinese-speaking people with him cannot afford to be anti-Communist," Lee realized.

And so Lee set out to court the trade unionists, progressives, and Communists. At the PAP's inauguration ceremony in November of 1954, Lee articulated objectives carefully calibrated to appeal to them. The PAP declared that it would seek to soften local sedition laws and secure the right for trade unions to participate in politics. "The problems and struggles of the trade union movement," the PAP signaled after the ceremony, "must find increasing expression in Party policy." These sweet words found eager ears among prominent trade unionists in search of allies. Lee soon found himself working closely with a man named Lim Chin Siong.

Later observers would describe Lim as "a comet on the [1950s] Singapore scene" and a "dominant political figure in [early 1960s] Singapore." A capable organizer and a charismatic orator in Mandarin and Hokkien, Lim could connect with Chinese-educated

audiences in a way that Lee could not. Contemporary accounts of Lim's political talent are giddy with praise.

> There were 40,000 people, each mesmerised by Lim Chin Siong's oratory. 'The British say you cannot stand on your own two feet,' he jeered. 'Show them how you can stand!' And 40,000 people leapt up—shining with sweat, fists in the air—shouting, Merdeka.

By inviting prominent trade unionists and left-wing factions—some of whom were pro-Communist—into the PAP, Lee was making a calculated gamble. Could he channel their popularity into electoral success without ceding internal control of the party to them?

In 1957, the Communists staged a coup inside the PAP. They hoped to wrest control of the Central Executive Committee (CEC) from Lee in order to oppose his plans for independence through merger with Malaya. Further, the Communists opposed the establishment of an Internal Security Council that ceded control of Singapore's internal affairs to the UK and Malaya that Lee had assented to in London. The left-wing coalition quickly secured six of twelve CEC seats. Lee had lost control.

This pro-Communist triumph was a brief one. Under the Preservation of Public Security Ordinance, the government arrested five of the six newly elected members of the PAP CEC. Lim Yew Hock, then Chief Minister of Singapore, had ordered a brutal crackdown of Communist and leftist groups. Lim Yew Hock's forceful application of the Internal Security Act won him many admirers in the British government. Comforted by reduced Communist activity, the United Kingdom Parliament passed the State of Singapore Act in 1958, granting Singapore full internal self government.

Publicly, Lee stood in solidarity with his imprisoned colleagues. Lee issued a declaration that the PAP would be standing for election but, in the event of victory, would refuse to take office unless all eight imprisoned members of the PAP were released. In parallel, however, Lee created four types of membership in the PAP: probationary, ordinary, probationary cadre, and full cadre. Under this new system, only full cadres would be able to vote for CEC elections. A Board of Selection filled with PAP moderates would decide which party members were full cadres. Lee was determined to prevent another coup.

In May of 1959, the PAP crushed its competitors, winning 43 seats out of 51 seats in the newly established Singaporean Legislative Assembly. To ensure a smooth transition, the government immediately released the eight alleged Communist members of the CEC. Lee's gamble had paid off handsomely. In just five years, the PAP had gone from nothing to Singapore's dominant political party. PAP moderates began to look for an opportunity to end their partnership with the pro-Communist faction. To preserve the party's legitimacy, a split would have to be over a principled policy disagreement. With Lim Chin Siong out of prison and able to lead, the Communists and their allies pushed yet again for the government to release all political detainees and abolish the

hated Internal Security Council. Yet their public statements did not alter PAP policy substantially. Lim Chin Siong was likewise beginning to tire of the political alliance.

These tensions reached a breaking point over the issue of merger with Malaya. During a motion of confidence, thirteen PAP assemblymen refused to vote for the PAP's merger proposal. Led by Lim Chin Siong, these thirteen assemblymen and five other prominent trade unionists left the PAP and formed their own party, called Barisan Sosialis, in July of 1961. In the wake of Lim's departure, 19 out of 23 PAP Organising Secretaries left to join Barisan. 25 out of 51 branch executive committees resigned en bloc. In total, 80% of PAP members would leave the party by the end of 1961.

Lim and Barisan Sosialis became a formidable opposition to the PAP, campaigning fiercely against Lee's proposal for merger. When Lee emerged victorious in a referendum for merger, Lim stated publicly:

> The PAP used threats and cheated to gain victory… the people can clearly see that if the PAP can juggle with the law and threaten and cheat today, they will be able to do so tomorrow…But as long as the authorities preserve the conditions for peaceful constitutional struggle, we will continue to carry out peaceful constitutional struggle. If the PAP continue to cheat and threaten, we will keep exposing their cheating and threats. If they want to juggle around with and break the parliamentary democratic system, they have to bear all the consequences.

Unable to detain and neutralize Lim without evidence of violent subversion, Lee bided his time. Then on December 8th, an armed rebellion in Brunei broke out. Lim and the Barisan issued a statement in support of the rebellion, declaring "a popular uprising against British colonialism and must command the support of all genuine anti-colonialists." Further, police had spotted Lim lunching with Azahari, the leader of the rebellion a few days ago. Lee had his opening.

On February 2nd, 1963, the Internal Security Council executed Operation Coldstore. Under the cover of darkness, police arrested 113 alleged Communists and detained them without trial. Among them was Lim Chin Siong. In one fell swoop, Lee dismantled the political network around Lim and his allies, ending their chances of intellectual leadership and political power.

Official Singaporean materials obscure the human cost of Operation Coldstore. The PAP casts Operation Coldstore as a harsh, but necessary action that crippled a violent Communist Party of Malaya. In contrast, the opposition identifies Coldstore as the moment political pluralism was wiped out on the island—Singapore's original sin. Lim Chin Siong is likewise a political totem. For Lee's supporters, his victory would have doomed Singapore to stagnation, conflict, and foreign domination. Opposition sympathizers instead imagine an alternative history where Lim was the one to build modern Singapore.

In reality, Lim would spend the next six years in prison, culminating in an attempt to commit suicide in 1969. After his release, Lim moved to England, working

odd jobs. For a time, he worked as a grocer in London. Lim never returned to politics and died after a heart attack in Singapore.

Scholars will continue to advance competing interpretations of this moment in history. As recently as 2018, Singapore's Home Affairs and Law Minister Kasiviswanathan Shanmugam spent six hours cross-examining dissident historian Thum Ping Tjin on his analysis of Operation Coldstore. The historiography of this affair is far from settled. Did Barisan intend to use violence to subvert the constitution and overthrow the government? Was the Communist threat real? Was Lim Chin Siong himself a Communist? Was he really willing to resort to violence?

Whether motivated by genuine security concerns or political gain, Operation Coldstore made the rules of engagement clear for the body politic. Lee would not hesitate to sacrifice pluralism or cripple civil society in the pursuit of a modern Singapore.

Lee Kuan Yew's High Modernism

By the mid 1960s, Lee had finally assembled two key components of the Singapore Model: Centralized authority and a weak civil society. These two conditions provided the blank canvas upon which Lee could impose his vision for Singapore. Yet what was the underlying philosophy that animated Lee's vision? To identify this third component of the Singapore Model, one must understand how Lee's time at Cambridge shaped his worldview.

Two centuries before Lee Kuan Yew's arrival at Cambridge, high modernism as an ideology emerged in Western Europe. Europe in the 1800s saw unprecedented advancements in chemistry, physics, medicine, math, and engineering. Modernists hoped to apply the fruits of linear progress in the sciences to shape society through the state. For some, this took the form of liberal technocracy or Fabian social democracy. For others, particularly Marxists, revolution had to overthrow those classes which opposed progress. Just as engineers can study and optimize the functioning of a steam engine, so too did the various modernists seek to calibrate social order. For the first time in history, governments could shape society not by custom and historical accident but according to conscious and scientific planning.

These themes suffuse Lee's 1971 Foundation Lecture at Cambridge. In it, Lee remarked unapologetically that industrialization in the developing world could only be achieved if "new value systems and behaviour patterns are grafted on the old." Leaders, according to Lee, could not afford to be sentimental. In his words:

> It requires bold and determined leadership to eradicate those values which hamper the advance of a people into the higher sciences. It requires strong will to force the adoption of values and attitudes which can quicken the pace of change.

For Lee, Southeast Asian populations were "soft societies." Modernization of Singapore's economy was impossible without the scientific alteration of society. In this sense, Lee was the prototypical high modernist.

Lee's Singapore reflects his modernist convictions. As Prime Minister, Lee's Housing and Development Board (HDB) replaced the chaos of kampongs with neatly ordered concrete flats. HDB flats of the same generation look identical apart from varying pastel paint jobs. Every detail from the placement of trees, to the ratio of playgrounds per resident, to the proportions of races in each building is carefully orchestrated. Lee's HDB sells these flats to Singaporean citizens at below the market rate.

A strictly enforced quota system prevents racial enclaves from forming by ensuring each block is racially integrated. Further, citizens do not actually own their property—they purchase a 99 year lease from the government. At the end of the lease, the government reclaims the property. With citizens largely holding leaseholds and the government owning 90% of Singapore's land, urban planners can tear down anything old that falls outside of narrowly defined heritage areas. It is in short, something straight out of modernist architect Le Corbusier's radical manifesto "Towards a New Architecture"—technocratic, mass-produced, and ruthlessly modern.

When Modernism Fails

Yet history is littered with the failures of authoritarian modernist regimes. Indeed, the record of utopian schemes to improve the human condition is dismal in the 20th century. In the Soviet Union, Stalin's plan to transform "small, backward and scattered peasant farms to amalgamated, large scale socialized farms" led to brutality and starvation for millions. In China, Mao's Great Leap Forward propelled the nation into the Great Chinese Famine. Even Le Corbusierian plans in Brasilia or Chandigarh have become embarrassing examples of government hubris. Why did authoritarian modernism work well for Singapore and poorly for others?

The key difference is scale. Authoritarian governments by nature concentrate authority in centralized decision-makers. Decision-makers must rely on simplified models to make their decisions. All schemata are by nature imperfect representations of reality. Indeed, a scheme that reflected reality perfectly would be cluttered and uninterpretable. The reality is always more complex than the plan. In large countries, the planner is further from ground reality than in tiny city-states. Abstractions and errors inevitably compound as the distance increases.

Part of the mythos of Lee Kuan Yew is that he succeeded as an authoritarian where so many others have failed. Would-be Lees around the world use the Singapore story to argue that authoritarian modernism works if the authoritarian himself is brilliant and wise. Perhaps it is the case that with the right leader, the problems of scale can be overcome? Nixon, for one, believed if Lee had led a larger country he would have "attained the world stature of a Churchill, Disraeli, or Gladstone."

History provides us with a natural experiment. In 1994, Lee Kuan Yew and Chinese Vice Premier Li Lanqing signed the "Agreement on the Joint Development of Suzhou Industrial Park." Under the agreement, Singapore would maintain a 65% ownership stake in the project and develop the city of Suzhou into a modern industrial

powerhouse—all running on Singapore's public-administration and industrial development expertise. Central to its success was the transfer of Singapore's management prowess to Chinese bureaucrats who hoped to glean valuable insight into the Grand Master's methods and Singapore's institutional DNA. Both Singaporean and senior Chinese officials were eager to have the project succeed—this was a chance to prove that the Singapore model was applicable beyond Singapore itself.

The careful choice of location for the project reflected the public endorsement of Jiang Zemin, Vice Premier Li Lanqing, and Premier Li Ping. Located in Jiangsu, China's richest province, Suzhou was a cultural and intellectual center. Universities, polytechnics and vocational schools in the area could easily supply the labor necessary for development. Modern expressways, a railway line, waterways, and an international airport connected the city to the rest of the country and the world. Lee was confident that the project had the endorsement it needed to succeed, assuring partners: "we can guarantee that the agreement we have reached with China about Suzhou will be honored." More broadly by 1993, China was growing at a blistering pace of 13% per year. The project was poised to succeed.

Yet by 1999, Lee had failed in Suzhou. Five years into the project's 20-year development plan, Suzhou Industrial Park had only attracted $754 million dollars of investment out of target of $20 billion, 5,000 residents out of target of 600,000 and 14,000 employees out of a target of 360,000. The Far East Economic Review reported that development costs had climbed to nearly $400 million but "profitability remain[ed] a distant hope." Singapore subsequently disengaged from the project in 2001, reducing its stake to 35%. Lee had meticulously transplanted Singapore's methods to Suzhou. Even the 'ready-built factories' constructed in Suzhou Industrial Park were made by the same government-linked organization that oversaw much of Singapore's earlier industrial development. Yet competition for foreign direct investment from nearby Suzhou New District—a smaller, older, and less-supported development that Singapore previously dismissed—proved too fierce. Singapore's elite group of civil servants simply could not navigate China's multi-level government and apply the Singapore model at scale.
Frustrated by the lack of results, Lee flew frequently to meet with Jiang Zemin personally. Jiang would act decisively to assist the Singaporeans, on one occasion sending an allegedly uncooperative Mayor of Suzhou away to Harvard Business School for a 'leave of absence.' It was to no avail. Lee's bet on a universal Singapore model was wrong.

Beyond the Singapore Model

A seductive assumption underlies the euphoria around the Singapore model: that models of development can be scientific and universal. Those who are afflicted with this euphoria search eagerly for examples of universality. But there is far more to the Singaporean story than mere technocracy. Political strategy and a keen understanding of domestic and international power were central to the success of Lee's PAP. This allowed him to create the institutional foundations for Singapore's famous technocratic model.

Likewise, there is far more to the rise of China than an imported Singaporean model—a story frequently told by stringing together study-mission statistics and a couple of Deng anecdotes.

That story ignores, for example, China's decentralized system of de facto fiscal federalism and fierce xian level competition—which have no Singaporean equivalent—because it is inconvenient for their thesis. They sweep aside the fact that the father of Singapore himself and a legion of elite Singapore civil servants could not scale the model under optimal conditions. Some are so oblivious of Singaporean history that they do not even realize they are advocating for a developmental model that contradicts their own ideological views. This analytical trap ends up not understanding Singapore, or China, or arguably the Western development path itself.

Ironically, Lee Kuan Yew himself had no patience for other people's models. In his words, "I am not following any prescription given to me by any theoretician on democracy or whatever. I work from first principles: what will get me there?" If there is a lesson from Singapore's development it is this: forget grand ideologies and others' models. There is no replacement for experimentation, independent thought, and ruthless pragmatism.