Chapter One

If You Are Human, You Are Biased

> *Our conscious motivations, ideas, and beliefs are a blend of false information, biases, irrational passions, rationalizations, prejudices, in which morsels of truth swim around and give the reassurance albeit false, that the whole mixture is real and true. The thinking processes attempt to organize this whole cesspool of illusions according to the laws of plausibility. This level of consciousness is supposed to reflect reality; it is the map we use for organizing our life.* —Erich Fromm, German psychologist and psychoanalyst

Interviews can be challenging to almost anybody and in almost any circumstance, but there are few circumstances more confronting than a medical school student admissions interview. Imagine. You have worked hard your whole life to be a good student, and even an elite student. Medical school admissions are among the most competitive processes people will ever face. Virtually every other candidate you are competing against has an outstanding résumé with exceptional grades. The interview process weighs heavy on people's decisions because it often separates the merely good students from those who have the intelligence *and* the presence to be a good doctor.

The challenge, of course, is that interviews are subject to many unconscious biases based on any number of extraneous factors relating to the candidate being interviewed, the interviewer, and the environment in which the interview is being conducted. Two physicians at the University of Toronto, Donald Redelmeier and Simon Baxter, decided to explore one of these more extraneous factors.[1] They were curious about the observation as to how it seemed that prospective students interviewed on rainy days tended to get lower ratings in their interviews than people interviewed on sunny days.

Now I'm sure anybody reading this will agree that determining whether to accept students into medical school, or any other academic program for that matter, based on what the weather is on the particular day they are

scheduled for interviews, is the height of folly. How absurd would it be to base a decision on whether to admit a student, based on something so obviously random and out of the student's control?

Absurd, perhaps. Nonetheless, it happens.

Redelmeier and Baxter collected the results of medical school interviews that were conducted at the University of Toronto between 2004 and 2009. They compiled all of the scores from the interviews, almost all of which were conducted in the early spring. The scores ranged from 0 to 20.3. A score of 10 or less was considered "unsuitable," 12 "marginal," 14 "fair," 16 "good," 18 "excellent," and 20 was considered "outstanding." They then researched the Canadian National Climate Archive to track the weather on the days that the interviews were conducted.

Over the course of that time, Redelmeier and Baxter identified 2,926 candidates who were interviewed. The demographics of the interviewees were found to be unrelated to the results. However, those interviewed on rainy days were rated lower than those who were screened on sunny days. In fact, when they compared the results against the students' scores on their primary testing mechanism, the Medical College Admission Tests (MCATs), they found that the difference in interview scores was equivalent to the students reducing their MCAT scores by 10 percent! Given the intense competition between high-performing applicants, this is enough to determine whether or not, or perhaps, "weather or not," a student may get accepted, or even become a doctor at all.

Is it likely that interviewers responsible for choosing students for medical school were likely to have said to themselves, "It's raining out so I think I'll give this student a lower score," or is it far more likely that they were unconscious to the impact that the weather made upon their mood? And the manner in which their mood influenced their perceptions of students? Most of us can certainly imagine that a bad weather day, dealing with traffic, and so forth, could impact our mood, and that our mood could impact an interview, but do we consider those influences when we are doing the evaluation of the person?

It is not a far stretch to consider that similar environmental or other concerns might affect us when we are conducting hiring interviews in business or making other business decisions, grading student papers, or determining hundreds of other choices, including those that are seemingly insignificant as well as very significant.

Unconscious influences dominate our everyday life. What we react to, are influenced by, see or don't see, are all determined by reactions that happen deep within our psyche. Reactions which are largely unknown to us.

In a way, we all know this to be true. Most people have, at some point in their lives asked themselves what made them do or not do a certain thing. We find ourselves curious as to why we don't always act in a way that is consis-

tent with what we would like to do. Why do we eat too much, or lose patience with our loved ones, even as we had consciously appealed to our "higher" selves to do otherwise? We often have a hard time motivating ourselves to do things, even when we have determined that they are important. The comedian Flip Wilson built a whole career in the 1960s and 70s upon the punch line of "the devil made me do it!" a line of thinking most of us can relate to in those moments when it seems like someone or something else is dictating our actions or choices.

We are constantly making decisions that are influenced by unconscious biases. In fact, even when our biases seem conscious, they may be influenced by a pattern of unconscious assumptions that we have absorbed throughout our lives. It is like a polluted river. We may do everything we can to clean the river as it flows downstream, without having any consciousness about the pollutants that are being dumped in it by a factory or sewage plant upstream.

Consider the biases that people clearly have in our society today toward LGBTQ people. We have gone through a generation in which we have seen breakthroughs in marriage equality: the end of "Don't Ask, Don't Tell" in the military; a dramatic shift in the presence of LGBTQ actors and actresses and themed programs in the arts; a lesbian elected mayor of Houston, Texas, and even a gay man running for president. And yet, bias against LGBTQ people continues to proliferate.

A May 13, 2013, Gallup poll found that 45 percent of the American public believed that same-sex marriages should not be valid.[2] Even after two July 2013 rulings by a conservative U.S. Supreme Court cleared the way for same-sex marriage in California and established, by declaring unconstitutional the Defense of Marriage Act, that same-sex couples were eligible for federal benefits under the law, overt discrimination and resistance to the rights of LGBTQ people still persists. Even in the entertainment industry, where most people see a great deal of open expression of sexual orientation, a Screen Actors Guild-American Federation of Television and Radio Artists study found that "the survey, based on responses from over 5,600 union members, showed nearly half of lesbian and gay respondents and 27 percent of bisexual respondents 'strongly agreed' that producers and studio executives believe that lesbian and gay performers are less marketable."[3]

However, are even these overt biases truly "conscious"? While there is no doubt many people are aware of the fact that they are uncomfortable or downright hostile to LGBTQ people, the cause for those animosities might still be unconscious. From where do these biases come? Most of us were probably quite young when we started to hear that "boys should play with these toys, but not those." How old were most of us when we first saw modeling among the people around us about what was "normal" and what was "sick," "sinful," "gross," or other such descriptors? When we started

going to our places of worship and hearing about biblical readings? When we heard people telling jokes about gays or lesbians?

As Brett Pelham, the associate executive director for graduate and postgraduate education at the American Psychological Association, has said, "virtually all bias is unconscious bias. We have learned to trust women to be nurturing and men to be powerful, for example, in much the same way that Pavlov's puppies trusted ringing bells to predict the arrival of meat powder. . . . Being biased is how we get through life without evaluating everything afresh every time we experience it."

Even when our biases are conscious downstream, their upstream causes may be very much hidden in our unconscious. For a long time, it has been our general belief that stereotypes and biases were the purview of bigoted people. However, an explosion of studies about the unconscious over the past two decades is revealing a truth that is very uncomfortable. All people use biases and stereotypes, all of the time. And all of us do so without realizing that we are doing it.

In any case, what is bias? Why do we have it?

Bias has been defined as "a particular tendency or inclination, especially one that prevents unprejudiced consideration of a question."[4]

While we have generally thought about bias in relationship to people and prejudice, we have biases in all aspects of our lives. We are biased toward particular kinds of television shows or movies, certain foods or kinds of foods, as well as certain kinds of books or stories. Virtually any preference we have is likely to have some bias associated with us. And they are, for the most part, unconscious.

This doesn't mean that every time we make a wrong determination about somebody that it is based on bias. In that sense, it is important to distinguish between what we might call "logical fallacies" and biases. People do sometimes follow faulty logic that leads to an error in reasoning. When we take a position about something based on that faulty logic, we call that a fallacy. Biases, on the other hand, result from times when we have some kind of "glitch" in our thinking. These may result from social conditioning, belief systems that we have been taught or exposed to, particular incidents that we remember, or any number of other assumed "truths" that we have picked up along the way.

The question of bias has entered the political arena, as well as the question of whether biases can often be associated with one political philosophy or another. However, the degree to which we see ourselves as "progressive" or "liberal" on these issues, or the degree to which we may have been the victim of other people's biases has little or no impact on the unconscious biases we may possess. Ironically, on an unconscious level, somebody (even a person of color) who sees himself as liberal on racial issues, for example, may have unconscious biases that are not much different from those pos-

sessed by an overt racist. Or somebody who sees herself as progressive on gender issues might still have hidden gender-based biases.

For instance, consider the attitudes that people have toward men and women regarding who is more suited to a career and who is more suited to staying at home. When researchers at the University of Virginia asked men and women to respond on a conscious level as to how strongly they associated women with careers, the differences between men and women were quite pronounced. Women were almost twice as likely to see a connection between women and careers and men almost twice as likely to not see that connection. However, when tested to see what their unconscious attitudes are to the same question, the disparity almost disappeared. It turns out that on an unconscious level, the differential is less than 20 percent. On an unconscious level, we all have absorbed the same stereotypes and have similar internal value systems, often completely inconsistent with our conscious values!

How might this difference in perception show up on a day-to-day basis? Perhaps, in assumptions that leaders make about a woman's willingness to travel and be away from her family or take an overseas job assignment. Or in how willing a woman might be to ask for something that she needs, or a raise in pay. Or in how much credibility we give to claims of sexual harassment. Or in how much a man might listen to a woman's point of view. Or how comfortable men or women feel about women with children working on flextime arrangements, *even when it is stated company policy to allow such arrangements*! The dissonance between our conscious value systems and our unconscious drivers can cause confusion to both ourselves and other people who are observing us.

These are often subtle perceptions. Like the story about the father and son in the airplane crash, we don't consciously say, "I'm going to ignore the possibility that the doctor could be the mother or the other gay father!" Yet, those images or thoughts don't even occur to us as we contemplate the problem. Bias serves as a fundamental protective mechanism for human beings.

Psychologist Joseph LeDoux has referred to bias as an unconscious "danger detector" that determines the safety of a person or situation, before we even have a chance to cognitively consider it.[5] For example, in more primitive times, if we came across a group of people around the river drawing water, we had to decide instantly whether it was "them" or "us." The wrong choice might have led to our death. We learned, through evolution, that making those determinations quickly could save our lives. Unconscious bias comes from social stereotypes, attitudes, opinions, and stigma we form about certain groups of people outside of our own conscious awareness, and can be fed by snippets of information that we might get from biased media or social media or other sources, which are often taken out of context.

The same is true when we encounter other circumstances in life. We teach our children to have a "bias" about the danger in crossing streets. We want them to instinctively stop at the curb when they are chasing a ball or walking to school. We do the same when we are determining whether a stove is hot or cold. We cautiously touch it to test it. Our minds have been wired to protect us in this way.

The important part to realize is that we have these biases for a reason. Imagine if you didn't have any biases and you went out into the world. How would you know whether somebody approaching you was "friendly" or not? How would you determine how to relate to different circumstances? If somebody approached you with a knife in their hand, raised high in the air, would you look at them and say, "I wonder what that is and what you plan to do with it?" or would you immediately switch into "fight or flight" mode and defend yourself?

To manage and negotiate an extremely complex and busy world, we have developed the capacity to compartmentalize things and people we are exposed to on a regular basis. We put them in observable categories so we can quickly determine how they fit into our background of experience and then determine what we can expect from them in the future. Gender, race, sexual orientation, age, and so on, are all such categories. For instance, it makes it easier to know that somebody with gray hair is likely older, as opposed to not having any idea of the age of the person with whom we are dealing. It is not a big jump, then, for the mind to associate qualities and values to those categories, for example: good or bad; right or wrong; smart or stupid; safe or unsafe.

One of the most powerful ways we do this is by creating stereotypes. We begin to learn how to "read" different kinds of people. As we encounter them, we instantly compare them to other people we have encountered before. Were the others friendly, safe, and welcoming? If so, then we are likely to feel comfortable with these individuals. On the other hand, were the others hostile or unfriendly? Then the mind sends a different message: Be careful! Stereotypes provide a shortcut that helps us navigate through our world more quickly, more efficiently, and, our minds believe, more safely.

Of course, even when we haven't encountered a particular kind of person before, we may have the same judgments and assessments based on things that we have heard or learned about "people like that." As far back as 1906, William Graham Sumner, the first person to hold an academic chair in sociology at Yale University, identified the phenomenon of "in-group/out-group bias." Sumner wrote that "each group nourishes its own pride and vanity, boasts itself superior, exists in its own divinities, and looks with contempt on outsiders."[6] This phenomenon is magnified when the "in" group is the dominant or majority culture in a particular circumstance. Because the dominant cultural group in any environment usually creates the standard and accept-

able norms and behaviors for that group, people from nondominant groups often will be seen as "different," "abnormal," "less than," or even "sick" or "sinful." Business cultures, to cite one example, are generally male dominant. Most business leaders are overwhelmingly male. The cultures of companies have largely been around from a time when even more men were in leadership. This has created a male-dominated cultural model in most businesses. And yet most men don't look at their business cultures as wanting things to be done in "a man's way." They see it as wanting things to be done "the right way," without even realizing that, in their unconscious minds, the "right way" and "the man's way" are virtually synonymous.

If we were to look at this thinking objectively, we could see a certain logic to it. If you were creating a mind and evolving it over the course of millennia, would it make more sense for that mind to be more sensitive, in encountering new people and experiences, to things that are potentially pleasant or things that are potentially dangerous? The obvious answer is that the one that might kill me is more important to spot than the one that might give me a "nice surprise." When we do not know much about this person, or these people, they can become potentially dangerous to us. Until proven otherwise. We are programmed to notice that potential threat before we notice "friend." To notice potential "danger" before we notice potential "pleasure." It helps keep us alive.

This isn't limited to people. We stereotype all kinds of things to try to figure them out. We see something and our mind automatically sorts it, consciously or unconsciously saying, "that reminds me of . . ." as a way of identifying what we are dealing with at that moment. Pelham has studied this pattern of behavior, even as we relate to dogs.[7] If you show people pictures of a bulldog, a sheepdog, a poodle, and a pointer, and ask them which is "loyal," "prissy," "persistent," or "clumsy," you will get the same answers almost every time. Some of these stereotypes have even become part of our language (e.g., "he was as persistent as a bulldog!"). Of course we might say these are common characteristics in these breeds, but not every dog in any breed acts the same way, yet we still make the assumption. It is quicker and easier that way, and much more efficient for our brains. And it is mostly unconscious. While we have tended to look at the dynamics of unconscious bias most particularly concerning racial and gender identity, unconscious bias patterns exist in all areas of life and are influenced by factors that might surprise us. For example, it is no surprise that we make certain decisions based on our hand dominance. We may sit in a certain place because we are right-handed or left-handed and don't want to be constantly bumping up against the person next to us. All of that makes sense. But a study from the Max Planck Institute for Psycholinguistics in the Netherlands seems to show that our responses to hand dominance may influence us more than we think.

In the study, which was led by Daniel Casasanto, researchers found that not only do people tend to choose more toward their dominant hand (in other words, if you are right-handed, you are more likely to choose something on your right side than on your left), but that we also respond to others based on their use of one hand or another.[8] In addition, we may be able to read people's positive and negative attitudes based on the hands they inadvertently use.

"In laboratory tests, right- and left-handers associate positive ideas like honesty and intelligence with their dominant side of space and negative ideas with their non-dominant side," said Casasanto. "Right- and left-handers were found to associate positive ideas like *intelligence*, *attractiveness*, and *honesty* with their dominant side and negative ideas with their non-dominant side." The researchers also analyzed the speeches of politicians to determine whether or not this pattern played out. Studying the 2004 and 2008 American presidential elections, they tracked 3,012 spoken clauses and 1,747 gestures from the four presidential candidates, two of whom were right-handed (John Kerry and George Bush), and two of whom were left-handed (Barack Obama and John McCain). In both cases, the dominant hand was more associated with positive statements and the non-dominant more associated with negative ones. In other words, if the candidate was right-handed, they used their right hand to gesture when they made a positive statement, and vice versa.

Now imagine hiring somebody because they happen to sit in the chair on the right side of your desk versus the one on the left side of your desk. That would be kind of a crazy way to decide who to hire, wouldn't it? And, of course, in addition to being patently unfair to the person who happened to be on "your wrong side," it also is a terrible way to make a talent management decision. Your chances of getting the best person have been reduced to a dice roll.

For the most part we have largely thought about bias from the standpoint of those incidents where people have a negative bias against somebody, which then has a destructive impact on that person's chances to be successful (e.g., a woman who doesn't get hired for a job because somebody has a negative gender bias about women). However, it is much more complex than that.

These destructive uses of biases against a certain group (Q1 in figure 1.1) are the ones we have focused most of our attention. We have, in fact, created laws to be sure that people are not discriminated against in this way. But they are not the only ways that bias plays out in our daily lives.

As odd as it may seem, there also are constructive uses of biases against certain groups (Q2 in figure 1.1). They can benefit us in many ways. We determine that people who have aggressive personality types might not be the best fit for a customer service job. Or that people who don't have certain technology skills and background won't be a good match for a job that

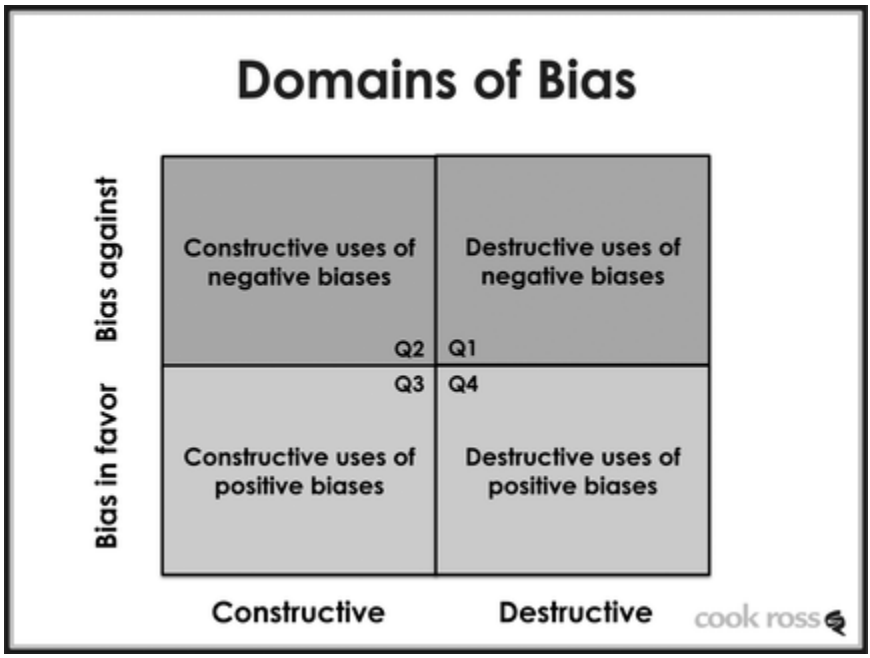

Figure 1.1.

requires computer proficiency. If we didn't have these filters, hiring would be almost oppressive, because we would start with a huge number of résumés and have to look at all of them more carefully than time might allow.

I know that many people would say those are "qualifications," and that looking for qualifications is not the same as having biases. In fact, qualifications are simply biases that we have agreed upon and codified. There are hundreds of examples of people who have performed in extraordinary ways who do not have the "normal" qualifications for their roles. If qualifications were the only measure of success, than college dropouts such as Steve Jobs, Bill Gates, and Mark Zuckerberg would still be unknown. However, understandably, we have determined that while there are occasional creative eccentrics like those three, it just doesn't make good sense to look at 150 résumés and not take education into account. So we use biases against the lack of those characteristics to "filter out" certain people who we might have determined are not a good fit for the job. We do the same thing when we are in dangerous situations. For instance, we might be especially attentive to locking our car in a location with a higher crime rate.

All the same, it is important to note that we should be thoughtful and very conscious about how much we take these negative biases for granted. There

are always exceptions, even to the most dependable of patterns (Jobs, Gates, and Zuckerberg, for example!). So, while using negative biases can be helpful, we should never assume they are absolute. The annals of sport are filled with examples of players who were "too small to be successful" by "normal" standards. Yet they were able to succeed far beyond expectations. The same can be said for constructive uses of biases for a particular kind of person (Q3 in figure 1.1). We often look for certain circumstances or people because we have a history with them that tells us we can be more assured that they will meet our needs. People who have certain college degrees, or went to a certain college; certain personality types that fit a particular job or situation. Language skills, or any number of other "qualifications" that we have determined might make the person a better fit for the job. Once again, having these filters can be very helpful, but we have to be careful that we don't develop blind spots that stop us from seeing exceptional people or circumstances that are "exceptions to the rule."

Finally, we also have to be mindful of the potentially destructive effects of these "positive" biases (Q4 in figure 1.1). This can show up in several different ways. For instance, we may place unrealistic expectations on somebody from a particular group because of a positive bias we have about "that sort of people." I remember a Chinese student once telling me, "I'm so tired of people expecting me to be good at math and sciences because I'm Asian. It's just not my thing. I like the social sciences more. But everybody, from my parents to my teachers seems to think I have to 'try harder' when my math grades aren't straight As, even though I do really well in the courses that matter to me."

Another way the potentially destructive effects of biases favoring a group or person can show up is when one person suffers because we have a positive bias toward somebody else. Imagine you are interviewing two candidates and something about one of them reminds you of your sister. You may not even realize it. It just occurs to you that "there is something about this person that I like." As a result, you pay more attention to them, listen more carefully, and are even warmer toward them in the interview. The interview goes great and you want to hire the person. However, what may be lost in the "glow" of that positive bias is that the other candidate never had a fair shot because of the bias that you had in favor of the first person.

It would be great if we were totally conscious about every decision we made and never used bias. However, such a thought is not only unrealistic but impossible. Our processing would slow to a near halt. The key is to become more and more conscious about when our biases are serving our greater objectives.

We develop biases toward people and behaviors all throughout our lives. We learn that to relate in a particular way is "better" than another way, or that we prefer people who act or look a particular way. We can sometimes

even develop patterns of behavior that work well enough for us in one domain that we unconscious and habitually use them in places where they do not work nearly as well.

As an example, on May 5, 2013, the *Washington Post* reported that:

> After they leave military service, veterans of the two wars (Iraq and Afghanistan) have a 75 percent higher rate of fatal motor vehicle accidents than do civilians. Troops still in uniform have a higher risk of crashing their cars in the months immediately after returning from deployment than in the months immediately before. People who have had multiple tours in combat zones are at highest risk for traffic accidents.

This is obviously of great concern. The story went on to read:

> The most common explanation is that troops bring back driving habits that were lifesaving in war zones but are dangerous on America's roads. They include racing through intersections, straddling lanes, swerving on bridges and, for some, not wearing seat belts because they hinder a rapid escape.[9]

This is one of the great challenges we have when our biases are unconscious. Without realizing it, we can apply the same behavior, or evaluation criteria that worked in one domain, and find that they are not at all helpful, or even tragic in another.

IS THERE ONLY ONE KIND OF BIAS?

Is bias basically something we have or don't have, or are there different kinds of biases? Amy Cuddy, at Harvard Business School; Susan Fiske at Princeton University; and Peter Glick, at Lawrence University in Appleton, Wisconsin, studied these distinctions and created a valuable map for looking at the way we process bias.[10]

Cuddy, Fiske, and Glick were able to identify two distinct forms of bias. The first is bias based on warmth. In their terms, "our warmth scales have included good-natured, trustworthy, tolerant, friendly, and sincere."[11]

In short, do you consider the personal likable? Is it somebody you feel comfortable being around? On the other hand, the second form is bias based on competence, which they classify as "capable, skillful, intelligent, and confident."[12] Looking at bias in this way can be very helpful. We may have inherent biases about groups of people, biases which are very strong, but are very different between the different groups. In extensive research, Cuddy, Fiske, and Glick found there were some groups people tended to respond to with a low degree of both warmth and competence (e.g., welfare recipients, homeless people, poor people, and Arabs). Others we may feel a high degree of warmth toward, but not see as very competent (e.g., the elderly and people

with physical or mental disabilities). Still others we may see as very competent, but not feel very much warmth toward at all (e.g., Asians, rich people, and Jews). And finally, there are those for whom we feel a high level of warmth, and a high level of competence (e.g., housewives, Christians, middle class Americans).[13] How we feel about each of these groups might yield very different behaviors.

Warmth seems to be the primary dimension in terms of how we respond to people. We are more likely to first emotionally respond to whether or not we like someone, and only secondarily respond to whether or not we believe they are competent. Cuddy and her study associates suggest this results in more active facilitation. They wrote that "perceived warmth predicts active behaviors: groups judged as warm elicit active facilitation (i.e., help), whereas those judged as lacking warmth elicit active harm (i.e., attack)."[14]

They also reported that "the competence dimension, being secondary (because it assesses others' capability to carry out intentions), predicts passive behaviors: groups judged as competent elicit passive facilitation (i.e., obligatory association, convenient cooperation), whereas those judged as lacking competence elicit passive harm (i.e., neglect, ignoring)."[15]

So the way the bias plays out may be very different, depending upon which dimension elicits a reaction from us. Consider whether you are dealing with somebody who is elderly, or has a physical disability, both types that tested in the high warmth, low competence dimension of the study. You may feel very warmly and loving toward them, but you may tend to treat them as being less competent than they are in reality.

Deb Dagit, Diversity Consultant and former Chief Diversity Officer

As a four-foot-tall woman who either walks with a cane or uses a wheelchair, it is not unusual for people to express their surprise when they meet me.

I often find people intending to make sincere compliments that can be quite off-putting, like "When I first met you I was surprised to see that you were handicapped, but now I don't even think about you being a person with special needs." I would much prefer "person with a disability," which doesn't identify me *as* my disability. Others say things such as, "You must work for a really special company if they would hire someone like you in such a visible role." Some people continue to ask when I will be getting well enough to walk again, rather than be in my wheelchair.

Most people with disabilities consider their disability to be an important and valued aspect of their identity that does not need to be overlooked or forgotten in order to make us more acceptable and competent.

I remember leading a workshop for a client many years ago in St. Louis. We were conducting a three-day training in a hotel and had arranged to have several wheelchairs available for the participants to use at various times as they negotiated the hotel. Obviously we were not pretending that this was the same as having a permanent disability, but we found that it could make a great impact upon people to consciously see what it was like to negotiate both the physical environment and being with people. One of the participants took the wheelchair overnight, and called for room service for breakfast in the morning. The participant reported that when the room service waiter came with the food in the morning, he seemed visibly surprised to find somebody with a wheelchair in a room that was not handicap accessible. He proceeded to place the tray on the table, remove the chrome food cover, and started to cut the participant's food! The participant was stunned and asked the waiter what he was doing. The waiter said he was only trying to be of help. This example shows how we can feel very warmly toward people and still demonstrate behavior that is patronizing and demonstrates a judgment of less competence.

On the other hand, you may have enormous respect for someone's competence, thinking them extremely capable, and yet just not like them very much. This may result in a completely different kind of bias. You may not choose them to be on a team you are putting together to work on a project, or not invite them to lunches or other business gatherings, and in doing so affect their ability to be successful.

HOW RATIONAL ARE WE?

These findings also are important to consider as we think about our true orientation toward people versus the orientation that, especially in business environments, we sometimes believe we take. We like to think we are rational, and that our emotions are secondary. This is not unusual in Western cultures. We have a long history of valuing the rational over the emotional. But really, how rational are we?

In the age of bifurcated media and social media streams that let us select who and what we are exposed to, it is obvious that politic differences create different "realities" in our experience of what is going on in the world around us. But Yale University law professor Daniel Kahan, along with psychologists Ellen Peters from Ohio State University, Erica Dawson from Cornell

University, and Paul Slovic from the University of Oregon, decided to explore whether, for example, our politics might affect our ability to do something we consider very "rational" indeed: math problems.[16] Kahan gave more than one thousand participants in his study a tricky math problem to compute. In the first version, the question he posed involved the results of a clinical study of skin cream. Fifty-nine percent of the participants got the problem wrong.

Then he decided to add a more emotional component. He took the same numbers and framed them as a question about the effectiveness of laws against concealed handguns, a highly political and emotional issue. He and his colleagues found that "conservative Republicans were much less likely to correctly interpret data suggesting that a gun ban decreased crime in a city; for liberal Democrats, the exact opposite was true. The people who were normally best at mathematical reasoning, moreover, *were the most susceptible to getting the politically charged question wrong*."[17]

We are trained to think we can talk people out of their points of view if we give them the right "evidence." But what this study demonstrated was that political biases actually distort our ability to reason logically. In the battle between emotion and rationality, emotion usually wins!

In a similar study, Brendan Nyhan, assistant professor of government at Dartmouth College, found that when voters are misinformed, factual information only makes them become more rigid in their point of view! Nyhan found these instances of facts making people more rigid:

- People who thought weapons of mass destruction were found in Iraq believed that misinformation even more strongly when they were shown a news story correcting that belief.
- People who thought George W. Bush banned all stem cell research kept thinking he did that even after they were shown an article saying that only some federally funded stem cell work was stopped.
- People who said the economy was the most important issue to them, and who disapproved of Barack Obama's economic record, were shown a graph of nonfarm employment over the prior year. It included a rising line that indicated about one million jobs were added. They were asked whether the number of people with jobs had gone up, down, or stayed about the same. Many, looking straight at the graph, said down.[18]

All of this might suggest that the age-old adage is true: "Never let the facts get in the way of a good story!"

A source of much of this thinking goes back almost twenty-five centuries to Plato. In one of his dialogues, the Phaedrus, Plato explained the way humans experienced the world through an allegory of a chariot. Describing

love as "divine madness," Plato describes the charioteer driving a chariot pulled by two winged horses:

> First the charioteer of the human soul drives a pair, and secondly one of the horses is noble and of noble breed, but the other quite the opposite in breed and character. Therefore, in our case the driving is necessarily difficult and troublesome.

In this allegory, the charioteer represents our rational intellect, the part of our soul that must keep the horses, our passionate nature and our righteousness (extreme positive emotions), and our more lustful negative emotions in check. It is only when the charioteer is "in charge" that we can move forward toward enlightenment.

For 2,500 years, we have worshipped at the altar of the rational. Think about how embedded it is in our language. "Are you sure you're being rational about that? Aren't you being too emotional?"

It turns out that we are far less "rational" then we are "rationalizing," and the lack of awareness of that may get in the way of our ability to think as clearly as we might. The renowned neuroscientist, Antonio Damasio, discussed this in his book *Descartes' Error: Emotion, Reason and the Human Brain.*

In the book, Damasio described his encounter with a patient he called "Elliott." Elliott had a brain tumor removed that had caused ventromedial frontal lobe damage. The ventromedial prefrontal cortex is the part of the prefrontal cortex that processes risk and fear. It plays a major role in managing our emotional responses and decision making. Elliott, who had been a successful businessman and family man, was struggling. Despite the fact that he still registered very high intelligence (his IQ was in the ninety-seventh percentile), everything around him, his businesses, and his marriage, were failing. One would think that somebody without the pull of emotions would make very "rational" decisions. However, Elliott seemed to lack any motivation at all. Damasio wrote that "he was always controlled. Nowhere was there a sense of his own suffering, even though he was the protagonist. I never saw a tinge of emotion in my many hours of conversation with him: no sadness, no impatience, no frustration."

Damasio found that without access to his emotions, Elliott was incapable of making even the simplest of decisions. Each small decision seemed to take him forever. He took long periods of time to choose what to write with, whether or not to make an appointment, or decide where to eat lunch. He concluded that "Elliott emerged as a man with a normal intellect who was unable to decide properly, especially when the decision involved personal or social matters."

Damasio described Elliott as an "uninvolved spectator" in his own life. Once the emotional part of his brain had been disabled, he was virtually unable to make any decisions.[19]

We live with this inherent dichotomy between the rational decisions we think we are supposed to be making, and the real impact of our unconscious processing and our emotional reactions, which can remain under the surface, unobserved and, often, discounted. We want to think of ourselves as good people, but we still have these emotional impulses. This can create an enormous dissonance between what we think we see and evaluate and what's actually going on. In Freudian terms, the id, our instinctive impulses, react and feel one way, but our superego, our inner controller and manager, tries to keep them under control by burying them deep in our unconscious. We know, for example, that we are "not supposed to be biased," and so we convince ourselves that we are not, even sometimes in the face of evidence to the contrary.

In fact, one of the many remarkable contradictions we see in this research is that intelligent people with high self-esteem may be the most likely to develop blind spots about their biases. Philip Dodgson and Joanne Wood, both psychologists at the University of Waterloo, found that people with high self-esteem respond less to weaknesses than people with low self-esteem. As a result they may be less likely to internalize negative thoughts or ideas about themselves. Not only that, but intelligent people often can rationalize their own bias as justified. The more sophisticated we are in coming up with explanations for our opinions, the more we see them as truth![20]

In addition, the cultures we grow up in give us a particular set of standards and rules to live by, which inherently are defined by "not like them!" guidelines. Our standards become the foundation of our inner "book of rules," and others appear to us as simply wrong. Because our identities are formed around this ego identification, we see ourselves as "right" and the "other" as "wrong" or "flawed" in some way.

There is nothing wrong with this process. It is inherent in every human being, but it creates real mischief for us in understanding how we are responding to others because we are largely unaware of it. Let's now look at how the brain seems to make all of this happen.