

Enlightening Technical Leadership

Kartik Subbarao

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Dedicated to the technologists who enlighten the world

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1 - Introduction

One of my favorite quotes is from David Keirsey's book *Please Understand Me II*, where he refers to an engineer describing his inspiration to create and innovate:

“You want to be the first to do something. You want to create something. You want to innovate something...I often think of Edison inventing the light bulb. That's what I want to do. I want to drive over the bridge coming out of New York there and look down on that sea of lights that is New Jersey and say, 'Hey, I did that!'”¹

The visual conjured up by the last sentence is, indeed, electrifying to me. I too want to drive over the bridge and look upon that sea of dazzling lights. But in this context, against that backdrop, the declaration “Hey, I did that!” isn't just a statement of personal triumph. Sure, there's the *I* – being the wizard, the vehicle through which the magic of advanced technology is wielded. But then there's the *that* – bringing light to a

¹ References for quotes are provided in the Bibliography.

world of darkness, enabling so many new possibilities, transforming the very landscape itself. Most importantly though, there's the *did*. This is no ordinary action. This is action that transforms *me*, along with my environment. This is action that consumes me so fully that it erases the very boundary between *I* and *that*. When I look upon the scene, the veil of duality is momentarily lifted, and I realize that the inner light and the outer light are one and the same.

I think that leadership development, whether we talk about it mystically or materialistically, is essentially about enlightenment. The very first sentence in the preface to Jerry Weinberg's book *Becoming a Technical Leader* could easily be inserted into any book on leadership: "This is a book about enlightenment, both mine and yours." Every author on this topic wants to enlighten us – by sharing their knowledge and experience, by creating a context in which we can discover insights about ourselves, and even by what is unsaid. At the same time, many authors also want to clarify their own knowledge. They learn a lot when they try to explain what they think they know about this vastly complex subject. This has certainly been the case for me.

Enlightening the process of technical leadership is fundamentally about bringing greater self-awareness to our technology work. Have you ever found yourself doing something mindlessly, paused, and asked yourself the simple question "Why am I doing this?" This is the

gift of self-awareness, which we all have. We can cultivate this gift by staying present with the question. We can ask it until we arrive at answers that are incredibly subtle, yet immediately practical; answers that connect what we do with who we are. When we live our calling, we can't help but lead others to live their calling.

This book presents an introspective approach to answering the question of why:

- Start with your talent
- Refine, switch and let go of your mental models
- Understand your sense of abundance as well as your sense of scarcity
- Learn from your reactions of dislike and admiration
- Observe how you set and form expectations when you communicate
- Identify the polarities that contain contrasting perspectives
- Realize from what you can virtualize

There are many other valuable questions that can be asked about technical leadership, such as who, what, when, where and how. Some books focus on strategy and systems. Others focus on teamwork and interpersonal skills. Still others focus on creativity and

innovation. And of course, there are plenty of books devoted to the technologies themselves. This book focuses on the self-awareness that enables and transforms our capabilities in all of these areas.

Consider this book as a series of philosophical essays. I encourage you to read it at a leisurely pace, so that you can readily notice your internal response. Whenever you find something expansive to your awareness, take the time to pause and reflect. See where that process takes you.

I'd be interested in hearing any feedback you might have about this book. Feel free to send me email at subbarao@computer.org.

2 - Mental Models

Mental models are maps that we create in our mind to navigate our way through life. A simple example is the mental model of our home town. I can easily visualize the route to my usual supermarket. I make a left out of my neighborhood, then take another left at the first traffic light, make a right at the end of that road, and so on. I can also visualize a number of snapshots along the way – that first traffic light for example. In addition, I know that I pass by several houses and road signs. But I can't tell you the colors of the houses, nor can I tell you where all of the road signs are located, even though I recognize them whenever I drive past them. Those details are peripheral for me in this mental model.

This is the basic nature of mental models. They are simplified representations that focus on what's most evident to us and most important to our needs. If I were a painter, my mental model might include a far richer awareness of the colors of the houses. If I were a

civil engineer, the locations of the road signs might come to mind immediately. In any case, the things that *aren't* evident or important to us are relegated to the background. Our mental models will always privilege some aspects of our experience and minimize or ignore others. This is particularly important to keep in mind as we look at more complex, dynamic models that map our world.

Sooner or later, this mapping expedition takes us to the most challenging of all terrains – the mind itself. There, the separation between mapmaker, map, and territory becomes far trickier, if not impossible, to maintain; the very act of drawing the map affects the territory it is trying to describe.

To overcome this challenge, we need more self-awareness. As our self-awareness increases, our abilities improve in three ways. First, we're able to privilege higher, more inclusive vantage points within our models. We refine our models to contain more of reality within them, which makes us less susceptible to being blindsided. Second, we can more fluidly shift from one mental model to another, and hold multiple, even opposing, perspectives simultaneously. This keeps us from being stuck in any one view of reality. Third, we can let go of our mental models more fully. We remove more of the boundaries imposed by our models, which defragments our perspective.

In the next sections, we'll look at these three capabilities in depth.

Refining Models

Like most of us, I take the act of walking for granted, and have long forgotten how I learned it. But my mental model of walking becomes woefully inadequate when I step on ice, because its critical assumptions are no longer valid. Suddenly, I have to pay much closer attention to the basics – how to move my feet and shift my weight gently enough so that I don't slip. With this limited capability (and fortunately limited need), I resign myself to the trepidation and clumsiness that accompanies my traversal of frozen surfaces.

Other people, though, see things differently. They sense within themselves the potential of navigating ice far more skillfully. Through trial and error, they learn how to *skate*². Those who are good at this can jump and even spin around multiple times without falling. Their mental model of movement is expanded. They develop a higher capacity for physical balance and fluidity.

The greatest athletes, like Michael Jordan on the basketball court and other heroes in the pantheon of sports, inspire us by expanding our sense of what is possible. They do things that we've never seen done before. These people – the technical leaders of their

2 For the record, I have learned how to skate just enough to learn how little talent I have for it.

fields – have vastly refined mental models in their sport compared to the rest of us. They're not satisfied with the conventional assumptions that most folks make. They question those assumptions, surpass limitations, and change the way their game is played.

Questioning assumptions is essential to refining our mental models, and talent is potent fuel for this process. As we develop our innate capabilities, it gets easier to shake off the assumptions of conventional wisdom that we may have passively accumulated. Talent gives us the strength to walk an unconventional path. The field of technology certainly presents plenty of obstacles along the way, but what seem like insurmountable boulders to others are more like stepping stones for us.

Think back on a time when a nontechnical person came to you in utter frustration about a problem with their computer. Chances are you solved the problem pretty quickly and sent them on their way. Maybe you'd seen that problem a thousand times before. Or maybe you hadn't seen that particular problem, but something about it felt familiar – you had a strong hunch about where to look and what to do. Now put yourself in a different situation, one where your initial hunch turns out to be completely wrong. Your hapless friend might become totally discouraged, but if the problem is at all interesting, you have a very different reaction. Your juices start to flow; the game is afoot. You analyze the problem from different angles. You try various things to

see what happens. You come up with theories of what might be going on. Every step of the way, your mental model is being updated, and the process is deeply engaging. When you finally crack the problem, a sense of triumph, however modest or significant it may be, is unmistakable. Mystery has ceded territory to you – you have made better sense of the world.

The more ground we win this way, the more we come to trust in the source of our talent, and in our ability to refine our mental models. It's like knowing that there will always be wind (our abundant source of talent), we just need to adjust the sails (our mental models) to catch it. Others who don't feel the same wind may be skeptical of our methods, but that's okay. Our mental models are a creation of our own mind, for our own mind. They only need to work for us, not for anyone else. This is not to say that we'll always succeed, or that we'll never have to give up. It just means that we have identified a path of learning that is particularly well-suited for us.

In this excerpt from his book *Just For Fun*, Linus Torvalds captures the spirit of refining mental models:

The story goes that the great German mathematician Carl Friedrich Gauss was in school and his teacher was bored, so to keep the students preoccupied he instructed them to add up all the numbers between 1 and 100. The teacher expected the young people to take all day doing that. But the budding mathematician came back five minutes

later with the correct answer: 5,050. The solution is not to actually add up all the numbers, because that would be frustrating and stupid. What he discovered was that by adding 1 and 100 you get 101. Then by adding 2 and 99 you get 101. Then 3 and 98 is 101. So 50 and 51 is 101. In a matter of seconds he noticed that it's 50 pairs of 101, so the answer is 5,050.

Maybe the story is apocryphal, but the point is clear: A great mathematician doesn't solve a problem the long and boring way because he sees what the real pattern is behind the question, and applies that pattern to find the answer in a much better way. The same is definitely true in computer science, too. Sure, you can just write a program that calculates the sum. On today's computers that would be a snap. But a great programmer would know what the answer is simply by being clever. He would know to write a beautiful program that attacks the problem in a new way that, in the end, is the right way.

It's still hard to explain what can be so fascinating about beating your head against the wall for three days, not knowing how to solve something the better way, the beautiful way. But once you find that way, it's the greatest feeling in the world.

To further improve our understanding of our talents and motivations, we can consult personality models. Two such models that I have found helpful are the Myers-Briggs Type Indicator (MBTI) and Strengths

Finder³. For example, my MBTI type is ENTP, and my StrengthsFinder Top 5 are Strategic, Learner, Ideation, Connectedness and Input. This kind of information reminds us of specific capabilities that we already have for expanding our mental models, and encourages us to cultivate these capabilities.

As we refine our mental models, we become increasingly tolerant with questioning our assumptions. We discover an inner confidence that can face up to our challenges, whatever the outcome.

Shifting Between Models

We can readily shift between different mental models for the same objects. For example, when I use a flathead screwdriver to assemble furniture, it evokes a different mental model than when I use the same screwdriver to open a paint can. When I use a quarter to pay for something, I'm thinking about it in a different context than when I use it to scratch off a game ticket. Computers are possibly the best laboratories ever created for shifting mental models. One minute we're using the space bar to insert a space character in a document, and the next minute we're pressing that same

3 Later in this chapter I provide some additional resources for MBTI, which is based on Jungian psychology. For more information on StrengthsFinder, see
<http://www.strengthsfinder.com>

key to fire torpedoes in a game. Later, we're using it to check a checkbox on a web page.

We encounter many groups of mental models in the IT world, such as graphical user interfaces and command line interfaces; procedural, declarative, object-oriented, and functional programming languages; connection-oriented and connectionless protocols; and various types of APIs. Our personality might incline us to prefer some of these models over others, and that's fine. Our growth as leaders doesn't require us to become technology agnostics. But it does require that we become more *aware* of our preferences.

Take a moment to look into your mental model preferences as exemplified by things like your favorite web browser, editor, programming language, operating system, or the architecture you just designed for a complex information system. Why do you tend to prefer certain tools/approaches over others?

- Are you used to them, and not familiar with others?
- Are some approaches easier or faster for you to understand because of your talents and skills?
- Do some approaches seem more logical? If so, what makes them that way?
- Do you find some approaches more practical or efficient than others, and if so, why is that

particular type of practicality or efficiency important to you?

- Do some approaches advance certain ideologies/values/aesthetics that are deeply important to you, and conversely, are you bothered or offended by other approaches? If so, why are these particular ideologies/values/aesthetics important to you?
- Are you fundamentally energized by some approaches and drained by others?

Pay close attention to how you find yourself responding to these questions at a *visceral* level, independent of how you form, frame and elaborate an intellectual answer. Intellectual answers are insightful too, but when you integrate them with your gut feelings, you get a fuller picture of yourself.

This kind of introspection helps us clarify the nature and intensity of our preferences. We recognize how these preferences are sourced in more fundamental aspects of our personality. This is similar to how when we refactor object-oriented code, we may discover common aspects among scattered data structures that can be captured by an abstract class. When we define that abstract class, we can then instantiate new concrete classes whose connection to the abstract class and to peer concrete classes is visible at all times. Likewise, when we introspect and clarify the motivations

underlying our mental model preferences, we're better able to recognize those same motivations bubbling up in other parts of our experience. We discover additional outlets for the underlying energy, which makes our favorite things feel less exclusive. This doesn't necessarily mean that we *lose* our preferences, just that we *loosen* our grip on them. We're less insistent on any technology to serve permanent duty as the embodiment of a deeply held value, logic, aesthetic or ideology – even as we remain aware of the iconic response evoked in us. We're able to shift perspectives more fluidly, and are less limited by the assumptions of any particular mental model.

Shifting between mental models is an example of the generalized skill of reframing. Reframing, studied by neuroscientists formally as cognitive reappraisal, enables us to see the silver lining of a dark cloud, and to recognize that lemons can be turned into lemonade. We don't deny or hide any of the facts of a situation, we just change our focus of attention and subsequent action. In *Your Brain at Work*, David Rock presents a key insight from Kevin Ochsner's research in this area:

As Ochsner explains, “Our emotional responses ultimately flow out of our appraisals of the world, and if we can shift those appraisals, we shift our emotional responses.” ... Ochsner’s research finds that as people reappaise positively, there is increased activation of the right and left ventrolateral prefrontal cortex, and a corresponding reduction in

activation of the limbic system. ... It turns out that conscious control over the limbic system is possible, not by suppressing a feeling, but rather by *changing the interpretation that creates the feeling in the first place.* [emphasis added]

(In the brain, the prefrontal cortex is associated with higher-order activities including prioritizing, decision making and problem-solving, and the limbic system is associated with a vast range of emotional responses and the formation of long-term memories.) Reframing can be enormously, sometimes magically, successful at neutralizing stress and freeing up energy. A minor shift in how we view a situation can make a major difference in how we feel⁴.

Of course, psychologists and philosophers have been telling us this for quite some time. Take a minute to ponder this observation from Carl Jung:

You know, it is sometimes an ideal not to have any kind of convictions or feelings that are not based upon reality. One must even educate people...that their emotions ought to have a real basis, that they cannot swear hell and damnation at somebody on a mere assumption, and that there are absolute reasons why they are not justified in doing such a thing. They really have to learn that their feelings should be based on facts.

4 For more examples and discussion of the neuroscience involved, see Chapter 8 of *Your Brain at Work*.

But to [develop further] one should unlearn all that. One should even admit that all one's psychical facts have nothing to do with material facts. For instance, the anger which you feel for somebody or something, no matter how justified it is, is not caused by those external things. It is a phenomenon all by itself. That is what we call taking a thing on its subjective level. ...

If you have reached that level...you have succeeded in dissolving the absolute union of material external facts with internal or psychical facts. You begin to consider the game of the world as your game, the people that appear outside as exponents of your psychical condition. Whatever befalls you, whatever experience or adventure you have in the external world, is your own experience.

Every time we re-frame, we break one mental frame and make another one. We undermine that absolute union of material facts with psychical facts. This is what I value most about reframing. It reminds me that situations cannot *compel* me to feel a certain way. Situations aren't inalienably "upsetting", "embarrassing", "terrifying" or "frustrating", or for that matter "joyous", "heartwarming", "inspiring" or "exciting". All of those emotional responses are valid, can be empathized with, and can be witnessed and experienced as fully as needed/wanted. But they stem from the mind itself, and are not locked to external circumstances. Here is David Rock again:

Consider this quote from one of the great neuroscientists, Walter Freeman: “All the brain can know it knows from inside itself.” If you recognize that all interpretations of the world are only that—interpretations your brain has made, and ultimately just yours—then having a choice about which interpretation you might use at any moment makes more sense.

The more we practice reframing, the more we become comfortable with holding multiple frames of reference simultaneously. For example, we can recognize the multiple perspectives involved in a dispute between a user who complains about the behavior of a software program, and a developer who responds “it's not a bug, it's a feature”. We know what it's like as a user to have an implicit expectation that a program should work in a certain way, and how frustrating it feels when we discover that it doesn't. At the same time, we know what it's like as a developer to write code that adheres to certain design principles, and how much difficulty it can create when exceptions are made. Both of these frames are valid. We don't have to diminish either of them to appreciate the other. By regarding both in a non-negative way, we're open to a wider range of options than we would be if we rejected either perspective outright.

For starters, we become more quickly aware of win/win solutions that eliminate the user's frustration without compromising any of the design principles. We might

identify a workaround that the user is happy to use, or find a clean way to incorporate the use case into the existing code that the developer appreciates. But it doesn't stop there. Holding multiple perspectives isn't *just* about win/win or finding solomonic solutions. It's also about being able to accept loss. When we're the user, we're better able to tolerate lack of support for our use case. When we're the developer, we're better able to tolerate code changes that deviate from our preferred design. This is because we don't fully lose sight of the other point of view. When we lose, it's not an all-encompassing sense of defeat that we might feel if we're heavily attached to a particular perspective.

Holding multiple perspectives doesn't hold us back in any fundamental way from making clear decisions. We just don't assume that the loudest voice in our head is always the clearest one. We listen for quieter voices that may have important things to say. When we make a decision, it may well be the same (or even more sharply defined) as what we might have otherwise chosen. But there is less of our self-image trapped in the decision. If we end up winning at another's expense, there is less of a need either to gloat or to feel guilty. And if we see wisdom in an opposing point of view, we can more readily change our mind without needing to save face.

What we gradually lose is the need to prove ourselves as being right, as well as the need to prove the imagined-

or-real naysayers wrong. This opens us up to discovering deeper truths about ourselves and others.

Letting Go of Models

GIS mapping programs, such as Google Earth and others, allow us to generate highly complex and detailed maps of the world. By checking checkboxes that enable various layers, we can model the world through a multitude of perspectives. Each of these perspectives naturally guides our mind along a particular line of thinking. For example, if I see layers indicating local roads, highways and real-time traffic conditions, I might think about how cities are connected, and efficient ways of getting from one place to another. If instead I see a layer indicating the results of an election, I might think about demographics and how patterns in national and regional culture influence political opinion. The state of Pennsylvania might be in the same place in both maps, but I'm considering it through very different lenses.

What I particularly like about these programs is that it's just as easy to add a layer and take on a new perspective as it is to uncheck a layer and *let go* of my current perspective. If I bring up a satellite map of North America with the usual layer delineating countries and states, and then uncheck that layer, what happens? The differentiated concepts of country and state disappear. I see with new eyes as I rediscover an underlying substrate that is more continuous. I scroll through the

jagged peaks of mountain ranges stretching across thousands of miles. I marvel at the unbroken expanse of flatlands. I drink in capacious inland bodies of water...

But what's that right in between two of the biggest lakes? I can't deny it. Michigan, like the claws of a wolverine, drags my jailbird mind back into the world of nations and states. I notice Florida as well, its peninsula as iconic to me as the ears of Mickey Mouse. Still, there is something different to this experience. These places, as distinct as they are, are more *connected* here than they were in the delineated map – they're more like parts of the same whole. The more I stay present with this map free of external layers, the more I become aware of the *internal* layers which supply my continued impressions of "Florida", "Michigan", and other such things. Even if I can't quite un-see them, their nature as constructs projected from my mind becomes more apparent and transparent.

The promise held out by this exercise is that we can gain more awareness of these inner layers/lenses that color and shape our perceptions, which we would otherwise see as *the* color and shape of the outside world.

Another way to coax out and reveal some of our inner layers, and become more sensitive to the presence of even subtler layers, is through visual and auditory illusions. Here are some instructive illusions that I have come across.

Color

I used to think of color as an intrinsic property of objects – you know, like an orange is inherently, well, orange. There was an implicit assumption that my eyes were basically windows through which I saw colors as they already existed, “out there”. I had come across many optical illusions involving color, but shrugged them off as corner-case oddities, peripheral quirks of neural circuitry. That all changed when I came across Beau Lotto's work. Take a look at these illusions from Lotto Lab:

<http://www.lottolab.org/illusiondemos/Demo%2012.html>

<http://www.lottolab.org/illusiondemos/Demo%2015.html>

<http://www.lottolab.org/illusiondemos/Demo%2010.html>

In the first image, the apparently-blue tiles on the top of the left cube are actually identical to the apparently-yellow tiles on the top of the right cube⁵. This cleverly-designed illusion was too powerful for me to dismiss. I felt compelled to consider the implications. In the equivalent illusion with physical tiles, if I were to measure the wavelengths of light reflected by these tiles using a spectrophotometer, the values would be the same. And of course, if I were to line up the tiles side-by-side, I'd see the same color for each of them. But

⁵ When I first came across this illusion, I couldn't believe it until I verified that the pixel-component values were indeed the same.

when I surround them with these different backgrounds, I suddenly have a different color experience. Color, I realized, isn't an objective property, but a subjective projection. It's an inner layer.

The visual world is like a giant color-by-number book, with the reflected light of objects as the numbers. But coloring in those numbers is anything but a one-to-one mapping. The color that we perceive for an object (qualia) is clearly influenced not just by the number for that object, but also by the numbers for the surrounding area and other factors. More generally, what we end up seeing is the result of a complex process of filtering, compositing, manipulation and outright fabrication performed by our brain.

Sound

What we see can change what we hear. This is illustrated by the McGurk effect. Check out this clip from the BBC Horizon episode *Is Seeing Believing?*:

<http://www.youtube.com/watch?v=G-lN8vWm3m0>

From 0:50 to 1:00 in the above clip, I hear “fa” when I observe the speaker's mouth, but I hear “ba”, the actual sound, when I close my eyes. My sense of sight is altering my perception of sound! Not even the best augmented reality technology can top this user experience – I can check and uncheck an inner layer by literally opening and closing my eyes.

Dreaming

Dreaming is possibly the most vivid illusion that is commonly recognized. This excerpt from Jeff Warren's book *The Head Trip* positions dreaming and waking along a continuum, with the same activity that manufactures our dreamworlds continuing through to the waking state in a subtler role – an inner layer that advances and recedes with the mental tide:

The reason REM brain activity looks so much like waking brain activity is because it *is* waking brain activity—high activation waking brain activity with the sensory input gates slammed shut. As Stephen LaBerge told me, “we dream because the brain is designed to make a model of the world whenever it’s functioning.”

Since the model is always there, in a sense we are always dreaming. So we see a subtle kind of dream when we look around, a world colored by expectations and personal history. This is the top-down interpretive part of perception: the cruel hostile curl of a stranger’s lip, the menacing bear-shaped form in the forest that makes your heart leap even though on closer inspection we see it is just a tree stump. In waking, sensory input floods consciousness and the dream is pushed back to the edges. We have an external reality within which to conduct our fact-checking.

But the dream model is just a flicker away. It begins to press in on us as soon as we close our eyes, as soon as we nod our heads. It too is on a continuum, so at the shallowest we experience mostly thoughts and ideas, but as we get more absorbed—in a daydream, or a hypnotic trance—then Mavromatis's stages [of hypnagogia] begin to kick in. Images of people and places complement the narrative, and finally the shift to fully-immersive dramas, so that at some point we are no longer just thinking of some scene, but actually moving inside one. The external world has been shut out; we are dreaming. It is the opposite progression of coming out of a dream, where, though we may try to hold onto the narrative and will ourselves back into the action, eventually we are no longer in the scene, but just thinking of it. The bottom-up sensory input stream is now dominant. The dream is in the memory; in some respects, the dream is *always* in the memory. [emphasis in the original]

Dreaming reminds us that perception and conception are not separate, that they constantly shape each other. At some level, we create our reality and our reality creates us.

Contemplating all of this helps loosen the rigidity with which we may be holding on to some of our mental models. After all, if our senses aren't unequivocal conveyors of absolute truth, anything built on their impressions is at least open to question. This can help

us identify mental models that have reached their limits of usefulness.

To truly and freely let go of mental models, we need plenty of mental *space*. Without an abundance of mental space, and without a tolerance for its emptiness, we tend to fill the space vacated by one model with an equally cramped alternative. It's like a corollary of Einstein's observation that we can't solve problems from the same level of thinking we were at when we created them. We can't properly let go of mental models from the same bubbles of mental space in which we constructed them.

Take the well-known anecdote about the belief that the earth rests on a giant turtle⁶. When challenged by the question of what that turtle stands on, the person with this belief responds “it's turtles all the way down!” I find this particularly humorous, because it's exactly what I do. When one of my turtle-models is undermined and I can't tolerate letting go of the turtle, I rush to add more turtles – or elephants, or giraffes, or unicorns for that matter. Whereas when I have more mental space, the turtle doesn't loom so large in my worldview. I welcome the opportunity to let it go, which enables me to be present with the question at a more im-mediate, essential level – both as conceived and as perceived.

One of the best ways I know to gain mental space is through meditation. There are various types of medita-

6 Wikipedia mentions various versions of this anecdote:
http://en.wikipedia.org/wiki/Turtles_all_the_way_down

tion techniques, such as the mental repetition of a sound (mantra); focusing on the breath or some other object; monitoring thoughts/feelings/sensations with equanimity; and others. All of these share a fundamental principle: the expansion of self-awareness. In meditation, when you become distracted by a thought, feeling or sensation, you gently return your attention back to the intention with which you started the meditation. Every such act of reaching beyond your current distraction is a micro-expansion of self-awareness.

The gentle aspect of this is important. Meditation is like shifting your car into neutral. When you realize that you have become distracted, it's like discovering that your right foot is back on the gas pedal and your car is in gear. At that moment, forcefully suppressing the distraction is like putting your *left* foot on the brake. That creates more friction, and takes you away from meditation. Instead, the idea is to just let up on the gas pedal and shift back into neutral. The car may keep moving, but you're not intentionally involved with that movement.

In meditation, you uncover many pressed gas pedals and brakes which you can release. All of this reduces internal friction and frees up mental space, which carries over into day-to-day experience. You find greater patience to listen to another person with an open mind, and to sit with a problem without the limitations

imposed by a particular mental model. You can allow a holistically informed response/solution to naturally emerge.

If you are interested in exploring meditation in the context of personal development and leadership, here are some resources that I recommend:

- *Search Inside Yourself*, by Chade-Meng Tan – Meng is a software engineer who started working at Google in 2000. The book presents a number of practical meditation exercises, along with research from neuroscience and psychology. Lectures from a full workshop, originally developed as an internal training class at Google, are freely available online at the Search Inside Yourself Leadership Institute (SIYLI) website⁷. Here is an excerpt from the book:

My life's goal is to make the benefits of meditation accessible to humanity. Note that I am not trying to bring meditation to the world. I am not even trying to bring its benefits to the world. All I intend to do is to make its benefits accessible. That is all. All I am doing is opening the door to the treasure room and telling people, "Here, all this treasure you see, feel free to take as much of it as you want, or not." I am merely a door opener. I am confident that the transform-

⁷ <http://www.siyli.org/take-the-course/siy-curriculum/>

ative power of contemplative practices is so compelling, anybody who understands it will find it irresistible.

- *The Soul of Leadership*, by Deepak Chopra – In this book, Deepak explores various aspects of leadership through the influence and progression of self-awareness. He has given several talks on this book which are available online⁸. Here is an excerpt from the book:

Awareness ultimately has no boundaries. It exists in this world but endlessly goes beyond it. The world's great wisdom traditions all derive from a higher reality that is indescribable but can be experienced. This is the greatest wonder and source of awe. As the ancient Indian sages declare, "This isn't knowledge that you learn. It's knowledge that you become." When you fully absorb this insight, you know what it means to transcend. You don't need to travel anywhere; all of reality exists in you. You exemplify wholeness because you are united with everything and everyone around you. You exist to demonstrate that human beings can reach the infinite, and by simply being who you are, you help others get there.

8 Here is a talk at Google:

http://www.youtube.com/watch?v=oJ4hL9a_VB0

- Technologies that can help facilitate meditation – this is a growing field of activity and will benefit from ongoing research.

One class of technology, brainwave entrainment, is based on the principle that the frequencies of neural activity tend to follow frequencies presented by external stimuli – not unlike how we find ourselves tapping along to the beat of music. Developers synthesize audio programs where frequencies gradually progress to those associated with deeper states of meditation. There are a number of open source tools available for generating entrainment audio files, as well as free and commercially available pre-generated audio files.

Another class of technology is biofeedback. Several consumer products use metrics such as Skin Conductance Level (SCL), Heart Rate Variability (HRV) and Electroencephalography (EEG). The relevant parameters for experts in various states of meditation are taken as a reference. The products provide real-time audio-visual cues and/or post-meditation analysis to users, suggesting ways to improve their practice.

A note of caution: technology-enabled meditation is currently a wild west of experimental investigation. I have refrained from making specific product recommendations here, partly because things are evolving so rapidly, partly because I

find some of the assertions made by developers to be dubious. My general attitude is that if these tools do nothing more than motivate me to meditate more consistently than I would otherwise, then they have been useful. Anything beyond that is gravy. Over time, I have found that the quality of my meditation when I am *not* using these tools has improved, which is more important to me.

Here is a test that I use to gauge how fully and freely I am able to let go of mental models. Let's say that I am deeply attached to a mental model – a particular technology use model, a business model, a psychological framework, whatever it may be. Then one day, I realize that this attachment is based on an illusory perception/conception, and recover the ability to see without that inner layer being constantly checked. Now for the test. After taking in this realization, what is my attitude towards someone, A, who is a zealous advocate for that mental model? Do I criticize him as a knee-jerk reaction? Do I relish patronizing him from my newfound superior position? If so, then I haven't truly let go of the model – I've merely traded attachment for aversion (attachment to its opposite).

If I clear this hurdle, a second one awaits. What is my attitude towards someone else, B, who is harshly critical of A's perspective, reminiscent of the aversion I just overcame? Do I now launch into a stubborn devil's

advocacy on A's behalf, just to prove that B is also wrong? If so, then I'm still caught up with the mental model – its narrative still has the power to seize my attention and frame the topic around its merits and demerits. To the extent that I can listen to both A and B without having a reactionary response, I know that I am able to let go of the model. Essentially, the test serves as an internal monitor against self-deception.

If you choose to use this test with your own development, remember to use it with compassion. Letting go of models can't be forced – it happens at its own pace. Even when I am not able to let go of a model, I find that just *noticing* that tends to improve the nature of my interactions. There's less self-righteousness and more acceptance of realistic limits.

When we let go of mental models, we defragment our view and reconnect to the underlying unity. We bring more of our awareness into whatever we do. We can step on the gas, hit the brakes, or shift into neutral, all with a clear intention.

Helpful Mental Models

Here are some mental models that I have found particularly helpful in understanding the minds of myself and others. As with all models, they work best when held lightly – when there are no barriers to refining them, shifting between them and others, and letting go of them.

Jungian Psychology and Personality Theory

Carl Jung was an exponent of analytical psychology, elucidating concepts such as individuation, archetypes, shadow, self-regulation and others. The rich theory and vocabulary that he developed for characterizing dimensions of personality was systematized decades later into the Myers-Briggs Type Indicator (MBTI), a typology used by many facilitators of personal and interpersonal development.

Here are a couple of books that I recommend on Jungian personality theory:

- *Personality Type: An Owner's Manual*, by Lenore Thomson – Lenore explains personality type with plenty of accessible analogies and anecdotes. Her descriptions of psychological functions and types enable the reader to try on these different perspectives and see the world through different eyes. She identifies in-depth avenues of personal growth that play to the unique strengths of each type. In doing so, she effectively illustrates broader principles that apply to all types.
- *Neuroscience of Personality*, by Dario Nardi – Based on previous literature and his own EEG studies conducted at UCLA, Dario labels and describes cognitive skill-sets associated with 16 regions of the neocortex (examples: FP1 – Chief Judge, P4 – Strategic Gamer). He then goes through the

eight Jungian cognitive processes and characterizes the EEG results of people whose personality types emphasize those processes. The results yield insights into how markedly different parts of the brain are activated in different people when they are asked the same questions. Below are links to a talk that Dario gave at Google and a slide presentation with further information on his experiments⁹.

For those of you who are familiar with this theory, here are a couple of articles that present some of my observations and lessons learned. The second article specifically addresses the benefits and pitfalls of using personality type in the IT workplace:

- “Polarities, Champions, Dementors and Mentors”
<http://kartiksubbarao.com/polarities-champions-dementors-and-mentors>
- “The Map vs. the Territory of Type”
<http://typeindepth.com/2012/11/the-map-vs-the-territory-of-type/>

Ken Wilber's Integral Theory

The vision of Integral theory is to integrate every field of human knowledge and every way of knowing –

9 Google Talk: <https://www.youtube.com/watch?v=MGfhQTbcqmA>
Slides: <http://www.keys2cognition.com/papers/EEGandSocialCognition.pdf>

including phenomenology, hermeneutics, empiricism and systems theory – into a coherent, unified whole. At a pragmatic level, it provides a map for locating different aspects of human experience in a common framework. Here are an introductory article and book:

- “The Integral Operating System”
<http://integrallife.com/node/125040>
- *The Integral Vision*, by Ken Wilber

There are many resources on the integrallife.com site, including articles, videos and discussion forums.

Susanne Cook-Greuter's Ego Development Model

Susanne Cook-Greuter has studied people with relatively high degrees of self-awareness, and has observed several patterns in development. Her ego development model, which builds on earlier work by Jane Loevinger, is included in Integral theory. It is described in this paper:

- “Ego Development: Nine Levels of Increasing Embrace”¹⁰

Here is another paper of hers, this one co-authored with Beena Sharma, on how people relate to polarities at different stages of development:

10 <http://www.cook-greuter.com/9%20levels%20of%20increasing%20embrace%20update%201%2007.pdf>

- “Polarities and Ego Development: Polarity Thinking In Ego Development Theory And Developmental Coaching”¹¹

The paper defines polarity (referencing Barry Johnson's book *Polarity Management*) as “an interdependent pair of two poles that are both desirable and required over time for a sustainable self and system”. Polarities are a fundamental building block of mental models. In Jungian personality type, there are polarities of extraversion and introversion, intuition and sensing, thinking and feeling, and judging and perceiving. In Integral theory, there are polarities of interior and exterior, individual and collective, differentiation and integration, absolute and relative, and others. We explore many polarities throughout this book.

A nice way to visualize the co-arising, interdependent nature of polarities is through M.C. Escher's "Symmetry" paintings, where the positive-space objects simultaneously serve as the background for the negative-space objects (and vice versa):

- <http://www.mcescher.com/Gallery/gallery-symmetry.htm>

11 <http://www.cook-greuter.com/Sharma%20Cook-Greuter%20paper%20EAIF%20SUNY.pdf>

3 - Open Source and Abundance

The practice of open source software development, where the source code for a project is made freely available for anyone to use, modify, and redistribute, has gained significant adoption and widespread visibility. Open source software runs most of the web, as well as the majority of smartphones and supercomputers. In our increasingly networked world, the principles of open source collaboration are being applied beyond science and technology, to areas like education, government, and popular culture.

Along with its impact on the world at large, which has been chronicled and analyzed extensively¹², open source in its many forms can be a catalyst for personal devel-

12 See http://en.wikipedia.org/wiki/Open-source_software and http://en.wikipedia.org/wiki/Open_source for more discussion and pointers to other resources

opment. Open source provides us with a laboratory to explore and expand our technical and leadership capabilities, and broaden our sense of abundance. We can create and choose contexts that are well-aligned with our sense of purpose, and incubate certain ideas more effectively than we can elsewhere. We can get feedback from all over the world, which gives us a better sense of how and where our skills add value. In this chapter, we'll explore some of the inner workings of this laboratory.

Identity Labels

As we participate in open source projects or open learning communities like Wikipedia, Quora, Stack Exchange and others, we frequently encounter people from different countries who work at different companies. It's not unusual to see people change organizational affiliations while working on the same project, or change projects while working at the same organization. Independent of any of the labels next to our names, we continue to increase the amount of innovative capability and insightful knowledge freely available to anyone, anywhere, anytime.

This perspective reminds us that countries, companies and communities are all inner layers that we can check and uncheck. Holding these mental constructs lightly, we can recognize our affinities for them without turning them into identity millstones. We can keep our eye on a vision that transcends boundaries, wherever we happen

to be. Whether we're helping a company provide greater value to its customers, or helping a community provide greater value to its audience, we're open to solutions that tap our connections and capabilities beyond our roles as employees or community members.

Giving Freely

Open source confronts us with an explosion of abundance – we can take as much of it as we want, without depleting it. This external abundance reminds us that our internal source of abundant talent works the same way. It can never be depleted, regardless of how much we give away. The more we give from a state of abundance, the better we can identify where we can give most effectively. We get better at giving *freely*, without strings attached. We can more fully enjoy the act of giving on its own, independent of future outcomes. This expands our broader capacity for taking action without becoming attached to the fruits of those actions.

To provide additional context, let's explore a hypothetical scenario¹³. Let's say that I discover a new, innovative open source project. I start to use it and soon come up with an idea to make it even better. I implement the enhancement and contribute the code to the

13 I previously wrote about this scenario at

<http://opensource.com/business/11/4/open-source-giving-freely-and-self-awareness>

project. In the next newsletter from the project leader to the user community, the new feature is trumpeted as a significant advancement, but without my name being mentioned. How do I feel when I read the newsletter?

If I find myself feeling strongly resentful, then I have attached some strings to the gift that I gave. Others might well sympathize with me, and say that I was wrongly slighted. But that's beside the point – whatever anyone else feels, I wouldn't feel strong resentment if my gift were truly free. Now, that doesn't mean I have to beat myself up for not having given freely. In fact, just the opposite – I can pat myself on the back for having identified the distinct feeling of resentment right as it showed up. Because if I didn't, I'd then be acting *from* that resentment. Resentment might prompt me to snidely react to the next email message from the project leader, which might provoke him to respond in kind, which could then suck me into an energy-draining conflict. By remaining aware of the feeling, I retain more control over my next actions. Maybe I need more recognition from the project leader to motivate me to continue working on the project. So perhaps I'll have a skillful conversation (where I may not even ask the question directly) to gauge whether the project leader can meet my needs. Or maybe there's another project to which I *can* give freely, and I'll go work on that instead. Or, maybe I sense a growth opportunity to let go of the attachment, and I continue to work on the project with a clearer intent. Any one of these approaches is better

than just reacting out of resentment, or castigating myself for feeling resentment.

If I feel neither offended by the absence of recognition, nor full of myself in its presence, that is a good sign that I have given freely. I am then unencumbered by future outcomes, whether negative or positive. If someone complains bitterly about the code's behavior, I can change it (or not) without feeling defensive. If someone effusively praises my contribution and requests an enhancement, I can implement it (or not) without craving their continued endorsement.

Giving freely is not about self-denial. In the scenario above, I can appreciate and accept any recognition that others might give me. What I can understand much better when I have given freely, though, is that that's *their* gift to give, just as the code contribution was my gift to give. This understanding carries over to when the shoe is on the other foot, and I'm reviewing the contributions of others. I can choose to accept or not accept these gifts without on the one hand taking them for granted, or on the other hand fearing the loss of future contributions.

Just as abundance is a powerful enabler of giving freely, scarcity is a considerable inhibitor. When we feel diminished by giving, it's hard to give freely. When we give beyond our limits, we can't fully let go. We remain attached to our gifts, becoming subtly (and sometimes overtly) controlling over their subsequent use. They

become sacrifices that we don't want to have been in vain. They shift from gifts to conditional loans on which we expect some form of repayment. Without that repayment, their ongoing use is like someone joyriding in a car that we really couldn't afford to give away.

The more we give out of scarcity, the more that this gift-as-loan model becomes prominent in our thinking. Just as we seek to collect payment from others, we also become uncomfortable with incurring debt of our own. This limits our ability to receive freely. For instance, when a sense of debt motivates us to “give back” to an open source project (as compensation for having “taken from” the project), we may end up attaching more strings to the gifts than did those who gave them!

One way to dispel this illusion is to recognize that we have superimposed a layer of encumbering debt over a more fundamental feeling – gratitude. When we reconnect with the feeling of gratitude, we find it to be intrinsically uplifting and unburdening. It returns us to a state of abundance and propels us to give freely. Whereas debt constrains us to pay it back, gratitude empowers us to gift it forward. Instead of being limited to a transactional template for giving and receiving, we can appreciate a more natural flow between the two. Instead of seeing giving as inherently separate from receiving, we can increasingly recognize aspects of each in the other.

Whenever we can shift from a scarcity model to an abundance model, we see our mind differently. Scarcity prompts us to see it as an idea *bank* with depreciating assets that we have to protect at all costs. Abundance enables us to see it as an idea *mint* whose capacity increases when its gifts are given freely.

Motivational Energies

The motivational energy of abundance is reliable and burns cleanly. We can do whatever needs to be done and readily move on to the next thing. It's extremely helpful to be able to identify how much of this energy we have in any given situation, relative to other motivational energies that are nowhere near as clean or reliable. Let me illustrate with the following examples.

Put yourself into the mind of an expert chef with a lifelong talent for cooking. You have just learned that many of your friends will be in town for an upcoming holiday. You feel immediately energized about preparing a nice meal for everyone. While cooking, you enter into a state of flow, feeling fully present and centered as you attend to a myriad of details. You are aware of subtleties and nuances in every step of the process, and how they shape the end product. Yet your goal is not perfection as defined by a static image. Rather, your goal, as well as your means, is a dynamic *wholeness*. You attend to each task completely – no less than that, and no more than that. If something goes wrong with one

dish, you find it easy to adapt, perhaps creating an entirely new snack out of the available ingredients. Even after many hours in the kitchen, you remain mentally alert and buoyant, since the work itself replenishes you. This is the energy of *abundance*.

Now put yourself into the mind of someone with an acquired craving for a rarely available food. You have just learned that your favorite restaurant will be serving it this evening. Immediately, your mouth waters in anticipation. You call the restaurant as quickly as possible to make a reservation. On your way to the restaurant, your emotions rise and fall with the green and red of every traffic light. When you arrive at the restaurant and order, you suffer through what feels like an inordinate delay. You can't help but notice that the person at the next table, who was seated after you, is already biting into morsels of your coveted cuisine. Once you are finally served, if the flavor is somewhat off, your anticipation collapses into a rubble of disappointment. And even if it meets your expectations, within a few minutes, it's all gone. All you are left with is a wistful aftertaste. This is the energy of *grasping*.

In most situations, we experience a combination of energies. Grasping is alleviated by abundance, just as abundance is dampened by grasping and other energies. Take a moment to connect with the energies independently. Recall two or more activities in which you were motivated by abundance, and relive them again now.

Notice what feels common in each instance, even if the external circumstances were radically different. Then do the same for grasping. When you recognize the distinct signatures of abundance and grasping, you can discern them in real-time, along with other energies.

A common situation where I apply this is with online discussion forums. If I find myself eager to answer a question or respond to a comment, I pause to notice the prominent energy. If it has a grasping quality, I'll see that as a red flag. If it has an abundant quality, then I'll see that as a green light.

The problem with grasping energy – like a craving to be the first to respond, or an urge to control the narrative – is that it creates attachment to a specific outcome. If I rush to post the first, definitive and conclusive answer, and someone completely misunderstands or disagrees with it, I'll feel sucked into continuing the discussion beyond its usefulness, just to prove my point. If several others respond without referring to my message, I'll feel impelled to post again, to try to redirect the conversation back to my way of thinking.

With abundance energy, the situation is very different. I can take my time to see if I can actually add value in my response. Once I post my message, I'm at ease with it. If the conversation goes on without me, that's fine. If someone doesn't understand or disagrees, I can provide clarification without becoming impatient or defensive. If they shed new light on the topic, even from a

contrary perspective, I can learn from them. If they want to debate something that I don't, I don't have to continue the cycle – I can just let the topic go. There isn't an attachment to a specific outcome, just an abiding sense of learning and sharing knowledge.

Sometimes, we start a project with abundance energy, but unconsciously exchange it over time for grasping energy. We ossify the natural happiness that we derive from the activity into a predetermined expectation. When it doesn't deliver on our schedule, we become impatient. When we realize that this is happening, we can try to reconnect with abundance energy and make that the motivation for our next action. With this subtle shift in energy, we can spend the next ten minutes rejuvenating our outlook instead of spending the next hour stewing in frustration.

Even when we are not able to reconnect with abundance energy, when all we seem to have is grasping energy, we can benefit from just being aware of this. We can allow it to run its course, on the one hand minimizing the degree to which we feed it, and on the other hand minimizing the degree to which we fight it with the energy of aversion. The more situations in which we can do this, the less that grasping and aversion can hijack our experience of abundance.

As I mentioned before, open source *confronts* us with abundance. In this role, it's not just a placid lake of crystalline turquoise water. It's a river of whitewater that

plunges through towering waterfalls. Open codebases, knowledge repositories and streams of communication are created and expanded every day. We are splashed by the recognition that we can't possibly consume it all, let alone claim it for ourselves. Perhaps this alarms us, even throws us into existential crisis. But after sitting with it for some time, we break out into a knowing smile. We start to laugh at ourselves, at how zealously we sometimes pursue the acquisition of knowledge, skills and capabilities. We pay closer attention to the lessons in *self*-knowledge that arise in these external pursuits, and discover abundant wholeness. We choose activities that further reveal and express this wholeness, and allow attachments and aversions to dissipate. We see the wisdom in Rumi's quote "You are not a drop in the ocean. You are the entire ocean in a drop."

4 - Workplace Dynamics

Scarcity

Now let's look at the workplace – the world of salaries, budgets, revenues, costs, management chains, promotions, layoffs, and the like, that actively engage our sense of scarcity. Knowing how we experience abundance, as we discussed in the previous chapter, prepares us to handle scarcity much more effectively. We can reframe many scarcity-triggering situations to encompass a broader view, and we can face our actual scarcity needs soberly, without exaggerating them.

For example, let's say we have a job where we are continually learning and making a meaningful contribution, where we have a solid reputation, colleagues who are good friends, privileged access to people and resources, and a good income. What happens if we lose

that job? Let's explore how our sense of scarcity can be mitigated by abundance.

Our ability to learn and share knowledge is unaffected, since those are aspects of abundance which we can cultivate independently. Abundance also diminishes our need for external validation, so we can tolerate the loss of recognition. Wherever we find ourselves, we can allow our reputation to rebuild naturally, as a reflection of our contributions and personality. Our loss of friendships is alleviated by the ease with which we can stay in touch with them, as well as our ability to make new friends.

With the loss of prized privileges, we realize some of the most powerful insights into our scarcity needs. Compared to the loss of income, which others can commonly relate to, our woe over lost privilege doesn't garner much sympathy. We must face this loss by ourselves, and when we do, the scaffolding of our mental model of scarcity is revealed. We relish certain things that aren't widely available – an office with a great view, invitations to meetings where exclusive advance information is shared, access to an armada of servers to run personal projects, whatever the perks may be. We then fixate on their external forms and try to preserve them. We avoid saying or doing things that might jeopardize them, allowing those calculations to intrude into our decision-making process. Abundance helps to set us free from this. It reminds us of so many

other ways in which we feel fulfilled, which puts the privileges in perspective. We can choose to exercise them or not, enjoying them without compulsion. When the privileges expire, we can let them go.

The loss of income, while not an insignificant matter, can become a crushing blow when it is conflated with the loss of meaning, reputation or privilege. Abundance helps by carting away as much of this excess baggage as possible, leaving us with a clearer picture of our needs. It regularly draws our attention to enriching activities that don't cost any money, decreasing the ratio of our material needs to our material resources. When we can comfortably live below our means, we can save and invest to build up a buffer. The more we are centered in abundance, the lower the level of our net worth at which we can make financially-related decisions that are unencumbered by scarcity.

The result of all of this is that our actions in the workplace become less influenced by fear (aversion to loss) and greed (attachment to acquisition). This improves our ability to lead, since there are fewer scarcity hooks on which our integrity can get snagged. We can better identify opportunities for contribution and growth in our current job, and we can also better recognize when it is time to leave.

Competition

If I think about situations in which I feel ruthlessly competitive, there's some perceived scarcity involved. For instance, jockeying to be as close to the front of the line while boarding a crowded flight, to ensure space for my carry-on bag; dashing over to a newly-opened checkout counter in a store, when my current line is moving at glacial speed; racing around to grab a good parking spot before someone else can take it. In these kinds of situations, it's everyone for themselves. I give no quarter, shamelessly employ subterfuge, even risk public humiliation – such as the rebuke of the gate agent to wait until my zone is called. Such can be the nature of my competitive drive, especially when the stakes are so high – like preventing my bag from being dragged through the tenebrous catacombs of the baggage handling system, possibly never to be seen again, or at best, to be reclaimed at the destination terminal after an interminable interval of time.

Recognizing this pattern allows me to do a reality check when I feel a rush of competitiveness. I can take a moment to pause and identify the scarcity involved. In that moment, a number of things can happen. The sense of scarcity may be reframed or vanish entirely. Or I might see a way to obtain what I need without any competitive action. Or I identify how much I want to compete, and beyond that, accept the outcome and move on. This minimizes the situations where the

steering wheel gets handed over completely to the competitive drive. It also creates space and time for a natural generosity to emerge, which can sometimes resolve a competitive situation better than winning would.

I appreciate competition most when it reveals levels of competence well above my own, of which I have been unaware. It gives me a better picture of the talent/skill/dedication involved at those levels. In many cases, it helps me improve my competence, however modest in comparison. In other cases, it helps me realize that I don't have the capability or the motivation to do what it takes to reach those levels. Even though letting go of an unrealistic aspiration is sometimes a painful process, the accompanying relief is liberating. Energy is channeled to areas of abundance where I *do* have the capability and motivation to act, and where increased competence is a natural byproduct. The inner layers of competitive labeling (e.g. "right-minded people" vs "wrongheaded people", etc.) are unchecked, revealing a continuum of latent potential. I've cultivated some aspects of that potential and disregarded other aspects, but there are no actual foreign adversaries. My erstwhile competitors are reframed as external representations of these inner aspects, reminders to me of the many options that are available in any situation.

How do you feel about competition? Where does it fit into your sense of scarcity and abundance? The more consciously you can answer this question, the more you will be able to understand your own motivations as well as the competitive motivations of others.

For some people, competition is a prominent part of their personality. Take a look at this description of Competition as a strength from *StrengthsFinder 2.0* by Tom Rath:

Competition is rooted in comparison. When you look at the world, you are instinctively aware of other people's performance. Their performance is the ultimate yardstick. No matter how hard you tried, no matter how worthy your intentions, if you reached your goal but did not outperform your peers, the achievement feels hollow. Like all competitors, you need other people. You need to compare. If you can compare, you can compete, and if you can compete, you can win. And when you win, there is no feeling quite like it. You like measurement because it facilitates comparisons. You like other competitors because they invigorate you. You like contests because they must produce a winner. You particularly like contests where you know you have the inside track to be the winner. Although you are gracious to your fellow competitors and even stoic in defeat, you don't compete for the fun of competing. You compete to win. Over time you will come to avoid contests where winning seems unlikely.

Competition sounds like this:

Sumner Redstone, chairman of Viacom (now known as CBS Corporation), on his efforts to acquire that company: “I relished every minute of it because Viacom was a company worth fighting for and I enjoyed a contest. If you get involved in a major competitive struggle, and the stress that inevitably comes with it, you’d better derive some real sense of satisfaction and enjoyment from the ultimate victory. Wrestling control of a company like Viacom was warfare. I believe the real lesson it taught me was that it is not about money, it’s about the will to win.”

What is your reaction to this? If you strongly identify with it, compare your perspective with the next paragraph. If you strongly disidentify with it, thinking “this isn’t me, I could never be like this”, you’re on your way to kicking this aspect of competition out of your conscious awareness. If you take the fateful next step and round the corner with “it’s these kinds of people who are obsessed with competition for competition’s sake that are ruining the country/company/world”, you fall into the trap of psychological projection¹⁴. You airbrush out a universally human capability from your self-image, and become hypersensitive to its appearance in others. The way out of this trap is to withdraw the projection.

14 For an excellent explanation of the mechanics of projection, see this excerpt from Ken Wilber's book *No Boundary*:
<http://www.kenwilber.com/editor/nbshadow.pdf>

Remind yourself of situations in which you *can* feel competitive, however overtly or subtly – without judging the feeling. Allow the feeling to be there, identify its contours and expression, and allow it to dissipate on its own. When you offer no resistance to the feeling, when it doesn't feel foreign to you, you won't project it away as shadow onto others¹⁵. You'll gain an expanded view of their strengths, and a more dispassionate picture of their weaknesses.

In *Leading Leaders*, Jeswald Salacuse gives the following advice to non-technical leaders who work with technical leaders of various stripes:

In seeking to motivate other leaders, the first thing you need to recognize is that they usually do not view their professional activities—whether they are doctors in a hospital, architects in a firm, or violinists in a symphony orchestra—as just a job. It is a profession, a calling, a commitment to an area of endeavor that has necessitated long years of training and practice. In most cases, they view that commitment as lifelong. Moreover, to a significant extent, they derive their identity, social status, and indeed very purpose in life from their position as doctor, lawyer, or violinist.

15 For an in-depth exploration of shadow work, see:

- Chapter 4 of *Integral Life Practice*:
<http://www.integral-life-practice.com/>
- The Work:
<http://www.thework.com/thework-4questions.php>

This conception of their role in life has two important consequences for leading them. First, they often have strong alliances and senses of affiliation with other persons who pursue the same callings. Indeed, that sense of affiliation with fellow professionals may be stronger than their loyalty to the institution that pays them. Thus, lawyers, economists, musicians, and actors may care much more about the opinions of other lawyers, economists, musicians, and actors than they do about the particular firm, university, orchestra, or studio that currently employs them.

My guess is that you, as a technologist reading this book, will find this characterization easy to identify with. You'll probably feel more inspired by someone who works at a competing company who creates a breakthrough technology, than you would by a salesperson at your company who cleverly undercuts that competitor to win a major account. As long as you perceive your company to be fiscally solvent and responsibly managed, you're not too motivated by the numbers. Given the choice between working on a boring problem that will only help one customer and increase your company's profits by 5%, versus an interesting problem that will help all customers throughout the industry and increase your company's profits by 1%, the interesting problem is an easy choice.

Now think of a business manager who is deeply attached to the competitive success of his company. He strongly disidentifies with the above perspective, and rounds the corner with “it's these kinds of people who are obsessed with technology for technology's sake that are ruining the company”. Again, this is projection, and can be remedied by the originator. But what if you're on the receiving end of this projection? What if the manager seems insistent on arguing, say, that the highest priority is to maximize wealth for shareholders, and that technology is just a means to that end? It's instructive here to pay attention to the intensity of *your* reaction. The more that these kinds of comments bother you, the more that your own shadow response is being triggered. The good news is that by doing your own shadow work, as mentioned in the previous section, you can *unilaterally* change the dynamics of the interaction. When you're not inflamed by someone's comments, you can hear them out more fully and pick up on nuances in their expression. You can recognize that they *aren't* saying some of the things that your projection may have filled in. You can ask questions that are informed by empathy, to clarify your understanding without unnecessarily escalating the situation. When you choose to share your views, you can do so forthrightly, without aggression or timidity. This doesn't guarantee that the other person will withdraw their projection or otherwise change their mind – that's out of your control. Withdrawing *your* projection allows you to accept them as they are.

The root cause of projection is attachment to a preferred identity and unacknowledgment of its opposites¹⁶. Notice the attachments mentioned in the above quote from *Leading Leaders*. If you derive a significant portion of your identity, social status and purpose in life from a role that you play, anything that threatens your concept of that role threatens *you*. Your meditation practice helps you go beyond this. The more mental space you have, the less that your identity congeals around any particular role. Your sense of affiliation with technology professionals across the industry, for instance, can be freely experienced alongside your affiliation with nontechnical employees of your company.

Performance Feedback

Whenever we get feedback, whether it's formally at an annual performance review, or informally during the course of our work, we have an excellent opportunity to observe our identifications. What do we feel proud about? What do we get defensive about? Sorting out our projection triggers helps us on the one hand not to fixate on the feedback, and on the other hand not to blithely dismiss it. We can put it into context and consider it thoughtfully.

16 Projections can be positive as well as negative. For example, if you're awestruck by someone's code and then deify them as a god of programming, you're projecting your unacknowledged potential onto them.

Something that can throw us for a loop is criticism of an area of expertise in which we feel considerable pride – for example, if we pride ourselves on our mental agility, and we're criticized for taking too much time and holding things up. It's one thing to be criticized for being too fast and making it difficult for others to keep up – *that* we may be used to, and might even wear somewhat as a badge of honor. But being told that we're too *slow*? That's humiliating, and depending on how much we are attached to mental agility, possibly even unthinkable. How do we handle this?

Dan Oestreich's paper “Following SELF: How leaders can stop defending and start living their own higher cause” provides insightful observations into this challenge¹⁷. It presents a self-assessment tool that allows the reader to explore their mental model of leadership, surface implicit assumptions, and create space to let go of attachments to limiting identities. Here is an excerpt:

Typically, we assume that we are defensive about our weaknesses being too visibly seen and criticized, but this is only partially true. We can also be defensive – and at times much more defensive – about areas that we consider our most important strengths. The reason for this is that we tend to build essential aspects of our self-concept and self-esteem from our views of where we are effective, right, and good. If I believe I am not very good at negotiations, hearing about that may pain me, but

17 <http://www.unfoldingleadership.com/downloads/FollowingSelf.pdf>

I'm not likely to try to defend to the death my assertion of that skill. But if I believe instead that I am an especially good negotiator, and stake my reputation (and maybe career) on it, attacking my effectiveness is likely to elicit some form of defensive response. *After all, if I am not effective, right, or good in the very areas I supposed I was, what in fact am I? How can I trust myself, my own judgments and consciousness?* [emphasis added]

What am “I”, indeed? In our example here, it can't be the “I” that's attached to agility – even when *that* “I” is defeated, we're still there. When we relax our attachment to agility, we can reintegrate an opposite pole, *deliberativeness*, into our “I”. When we need more time to think things through, we can take that time without losing self esteem. As we do, we discover aspects of our proficiency that are more visible at slower speeds. An interesting thing then happens. This firsthand knowledge *carries over* to situations where we need to coordinate our work with people who are moving more slowly than we are. We're able to be patient with them not just out of a vague sense of politeness, or to avoid their criticism. We actually appreciate *why* they might need more time, and can adjust our pace to work more effectively with them. Overall, we are more at ease operating across the spectrum of agility and deliberativeness. We may still prefer projects that predominantly engage our agility, but we're not lost if we need to deliberate. Our agility enables us to stop on a dime, and our deliberativeness allows us to confidently fire up the

afterburners. Our “I” now contains this expanded space, and regains our trust at a deeper level.

Having done this inner work, we can revisit the original feedback – that we're taking too much time on something – without our prior defensiveness. Now that anxiety isn't holding us back, we may well find that we can move faster. Or even if we can move faster, we may choose to maintain or decrease our speed, out of a clearer understanding of our effectiveness. In this way, feedback moves from being an assertion that we have to accept or reject wholesale, to a springboard from which we can launch an exploration of our mental space, and where our eventual response falls out like one of many solutions to an equation.

Whenever we feel perturbed by negative feedback, whether it's criticism of our strengths or weaknesses, we can engage this kind of mindful exploration. What sort of polarity is involved? What are we attached to as our “I”, what opposites are we not acknowledging, and how are we projecting that unacknowledged content onto others? One of the most satisfying experiences in technology work is solving a core problem that in turn resolves several other outstanding issues that we didn't realize were all connected. Resolving our projections at their origins has the same effect. Other problems go away without us having to even *think* about them. For example, we breathe more naturally, our tone of voice is calmer, our body language is more relaxed, we listen

more attentively, and so on. Even if we aren't able to fully withdraw some of our projections, the more transparent they are to us, the less energy we invest in sustaining them. We know at some level that they're illusions, so our reactions are somewhat dampened – which may be all that we need to interrupt some of our unhealthy habitual patterns.

Over time, we can become savvier consumers of feedback, which is essentially a collection of stories about us. Some of them are myths, others are tragedies, and there's always an element of comedy. Sometimes we're cast as the hero, other times as the villain; sometimes the wizard, other times the fool. If we don't get too caught up in the archetypes (projection), we can learn much about the storytellers. From what people say (and don't say), we can glean insights into their priorities, values, goals, strengths, weaknesses, and blind spots. We can unlock remarkable significance in offhanded remarks, discount even solemn statements that are suspicious, *and* take more comments at face value. Feedback becomes a powerful ally in understanding ourselves and working effectively with others.

5 - Communication

Communication is a fascinating thing. I've participated in meetings where ideas flow effortlessly, where people build ingeniously on each other's observations, and where breakthrough solutions to challenging problems are generated. I've also participated in meetings where people can't get on the same page, and walk away with completely different pictures of what was discussed. To see someone facilitate the former kind of meeting, or rescue the latter kind of meeting, is to see leadership in action.

Technical leaders can excel at this through their in-depth understanding of the individual components under discussion, as well as their knowledge of the system as a whole. They can clear away doubts and help each person understand how their work fits into the larger picture. But that's not the full story. Early on in my career, when I would see a particularly impressive display of technical leadership, I would ask myself

“How did they have the presence of mind to say that?”; or “How did they have the presence of mind *not* to say anything at that moment?” Over time, I discovered that the answer was contained right within the question. Presence of mind *is* what enabled these people to say what they said, when they said it. Presence of mind enables the right words to pop up at the right time, or if none seem necessary, to allow for space. Cultivating presence of mind takes our communication skills to a whole new level.

When we communicate, we are constantly setting expectations with others and forming expectations from what others say. How aware are we of the shifts in content and context, moment by moment, that shape those expectations? How often, instead, are we a prisoner of those expectations, jumping to conclusions and falling into conversational ruts? As we've explored in previous chapters, it's not the expectations themselves that cause problems, but rather our attachment to those expectations. In the space after every word is an opportunity to become aware of the micro-expectation we have just set or formed, and to let go of any attachment we have towards that expectation.

Jargon

Jargon offers us a powerful illustration of the subtle expectations developed in communication. Peter Senge puts it well in *The Dance of Change*:

One's own jargon is hard to recognize because it is always "in the eye of the beholder." Once new terms and idioms become used regularly within a team, team members come to take them for granted. Then, when they use these terms with others, they are unaware that they are "speaking in tongues" as far as the uninitiated are concerned. This is why developing awareness of one's language is a high leverage strategy ... It is also why explaining complex ideas in the most simple and accessible manner has always been a hallmark of great leadership.

When we are attached to our jargon, we're not very patient when people don't understand what we're saying, or when they use words generically that mean something very precise to us. Consider the network expert who, after hearing a novice declare "the Internet is broken", sarcastically retorts with "Oh, what design flaws have you found in the TCP/IP protocol suite?" – instead of just asking them for more details about the problem they are having.

We can't get everyone to learn our jargon, and we can't learn everyone else's jargon. This is why the exercise of explaining complex ideas in a simple and accessible manner is so powerful. It detaches us from our habitual interpretations and opens us to other ways of expressing the idea. It reminds us that there are different levels on which we can appreciate a concept, that they are all connected, and that even a simple understanding can unlock a path that leads to greater knowledge. It also

allows us to be okay with making our ideas as simple as we can, without needing to make them any simpler. We don't need to stop using jargon, we just need to be more aware of the expectations that are evoked by jargon.

Feelings and Interpretations

Another case of expectations running amok in communication is when our feelings become conflated with our interpretations. Marshall Rosenberg addresses this point in *Nonviolent Communication*:

It is helpful to differentiate between words that describe what we think others are doing around us, and words that describe actual feelings. The following are examples of statements that are easily mistaken as expressions of feelings: in fact they reveal more *how we think others are behaving* than what we are actually feeling ourselves:

- A. “I feel unimportant to the people with whom I work.”

The word *unimportant* describes how I think others are evaluating me, rather than an actual feeling, which in this situation might be “I feel sad” or “I feel discouraged.”

- B. “I feel misunderstood.”

Here the word *misunderstood* indicates my assessment of the other person's level of understanding rather than an actual feeling. In this situation, I may be feeling *anxious* or *annoyed* or some other emotion.

C. "I feel *ignored*."

Again, this is more of an interpretation of the actions of others rather than a clear statement of how we are feeling. No doubt there have been times we thought we were being ignored and our feeling was *relief*, because we wanted to be left to ourselves. No doubt there were other times, however, when we felt *hurt* when we thought we were being ignored, because we had wanted to be involved.

Words like "ignored" express how we *interpret others*, rather than how we *feel*. [emphasis in the original]

Disentangling feelings from interpretations makes it easier to label those feelings, so that we can recognize them more readily when they arise¹⁸. The act of labeling feelings simultaneously activates our problem-solving prefrontal cortex and pacifies our emotionally responsive limbic system, as described in this excerpt from *Your Brain at Work*:

18 Reviewing a list of feelings can facilitate this process. A concise inventory is presented at
<http://www.cnvc.org/Training/feelings-inventory>

When your limbic system becomes aroused, the resources available for your prefrontal cortex decrease. However, this works the other way, too. Increasing the arousal of the prefrontal cortex can dampen down the arousal of your limbic system. The two work like a seesaw. You can make this switch happen by trying to find the right word to identify an emotional sensation, a technique that is called *symbolic labeling*. [emphasis in the original]

As mentioned in Chapter 2, activating the prefrontal cortex also facilitates cognitive reappraisal. When we clarify and label our feelings, we're in a better position to examine and reframe our interpretations, which can transform our feelings. Even if we can't find a better reframe at the moment, we can at least communicate our emotional state more accurately when we need to, with less pressure to exaggerate or understate.

All of this comes in handy when we are on the hearing end of a mixture of interpretations and feelings. We can go beyond surface statements, listen for deeper concerns, and identify possible underlying perspectives. The more that we can empathize with those perspectives, the less stuck our expectations will be, and the more fluidly that compassion can inform our listening.

The greater our mental space, the more fully we can metabolize our emotions, whatever our interpretations may be. For example, let's say that someone agrees to complete a task for us by a certain date. That date comes and goes, the task remains unfinished, we have

not heard anything from that person, and we find ourselves feeling anger and frustration. In some cases, learning about extenuating circumstances (e.g. they got sick) might assuage our feelings. In other cases, listening to them carefully might make us realize that their intent was positive, but other things came up and they lost track of their commitment. Here, we may be able to channel our emotional energy into constructive activities, such as setting up regular checkpoints to help keep them on track. But sometimes, our attachment to our expectations is so intense that any interpretation feels virtually the same as if the person had told us “I purposely set that expectation with you, didn't follow through, and didn't communicate about it, because I want to thwart your work and cause you pain.” In that moment, it doesn't help to listen to explanations; they will sound like excuses. It doesn't help to offer additional coordination; whatever we offer will be overbearing. This is where mental space makes a huge difference. If we have enough of it, we can contain the grasping energy that is flooding through us, and examine its properties. We find that it is the pus of an infected wound of unmet expectations. When we release our attachment to those expectations, we feel the pain of cauterizing that wound. Mental space allows us to contain the pain even as we experience it, to enable the process of healing to complete. Once this is done, our sense of wholeness is renewed, and we can reconnect with abundance energy. Now we are open to

plenty of options for communication and for changing scope/schedule/resources. Whatever the eventual outcome, we can accept it, along with the lessons that we learned.

Influence

When we want to influence others, it helps to be aware of what is influencing *us*. When you want to influence someone to do something, or to think or feel a certain way, first ask yourself a simple question: why do you want to influence this person? Spend some time with your response. Carefully observe the thoughts, feelings and sensations that arise. Then, ask yourself if you can accept not having control of the outcome. If your answer is no, then you are *being* controlled (by your drives), and have far less freedom to influence others. If your answer is yes, then you're less likely to get in your own way.

One of the ways I like to visualize influence is with the following analogy. Your influence is like a flashlight that can selectively emit different wavelengths of light at different levels of brightness. Each wavelength corresponds to a perspective that you can take. The more you have refined a given perspective, the brighter you can emit that wavelength. The more perspectives you can take, the more wavelengths you can emit. When you influence someone, you metaphorically stand next to them and invite them to envision their surroundings,

including yourself and even themselves, as illuminated by your flashlight.

The impact of the brightness setting is unmistakable. When an expert illuminates a topic to a degree we've never seen before, our very way of thinking can be influenced. But influencing someone, of course, isn't just a matter of turning up the brightness as high and as fast as possible. If you light up *too much* of the scene, the person can lose focus. They're given too much content without enough context. The practice here is to center the light on a well known area, and expand accordingly from there. If you light up a scene *too quickly*, this can temporarily blind them. They may turn away in discomfort from something that they might otherwise find useful. To relate to that, think about a situation where you had a misconception about something and someone pounced on that, firing off a barrage of explanations of just *how* wrong you were. The practice here is to raise the level of lighting at a pace that the person can handle.

The wavelength setting is more complex. The perception of the person you are communicating with is shaped by their inner lenses. Some wavelengths may be amplified positively, others may be amplified negatively, and still others may be dampened, modified, or not even seen. When you communicate on a wavelength that resonates with them, influence is natural. When you don't, things feel out of sync. What can you do in the

latter case, if you can't find a workable wavelength? What about a scenario where your brightest wavelengths seem to be unfavorably perceived by them, and you can't generate the wavelength that seems to dominate their decision making process?

One thing you can do is to reflect on the dominant wavelength of the other person. Observe how *your* inner lenses/layers are filtering that wavelength. See if you can surface any unconscious reactions and withdraw any projections. As you do this, you will find that your flashlight can start to generate that wavelength. When it reaches a utilitarian level of brightness, you will be able to articulate that perspective within a neutral context, without feeling threatened or forcing a value judgment on it.

Now, you can make an informed decision on a key question – is their dominant perspective an important growth area for you, at the current time? If it is, you can take the time to actively develop that wavelength to a higher level of brightness that will resonate more strongly. If it isn't, you can more confidently channel your energy into areas that *are* important to your growth. The utilitarian level of brightness you have developed with this wavelength will help keep you from being blindsided, even as you focus on other wavelengths. You'll gain a better sense of where to assert your influence, and where not to actively intervene.

Evaluating Leadership Advice

Leadership advice comes in a lot of flavors – from the soothing stories of a grandmother, to the salty screed of a hardened skipper, to the bland babbling of a bureaucrat, and many others. But when we digest them, we see how they break down into the same set of underlying components. One way to chew this cud is to pass it through the quadrants of a polarity chart, like Barry Johnson's Polarity Management map¹⁹ or Daniel Ofman's Core Qualities model²⁰. Here, we'll evaluate leadership advice with a simplified approach, using the same basic principles.

As an example illustration, we explored the polarity of agility and deliberation in Chapter 4. If someone gives us useful pointers on agility, we can add them, appreciatively, to our toolbox. However enthusiastically or cleverly the advice is given though, we can still place it into context, because we know that agility isn't an end to itself. Sometimes we'll want to act with agility, where these tools will be valuable, and other times we'll want to act with deliberation, where other tools will be more useful. We can benefit from tips and tricks across the entire polarity.

19 <http://www.xperienceit.com/wp-content/uploads/Polarity Thinking Description 2012.pdf>

20 <http://www.jessemeijers.com/identifying-core-qualities-pitfalls-challenges-allergies-daniel-ofman/>

Let's now take a look at some popular nuggets of leadership advice, with an eye towards putting things into larger contexts.

“Embrace failure” is a perspective that encourages us to let go of our attachment to success. When we become attached to success, we become hypersensitive to the pain of failure. As a result, we may impose limits on our activities out of fear of experiencing that pain. Embracing failure allows us to be more present with failure, without being overwhelmed by it. We can pick up additional details about what went right and what went wrong, details that would otherwise be masked by our reaction to our pain. We can subsequently approach more situations with less fear.

If we start to embrace failure as an end in itself though, we start to lose sight of what success means to us. Further down this path, we become like the compulsive stock trader who tolerates failure so much that he neglects to take profits regularly. Addiction to risk is not a healthy substitute for aversion to risk.

A broader perspective is to embrace the continuum of success and failure as a whole. Both have many lessons to teach us. Take these two sharply contrasting pieces of advice: “if you're not failing, you're not trying hard enough” and “failure is not an option”. There are times when one of these speaks more powerfully to our growth than the other, as well as times when neither feels relevant. At their core, they are actually not

different. Both derive their energy from the polarities that span success and failure, like two arcs of lightning from the same cloud. To assert one is to imply the existence of the other, via the existence of the continuum to which they both belong.

Whatever advice on success or failure that we start with, we end up redrawing the same continuum. Any part inevitably implies the whole. The more we are aware of the whole, the more clearly we can appreciate the value of any particular piece of advice.

With that in mind, let's look at examples of other contrasting pairs of advice, along with the polarities that generate their energy:

- “you can't manage what you can't measure” and “not everything that counts can be counted” – polarity of Quantitativeness and Qualitativeness
- “stay hungry, stay foolish” and “know how to take yes for an answer” – polarity of Seeking and Finding
- “what got you here won't get you there” and “remember what got you here in the first place” – polarity of Changeability and Consistency

In all of these cases, our perspective is expanded by looking at the polarity as a whole. Again, it's not that any of these pieces of advice are wrong; they're just partial.

With greater mental space, we have less of a need to short-circuit the polarity by declaring a victor or by imposing a devitalizing compromise between the two sides. Instead, we become increasingly able to contain the polarity like a plasma globe²¹. We can point to a variety of locations on the sphere to direct its energy, or we can let go of the polarity as a whole. The deeper calling of every piece of advice we receive is to lead us here.

Language

Some of our deepest insights into communication arise when we turn the lens on language itself. Language can trap us with the power of its conditioning. But it can also liberate us by pointing us beyond its limits. Susanne Cook-Greuter explores our collective language habit in her paper “Comprehensive Language Awareness”²². Here is an excerpt:

Living in language we live in a split or permanently separated state. All our categorization schemes, theories, and mental frameworks are originally built on arbitrary, though functional distinctions. This holds from the primitive sensory distinctions of babyhood to the most elaborate adult theories of what is good, beautiful and just or scientifically valid, predictive, and replicable.

21 http://en.wikipedia.org/wiki/Plasma_globe

22 <http://www.cook-greuter.com/Cook-Greuter,%20ComprehensiveLanguageAwareness,1995.pdf>

We analyze, categorize, and define the “elements” of experience in ways that reinforce the notion of their separateness and permanence and thus afford us a measure of stability and predictability.
[...]

Some adults do start to examine their need for certainty and permanence as they watch the continuous complexification of their frameworks of meaning. They may consciously explore how they make distinctions and realize that a major function of language is to create a semblance of order and stability. The full absorption of A. Korzybski’s caveat, that the map is not the territory, may awaken the desire to peer behind the veil drawn by language and to reconnect with the direct, unfiltered experience of the whole.

Larry Wall's “State of the Onion” talks on the Perl programming language abound with humorous, perceptive observations on the nature of language. Here is an excerpt from one of his talks²³:

I'm not here to talk about postmodernism. I tried to do that last spring²⁴, and afterwards I was thoroughly deconstructed by the deconstructionists for attempting to deconstruct deconstructionism. At least, that's the construction I put on their construction of it. [...]

23 <http://www.wall.org/~larry/onion3/talk.html>

24 <http://www.wall.org/~larry/pm.html>

Actually, as a linguist, I don't believe in etymological meanings. The meanings of words depend on many contexts, but all of the real contexts are in the present language, and true etymology is only in the past. On the other hand, part of the current context is what you *think* the etymology of a word is. That's why people like me keep trotting out etymological arguments, even though they're relatively meaningless, not to mention wrong half the time. [emphasis in the original]

The second paragraph reminds us that the past is history – a story that is constantly open to revision and reinterpretation in the present.

Words can betray us. Words can redeem us. Above all, words can teach us that they are only servants of truth, not its master. They cannot detain the truth in exclusive custody. When we understand and accept the limits of language, we can deepen our own service to truth. Through our service, we gain greater freedom of speech and freedom *from* speech.

6 - Virtualization and Realization

With technology, we can make the essence of something, somewhere available to anything, anywhere. When we invent the wheel, we can roll objects of any shape. When we invent the match, we can bring fire to any cold, dark place. When we invent the battery, we can take electric power to the ends of the earth and far beyond. What we can virtualize, we can realize.

Both meanings of *realize* – to manifest, as well as to understand – come into play here. What we manifest (make real to our senses), we can better understand (make real to our thoughts); what we understand, we can manifest more effectively. Two common examples are drawing a block diagram to help us *see* our thoughts better, and rehearsing a talk to help us *hear* our thoughts better.

Virtualization has helped me arrive at many realizations. For example, take the technologies that virtualize communication – like email, discussion forums, instant messaging, telephony, and video conferencing. My mental model of communication has been transformed as I have interacted virtually with people all over the world, many of whom I have never met in person.

Since these technologies can't capture all of the cues and context of in-person conversation, they introduce ambiguity into the process. By paying attention to my reactions to this ambiguity, I've gotten better at managing my expectations. For example, if I ask a question during an instant messaging session and don't get a response for an extended period of time, I may feel anxious. It can be ambiguous whether the person is thinking about how to respond, whether their attention has shifted elsewhere, whether they are reluctant to respond, whether they think they don't need to respond, or whether something entirely different is the case. If I can contain the sense of anxiety, then I won't be in a rush to collapse the superposition of possible explanations. I can take the time to clarify why the question is important to me, independent of why I haven't gotten a response. Upon reflection, if the topic isn't that important, I can drop it entirely, or wait until the next time I happen to talk to the person. If it is important, I can weigh the amount and type of followup effort I want to exert against the risk of overextending myself, and act accordingly. If I still don't get a

response, I can let it go and move forward with other options. If I do get a response, but have ongoing concerns around responsiveness, I can bring up those concerns without the previous anxiety hanging over the discussion.

This experience in managing ambiguity carries over to in-person interactions, where the challenge is often the opposite. With plenty of contextual cues, it is all too easy for me to jump to conclusions. For example, I might interpret someone nodding their head as an indication of agreement – which may or may not be the case. Instead of forcing an interpretation, I can practice tolerance for the superposition of possible explanations, which allows it to collapse more naturally and accurately – or perhaps not at all, if it's not necessary. Maybe the person doesn't agree with me philosophically, but is willing to collaborate on a specific task. Or maybe they agree with me in theory, but not in practice. Or something else. By not overfilling in the blanks, I can free up space in the conversation, which makes nuances like these more evident.

Online discussion forums have powerfully reminded me about the constructed nature of identity. There's a well-known cartoon from 1993 with a computer-savvy dog advising another that “On the Internet, nobody knows you're a dog.”²⁵ With online discussion forums, the

25 http://en.wikipedia.org/wiki/On_the_Internet,_nobody_knows_you%27re_a_dog

uncertainty about what exactly *is* on the other side, highlighted by the use of handles, avatars and other constructions, gives rise to a superposition of possibilities. It could be one person. It could be multiple people posting to one account. It could be one person posting to multiple accounts. It could be partially or even entirely computer-generated. And so on. Reminding myself of this superposition helps shift my attention to what I can learn from the discussion and how I can contribute to the discussion, irrespective of what may be on the other side.

In person, there are plenty of identity constructs that mediate interaction. Roles are one such example, as we've already seen in previous chapters. Accepting superpositions of possible identities online helps me see people in person as not being limited to the role that they are currently playing. This is not to diminish the value of roles in clarifying and even constraining responsibilities, but to simultaneously acknowledge the unbounded set of capabilities that each person brings to their bounded roles. Along these lines, a leadership skill that I deeply respect is the ability to see potential in people that they may only be dimly aware of themselves. When you can do this, you bring someone's future to the present. When you can do this from a state of abundance, without attachment to your expectations for that person, you bring your own future to the present. You can transcend constructs of identity even

as you continue to be who you are and allow others to be as they are.

The ultimate virtualization project is the human brain, which is being taken on by a multidisciplinary array of scientists and engineers. I see this effort as being complementary to other lines of inquiry into the fundamental question “Who am I?” Whatever we learn in our attempts to virtualize the virtualizer can help us in realizing the realizer.

There is an ancient Sanskrit instruction, “neti, neti” which translates to “not this, not this” or “neither this, nor that”²⁶. It tells us to negate each of our concepts, thoughts, emotions, sensations – every object for which we have unwittingly constructed a separate subject within ourselves. It tells us that what remains – unfiltered, unflavored, unscented, uncolored, unattached, unqualified consciousness itself – is who we really are. As you might expect, this is not an easy instruction to follow. One reason why I find neuroscience research compelling is that it provides great fodder for this kind of practice. Neuroscience helps me unearth deeply entrenched concepts about the mind (such as the perceptual examples from Chapter 2). This gives me the opportunity to say “not this”, uncheck inner layers, and see who I am without these concepts. The practice is sometimes exhilarating, sometimes gut-wrenching, but always illuminating.

26 http://en.wikipedia.org/wiki/Neti_neti

In this book, we have explored a number of ways in which self-awareness expands our leadership capability. Here is a recap with some questions to reflect on:

Start with your talent. What are you really good at, that you really enjoy doing?

Tap into its abundant source. What are the gifts that you can keep giving, without losing anything?

Refine, shift, and let go of your mental models. How do you find the right answer? How do you integrate or make tradeoffs between multiple answers? How do you tolerate not having an answer?

Understand your sense of scarcity. How do money, privilege, status, and other scarcities affect your actions? How and where does abundance alter your experience of scarcity?

Recognize projections. What assumptions are you making about the people you intensely dislike and the people you greatly admire? What qualities do they have that you do not acknowledge within yourself?

Observe how you set and form expectations in communication. When do you use jargon, and when do you use simpler language? How do you hear feedback? How do you clarify feelings and interpretations? How do you shine your flashlight of influence?

Identify polarities. When you come across contrasting perspectives, how do you identify the polarity that contains them both? How do you wield the plasma globe? When do you let it go?

Virtualize and realize. What superpositions of possibilities are revealed when you lift something up from its moorings? What does that tell you about its essence?

I'd like to close with my favorite Star Trek quote. In the final episode of *Star Trek: The Next Generation*, written by Ron Moore and Brannon Braga, Captain Picard solves an extravagant time-travel puzzle imposed by the omnipotent being Q. This is part of the final exchange between Q and Picard:

Q: We wanted to see if you had the ability to expand your mind and your horizons. And for one brief moment, you did.

Picard: When I realized the paradox.

Q: Exactly. For that one fraction of a second, you were open to options you had never considered. *That* is the exploration that awaits you. Not mapping stars and studying nebulae, but charting the unknown possibilities of existence.

Every polarity contains a paradox. Realizing the paradox grants you a glimpse of the reality that transcends opposites.

The more you chart the possibilities of existence, the more you can see how every path begins in yourself, runs through your self, and leads to your Self.

Q's parting words to Picard are "see you, out there". See you, out there? See me, in here? The ultimate seer is one and the same.

Bibliography

- Chopra, Deepak. *The Soul of Leadership: Unlocking Your Potential for Greatness*. New York: Harmony Books, 2010. Quote on page 28 is from page 68.
- Cook-Greuter, Susanne R. “Comprehensive Language Awareness: A Definition of the Phenomenon and a Review of Its Treatment in the Postformal Adult Development Literature”, 1995. Quote on page 78 is from pages 14-15.
- Csikszentmihalyi, Mihaly. *Flow: The Psychology of Optimal Experience*. New York: Harper & Row, 1990.
- DiBona, Chris, and Sam Ockman. *Open Sources: Voices from the Open Source Revolution*. O'Reilly, 2008.
- Frith, Christopher D. *Making up the Mind: How the Brain Creates Our Mental World*. Malden, MA: Blackwell Pub., 2007.
- Johnson, Barry. *Polarity Management: Identifying and Managing Unsolvable Problems*. Amherst, MA: HRD Press, 1992.

Jung, C. G. *Psychological Types*. Princeton, NJ: Princeton University Press, 1971.

Jung, C. G., and Sonu Shamdasani. *The Psychology of Kundalini Yoga: Notes of the Seminar Given in 1932 by C.G. Jung*. Princeton, NJ: Princeton University Press, 1996. Quote on page 15 is from pages 49-50.

Keirsey, David. *Please Understand Me II: Temperament, Character, Intelligence*. Del Mar, CA: Prometheus Nemesis, 1998. Quote on page 1 is from page 184.

Kuhn, Gustav, Lawrence D Rosenblum, R Beau Lotto, Janine Spencer, Philippa Stanton, Noam Sagiv, Charles Spence, et al. *Is Seeing Believing?* UK: BBC 2, 2010.

Nardi, Dario. *Neuroscience of Personality: Brain Savvy Insights for All Types of People*. Los Angeles: Radiance House, 2011.

Oestreich, Dan. “Following SELF: How Leaders Can Stop Defending and Start Living Their Own Higher Cause”, 2010. Quote on page 60 is from page 14.

Purves, Dale, and R. Beau Lotto. *Why We See What We Do Redux: A Wholly Empirical Theory of Vision*. Sunderland, MA: Sinauer Associates, 2011.

Rath, Tom. *StrengthsFinder 2.0*. New York: Gallup Press, 2007. Quote on page 54 is from pages 69-70.

- Rock, David. *Your Brain at Work: Strategies for Overcoming Distraction, Regaining Focus, and Working Smarter All Day Long*. New York: Harper Business, 2009. Quote on page 14 is from page 127; Quote on page 17 is from page 133; Quote on page 70 is from page 113.
- Rosenberg, Marshall B. *Nonviolent Communication: A Language of Life*. Encinitas, CA: PuddleDancer Press, 2003. Quote on page 68 is from pages 42-43.
- Salacuse, Jeswald W. *Leading Leaders: How to Manage Smart, Talented, Rich, and Powerful People*. New York: AMACOM, 2006. Quote on page 56 is from page 155.
- Senge, Peter M. *The Dance of Change: The Challenges of Sustaining Momentum in Learning Organizations*. New York: Currency/Doubleday, 1999. Quote on page 67 is from page 333.
- Tan, Chade-Meng. *Search Inside Yourself: The Unexpected Path to Achieving Success, Happiness (and World Peace)*. New York: HarperOne, 2012. Quote on page 27 is from page 231.
- Thomson, Lenore. *Personality Type: An Owner's Manual*. Boston: Shambhala, 1998.
- Torvalds, Linus, and David Diamond. *Just for Fun: The Story of an Accidental Revolutionary*. New York: HarperBusiness, 2001. Quote on page 9 is from page 76.

Warren, Jeff. *The Head Trip: Adventures on the Wheel of Consciousness*. Toronto: Random House Canada, 2007. Quote on page 23 is from page 337.

Weinberg, Gerald M. *Becoming a Technical Leader: An Organic Problem-Solving Approach*. New York: Dorset House, 1986.

Wilber, Ken. *No Boundary: Eastern and Western Approaches to Personal Growth*. Boulder, CO: Shambhala, 1981.

Wilber, Ken. *The Integral Vision: A Very Short Introduction to the Revolutionary Integral Approach to Life, God, the Universe, and Everything*. Boston: Shambhala, 2007.



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