

July 21:16

appreciate理解，明白 We appreciate that caring for children is an important job.我们理解，照顾小孩子是个重要的工作。

July 21:17

Many men don't appreciate how much work it takes to cook three meals a day.

Sicy 21:17

I beat her by the hair/ don't split hairs./ not turn a hair/ hair trigger

contingency, emergency

苗雅蕙 21:03

at one's own discretion

Sicy 21:04

speak volumes/it says a lot about

苗雅蕙 21:04

speaks to ,it says a lot about,speak volum

May 21:04

speak to/speak volumes/sth. says a lot ab

剪影 21:10

lend itself to

苗雅蕙 21:10

in perpetuity

JY 21:11

in perpetuity

Sicy 21:13

on conjectures/ lend itself to

Brain picking

May 20:57

sweet spot甜区

Sicy 20:57

weather the storm

Jimmy 20:58

face the music

Sicy 20:58

reinvent the wheel

Copyrighted Material

THE STICKING POINT SOLUTION

"Jay's innovative and dynamic approaches to increasing sales, cutting costs and boosting profits are the simplest, most powerful and practical I have ever seen."
—Brian Tracy,
New York Times
bestselling author

**9 Ways to Move Your Business
From Stagnation to Stunning Growth
In Tough Economic Times**

- Unlock the true potential of your company
- Learn how to ask the right questions about your business
- Achieve new levels of profitability and success
- Gain control over the future of your business today

JAY ABRAHAM
America's #1 Marketing Expert

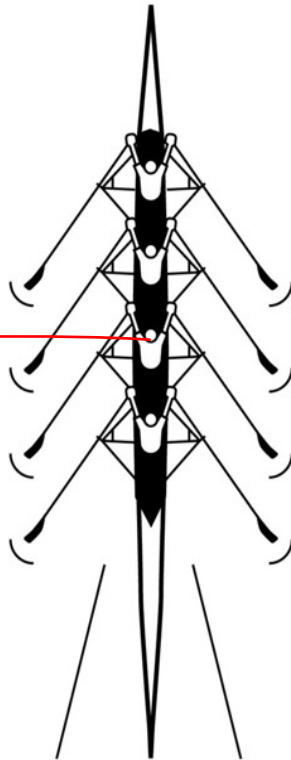
Copyrighted Material

Biology

Cooperation

Otherish,

Alloying



—
Work together.

Cooperation

Cooperation, or symbiosis, in biology rests on the idea that an organism that cannot perform an important function alone fills this particular gap by using the physical body of another organism, who also benefits from the interaction. It's often a way for species to increase their competitive pro^{x2-}we₄ss by giving them an advantage over their competitors. "All organisms are constrained in their adaptability at some point, and symbiotic relationships allow them to extend their inherent adaptive capacity to exploit new resources and environments or adapt to their own environment as it changes." ¹

We commonly think of biological cooperation as a win-win arrangement for the parties involved. You have a need. Someone fills it in. In exchange, you fill one of their needs. You don't require cooperation to survive, but with it the quality of your life improves. A shark doesn't need little fish to clean its teeth in order to live that day, but overall the quality of the shark's life is enhanced because clean teeth mean healthy teeth, which will give it more years to feed on prey. [Cooperation significantly expands what's possible, by creating emergent properties that have more power than the individual components.]

The origin of mitochondria is an excellent example of cooperation in biology. Mitochondria are the energy-producing organelles of cells. They are now an indispensable component of cells, but they do not exist in cells as a product of natural selection. We are here because at some point a mitochondrion and another cell cooperated.

According to one theory, mitochondria originally existed in nature as free prokaryotic cells (simple cells) and that one such mitochondrion was then acquired by an anaerobic, already eukaryotic cell (complex cell) for the purposes of converting toxic oxygen radicals into harmless water for the host. Another theory states that both the mitochondria and the host cell were prokaryotes and that the eukaryotic cell that now powers the vast majority of living organisms was then created as a result of the cooperation.²

Either way, the ancestor of mitochondria was a bacterium that got incorporated into a cell, from which a mutually beneficial relationship developed. Mitochondria produce adenosine triphosphate, or ATP, which can be thought of as the energy currency of the cell. Most chemical reactions in the cell need a lot of energy. These reactions are possible because the mitochondria are on board to create a rich energy source.³

Because of the success of this new cell, the mitochondria began “living” in the host cell, and over time became a part of the host cell and reproduced in this manner. These events took place over 1 billion years ago. Without this cooperation between two types of cells, complex organisms would not have been able to evolve.

The symbiosis between cows and the bacteria that live in their digestive systems is also interesting. These bacteria digest the cellulose found in hay and grass for the cow, while the cow offers nutrient-rich environments for the bacteria. It's a win for both organisms. Combined with their multilayered stomach and short appendix, this relationship means cows can eat tough plant foods.

Humans cannot digest cellulose in part because they do not have cellulose-digesting bacteria in their digestive systems!

A final, fascinating example is the interaction of the Hawaiian squid and a bacterium, *Vibrio fischeri*. The bacteria emit light and live in the light-producing organ of the squid. This is a relatively safe environment for the bacteria, as anything that wants to consume them has to get through the squid. The squid, in turn, uses the light produced by these bacteria to camouflage itself from predators in oceans.

« Cooperation...is its own evolutionary force that contributes to an organism's immediate survival but also creates the possibility for adaptive responses to future challenges. »

Rafe Sagarin⁴

Progress takes the fast track

In some cases the cooperation can be so valuable to the organisms involved that they evolve to become part of each other permanently. As in the mitochondria example above, the benefits realized by those organisms cooperating provide a foundation for further development. When you can depend on the cooperation and the needs it addresses, you can leverage the freed energy to support growth and innovation.

[A human example of this is the development of the railroad and the telegraph.] As inventions they were completely separate, but the cooperative relationship that developed between the two allowed them to take over the world. As Alfred D. Chandler writes: “The railroad and the telegraph marched across the continent in unison.”⁵ The telegraph provided train companies with a mechanism for communicating the progress of trains on the line—if they were late or early—so people could be ready to unload perishable goods and otherwise adjust their schedules. This extreme efficiency was key to the railroads being profitable. In return, the rail lines provided telegraph companies with an infrastructure on which to construct their system—from the poles and wires linking cities to the stations that often housed telegraph offices.

The cooperation was so successful that very quickly neither industry could conceive of doing business without the other. Their businesses became linked due to the mutual benefit each provided, and the benefits that further accrued from their symbiotic relationship. The interactions between the two technologies

“intensified the speed and volume of the flow of goods, passengers, and messages.”⁶ They helped each other to be better, and similar to cooperation among biological organisms, “what matters is that partnerships develop according to how effectively tasks are accomplished.”⁷ The attachment between the railroad and telegraph was so strong that it could be depended on completely, allowing each industry to free up resources that would otherwise be spent on duplicating the other’s technology and infrastructure.

[The lesson here is, how often do you look for opportunities for collaboration? We often talk of the competition—what they are doing, what direction they are headed—so we can keep up where we need to and not get blindsided or lose too much market share. But how many of us devote resources to looking for “the cooperation”—companies or industries with whom we can partner for mutual benefit?]

Reciprocity $\leftarrow$ ^{given} _{xx}
Alloying

Exceptional harmony

Writing about lichens, which are essentially a new organism produced through the symbiotic relationship between algae and fungi, Rafe Sagarin says of symbiosis that it “creates emergent properties that you wouldn’t predict from just looking at the two organisms on their own.”⁸

There is possibly no better example of the power of cooperation to transform existing structures and create new capabilities than the relationships required to achieve success as a → symphony orchestra. The interaction between the musicians, and them with the conductor, involves a huge amount of trust and commitment to produce something that is greater than the sum of its parts.

Alexander Shelley, conductor of the National Arts Centre Orchestra in Ottawa, Canada, describes the interaction of its members as such: “In the best-case scenario, they start to behave like a flock of birds. When you see a flock of birds moving around, you’re not quite sure who’s leading it or what’s happening.”⁹ This speaks^{x2} to the unusual collaboration that happens in symphony orchestras. It’s not a leader with a bunch of followers. It is not a rigid hierarchy of responsibility. Shelley says, “When it’s functioning correctly, it’s a symbiosis between me and the eighty musicians on stage.”¹⁰

Why does an orchestra pursue its goals in this way? Because this is what all the participants believe is required to truly make the music. Perfect cooperation is the difference between good and inspirational. Shelley describes an orchestra by saying, “When

things are working well, a conductor and orchestra are in this state of absolute coordination where the music is speaking the way it needs to speak.”¹¹

Other conductors have made similar points. Conductor Valery Gergiev says, “I just go straight to the most important thing—what is the color, what is the character of this music, what is the principal voice? And that means we are working immediately on... the relationship between all the parts, which is a huge coordination between all of us.”¹²

Conductor Mariss Jansons defines that moment of success for an orchestra as “when a good performance becomes a great one, a coming together of the piece, the performers, and the audience that creates a positive feedback loop of continuous enrichment and enchantment.”¹³

→ Therefore, trust is an essential component of successful symphony orchestras. Each musician hears the instruments closest to them best, and in some halls cannot rely on their ears at all if they have to collaborate with an instrument in a different section. To cooperate fully as a group, they have to trust each other, and they have to understand how their individual part contributes to what the rest of the orchestra is doing. In *Music as Alchemy*, Tom Service describes the musicians in the Berlin Philharmonic Orchestra as “a group of players who value themselves enormously as individual musicians, but who together create an instantly identifiable single sonic body in their performances.”¹⁴ It’s the complete cooperation that allows the emergence of the musical experience.



An orchestra has to come together on many levels in order to make music. To achieve the trust required to anticipate the needs of the performance the cooperation must be absolute. Each member has to be all in.

An orchestra is an all-or-nothing situation. If one member is messing up and playing terribly, they can ruin the whole performance. Their playing jars with everyone else and throws them off. It requires total cooperation.

A remarkable example of this cooperation and trust is the Montreal Women's Symphony Orchestra. Started in 1940, they were "the only complete all women's symphony orchestra in North America at that time—conducted by a woman, managed by women, and composed of women."¹⁵ This orchestra was born at a time when it was rare for women to play in orchestras, and if they did were confined to certain instruments that were considered "ladylike," such as the harp. Anything happening in the public sphere, even music, was still very much considered the purview of men. Of course, not everyone agreed, and two women, Madge Bowen and Ethel Stark,^{*} decided that there was enough untapped female talent in the city of Montreal to put together an all-female symphony orchestra.

The only requirement to join the orchestra at the beginning was commitment and passion. Thus, the orchestra was comprised of women from many walks of life—professional musicians and amateurs, housewives, socialites, working class, and upper class. There were Jewish women, Christians, French, English, and white and black women, including Violet Grant, the first black Canadian to be a permanent member of a symphony. Their emphasis, under the

guidance of their conductor Ethel Stark, was on teamwork and inclusiveness, so that “despite their differences, they came together for one purpose: to make music.”¹⁶

The diversity of the group required a staggering amount of cooperation in order to make the orchestra succeed. They had to deal with social tensions that are still unresolved in contemporary society. Before the instruments could cooperate to make music, the cooperation of the members was required to create the orchestra. Class divisions had to be set aside during rehearsal time in order for their dedication to the music to achieve fruition.

→ Cooperation often comes about in a biological context due to the latent understanding that no one can do everything. No species or individual is perfectly adapted to deal with the entire spectrum of possible environmental conditions. This applies equally well to an orchestra. There is no music without all the instruments, and these instruments cannot work together without people who are willing to trust each other to respond correctly to the demands of performance.

The Montreal Women's Symphony Orchestra devoted themselves to their music, demonstrating, as Maria Noriega Rachwal describes in her biography of the group, “the power of music to transcend boundaries.”¹⁷ Their dedication and talent were recognized after years of practice in basements and drafty industrial buildings, squeezing the music in between factory work and child-rearing, when the group became the first Canadian orchestra to be invited to play at Carnegie Hall in New York. The performance was exceptional; the music flowed out to rave reviews. Building on this success, the orchestra toured all over the world, as

well as performing on television and radio. Never well-paid, the Montreal Women's Symphony Orchestra eventually had to shut down after being denied funding that was made available to other Canadian symphony orchestras.¹⁸ So it is truly their commitment to music and each other that led them to the successes they had. In terms of cooperation, theirs was absolute. The women in the orchestra were all in.

—Sidebar: Shared Belief

Shared Belief

In the book *Sapiens*, Yuval Noah Harari explains and examines how humans cooperate in extensive systems of shared belief.¹ He points out that, uniquely among species on the planet, humans are able to imagine things that have no physical counterpart, and furthermore that this imagining allows us to function in the large, complex societies that we have. These shared beliefs are requirements for our lifestyles—“large numbers of strangers can cooperate successfully by believing in common myths.”²

These shared beliefs frame every aspect of our lives. Our belief in the value of currency, laws, corporations, and nations is what allows us to work together and to live together. Without these shared beliefs, we wouldn't own anything or have homes, jobs, or any social infrastructure. According to Harari, it is this ability to trust in shared beliefs that allowed humans to move from small groups focused on daily needs to the large, interconnected population that studies the past and worries about the future.

Whether or not this gets a value judgment of “good” can be debated. As Harari argues, “most human cooperation networks have been geared toward oppression and exploitation.”³ After all, it is only shared belief that explains why some people's lives are easier than others—if we didn't all buy in to the myth of money, it wouldn't exist, let alone be useful to accumulate. And there is an element of inertia here.

The more encompassing a shared belief gets, the more we forget it is a human construct. Eventually, the mass of belief becomes so large that we consider it an inescapable part of the natural world. There is no doubt that we can no longer operate without cooperating in these shared beliefs.

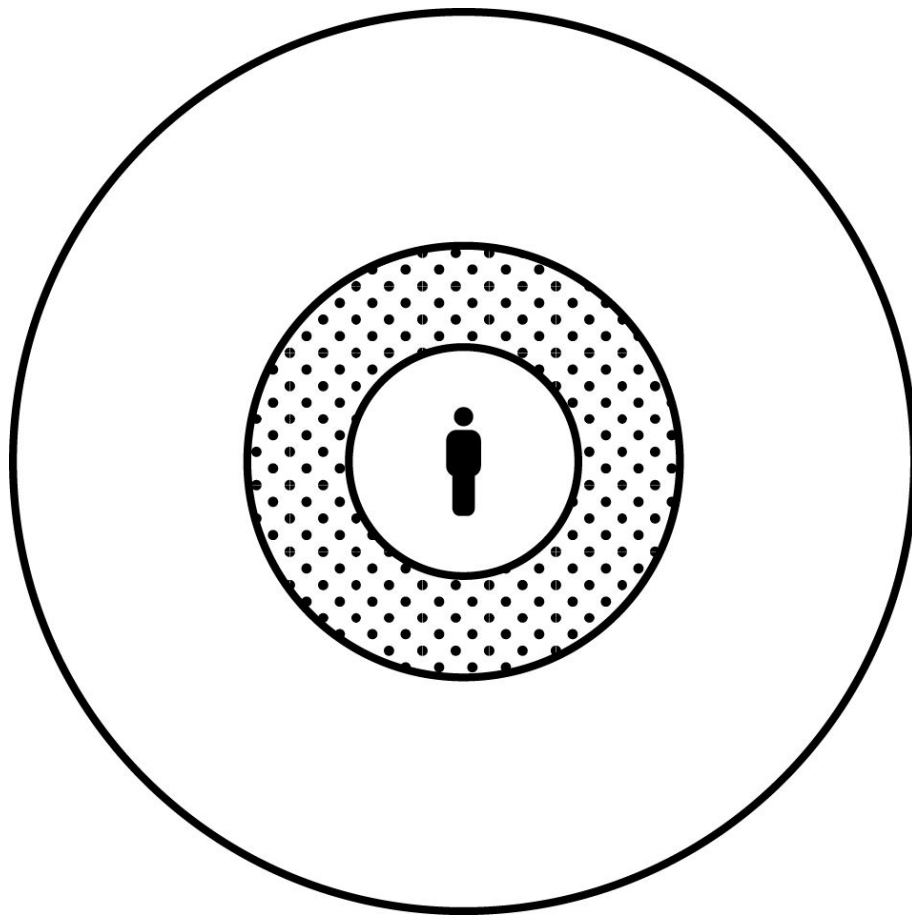
Conclusion

Cooperation teaches us to seek out and frame interactions based on not only what we can get, but also what we can give. If there was any one model that explains humanity, then this is it. Cooperation unleashed the potential of the human species. Working and collaborating with others gives us options and opportunities that are unavailable when we insist on going it alone. Furthermore, when you don't have time to evolve in response to changes in the environment, cooperation can significantly improve your chances of survival by pursuing relationships that bring mutual benefit.

Cooperation led to the powerful brains we have, capable of art and abstract thinking. Our complex societies are built on our ability to work with each other, believe in the same ideas, and share the same goals. Cooperation is the fuel that powers our day, from raising our children, to the jobs we perform, and the social structures that give us everything from leisure time to meaning and purpose. When we cooperate, we lighten our individual loads and sometimes create something brand new.

Supporting Idea:

Dunbar's Number



Robin Dunbar, an evolutionary anthropologist, argues that there is a limit to the number of people with whom one can maintain stable social relationships. This limit, of about 150 persons, is set by our neocortex size. He explains that in groups beyond this number, neocortical limitations make it

difficult for people to maintain relationships with everyone, as they suffer from information overload. Using studies by field anthropologists working with primates, Dunbar suggested that there was a direct correlation between the number of neocortical neurons and the number of social relationships that can be monitored.¹

To support this argument, Dunbar refers to historical communities that were about ~~150 in number~~. These include hunter-gatherer communities, military units, successful businesses, communities counted in the *Domesday Book*, Neolithic villages, and Christmas-card networks, to name a few.

Because we are limited by our brain capacity, Dunbar's research suggests that the fitness advantage of larger social groups was a driver in the evolution of parts of the brain. Other scientists have corroborated this idea that our larger brains are primarily a social ^Δ versus ecological adaptation. It wasn't because we happened to have a bigger brain for say, hunting, that we pursued complex social relationships, but rather that these relationships were critical for the evolutionary development of neocortical capacity.

→ This means that being socially successful is critical for our survival, both as a species and an individual. There is, however, a limit to how many social relationships we can successfully navigate. Thus, being socially successful is about knowing our limits and investing our time accordingly.

Dunbar identified the following scale of closeness for humans in groups. Note that each group includes the

individuals from the smaller groups, and each number is about the maximum that could be maintained at that level.

- ↳ • 5 people: This is our inner core of closeness, the people who we support and who support us on a daily basis, such as partners, family, best friends.
- 15 people: This is our close friend group. These people are integrated into our lives to the extent that we have an excellent understanding of their behavior, even if we may not see them all the time.
- 50 people: This includes our basic friends and acquaintances. We hang out occasionally, probably more often in groups, and know a bit about what is happening in their lives.
- 150 people: This is the size where you feel you are a part of a community. "This is the number of people you can have a relationship with involving trust and obligation—there's ~~some personal~~ history, not just names and faces."²
- 500 people: This category includes friends of friends, people you know something about but don't know as well and don't make a sustained effort to know.
- 1500 people: This is the upper limit and includes all the faces you can put names to.

place

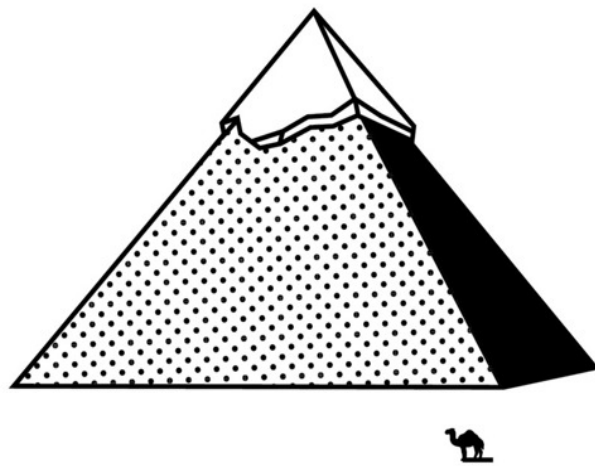
Dunbar's number is useful in terms of reminding us about working with our biology. Our brains can only process so much of the information required to maintain social groups. The larger the group, the more brain power required. Eventually we are going to run out. In addition, and we do this all the time, is

the cost/benefit analysis. At what point does an increase in my social efforts start to bring diminishing returns?

At around 150 people we max out, according to Dunbar. Too far beyond this and we will have trouble keeping track of who everyone is and how they relate to everyone else. To invest effort beyond this may be more than our brains are capable of performing. Also, less related to scientific research but very relevant to life experience, relationships of any sort require a time investment. How much time we have to devote to social maintenance has a definite cap.^{x 2}

Biology

Hierarchical Organization



—
Know your place.

Hierarchical Organization

Hierarchies can be found across the animal world. They are a form of social structuring characterized by a linear or almost linear dominance ranking between individuals that live close to one another. These types of organizing structures are most common in social mammals such as baboons and wolves, but are also found in chickens, bears and elephant seals. All else being equal, hierarchies are relatively stable over time, as the individuals within a lower group are aware and accept their position and thus do not directly challenge those on top. Organizing this way generally means there is less fighting and more order.]

Getting to the top

There is a contract implied in a hierarchy. The dominant member of a group has certain responsibilities to execute in relation to the other members. Specifically “a) direction each day for food, b) protection each day from predators and other dangers, and c) the maintenance of order every day by orienting members to their places and roles, by resolving conflicts when they break out, and by reinforcing social norms whenever transgressions occur.”¹

It was the Norwegian researcher Thorleif Schjelderup-Ebbe who first studied hens to explore how dominance hierarchies, and consequently peace, was maintained in their flocks. He recognized that peace was found only in already established flocks where a dominance hierarchy had been set—each hen knew who it could dominate and who it was subordinate to. Each hen was able to remember the pecking order, and in his experiments, he discovered that one hen had extraordinarily recognized 27 other hens from different flocks. This shows that hierarchical organizations are respected by these birds and form the basis of their way of living.

In chimpanzees, “the alpha male usually wins his position not because he is physically stronger, but because he leads a large and stable coalition. These coalitions play a central part not only during overt struggles for the alpha position, but in almost all day-to-day activities. Members of a coalition spend more time together, share food, and help one another in time of trouble.”²

→ One of the drawbacks of hierarchies is the lack of perceived value of those who are at the bottom. “An efficient new gathering

strategy devised by a low-ranking chimpanzee, for example, might not get replicated just because of her status in society.”³

→ [Hierarchies in the human world act as information filters causing us to potentially miss opportunities and ideas.] The way we organize ourselves is often a default to our instincts on leadership and authority. Sometimes this is optimal, sometimes it isn't. If it isn't getting us what we need, either as individuals or as a society, it is within our power to make different choices emphasizing the values and strengths that would be beneficial. [Our hierarchical organizations are where we derive our ego, status, and reputation, and they are what conditions us to focus on growing ourselves rather than growing others.] 

The interesting thing about hierarchies in humans is that their benefits aren't always obvious at first. Few people would say they like them, unless they happen to be at the top of the pile. Most of us hate having to defer to our parents, our bosses, the state. Hierarchies reduce creativity. They put extra stress on those at the bottom, potentially increasing their mortality levels. They put a lot of pressure on those at the top too, forcing them to constantly worry about maintaining their position. Most organizations promote cultures that emphasize rather than de-emphasize an individual's status, power, and place, which is part of the reason they get torn apart. Hierarchies are inherently and inevitably unequal and unfair.

Hierarchies, however, clearly confer a benefit that is large enough to balance out their costs. In the absence of an imposed structure, people have a natural instinct to self-organize. In organizations that claim to have a flat structure with no leaders, people often just end up more frazzled than normal as they attempt

separation
←

to navigate the inevitable unspoken power structures. Even anarchist movements end up with leaders. Leadership is important. Getting rid of the title of “captain” or “boss” doesn’t change the fact that someone in the locker room or the boardroom is going to set the example for others, so it’s best to ask who we want that person to be.

If we can’t avoid hierarchies, we need to recognize their presence and focus on structuring them in the most beneficial way for everyone involved, like having prestige associated with belonging to the group rather than being conferred on individuals. The key is to be aware of hierarchies and work with, not against them. We want to use hierarchies as a tool, not be used by them.

A place for everyone and everyone in their place

According to both Plato and Plotinus, another major ancient Greek philosopher, the entire universe is arranged in a hierarchical structure. At the bottom, we have inanimate objects like pebbles or soil. Next, we have plants, then animals, then humans. Then god is at the top of the hierarchy, superior to everything else in the universe. As Charles van Doren explains in *A History of Knowledge*, it was this idea that informed human society from the very beginning. The assumption that humans can be organized into a hierarchy from the lowest up to the individual with the most power and perceived importance has always been integral to the way we've constructed our world. Look at any ancient civilization, and you'll find someone at the top, with only that group's god above them. Following Plato and Plotinus, people used their ideas about hierarchy to justify a stratified society.⁴

Yet people have always, at various times, rebelled against hierarchies. As van Doren points out, many of the individuals, in particular religious leaders, to whom we've accorded the highest esteem throughout history, are those who have questioned and thought against existing, unequal hierarchies. This is especially true when a hierarchy becomes so severely stratified that only a handful of individuals can benefit from it. The French Revolution is one of the most iconic instances of people fighting to overthrow a flawed social hierarchy.

Prior to the French Revolution, French society was divided into three main groups, known as estates. The First Estate consisted of the Catholic clergy, who oversaw the Catholic church

and had some other duties, like giving the monarch advice. They didn't have to pay taxes, collected tithes, and owned lands. As with each of the estates, it was further divided into hierarchical levels, with higher-ranking individuals in Paris and Versailles having very different lives to rural parish priests. The Second Estate consisted of aristocrats with inherited titles. Like the First Estate, they didn't need to pay taxes, but they could collect them.

Into the Third Estate went everyone else, about 96–98% of the population. At the highest level of the Third Estate were the bourgeoisie, including those in finance, medicine, law, and trade. They could become wealthy, just without gaining any political power or influence. Next were the *sans-culottes*, artisans, and other city workers. The final layer was the peasants who labored on farms, paid heavy taxes, and had essentially no rights or influence. They owned land, but few had enough to feed their families. For instance, between 1720–1729 and 1780–1789, land rents rose by 142%, while the prices of agricultural products rose by only 60%.⁵ About three-quarters of peasants had less than the minimum amount of land needed to survive, five hectares. In many areas, at least a quarter of peasants had just one hectare.

At the top of society was the king, who had absolute power and few limitations on his behavior. This system of power, known as absolutism, was popular in Europe at the time. Not only was arguing against it dangerous, but some people did also see the system as positive due to its ability to maintain order. It's worth noting that absolutism was not like other monarchy systems, like the ones used during the medieval era, because here the king did not share his power. When King Louis XIV said "*L'état, c'est moi*" (I

am the state), he meant it. For everyone but the king and a few nobles, the system was entirely unfair.⁶

During the French Revolution, people fought for a more equal society without the intense divisions of the estates. The vast majority of the French population were trapped in harsh poverty with too little to eat and no rights whatsoever. The wealthy minority merrily spent their tax income and racked up a growing national debt. People began to question the age-old notion of an absolute ruler with a monopoly on force and no restrictions on their behavior. They saw that the social hierarchy was arbitrary and could be overthrown. When the common people seized weapons and means of exercising force in Paris, they upended the hierarchy. What they had more trouble with was finding a system to replace it.

During the interim period between the end of the monarchy and the rise of Napoleon, the French people tried out different hierarchical structures and leaders, each of which failed. Here is the summary of those years:

Between 1789 and 1815 the country went through roughly five phases. From 1789 to 1792 France was a constitutional monarchy. During that time Louis XVI came to be seen as a despot, and in 1792 he was tried and beheaded. That marked the beginning of the most radical period of the Revolution, called the Terror, when France was run by the Committee of Public Safety, headed by Maximilien de Robespierre.* Robespierre quelled civil war within the country and waged war on the neighboring countries hostile to the Revolution.

Some seventeen thousand opponents of his regime were beheaded and another thirty-five thousand jailed, but in 1794 Robespierre himself was led to the guillotine in a counter coup.⁷

The country was then run for five years by the government of the Directory, staffed mostly by the bourgeois class. What's interesting is that within a few years, the old hierarchy was effectively back in place. When Napoleon came to power in the late 1790s, he reinstated absolutism, although he did not call himself a king. Napoleon seized power in 1799, and in 1804 declared himself emperor. Hardly a revolutionary move. Napoleon had absolute power and was not answerable to anyone. He maintained this by violently quashing any dissent.

France did not emerge from the Revolution as a country without a hierarchy. Instead, Napoleon instituted a system that was more based on ability than class, although it is still debatable whether a meritocracy is even possible or what a true one might look like. In addition, Napoleon saw France as at the top of the hierarchy of European countries and therefore sought to make the others subordinate. This was part of the rise of nationalism, the belief that one's own country is superior to all others and must be willing to fight to expand its borders. Napoleon was then defeated by the British and sent into exile in 1815.

The period from 1789 to 1815 thus saw a constant jostling of the hierarchy in France, as various groups and individuals tried to take and maintain power. One of the lessons of the French revolution is that upending a hierarchy creates instability, and

many people will maneuver to influence what the old hierarchy will be replaced with. A new hierarchy might have different rules and different roles, but it will still be a hierarchy. Surviving the establishment of a new order is by no means easy.

→ Take the story of Charles Maurice de Talleyrand,^{*} “who simply kept reinventing himself in order to ride France’s political roller coaster.”⁸ Talleyrand was Bishop of Autun in the Loire Valley when he joined the Revolution. When things got extreme, he went into exile. In 1797 he returned, became foreign minister under the Directory [government], and remained there under Napoleon. But in 1807, as Napoleon’s ambitions began to become alarming, Talleyrand turned against the Emperor. In 1814 he represented France during the peace negotiations of the Congress of Vienna as foreign minister during the brief reign of Louis XVIII. Talleyrand thrived by finding a way to maintain position in the constantly changing hierarchy.

Another important lesson from the French Revolution is that when contemplating the hierarchy we want to live with, it is worth asking what kind of leaders our hierarchical system will produce.

Our hierarchical instincts are not always right in getting us the most efficient organization to deal with the challenges we are facing. Writing about sports teams, Sam Walker argues in *The Captain Class* that the best performers are not the best leaders. We seem to want our leaders to be the alpha performers. The guys and gals who dazzle us with their play.⁹ Walker writes that “all too often, the people who propose themselves for positions of power are quick to trumpet their abilities. And those of us who make these decisions [on who should lead] are often swayed by the force of

their personality.”¹⁰ For example, the leader becomes dominant because of skills displayed in the competitive process of becoming leader—strength, smarts, etc. This means that the leader is just the most powerful competitor, like Robespierre or Napoleon. His or her skills are exemplary for winning the competition of dominance. They are not necessarily the most skilled for actually running the show. Maybe the role would benefit from some of the strengths exhibited by others, but because those traits didn’t help in the competitive process, the leader doesn’t possess them—to the detriment of the entire hierarchy. We then end up with leaders who don’t actually have the skills to lead.

The French Revolution, with its focus on ending absolutism and subsequent return of absolute power and the rise of nationalism, can show us a lot about our hierarchical instincts. People could not destroy the hierarchy altogether; they just ended up with a new form of it. One of the lessons here then, is that allowing for the fact of hierarchical instincts is critical in the development and leadership of any organization.

—Sidebar: Status Symbol

Status Symbol

The history of fashion can be read, in part, as a chronicle of humans trying to establish and negotiate social hierarchies. How we dress communicates information to people about our status. In *Survival of the Prettiest*, Nancy Etcoff says of magazines that “the fashions they feature are as much products of social competition as the finest bird feathers or the sweetest birdsong.”¹ Thinking about fashion exposes the ongoing tension in human hierarchies. On the one hand we are comfortable when we can place people quickly in the hierarchy. From their clothing we infer information about their relative power and wealth in the society we inhabit. On the other hand, we continually chafe at the restraints of whatever position of the hierarchy we happen to find ourselves in. I may be limited by my biology, but I certainly don’t want to be limited by the messages of the clothes I wear.

Yuval Harari observes, “Hierarchies serve an important function. They enable complete strangers to know how to treat one another without wasting the time and energy needed to become personally acquainted.”² In different times and places, the hierarchy of fashion has been legally mandated in the form of sumptuary laws. They were often enforced—not legally, which was logistically challenging, but socially. If your status meant you weren’t allowed to wear purple and yet you showed up at court decked out head-to-toe in violet, you were risking a lot. You probably wouldn’t be arrested, but you could be

snubbed by your peers, laughed at by those higher up, and left off the list for the next social occasion or business opportunity. Fashion laws thus meant that you could easily place people in their social position and act toward them accordingly. Taken to the extreme, some markers of high status were intended solely to convey that status. Black teeth were fashionable in the Elizabethan era to show that one could afford sugar, and very long nails demonstrated the lack of a need to work.

Of course, hierarchies are dynamic, with ongoing challenges for top position. Fashion and accessories were a way to make it harder for those lower in the hierarchy to successfully compete, mostly through cost. Silk, gold, silver, precious stones—these long-recognized components of “luxury adornment” have always put those who could afford them “at the top of the pyramid, setting apart the haves from the have-nots.”³ Cost barriers to various goods are an easy and long-lived way to set up and define social hierarchies.

The upper class also shows status through wearing clothes that are totally impractical for doing any labor, reflecting participation in expensive activities and having more than one actually needs. “Charlemagne owned 800 pairs of fine gloves at a time when gloves were difficult to produce and clean,” notes Etcoff.⁴ We can admit to ourselves that not a lot has changed. Status is still frequently demonstrated through fashion. Labels, fabric, the cut of a suit or a hoodie, communicate a lot. Yes, it is often nuanced. For example, even though luxury goods in some contexts are still markers of status, dressing scruffy when you don’t have to is also a form of

demonstrating one's privileged place in the hierarchy. The academic in a shirt with soup stains, the CEO in battered jeans, the billionaire in a tracksuit—these are all examples of them announcing to the world that their status is so secure they don't need to indicate it through luxury clothing. In so many cases, what we wear “helps us negotiate our relations with the outside world and provide us with comfort and protection.” ⁵

“Underground” hierarchies

Hierarchies are critical in survival situations and in combat. In these scenarios, we primally crave leadership. In chaotic, life-and-death situations, sheepdogs magically appear to herd the sheep. Even in the US Special Forces, which are designed to be as flat as an organization can be within a military service, hierarchical decision making immediately emerges and takes over in combat or when there are time constraints.

→ How do hierarchies form and break down? There are, broadly, two components: biological enablers and cultural constraints. These two dynamics influence how our tendency toward hierarchies manifest. To get insight into these dynamics, let's look at the 2010 Copiapó mining accident in northern Chile, when a cave-in at the San Jose copper-gold mine trapped 33 miners 700 feet underground.

The miners were completely isolated in a physically stressful environment. It was hot, humid, and dark. The ground was unstable, and debris and rocks continued to fall. They retreated to a refuge that had only enough provisions for ten miners for two days.

Luis Urzua was the shift foreman, a position which granted him automatic authority. He “held formal leadership, for in the Chilean mining culture the authority of the shift foreman was absolute.”¹¹ Urzua, however, had worked at the San Jose mine for less than three months. He hadn't had time to develop a bond with the miners on his team to back up the authority implied by his title. In the small power vacuum created, two other miners, Mario Sepulveda and Mario Gomez, “rallied the miners to explore escape

routes and send signals to rescue workers.”¹² Although these two may have had the right characteristics for leadership, they could not take a place at the top of the hierarchy on account of not having the culture-supported authority. Thus, in the first 24 hours, “most miners felt accountable to no one” and “stayed in sub-groups based on kinship and past friendships.”¹³

Our desire for hierarchy, for leadership, is most present in survival situations. It will emerge. For the miners in Chile, days two to five saw the emergence of spiritual leadership by one of the team who had pastoral experience. A democratic process was instituted to make decisions about allotment of the food supply and bathroom rules. Mario Sepulveda, clearly having natural leadership instincts, used them in a way that exploited the culture he was in; he urged the group to “respect Urzua and suggested that if Urzua were willing to lead, the miners should accept him as their leader. If Urzua were unwilling to lead, Sepulveda would be willing to take charge.”¹⁴ Leadership was necessary not only to get tasks done, but for the comfort it would offer to the group.

By day five, “throughout the day, the miners gave more authority and respect to both Urzua and Sepulveda. Gomez was also widely respected for his experience and wisdom. Sepulveda had started to assign specific tasks to people based on their skills, experience, and mental stability.”¹⁵ Good leadership is about acting in the interests of the group. In *The Captain Class*, Sam Walker, in one of the most counterintuitive conclusions in his book, explains it this way: “When it comes to competition, most people believe that the leader of a team is the person who does something spectacular when the chips are down.”¹⁶ This, however, is actually not true.

Walker's conclusions about the real qualities of great captains apply to the dynamics of the miners in Chile. "The great captains lowered themselves in relation to the group whenever possible in order to earn the moral authority to drive them forward in tough moments. The person at the back, feeding the ball to others, may look like a servant—but that person is actually creating dependency. The easiest way to lead, it turns out, is to serve."¹⁷ It's possible that Sepulveda, by supporting the leadership of Urzua, was doing the most valuable thing he could to serve the interests of the group.

The hierarchy developed in the early days held until day 17. During this time, there was widespread despair about the success of the rescue efforts, with the miners rationed down to one bite of food every 36 hours. Hope was low, but the hierarchy served its purpose of maintaining a structure that supported a maximum chance of survival.

On day 18, a "breakthrough shaft" reached the refuge where the miners were located. Not large enough for rescue, it was used to get items to the miners, including food, medical supplies, letters from their families, and a television. At this point the hierarchy of the 33 miners began to break down, because there was a new top of the pyramid. Control shifted to people above ground. The miners were no longer accountable to just each other. "Fights occurred about which channels to watch," and "discipline gradually declined alongside their humility as the miners began to digest the news of their celebrity status."¹⁸

As the days continued, the hierarchy that had maintained order while they were isolated and scared continued to fade. Miners

began developing relationships with doctors and media advisors, fighting for more information from their loved ones. Some miners began receiving drugs in their communications from family, which shifted relationships and allegiances underground. The hierarchy, though, didn't completely disappear. It was as though they were pulled between two different hierarchies, the one below ground that had gotten them this far, and that above ground which offered promise of rescue. As they passed 60 days underground, "the miners' behaviors...oscillated between extremes, indulging in petty fights one minute and promising never to break their fraternal bonds the next minute." ¹⁹

The rescue started on day 70. The miners were lifted out one by one, with Urzua coming up last. They had expressed the desire to leave San Jose as a group, which they did with the world watching.

—Sidebar: Boss vs. Leader

Boss vs. Leader

There is a nuance here between authority and leadership. Those at the tops of hierarchies have authority that they are expected to use to solve problems and address issues facing the hierarchy. But as Ronald Heifetz points out in his article *Leadership*,¹ we can easily think of examples of people with lots of authority who don't actually lead or who don't have the solutions in times of crisis, and lots of people who exhibit leadership without having any authority.

Conclusion

Hierarchy is a core instinct. While we can modify hierarchies and try to make them work for us, it is hard to do away with them all together. We operate as if a leaderless environment provides more threats than one with a bad leader. However, the model demands balance. Too much hierarchy can also lead to unrest and instability. Most organizations promote cultures that emphasize rather than de-emphasize an individual's status, power, and place, which is part of the reason they get torn apart, as the fight to get to the top of the hierarchy takes precedence over the success of the organization. We all look for leaders, even if we are looking at ourselves.