Thomas Gilovich How We Know What Isn't So: The Fallibility of Human Reason

1991
Free Press

5

Seeing What We Want to See

Motivational Determinants of Belief

Man prefers to believe what he prefers to be true.

Francis Bacon

If you are like me, you have spent more time than you care to admit wondering who you would want to be if you could be somebody else. Sometimes I play this game alone, simply by trying to think of someone I might rather be. Although I am aware that other people might take one look at my life and quickly generate a host of promising candidates, I have always been struck by how difficult it is to think of any acceptable possibilities. Somehow I can always think of reasons why I would rather be myself than, say, John Updike, Warren Beatty, or Ted Koppel.

In another version of this game, I ask other people whether they would trade places with a particular person. I generally try to pick a person who is right on the borderline—one about whom the decision to trade lives should be truly difficult. Thus, I might start with the likes of Updike, Beatty, or Koppel, expecting to find a readiness to exchange lives, and then move down the list of candidates to the more difficult and informative choices. Again, I am intrigued by how quickly one reaches the other person's point of hesitation. The Updikes, Beattys, and Koppels do not elicit the expected swift willingness to trade; instead they bring forth the kind of hesitation indicative of truly tough decisions.

Why are people so reluctant to switch lives with others? To

some extent, the answer lies in the inherent ambiguity of the game. What does it mean to trade places with another person? Do you become that other person, or do you remain yourself and simply occupy the other person's station in life? If it's the latter, can you truly remain yourself while living under such radically different circumstances? Questions like these raise the worry that changing places with someone else ultimately entails the death of oneself, a fate we all want to avoid.

The difficulty of finding someone with whom we are willing to exchange lives can also be understood as a particular instance of a phenomenon known to economists and decision theorists as the "reluctance to trade" or the "endowment effect."[1] Ownership creates an inertia that prevents people from completing many seemingly-beneficial economic transactions. What one side is willing to give up tends to loom larger to that side than to the side receiving it, with the result that agreements with which both sides would be happy are difficult to achieve. In the present context, what one gains in money, fame, and respect by becoming an Updike, Beatty, or Koppel has surprisingly little weight compared to whatever idiosyncratic losses are involved in giving up one's former existence.

Finally, and perhaps most interestingly, the reluctance to trade places with someone else is also partly due to the tendency to overestimate our own value in the "market" of compelling lives. We are capable of believing the most flattering things about ourselves, and many scholars have argued that we do so for no other reason than that we want them to be true. If we think we are brighter, healthier, and more esteemed than is actually the case, it is not so surprising that we are reluctant to trade places with people of undeniable fame, wealth, and achievement.

This chapter deals with this tendency for people to believe, within limits, what they want to believe. As the discussion will make clear, much of the empirical research and theoretical analysis on this topic has dealt with how our wishes influence our beliefs in one particular domain—our beliefs about ourselves. There is ample evidence indicating that we tend to make optimistic assessments of our own abilities, traits, and prospects for future success. This chapter will critically evaluate the work in this and other areas, and discuss how this "wish to believe" can lead to the formation of erroneous beliefs.

Empirical Support for the Wish to Believe. The idea that we tend to believe what we want to believe has been around for a long time, and considerable evidence consistent with this notion has accumulated. As we saw in Chapter 4, those who prefer to believe that capital punishment is an effective deterrent to murder find support for such a belief in an equivocal body of evidence; those who prefer to believe that it is *not* an effective deterrent find support for *their* position in the same body of evidence. Similarly, a study of the public's reaction to the Kennedy-Nixon debates in 1960 revealed that those who were pro-Kennedy thought that Kennedy had won the debates, whereas those who were pro-Nixon thought that their man had won.[2] Voters, furthermore, generally exaggerate the extent to which their candidate is favored by others, and thus tend to overestimate their candidate's chances of winning an election.[3]

However, most of the evidence indicating that people tend to believe what they want to believe comes from research on people's assessments of their own abilities, and their explanations of their own actions. One of the most documented findings in psychology is that the average person purports to believe extremely flattering things about him or herself—beliefs that do not stand up to objective analysis. We tend to believe that we possess a host of socially desirable characteristics, and that we are free of most of those that are socially undesirable. For example, a large majority of the general public thinks that they are more intelligent,[4] more fair-minded,[5] less prejudiced,[6] and more skilled behind the wheel of an automobile[7] than the average person. This phenomenon is so reliable and ubiquitous that it has come to be known as the "Lake Wobegon effect,"[8] after Garrison Keillor's fictional community where "the women are strong, the men are good-looking, and all the children are above average." A survey of one million high-school seniors found that 70% thought they were above average in leadership ability, and only 2% thought they were below average. In terms of ability to get along with others, *all* students thought they were above average, 60% thought they were in the top 10%, and 25% thought they were in the top 1%![9] Lest one think that such inflated self-assessments occur only in the minds of callow high-school students, it should be pointed out that a survey of university professors found that 94% thought they were better at their jobs than their average colleague.[10] Also, people tend to think

that they are more likely than their peers to experience a variety of favorable events like owning a home or earning a large salary, but less likely to experience aversive events like getting divorced or suffering from lung cancer.[11] Recent public opinion polls indicate that although only 25% of the population believes that the country as a whole will be better off financially in the coming year, 54% nevertheless think that *they* will do better.[12]

People are also prone to self-serving assessments when it comes to apportioning responsibility for their successes and failures. In numerous studies across a wide range of situations, people have been found to attribute their successes to themselves, and their failures to external circumstances.[13] People also tend to make more charitable attributions about their performance than do observers of their performance. Athletes tend to attribute their victories to themselves, but to blame their losses on bad officiating and bad luck.[14] Students who perform well on an examination generally think of it as a valid measure of their knowledge; those who fail tend to think of it as arbitrary and unfair.[15] From the other side of the instructional podium, teachers tend to attribute a student's success to the quality of instruction the student received, but they tend to attribute a student's failure to the student's lack of ability or effort.[16] Academicians whose attempts to publish have been rejected often attribute their bad fortune to factors beyond their control, like an unfortunate choice of reviewers; those who have their manuscripts accepted, in contrast, rarely acknowledge any parallel good fortune in the selection of reviewers.[17]

Mechanisms Underlying Self-serving Beliefs. The results of these investigations are clear and consistent: We are inclined to adopt self-serving beliefs about ourselves, and comforting beliefs about the world. The interpretation of these results, however, is extremely controversial. Many psychologists believe these phenomena stem from truly motivational processes: We hold such self-serving beliefs because they satisfy important psychological needs or motives, such as the motive to maintain self-esteem.[18] Others believe that such beliefs, although clearly self-serving, are the product of purely cognitive mechanisms.[19] By this account, a perfectly rational person, unaffected by needs and motives, might nevertheless arrive at such self-serving attributions and self-assessments, and such comforting beliefs about the world.

Indeed, with a little thought one can see how the results discussed above could result purely from cognitive processes. The tendency

to believe that we are more likely than our peers to experience positive events, for example, may result from our being more aware of our own efforts to bring about such experiences than we are of analogous efforts by others. We thus seem to ourselves, even when we are trying to be perfectly objective, to be relatively likely to experience positive outcomes. The tendency for people to attribute success internally and failure externally can likewise be explained without reference to self-esteem motives. If a person tries to succeed at something, then any success is at least partly due to his or her efforts and thus warrants some internal attributional credit. Failure, on the other hand, generally defies one's efforts and intentions, and therefore necessitates looking elsewhere, often externally, for its cause. Even an unbiased attributor, then, might exhibit an asymmetrical pattern of attributions for success and failure because success is so much more tightly connected than failure to intention and effort. Furthermore, consider a person who has had a lifetime of experience indicating that she is adept at mathematics. Is she not justified in attributing her failure to solve a mathematical puzzle during an experiment to the difficulty of the puzzle or the unfamiliarity of the setting, rather than to a sudden loss of mathematical acumen?

To what, then, should we attribute these self-serving patterns of beliefs and attributions? Are they the result of the "interference" of needs and motives, or are they the product of "cooler" cognitive processes? Do they come from the heart or the mind? Those who favor a cognitive interpretation argue that since any apparent demonstration of a motivational bias can be explained solely in terms of dispassionate cognitive processes, we should not invoke motivational mechanisms to explain these phenomena. Cognitive explanations, we are told, are more parsimonious.[20]

There are a couple of points to be made about this issue. First, cognitive explanations are *not* inherently more parsimonious than motivational ones. They can, and do, involve as many assumptions as motivational accounts. Cognitive mechanisms are more parsimonious only if one adopts a model of the human organism in which a motivational system overlays, and occasionally interferes with, a more fundamental cognitive system. But it is an open question whether the cognitive system should be considered primary.[21] Given a model in which the motivational system is more fundamental, motivational explanations would be more parsimonious.

The second point to be made about this motivation-versus-cogni-

tion controversy is that it is in many ways a false issue. There is little reason to believe that our self-serving biases result exclusively from one or the other, and even less reason to believe that there will ever be a truly definitive test that will decide between the two accounts. Indeed, when we closely examine how our motivational biases might operate, the two explanations begin to blend rather closely. To the extent that there is a motivational "engine" responsible for our self-serving biases and beliefs, it is one that delivers its effects through processes that look suspiciously cognitive. Our desire to believe comforting things about ourselves and about the world does not mean that we believe willy-nilly what we want to believe; such flights of fantasy are reined in by the existence of a real world and the need to perceive it accurately. Rather, our motivations have their effects more subtly through the ways in which we cognitively process information relevant to a given belief. What evidence do we consider? How much of it do we consider? What criteria do we use as sufficient evidence for a belief? Cognition and motivation collude to allow our preferences to exert influence over what we believe.

Essentially the same point has been articulated by social psychologist Ziva Kunda, who argues that people are indeed more likely to believe things they want to believe, but that their capacity to do so is constrained by objective evidence and by their ability ". . . to construct a justification of their desired conclusion that would persuade a dispassionate observer. They draw the desired conclusion only if they can muster up the evidence necessary to support it."[22] It is informative in this respect that people generally think of themselves as objective.* People rarely think that they hold a particular belief simply because they want to hold it, the evidence be damned. This sense of objectivity can nevertheless be illusory: Although people consider their beliefs to be closely tied to relevant evidence, they are generally unaware that the same evidence could be looked at differently, or that there is other, equally pertinent evidence to consider. As Kunda describes it, ". . . people do not realize that the [inferential] process is biased by their goals, that they are only accessing a subset of their relevant knowledge, that they would probably access different beliefs and [inferential]

*Indeed, this would make a particularly good item for a demonstration of the "Lake Wobegon effect": Asked to assess how objective or unbiased he or she is, the average person would no doubt rate him or herself above average.

rules in the presence of different goals, and that they might even be capable of justifying opposite conclusions on different occasions."[23]

Our motivations thus influence our beliefs through the subtle ways we choose a comforting pattern from the fabric of evidence. One of the simplest and yet most powerful ways we do so lies in how we frame the very question we ask of the evidence. When we prefer to believe something, we may approach the relevant evidence by asking ourselves, "what evidence is there to support this belief?" If we prefer to believe that a political assassination was not the work of a lone gunman, we may ask ourselves about the evidence that supports a conspiracy theory. Note that this question is not unbiased: It directs our attention to supportive evidence and away from information that might contradict the desired conclusion. Because it is almost always possible to uncover *some* supportive evidence, the asymmetrical way we frame the question makes us overly likely to become convinced of what we hope to be true.

Kunda and her students have collected evidence indicating that our preferences lead us to test hypotheses that are slanted toward confirmation in precisely this way. In one study, participants were led to believe that either introversion or extroversion was related to academic success.[24] Not surprisingly, those who were led to believe that introversion was predictive of success thought of themselves as more introverted than those who were led to believe that extroversion was associated with success. More important, when asked to recall autobiographical events relevant to introversion/extroversion, those who were led to believe in the importance of introversion recalled more incidents of introversion, and they did so with greater speed. Those who were led to believe in the value of extroversion, in contrast, recalled more incidents of extroversion, and they did so more quickly. By establishing a preference for one of these traits, the ease of generating evidence consistent with that trait was facilitated. It seems that the preference led participants to formulate and test an asymmetrical hypothesis that was biased toward confirmation.

A second way in which our motives influence the kind of evidence we entertain involves whose opinions, expert or otherwise, we consult. We can often anticipate other people's general beliefs and overall orientations, and thus can predict with some accuracy their views on a particular question. By judiciously choosing the

right people to consult, we can increase our chances of hearing what we want to hear. Smokers can discuss their habit's health risks with other smokers; Nixon fans can explore the "real meaning" of the Watergate scandal with those of similar ideological bent. There are a number of physiologists at Cornell who differ in their assessments of the importance of dietary fat as a determinant of serum cholesterol and arteriosclerosis. This variability in expert opinion gives members of the Cornell community an opportunity to find support for whatever eating practices they wish. Those who need to justify the lost opportunities brought on by an austere diet can talk with someone willing and able to describe the latest studies testifying to the evils of dietary fat; those with an appetite for Continental cuisine can talk with someone eager to discuss the critical flaws of those very same studies. We seek opinions that are likely to support what we want to be true.

People's preferences influence not only the *kind* of information they consider, but also the *amount* they examine. When the initial evidence supports our preferences, we are generally satisfied and terminate our search; when the initial evidence is hostile, however, we often dig deeper, hoping to find more comforting information, or to uncover reasons to believe that the original evidence was flawed. By taking advantage of "optional stopping" in this way, we dramatically increase our chances of finding satisfactory support for what we wish to be true.[25]

Consider a student who has performed poorly on an exam and wants desperately to believe that the test was unfair. The student may initially seek support for this interpretation by trying to recall specific questions that were ambiguous. If examples of ambiguity can be found, the student rests his case: the exam was unfair. If no such examples can be recalled, however, the search for supportive evidence continues. Maybe other students thought it was unfair! Again, if a number of like-minded others can be found, the test is deemed to be unfair; if not, then still further evidence is sought. Perhaps the student will think of all the things he learned in the course that were *not* tested, and therefore conclude that the test was unfair because it did not adequately cover all the course material. By considering a number of different sources of evidence and declaring victory whenever supportive data are obtained, the person is likely to end up spuriously believing that his or her suspicion is valid.

To illustrate further, consider a discussion I recently heard be-

tween two prominent psychologists concerning the severity of the AIDS risk among the heterosexual, non-drug-using population. One was arguing that the risks were overstated, whereas the other thought they were indeed so severe that they would soon bring about widespread changes in social life as we know it. Their opinions, furthermore, mirrored their preferences. One fervently wanted the sexual revolution to continue, and the other, someone who has lived a happy, monogamous life for some time, would just as soon see this era pass (in his words, "AIDS is not God's punishment for licentiousness, but His way of reducing dissonance for sexual monogamy"). How did their divergent preferences influence how they arrived at, and how they justified, their ultimate beliefs? It is doubtful that their predilections led them simply to see things their way, with little attention to the relevant evidence. The consequences of ignoring reality are too great (indeed, in this case potentially fatal) for such a cavalier regard for the way things really are. However, their preferences did influence the kind of evidence each considered, as well as the *amount* they considered.

The person worried about the end of the sexual revolution began the discussion by noting the small number of drug-free heterosexuals in the United States who have contracted AIDS and assumed that that was decisive. Jarred out of premature security, however, by the other person's statistics regarding AIDS transmission among heterosexuals in central and east Africa, he was momentarily concerned. But only momentarily. He proceeded to dig deeper into the matter, eventually finding solace in the fact that the state of public health in central Africa is so different from that in the United States that such information is not terribly informative. ("So many people there have open sores due to untreated venereal disease that of course AIDS is readily transmitted heterosexually.")

The important point here is that although evidence and reality constrain our beliefs, they do not do so completely. For nearly all complex issues, the evidence is fraught with ambiguity and open to alternative interpretation. One way that our desires or preferences serve to resolve these ambiguities in our favor is by keeping our investigative engines running until we uncover information that permits a conclusion that we find comforting.

More generally, it is clear that we tend to use different criteria to evaluate propositions or conclusions we desire, and those we abhor. For propositions we want to believe, we ask only that the evidence not force us to believe otherwise—a rather easy standard

to meet, given the equivocal nature of much information. For propositions we want to resist, however, we ask whether the evidence *compels* such a distasteful conclusion—a much more difficult standard to achieve. For desired conclusions, in other words, it is as if we ask ourselves, *"Can* I believe this?", but for unpalatable conclusions we ask, *"Must* I believe this?" The evidence required for affirmative answers to these two questions are enormously different. By framing the question in such ways, however, we can often believe what we prefer to believe, and satisfy ourselves that we have an objective basis for doing so.

Optimistic Self-assessments and Self-based Definitions of Ability. To consider a particularly intriguing example of how we juggle criteria to arrive at comforting conclusions, let us return to the previously discussed tendency for people to make unduly favorable assessments of their own abilities. Recall that, on average, people think of themselves as being much better than average. Part of the reason, it seems, is that different people use different criteria to evaluate their standing on a given trait—criteria that work to their own advantage. As economist Thomas Schelling explains, ". . . everybody ranks himself high in qualities he values: careful drivers give weight to care, skillful drivers give weight to skill, and those who think that, whatever else they are not, at least they are polite, give weight to courtesy, and come out high on their own scale. This is the way that every child has the best dog on the block."[26] By basing our definitions of what constitutes being, say, athletic, intelligent, or generous on our own idiosyncratic strengths on these dimensions, almost all of us can think of ourselves as better than average and have some "objective" justification for doing so.

Several recent experiments indicate that such self-based definitions of ability are largely responsible for this "Lake Wobegon effect." First, it has been shown that people are particularly inclined to think of themselves as above average on ambiguous traits—those for which the definition of what constitutes excellence can most readily be construed in self-serving ways. People rate themselves more favorably on amorphous traits like sensitivity and idealism (at the 73rd percentile, on average) than on relatively straightforward traits like thriftiness and being well-read (48th percentile). Further evidence was obtained in an experiment in which a group of university students was asked to rate the importance of a variety of academic skills (e.g., public speaking, math) and personal charac-

teristics (e.g., creativity, meticulousness) in terms of how important they are in determining success in college. The students were also asked to rate their own standing on these characteristics. As expected, the students tended to think that the characteristics at which they excelled were most important in determining what constitutes a successful college student. Finally, it has been shown that the tendency for people to think of themselves as above average is reduced—even for ambiguous traits—when people are required to use specific definitions of each trait in their judgments.[27]

This research effectively illustrates how we juggle different criteria to arrive at conclusions we favor.* As strong as our wishes or motives may sometimes be, they rarely lead us simply to see the world the way we would like to see it. To do so would invite pathology. It would require that we pay an excessively high price in cognitive inconsistency and in the ability to get along effectively in the world. Instead, we accomplish the same motivational goals more subtly by skewing the meaning we assign to the information we take in from the world. There are alternative ways of interpreting or "framing" what we encounter around us, and we seem to be fairly adept at finding a frame that is comforting. (Indeed, some evidence has accumulated that people who habitually fail to put the most favorable cast on their circumstances run the risk of depression.[28]) It is in these relatively subtle shifts of criteria and interpretation that many of the most significant effects of the wish to believe can be found.

EPILOGUE: BELIEFS AS POSSESSIONS

A supplementary perspective on how our preferences influence what we believe can be obtained by considering a useful metaphor offered by psychologist Robert Abelson, who argues that "beliefs

* Although this self-serving juggling of criteria can be attributed—as it is above—to the motive to see ourselves in a favorable light, it is important to note that this phenomenon can be explained in purely cognitive terms as well. In particular, people may use their own strengths as the basis of what constitutes success in a given domain because, after a lifetime of basing their actions on what they do well, those elements at which they excel simply come to mind more readily and thus figure more prominently in their assessments. These two rival explanations are not mutually exclusive, of course, and the most important point is that both processes result in people believing what they would prefer to believe.

are like possessions."[29] We acquire and retain material possessions because of the functions they serve and the value they offer. To some extent, the same can be said of our beliefs: We may be particularly inclined to acquire and retain beliefs that make us feel good.

As Abelson notes, the similarity between beliefs and possessions is captured in our language. First of all, a person is said to "have" a belief, and this ownership connotation is maintained throughout a belief's history, from the time it is "obtained" to the time it is "discarded." We describe the formation of beliefs with numerous references to possession, as when we say that "I ***adopted*** the belief," "he ***inherited*** the view," "she ***acquired*** her conviction," or, if a potential belief is rejected, "I don't ***buy*** that." When someone believes in something, we refer to fact that "she ***holds*** a belief," or "he ***clings*** to his belief." When a belief is "given up," we state that "he ***lost*** his belief," "she ***abandoned*** her convictions," or "I ***disown*** my earlier stand."

This metaphor sharpens our understanding of the formation and maintenance of beliefs in a number of ways. First, we are quite possessive and protective of our beliefs, as we are of our material possessions. When someone challenges our beliefs, it is as if someone criticized our possessions. We might no longer associate with that person, or we might seek solace and confirmation from others with similar beliefs. As with possessions, in other words, "one shows off one's beliefs to people one thinks will appreciate them, not to those who are likely to be critical."[30] Alternatively, we might respond to a challenge or criticism by thinking of compensatory features ("True, it is not very stylish, but I bought it for the gas mileage."/"True, the raw statistics might seem to contradict me, but if you look at the intangibles. . . ."); or by shielding it from public view ("Maybe we should move the watercolor from the living room to the upstairs bedroom."/"My beliefs work for me, why should I have to justify them to those people?").

The metaphor also applies to how our beliefs fit together. We carefully choose furniture and works of art that do not clash, just as we try to avoid the dissonance produced by incompatible beliefs. If, over time, we find that our decor does not make a single, coherent statement, we might hold a garage sale and start anew. A similar phenomenon is observed when one undergoes an ideological conversion (such as joining a cult) and many of one's earlier convictions are discarded to make room for new beliefs.

For the purposes of this chapter, however, the most telling ana-

logue between beliefs and possessions involves the tension between desire and constraint. We are tempted to buy as many of the best things in life that we can. As much of today's world makes clear, the thirst for material possessions is hard to quench. But few of us can afford everything we desire. We have a budget, and some things are just too expensive. So we do without.

The same can be said of our beliefs. There are things we are sorely tempted to believe; to do so would be tremendously gratifying. To simply acquire many of these comforting beliefs, however, would extract too high a price in rationality and cognitive consistency. So not all are acquired, at least not as is. But if we could just view them from a slightly more flattering perspective, if we could just take the evidence in a little here and let it out a little there—if we could get them on sale!—we just might buy them.