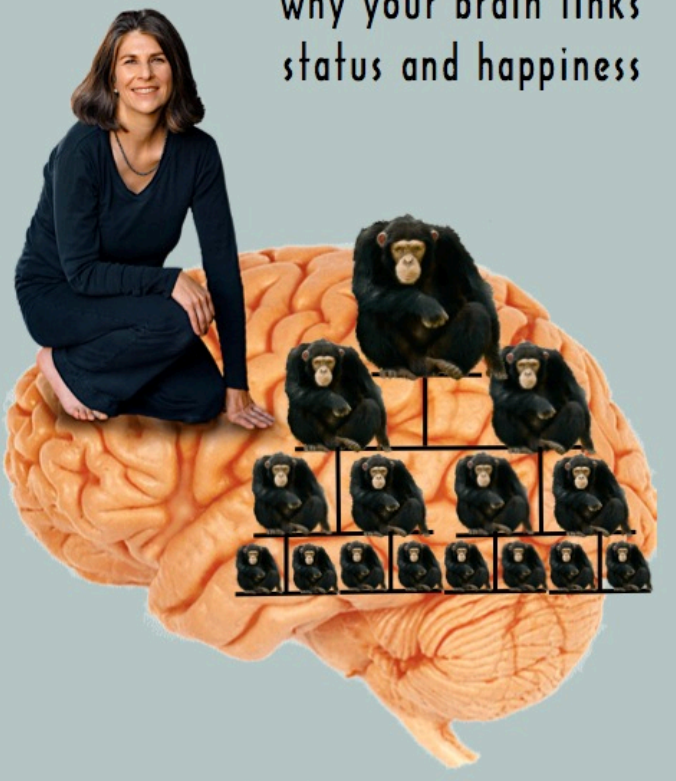
I, mammal

why your brain links status and happiness



Loretta Graziano Breuning, PhD

We mammals are curiously preoccupied with social hierarchy. You may say you're "against status." But if you filled a room with people who say they are anti-status, a hierarchy would soon form based on how anti-status each person claims to be. That's what mammals do.

Humans have inherited brain structures that all mammals have in common. We experience happiness when this mammalian limbic system releases neurochemicals like serotonin and dopamine. These "happy chemicals" do not flow all the time. They evolved to reward survival behaviors. When your survival prospects rise in a way that makes sense to a mammal, it stimulates your happy chemicals.

Dominance promotes survival, so mammals try to raise their status in their herd or pack or troop. Wild animals seek social dominance in ways that are eerily familiar. The field notes of a primatologist are suspiciously similar to the lyrics of a country western song. A zoology textbook has uncanny overlaps with a soap opera

script. Animal behavior tells us what our own limbic system cannot put into words.

The mammalian brain reacts to the world without using language. It emits neurochemicals instead of verbalizing. That's why our human cortex has trouble making sense of the mammal brain it's attached to. No self-respecting human thinks of himself as a dominance-seeking herd animal. But we want to be happy, and happy chemicals are controlled by the mammal brain. This hybrid brain of ours can finally be understood thanks to an accumulation of research in animal science and neuroscience.

To survive, a mammal must meet its needs and avoid harmful conflict. The mammal brain evolved to choose when to act on the urge to meet a need, and when to hold back and avoid conflict. Neurochemicals ebb and flow as a mammal decides when to hold back and when to assert. Once a mammal sees a safe way to meet its needs, its happy chemicals flow.

Dominance hierarchies emerge spontaneously as each mammal in a group seeks rewards and avoids harm. The frustrations of social hierarchies are not caused by "our society." We are simply heirs to the brain that helped mammals thrive for millions of years.

It's not easy being human with a mammalian operating system. Managing your mammal brain is the challenge that comes with the gift of life. No one else can manage it for you, and you cannot manage someone else's. When you know where your neurochemistry came from, you can stop fixating on human flaws and celebrate how well we do with the mental equipment we've got.

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System Integrity Press

Chapter 7

You May Already Be A Winner

...Eventually the brain learns to expect satisfaction instead of expecting to be deprived...

An old sweepstakes ad made famous the claim that "you may already be a winner." The ad got people's attention because the thought of winning turns on our happy chemicals. Dopamine floods your system when you encounter more rewards than expected. Serotonin flows when you contemplate the security your winnings will bring. Oxytocin flows when you imagine these winnings strengthening the trust bonds in your life. If you were already a winner, these good feelings would just appear without your having to do anything.

Could you already be a winner without knowing it? It seems impossible except in the world of phony sweepstakes ads. But this chapter shows that you are already more of a winner than you realize. Your brain focuses more on your losses than your wins, so your triumphs tend to get overlooked. However, you can train your brain to focus on how well you are already doing, and thus enjoy the neurochemical rewards.

Feeling like you're already a winner may not ring true. Your brain replays past slights and disappointments easily because those circuits are well-developed. Circuits that represent your triumphs may not be developed. If you were already a winner you would hardly notice. So the feeling that you're *not* a winner can be just as false as the feeling that you are one.

Nice people may object that it's wrong to focus on winning and losing. But when others win, nice people notice and their unhappy chemicals flow. They could enjoy happy chemicals instead by focusing on their wins rather than their losses. Forgoing these happy chemicals achieves no higher purpose because you cannot give to others the happy chemicals you don't produce in yourself. Each brain must make its own, so you can enjoy happy chemicals without depriving others.

Alas, mammal brains produce a lot of unhappy chemicals. We evolved to monitor potential threats in order to survive. Unhappy chemicals notify your brain of potential threats. When you feel dominated by others, unhappy chemicals etch information that you use to avoid potential threats in the future.

We are skilled at processing information about losing because attention has developed those circuits. We could develop our circuits for winning simply by focusing our attention there. You can train yourself to appreciate your wins the way you can develop an appreciation of art or music.

Of course, you can't just go around presuming you're the winner. You have to live in a world of rules that determine wins and losses. The people around you want to win just as much as you do. If you acted on every momentary urge for dominance, you'd end up in trouble just as surely as if you acted on every mammalian urge for food or sex.

But ignoring your desire for status brings trouble just as surely as ignoring your desire for food and sex. You could starve

yourself for happy chemicals. You could end up believing you are always dominated, stimulating unhappy chemicals with great efficiency. Your brain will interpret the unhappy chemicals as danger signals, and search for evidence of danger. It will not be looking for evidence of success.

Success lies in the middle ground between ignoring your mammalian urge for dominance and seeking dominance automatically regardless of the consequences. Finding the middle means managing your natural appetite for status the way you manage your natural appetite for food and sex. We start managing these appetites the moment we're born. Most of the time, we succeed at avoiding the extremes of unbridled excess and unhealthy self-deprivation. We don't notice this success because it takes constant struggle. Struggle doesn't feel like success. We'd rather have an easy way to manage our mammal brain. That doesn't exist, unfortunately. Life is not easy with a hybrid brain bent on promoting its legacy. The best we can do is celebrate our successes.

This chapter shows that the feeling of winning can be learned, and that the feeling itself helps satisfy the urge for status. The feeling of winning helps prevent self-destructive excess. You can experience the pleasant sensation of winning without investing all your energy into the constant pursuit of winning. You can experience more happy chemicals from the wins you already have. Focusing your attention on them is all it takes.

Your mammal brain does not automatically focus on celebrating your accomplishments. If an animal escapes a predator, it doesn't celebrate much because it would succumb to the next predator while distracted. If an animal dominates a rival, it doesn't celebrate for long because it would soon be supplanted by the next rival. When we triumph, we quickly shift our attention back to business.

If you learned to enjoy each triumph a little longer, you would not rush into the next status-seeking risk.

Actively recalling past triumphs can trigger your happy chemicals. Your experience of triumph expands when you focus on it. It's not easy to evoke positive memories in a way that feels real, but when you do, your status disappointments feel less frustrating.

"I want real triumphs," you may say. Celebrating old micro-triumphs may seem misguided to you. The problem is, no matter how many real triumphs you have, they will not satisfy your mammal brain for long. It quickly embarks on the next quest. You may be better off without that next quest, but your mammalian neurochemicals create the impression that it's necessary for your survival. At these times, the ability to feel your past triumphs will free you from the need for more.

Too much celebrating may sound risky. We have all seen people "celebrate" in self-destructive ways. But a person would not need self-destructive habits if they could activate the feeling of celebrating without them.

Anyone can feel triumphant, no matter how small or remote their past triumphs. You can stimulate your happy chemicals with mental images of what you have already accomplished.

Appreciating your accomplishments triggers more happy chemicals in the long run than actually accomplishing more. You can make peace with your mammal brain by cultivating awareness of your triumphs.

Many people think it's not nice to feel triumphant. But that leaves them feeling stuck in the subordinate position, and they bitterly resent it. A better alternative is to imagine triumph without conflict. This is expressed brilliantly in the song *Because We Believe*, the theme song of the 2004 Olympics in Italy. The lyrics revolve around the Latin word *vincere*, which is the root of the words "to win" and "to shine" in Italian (as well as "to gain"). When Andrea Bocelli sang "we were born to shine," it triggered the Latin sense of winning without the implied conflict. This song could be the mammal brain's theme

song, since it satisfies the urge for dominance with none of the excesses that lead to trouble.

Here are some of the lyrics. They alternate between English and Italian – Bocelli wrote the song with David Foster and Foster's daughter (a mammal promoting his offspring). I have translated the Italian and italicized all the uses of *vincere*.

"Like stars across the sky,
We were born to shine.
E per *avvincere* (And to shine)
Dovrai *vincere*. (You must win.)
E allora, *vincerai*." (And so you will win.)

These lyrics highlight the appeal of the Olympics. You see athletes getting recognition for their achievements and your mirror neurons feel their pride. They shine, whether they win or not. You can imagine that feeling, even though you didn't train for the Olympics and you are not getting the attention. Imagining the feeling triggers your happy chemistry, providing a valuable opportunity to develop that good feeling.

The Neural Pathway Not Taken

Anyone can start having neurochemical happiness right now by replaying a past triumph in their head – even a tiny one from years ago. This may seem delusional, yet you probably still feel the sting of past status disappointments. Even tiny ones from years ago. Your brain is skilled at feeling dominated, and it will keep doing that unless you train it to do something else.

It may seem like cheating to stimulate one's happy chemicals without actually winning. But you may already dominate more than you realize. We have all been around domineering alphas who are constantly on guard for others dominating them. They don't appreciate the dominance they already have because they are so

focused on protecting their status. Becoming aware of your own dominance frees you from investing in more dominance than you really need. Recognizing your own dominance creates a sense of security that offsets those automatic threat signals.

Some threats are real, of course, and we should pay attention to them. Ignoring signs of threat is not a safe way to live. But we can develop our happy circuits and still be safe. Indeed, we become safer when we stop dwelling on the same old threats because we are more open to new evidence of real threats.

A mammal is safer when it avoids unnecessary risk. Some risk is necessary to satisfy our needs, but once our needs are satisfied we are better off avoiding risk. The ability to know when you're satisfied thus frees you to enjoy what you have instead of risking to get more.

Yet, it's curiously hard to know when you are satisfied.

Satisfaction

The mammal brain is always striving to satisfy its needs, but it is surprisingly bad at knowing when it has succeeded. When you eat, for example, your mammal brain doesn't know that your hunger is satisfied until twenty minutes after your nutritional needs are met. You may already be satisfied without knowing it.

The mammal brain evolved to seek food, sex and status until these appetites are satisfied. Satisfaction is an internal experience, not a property of the food or the sex or the status. The more you have developed neural pathways for experiencing satisfaction, the easier it is to feel satisfied. Satisfaction is a skill that results from a well-developed neural infrastructure, just like any other skill. The more skilled a person is at feeling satisfied, the less they need to keep feeding themselves with more food, or more sex partners, or more status.

Anyone can learn to feel more satisfied with the status they already have. Feeling satisfied doesn't mean giving up, or rejecting status entirely. Denial doesn't work because our mammalian appetites

are real; they don't go away just because you ignore them. Feeling satisfied means extracting more enjoyment out of the status you have. When you feel satisfied, you don't need to look for more status right away.

Dieters learn to feel satisfied with less food. Dieters do not practice abstinence the way alcoholics do. Abstaining from food is a bad way to diet because starving increases the risk of succumbing to your mammalian impulses. The same applies to status. Starving yourself for status leaves you tempted by self-destructive status-seeking strategies. Your urge for food is best managed by filling up on nourishing foods, and your urge for status is best managed by filling up on nourishing status.

Each person has to define healthy status for themselves. Dieters learn to find healthy foods that satisfy them, and healthy status can be discovered in the same way.

You don't have to wait for the world to change in order to feel good. All it takes is focusing on the healthy status that you already have.

Feeling satisfied will not make you an alpha. But being an alpha would not satisfy your mammal brain. Alphas are too busy protecting their position to enjoy it. You are free to live that way if you want, but you have an alternative. Learning to enjoy what you have gives your mammal brain the feeling of security that the mammal brain associates with being dominant.

Anyone can get more enjoyment from the status they already have. No one is stopping you from doing that right now. It's free. It's painless. And no one can do it for you.

If you feel dominated by others, you may hate the idea of being satisfied with the status you have. "It's my turn to dominate," you may think. But once you learn to trigger your own happy chemicals, you may discover that you are not as dominated as you'd imagined. Your unhappy chemicals may have fed the perception of being

dominated. Your perceptions may change as you build circuits that focus on your wins.

You may think it's selfish or arrogant to feel good about your status. But if you think about it, it's easy to see that even more selfishness and arrogance are provoked when one feels bad about their status. Feeling satisfied rather than deprived can help you without hurting others. Of course, there are selfish, arrogant people who dominate with cruelty, and self-destructive consequences result from such over-indulgence in status seeking. The best way to avoid such excess is to learn to enjoy the status one already has. Everyone can.

Your Appestat

The brain evolved a mechanism that recognizes when hunger is satisfied. The mechanism has been called the *appestat* because it's a thermostat for your appetite.

When you have eaten enough to meet your needs, your digestive system sends a message to your brain. Research suggests that the brain does not receive this satisfaction signal until twenty minutes after you've eaten enough. It seems like a glitch in the system, and over-eating is the obvious consequence. But overweight mammals do not exist in nature because they are soon eaten by predators. Natural selection would eliminate a faulty appestat. Our appestat is not faulty. Its time lag has a survival value that's important to appreciate. Understanding the quirks of our appestat can help us understand the parallel temptation to over-indulge in status.

The mammal brain evolved in a world where sugars and fats were scarce. Our distant ancestors ate a lot of coarse foods, and even those were often scarce. When they occasionally stumbled onto a delicious abundance, it made sense to stuff themselves. A little cushion helps you survive in a life where your next meal can be threatened. But after you stuff yourself for twenty minutes, your digestive system can

handle no more and it signals your brain to stop. It's fascinating to watch a monkey or lion stuffing down food as fast as it can when opportunity knocks. But they also know when to stop.

There's no temptation to keep eating food that's bland and chewy. Our primitive ancestors spent a lot of time foraging and chewing just to get enough nutrition. Eating was work. You would stop eating when your hunger pangs subsided because the food was not rewarding enough to motivate extra foraging and chewing. Under-eating was more of a risk than overeating. The primitive appestat seems designed to trick you into eating a little extra, so you don't become malnourished before the next available food source.

When richer food became available, this primitive appestat wasn't enough to manage behavior. Richer foods arrived ten thousand years ago, when humans cultivated grain. Our ancestors would have a storehouse full of grain at harvest time, but if they stuffed themselves it wouldn't last until the next harvest. In order to survive, they learned to feel satisfied before they felt stuffed. They could manage their appetite because the grain they did without today would be there to satisfy their needs tomorrow.

Apes do not store food – they look for food when they feel hunger. This strategy is obviously risky, and humans thrived by focusing on the future. Farmers planted seeds before they got hungry. Mothers baked bread before their children were hungry. Today, we build careers instead of looking for ways to earn money when we're hungry. We satisfy our needs by anticipating the future.

Just as we learn to anticipate future hunger, we learn to anticipate future satisfaction of hunger. You learn that if you stop eating now, you will feel full in a few minutes.

In the past, most people ate from a common platter. Food was scarce for most of human history, and social bonds discouraged you from taking more than your share. Each individual developed a sense of what they could take without straining their social bonds. Our

living situations are more individual today, and we learn to make individual eating decisions as well. Instead of relying on social constraints to know when we've had enough, we develop an awareness of our own internal state.

It works the same way with our other mammalian appetites: status and sex. Our primitive mechanisms can tempt us to over-indulge in behaviors with self-destructive consequences. In the past, social pressure helped restrain us from overdoing it. Today, social pressures have weakened, and we have to rely on our own internal awareness to lead us to good decisions. Internal awareness can tell us when continued seeking is not worth the risk. But we have to build the neural circuitry for internal awareness to do the job.

We build our circuits from past experience, but the past is not always a good predictor of the future. You can drive drunk ten times without crashing, and your brain might "learn" that drunk driving is safe. If you feel good about your status when you drink, your brain might "learn" that drinking promotes survival. It's hard to unlearn this. But instead of relying on the circuits you built from accidents of experience, but you choose new experiences that build new circuits.

Feeling satisfied comes easier when you make it a habit. Here's a simple example. When I get an ice cream with my husband, he insists on sitting down with it. I would rather walk around while eating, and the sitting frustrates me. But my husband has a small waistline, so I decided to try it his way.

He is doing what experts call "conscious eating." He feels satisfied with less food because he's learned to increase the pleasure he extracts from whatever he eats. Anyone can do this. All it takes is conscious attention.

Why do I find this frustrating? I love ice cream, so why wouldn't I automatically dwell on the pleasure of it?

The reason is that my brain is always scanning for new opportunities to promote my survival. The deliciousness of the ice

cream is not new after the first few licks. After that, my brain processes it on automatic like other familiar things. While I'm eating my ice cream, my mind automatically seeks information on my next object of desire. When I force my brain to focus on the ice cream I frustrate its search for new information. The mind is curiously resistant to dwelling on satisfaction.

Since we're always seeking satisfaction, you would think we'd notice it when we achieve it. But satisfaction can be hard to notice. It can be a faint positive feeling amidst many other neurochemicals sloshing around the brain. Paying attention to this feeling allows it to grow by developing the neural connections. Next time it will be easier to feel. Eventually, the brain learns to expect satisfaction. Instead of expecting to be deprived and looking for evidence of that, it will look for evidence that it is satisfied. Expectations shape the information we feed to our mammal brain. When we expect to feel satisfied, we get more happy chemicals from less ice cream or less alcohol or less status.

My husband built his conscious-eating habit by accident. He was forced to sit with ice cream when he was young because his parents were worried about wasting money if he dropped his scoop. He was often pressured to sit still and to worry about money. Like everyone, his early experience built some helpful circuits and some unhelpful ones. And like everyone, he was challenged to build on the helpful ones and leave the junk circuits to atrophy. When I notice a good habit in him, I focus on it and my mirror neurons take it in. Mirroring the satisfaction of others is a good way to strengthen the habit.

The feeling of satisfaction can be stimulated in myriad small ways. The more you create the feeling yourself, the less you need to wait for the world to express its satisfaction with you.

People often get the idea that there's something wrong with feeling satisfied on your own, without the world's approval. When a person is called "self-satisfied," it's meant as an insult. You may notice

yourself disliking people who are satisfied with themselves. You may try to avoid appearing "self-satisfied" by routinely embracing the one-down position and avoiding the one-up position. But in doing that, you risk wiring yourself up to be a wiener.

You May Already Be a Wiener

A wiener identifies with anyone who loses and resents anyone who wins. Zero-sum thinking is at the core of being a wiener. When you think one person succeeds by making others fail, success seems bad.

Even if you say you don't care about winning, your unhappy chemicals surge when you find yourself in the one-down spot. Yet you often wind up there because you think there's something wrong with winning.

You will be stuck in resentment unless you build a mental model of success that has positive rather than negative connotations for you. A useful way to think of success is embodied in the French word *debroullier* [day-broo-ee-yay]. It means "to get yourself out of a mess." The French applaud the *debrouillard* [day-broo-ee-yard] – someone good at extricating themselves from messes.

The root meaning of the word is "to untangle a knot." When you untangle a knot, you triumph without mistreating others.

I once had knots in a necklace and worked on them in my lap while sitting on a bus. It took me a long time to succeed, and I felt a thrill through my whole body when I did. Then looked up from my task and realized that a number of bus passengers had been watching me. They were smiling, as if they felt the thrill of success as well.

I chose a French word to describe this feeling because a foreign word is a good foundation on which to build a new concept. It does not mean that France has less self-destructive status seeking. The French struggle with their urge for dominance just like other

mammals. In fact, a *debrouillard* in France is often what we would call an "operator" – someone who gets out of messes with bribes or other lapses of integrity.

If you were already a wiener, you might not even try to untangle knots. And if you succeeded at untangling them, you might squelch the thrill. If you were already a wiener, you would not even notice if your star were rising. No matter what status you had, you might allow yourself to be dominated for no good reason. Even monarchs and presidents and captains of industry are often dominated by someone in their life, as biographies plainly show.

The mammal brain needs to triumph to feel good. There are infinite ways to triumph, so everyone can find a way. But each mammal brain relies on the circuits it has, and most of them were learned from watching others. If your brain is surrounded by people who feel dominated and defeated, your brain is likely to build those circuits. If you are surrounded by people who only feel triumphant when they take self-destructive risks, those circuit will easily develop. You are always free to build new circuits, simply by focusing on the good feeling of untangling knots and managing your way out of messes. If you don't, your old circuits could make you a wiener.

You can celebrate your ability to get out of messes instead of berating yourself for getting into messes. A *debrouillard* automatically enjoys their triumphs because this circuit replaces the old idea that success is somehow not-nice.

Children often learn to feel bad about themselves. Many adults perpetuate that habit unwittingly. Where I live, for example, children are taught to feel bad about being American. They are taught to associate any bad in the world with America, and any good in the world with other cultures, or with opposing America. The people who teach this may have good intentions, yet they persistently burden American children with the presumption that their culture is bad. They would never expect children from other cultures to think badly

of themselves. The harm done to children "educated" in this way is yet to be explored.

Abstinence

I often hear people celebrate those with low status and disdain those with high status. I hear people automatically sneer at status without interest in the individual facts. Abstaining from status in this way can be as harmful as overindulging in it, just like abstaining from food and sex. Yet many people make a habit of condemning the natural urge for status.

A whole social group can adopt the habit of rejecting status. Group members reflexively put themselves down and berate people who don't put themselves down. Such a group might be dominated by a self-serving alpha who pays lip service to "equality" while commanding submission. Members of such a group feel frustrated by the rigid domination, but their shared frustration builds strong social bonds that they can't let go of.

Running with a herd that "rejects" status inflicts terrible strain on your mammal brain. You risk being shunned by your herd if you express your natural urge for status. But if you keep rejecting your natural urge for recognition, you reject a core piece of yourself. Running with a status-hating herd does not free you from mammalian frustration with social dominance.

Your mammal brain needs to see your star rising to release happy chemicals. You do not need to light up the galaxy; you only need to believe in your own momentum. You can say it doesn't matter, but that is likely to leave you with unhappy chemicals.

People with high formal status feel bad about their status as people with low or middling status. A high-status person might have the habit of seeking status regardless of the consequences. They might fear losing everything they have the moment they stop their automatic

status seeking. Their well-being would benefit most from learning to feel satisfied with whatever status they happen to have.

Feeling good about your status is hard whether you feel like you're at the top, the middle or the bottom. Your fellow mammals will never stop challenging your place in the dominance hierarchy. No amount of status will protect you from feeling this threat. Your only security comes from the feeling of satisfaction you create internally.

You can create circuits that amplify your sense of satisfaction, even if your present circuits amplify your sense of deprivation. But new circuits are not easy to build. Re-wiring your neurochemistry is as hard as quitting smoking and learning a foreign language at the same time. It's like learning a foreign language because you're hacking a new trail through your jungle of neurons, so even routine things suddenly require great effort. It's like quitting smoking in the sense that you have a well-travelled path through your jungle of neurons but you are struggling not to use it.

Learning to feel satisfied is not easy, but it has fewer negative side effects than other ways of managing your neurochemicals.

Those who insist on rejecting all status opt for starving their mammal brain instead of teaching it to feel satisfied. Abstinence from food leaves you weak and easily tempted by junk food, and abstinence from status leaves you weak and easily tempted by junk status.

Bingeing on Junk Status

When a person is hungry, junk food is very tempting. When a mammal brain is hungry for status, it is tempted to binge on junk status.

Dieters learn that starving is not the best way to lose weight because it often leads to bingeing. A person who says they don't care about status is starving their mammal brain, and that leads to binging on junk status. Any status looks good to a person who feels dominated and status-starved. Self-destructive actions that indulge your craving

seem appealing.

Junk status, like junk food, satisfies the craving but doesn't supply real nourishment. The difference between junk status and real nourishment must be decided by each brain for itself, since happy chemical circuits vary with unique life experience. Each brain must determine the nourishment it needs to avoid being tempted.

Dieters learn to prevent bingeing by eating moderate portions of nourishing foods. The mammal brain likewise needs to be nourished with healthy status before it is tempted by junk status.

People who say they don't care about status often end up seeking status in some other way. People who feel dominated find their own ways to dominate. They may find themselves bingeing on status-seeking strategies that have unhealthy side effects. The best way to avoid junk status is to become aware of one's desire for status, the way a dieter becomes aware of true hunger. Honoring your true hunger works better than starving and bingeing. Honoring your true need for status helps you avoid feeling deprived and bingeing on junk status in response.

It's easy to notice other people bingeing on junk status. A memorable example for me is the day I heard the words "What idiot designed this parking lot?" I was stuck in gridlock after picking up my son at soccer practice. It was annoying to be trapped in a car, wasting time and gas. Someone next to me was managing that annoyance by putting down the designer of the parking lot. When life is frustrating, it's easy to assume that you could easily fix the problem if only you ran the world.

I did not want to teach my son that habit. More important, we knew the "idiots" who had designed the parking lot. We lived on steep hills, with little flat space for playing fields. My son's practices were often held in other towns, requiring terrible commutes. We were thrilled when the volunteer leaders of our town's athletic organizations figured out a way to carve enough space from a hillside for a new

soccer field. The cramped site left little room for parking, but the improvement was satisfying.

The critic whose voice drifted into our car did not focus on the accomplishment. Gridlock is unpleasant, of course. The mammal brain feels threatened when it's trapped. When it sees no escape, unhappy chemicals surge.

Life often lands us in gridlock of one sort or another. We find ourselves in unpleasant subordinate positions every day. Our mammal brain dislikes this feeling, and if we don't find a way to feel satisfied with our status we will be tempted by any status that's immediately available. Hating the "idiots in power" is a common status-seeking strategy in my corner of the world. Parents who think this way build the thought habit in their children. A new generation gets wired to automatically put down those in positions of responsibility when feeling frustrated

The junk-status habit is easily provoked by a visit to the Department of Motor Vehicles. When you're stuck in a line, it feels like submission to your mammal brain. Feeling hostile toward the DMV helps the mammal brain raise itself from the subordinate position to the dominant position. That makes you feel better, and the brain learns from whatever makes it feel better. It's tempting to binge on finding fault with the clerks and the rules of this institution.

When you focus on faults, it's hard to see accomplishments. I see the DMV as an accomplishment because so many of my students paid bribes for drivers licenses and traffic violations in their countries of origin. These students often asked me how we prevent this. And I had to tell them we take it for granted. In some countries, drivers take it for granted that they will have to bribe police who stop them for traffic violations. And then drivers feel free to violate traffic rules on the presumption that bribes are inevitable anyway.

When a DMV works without bribery, it's a cause for celebration. But most people don't see how they benefit from the

DMV's bureaucratic procedures. Auto thefts and accidents are prevented when the rules are enforced. Bureaucracies enforce the rules and thus make the benefits possible. Most people complain about the enforcement while taking the benefits for granted. The next time you go to the DMV, you can try looking at it as an opportunity to feel satisfaction instead of scorn.

I was tempted by junk status when I brought my car to the dealership for servicing. I caught myself blaming my mechanical problem on the manufacturer. I had no evidence, but it felt better than facing a repair bill. Then I realized that cars wear out like everything else. I am not being dominated by the manufacturer when I wear out a part on my car. Paying a repair bill is not submitting. So I did not try to dominate the service desk by aggressively insisting it was their fault. I did not want to wire my brain for a world where aggression wins. I wired myself for a world in which evidence wins. I celebrated the fact that spare parts are available when I needed them. My urge to binge on junk status passed. I didn't feel dominated so I didn't need to dominate in response.

But the lure of junk status tempted me again when I was in a car rental line at an airport. I was frustrated because I had already done the paperwork online. Why should I wait to do it again? Then I thought about what a miracle it is that something as expensive as a new car is entrusted to strangers with so brief a transaction. It's a marvel that the staff is so pleasant to customers who are often looking for flaws to critique. It's a triumph that labor and capital are managed in such a way that a clean car is waiting at a competitive price when I need it. I felt satisfaction with the process while I waited in line.

We are often surrounded by large complex systems. It's easy to feel dominated when you interact with something bigger, and the mammal brain looks for ways to avoid submitting. It's helpful to see large complex systems as mammalian alliances struggling to satisfy the needs of the whole herd. If you see a system as an alliance rather than a

dominator, you are likely to have a better experience. But it will not raise your status. You will have to find other ways to meet your status needs, or you will be tempted to binge on junk status when you encounter a person behind a counter in a large rule-bound system.

Our urge for dominance will not disappear. It is part of our core operating system. An appetite for status is part of being a healthy mammal. Feeling good about your status frees you from junk status binges that don't really improve your life.

One Man's Status Is Another Man's Junk Status

Sometimes I feel like I'm surrounded by people bingeing on junk status. But if I find fault with everyone, I am really just bingeing on junk status myself. So when I'm tempted to think everyone else is misguided, I try to remember that everyone else is a mammal who cares about their status.

This was especially hard for me at a particular PTA meeting. I was listening to mothers griping about their children's homework. Half of the mothers complained that their kids had too much homework, and the rest complained of too little. One mother moaned that her child was too stressed for homework when he finished his daily music, sports and language lessons. Another moaned that her child needed more homework to prevent falling behind a cousin whose school covered more math. Each mother was focused on her own interests and expecting the school to submit to them. I thought it was all junk status as each mother tried to dominate the curriculum.

I expected conflict between the more-homework mothers and the less-homework mothers. But I was wrong. Within minutes, these mammalian mammas had built an alliance to blame the school. They agreed that teachers should tailor homework to each family's individual needs.

I did not agree. As a teacher, I had tried yielding to individual appeals and gotten bad results. I had agreed to give students make-up exams only to have them not show up for the make-up. In my experience, students put schoolwork last when standards are negotiable. They quickly fill their time with other things.

The herd of PTA mothers outnumbered me. Since their view was held by so many, I decided to understand it instead of dismissing it as junk status. And I realized it was the mammal brain at work. In the modern world, reproductive success depends on your child's status. Our children are not likely to get eaten by predators, so all of that protective energy gets focused on other ways of protecting our children. These mammalian mammas saw the teacher as the predator – not consciously in words, but in their automatic neurochemistry.

People often feel dominated when educational standards are imposed on them. But real learning suffers when educational standards submit to the domination of each student and their mammalian mamma. My students would treat my office as if it were the Complaint Department at Macy's if I allowed it. Their experience of customer service built the expectation that you can return an outfit the day after a party and get a refund, no questions asked. Students used to come to my office the day after a test saying "I'm not satisfied with my grade," as if they expected me to provide "excellent customer service" in the form of extra points. Instead of taking responsibility for their studying choices, I think they were mirroring parents like the ones at my PTA meeting. Dominating the teacher instead of mastering the material can become a habit.

Parents today put their eggs into fewer baskets, so each perceived threat to a child's prospects feels like a big threat to reproductive success. Your intellect knows that a child is better off actually learning rather than "winning" against the educational system. But happy chemicals flow when a mamma mammal dominates a teacher and protects a child's interests as they see it in the moment.

People say they want high standards, but their actions are shaped by mammalian neurochemicals.

Students can find ways to "win" at the education game without actually learning. This temptation is widespread because the mammal brain is always looking for ways to win. When a person learns to satisfy that urge in other ways, they can avoid satisfying it in ways that undermine their true interests.

Mammalian Legacy vs. Human Legacy

In the past, many people had a large troop of grandchildren. But today our planet is crowded, and having fewer children raises the survival prospects of each one. Some people will have no grandchildren at all, but their mammal brain can't stop caring about its legacy. Without grandchildren to focus on, the mammal brain is anxious. Its future seems bleak. To feel good about the future, the mammal brain needs an alternative legacy to focus on.

Every brain wants to see its own impact on those who will come after them. One person strives to get hits on their blog and another to set a record at their local bowling alley. The mammalian urge to reproduce as much as possible can be satisfied in many ways. But our happy chemicals still depend on building a sense of long-term survival. Without that, your mammal brain looks at the future and sees nothing but annihilation.

Whatever legacy you focus on, everything that seems to threaten it will frustrate you. You will see other mammals getting in the way of your legacy and feel alarm. The unhappy chemicals drive you to seek happy chemicals by raising your status. This is what the mammal brain does.

You cannot always dominate. You cannot eliminate every obstacle to your legacy and secure it with ironclad certainty. If you

want more happy chemicals, you have to believe in your legacy despite the apparent obstacles. You can learn to feel satisfied with your legacy.

Ignaz Semmelweis May Already Be a Winner

Great contributors to humanity sometimes die without getting recognition. Ignaz Semmelweis did more for the world than most people ever do, yet he went insane before his contribution got respect. His story shows that social status is too unpredictable to rely on during the span of one human lifetime. The happiness of building a legacy must come from small daily triumphs instead.

Ignaz Semmelweis is the nineteenth-century Hungarian doctor who accidentally discovered germs. He proved that doctors can save lives by washing their hands with disinfectant. Dr. Semmelweis was disdained and ignored during his life, and his legacy is now only dimly recalled. Like so many people, he enriched the lives of everyone who came after him, but he didn't know it. If he knew he was already a winner, his troubles could have been easier to bear.

Semmelweis managed a maternity hospital in Vienna when a natural experiment fell into his lap. His hospital had two wards: one with a very high death rate for post-partum mothers, and another with a very low rate. The low death rate occurred in the free clinic, which was attended only by midwives. The tragedies were occurring in the ward attended medical doctors. Semmelweis was agonized by these deaths, but he couldn't figure out the cause.

Then a doctor friend of his died mysteriously of the same symptoms as the mothers who'd contracted "childbed fever." The dead doctor had been cut by a student's scalpel while teaching an autopsy class. Suddenly, Semmelweis got it. The doctors were often performing autopsies during their spare time between deliveries. Invisible particles from the cadavers must have been on their hands when they were called to the delivery room, he reasoned. He required

his staff to wash with disinfectant before leaving the autopsy room, and maternal deaths plunged to zero.

That would seem like a happy ending. It would seem like convincing proof. But the human animal is complicated. Semmelweis got a bad reaction when he tried to spread the word in the European medical establishment. His idea that "invisible particles" cause disease was ridiculed as "unscientific." Semmelweis watched more women die in agony and more newborns become orphans while he struggled to convey his message.

Poor Dr. Ignaz hit up against closed doors for the rest of his life. His behavior became erratic and his family sent him to an asylum, where he died shortly after being admitted. He seems to have sustained injuries in a conflict with a caretaker, causing infection by the invisible particles he spent his life battling. Semmelweis has been critiqued by posterity for his poor communication skills, but it's hard to imagine acting differently in his situation.

Semmelweis did outstanding work, but he could not take pleasure in his legacy. It's hard to feel satisfied when your efforts are disdained or ignored. The mammal brain cares about the respect of others, and it's easy to become embittered when the desire for recognition is frustrated. Unhappy chemicals are triggered by a loss of status in your herd or pack or troop.

What if Semmelweis had known he was already a winner? What if he'd known there would eventually be statues of him in medical schools, and his birthplace would become a museum? Perhaps he could have protected himself from his own unhappy chemicals.

You do not always get recognition for your good deeds in your lifetime. It's easy to respond by torturing yourself with unhappy chemicals. But you don't have to. It's your brain, so you always have the option of feeling satisfied with your efforts regardless of the reaction of the world.

I went to the Semmelweis Museum when I was in Budapest. I saw the good doctor's lab and his instruments, and my mirror neurons responded to his devotion to his work. But it was a bittersweet experience because the museum was empty except for my husband, myself and the ticket-taker.

"Do you want to be right or do you want to be happy?" This question is constantly posed by TV's Dr. Phil. The guests quickly answer that they want to be happy, but I suspect that they want to be right as soon as they leave his stage. Ignaz Semmelweis wanted to be right more than he wanted to be happy. Being right means sticking to the facts as you see them. That creates impossible conflict because each brain sees the truth through the lens of its unique life experience. If you want the safety of the herd, you will be with people who think you are wrong. We will not know who is actually right while we are alive.

You can be right and happy if you can tolerate others thinking you are wrong. Whether the future proves that you were right or not, you need not put others in charge of your happy chemicals. You can manage them yourself.

Happiness Is a Warm Neuron

Before I understood the mammal brain, I thought my ups and downs depended on the state of the world around me. I didn't know about my mammalian neurochemicals, or the neural pathways I've built from accidents of experience. Once I figured this out, I knew I could activate my happy chemical pathways without depending on the state of the world.

Accepting my existing pathways is not something noble and glorious but something pragmatic and mundane. Here's a small example. I have always found pleasure in interior design. I can't sit in a room without looking for ways to improve it. My mind starts envisioning a new design project as soon as I near the end of the last one.

When I was young, this pleasure was limited by my time and money. In a more perfect world, I imagined, all my designs could be realized.

But when I had more time and money, I realized that another big remodeling project would not really make me happy. Strangely, my mind kept imagining new projects anyway. I needed a way to say "no" before I was up to my ears in plaster dust, so I decided to figure out why my mind was going there. That's how I discovered the link between decorating and my happy chemicals.

When I was twelve, my mother inherited two thousand dollars from her father and spent it redecorating. It doesn't sound like a lot of money. But it would be about ten thousand dollars today, and it was a lot to us. It was especially meaningful to my mother because it came from the father who had abused and abandoned her. I think she was determined to enjoy it, and she uncharacteristically spent it all in one place.

My mother took me along on the shopping trips, and showed me lots of color swatches. She asked my opinion.

That's all I remember, but my mammal brain clearly marked it as important information about happiness. The reasons are obvious.

First, I witnessed the pleasure my mother took in the project. She was not happy often, so this was the happiness my mirror neurons got to mirror. Many people enjoy sports for the same reason – they experienced a parent enjoying sports. When I was barely a teenager, I etched that first decorating circuit and started re-decorating my bedroom. Soon, starting decorating projects became a safe, acceptable way to escape from unpleasant goings-on around me.

The second key to happiness is the respect my mother showed for my opinion while we were decorating. Before that, she was generally hostile to my opinions. So when she brought me along and showed me the color swatches, my brain seized on that small shred of respect. Obviously, it's not about the decorating.

I know there is nothing inherently virtuous about decorating itself. But the random chance of experience made it important to me. My neural connections are real. To turn on my happy chemicals, I must use the neural connections I have.

I discovered that these connections get stimulated when I pick out the colors for any project I'm working on. If I am making a digital presentation, I dwell on the design and the colors. I have no illusions of changing the world with my color selections. I know I am just using the circuits I have to make other projects more enjoyable. And that actually develops circuits that make other projects more enjoyable. New circuits don't develop quickly at my age, so I keep finding excuses to design and color things.

Lingering over the pleasure of color might seem like a silly strategy with all the suffering in the world. Some might say it's frivolous. With all the opportunities in the world, some might say it's trivial. But life often frustrates our hopes, and we have only our existing neural circuits to fall back on. The happy circuits we have can help us avoid the temptation of self-destructive status seeking.

I thought about being an interior designer when I was in high school. No one in my family had ever gone to college, and the whole idea of going to a "sleep-away college" was looked on with suspicion. Talking about being a designer helped get me out of the house. But once I was in college, I was persuaded that "changing the world" was the only respectable career goal. It took me decades to realize that re-decorating and changing the world are just two different strategies for raising your status and triggering your happy chemicals.

You May Already Be A Finalist

I have been judging high school science fairs in recent years. It's a thrill for me to be in a huge convention center full of young people pursuing independent empirical research, and old people

volunteering to give them positive feedback. Everyone at this fair is a winner to me.

The majority of students who enter will "lose," even though modern science fairs award a huge number of prizes. But an enormous number of students value participating enough to do it voluntarily – these projects are not school assignments. Every entrant is called a "finalist" at the fair I attend, because each student won a regional science fair before being admitted to the international fair.

When I tell friends about this wonderful activity, I am sometimes shocked to hear them attack it. They seem to be uncomfortable with an activity that confers status on some children and not others. I think my friends dream of a science fair without "winners and losers," where no science is "excluded." I tried to explain that the barriers to entry are low because good research need not be expensive, and many organizations eagerly support students willing to do the methodical, sustained data collection on which scientific progress depends. But my friends were not interested.

There's a difference between good science and bad science. If every science fair project got equal recognition, the fair would be an empty ritual and it would not build real science skill.

The competitive process in today's science fairs offers an unparalleled learning opportunity. Each student is visited by five to ten judges in separate time slots. A young researcher gets invaluable one-on-one attention from sympathetic professionals. It's rare for students to have such an opportunity to share their thought process with experts who really understand it. For the judges, it's great to hear the thought process of a person who hasn't already been shaped by the conventions of their discipline. It's a treat for all parties. Everyone is already winning.

There's so much good here that it would be tragic to allow idealized visions of a perfect world to obscure it.