

“Strategy Needs Creativity”
by Adam Brandenburger^{*,1}

1. Being Different

Business strategy has been around for a long time, but competition has been around even longer. This proposition comes from a classic *Harvard Business Review* article, “The Origin of Strategy” by Bruce Henderson, the famous business consultant who founded the Boston Consulting Group. Henderson wrote: “Competition existed long before strategy. It began with life itself.”²

The natural world offers numerous lessons for everyone who studies competition and, by extension, for everyone who is a strategist. One lesson mentioned in “The Origin of Strategy” comes from what is called the Principle of Competitive Exclusion in ecology. This principle states that if two different species are to co-exist in some environment, then they must make their livings in different ways. Adapted to business, this principle tells us that successful enterprises are ones that find ways to be different from their competitors. Differences, not similarities, are essential to success.

This proposition is almost an axiom of business. It is taught in business schools and, as far as it goes, is correct. But being different is easier said than done. It is also almost axiomatic that there is no shortage of smart, well-informed, observant players out there in the world of business. It is very likely true that the increasing interconnectedness of the world makes the challenge of standing out from the competition even harder. On the one hand, interconnectedness — with its consequences for globalizing markets and rising wealth — means that the opportunities to deploy knowledge are greater than ever. On the other hand, it is very hard to gain an edge when so many people have access to the same information. This is the challenge.

2. Thinking Differently

Albert Einstein said: “Creativity is seeing what everyone else has seen, and thinking what no one else has thought.” His words give us the key to being different in an interconnected world. Many people may know and see more or less the same things, but it does not follow that everyone then has to think the same thoughts. The recipe for the successful strategist is: Think differently from other players. Of course, thinking differently is not enough. To out-compete the competition, the strategist has to think both differently and better. Out-thinking the competition in this sense is the job of the business strategist.

There is more to what Einstein said. Seeing the same but thinking differently is his definition of creativity. So, if we follow Einstein, we conclude that successful strategy must involve harnessing one’s creativity. Strategy making is not a machine. It is creativity exercised in a particular direction. Strategy needs creativity.

* New York University; J.P. Valles Professor, Stern School of Business; Distinguished Professor, Tandon School of Engineering; Global Network Professor, NYU Shanghai; email: adam.brandenburger@nyu.edu; website: <http://adambrandenburger.com>. (Version 01/07/18)

Business students are taught to draw various maps of organizations and the landscapes on which they operate. They also learn various schemes for classifying strategies, such as sorting strategies into the different kinds of market positions or organizational capabilities that are possible. While useful, these activities do not get to the heart of making, as opposed to understanding, strategy.

The question for everyone is how to go beyond learning to appreciate strategic possibilities and take the essential step of creating strategic options for oneself.

3. Strategy from Four Directions

Creation, in its most fundamental sense, means bringing something entirely new into existence. Likewise, creativity is, by definition, about moving away from what already exists. Creativity is always a challenge to the status quo.

Often, creativity is more or less defined this way — as an act of challenge or rebellion, breaking with what has gone before. This is obviously central to creativity, but it is not the whole picture. Experts on the subject of creativity talk about various other inputs to the endeavor. Strategists who want to think creatively need a framework to help them remember and apply a number of these inputs. The 4 C's framework is designed to help strategists do exactly this.

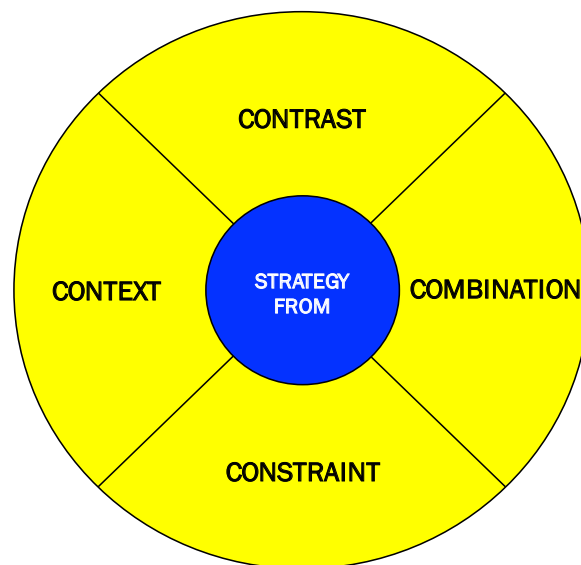


Figure 1: The 4 C's Framework

The 4 C's framework is a set of mental prompts to help strategists find new moves that involve thinking differently from the competition. There are four prompts:

- contrast
- combination
- constraint
- context

Let's look briefly at the 4 C's and then consider each of them in more detail, including examples of how they work.

We already said that challenging the status quo is central to creativity and, therefore, to the creative strategist's task. This is embodied in our first mental prompt: strategy from contrast. The strategist should be on the lookout for moves that constitute a sharp contrast with convention. The second prompt is strategy from combination. Steve Jobs famously said that creativity is "just connecting things," and many breakthrough moves in business come from connecting products or services that had not been thought of as usefully connected before. The third mental prompt is strategy from constraint. At Google, Marissa Mayer proclaimed that "creativity loves constraints," and, indeed, creative strategists look at limitations and constraints in their organizations and turn them into strengths. The final prompt is strategy from context. Context is key because it influences how one thinks and acts. For this reason, we say that changing contexts can even be king when it comes to having new thoughts. Adapting ideas from one context to another can be a powerful way to find new strategies.

Strategists need new thinking, but simply waiting for inspiration to strike is not the answer. They must search actively and creatively for new ideas. The 4 C's framework proposes four directions in which to look — directions from which new strategies can come. They can come from contrast, combination, constraint, and context.

4. Strategy from Contrast

In 1805, Britain was fighting for its life against the combined fleets of the French and Spanish navies.³ The modus operandi in naval battles of the time was that the two sides lined up opposite each other, and then the gunners opened fire. But this time, in part because the British Navy was outnumbered, the British admiral Lord Nelson decided on a dramatically contrasting approach. At the Battle of Trafalgar, he broke the British fleet into two parts and drove them perpendicularly at the French-Spanish line, which he succeeded in breaking into pieces, thus destroying the enemy's ability to communicate and coordinate. It was a crucial British naval victory, ending French plans to invade Britain.

The striking lesson of Nelson's victory for us is how literal was the change he made to status-quo thinking. Conventional wisdom said to line up in parallel with the enemy. Instead, he lined up perpendicularly.

Challenging the status quo is a good general mindset to employ, but it is not immediately a guide to action. Being very literal in testing the assumptions underlying a status quo can help uncover those game-changing moves. The famous 1997 Apple ad said: "Think different." The extra ingredient here says: "Think different literally." Look at the status quo and then look for moves that contrast with it in a very literal way.

Here are two examples from the world of enterprise. Universities offer a highly bundled — and often expensive — product called the degree program. Typically, students cannot take just one or two courses but must enroll in a full program. If the incumbents are bundling, then a very literal counter-strategy is to unbundle. This is currently a big move in higher

education. A prominent example of unbundling is General Assembly, founded in 2011 as a co-working space and now with 20 campuses in six countries. General Assembly offers coding courses, as well as courses in digital marketing and even strategy. Its unbundled offerings compete with the bundled offerings of traditional business-school programs.

The contrasting move is very literal: If your competitor offers a bundled product or service, consider offering an unbundled version. There is a good chance that a segment of the market — perhaps, a very large segment — will prefer to get a specific subset of the bundle at a better price. The other side of this, of course, is to beware if you are the business offering bundled solutions. A competitor may unbundle and eat into your market.

The world of retail provides the next example of a contrasting move. Traditionally, a common retail model was to start with a flagship store and then add satellite locations.⁴ The flagship was often in the center of a big city, and satellites were added in surrounding suburban locations. Now consider pop-up stores. In some cases, these conform with the old model — they are like mini-satellites. But there are also cases in which the pop-up is the contrasting strategy of starting with a smaller footprint and then, if that is successful, adding a larger footprint later. The Soho area in New York has become a testing ground for this strategy. For example, Samsung opened a pop-up in Soho in 2013, which it later expanded to a full retail outlet. The pop-up is another example of literalness: Instead of starting large and then adding small, start small and then, perhaps, go big.

Strategy from contrast can be made actionable by thinking very literally. At first blush, this might sound a bit paradoxical. Isn't literalness the opposite of creativity — more in-the-box than out-of-the-box thinking? Doesn't literalness break the link from creativity to strategy? No. Literalness is not small thinking. It is precise thinking, which involves looking carefully at the status quo and considering the impact of concrete changes to each of the assumptions underlying that status quo.

5. Strategy from Combination

Combination is a canonical creative move in both the arts and the sciences. In the hit TV show *Game of Thrones*, there is a dramatic battle scene (“The Battle of The Loot Train”⁵) which cleverly combines elements of iconic battle scenes from movies as disparate as *Stagecoach* (1939) and *Apocalypse Now* (1979). Or we can look to the sciences and go back to Einstein, who talked about the “combinatory play” of ideas. Einstein combined the idea of a ride in an elevator (a rather new technology back when he was writing) with the idea of a journey to outer space (where humans have yet to travel), to come up with his theory of gravitation.

In business, too, creative and successful moves can come from combination. The world of complementary products and services is one important arena in which these moves are seen. A good example is the complementarity between products and payment systems. Thus, the Chinese social media platform WeChat includes an integrated mobile payment platform (WeChat Pay) that enables users to buy and sell products within their social networks.

Apple and Nike have been exploring creative combinations for several years now, starting in 2006 with the introduction of the Nike+iPod Sport Kit, which enabled Nike shoes to communicate with an iPod for steps tracking. More recently, versions of the Apple Watch come with the Nike+ Run Club app fully integrated. These kinds of combinations are found in more and more businesses as increasing numbers of products -- ranging from factory machines to household devices to clothing and much more -- are being made smart and connected.

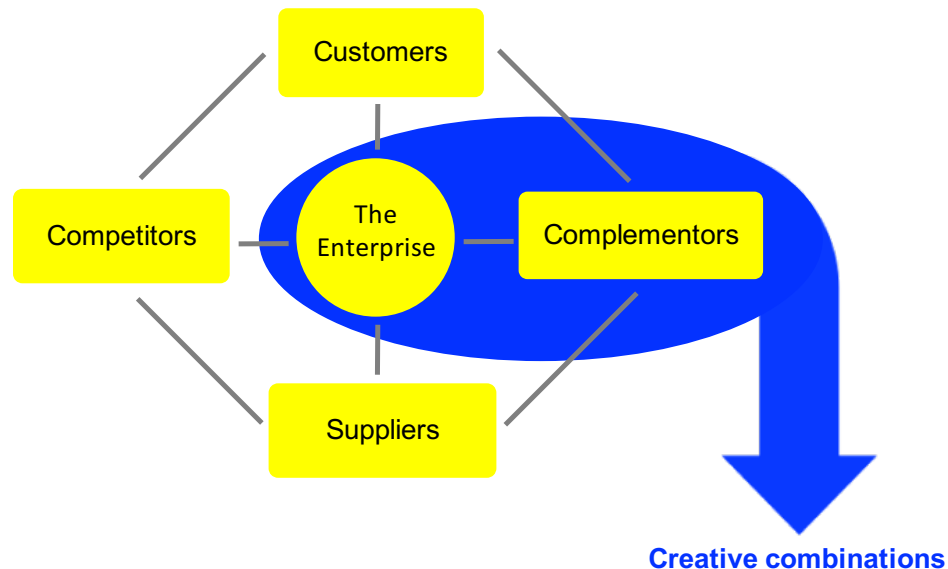


Figure 2: The Value Net

The general case is illustrated by the Value Net, which depicts a business together with the other players with which it interacts.⁶ On the vertical axis are suppliers and customers. On the horizontal axis are the business's competitors and also another group of players, overlooked in many traditional strategy frameworks, called the complementors. The complementors are other businesses that provide complementary products or services to the business in question or are complementary users of resources. As just explained, Apple and Nike provide an example of complementors. Likewise, Nest Labs and Amazon are complementors since Nest's intelligent home thermostat and security systems integrate with Amazon's home assistant Alexa. Every business can potentially benefit by scanning its landscape to identify potential complementors and then looking for creative ways to coordinate with them.

Perhaps today's biggest complementarity of all is the one emerging between humans and machines. Some commentators see the future as more competition than complementarity between humans and machines, with humans losing out in a lot of areas of economic life. Garry Kasparov, the former world chess champion, has a different view. After losing to IBM's Deep Blue in 1997, he initiated centaur chess, in which each team is a human-computer combination. Kasparov has explained: "Smarter computers are one key to success, but doing a smarter job of humans and machines working together turns out to be

far more important.”⁷ Back to business, the ability to find creative combinations of humans and machines is surely going to mean the difference between success and failure in many industries in the future.

Strategy from combination involves looking for connections across traditional boundaries, whether it is combining product and service, human and machine, or other ingredients. So, again, the creative strategist must challenge the status quo — this time, by thinking not just outside the box, but across two or more boxes at once.

6. Strategy from Constraint

Scientists operate under the constraint that for their new theories to be taken seriously, they must fit with what is already known. They cannot just make predictions about what has yet to be observed. The great physicist Richard Feynman referred to science as imagination in a straitjacket, for this reason. Artists also operate under constraints, although these are often concerned more with how than with what, such as when they adopt rules of a particular medium (a musical style, say). Just as in the sciences and the arts, creative thinking in business accepts constraints and turns them into opportunities to exercise the imagination.

This view of strengths and weaknesses in business is very different from that suggested by the classic SWOT analysis. Traditionally, the strategist is supposed to identify the strengths, weaknesses, opportunities, and threats impinging on an organization. Appropriate actions to exploit strengths and opportunities, or to mitigate weaknesses and threats, are then formulated. Thinking in terms of strategy from constraint is different. The strategist again starts with what appears to be a limitation or weakness, but does not take the situation at face value. Instead, the strategist asks if, viewed or used differently, this weakness can, in fact, be turned into a strength. A constraint plus imagination may yield an opportunity.

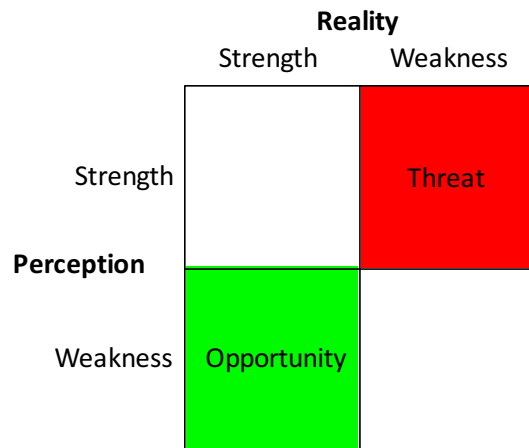


Figure 3: SWOT Analysis Updated

Tesla has not lacked financial resources in entering the car industry, but it does not have the traditional asset of a dealership network. Rather than get into the business of building such a network, Tesla has turned what might conventionally have been seen as a weakness in the

industry into a strength. It has chosen to build Apple-like stores with salespeople on salary, and it also sells cars online. This positions Tesla advantageously relative to competitors whose dealers might be conflicted in promoting electric vehicles over their existing sales base of internal-combustion vehicles. In particular, Tesla controls its pricing directly, while buyers of GM's Chevrolet Bolt, a competing electric vehicle, have encountered large price differences across GM dealers.⁸

There is a flip side to strategy from constraint. Just as it may be possible to turn an apparent weakness into a strength, it is possible that an apparent strength turns out, on closer inspection, to be more of a weakness. Rather than opportunity, this poses a threat. This possibility often increases in likelihood over time, as the assets that enabled a business to succeed in an existing environment turn into liabilities when the environment changes. For example, big retailers traditionally thought in terms of moving product out the door, and, to this end, they needed large physical footprints with on-site inventory. Among the many changes that retail faces today is the rise of the "guideshop" — the term used by the menswear retailer Bonobos — where shoppers try on items, which are then shipped to them or which they can subsequently order online. The traditional retail layout now becomes more a liability than an asset.

Thus, business strategists must be on the lookout for constraints that promote imagination and new strategies. They must also guard against the flip side. Resources that are in good supply and that might, at first blush, appear to be strengths may actually be sources of weakness. The business strategist must be aware of this possibility, too.

There is a further step in thinking about strategy from constraint, which is to ask if we might even benefit from self-imposed constraints on our organizations. This is like the artist's notion of following the rules of a particular medium. The famous Copenhagen restaurant Noma adheres to the New Nordic Food Manifesto (emphasizing purity, simplicity, beauty, seasonality, local tradition, and innovation) penned by its founders. It marks an extreme — and highly successful — instance of a strategy adopted by numbers of restaurants and food businesses around the world to work only with local suppliers. Commitments to supply-chain practices (other examples include adherence to labor or environmental standards) can be a powerful route to establishing a superior position in the eyes of customers. Self-imposed constraints can also spur innovation. In the early 2000s, the Audi racing team asked itself the question of how to win Le Mans if its cars couldn't go faster than the competition's.⁹ This led Audi to develop diesel- vs. gasoline-powered racers, which required fewer pit stops, and its new cars won Le Mans three years in succession (2004-2006). Now, in 2017, Audi has set itself a new constraint — and ambition — which is to build winning all-electric racers for the new Formula E (= electric) championship.

Strategy from constraint comes in various forms. Some constraints are imposed on an organization. These might be constraints of history or market position or lack of resources. Other constraints are consciously self-imposed. In all cases, creative strategists use constraints to advantage.

7. Strategy from Context

In 1975, musician Brian Eno and painter Peter Schmidt published a tool called Oblique Strategies, consisting of a deck of cards containing prompts designed to help people working on creative projects overcome mental blocks. Prompts included “Abandon normal instruments,” “Use ‘unqualified’ people,” and “Go outside — shut the door.”¹⁰ Eno used the cards when he worked with David Bowie, among other projects.

Going outside, literally or metaphorically, is excellent advice to the strategist. Context can have a profound influence on one’s thinking. Going outside is about changing contexts and can, therefore, be a powerful stimulus to new thinking. Creative strategists are aware of the effect of context and look for opportunities to shift contexts in order to come up with solutions to problems.

Intel went outside its normal business environment to come up with its famous Intel Inside logo in the early 1990s. The goal was to turn Intel microprocessors into a branded product, in order to speed up consumers’ adoption of next-generation chips and, more generally, to improve the company’s ability to drive the PC industry forward. The idea of a branded ingredient was well-established in certain consumer product sectors — famous examples included Teflon and NutraSweet — but had never been tried in the world of technology. Intel studied the consumer product examples and applied the same idea to the hi-tech sector via a novel advertising campaign, successfully branding what had previously been an invisible component inside a computer.¹¹ In the 2017 Interbrand ranking of the world’s most valuable brands, Intel comes in at number 15, just one place behind Disney.

Moving ideas across contexts involves moving them between industries, as Intel did, or even across countries. Sorority China is a Shanghai-based startup that provides co-living and co-working spaces for young professional women in China.¹² Founder and CEO Michelle Li got the idea from the feeling of sisterhood she experienced as a member of a sorority while in college in the U.S. She wanted to create the same effect for post-college women in China, noting, in particular, that Chinese women born during the one-child policy era do not have any actual sisters. Sorority China offers its members shared living and working opportunities and also helps member-based startups find co-founders, engage in co-marketing, and share best practices.

Strategy from context can mean taking a solution to a problem found in one setting and bringing it, more or less as is, to another setting. It can also mean coming up with an entirely new solution to a problem, where the creative spark behind the new solution comes from the positive effect that shifting vantage points can have on one’s thinking. Either way, context switching can be a powerful way to move one’s thinking and actions forward.

8. The Perilous P’s

Four directions: contrast, combination, constraint, and context. But just as there is opportunity for the strategist in each of these four directions, there is also danger in each direction. These dangers are, respectively: predictability, performance, profit, and paradigm. Call them the Perilous P’s.

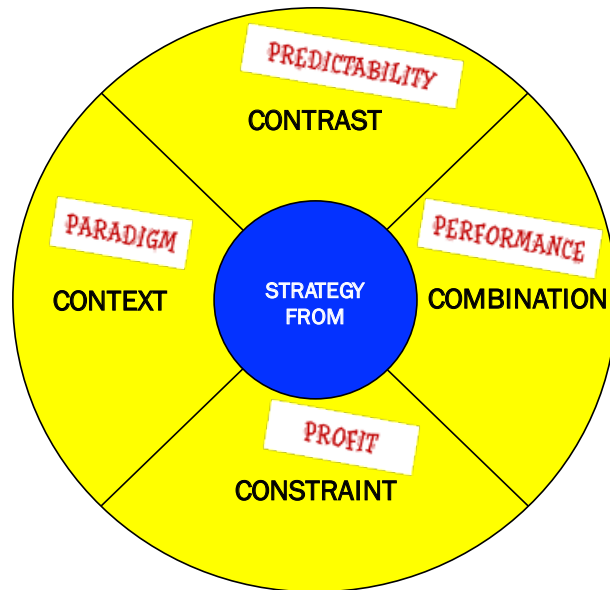


Figure 4: The Perilous P's

Organizations crave predictability. Without predictable routines, they would be unable to deliver on basic tasks such as providing customers with the same-quality product tomorrow as they provided today, or giving employees a degree of stability in their working environment.¹³ But pressure for predictability can work against strategy from contrast. To come up with clever moves that turn conventional wisdom upside down or inside out requires an environment in which unfamiliar, even crazy-sounding ideas, can be tested. The consequences of trying an upside-down or inside-out move cannot be predicted ahead of time. Strategy from contrast necessitates a different mindset from one that seeks certainty in advance.

Organizations spend a lot of time measuring performance. Revenues and costs are measured across product lines, with more-profitable lines grown and less-profitable lines pruned. But pressure for performance can work against strategy from combination. To build effective combinations of products may involve investing in initially less attractive products, or in untried partnerships with other businesses, or even in entirely new businesses. Even once creative new combinations of products are up and running, their performance cannot be correctly measured at the individual product level — it is the return on the whole system that matters. Strategy from combination necessitates a different mindset from one that favors a simple and overly focused notion of performance.

Business organizations seek profit. It is fuel for their futures and reward for their efforts. But the presence of profits loosens constraints. In the paradoxical world of creative strategy, an abundance of fuel and a loosening of constraints may actually do more harm than good. Thinking is hard and thinking creatively is harder; and, when resources are abundant, there is a temptation to think less. As we have seen, smart businesses impose constraints on themselves to make sure that they do not stop thinking hard. But even the discipline to do this may be in short supply if the environment is too comfortable. Strategy

from constraint necessitates a different mindset from one that enjoys the fruits of success too much.

Businesses live by paradigms. Agreed-upon theories about how its customers behave, what its suppliers need, how its competitors will act, or what the latest technological revolution means for it — these constitute the paradigm under which an organization operates. The benefit of such a shared narrative is that it enables people in an organization to coordinate their actions. But a paradigm can also be a prison, trapping people in a particular way of seeing things. Their context is fixed. A paradigm shift is needed if people are to be able to see differently and think differently. Strategy from context necessitates a different mindset from one that is committed to a single narrative.

An organization's innate attachments to predictability, performance, profit, and paradigm work against creative strategy. Effective business strategists must be both fighters and lovers. They must fight against these factors that endanger an organization's ability to come up with new strategies. They must be in love with the world of possibilities opened up by thinking about strategy from four creative directions: contrast, combination, constraint, and context.

Endnotes:

¹ The thinking in this article owes a considerable debt to my co-instructor Jeff Lehman and the students in the course Creativity Considered (at NYU Shanghai). Jessy Hsieh, Michelle Li, Barry Nalebuff, and Jeff Ramras offered valuable comments, and Rena Henderson kindly provided copyediting expertise. Financial support from NYU Stern, NYU Shanghai, and J.P. Valles is gratefully acknowledged.

² Bruce Henderson, "The Origin of Strategy," *Harvard Business Review*, November-December 1989, at <https://hbr.org/1989/11/the-origin-of-strategy>.

³ This example is inspired by the account in Richard Rumelt, "The Perils of Bad Strategy," *McKinsey Quarterly*, June 2011, at <http://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/the-perils-of-bad-strategy>.

⁴ Eliot Gattegno kindly provided this example.

⁵ Season 7, Episode 4. This paragraph follows the analysis at "Recreating Game of Thrones' Dragon Battle," by Nerdwriter1, at <https://www.youtube.com/watch?v=hcfGViXv4YQ&sns=em>. I am grateful to Jeff Lehman for pointing me to this example.

⁶ The Value Net was introduced in Adam Brandenburger and Barry Nalebuff, *Co-opetition*, Doubleday, 1996.

⁷ Garry Kasparov, *Deep Thinking: Where Machine Intelligence Ends and Human Creativity Begins*, John Murray, 2017, pp.5-6.

⁸ Eric Van den Steen, "Tesla Motors," Harvard Business School Case 9-174-413, December 2015; "How Tesla's Turning Weakness into Strength," posted 03/24/17, at <http://www.barrons.com/video/how-tesla-turning-weakness-into-strength/D8CC59A8-B7CE-4649-B332-CE1D072B4EC2.html>.

⁹ Adam Morgan and Mark Barden, *A Beautiful Constraint: How to Transform Your Limitations into Advantages*, Wiley, 2015, pp.59-60.

¹⁰ My thanks to Jeff Ramras for pointing me to this tool. A selection of the cards can be found at http://music.hyperreal.org/artists/brian_eno/oblique/oblique.html.

¹¹ David Yoffie and Michael Cusumano, *Strategy Rules: Five Timeless Lessons from Bill Gates, Andy Grove, and Steve Jobs*, HarperCollins, 2015, pp.82-85; Richard Tedlow, *Andy Grove: The Life and Times of an American*, Portfolio, 2006, Chapter 13.

¹² The author has a business relationship with Sorority China; see Sarah Boorboor, "Girl Talk with Michelle Li, CEO of Sorority China, a Coworking Space for Women," SmartShanghai.com, 09/14/17, at <http://www.smartshanghai.com/wire/community/girl-talk-with-michelle-li-ceo-of-sorority-china>.

¹³ This important role of predictability is emphasized in Howard Stevenson, Jeffrey Cruikshank, and Mihnea Moldoveanu, *Do Lunch or Be Lunch: The Power of Predictability in Creating Your Future*, Harvard Business Review Press, 1997.