

STEPPING STONES TO SUCCESS

How To Achieve Incredible Feats
When Goal Setting Falls Short



The Value Of Your Membership

#1: Membership allows you to leverage our time and expertise.

Eben and I have each read thousands of books across dozens of disciplines over the last 20 years. That's 15,000+ hours of time. Over the last month, we've spent 100+ hours putting together this manual for you. It takes the best of what we know and the best of what humanity knows and tightly packages it so you can take action and get results across your life. And you get all of this for less than it costs to take someone out to dinner.

We've been lucky enough to spend nearly our whole careers doing what we love: learning, applying what we learn to our own lives, and then teaching others to do the same. Learning about the most important mental models, learning how to combine them, and learning how to apply them to different areas of our lives has transformed our health, our wealth, our impact, and our relationships, and we hope it does the same for you.

#2: You receive links to our most life-changing resources.

One of the biggest challenges with learning is information overwhelm. The amount of knowledge in the world is exploding fast. While there are more life-changing books, videos, and articles than ever, they are harder than ever to find because they are like needles hidden in a "haystack" of noise and distraction. The process of finding gems is trial and error. In our experience, it takes reading 10 books that we thought might be life-changing to find one that actually is.

Mastery Manuals are rich in links to books, videos, and articles that have changed our lives. We share these resources so you don't have to go through the same trial and error process that we did.

#3: You dramatically increase your 'Return On Experience' from life.

The difference between someone who doesn't collect and synthesize mental models and someone who does is the difference between someone who ultimately sees knowledge as fragmented between disciplines and one who sees it as an interconnected tapestry. By having the knowledge in your mind be densely connected, you learn much more from every experience, because you're able to make connections that no one else would be able to make.

NOW, THE BALL IS IN YOUR COURT



The value you receive from this Mastery Manual is directly proportional to the amount of time you put in. We invite you to:

- Read through this Mastery Manual multiple times.
- Complete each of the exercises.
- Explore the links to other resources that we provide.

This Mastery Manual is intended for a single recipient, but occasional forwarding is totally fine!

If you would like to order multiple subscriptions for your team with a group discount (minimum 5), please contact me directly at michael@learningritual.com.

In case you're not already a member and would like to receive a manual like this every month in addition to a live masterclass, you can try the Mental Model Club for just \$1 at MentalModelClub.com.

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Short Summary

The Goal Model Is Powerful

One of the typical ways of thinking we use to accomplish things is the goals model. If you want to accomplish anything really big, you should:

1. Set a big, hairy, audacious long-term goal.
2. Break your long-term goals into medium-term goals.
3. Break your medium-term goals into short-term goals.
4. Break your short-term goals into today's to-do list.
5. Take action on your to-do list.
6. Measure the results from your actions.
7. If it helped you move toward your long-term goal, keep going.
8. If it didn't, course correct.

The goal model is so obvious in our culture, it goes without saying. Goals give motivation, meaning, and focus when we feel lazy or distracted.

But The Goal Model Has Hidden Downsides

Indeed, the goal model is extremely powerful, but like all models, it can be counterproductive when we apply it to the wrong situation.

Recent research from the field of artificial intelligence makes the case that the goal model is effective when the steps between where you are now and where you want to go are clear.

However, when the steps between where you are now and where you want to go are numerous and unclear, the researchers make the case that goals are often OBSTACLES to LARGE feats of innovation rather than enablers.

✓ WHEN SETTING
GOALS WORKS



✗ WHEN SETTING GOALS
DOESN'T WORK



Introducing The Stepping Stones To Success Model

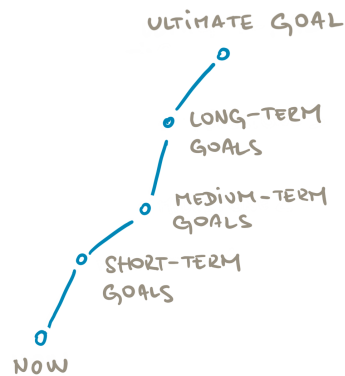
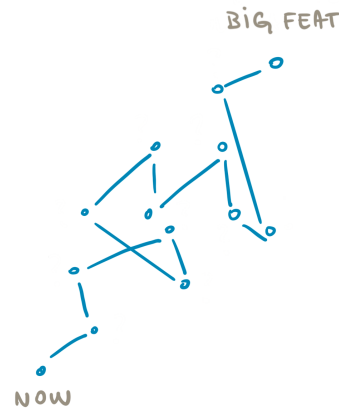
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Cross the river by feeling for stones.

Deng Xiaoping

To accomplish something big, you do NOT set ambitious goals and then work backwards.

Rather, you can follow the stepping stones right in front of you that give you **the most novel paths forward**, even if you aren't sure exactly how that stepping stone will pay off in the future. Then, from that new stepping stone, you look for the most novel path forward again. And so on.

*GOAL
MODEL**STEPPING STONES
MODEL*

Using novelty as a filter may sound overly simplistic, but it is actually incredibly powerful:

1. **Novelty is a great shortcut for detecting great stepping stones.** As you pursue novelty, it gets harder and harder to find. This difficulty forces you to adopt new and more complex ways of thinking in order to find novelty. This more complex thinking leads to breakthroughs.
2. **Humans are uniquely good at perceiving novelty.** Humans have an almost magical ability to detect interestingness. We don't need logic and analysis to detect that something is fascinating to us.
3. **Humans are wired to love and be motivated by curiosity.** To be motivated, we do NOT need huge goals. Curiosity is an innate and incredibly powerful drive. And, it can be cultivated.

The Curiosity Filter: Apply The Stepping Stones Model

Many of us, especially the most ambitious, have a goal filter that we take through life. When we come across books, people, and opportunities, we ask ourselves whether it will help us accomplish our goals.

THE GOAL FILTER



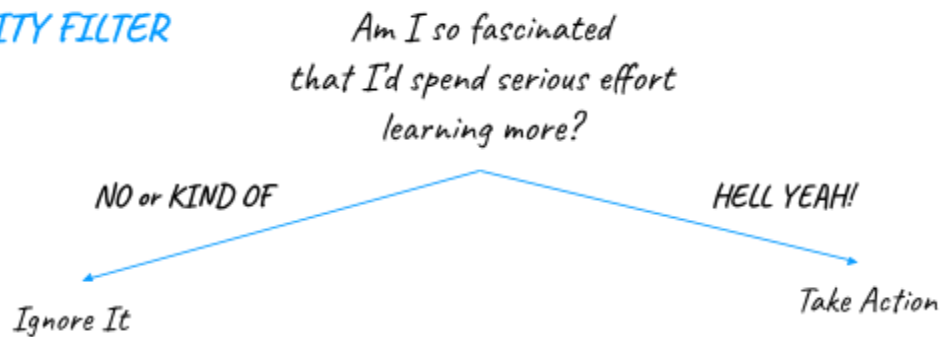
As an experiment, try adding a **curiosity filter**. When you come across books, [people](#), or opportunities, ask yourself:



Am I so fascinated by this that I'd be willing to spend serious effort learning more?

If the answer is NOT [hell yeah](#), then let it go. If it is a hell yeah, then make time for it within your schedule. **Use the level of your fascination as a compass.**

THE CURIOSITY FILTER



Long Summary

The conventional model for great success in your career is setting and ardently pursuing big, hairy, audacious goals (BHAGs), even if you have no idea how you're going to achieve them when you start.

Want to build a billion dollar company? Set the goal and work backwards from long-term goals to medium-term goals to short-term goals to today's to-do list. Then take action, measure your progress along the way, and constantly course correct so you're always on the most direct path (that you're aware of) toward your ultimate goal.

Want to cure cancer? Set the goal and work backwards. Measure your progress.

Want to find the love of your life or be happy? Set the goal. Rinse and repeat.

This goals model is so obvious in our culture, it goes without saying. It's central to our collective success recipe. Goals give motivation, meaning, and focus when we feel lazy or distracted—at least so we're told.

However, recent research from the field of artificial intelligence is putting a nail in the coffin of this paradigm—making the case that goals are often OBSTACLES to LARGE feats of innovation rather than enablers. In the book [Why Greatness Cannot Be Planned](#), researchers Kenneth Stanley and Joel Lehman, founding members of Uber AI Labs, compellingly present research for a new model of success and innovation with curiosity at its center.

This breakthrough is important, because the better our [mental model](#) of success is, the more likely we are to achieve it. Collecting the most valuable mental models in the world is [a key strategy of world-class entrepreneurs and leaders](#).

I have now read [the book](#) three times, and it's had a profound impact on how I view the world. **I've felt tension between my own internal curiosity and my goals throughout my entire professional life, and the book helped to resolve it (more on this in a minute).** Out of the 1,000+ books I have read, I consider this one to be in the top 10.

And their research is not alone. Researchers from other fields are coming to the same conclusion...

After spending months studying the habits of every single Nobel laureate across every single discipline across all of history, researcher Robert Root-Bernstein [found a fascinating pattern...](#)

Nobel Laureates have significantly more and deeper interests than average scientists.

Whereas average scientists view their hobbies as having nothing to do with their work, Nobel laureates don't look at their hobbies as hobbies. They look at them as fundamental parts of their creative process.

A camping trip isn't just a camping trip. It's an opportunity to get perspective on their work while looking at the stars. Art isn't just art. It's an opportunity to hone their visualization skills and therefore think better. Just as every moment, personal or professional, is potential material for a comedian, so too is every moment potential fodder for a Nobel laureate. Everything we learn or experience is fodder.

When we look back at many of the most creative people in history, including Nobel laureates, they seem to operate in a completely different way. They pursue curiosities, [sometimes purposely not thinking of immediate applications](#). They embrace serendipity. At certain points in their career, they were even considered aimless or seen as lazy underperformers as I wrote in [How To Rapidly Double Your Brain Power With The Einstein Technique](#).

We see this with many of the most innovative companies in the world as well...

- When **Michael Dell** was asked to name the one attribute CEOs will need most to succeed in the turbulent times ahead, [he said](#), "I would place my bet on curiosity."
- Under **Eric Schmidt's leadership as CEO, Google** grew from a few hundred employees to over 32,000. After years of experimentation, he found that [two qualities](#) mattered more than anything else: persistence and curiosity.
- **Elon Musk** [spent hours a day](#) during his childhood exploring his curiosity by reading books across physics, programming, philosophy, spirituality, and science fiction.
- Many of Apple's greatest innovations directly come from [Steve Jobs' meandering curiosity](#). Learning calligraphy helped Apple pioneer typefaces on the first personal computers. Jobs' love of music enabled him to spot the opportunity to launch the world's first truly successful MP3 player.
- Self-made billionaire **Charlie Munger** has collected the [most valuable mental models across the biggest disciplines](#) for his entire career.

Interestingly, many of the same iconic leaders, [scientists](#), and entrepreneurs who are [modern polymaths](#) and who follow the [5-Hour Rule](#) (spending at least five hours per week on deliberate learning) are also extremely curious.

Is this just a coincidence?

It is NOT. And, I'll explain why in a moment.

But first, let me get personal with you for a second...

The Tension Between Curiosity And Ambitious Goals We All Experience

Since I can remember, I've been a deeply curious person. I love reading [across disciplines](#). I love meeting [interesting people](#). I love peppering everyone I meet with questions. I love understanding things at a deeper level that may not have an immediate and obvious connection to my goals.

On the other hand, I love setting and [achieving ambitious goals](#). Since I became an entrepreneur at 16, I've believed that if you want something bad enough, you get specific about what you want and when you want it, you keep visualizing it, and then you take massive action, you can have it. And worst case scenario, "shoot for the stars and hit the moon."

The tension is that my curiosities are rarely on the direct path to my goals, making pursuing them hard to justify. Therefore, I've often relegated my curiosities to the hobby zone. Telling my team that I was going to read a book on evolution or network science felt like I was letting them down, even if those have paid huge dividends for my business over the [long term](#). Earlier in my career, I hid my curiosities from my bio and resume, because they didn't give a clear story of someone who was ambitious and focused.

Previously, I saw the holes in the goals model as personal shortcomings. Now, I have a clear picture of how a goals-only model can backfire:

Downside #1: Goal obsession can lead to one-track thinking

One of the best examples of how goals can lead to myopia is a famous study conducted by UK researcher Richard Wiseman.

[In this study](#), Wiseman gave people who considered themselves lucky and unlucky a newspaper and then asked them to look through it and count the number of photos inside.

Here are the average results of how long it took people:

Unlucky people: 2 minutes

Lucky people: seconds

How was this even possible? On the second page, there was a huge half-page ad that said:

"Stop counting. There are 43 photographs in this newspaper."

Amazed by the results, in his next experiment Wiseman placed a second large message halfway through the newspaper:

"Stop counting. Tell the experimenter you have seen this and win £250."

Once again, the unlucky people missed the message. They were too busy counting.

To summarize the surprising results, [Wiseman writes](#):

And so it is with luck—unlucky people miss chance opportunities because they are too focused on looking for something else.

They go to parties intent on finding their perfect partner and so miss opportunities to make good friends. They look through newspapers determined to find certain types of job advertisements and as a result miss other types of jobs.

Lucky people are more relaxed and open, and therefore see what is there rather than just what they are looking for.

The goal paradox is that the people who most fixedly pursue a goal might also be the worst at recognizing opportunities along the journey.

Downside #2: Pursuing and achieving goals can leave you feeling empty

As the saying goes, "Be careful what you wish for." Or, more eloquently:

The Dalai Lama, when asked what surprised him the most about humanity, he said, "Man. Because he sacrifices in health in order to make money. Then, he sacrifices money to recuperate his health, and then he is so anxious about the future that he does not enjoy the present. The result being that he does not live in the present or the

future. He lives as if he is never going to die, and then he dies having never really lived."

We've all had this experience of going after empty goals. We think a goal is going to change everything, so we sacrifice our health or our close relationships (or both) for it. [Then, in the end, we realize that what we sacrificed may have been more important than the goal itself.](#) In my twenties, I had a goal to build a business with over \$1 million in revenue. Our team referred to it as the two commas goal. When we achieved it, nothing really changed, and I wondered why we had put so much energy to achieving this goal as rapidly as we could.

When we look at some of the world's top performers, one is left to wonder about the sacrifices they made. For example, consider Michael Phelps and Tiger Woods—two of the best athletes in history. They followed the goal playbook to a tee (no pun intended). They started super young, accumulated tens of thousands of hours of deliberate practice, were single-minded, and actually achieved their most ambitious goals. Yet, they were left feeling empty.

Phelps, for example, has gone [on the record](#) saying that, "Really, after every Olympics I think I fell into a major state of depression." He even added, "I didn't want to be in the sport anymore ... I didn't want to be alive anymore."

Tiger Woods repeatedly ignored signals that parts of his body were failing him. He prided himself on playing through pain. He will now have to live in significant pain for the rest of his life. And his rampant cheating on his wife and lying about it ruined his marriage. In the [biography](#) on him, which I recommend, we see how being so single-minded didn't leave space for Tiger to do deeper work on himself or build deep relationships with those closest to him.

Downside #3: The second you set a goal, it starts to become stale

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The reason that most of us are unhappy most of the time is that we set our goals, not for the person we're going to be when we reach them, but we set our goals for the person we are when we set them.

Jim Coudal

Two things happen after you set a goal:

1. You change
2. The world changes

Yet, when we set a goal, we often unconsciously make the assumption that we won't change significantly and neither will the world. Neither is true.

If we set a 10-year goal to go down a certain path, the person we are in five years [may actually feel trapped by it](#). There is such a large sunk cost of time, money, and energy. We have publicly committed to it. Many of the people we have built relationships with still value the goal. As a result, it's hard to give up.

Furthermore, we will be confronted with new opportunities in the future we can't even imagine now.

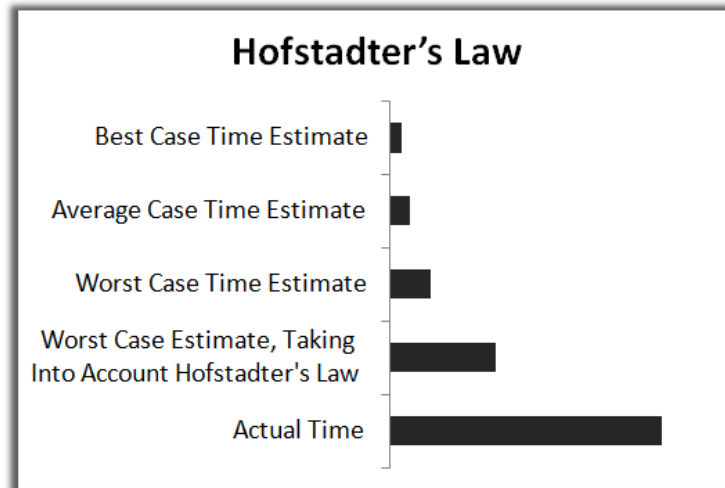
Downside #4: Goals can make you feel insecure

Goals predictably make us feel insecure. Here's how:

First, most people tend to set big goals that stretch them and to set aggressive deadlines. One of the 20th century self-help bibles, [The Magic Of Thinking Big](#), proclaims, "Believe Big. The size of your success is determined by the size of your belief. Think little goals and expect little achievements. Think big goals and win big success. Remember this, too! Big ideas and big plans are often easier—certainly no more difficult—than small ideas and small plans."

Naturally, we underestimate how long it will take us to achieve the goal, because it is a big goal and likely something we haven't done before. This is known as the [Planning Fallacy](#).

And, even when we are aware of the Planning Fallacy, it still takes way longer than expected. This is known as [Hofstadter's Law](#).



As a result of the Planning Fallacy and Hofstadter's Law, we are almost always behind where we thought we should be, which then makes us feel insecure.

When I set the million dollar revenue goal, I framed the goal, and hung it in the closet so I could see it every morning when I got dressed. Year after year, I full heartedly pursued the goal. The more I missed it, the more I felt insecure, like I was doing something wrong.

Downside #5: Goals can reduce learning

When it relates to learning, [several studies](#) have shown that setting performance goals can backfire.

For example, when someone sets a goal to get an A in school, they may end up studying for the test rather than studying to learn. As a result, performance goals can hurt learning goals.

Downside #6: Goals can actually make you feel unmotivated

They can even lead to [procrastination](#). When you set a big goal you inevitably create a mental image of the road in front of you, and science shows that this journey to a big goal has predictable motivation dips:

- **Going from zero to one.** As the saying goes, "Half of the journey is beginning it." When you have a big goal that may take months or years of hard work and going outside of your comfort zone, taking the first step can feel intimidating.

- **The OK (good enough) plateau.** When we get OK in any discipline, it is very easy to just coast. For example, when was the last time you tried to deliberately improve at driving or typing?
- **The dip (aka - the long middle).** After the initial excitement wears off, and you can't see the light at the end of the tunnel, it's easy to give up.

Downside #6: Goals focus us on end points rather than process

Ed Catmull, president of Pixar and Disney Animation Studios captures this brilliantly in the book [Why Questions Are The Answer](#):

*When we see the point of our work as all about arriving at smart answers, too often we **mistake an answer for the end of an effort**. We celebrate arriving at a point from which we need go no further. But that isn't the way life is. Yes, often we are hard at work producing something that needs to be finalized—in Pixar's case, at some point, we release a movie. Boeing ships a jet. A professor finishes a book. And that is an important form of culmination. But for many people, I think, that culmination becomes the goal.*

*What if, instead, we valued the answers we arrive at mainly because of all the new and better questions they lead us to? **Put another way, what if instead of seeing questions as the keys that unlock answers, we saw answers as stepping stones to the next questions?***

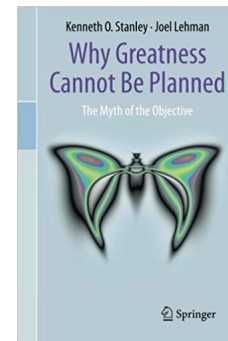
Many of these downsides can be fixed with better goal setting. **But over time, I've come to believe that the problem with goals runs deeper. Many of these downsides are inherent to the goal-setting model itself.**

Enter the “other” success model that many of the most famous innovators in history have followed, but that few people are even aware of.

Next, I'm going to introduce the essence of this model and then give you a very simple hack you can do to start getting results from curiosity right away.

For Great Achievement, Stepping Stones Beat Goals

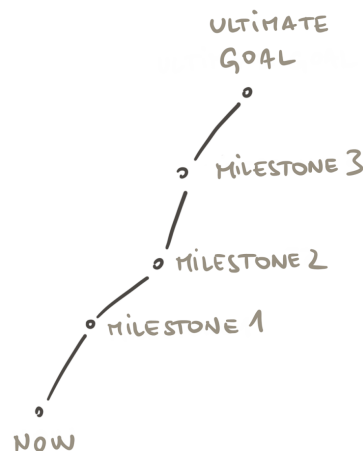
New research and simulations coming from the field of artificial intelligence are painting a completely different picture of success. Surprisingly, researchers [Kenneth Stanley and Joel Lehman](#) are finding that the algorithms most effective at solving the kind of big, hard problems that we see in the real world are NOT the ones based on setting a goal, measuring progress, and then checking each milestone off as they complete it.



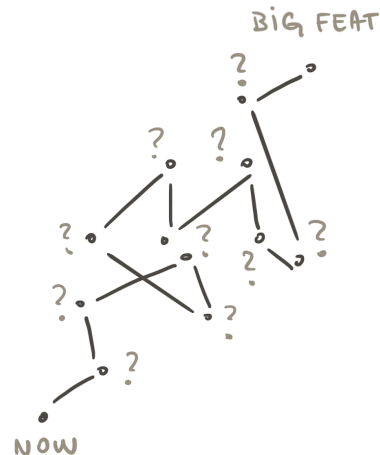
The goal-based model is effective when the steps between where you are now and where you want to go are fairly few and clear. For example, it still makes sense to set goals like losing 10 pounds, getting 8 hours of sleep per night, spending more time with your family, or hitting quarterly business targets.

However, when the steps between where you are now and where you want to go are numerous and unclear, the researchers have found that a different model works better.

✓ WHEN SETTING GOALS WORKS



✗ WHEN SETTING GOALS DOESN'T WORK



In other words, goals are good for exploiting what you already know. The Stepping Stone model, which I'll explain next, is good for exploring what you don't.

In fact, Stanley and Lehman go a step further in [Why Greatness Cannot Be Planned](#):

[Ambitious] objectives actually become obstacles towards more exciting achievements, like those involving discovery, creativity, invention, or innovation—or even achieving true happiness. In other words (and here is the paradox), the greatest achievements become less likely when they are made objectives. Not only that, but this paradox leads to a very strange conclusion—if the paradox is really true then the best way to achieve greatness, the truest path to “blue sky” discovery or to fulfill boundless ambition, **is to have no objective at all.**

“Wow!? What did I just read?!” That was the first thought that went through my head when I saw this passage.

I felt like a religious devotee who had spent my whole life doing everything by the book in hopes of going to heaven, only to have a rude awakening. Not only did the religious practices not work, but I was going straight to hell.

Stanley and Lehman make big claims, and big claims need big evidence. So, let’s unpack their studies and conclusions at a deeper level.

The 3 Keys To The Stepping Stone Model

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*Put another way, what if instead of seeing questions as the keys that unlock answers, we saw answers as **stepping stones** to the next questions? That strikes me as a very different mindset—and one that could take the creative efforts of groups much further.*

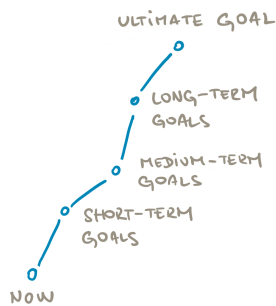
Ed Catmull, President, Pixar And Walt Disney Animation Studios & Author Of [Creativity Inc](#)

So, if goals aren’t the best model for ambitious creative feats, what is?

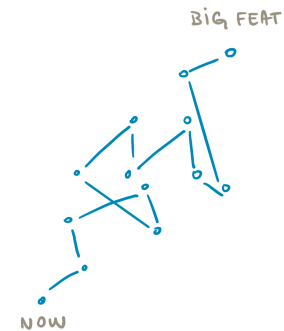
Stanley and Lehman describe this new model as the stepping stone model.

To accomplish something big, you do NOT set ambitious goals and then work backwards. Rather, you follow the stepping stones immediately in front of you that give you the most **novel** paths forward, even if you aren't sure exactly how that stepping stone will pay off in the future. Then, from that new stepping stone, you look for the most novel path forward again. And so on, jumping from one novel stepping stone to another.

GOAL PARADIGM



STEPPING STONE PARADIGM



Furthermore, to be motivated and passionate, you do NOT need huge, long-term goals. Curiosity is an [innate and incredibly powerful drive](#). And, it can be cultivated.

To someone reared in the goals model, this thinking is counterintuitive:

- If you just follow the most novel path, won't you just aimlessly jump from one thing to another without making any real progress?
- If you just follow the most novel path, won't you become an aimless wanderer?

Novelty may sound overly simplistic, but it is actually incredibly powerful on three levels:

#1: Novelty is a great shortcut for detecting great stepping stones

When you're a beginner at something, you can get novelty easily via simple trial & error. For example, let's say you've never read a book on habits before. As a result, it's likely that the first book you read on it is going to be mind-blowing even if it is mediocre.

As you become more expert on habits though, novelty becomes harder to find. Trial and error is no longer enough. You need to change how you think. You need a more complex model. For example, after you've read 10 books on habits, rather than picking up an 11th book on habit change, you may need to search in another discipline you know nothing about and then see if it provides creative ideas you can apply back to habits.

This may explain why the [founders of the five largest companies in the world are all polymaths](#). With the stepping stone model, one pursues novelty, which very quickly leads to learning across domains. With the goals model alone, being a polymath doesn't make sense as it is unpredictable and indirect to achieving goals. Elon Musk [expands on this](#):

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A lot of people who spend a long time trying to figure out how to solve tough problems in one industry don't ask, 'Well, is there some way we could apply that solution to a different industry?' And that can be really, really powerful.

Elon Musk

Put more succinctly: as you pursue novelty, it gets harder and harder to find. This difficulty forces you to adopt new and more complex ways of thinking in order to find novelty. This more complex thinking leads to breakthroughs.

Stanley and Lehman explain:

The important point is that novelty (and interestingness) can compound over time by continually making new things possible. So instead of seeking a final objective, by looking for novelty the reward is an endless chain of stepping stones branching out into the future as novelty leads to further novelty. Rather than thinking of the future as a destination, it becomes a road, a path of undefined potential.

#2: Humans are uniquely good at perceiving novelty

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Behind any serendipitous discovery there's nearly always an open-minded thinker with a strong gut feeling for what plan will yield the most interesting results.

Kenneth Stanley and Joel Lehman

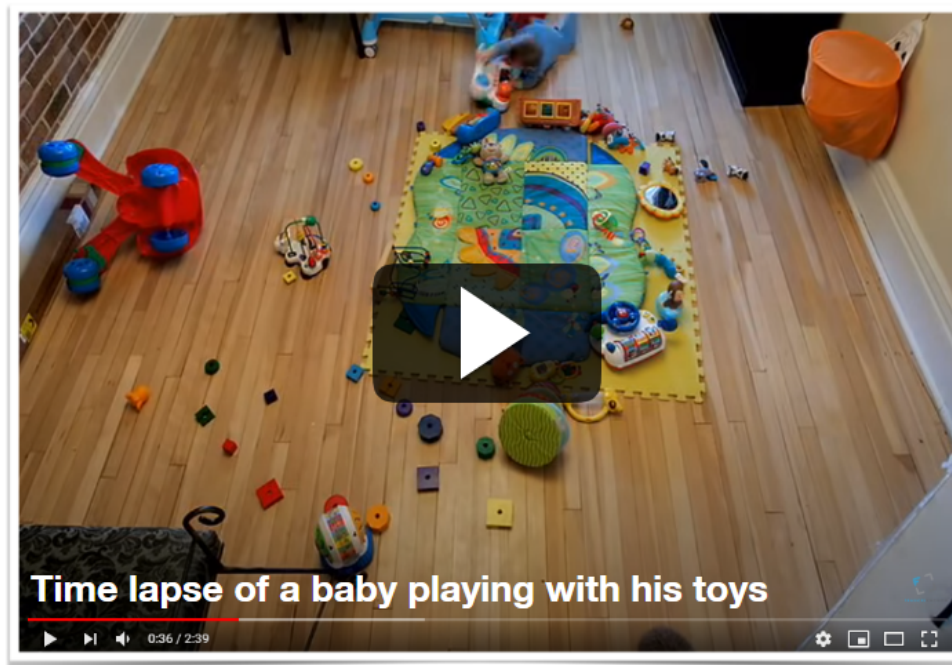
We often take it for granted, but humans have an almost magical ability to detect **interestingness**. We don't need logic and analysis to detect that something is fascinating to us. We can almost immediately find it without even knowing why.

Furthermore, Stanley and Lehman have found that replicating this natural human ability to identify paths that are interesting is currently impossible with artificial intelligence. They add:

Often we feel the urge to explore a particular path or idea despite being unsure where it might lead. Our intuitions and hunches often prod us in directions that might not be justified objectively but still lead to something different or interesting. So it's no coincidence that the concept of interestingness comes up naturally when discussing novelty. When an idea feels genuinely novel, that's often enough to make us curious. The idea interests us even if its ultimate purpose is unclear... **We understand that if we take the interesting path, it may yet lead somewhere important, even though we might not know where.**

#3: Humans are wired to love and be motivated by curiosity

One of my favorite examples of our innate curiosity is this [four-hour time-lapse video](#) (compressed into 2 minutes) of a baby playing with toys.



Think about how amazing this video is. Staying focused for four hours is hard for anyone to do, but this baby is able to do it naturally without even trying.

This is how babies go from zero knowledge of the world to incredible amounts of learning—simply by following their curiosity.

The research, case studies, and examples that I presented in this section have an obvious and easy conclusion...

If you want to accomplish huge creative feats, embrace your inner curiosity. Goal setting is powerful, but best used for short-term goals where the path between where you are and where you want to be is clear.

The less obvious and more important question, though is, how?

A Simple Way To Incorporate Curiosity Into Your Life

“

Unfettered curiosity is wonderful; unchanneled curiosity is not.

Ian Leslie, author, [Curious](#)

How do we embrace the serendipity of curiosity while handling the predictability of our bills?

How do we productively channel our curiosity? In other words, how do we avoid neomania—[getting constantly distracted](#) by the latest tech gadgets, the newest articles, the newest social media posts, and the newest books—for no other reason than they trigger our innate curiosity?

For me the answer to these questions comes down to what I call the **curiosity filter**.

Many of us, especially the most ambitious, have a goal filter that we take through life. When we come across books, people, and opportunities, we ask ourselves whether it will help us accomplish our goals.

THE GOAL FILTER



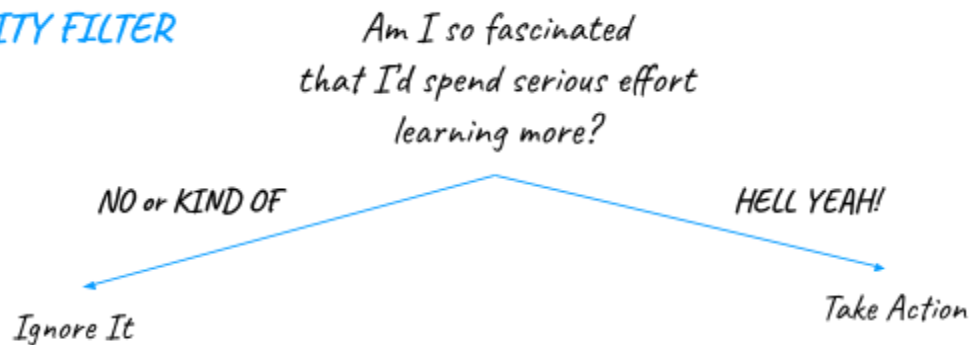
As an experiment, try adding a curiosity filter. When you come across books, [people](#), or opportunities, ask yourself:



Am I so fascinated by this that I'd be willing to spend **serious effort** learning more??

If the answer is NOT [hell yeah](#), then let it go. If it is a hell yeah, then make time for it within your schedule with the [5-Hour Rule](#). Use the level of your fascination as a compass.

THE CURIOSITY FILTER



This filter is powerful on two levels:

1. **How much you're willing to sacrifice your time for a fascination is a good proxy for how fascinated you actually are.** This proxy helps protect against shallow curiosity where you're pulled in by clickbait titles, notifications, and subject lines that feel interesting in the moment, but don't actually matter.

2. **Having a high bar for fascination prevents information overwhelm.** The more you get in touch with your innate curiosity, the more and deeper curiosities you will have. The “hell yeah” filter prevents you going into too many directions at once.

And, ultimately, four things will happen the more you say ‘hell yeah’:

1. **You will ignite an inner fire and access a whole new system of motivation beyond will-power.** Famous Hollywood producer Brian Grazer summarizes this motivation source in his book [A Curious Mind: The Secret to a Bigger Life](#): “Curiosity will conquer fear even more than bravery will; indeed, it has led many people into dangers which mere physical courage would shudder away from.”
2. **That fire will turn into an inferno.** As Einstein eloquently said: “Curiosity is a delicate little plant which, aside from stimulation, stands mainly in need of freedom. It turns out that like many delicate plants, in order to flourish, curiosity needs to be cultivated.”
3. **You will channel your curiosity into a reservoir of knowledge.** [Every diverse skill and idea you learn](#) is ultimately fodder for future creative breakthroughs. (We go deeper into how to learn faster and better in [this free webinar](#).)
4. **You will enjoy your life way more!**

Ironically, the fact that I’m even writing this is an example of the power of the stepping stone model. I started writing seriously in 2013 when I became a contributor to Forbes. I was running my old business full-time and feeling burned out. So I decided to use the writing opportunity to explore my curiosity—to give myself permission to do something that wasn’t connected to an immediate outcome. In other words, **I used the curiosity filter.**

For each article I wrote, I read 3-4 books and spent 80 hours. From a typical productivity perspective, my approach made no sense. From a curiosity filter perspective, I very rapidly went from burned out to on fire.

That curiosity took me on a meandering path from articles on [work-life balance](#), to articles on [relationship building](#), to [learning how to learn](#)—all topics not at all related to our business at the time.

It made no economic sense. But, it made sense to my soul. It made sense in the stepping stone model. And now, in retrospect, it makes sense in the goal model—because now, I am [writing and teaching full-time about learning how to learn](#).

The only way that I could write this is by having written these articles. The only reason why the book [Why Greatness Cannot Be Planned](#) resonated so deeply with me is because I had been unconsciously following the stepping stone model.

I pursued my previous business with the traditional goal-setting model. It left me burnt out. I've built my current business by following my curiosity and by following short-term goals, and I've never been more successful or happier. Over the past few years, I have:

- Contributed to Time, Fortune, Forbes, Inc., Entrepreneur, and the Harvard Business Review.
- I have earned more money than I ever have.
- My writing has been read tens of millions of times.
- Built a 200,000+ person email list.

And none of this was planned when I started writing for Forbes.

Historical Case Studies

Overview

It's easy to look back on our life and see instances when we followed our curiosity from a starting point to somewhere really interesting—a new career path, a new business, a new relationship. It's harder to have faith looking forward. It's hard to believe that if you set aside time to read a book purely on the basis that it is fascinating to you, or listen to a podcast on something that's novel, it will pay off over time.

What follows in this section of the Mastery Manual are examples and case studies of companies, inventions, and individuals who succeeded as a result of the stepping stone model.

Evolution

“

The incredible diversity of life on this planet can only be understood in an evolutionary framework.

Carl Woese

Evolution, the process which has created the stunning, complex, and diverse life of Planet Earth, is a prime example of the power of the stepping stone model. Evolution doesn't depend on having big goals. It doesn't have a purpose.

Rather, evolution creates variation (novelty) and then keeps what survives. Each new surviving generation then serves as a stepping stone for new variations. In addition, each new stepping stone serves as a platform for new applications that could never have been predicted in advance.

For example, many of the organs in the body today are NOT used for what they were originally designed for. Yuval Harari, historian and author of [Sapiens, breaks this down for us](#):

- Feathers first appeared to keep ancient reptiles warm. Now, birds use them to fly.
- Fingers appeared to help our ancestors climb trees. Now, we use them to play the piano.
- Mouths evolved to allow organisms to take food into their body. Now, we use them to speak and to kiss.
- Sex originally appeared for reproduction, but now we use it to establish intimacy.

Business

“

Thoroughly conscious ignorance is the prelude to every real advance in science.

James Clerk Maxwell

Similar to evolution, the history of innovation shows us how the path that stepping stones will lead to is unpredictable. Below are a few of my favorite examples pointed out in [Why Greatness Cannot Be Planned](#):

- **“No one in the 19th century would have predicted that vacuum tubes would be the linchpin that leads to computers.** The history of vacuum tubes has nothing to do with computers. People like Thomas Edison who were originally interested in vacuum tubes were investigating electricity, not computing.”
- **“The first engine was not invented with airplanes in mind,** but of course the Wright brothers needed an engine to build a flying machine.”
- **“Microwave technology was not first invented for ovens,** but rather was part of magnetron power tubes that drove radars. Only when Percy Spencer first noticed the magnetron melt a chocolate bar in his pocket in 1946 did it become clear that microwaves are stepping stones to ovens.”
- **“The stepping stones to intelligence do not resemble intelligence at all.** Rather than increasing intelligence, the stepping stones that lead from single-celled organisms to humans include such unrelated innovations as multicellularity and bilateral symmetry. Millions of years ago our ancestor was a flatworm. It would not score any accolades for its intellect, but its one great achievement was bilateral symmetry. Who would ever think that bilateral symmetry is essential to writing poetry? But it was an essential stepping stone on the road to Shakespeare.”
- **“The stepping stones to walking aren’t necessarily good walking, or even balancing.** Falling down and kicking your legs may be a better stepping stone than trying to take a step (because kicking your legs is the foundation of oscillation, which is how walking works), but if walking is the objective, falling down is considered one of the worst things you can do. So once again novelty search far outperformed the objective-based search.”

Looking backwards with the benefit of 20/20 hindsight, we can clearly see that vacuum tubes were critical to the computer revolution, engines were critical to airplanes and that microwaves were critical to radar. However, when we look forward, the stepping stones we need are unpredictable and nonobvious. These critical steps would not be on the direct path in the goals model. Ultimately, goals give us the feeling that the future is more predictable than it actually is. Stanley and Lehman go a step further and say, “Almost no prerequisite to any major invention was invented with that invention in mind.”

Companies

Interestingly, many of the same people who are [modern polymaths](#) and who follow the [5-Hour Rule](#)—spending at least five hours per week on deliberate learning—are also extremely curious. Is this just a coincidence?

I don’t think it is.

Once you are in the stepping stone model, curiosity, learning across disciplines, and setting aside time to explore makes complete sense. The stepping stone model explains the paradox that many of the busiest people in the world still make time for reading, reflecting, [experimenting](#), and even [wandering](#).

Many of the CEOs, entrepreneurs, and leaders we admire the most attribute their success to curiosity, but when others write about them, they focus on their strategies rather than the model that underlies those strategies. As a result, curiosity is rarely mentioned, and if it is, it’s an afterthought. Business schools somehow teach opportunity recognition without teaching curiosity.

Somehow, if you ask the average person what they associate with the word “business,” they might say something like money. Yet, when many of the most famous entrepreneurs are asked the same question, they say curiosity. One of Silicon Valley’s most successful and wise entrepreneurs and investors summarizes the situation with the following quote:

“

Following your genuine intellectual curiosity is a better foundation for a career than following whatever is making money right now.

Naval Ravikant

Many current-day entrepreneurs started their company because of a question that was so interesting to them that they decided to pursue it:

- The founders of [Airbnb asked](#), “Why should you be stuck without a bed if I’ve got an extra air mattress?”
- Netflix’s [Reed Hastings asked](#), “What if a video rental business were run like a health club?”
- Jack Dorsey, the co-founder of Square and Twitter [wondered why](#) only established businesses, and not smaller merchants, were able to process credit card transactions.
- Elon Musk wondered why the traffic was so bad in LA before he started [the Boring Company](#).

Despite the fact that many of Silicon Valley’s companies espouse moonshots, when you actually look at many of their origins, it is often the result of exploration. And there is no telling in the very beginning that these companies will be moonshots. Examples being:

- Twitter was an experiment for a failing company.
- Facebook was started out as an online yearbook for Harvard students.
- Google was a side project of two Stanford Ph.Ds.

Steve Jobs’ captures the randomness of how all of the dots connect in his famous Stanford commencement address:



“ You can’t connect the dots looking forward; you can only connect them looking backwards. So you have to trust that the dots will somehow connect in your future. You have to trust in something – your gut, destiny, life,

karma, whatever. Because believing that the dots will connect down the road will give you the confidence to follow your heart even when it leads you off the well worn path; and that will make all the difference.

Steve Jobs

Jobs would never have predicted that learning calligraphy as a freshman in college would lead to one of Apple's competitive advantages. He would never have predicted that being fired from Apple would lead to a 10-year wilderness period where he developed the emotional maturity to be a great leader and developed a NeXT operating system that would be sold to Apple and baked into the Mac operating system, which would then lead to Apple being the largest company in human history. He could never have predicted that his love of music would enable him to spot the opportunity to launch the world's first truly successful MP3 player, talk to and persuade music executives and musicians from a place of authentic passion, and eventually launch the iPod.

Science

These examples from the world of business could just as easily be found in the worlds of science as I shared in the introduction.

For example, scientists at Harvard recently [published a study](#) that “the discoveries that lead to the creation of a new medicine do not usually originate in an experiment that sets out to make a drug. Rather, they have their origins in a study — or many studies — that seek to understand a biological or chemical process,” according Mark Fishman, one of the study's authors. Similar to the Jobs quote of the dots connecting in reverse, Fishman adds, “Only in hindsight does it seem obvious.”

Below are a few examples of Nobel laureates endorsing the stepping stone paradigm.

Einstein

‘Then do not stop to think about the reasons for what you are doing, about why you are questioning. Curiosity has its own reason for existence. One cannot help but be in awe when [s]he [the person of value] contemplates the mysteries of eternity, of life, of the marvelous

structure of reality. It is enough if one tries merely to comprehend a little of this mystery each day. Never lose a holy curiosity.” [source: [Einstein's final interview](#)]

Nobel Laureate Yoshinori Ohsumi

“Ohsumi never overlooks anything even in the most banal kind of experiment,” Nakatogawa adds. “He doesn't care about whether it will lead to something useful, whether a breakthrough can be expected, whether it will lead to more funding. He just follows his curiosity.” [source: [Nature](#)]

Nobel Laureate John Cornforth

“What we [Cornforth's collaborator] have in common is a lifelong curiosity about the shapes, and changes in shape, of entities that we shall never see; and a lifelong conviction that this curiosity will lead us closer to the truth of chemical processes, including the processes of life. [source: [Nobel banquet speech](#)]

Nobel Laureate Carlo Rubbia

“What is fundamental, it is based on curiosity. All of these scientific achievements are driven by curiosity.” [source: [Nobel prize interview](#)]

Nobel Laureate Phillip Sharp

“It [my entry into science] was a step driven by curiosity. I clearly did not want to spend my life being a farmer. I enjoyed the life when I was young, but it was not very intellectually stimulating, and the world was very confined. ... Science gave me the opportunity to continue learning.” [source: [Nobel prize interview](#)]

Nobel Laureate Christiane Nüsslein-Volhard

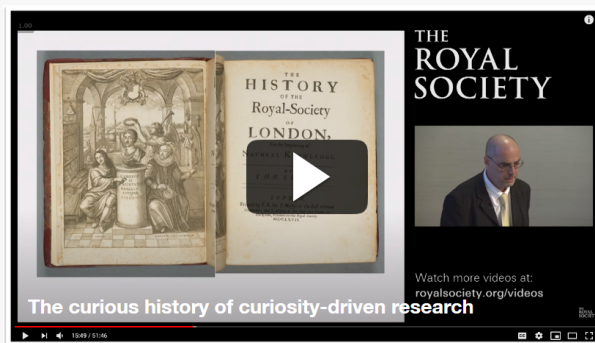
On what made him go into science: “I think a very big curiosity. I am very curious and I like to understand things. And not only science, I try to find out why and how things work. Science and nature caught my eye.” [source: [Nobel prize interview](#)]

THE CURIOUS HISTORY OF CURIOSITY-DRIVEN RESEARCH



Professor Jon Agar asks why scientists say they ask ‘why?’, and traces the curious history of the idea of curiosity-driven science; as he explores the curious place of curiosity in the history of science.

[\[Watch Video\]](#) [\[Read Transcript\]](#)



How Eben Has Used The Stepping Stone Model In His Own Life

Note to the reader: The following section is all in Eben's voice - for this section, "I" is Eben. Eben is a co-founder of the Mental Model Club. He has developed dozens of courses that have taught tens of thousands of people and generated hundreds of millions of dollars.

The Great Role Novelty Has Played In My Own Life

My Life's Structure Finds Novelty

- I run a 100% virtual business, that has never had a "central office"
- We travel 7-8 months per year, on average
- I'm always watching for the unexpected chance to try or do something novel and interesting

In my own life, novelty has played a great role. I run a 100% virtual business that has never had a "central office" for over 15 years. My wife and I, we travel seven to eight months per year, on average, for the last four years. In fact, I'm always watching for the unexpected chance to try or do something novel and interesting.

That is because I've found that, if you try 10 new things, there will be three or four of them that you're going to feel were great, and, maybe, for one of them, you're going to feel like you've discovered something really important—something that you wouldn't have found, had you not tried that novel thing.

Let me give you an example:

Last year, my wife and I were traveling in France, and we went to the Louvre Museum. My wife found this man named Cedric who does stand-up comedy tours in the Louvre (if you ever happen to go there, go look up Cedric and stand-up comedy tours of the Louvre, and you'll find him—he's amazing).

Cedric worked at the Louvre for years, so he's really into the art history. In addition to that, he's also very funny, and thus he came up with this stand-up comedy tour. I went on the tour, and I was so astonished, because it was so interesting and entertaining. He was saying all this politically incorrect stuff, talking about the gossip behind the scenes, what was going on with the people painting the scenes and the people within the scenes.

Then, this year, we went again. My wife wanted us to do another tour with Cedric, and so he took us out to see Versailles (which, if you've never been to, is definitely worth going to). He walked us through there, and he told us all these incredible things. Because he was so compelling, it led to me going into some French history and studying Louis the XIV, the Sun King, and learning a lot of stuff about people in politics.

This example comes to mind because it's led to me noticing so many different things that never would've happened, had we not hired the stand-up comedy tour to go through the Louvre. Of course, we made friends with Cedric—we went and had dinner with him and his wife, and now they're these cool friends that we have in France.

The amazing thing is, I could point out 100 other situations like that one—novel experiences that led to something amazing one way or the other. This stands to show that just trying new things that you'd never normally do, is a great way to find the path forward.

But let's go a bit deeper, shall we?

What Do 12 Different Occupations Have In Common?

- Rock Guitar Player
- Metalsmith
- Jewelry Maker
- Guitar Teacher
- Real Estate Agent
- Bookkeeper
- Audio Visual Technician
- Marketing Consultant
- Dating Guru
- Entrepreneurship Teacher
- Technology Investor
- Art Collector

What do these have in common?

When you look at these, you're probably thinking that they have nothing in common, unless they refer to different people, right?

Well, wrong, because what they have in common is **they're all me!** This is a sequential order of my career mishaps throughout my life. I dropped out of high school. I was a rock guitar player for several years. My first job was as a metalsmith. I tried making jewelry. I did a little bit of guitar teaching. I was a real estate agent.

Then I did bookkeeping for a little while on the side for a home builder (that was horrible). I was an audiovisual technician for a seminar company. I was a marketing consultant for a few

years. Then, I became the most unlikely dating guru, entrepreneurship teacher, technology investor, art collector, and there are a few more on there that I could come up with.

I know you're feeling that all that is quite haphazard—and you're right! But, what's interesting is that, as I've done these things, I've learned a ton, and I've brought what I learned in each of them forward into my life.

When I look back now, I constantly notice how many things would never have happened without the ones preceding them. For example:

- There is no way that I could've been a guitar teacher had I not been a rock guitar player.
- There's no way that I could've been an audiovisual technician if I hadn't done the guitar playing and the music recording.
- There's no way that I could've been a marketing consultant had I not been a failure as a real estate agent, and then had to learn marketing.
- There's no way that I could've been a dating guru had I not learned what I learned being the marketing consultant and the audiovisual technician and some of the other things as well.
- I could've never been an entrepreneurship teacher had I not had all these different diverse experiences.

You put them all together, I learned about business and marketing and information products. As I moved haphazardly throughout my life, but still took very seriously each thing that I was learning, the stepping stones model started taking effect, and eventually led me where I am today.

Layering Diverse Competencies (AKA which stones to step on)

Diverse Competencies

- Business, Interpersonal, Personal
- Art, Science, Psychology
- Design, Production, Distribution
- Sales, Marketing, Finance, Management, Leadership
- Inner & Outer

If you decide to move more haphazardly in your life, mostly based on your intellectual curiosity, but still aiming for rapid evolution and moving towards success, there has to be some reason behind your decisions.

Basically, the model I use in my own life is **layering diverse competencies**, i.e. gathering novel experiences and knowledge from a variety of complementary fields. To make this more comprehensive, I've isolated a few groups—five groups with categories that you'll need to learn a little bit about each one of them.

Business, Interpersonal, Personal

In personal, you want to learn and get some competency in your personal life. You want to learn about your personality type. You want to learn about your own psychology and your emotions. You want to get an idea of the way you see the world that's unique and different.

In interpersonal, you want to develop some interpersonal skills. You want to be able to do active listening. You want to understand the structure of friendship or how to build political alliances. You need to learn how groups work, and how to succeed in those dynamics, be they friendly or competitive.

And then you need to learn about business, where it's basically a group of people that are working together to create value and make profit in some way—a situation which heavily combines the previous two categories.

Art, Science, Psychology

Art is basically the intersection between expression and emotion—you could say it's the physical expression of an emotional feeling or inspiration. Science, on the other hand is typically the intellectual conceptual study of the physical domain. Psychology is the intellectual study of the emotional or the psychological domain.

Each of these has its own little reality with its own rules, its own paradigm, its own legitimacy. When you study each of them, and then start putting them together, you become much more powerful than if you just get stuck down with one of them—a lot of synergies appear, both in understanding your own self and in understanding and communicating with others. After all, the physical and the emotional in humans are not something you can separate.

Design, Production, Distribution

This is about creating products and services in the business realm, and the first step is understanding what it means to design a great product or a great experience. It's actually very common that very smart individuals pay little attention to the design and the creative aspect of things, rendering useless what could otherwise be a great product or service.

But design alone is not enough—it's actually critical to learn about producing it and actually making it happen. And then, what most creatives struggle with, is learning about the distribution of the product, i.e. getting a bunch of clients or customers to buy your thing.

If you want to build your own products and services, you need to follow your curiosity into each one of these categories, and avoid being myopic. Even if you outsource the parts of the process that you are not interested in, having basic knowledge of each of these areas can make a huge difference.

Sales, Marketing, Finance, Management, Leadership

These are all areas within business and entrepreneurship that are important to study. Each one of them is different. Each one is its own little world, and when you go hang out with successful people from either one, you'll notice that they tend to think differently than the others.

If you go and hang out with successful marketers, for example, they look at reality differently than salespeople do. They have a different model of the way that things work. They have different tricks and tips and tools that they use.

Or, if you go and hang out with finance people, you'll notice that they're looking at the business from an objectified perspective. They have ways of measuring things.

What you'll also notice is that you probably relate more to one of these than to others—for example, you might be much more interested in human resources than you are in sales, or you might be much more interested in technology than you are in finance.

If you get too far down one of these rabbit holes, and you get too involved in one of these cultures, without going over and visiting the others, checking them out, seeing how they see reality, what their values, their incentives, and their challenges are, you'll start to become myopic. You need to follow your curiosity into learning at least a little about each one of those.

Inner and Outer

This is about subjectivity and objectivity. Most people tend to be more subjective, where they're always tuned in to how they're feeling, what's going on for them, and the way that they see things. Other people are more outer, more objectified. They're more dissociated from reality, and they're looking at things from the outside, usually with a more scientific perspective.

By looking at reality through these different perspectival lenses, we get different ideas about how things work, and we have really interesting insights. For instance, someone that's much more objectified and rational, and tends to push their emotions down, when they, all of a sudden, get into their emotions, feeling them and using them as part of their intuition—well, that can become a superpower.

In fact, you can discover a superpower that you didn't know you had, simply by expanding your curiosity to include diverse competencies around your main one.

Watching The Intersections

Fascinating Intersections In My Life

- Audio Visual Tech (to sit in the back of the room)
- Dating & Marketing
- Burning Man & My Wife
- Opportunity Book Cover
- Mental Models & Knowledge Products

Audio Visual Technician in Real Estate

As I mentioned before, I couldn't have done some of these different things in my life, had I not done the preceding ones. For example, I mentioned that I was an Audio Visual Technician. I never would have been one, had I not done several things leading up to it (it's actually a fascinating intersection).

As I've said, I used to play the guitar, and in that process, I had also recorded music. In addition to that, I had some experience with buying and selling musical equipment, again

during my time as a musician. Then, at a later point, I became a real estate agent (which I didn't do well in).

These seemingly unconnected dots led me to being an audio visual technician for a real estate training company. Amazing, right? I had developed, almost by chance, this unique intersection of skills that allowed me to get this job working for a seminar company that taught sales and marketing—which in turn proved to be a pivotal moment in my life. I never could've done that if I didn't have those specific intersections.

Dating Business

Similarly, if you really get behind the scenes of my dating business, you see that I went through a period of my life where I was single, frustrated, and socially awkward, where I just couldn't figure out how to get a date.

If I hadn't gone through that, and then I also hadn't gone through a phase in my life where I'd learned about marketing and direct response marketing, there's no way that I could've gone on to become a successful online dating guru. It just wouldn't have happened. Because I wouldn't have had those sets of skills.

Burning Man

Here's another good intersection from my own life. In a crazy adventure about 10 years ago, I went to Burning Man. Then, in the second year, I went back, and I met my wife there! Now, my wife and I, we are very involved. We go every year. I do the art inside of our camp at Burning Man. We take our daughter with us.

It was at Burning Man that we discovered visionary art. I started collecting visionary art. I made friends with Android Jones who is probably the leading visionary artist right now—he's just so innovative. Then, I called him up and had him design the cover for my new opportunity book.

Mental Model Club

Here's another one. I've been creating knowledge products, information products for many years. I've also been interested in mental models. Then, Michael and I started talking. Now, we're doing the Mental Model Club, which is taking mental models, packaging them up, and offering them as a knowledge product.

Keeping The Balance

These are all intersections, and what's interesting about them is, there's no way that I could've seen these in advance. It just required me trying different things out and developing these diverse competencies.

Here I want to add a note on something Michael often says about me—the fact that I've been pursuing my curiosity on multiple levels, but I'm still able to package my insights and sell them in courses, effectively becoming financially successful while doing so.

A common question that comes up when we're talking about pursuing novelty is that, even after gathering all that knowledge and insights, people don't feel capable of bringing things together and making them practical and sustainable.

This forms the necessity for an interesting balance:

- If you just wander without disciplined execution, you'll just wander.
- If you just do disciplined execution, and you're not watching the horizon for new opportunities and exposing yourself to new things, you will probably sub-optimize your overall success by 90%, or something in that magnitude.

There are seasons for novelty, and there are seasons for head-down execution.

Keeping The Balance Expanded

One Investment Project Per Year

- Each year, I choose the best startup investment opportunity that comes my way.
- By concentrating on things I understand, and distributing my resources to new investments yearly, it keeps the balance of focus and novelty

Let me show you an example of how I balance between focus and novelty. Following Warren Buffett and Charlie Munger, I try to make one investment per year—I choose the best startup investment opportunity that comes my way by concentrating on things I understand, but at

the same time distributing my resources to new investments yearly. That actually keeps the balance of focus and novelty.

To elaborate a little, two or three times a month someone will show up pitching me their or a friend's idea. I then try to look at them whenever I can and, once a year, I try to choose the best one. That is the one I think will be a great investment, but also the one that I think that I will learn a lot from and that I could contribute a lot to.

These have been things like a technology platform that does events called Splash, or another technology platform that basically sets up your whole business in one and that's called ONTRAPORT. I've also invested in an online dating company for mindful singles called MeetMindful.

These are all very different projects. In addition to those, I actually invested with Michael in his business. I've got a project right now I've been working on for a couple of years with Peter Diamandis that's a project about futurism, watching futurism news.

Each time I work on one of these projects, I learn new things. I meet with new people and they really challenge me. That's why I think that that one investment project, plus placing a good sized bet on it, helps with both novelty and curiosity, but also with focus.

Applying this for other people, if you don't have money to be an angel investor, one passion project per year can produce the same effects—it's just going to need a little more effort from your side.

The futurism project for example, that actually was my idea, the original version of it. I just wanted to start watching futurism news and I had a couple of young guys that wanted to be interns a little bit and I just started it out. I then wound up showing it to Peter Diamandis and he had some similar stuff, then we threw in together and then it became a startup idea.

So each year, pursue a new passion, something that you're curious about and then, who knows? You'll see if it turns into something that you want to pursue.

Hang Out In Diverse Subcultures

The 80/20 Of Subcultures

- Each subculture has its own model and way of looking at and succeeding in reality
- Spending time with diverse social influencers within diverse subcultures brings new paradigms, terms, concepts, models and distinctions
- Look for the “leader” in each for maximum effect

Each subculture has its own model and way of looking at and succeeding in reality. Spending time with diverse social influences within diverse subcultures brings new paradigms, terms, concepts, models and distinctions. (Quick tip: look for the leader in each for maximum effect.)

When I think back through my life, I often think about the different phases that I've gone through. Being a rock musician and hanging out with other rock musicians on tour when I was 18 years old. Working in a metal shop for seven years as a craftsperson and going to craft fairs, and generally working in that whole reality.

Being a pretty serious Christian for several years. Going through being a real estate agent and seeing how real estate agents look at the world and look at reality. Hanging out with men who were really good at getting dates and attracting women—very different types of men, but that were all really good at that. Going to Burning Man and making friends with a bunch of burners, making friends with visionary artists.

Each and every one of those is like going to an alien land. It's like getting on a spaceship, going to another planet, landing, and starting questioning people on what they've figured out differently than you have. What their challenges and solutions are.

There you see how different the personalities are and how different the values are—but then you also start seeing some of the same patterns. The same conflict issues, the same political patterns. The same challenges with getting results. The same blind spot issues that are between things.

You see the similarities and differences. It is so enlightening—but you need to go in expecting to find a different reality. Otherwise, you'll just project what you've brought with you.

Build Your Supertribe

The Process To A Supertribe

- If you're going to build your own "Tribe 2.0" it's important to choose each member intentionally
- Build small masterminds in each domain that you'd like to improve in life
- Then introduce these together to create hybrids, synergies, and powerful collaborations

If you're going to build what I would call your Tribe 2.0, it's important to choose each member intentionally.

Robin Dunbar extrapolated what our natural "tribe size" is and he estimated it at about 148—also known as Dunbar's number. We've rounded it up, and thus we have this idea that the human tribe size is 150—this is why there are, on average, 150 people that go to a wedding or a funeral.

It might surprise you that a piece of this equation is our brain size. The reason that is correlated with tribe size, is that you can only track so many members (150) of your group, their relationships, and their social status relative to each other. In the animal kingdom, where we originate from, it's really important to know where you stand in the social hierarchy—it's a really big mistake to treat someone that's higher in the social hierarchy like they're lower, or the opposite.

So, the theory is that we can hold 150 different people in our minds and know which of them know each other and what all their status relationships are. Now, because we don't live on the savannah or in the jungle anymore, and we can't just have an actual little tribe of 100 or 150 people, it's up to us to build our tribe. That is what I call our Tribe 2.0.

I suggest thinking about adding a new person to your tribe about every 90 days, so four people a year. Over 25 years, you can build a tribe of 100 people. If you intentionally take the

most compelling person that you find every few months, and then introduce them to your other friends and the other people that are in your tribe, then you could build a pretty compelling Tribe 2.0.

Another way of approaching this is to build small masterminds in each domain that you'd like to improve in life. Then you can start introducing the masterminds to each other or people from the masterminds to each other. That takes things to the next level, and when you introduce all these people, you start to get hybrids, synergies and powerful collaborations that you couldn't necessarily predict. It really brings in that serendipitous, that good coincidence thing that we're all looking for.

Mental Model Club

- Michael and I were passionate about mental models
- So we created space in our individual lives
- We connected around mental models
- We created a mental model supertribe
- We created the Club to make it sustainable, to grow the supertribe, and to add accountability

And, that's pretty much what Michael and I are currently doing. We were just exploring our curiosity and passion about mental models, and then we created a space for that. We created a space where we could pursue that curiosity, which then turned into creating our own supertribe with the members of the Mental Model Club.

And note that this is not only about the supertribe. We get to pursue our curiosity at a deeper level. We also get to have an impact doing so. And, seeing as it is sustainable as a project, we can keep focusing on it (while also being accountable to it), and go deeper on one overarching model per month.

None of these would have happened had we not pursued our curiosity in various stages of our life.

The Research

Now that we understand the stepping stone model and several case studies, let's explore the actual research that Stanley and Lehman used to develop their ideas in the first place, which they [present in their book](#).

What makes the stepping stone model particularly interesting is that simulations can be evolved to test if and when it works...

The Study That Began It All — Picbreeder

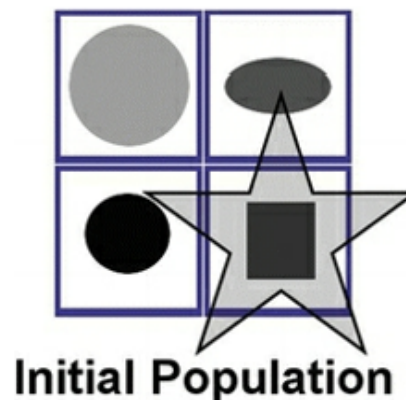
Researchers Kenneth Stanley and Joel Lehman began to question the goal paradigm after they helped inspire a genetic art simulation called Picbreeder in 2006.

Here's how it works...

The user starts off with a random set of shapes. For simplification purposes, there are only four squares below. In Picbreeder, there are actually 15 squares.

They then select one image.

Image Credit: [Why Greatness Cannot Be Planned](#)



Next, a new set of random shapes is formed based on how your shape looks. This is done by a computer algorithm that captures the "DNA" of the image and then adds variation to it.



Now, we have the basis setup for evolution:

- Random Novelty
- Selection Based On Human Interest

Amazingly, by simply selecting the images that look interesting, within a few dozen generations, humans are able to create things that look like actual things and art rather than random shapes.

Below are some of the highest-rated images on the site created by its thousands of users:

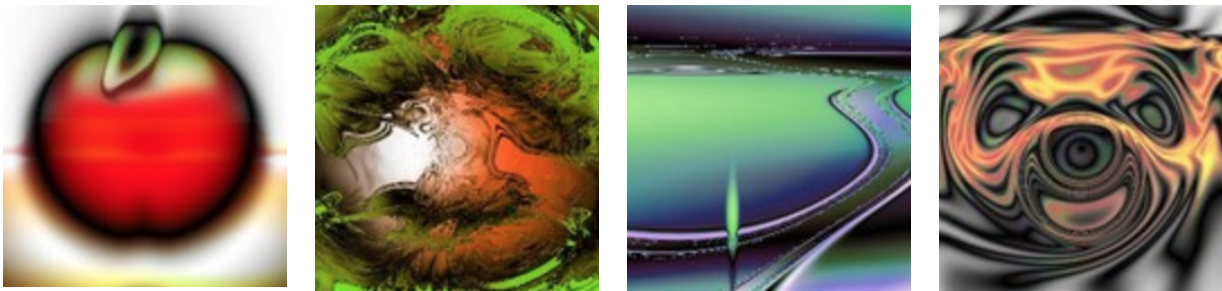


Photo Credits: PicBreeder

How does this relate back to the goal paradigm vs. the stepping stones paradigm?

“What turned out to be really surprising is that Picbreeder visitors almost always bred the best images when those images were not their objective. In other words, Picbreeder seemed to work best when visitors were open minded about what they hoped to find,” explained Stanley and Lehman.

Out of all the possible images that could have been generated, almost all of them would be random images that didn’t have much of a meaning to humans. However, humans seemed to be really good at rapidly getting to meaningful images without trying to reach an end objective. Virtually all of the interesting images on the site were generated without a goal.

To test this further, they created a computer program and repeatedly ran it for thousands of generations...

“First, we chose a target image from those that users have discovered and published on the site. Then, at every generation the program automatically chose parent pictures that look increasingly similar to the target image [37]. The result for the most interesting images—total failure. It’s impossible to breed an image if it’s set as an

objective. The only time these images are being discovered is when they are not the objective. The users who find these images are invariably those who were not looking for them.”

To test if their surprising conclusions transferred to other domains, they design new experiments starting with the hallway study, a common experiment in the field of machine learning.

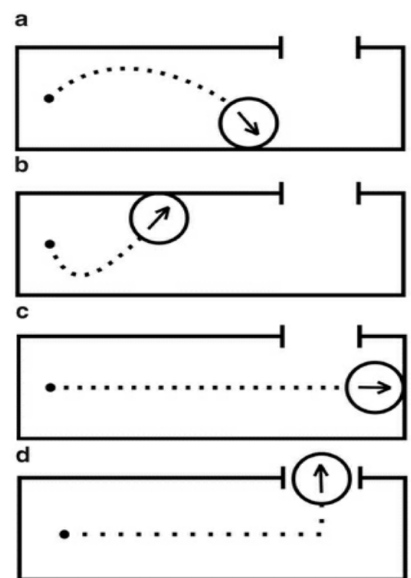
Study #2: The Hallway Study

In the typical hallway study, researchers use the goal paradigm.

The goal is to get an agent from one side of the hallway to an open door on the other side. As the agent moves closer to the door, it gets more and more positive feedback. In a way, you can think of it as a game of Marco Polo where the person who is it can't move.

In this case, Stanley and Lehman want to see if the stepping stone approach would work. Naturally, given that the door is just a small percentage of the room, the robot would keep crashing as it randomly tried different approaches that were novel. Here's how they explain it:

Instead of attempting to make it to the other side of the hallway, the robot can simply try to do something different than it has done in the past. As illustrated in Fig. 5.1, the robot might first crash into a wall because initially it's not experienced at navigating hallways. However, unlike when it's pursuing an objective, in novelty search the robot's crash is considered good because we've never seen it do that before. In other words, the behavior is novel, which is what we care about when searching for novelty. But if crashing into a wall is good, what would the robot do next?



The answer is that it might crash into a different wall, but once again as long as it's different from the first crash, it's also going to be considered good. Even if the second crash is farther from the goal than the first, it's still considered a good sign in the pursuit of novelty because it's a different crash. As you can see, this attitude of

appreciating novel situations without being judgmental already makes the novelty search different from an objective-driven pursuit.

Crashing into various walls may not sound that exciting, but what happens next is magical and highlights the power of novelty search. At some point, after crashing into enough walls, there are no more new walls to crash into. At that moment, novelty search has exhausted all the options for crashing and a remarkable fact comes into play: The only way for the robot to do something novel is now by not crashing. This advance is interesting because learning to avoid walls was never expressed as an objective.

But even though it wasn't the objective, the robot seeking only novelty eventually must learn to avoid walls anyway to have the hope of continuing to produce novel behaviors.

This is where the magic happens. The novelty search forces the robot to evolve its thinking. Stanley describes what happens next...

In fact, eventually the novelty-seeking robot will even have to enter the doorway on the far side because once again it will exhaust all the possibilities for novel behaviors that remain within the same hallway. The result is something very strange: A robot told only to seek novelty eventually learns how to avoid walls, navigate a hallway, and enter doors even though none of those are ever actually requested or rewarded as objectives. Following this logic, a push towards novelty seems to produce more sophistication than you might expect.

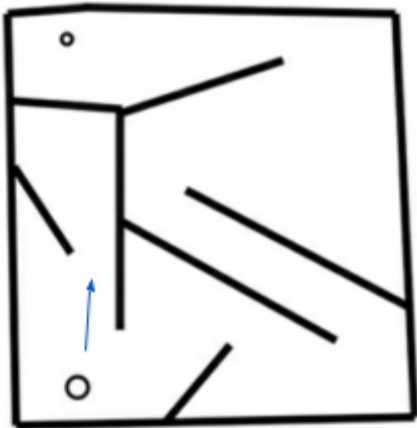
At the same time, it might seem that this apparent success is simply a result of "trying everything" (which computer scientists call exhaustive enumeration). If you really have the time to try every behavior under the sun, eventually you'll end up doing something that seems intelligent, but it might take you almost forever to get to it. That doesn't sound like a smart approach, and it turns out that discovery in novelty search is deeper than simply trying every behavior you can think of.

Having shown that the stepping stone model works for a simple hallway, they decided to move to one that is more complex and more like the real world. And this is where things get particularly interesting.

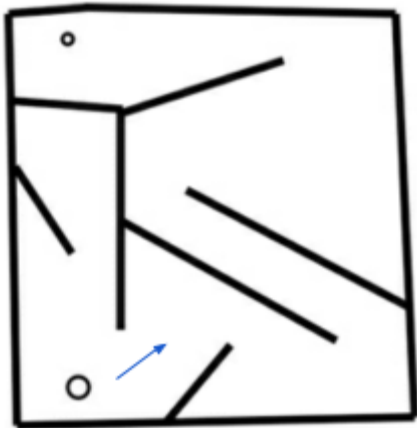
Study #3: The Maze Study

The [next study](#) tested novelty search in a maze instead of a hallway.

Goal Paradigm



Stepping Stone Paradigm



Amazingly, they repeated the experiment 40 times for the goal paradigm and 40 times with the stepping stone paradigm and obtained the following result:

	Maze Completions	Attempts	Success Ratio
Stepping Stone Paradigm	39	40	97.5%
Goal Paradigm	3	40	7.5%

In other words, the stepping stone paradigm was 13x more effective at solving the maze. The authors explain why the goal paradigm didn't work:

This closest wall attracts the robot because by approaching it the robot edges closer to the goal—which is its objective—causing its reward to go up. But to come any closer to the goal than the wall allows would require first driving much farther away. But that won't work out well because moving away from the wall looks worse to the objective-driven search.

From here, Stanley and Lehman generated hundreds of random maze designs with differing levels of difficulty. Then, they tested the two approaches again and again, and ultimately came to the following conclusion:

The trend that resulted from the data was that as mazes grow increasingly complicated, both novelty search and objective-based search can fail to solve them. However, objective-based search's abilities taper off much faster [55]. In other words, the reach of novelty search is greater but not unlimited.

These are just three of the most prominent studies, but [many others](#) have been completed.

RELATED RESOURCE: A NEW EQUATION FOR INTELLIGENCE



"In game play, for example, in Go -- everyone remembers in 1997 when IBM's Deep Blue beat Garry Kasparov at chess -- fewer people are aware that in the past 10 years or so, the game of Go, arguably a much more challenging game because it has a much higher branching factor, has also started to succumb to computer game players for the same reason: the best techniques right now for computers playing Go are techniques that try to maximize future options during game play."

"Intelligence tries to maximize future freedom of action and keep options open."

“...a variety of signature human intelligent cognitive behaviors such as tool use and walking upright and social cooperation all follow from a single equation, which drives a system to maximize its future freedom of action.”

“Intelligence should be viewed as a physical process that tries to maximize future freedom of action and avoid constraints in its own future.”

[Watch full video >>](#)

RELATED RESOURCE: THE POWER OF CURIOSITY AS A MOTIVATOR



“Reinforcement learning (RL) has emerged as a popular method for training agents to perform complex tasks. In RL, the agent policy is trained by maximizing a reward function that is designed to align with the task. The rewards are extrinsic to the agent and specific to the environment they are defined for. Most of the success in RL has been achieved when this reward function is dense and well-shaped, e.g., a running “score” in a video game [21]. However, designing a well-shaped reward function is a notoriously challenging engineering problem. An alternative to “shaping” an extrinsic reward is to supplement it with dense intrinsic rewards [26], that is, rewards that are generated by the agent itself. Examples of intrinsic reward include “curiosity” [11, 22, 27, 35, 40] which uses prediction error as reward signal, and “visitation counts” [3, 20, 24, 30] which discourages the agent from revisiting the same states. The idea is that these intrinsic rewards will bridge the gaps between sparse extrinsic rewards by guiding the agent to efficiently explore the environment to find the next extrinsic reward.

“But what about scenarios with no extrinsic reward at all? This is not as strange as it sounds. Developmental psychologists talk about intrinsic motivation (i.e., curiosity) as the primary driver in the early stages of development [32, 41]: babies appear to employ goal-less exploration to learn skills that will be useful later on in life. There are plenty of other examples, from playing Minecraft to visiting your local zoo, where no extrinsic rewards are required. Indeed, there is evidence that pre-training an agent on a given environment using only intrinsic rewards allows it to learn much faster when fine-tuned to a novel task in a novel environment [27, 28]. Yet, so far, there has been no systematic study of learning with only intrinsic rewards.

“We have shown that our agents trained purely with a curiosity reward are able to

learn useful behaviours: (a) Agent being able to play many atari games without using any rewards. (b) Mario being able to cross over over 11 levels without reward. (c) Walking like behavior emerged in the Ant environment. (d) Juggling like behavior in Robo-school environment (e) Rally-making behavior in Two-player Pong with curiosity-driven agent on both sides. But this is not always true as there are some Atari games where exploring the environment does not correspond to extrinsic reward. More generally, these results suggest that, in environments designed by humans, the extrinsic reward is perhaps often aligned with the objective of seeking novelty. The game designers set up curriculums to guide users while playing the game explaining the reason Curiosity-like objective decently aligns with the extrinsic reward in many human-designed games [6, 12, 16, 48].”

[Read full study >>](#)

Reconciling The Goal Model With The Stepping Stone Model

In this Mastery Manual, we've been talking about the idea of creating stepping stones in your life by making choices not based on objective, but based on novelty and learning opportunities. This concept raises two counterintuitive points:

- The place you'll reach is not necessarily the one you set out to.
- Setting fewer goals can help you get there faster.

We've already explained how that works, and why this could be an even better way to achieve a wonderful life than setting goals. But, these do not mean that goals are not a viable way of doing things—instead, they can be quite valuable if used correctly. That's why we did a Mastery Manual on goals, and why Eben and I both use them in a regular basis.

What we're trying to achieve by teaching the stepping stones model is to balance the idea out, so that you don't get dependent on one way of doing things or one way of looking at reality. We are not talking about forgetting all of your ideals, goals, and directions, and no longer having an aim in life. Instead, we are talking about another way of approaching long-term success—another tool to add to your toolbelt.

In fact, this is actually one of the things we teach in the Mental Model Club—the importance of switching out models. If you tend to apply a mental model to every situation, it's inevitable that you'll find a situation where it won't apply, with unpredictable consequences. It's like digging in your heels during a fight with your spouse—it's not serving anyone, and it's in no way promoting open communication.

In Neuro Linguistic Programming (NLP), there is the notion that we need to know where we're going in life. But, at the same time, NLP supports that, if what you're doing isn't working, you should try something else. That flexibility of trying different things is what we are covering in this Mastery Manual.

In short, sometimes you're going to need to have really clear outcomes. Now, it's time for us to integrate both of them so that we use each model when it's appropriate. As we learned in our previous Janus Mastery Manual, one of the best ways to integrate two ideas that seem on opposing sides is to clearly understand the pros and cons of each side. Or in the diagram below, to understand answers for each quadrant.

	Positives		
Goals	+	+	Stepping stones
	-	-	
	Negatives		

The Upside Of Goals

With that said, let's explore the upside of goal setting more deeply. Goals are the most valuable when:

- **You are super clear that there is a specific place you want to get to AND you are clear that it's not worth exploring other possibilities.** In other words, you've thought deliberately about what is valuable and what's not valuable, what's worth pursuing and what's not worth pursuing.

For example, I'm very clear that I want to be healthy, have close relationships with people I love, and have a nest egg so I can live a comfortable lifestyle for the rest of my life, etc. I don't feel it is necessary to continue exploring on whether those are valuable or not.

- **You are clear on the steps to get to where we are now to our ultimate goal.** Being clear on the steps doesn't necessarily mean that goal setting only works for small, short-term goals. Consider Elon Musk's ambitious goals to show that an electric car was possible or travel to Mars. In each case, Musk had a very detailed plan based on his detailed knowledge of physics and building multibillion-dollar businesses. With Tesla, Musk has a [10-year plan](#) that has been remarkably consistent.
- **You want to inspire yourself and your team.** Can you imagine a public company saying it purposely doesn't have a vision and that it's going to wander? One could imagine that this would not create confidence in investors and potential employees.

Finally, when you really consider it, the implications of the Stepping Stone and Goal models are profound. Below are three of the core implications that it's worth considering in my opinion:

Implication #1: Beware of false compasses

In our societies, we judge how high potential many people are professionally by how much progress they make on milestones like:

- Grades in school
- Grades on standardized tests
- What college they went to
- What they majored in while at college
- The prestige of the jobs and companies they work at
- How much money they have
- The awards they win

In the goals model, these milestones are the keys to accomplishing something major in one's life. They give comfort to people who have them, that they are on the 'right' track. They give parents who want the best for their kids comfort that everything is going as planned.

However, by fully understanding and exploring the implications of the Stepping Stones To Success model, we see how these milestones are false compasses. By trying to individually pursue their milestones and cross them off our list, we likely move AWAY from having the most innovative life rather than TOWARD it.

If our true goal is to creatively unleash new innovations into the world via art, science, business, culture, or elsewhere, we need to let go of accomplishing these milestones as they may hold us back. At a deeper level, we need to let go of wanting to be perceived by others as someone who is on the 'right' track. We can't always take the job or opportunity that gives the most money and prestige. If we can afford to, it may pay off the most to take the jobs that give the most learning and are the most interesting!

Implication #2: Let go of the curiosity guilt

Many of us have curiosities and hobbies that we kill, because they're not practical. Or we have hobbies that we do spend time on but that we feel guilty about.

The Stepping Stones To Success model gives us permission to allow us to bring these back into our life, because:

- They bring new energy and passion into our life.
- They will have unexpected pay-offs.

Implication #3: Re-examine your goal setting practices

The lesson of this mastery manual is NOT to completely abandon goals. It is to question them—to ask ourselves what goals are good for and what they are not good for.

The resolution between the goals model and the stepping stones model is not black & white. Therefore, we each need to re-examine our own goal setting practices based on these models and what feels right for us. We need to explore:

- How can we improve our goal setting process to eliminate the downsides?
- How can we improve our ability to understand what goals are even worth pursuing in the first place?
- When should we not set goals?
- How can we improve how we pursue novelty and curiosity in our lives?

Exercises

Exercise #1: How To Think Like Leonardo Da Vinci

“

Brainstorming nothing but questions for four minutes delivers a reframed challenged and at least one potential solution 80% of the time. Questions are the answer.

Hal Gregersen, Exec Director @MITLeadership Center & Author
[Questions Are the Answer](#)

You might be wondering how to get started. There's one approach that's had a really big impact on my life.

It's from a book that was written in the late 90s called [How to Think Like Leonardo da Vinci](#) by Michael Gelb—an awesome book. In the workbook, there is an exercise that's really good for getting us back in touch with our own curiosity.

As you saw in the video with the baby, everything was new to it to the point of exploring for four hours. Now, take the average adult, and tell them to explore their curiosity for four hours...

We train ourselves to be so practical in the short term, and just focus on getting our to-do lists done, that pursuing our curiosity for so long is quite difficult. We've lost connection with what we're most curious about. This exercise helps with that. Here's how it goes:

Step #1: Start by writing down 100 questions as they come to mind.

“

Questions are places in your mind where answers fit. If you haven't asked the question, the answer has nowhere to go.

Clayton Christensen, author, [The Innovator's Dilemma](#)

The key here is you're just writing everything that comes to mind. There might be tactical things, like business stuff, but over time, as you keep on going, it may turn into deeper questions, even existential ones.

The idea is to not pick up the pen from the paper. It takes me about 15 minutes to do, and I do it about once a year.

What are the top 100 questions you have?



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- 2.
- 3.
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- 6.
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As you brainstorm the questions, keep the following heuristics in mind to spark more questions:

- Ask as many questions as you can
- Do not stop to discuss, judge, or answer any questions
- Write down every question exactly as stated
- Change any statement into a question

Step #2: Categorize your top 10 themes

As you go through them, you'll start noticing the few top themes. For me, they're almost always split into business questions and questions about reality. I've actually been doing this exercise since I was in high school, and these have been constant themes in my life, that I've always been interested in.

So, a theme is whenever you have two or more questions belonging in the same category. The next step in the process, is to identify the 10 top themes, which are the ones that have the most questions in them.

What are the top 10 themes you noticed ?



- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.

Step #3: Prioritize - Identify your core guiding question

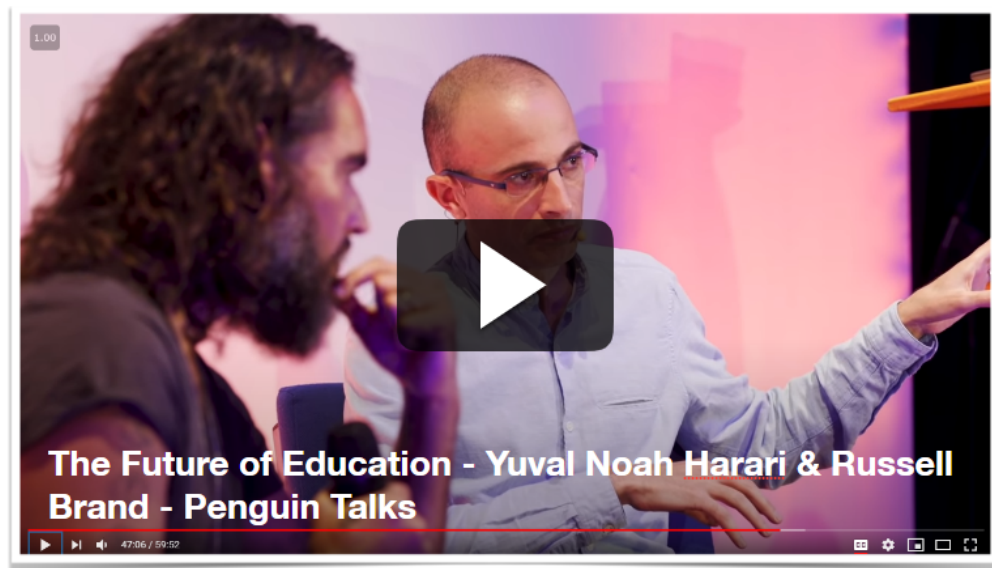
The next is to identify what is one question that encapsulates the majority of the questions within one of the top themes. Essentially, you're applying the 80/20 rule on two layers.

What is the #1 question you would like answered in your life?



You're trying to find the one question that you're most interested in and curious about in each theme, so you can make that your next stepping stone in your journey towards novelty.

I recently watched a [video](#) with Yuval Harari that helps us complete this exercise. Harari is the author of [Sapiens](#) (a book that has gone gangbusters over the years), and he's also a historian.



In the video, he was asked how he came up with all these ideas and such original thinking and he said:

PARTIAL VIDEO TRANSCRIPT

When answering the question how he builds a reality map in a world of information overwhelm so he can focus...

“My method was really to focus on the most important questions and then allow the questions to just lead me wherever they go.

Like you take a big question, for example, “Why have men dominated women in almost all large-scale societies for the last 10,000 years.” And, you want to understand why.

And, it’s important to take a question which is not only big but it’s also very relevant to my life to make it interesting—something that really impacts me every day. Like “Why is

reality like this?" And when you start reading and researching about it, the first thing that you will discover is that you have to cross all kinds of disciplinary borders. This is not a question in biology, or psychology, or economics, or philosophy, or history—it's everything.

You can't understand gender relations, if you don't understand something about biology. But, if you think biology has all of the answers you won't understand much. You also need to take history into account. And economics into account. And so forth.

And so what gives you the structure is the question. I have this big question, and I'm on a quest following it wherever it leads me.

Step #4: Set aside time to answer your guiding question

The next step, of course, is to set aside time and create space in your life for books, podcasts, people and projects related to that question. This is the point where you actually work on satisfying your curiosity and making that step onto the next stone.

It's also really important to not forget the other mental models that will help you in your journey. Use the 80/20 rule so you make this whole process efficient and effective. Make sure to set up the proper accountability measures so you don't give it up—especially if it's a completely novel field for you. Finally, be mindful of ways that the new knowledge can assist you in your current interests and obligations—there are always synergies to be discovered.

What days and times will you focus on answering the question?



Mon	Tue	Wed	Thu	Fri	Sat	Sun

Step #5: Determine how to answer the question

- Connect with someone who is on a quest to answer the same question.
- Read a book, listen to a podcast, or watch a video of someone who has answered all or part of the question.

What steps are you going to take in order to answer your core guiding question?

**RESOURCE: ACADEMIC RESEARCH ON QUESTION ASKING**

A fair amount of research has been done on the best approaches to formulating high-quality questions that lead to productive reflection.

This paper, although targeted at teachers, is valuable for professionals as well.

[Read more >>](#)

Exercise #2: Use The Breakthrough Knowledge Question



Does what I'm about to learn have the potential to completely blow my mind and take my thinking to the next level?

There is another exercise that can help you with identifying novelty, which I call the breakthrough knowledge question. Any time I'm out to meet a person, listen to a podcast, or read a book, I ask myself, "Does the person I'm meeting or what I'm about to read/listen to have the potential to fundamentally change the way that I see the world?"

I find that is a really good question when I want to protect myself against shallow novelty—like getting swayed by the latest headline, only to read an 'empty' article, or just listen to a podcast purely because I'm subscribed to it. It helps you go away from just pure entertainment into more of actual novelty.

The reason I've developed that question was from trying to learn more and more about how science works. It was pioneered by Karl Popper, a philosopher of science in the mid-20th century, and the idea is that science moves forward the most by disproving existing theories and introducing new theories, rather than finding evidence for existing theories.

The corollary to life is when you're constantly going into reality looking for evidence that you're right and that you're on the right path, which in turn leads more and more to confirmation bias—a bias which we're almost innately wired to fall prey to.

If you follow that behavior, then you're not going to learn nearly as much. Any information we learn might even start to be inaccurate, because we're getting a distorted view of reality versus really forcing ourselves to challenge our existing knowledge, bringing on more new ideas and concepts to our lives.

Exercise #3: Ask Better Questions



If you want better answers at work and in life, you must ask better questions.

Hal Gregersen, Exec Director @MITLeadership Center & Author
[Questions Are the Answer](#)

“

A lot of times the question is harder than the answer. And if you can properly phrase the question, then the answer is the easy part.

Elon Musk

In [A More Beautiful Question: The Power of Inquiry to Spark Breakthrough Ideas](#), Warren Berger makes the case that innovation starts with questions. And, I agree. If you do as well, then two more questions arise that I invite you to answer:

What are the best questions to ask?



What is the criteria for a good question?



Exercise #4: Use This Metaphor To Think Through A Problem

To further understand the stepping stone paradigm, the authors of [Why Greatness Cannot Be Planned](#) introduce a very helpful metaphor, which I use in my mind whenever I'm thinking about the paradigm, which at times can feel counterintuitive:

It's useful to think of achievement as a process of discovery. We can think of painting a masterpiece as essentially discovering it within the set of all possible images. It's as if we are searching through all the possibilities for the one we want, which we call our objective. Of course, we're not talking about search in the same casual sense in which you might search for a missing sock in the laundry machine. This type of search is more elevated, the kind an artist performs when exploring her creative whims. But the point is that the familiar concept of search can actually make sense of more lofty pursuits like art, science, or technology. **All of these pursuits can be viewed as searches for something of value.**

Stanley and Lehman then extend their metaphor into the world of art and painting:

As you can imagine, the kind of image you are most likely to paint depends on what parts of the room you've already visited. If you've never seen watercolor, you would be unlikely to suddenly invent it yourself... The more you've explored the room yourself, the more you understand where you might be able to go next. In this way, artists are searching the great room of all possible images for something special or something beautiful when they create art. The more they explore the room, the more possibilities open up.

Let's pretend you wanted to paint a beautiful landscape—so that's your objective. If you're experienced in landscape painting, it means that you've visited the part of the room teeming with images of landscapes. From that location, you can branch off to new areas full of landscapes that are still unimagined. But if you're unfamiliar with landscape painting, unfortunately, you're unlikely to create a masterpiece landscape even if that's your objective. In a sense, the places we've visited, whether in our lives or just in our minds, are stepping stones to new ideas.

In other words, the skills you learn are stepping stones for you to explore and search more effectively. Each new skill gives you a new flashlight to explore rooms you couldn't previously.

In the goal paradigm, a skill is valuable because it helps you accomplish your specific goal more effectively. In the stepping stone paradigm, every new idea we learn is a potential

stepping stone to new, more complex ideas and bigger accomplishments that were previously unthinkable.

Finally, Stanley and Lehman also extend the metaphor to the world of invention:

This way of thinking doesn't only work for paintings. We can imagine a room filled with anything. For example, it could be a giant room full of inventions. As with images, the great room of all possible inventions is mostly filled with inelegant doodads, like unreliable machines that occasionally can move a ball from one location to another and pointlessly ring a bell. But if you look hard enough, some areas of the room contain simple yet useful ideas—bags, wheels, wheelbarrows, spears. Rarer still are more sophisticated inventions—in one corner are all manner of cars and in another corner, computers. Somewhere in the room are fanciful machines unlike any we've seen before, still waiting to be found.

Let's visit the pocket of space filled with computers. If you spend a lot of time in this area, an interesting thing begins to happen: You start to understand the shape of the space, how one computer leads to another, like stepping stones along a winding path. Wander here long enough, and you might even start to see where the interesting possibilities may lie.

Let's bring this down to Earth. Here's how I think about the search space in my own life.

Every time I sit down to write an article, I think to myself...

I could write millions of potential articles. Many of them would be duds. Most of them would be solid articles that are close in quality to my previous articles. And then there is the possibility of writing an article that would have a life-changing impact by tens of millions of people. The odds of this are extraordinarily low, but each time I start an article, I think about what stepping stones (skills, knowledge and relationships) I would need to develop in order to find that small set of articles.

Every time I launch a new product or a new company, I go through the same thought process.

Exercise #5: Surround Yourself With Novelty

One of the basic ideas from decision theory is that our decisions are determined by our environment. Stock your refrigerator and pantry with junk food, and your diet will be much worse. Surround yourself with confident people, and you'll be more confident.

The same is true with novelty. The more we surround ourselves with novelty, the more we'll use the stepping stone model and move toward novelty.

This from one of my favorite books, [Where Good Ideas Come From](#), captures this...

The trick to having good ideas is not to sit around in glorious isolation and try to think big thoughts. The trick is to get more parts on the table...

Innovative environments are better at helping their inhabitants explore the adjacent possible, because they expose a wide and diverse sample of spare parts—mechanical or conceptual—and they encourage novel ways of recombining those parts.

How could you bring new types of people into your life?



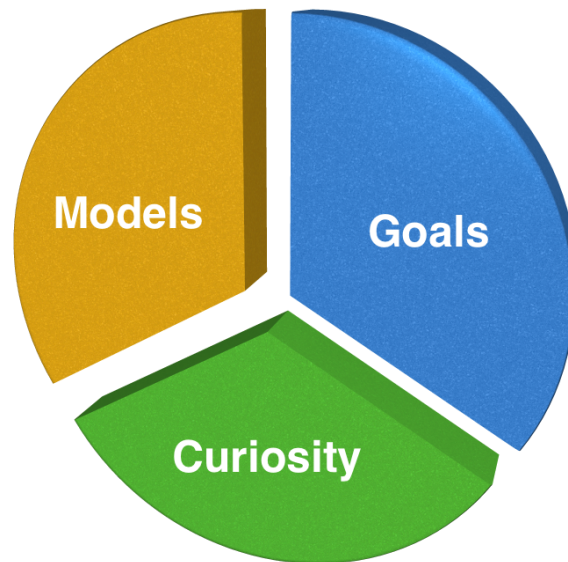
How could you regularly spend time with those people?



Identify 10 podcasts and books you'd normally never read, but that look super interesting.



Exercise #6: Set Aside Time In Your Life For Curiosity



“

To arrive somewhere remarkable we must be willing to hold many paths open without knowing where they might lead.

Kenneth Stanley

One of the most common questions I hear over and over is:

"There's so much information out there. How do you choose what to learn?"

Here's how I think about it. Within the time you set aside for learning, there are three key areas that we should focus on:

- **Goals.** Knowledge that will help us overcome the biggest obstacle to our most important goal.
- **Mental Models.** Knowledge that will last forever, which will help you learn fast and make better decisions.
- **Curiosity.** Knowledge that is most fascinating to you in the moment.

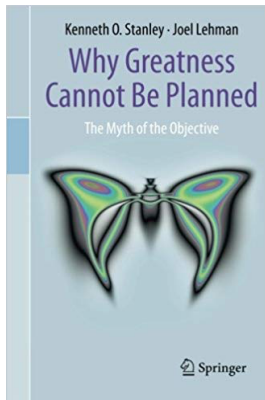
Each of these pieces of the pie play an important role. And, I don't think there's a right ratio to have. It depends a lot on the phase of life you're in and the moment you're in. If you have something or you really need money, then maybe the goal-based one is better. If you're on a sabbatical, or on parental leave, or a transition in life, or want to reinvent yourself, curiosity becomes much more important.

Given where you are in life, what percentage of your learning time do you want to devote to curiosity? Why?



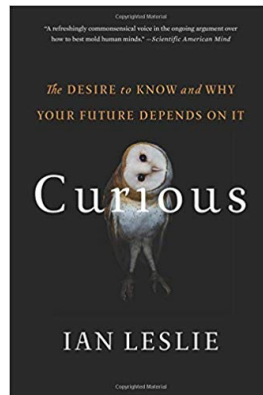
Resources

Books



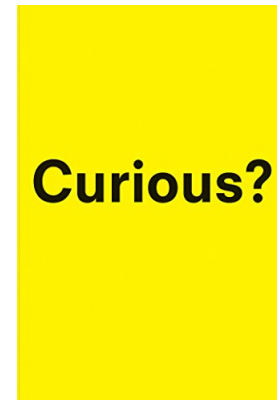
[Why Greatness Cannot Be Planned: The Myth of the Objective](#)

Kenneth O. O. Stanley



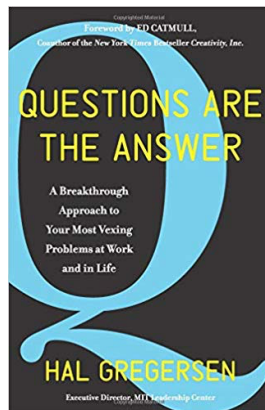
[Curious: The Desire to Know and Why Your Future Depends On It](#)

Ian Leslie



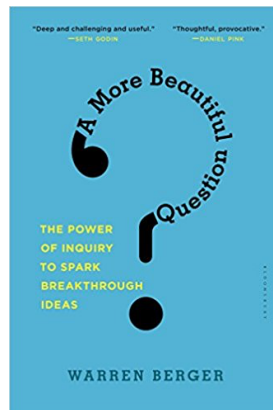
[Curious?: Discover the Missing Ingredient to a Fulfilling Life](#)

Todd B. Kashdan



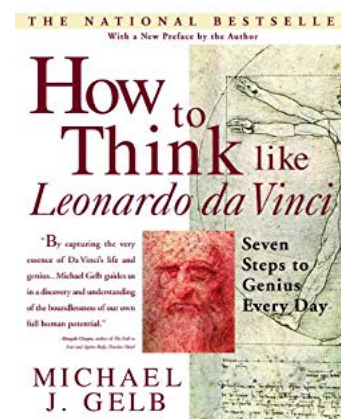
[Questions Are the Answer: A Breakthrough Approach to Your Most Vexing Problems at Work and in Life](#)

Hal Gregersen



[A More Beautiful Question: The Power of Inquiry to Spark Breakthrough Ideas](#)

Warren Berger



[How to Think Like Leonardo da Vinci: Seven Steps to Genius Every Day](#)

Michael J. Gelb

Top Stepping Stone Questions

“

The questions which one asks oneself begin, at least, to illuminate the world, and become one’s key to the experience of others.

James Baldwin

Over the past few years, I’ve been collecting questions from luminary leaders in order to spark curiosity, problem-solving, and inspiration. Here is my shortened list of top questions:

Question	Source	Situation
1. What have I given today? 2. In what ways have I been a giver today? 3. What did I learn today? 4. How has today added to the quality of my life OR how can I use today as an investment in my future?	Tony Robbins	Evening Reflection
1. What is great about this problem? 2. What is not perfect yet? 3. What am I willing to do to make it the way I want it? 4. What am I willing no longer to do to make it the way I want it? 5. How can I enjoy the process while I do what is necessary to make it the way I want it?	Tony Robbins	Problem Solving

Before Sleep: 1. What are the kind of key things that might be constraints on a solution, or might be the attributes of a solution? 2. What are the tools or assets I might have? 3. What are the key things that I want to think about? 4. What do I want to solve creatively? Upon Waking “The very first thing I do when I get up, almost always, is to sit down and work on that problem because that’s when I’m the freshest. I’m not distracted by phone calls and responses to things, and so forth. It’s the most tabula rasa - blank slate - moment that I have. I use that to maximize my creativity on a particular project. I’ll usually do it before I shower, because frequently, if I go into the shower, I’ll continue to think about it.”	Tim Ferris	Problem Solving
What if I did the opposite for 48 hours?	Tim Ferris	Experimentation
What do I spend a silly amount of money on? How might I scratch my own itch?	Tim Ferriss	Product Development
What would I do/have/be if I had \$10 million? What’s my real TMI?	Tim Ferriss	Planning
What are the worst things that could happen? Could I get back here?	Tim Ferriss	Planing
If I could only work 2 hours per week on my business, what would I do?	Tim Ferriss	Prioritization

What if I let them make decisions up to \$100? \$500? \$1,000?	Tim Ferriss	Delegation
What's the least crowded channel?	Tim Ferriss	Marketing
What if I couldn't pitch my product directly?	Tim Ferriss	Marketing
What if I created my own real-world MBA?	Tim Ferriss	Learning
Do I need to make it back the way I lost it?	Tim Ferriss	Recovering from loss
What if I could only subtract to solve problems?	Tim Ferriss	Simplification
What might I put in place to allow me to go off the grid for 4 to 8 weeks, with no phone or email?	Tim Ferriss	Systematization
Could it be fine that everything is fine and complete as is?	Tim Ferriss	Stoicism
What would this look like if it were easy?	Tim Ferriss	Simplification
Is your solution 10 times better - in a key dimension - than anything else available?	Peter Thiel	Product Development
What's one thing you know that no one else knows?	Peter Thiel	White Space
How could I accomplish my 10 year goal in 6 months?	Peter Thiel	Goal Setting
What aren't people able to say or think?	Peter Thiel	Planning

What are my key theories of how I work? The world works? What are observations that run contrary to the theory?	Darwin's Golden Rule	Contrary Thinking
What is the path of least resistance?	Thomas Jefferson	Prioritization
1. Positive monitoring. What do I already understand? 2. Negative monitoring. Which main points haven't I understood yet? 3. Self-diagnosis. Explain to themselves the cause of their knowledge gaps - What's the reason for this? 4. Self-regulation. What possibility do I have now to overcome my comprehension problems?"	Metacognition Questions	Learning
"If today were the last day of my life, would I want to do what I am about to do today?" "If the answer was ""No"" for too many days in a row, he says he knows he needed to change something."	Steve Jobs (via Inc.com)	
What good shall I do this day?	Ben Franklin	Morning Reflection
What good have I done today?	Ben Franklin	Evening Reflection
The day is over and I am leaving the office with a tremendous sense of accomplishment. What have I achieved?	Ron Friedman (via Fast Company)	Ask yourself this the moment you sit at your desk

What things in my life do I consider important, yet am not taking complete responsibility for?	Quora	
What if money were no object? How might we approach the project differently?	Warren Berger	Planning
What's truly worth doing, whether you fail or succeed?	Warren Berger	Planning
How would [insert role model] think about this?	Win Winger	Thinking

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Help us share our vision to spread mental model literacy across the world.