We Are

ALL

Innocent

by Reason of

Insanity

The Mechanics of Compassion

by Kathleen Brugger

copyright 2013 Kathleen Brugger Aeogia Press

ISBN: 978-0-9893582-0-0

http://www.innocentbyreasonofinsanity.com/ http://kathleenbrugger.com/

Table of Contents

Preface

Part 1: We Are All Insane

1. Virtual Reality	7
2. Collective Reality	12
3. Delusion and Confusion	18
4. Filters of Reality	21
5. My Story	

Part 2: We Are All Innocent

6. Why It's So Hard to Change	35
7. The Mask of Assumptions	.41
8. Subjective Mind's Greatest Invention	47
9. The Wizard of Subjective Mind	55
10. The Pacifier of Pride	61
11. Crime and Punishment	65
12. Value	70
13. The Scale of Value	75
14. Love in the Age of Subjective Mind	80

Part 3: Love is Sanity

15. The Pathless Path	35
16. Bend Like a Willow	94
17. Question My Story) 9
18. Clean Sex10)4
19. Completion10)9
20. The Mechanics of Compassion1	4
21. Love is Sanity12	20
End Notes12	26

Preface

This book is the fruit of a long-term collaboration with my husband Arthur Hancock. In the more than thirty years of our relationship we have been looking for answers to questions such as: what is the meaning of life?, why do we suffer?, who are we?

In our first book, *The Game of God*, which we co-authored (cartoons by Arthur), we presented our answer to the question, "Why does the universe exist?" Oprah called this "a great book about God." Tim Allen included it in his recommended reading list at the end of his bestseller, *I'm Not Really Here*.

Then Arthur and I turned our attention to the human condition. Why are happiness and peace so elusive? Why is love so rare? Our philosophy of universal human insanity was developed through years of observation of ourselves and humanity at large. *We Are ALL Innocent by Reason of Insanity* is an exposition of this philosophy, and Arthur's forthcoming memoir, *Exposing Myself*, uses his life story to illustrate the theory.

Recently I gave the following quick synopsis to a new acquaintance: "Most of us think we perceive reality directly and accurately. But we don't. What we see is an individual mind-generated reality, heavily distorted by our beliefs and assumptions. We confuse our subjective opinions with objective facts. We're all deluded about what is real, and this is why we're all insane."

I could see that he found this a dubious proposition, and I was pretty sure it was because he was convinced that he did perceive reality directly and accurately.

The analogy of a 3D movie may help to illustrate the concept of universal insanity. When a 3D movie is being made, two cameras film simultaneously from slightly separated positions. The final film superimposes the offset perspectives. When you wear polarizing glasses those two images are separated and delivered to the appropriate eye, and you perceive the illusion of three-dimensions on a flat movie screen. But when you look at the film without glasses, it's blurry, as if it's out of focus. If you watch too long it's disorientating and nauseating.

The more clearly an organism perceives objective physical reality, the better its survival chances. For example, when we are trekking through the jungle, if we can't distinguish the crouching tiger from the obscuring foliage we're dead. Humans are the product of over three billion years of evolution on this planet, and our ability to construct an effective model of physical reality in our minds is quite remarkable.

But there is another reality in our minds, a subjective reality, and this doesn't match physical, objective reality. It is offset from objective reality by a small amount, depending upon the content of our personal subjective beliefs. This offset causes dissonance in our minds, analogous to the way the blurred 3D picture causes nausea. This dissonance is our delusional insanity, and the more our subjective reality is offset from objective reality, the more insane we are.

As 3D films show, it doesn't take much offset to create an uncomfortable distortion. This is why it can be hard for us "normal" people to grasp our insanity, because our everyday actions appear to prove that we are in touch with objective reality. We can navigate our cars through rush hour traffic, handle the demands of our job, shop for groceries, cook dinner, bathe the kids—all this seems to indicate that we are accurately perceiving objective reality. But accompanying these actions are the distortions caused by our subjective reality: we're unhappy, or anxious, or depressed, or wish we could be doing something else.

We have all been programmed to think this internal dissonance is completely normal. It's "normal" if by that word you mean what people live with every day. It's also "normal" in the sense of being an evolutionary inevitability. But this dissonance is exactly what I mean by

universal insanity. We all confuse our subjective reality with objective reality, and when life doesn't go according to our subjective-reality-script, we feel anger, anxiety, or depression.

Recognizing my insanity means I stop confusing my subjective beliefs with objective reality. It doesn't mean I don't have a subjective point-of-view, it means I eliminate a lot of the dissonance—conflicts, disappointments, worries, problems—in my life.

Asheville, North Carolina May 2013

Part One

We Are All Insane

When we remember we are all mad, the mysteries disappear and life stands explained. - Mark Twain¹

1. Virtual Reality

Thomas Jefferson is revered in the United States, in part for his inspiring language in the Declaration of Independence: "We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable rights, that among these are life, liberty, and the pursuit of happiness."

Noble words, but ones which reveal an astonishing cognitive dissonance in the mind of the man who wrote them. Thomas Jefferson owned slaves. Clearly he could believe in the ideal of liberty and equality for "all men," yet simultaneously believe that *some* men could be enslaved and treated unequally because of their skin color.

Today we congratulate ourselves that we're beyond this kind of confused thinking on race, but most of us still believe in the concept of race itself. We think there really are "Caucasian" and "Asian" and "Black" humans. But, according to scientists, including the majority of anthropologists, the concept of race exists entirely in our minds; there is only *one* race, the human race.²

What would it mean if racial categories were just an invention of the human mind, if the "fact" of race turns out to be an illusory mind-generated reality?

A friend of mine shaved off *half* his moustache one morning, and then walked around all day enjoying people's reactions. He couldn't believe how long it took most people to become aware of his half-moustache.

People "saw" him with his moustache intact—entirely missing the reality that half of it was gone. When they finally noticed the half-moustache their faces always registered shock (realizing how out of touch with reality they were) before dissolving into laughter.

When I was a teenager my favorite book was *The Heart is a Lonely Hunter*, by Carson McCullers.³ Not long after I met Arthur, my husband of over thirty years, I went to his apartment and this was one of three books on his desk. But I was surprised when I heard him talk about it, because it sounded like he was describing a completely different book. In my mind it was the story of a young girl whose dreams of a creative life were squashed by economic realities. In Arthur's mind it was the story of a deaf-mute and the people who found in him an outlet to express their frustrations and dreams. One book, but two very separate realities.

Think of the most basic element of any argument: "You're wrong," "No, *you're* wrong." From a couple arguing about who forgot to mail the rent check to two nations fighting a war over a disputed boundary, disagreements arise from separate realities in the minds of the participants.

Most of us think we perceive reality directly and accurately. That is not true. We all live in

8 We Are ALL Innocent by Reason of Insanity

our own individual, mind-generated reality.

The idea that we see only a mind-generated reality feels wrong; the sensation that we experience the physical world directly and perceive it accurately is very strong. For example, when I want to pick my shoe up off the floor I can accurately locate the physical object—the shoe is here on the floor, not over there on the dining table—and I can precisely move my hand to its location and pick it up. Surely this means I'm experiencing the physical world the way it is!

The disquieting truth is I'm not.

Just for starters, we have blind spots in both of our eyes. In the middle of the retina, where the optical nerve attaches, there are no light receptor cells. We literally cannot see part of the visual field before us. Yet our mental image of reality does not match what our eyes actually see; the picture in our mind doesn't include large black holes in the center. Our minds fill in the blanks with what they think *should* be there, built from our expectations of reality, the information surrounding the blind spot, and our experience of how the world works.

Optical illusions are amusing and shocking because they let us see that we do not perceive reality accurately.

For example, in the illustration below the center bar is the same shade of grey all the way across, yet our perception is that it's lighter on the right.



When I was a child I loved to count the time between a flash of lightning and the sound of thunder—every five seconds of separation meant a mile. But I never stopped to consider what that meant about other perceptions of light and sound. When a friend calls to me from across the street, I perceive that his mouth moves and the sound comes out of his mouth simultaneously. But just like the lightning's sound coming slower than the flash, my friend's voice doesn't hit my ears until after my eyes see his mouth move.

Not only do visual and aural signals travel to our eyes and ears at different rates, our brain processes the two perceptions at different rates. And somehow our brain still links them together as one and the same event.⁴

Ventriloquists exploit our brain's processing to trick us into believing that their voice is coming out of their puppet's mouth. I love Triumph the Insult Comic Dog by Robert Smigel. Triumph is a crude rubber dog, and it's absurdly obvious that "his" voice is coming from off-screen, yet the illusion is created that Triumph is really speaking or singing.⁵

The art of foley is another example of how our brain's processing of visual and aural cues

can create an illusion of reality. We see someone's leg breaking and we hear celery snapping, we see someone being punched and we hear a raw steak being hit, we see someone riding a horse and hear two coconut halves banging together (see Monty Python's *The Holy Grail* for an amusing riff on this illusion⁶), and we really believe we're hearing the actual sound of whatever action we're seeing. I've thought about this while watching action movies—how does anyone know what the sound of a fifty-foot monster kicking around buses on a city street sounds like?

Clearly there is some mental processing going on that interprets perceptual information *before* it gets to our awareness.

We have to learn to see and hear. As infants we learn how to process sensory information to create a mental picture of reality in our brain. We are taught first by our parents and then by everyone around us how to interpret the input of our senses.

We look with our eyes but see with our brains.

A friend of mine described how, for most of his life, he had never paid much attention to pregnant women. But when he learned he was going to become a father, "Suddenly large numbers of pregnant women started popping out of the landscape. I found myself noticing them and observing them with intense interest. After the birth of my daughter this legion of pregnant females receded back into the mists of my indifference."

Of course there weren't more pregnant women than normal; it was just because of his personal interest that he saw them. And they didn't suddenly disappear after the birth of his daughter; he was just no longer paying attention to pregnant women and so from his point-of-view they ceased to exist.

Our brains take the sensory stimuli generated by actual reality (whatever that may be) and create virtual models in our minds. We see only the mental representation of a thing, not the thing itself.

This means we all live in our own individual virtual reality. We do not see actual reality; we see our mind-generated virtual reality projected on an internal screen of awareness.

Our mind-generated reality is more than just a model of physical reality; it includes abstract, subjective perceptions also.

Psychology textbooks are filled with long lists of common errors in our subjective perception of reality. For example, there's the famous "Lake Wobegon effect": most people think they're above average (a statistical impossibility). There's wishful thinking: "One day I'll hit the lottery and all my problems will be solved." Denial: "I'm not an alcoholic—I just like to drink every night, and I've been doing it all my life without any problem." Or, "I'm not in an unhappy marriage—we never fight!" (Because we never talk to each other...) Rationalization: "It's okay that I steal paperclips from work because they'll never miss them."

These thinking errors can all be summed up in this line from the song "The Boxer" by Paul Simon: "A man hears what he wants to hear and disregards the rest."⁷

Our mind-generated virtual reality is a construct built of preconceptions, beliefs, and assumptions that cause us to see our world and ourselves in a rigid and unchanging way. We are boxed in by our beliefs about reality.

Someone (the source is disputed) said, "We do not see things as they are. We see things as we are."

Comedians make us laugh because they break open our individual reality-box: they challenge our fixed beliefs and force us to see life from an alternative point-of-view. They literally crack us up!

We like puns because they expose how our minds make assumptions based on the meaning

of words. When it's revealed that our assumption of a word's meaning was incorrect, it turns our understanding of the joke upside down. Groucho Marx provides a great example: "Time flies like an arrow. Fruit flies like a banana."

*

I knew an elderly woman named Bessie who was constantly harassed by an annoying entity named Whitney. Sometimes Whitney would sit on the end of Bessie's nose and try to take food off her spoon while she was eating. Whitney was always telling Bessie to "go get in the bed." While Whitney was invisible to everyone else, he was all too real to Bessie. Doctors would have diagnosed Bessie as delusional: seeing something not subject to objective confirmation by others.

Who hasn't experienced "seeing something not subject to objective confirmation by others" when they look in the mirror! How many readers can relate to this scenario: I'm oblivious to the weight I've gained when I gaze at my image in the mirror, seeing instead the thinner self of years past. Then I put on a pair of pants I haven't worn for a while and feel surprise when they're tight.

Webster's New Universal, Unabridged Dictionary defines "delusion" as: a fixed, false belief that is resistant to reason or confrontation with actual fact.

Once I gained some weight and a favorite skirt was so tight I moved the buttons so it would fit better. Believe it or not, at the time I was actually convinced that something about the *skirt* had changed. I was completely unwilling to admit the obvious fact that I had gained weight. I was resistant to reason or confrontation with actual fact. I was delusional.

A white man of my acquaintance, who I'll call Bob, once suffered a diabetic coma. An ambulance was called to his home. Though unconscious, Bob was able to hear the EMS personnel talking. The white members of the team were repeatedly ready to give up on him, but the sole black technician refused and kept working until he brought Bob back to life. When describing this scene later, Bob, a life-long racist, would refer to this valiant man as "the nigger": "I could hear them talking and one would say, 'He's gone, let's stop,' but the nigger would say, 'No, let's keep working on him.'" Even the objective reality of a man saving his life was not enough to shake Bob's fixed reality that a black man is a "nigger."

Psychologists tell us that we build models of reality in our minds, and we use these models to navigate the world. We do not see actual reality, whatever that might be. We see only a mind-generated model of reality. No matter how good a model it may be, it is still just a system of beliefs about reality.

When we believe our mind-generated model of reality is actual reality we are delusional. Delusional is just another word for insane.

What better explanation for the human condition than delusional insanity? What better way to explain why loneliness, fear, and hatred are so familiar and love so rare? Why bigotry and prejudice are still so common? Why peace and cooperation elude us? Why so many people need to use alcohol and drugs just to get through another day, seeking a satisfaction not available in sobriety? Why more than one in ten Americans take anti-depressants just so they can function? Why billions of human beings live in desperate poverty and ignorance while a tiny few live lives of wasteful luxury and self-indulgence? Why the human race totters on the brink of the supreme folly of self-extinction, via environmental collapse or thermonuclear disaster?

Of course there are other explanations for this list of human ills. Judeo-Christian theology, a world-view that has exerted tremendous influence on western culture, says that humans are cursed with something called "original sin" and are, therefore, inherently evil; God gave humans

free will and we choose evil because we are evil.

One of Gary Larson's *Far Side* cartoons shows a plump young man stretched out on a psychiatrist's couch, his mouth gaping wide in self-absorbed monologue, while the bearded shrink is quietly writing on his pad, "Just plain <u>nuts</u>."⁸

Which is the better explanation for the chronic human ills listed above: "humans are just plain <u>nuts</u>"—evolving apes understandably confused about the nature of reality and necessarily making mistakes out of their confusion and ignorance; or "humans are just plain <u>evil</u>"—stubborn wicked creatures who sadistically (or masochistically) use their free will to *choose* pain, suffering, and wrongdoing when they know better? Which explanation offers us hope for a different future? If we are just plain nuts then we have some hope of finding sanity. If we are just plain evil what is there to do? How does one overcome intrinsic evil?

If universal human insanity is the cause of the human condition, we can immediately begin to envision the possibility of a cure; we can begin to imagine the possibilities for humankind when we are liberated from our delusions. Imagine realizing that all our crimes and misdemeanors, our mistakes, and our embarrassing blunders are simply products of our delusional thinking and not willful wrongdoing! Imagine realizing that punishing ourselves and others for wrongdoing is literally as absurd (and counterproductive) as punishing the inmates of a lunatic asylum for misbehaving.

At first blush the idea that we're insane sounds like a horrible thing, but actually there's great news here. Realizing our insanity can empower us by freeing us from the delusion that we're in control. Because we're insane we can't be blamed and shamed for all those misdeeds and wrongs that haunt us—we're innocent by reason of insanity.

In addition, when we realize that everyone is insane, we have the key to compassion. We understand why people (including ourselves) do mean or hurtful things: we know not what we do.

Being innocent by reason of insanity is in no way a blank check or license to kill. It doesn't mean it's okay to do mean and hurtful things; it means we understand that those actions are motivated by insanity, not willful choice. We will still put people in prison if we can't figure out any other way to prevent them from hurting others. But we will think differently about who they are: they're not evil monsters, they're sick.

Innocent has two meanings. The first is "not guilty." Most of us believe that we *are* guilty by reason of sanity. Happily, as we shall see, this is not the truth. When we recognize our insanity we realize that we are *innocent* of all the charges we have levied against ourselves.

The other meaning of innocent is "virtuous, flawless, without sin or moral wrong." By realizing our insanity, we can experience this meaning of innocent, analogous to the innocence of a child.

After spending a lifetime convinced that we're sane, the idea that we're all insane is guaranteed to meet with some resistance. I know from experience how difficult facing this truth is, but I also know how liberating it can be.

Not only is insanity universal; there is absolutely nothing wrong with it: the universe is unfolding perfectly and without flaw. The pageant of evolution must include the epoch of insanity. Evolving apes endowed with analytical thought are bound to go bananas...before they work the problem out.

2. Collective Reality

Western philosophers have been arguing about the nature of reality for hundreds of years: is there an actual reality out there or does it exist only in our minds? The 18th Century philosopher George Berkeley asserted that reality exists entirely in the mind. Dr. Samuel Johnson, hearing of this, indignantly exclaimed, "I refute it thusly!" and kicked his foot against a stone.

In this book I will assert that Berkeley and Johnson were both right. There is an actual reality out there *and* everyone has a unique perception of this reality in his or her mind. As we will see, all of us live in our own individual subjective reality.

In addition, every society develops a "consensus reality," a collective mind-generated reality. Our individual realities are constructed within the collective reality of our culture.

One of the reasons it's so hard to realize that we are living in a mind-generated reality is because when we conform to our culture's collective reality there is a lot of agreement that this reality is really real. It's often hard to even recognize the beliefs that underlie the collective reality of our own culture. Looking back in time helps, because collective cultural beliefs change.

For example, a few hundred years ago people of African descent weren't considered human by many Europeans and Americans. Africans were bought and sold in slavery because of a belief that these dark-skinned people were more like animals than humans. In a painfully slow process Western culture has changed its beliefs to recognize that all people, no matter the color of their skin, are equally human. But even today there is clear evidence that not everyone's reality has changed—there are still people in our culture whose reality includes the belief that a person with dark skin is inferior to a person with light skin.

Our cultural beliefs about the morality of exposed flesh are another example. In one of my earliest memories I'm running down the street in front of my house, and I'm only wearing shorts. I'm thinking, "Soon I'm going to be too old to do this, I'll have to wear a shirt." I grew up in Missouri where it gets very hot in the summer. Every year, from the age of five until puberty, I burned with anger in addition to the heat at being required to wear a shirt when my chest looked no different than my brother's. Why was he allowed to go topless and be cool, when it was "dirty" for childishly flat-chested me?

Even today I look at photos of young girls in bikinis, with those silly tops flapping over nonexistent breasts, and feel the old anger at our primitive, prurient, and puritanical attitudes towards the human body. We could easily go on and question our culture's ridiculous ban on barebreasted women of any age. *National Geographic* was the pornography of the pre-*Playboy* years and even better because you could appear to be improving your mind while feasting your eyes on the topless women of "backward" cultures that didn't share our obsession with hiding women's breasts.

Modern bikinis are so tiny they leave almost nothing to the imagination, but the absence of those pieces of fabric, covering three objectionable points of the female anatomy, would constitute indecent exposure in current American reality. Reality is different in much of Europe where topless beaches are normal; only one piece is required. Of course that one piece is still very important for both woman *and* men.

While the steadily increasing acceptance of nudity continues in the West, the conservative Islamic world still insists that women must be hidden; that exposed female flesh is immoral. Special bathing suits are available for Islamic women that look like skirted wetsuits with hoods. A typical suit has multiple pieces: a long-sleeved dress that ends above the knee, long pants to

the ankle, and a head covering.

Homosexuality provides another example of changing cultural norms. Until 1973 the psychiatric community officially labeled homosexuality a mental illness—it was classified in the Diagnostic and Statistical Manual of Mental Disorders as a sexual deviation. In the last 40 years the change in our consensus reality has been swift; it won't be long until gay marriage is a completely accepted part of American culture.

Travel allows us to see that our culture's reality isn't the only way to view the world, and the dissonance caused by the clash of beliefs and assumptions has a name: culture shock. The reason we feel shock is because we take our culture's collective reality so for granted that we think it is actual reality. It's unsettling to experience an alternate reality.

We often use the word "myth" dismissively, as something just made-up, but this is exactly what our collective mind-generated reality is: something made-up, invented, to explain the mystery of existence to ourselves in order to make sense of it. Myth is a culture's collective mind-generated reality, how it describes the world.

For thousands of years humans told variations of the same story: gods lived and moved among us and ruled humanity and nature. The world was like a large hall. The earth was the floor and the sun, moon, and stars moved around the ceiling. We now see this as a primitive misconception of reality, but these gods and this world were very real to the people of that time.

Then Christianity took hold in the West. Christian cultures told a new story: up above the clouds was a place called Heaven and down below the ground was a place called Hell. These places were very real to people of the last millennia.

Now most of us look to science to define reality. Today we believe that the universe began in a Big Bang. This is our collective reality. And we think we are more in touch with reality than those earlier peoples who believed in Zeus or the fiery pits of Hell. We portray earlier cultures' mind-generated realities as quaint misconceptions based on limited understanding—the stars are holes in the ceiling—but we assume that our current mind-generated reality is authentic because it's based on science.

But science has continuously changed its description of the universe. One hundred years ago astronomers told us that what we saw in the night sky, a few thousand stars, was the entire universe.⁹ Now we are told that what we see up there is just a very small portion of something called a galaxy, containing a hundred billion stars, one among hundreds of billions of galaxies in a mind-bogglingly large universe. And the latest news from physics is that our universe may be only one of an infinite number of multiverses.

You can be sure that in the future another society will look back with amusement upon our quaint myths, our primitive scientific explanations of the universe.

Collective realities are language-based. Long ago humans developed a level of language skill sophisticated enough to permit us to label and categorize things. As time passed we forgot that the labels were just convenient tools. We came to believe that they had separate, real existence.

For example, we divided the Earth into countries and have so completely forgotten that the divisions are arbitrary that we have fought endless battles over the invented boundaries. When people first saw the photos of our planet taken by Apollo astronauts in the 1960s it was a revelation—all those arbitrary borders are irrelevant when you comprehend the vastness of the blackness surrounding our precious globe of life.

We confuse the naming of a phenomenon with the understanding of it. We give a child a name and by the time that child has grown up she believes that name defines who she is. I was given the name "Kathleen" when I was born, but the only time I heard that name was when my

mother was mad at me. I was known as "Kathy" during my childhood. But that name sounded square and boring to me, so when I graduated from college and moved to San Francisco I decided I should change my name to better suit the person I wanted to be. I became "Katie," because I believed "Katie" is the name of someone who is fun and adventurous.

A consensus reality is essential for a society to function; members must agree to agree about certain aspects of reality. Most of the members of our culture agree to stop at a red light, for instance. We learn as an infant that red means stop and green means go—and yellow means go very fast. There is nothing inherent in the color green that means "go," but it is useful to have that shared interpretation.

In his masterpiece *Up from Eden*, Ken Wilber quotes Don Juan, the Yaqui Indian shaman, describing to his student Carlos Castaneda (from the book *Journey to Ixtlan*) how we are all indoctrinated into the belief system of our culture:

Everyone who comes into contact with a child is a teacher who incessantly describes the world to him, until the moment when the child is capable of perceiving the world as it is described...We have no memory of that portentous moment, simply because none of us could possibly have had any point of reference to compare it to anything else...Reality, or the world we all know, is only a description..., an endless flow of perceptual interpretations which we, the individuals who share a specific membership, have learned to make in common.¹⁰

Mr. Wilber concludes, "This large, unconscious background of membership cognition, basically *linguistic* in nature, of shared sentiments, shared descriptive realities, and shared perceptions, alone can serve as the psychological support of a coherent society."¹⁰

Just because a group of people agree to believe in a collective reality does not make it real. It may make for a functioning society but it remains a collection of beliefs about actual reality. It is still a virtual, mind-generated reality.

*

A random list of some of our culture's collective beliefs:

"Men are superior to women"—sexism is still rampant in American culture.

"God exists, and has a gender," and what a surprise, most people think God is male.

"Marriage is between two individuals." We're almost past "marriage is between a man and a woman" but we're a long way from accepting anything but monogamy.

"Fat is ugly." This is not true in other cultures or times. In some countries in Africa obesity is actually revered; in Renaissance art, plump females were considered aesthetically pleasing, as epitomized in the paintings of Rubens.¹¹

"It is not okay for women to have hair on the face, under the arms, or on the legs. However, it is okay for men to have hair in these regions."

"Men do not wear skirts." The Scottish kilt is the obvious example of a different cultural belief on this subject; many tourists are shocked on their first visit to Fiji to see large powerful male policemen in a uniform that includes a skirt, called a "sulu."

"Sex is dirty. Explicit sex in movies is obscene, but extreme violence is okay, even for children."

"Humans are separate from nature."

"Private property is sacred; it's okay to kill someone who threatens your property."

"Black is the color of mourning." In other cultures the color of mourning is white, purple, or red.

"I have an immortal soul that enters my body at (a) birth (b) conception (c) some other time...and leaves at death and goes (a) to heaven (b) to hell or (c) to some spiritual nirvana."

Examine your reaction to this list. Did you accept some as self-evident, true, and beyond question? That is, you believe they represent actual reality and not a consensual reality based on cultural beliefs?

Another example of cultural mind-generated reality is the price of art. What could justify a price of \$11 million for a single painting of a Campbell soup can by Andy Warhol? When the artist created the original series of 32 soup-can paintings in 1962 only a handful of people were willing to pay \$100 for a canvas, and over the years he painted hundreds more in the series. The only possible explanation for the price, paid at an art auction in 2006, is that a group of people agreed among themselves that a canvas painted by this artist has a high value.

Price bubbles are another example of consensual reality in action. Bubbles happen when people agree that a commodity is valuable and their belief pushes the price of that commodity up until it has no relation to any actual utilitarian value. The Dutch tulip bubble of the 1630s is a classic example.¹²

The housing bubble in the United States is a more recent example. In 2000, someone we know bought an ocean-view condo in Florida for \$125,000. Five years later they sold that apartment for \$415,000. In 2011, that very same condo was worth \$180,000. Same condo, same view, same building. The only difference: the subjective perception of its value created by a housing mania that had seized our culture. The blatantly delusional belief, "housing prices will keep going up forever," had become part of millions of people's mind-generated reality, including that of economists who should have known better. Prices just reflected the delusion.

Soldiers in war must struggle with the cognitive dissonance created by the sudden permission to break one of society's most basic rules. Most cultures' consensual reality says it's necessary, even heroic, to kill within a war zone, but if you kill outside that zone you've committed murder and should be punished. Many books and films have focused on the psychological cost of this dissonance. In Monty Python's *The Meaning of Life*, a dying British soldier says to a passing officer:

Better than staying at home, eh sir? At home if you kill someone they arrest you. Here they give you a gun, and show you what to do, sir. I mean, I killed fifteen of those buggers sir! Now at home they'd hang me. Here they give me a fucking medal sir!¹³

As long as our thoughts and behaviors conform to our culture's collective mind-generated reality we are accepted as normal and sane. Any deviation from the collective mind-generated reality is branded aberrant, abnormal, perverted, taboo, and insane, and is treated, corrected, persecuted, and/or punished.

*

The psychiatric community does not have a definition of insanity, a fact that is quite surprising to a layperson. Sanity and insanity are legal concepts, used to determine whether a person can be held accountable for their actions: sanity means that you know the difference between right and wrong. Mental health professionals just have ever-lengthening lists of neuroses and psychoses codified in their diagnostic manuals; the many ways we can all be crazy. My dad is a child psychiatrist. I asked him once about the definition of sanity and he laughed heartily. He then described a study done in the 1960s by Roy R. Grinker, Sr., who studied under Sigmund Freud and was emeritus professor of psychiatry at the University of Chicago, University of Illinois, and Northwestern University. My dad told me, "Grinker looked at a group of college students who had never had any psychiatric issues, who were what any mainstream American would consider completely normal and well-adjusted, yet at the end of the study Grinker threw up his hands and concluded that 'these people were as close as I could come to normality and I still don't know what normal is."¹⁴

"So what's the point of therapy?" I asked.

"To enable a person to be a functioning member of society," my dad replied.

The quintessential mental health professionals—psychiatrists—don't have a concept of sanity. Just functionality. In other words, they're telling us the best we can do is to accept our culture's consensual reality. Our choices are: Accept the reality of our tribe and be considered sane or reject the reality of our tribe and be considered insane.

This is the root of the psychological need to conform, to be a member. Our need to conform is so great that we are willing to accept monstrous beliefs as sane and normal if they are part of our culture's consensual reality.

Sixty years ago, large numbers of German men and women willingly participated in mass murder at the Nazi death camps. Conformity to Nazi social norms allowed them to work hard, raise children, pay taxes, go to church, be a pillar of the community—and be accomplices to the assembly-line slaughter of millions of human beings. They were able to justify their behavior because the Nazi collective mind-generated reality condoned it as both sane and right.

Not long ago, certain Fijian cannibal tribes believed that sexually mutilating their human captives before killing, cooking, and eating them was perfectly normal, sane behavior.

Roman gladiator games two thousand years ago, Salem witchcraft trials four hundred years ago, and Islamic suicide bombers today are all examples of unquestioning conformity to social belief systems that label insane behavior "normal."

As a member of a society we not only agree to believe certain things, we also agree to ignore other things, to deny their existence.

For example, there is evidence that even a limited thermonuclear war could result in the extinction of the human race. Yet the billions of citizens of the nuclear club nations, the United States, Russia, China, France, England, India, Pakistan, North Korea, and Israel, obviously believe that the preservation of their ideology, political system, and way of life fully justifies risking the total annihilation of the human race.

This truly incredible mind-set, exemplified in the Cold War slogan "Better Dead than Red," has become so much a part of life that most people don't even think about it any longer. The question, "In order to defend your country, are you willing to risk the extermination of the entire human race?" has only one sane answer: "Of course not! If the unthinkable happened *we'd all be dead*, thus without a country and without hope!" The fact that billions of people are willing to live under the threat of self-extinction demonstrates that a chronic state of denial about nuclear weapons and what they represent is commonplace.

Buddhist teacher and psychotherapist Jack Kornfield, in *A Path with Heart*, describes the way our culture agrees to ignore some aspects of life: "To insulate ourselves from the specter of aging and infirmity, we put smiling young people in our advertisements, while we relegate our old people to nursing homes and old-age establishments...We deny death to the extent that even a ninety-six year-old woman, newly admitted to a hospice, complained to the director, 'Why

me?' We almost pretend that our dead aren't dead, dressing up corpses in fancy clothes and make-up to attend their own funerals, as if they were going to parties."¹⁵

*

If we're born and raised in a lunatic asylum we will adopt the beliefs and mannerisms of the inmates. We can't see the insanity because it's the sea we swim in. There's a cartoon that shows two fish leaping out of the ocean. One is pointing down with a fin and saying to the other, "See? It's called water." All of our reference points for reality are taken from our culture's belief system, so it is almost impossible for us to see that they are not actual reality (whatever that may be), but a mind-generated system of thought *about* actual reality.

Alan Watts, a theologian and scholar of both western and eastern religions, put it this way: "Experiences [of enlightenment or awakening] imply that our normal perception and valuation of the world is a subjective but collective nightmare. They suggest that our ordinary sense of practical reality—of the world as seen on Monday morning—is a construct of socialized conditioning and repression."¹⁶

Eckhart Tolle uses the word "insane" repeatedly in his best-selling books to describe the human race, both individually and collectively. In *A New Earth* he writes, "One can go so far as to say that on this planet 'normal' equals insane."¹⁷

To participate in society we must conform; we must assume the collective reality—the madness—of our particular culture. Most of us grow up thinking there is a normal society out there that we can never quite fit into. There is no normal society out there.

3. Delusion and Confusion

We share the beliefs and mind-generated reality of our particular culture, but within that context we create an individual mind-generated reality that delineates a world of our own. We all have our personal delusions.

We've seen how hard it is to see the collective beliefs of our culture. In my experience it's even harder to see our personal beliefs.

Most of us are totally unaware that our perception of reality is a mental construct and extremely limited. Most of us go through life accepting our mind-generated reality as actual reality without any thought of questioning it.

Picture this scenario: Your boss snaps at you. You start imagining that she's angry with you, maybe she's unhappy about that report you turned in last week, the one you knew could have been better, and you work yourself into a state of total panic about losing your job. This is your mind-generated reality.

Then later your boss happens to mention that her in-laws are visiting and driving her completely bonkers. The true cause of her irritability becomes happily evident and your mind-generated reality is revealed to be a fantasy.

Many books, plays, and movies are based on the tensions, conflicts, and farces that arise from people operating out of separate mind-generated realities. In a common story line a character believes that she is in love with someone, but then realizes too late (or just in time) that she actually loves someone else. *Gone with the Wind* is a classic example: through most of the story Scarlett O'Hara's reality is that Ashley Wilkes loves her and she loves him. Only at the very last does she realize the inaccuracy of her mind-generated reality and what clinging to it has cost her.

Our behavior is a direct reflection of our beliefs. One driver will see a snake in the road and take care to avoid hitting it, while another will go out of his way to run over it. To kill or not to kill is completely determined by the belief systems of each driver about the worthiness of snakes. We are and we do what we believe.

Addictions—to alcohol, drugs, eating, sex, shopping, gambling—are enabled by the mind's ability to block out information that does not fit our beliefs. Entire shelves are filled with books documenting the myriad ways people have been "in denial"—that is, deluded—about their addictive behavior. When we are free of the addiction, we look back on that time in our life and ask, "How could I have been so blind?"

How many of us have experienced being delusional in our love life? Usually our friends see our romantic relationships in a much more objective light than we do. A friend may ask, "How can you put up with your girlfriend, she's so boring?" and we'll just shrug it off as if we don't see it—and we don't, in our conscious mind. We block out negative thoughts about our lovers in an attempt to preserve the relationship, so we are oblivious to the problems our friends see. But later, when the relationship is over, we often realize we were aware of the problems all along.

Perhaps the most common delusion of all is the assumption that we know who we are. Ask yourself who you really are. If you are like most people, you will find an abundance of unquestioned beliefs you hold about yourself (I'm pretty, I'm unattractive, I'm smart, I'm stupid, I'm a good person, I'm a bad person, I'm my job, I'm my history, I'm my possessions, I'm my name, etc.), which collectively comprise your identity. All of these beliefs create a mind-generated reality called "this is who I really am." But with sufficient examination you will find that these beliefs in no way reveal the actual reality of your identity. These beliefs are simply

what you have been taught and what you have come to believe about yourself.

You might ask: Am I a soul created by God that waited for a particular time and space to be born? If that's true, where was that soul before I was born and where does it go when I die? If there is no God and no soul, am I just an arbitrary combination of genetic material? Is my life just a vehicle for self-replicating DNA to continue a purposeless evolutionary progression? Or, as some physicists suggest, am I just a bunch of subatomic particles randomly banging together, which means my life is an inconsequential blip of consciousness in a completely meaningless universe?

After asking such questions it becomes clear that none of us, ultimately, has any absolute knowledge of *who* we are, *what* we are, *where* we are, *when* we are, *why* we are, *what* we're doing, *where* we came from, or *where* we're going.

These are the kinds of thoughts that keep us up on those dark nights of the soul.

*

It's not our ignorance of who we are that makes us crazy; it's our delusion that we *do* know who we are that makes us insane.

Every unexamined belief, every unquestioned assumption about reality, is a building block of delusional insanity.

Webster's New Universal, Unabridged Dictionary, a massive compendium of words and definitions, provides only these brief (and circular) phrases to define sanity:

sane: *free from mental derangement* insanity: *a derangement of the mind* deranged: *insane*

Here's my definition:

Insanity: the confusion of mind-generated reality with actual reality

Does anyone know what actual reality really is? We perceive all this stuff going on, we have all sorts of names for it and unending beliefs about it, but we have no absolute knowledge of what any of "it" really is. That is to say, no one knows what actual reality is.

There's *one* thing we do know: all of us have the absolute certainty that "something's happening"; experience is occurring.

"Something's happening," whatever that ultimately proves to be, is what I mean by actual reality. Actual reality is what is. Actual reality may currently be a mystery to us but the actuality of the existence of the mystery is not in doubt. If you are reading these words then something's happening: the mystery is absolutely real.

Actual reality is not what we think is, or what we have been taught is, or what we have faith is, or what we hope is, or what we fear is. Actual reality is *what is*. If there are fourteen trillion quintillion universes, and/or if everything is infinite oneness, then that is the actual reality, that is *what is*.

Children's questions have a way of revealing just how little we know about even the simplest facets of reality. Walt Whitman says this beautifully in *Song of Myself*:

A child said, 'what is the grass?' fetching it to me with full hands.

How could I answer the child? I do not know what it is anymore than he.¹⁸

A sensitive fourteen-year-old girl of my acquaintance was sent to a psychologist because she had continued asking "Why?" long after most children give up on the question (for lack of satisfying answers). She was struggling to find a rock of certainty on which to stand. The help she received? A diagnosis of "existential angst."

In order to get along in this life, most of us act as though we *do* know what's real. This is what makes us insane: we confuse our mental model of reality with reality itself.

We believe our mind-generated reality is actual reality.

4. Filters of Reality

Robert M. Pirsig asserted in *Zen and the Art of Motorcycle Maintenance* that "definitions are the foundation of reason."¹⁹

The purpose of definitions is to bring our individual mind-generated realities about the meaning of a word into closer alignment. Then we have a basis for discussion and analysis. Even if you disagree with a definition of mine it allows you to better understand the point I'm trying to make.

Here are definitions for some important words in this book (note: if a definition in this book isn't attributed to a specific dictionary it's mine):

Ego: I, me; self-awareness; our personality or self-image.

Subjective: our individual point-of-view or perspective; cannot be consistently verified as accurate by an impartial observer.

Objective: *independent of our individual point-of-view; can be consistently verified as accurate by an impartial observer.*

Our mind-generated reality, our individual conscious awareness, has two components: a *subjective reality* and an *objective reality*.

I'll use the analogy of filters to describe how our mind-generated reality is constructed. The sensory stimulation caused by actual reality (whatever that is) must pass through two filters—a construct filter and an analysis/evaluation filter—before we become consciously aware of it.

The raw incoming data of actual reality first passes through our "portal of awareness." Our sensory apparatus, including our eyes, ears, nose, taste, and touch, delivers a stream of information to our brain. Because of the unique configuration of each person's portal of awareness the content of the information will be different for each of us. For example, you may have better eyesight than I do, and as a consequence will have more visual information delivered to your brain.

Arthur has a much keener sense of smell than I do, and he is always asking me, "what is that smell?" My usual reply is "what smell?" Because there is no olfactory data entering my portal of awareness, this smell doesn't exist for me. That doesn't mean there is no odor: there have been plenty of times when Arthur has found the source of an odor I never smelled.

The data that enters the portal of awareness then passes through the construct program to assemble basic physical reality in our minds: space, time, matter, color, up, down, soft, hard, wet, dry, hot, cold, etc. This processed information forms our mental conception of physical reality. Almost everyone perceives physical reality in basically the same way.

Immanuel Kant, in his 1781 treatise *The Critique of Pure Reason*, addressed the debate about whether reality exists only in our minds (that is, he expanded on Dr. Johnson's kick of the stone). He postulated hard-wired circuits in our brains that create a mental image of physical reality. His "categories of understanding" include quantity, quality, causality, substance, space, and time.²⁰ They guarantee that we all share a common version of objective, physical reality.

Neuroscientists are now confirming Kant's proposition. David Eagleman writes in his 2011 book *Incognito: The Secret Lives of the Brain*, "Babies, helpless as they are, pop into the world with neural programs specialized for reasoning about objects, physical causality, numbers, the biological world, the beliefs and motivations of other individuals, and social interactions."²¹

Examples of physical reality: rocks are hard unless they're molten; water is wet unless it's frozen or gaseous; and humans have many different skin colors. Imagine a child from an Amazonian jungle tribe brought into a New York apartment. While not having a clue as to the

purpose of the computer screen on the table, he would nonetheless respect the physicality of the object: he wouldn't try to put his hand through it.

If you still don't believe in the existence of physical reality, if you think there are only subjective perceptions, if you say "you have your reality and I have mine," I ask: how can you have followed my arguments up to this point? How can we have a conversation about *anything*, unless there is a physical reality that we share, one that forms a foundation of shared concepts? We certainly have our own subjective perception of physical reality, but let's allow that there is a physical reality. Of course we don't know what that physical reality is in the absolute sense, but this is the reality we obviously must accept as we live our lives. Still don't believe? Step in front of the "nonexistent" speeding truck and get back to me on how that worked out.

*

The mental images of physical reality then pass through the analysis/evaluation filter, which examines and appraises everything based on the criteria of value and meaning: beautiful, ugly, good, bad, useful, worthless, right, wrong, better, worse, important, insignificant, etc. This second filter is what makes us human, and is the source of all creativity and invention, our abstract thoughts, and our reasoning ability.

Animals have a rudimentary version of this analyzing filter, but only a very few are capable of elementary mental abstractions.²²

The analysis/evaluation filter utilizes concepts, some learned from our culture, some learned from our family, and some created from our own personal experience. The analysis/evaluation filter produces our individual objective and subjective realities.

The analysis part of the filter utilizes objective concepts that allow us to manipulate physical reality: because rocks are hard they make a good building material, the wetness of water can clean the rocks before I use them, and dark skin in humans is an evolutionary response to the greater amount of sunlight in tropical regions. This analysis creates our individual objective reality, which can be consistently verified as true by impartial observers (within limits). Objective reality is composed of *critical judgments* based on utilitarian value, and results in inventions like spears, baskets, alphabets, computers, and space telescopes.

The evaluation part of the filter utilizes personal beliefs and opinions about physical reality: this rock is prettier than the one next to it, that pond-water is disgusting, and people with my skin color are superior. This creates our individual subjective reality, which cannot be consistently verified as true by impartial observers. Subjective reality is comprised of *value judgments* based on our personal perception of meaning and worth. Subjective evaluation determines that some things have more inherent worth or meaning than other things. Subjective reality results in inventions such as art, music, religion, prejudice, and human sacrifice.

The fully processed information, a synthesis of objective reality and subjective reality, is served up to our awareness at any given moment as, simply, "reality." This is what is projected on our screen of awareness. We believe this information to be unfiltered actual reality when in fact it has been heavily processed to form a subjective point-of-view.

For example, imagine a tourist standing at a scenic viewpoint and observing the landscape. His construct filter translates the data of actual reality into: man, standing, looking, viewpoint, cloudy sky, mountain, and river. But then his analysis/evaluation filter applies *value* and *meaning* according to his beliefs: man = me, me = not as good as others who can paint a scene like this; cloudy sky = unattractive because overcast days aren't as pretty as sunny days; mountain = beautiful because mountains are more aesthetically pleasing than flatlands; river =

pretty except for that litter on the bank; litter = caused by a lesser-human being who doesn't care about the environment.

This person's mind-generated reality becomes "Beautiful mountain and nice river despoiled by litter flung by an uncaring asshole on a rather unattractive day, with a slightly negative twist because this scene is a reminder of my unhappiness about my non-artistic nature." This is "reality" for our tourist, but it has only a tenuous connection with the objective reality of the scene, and even less of a connection with whatever actual reality might be.

The division between objective and subjective realities is fuzzy, because our subjective beliefs color our perception of everything with judgments of value and meaning. For example, we have a rag rug in our home office. When I look at this rug, I am seeing it through a veil of warm feelings for my great-grandmother who made rugs like this. Our rug is rather plain, but to me it is beautiful because of the memories it evokes. Arthur sees it through another veil: he found it at a used furniture store and is proud of his purchase—it fits this room perfectly. Whenever he looks at the rug, it is more attractive because of this association.

In addition, as we will see, what we think of as objective reality is often revealed to be subjective. However, learning to tease apart the subjective from the objective will help us deal with our insanity.

*

A belief sounds like a harmless thing. In fact, beliefs completely shape our view of the world and our lives. Actual reality is filtered through our preconceptions before it reaches our conscious awareness. What we call reality is a mental model created by our objective and subjective beliefs. The analysis/evaluation filter is not a passive sifter of information but an active analyzer and arranger of both incoming sensory data and information stored in our memories.

The reason that people perceive reality differently is because every mind interprets reality in a unique way, due to the personalized content of their analysis/evaluation filter, as well as their unique portals of awareness. For instance, imagine two people standing side by side and looking at a particular tree. They may be looking at the same tree, but what they *see* is different.

The first difference in the perception of the tree is caused by the fact that the two people in our example have different portals of awareness; they have different sensory capabilities. One person may see details in the bark that are just a blur to the second; the second may smell the fragrance of the tree while this is completely unknown to the first.

In addition, they cannot share the identical line-of-sight perspective of the tree. Their physical position relative to the tree is necessarily different which means their construct filters perceive the tree differently. These factors usually make a relatively minor difference; most people's construct filters have a lot in common and the end result is a physical reality we all more or less agree to: a tree is almost always a tree.

Our analysis/evaluation filters are far more individualized.

The analysis component involves critical judgment of physical reality. The two observers perceive that this is an oak tree; the leaves are being moved by the wind; this tree is taller than others around it. This forms objective reality; they will probably still be in agreement here.

The evaluation of the tree is influenced by everything the two tree-watchers have ever learned, thought, felt, and experienced about the meaning and worth of trees. One may think of "tree" as a miraculous living thing, with individual characteristics and deserving of respect, while the other believes "tree" is uninteresting and valuable only as potential lumber or a source of heat. These are their two subjective realities, and our subjects are much less likely to agree about which of these "realities" is true.

Some examples of objective and subjective realities:

That person is obese: objective reality/verifiable fact. Fat people lack self-control, they're weak and repulsive: subjective reality/unverifiable opinion.

I have a pimple on my face: objective reality/verifiable fact. The pimple makes me unattractive and I have to hide until it's gone: subjective reality/unverifiable opinion.

Some people like to have sex with multiple partners: objective reality/verifiable fact. People who have sex with multiple partners are immoral and evil: subjective reality/unverifiable opinion.

Over the course of human history the analysis/evaluation filter has become clogged with subjective beliefs pretending to be objective facts, mixing constructive analysis like "that river would be easier to cross if we built a bridge," with superstitious beliefs like "sacrificing a virgin will appease the gods and ensure a fruitful harvest." As we've seen, if enough people believe something, it's hard to even recognize it as a belief anymore.

*

I'd like to spend a little more time looking at the construction of objective reality in our minds because it's tempting to believe that our internal model isn't affected by our beliefs. A tree is a tree, no matter what I believe, right? Our model of objective reality usually matches physical reality enough to allow us to function in the world, but we do not perceive the raw information of physical reality that enters our senses. We perceive only processed information.

We are born with impressive mental processing equipment—our construct filter—but, as we will see, infants must add more. We need to accumulate beliefs in our analysis filter that allow us to correctly interpret sensory stimuli.

Annie Dillard's Pulitzer Prize-winning book *Pilgrim at Tinker Creek* is an extended meditation on what it means to see. After years of walking in the woods and looking closely at tiny creatures, she had never seen a praying mantis egg case. When she learned what to look for she immediately found dozens that she had passed by many times on her daily walks.²³

Ms. Dillard also describes with wonder the experience of people, blind their entire life, who suddenly gained their vision when cataract surgery was invented in the 1950's. These people didn't immediately see as we do: after the surgery almost everyone experienced great difficulty in perceiving three-dimensions; all they could see when they looked at the world were blobs of colors and varying amounts of luminance.

Those of us endowed with normal vision don't remember learning, while we were infants, that shades of grey define the boundaries of objects. We don't remember learning, through the combined input of seeing with our eyes and feeling with our hands and mouth, what edges and shadows mean.

Ms. Dillard relates how some of the older adults wished they had never had the surgery because, with sight, the world had become too large and confusing. They didn't understand perspective—they couldn't comprehend how things varied in size with distance. One woman would close her eyes whenever she had to negotiate a spatial task such as walking down stairs.

Pawan Sinha, associate professor of brain and cognitive sciences at MIT, is investigating how we learn to see through a humanitarian project called Project Prakash. Blind children in India are given medical treatment to restore their sight. Some of these children are then enrolled in a scientific study to discover how the brain learns to take the raw input of visual information and translate it into a mental image of an object.

Dr. Sinha has found that these children initially perceive images just as those cataract patients did, as regions of different colors and brightness. "The brain has this complex task of putting together, integrating, subsets of these regions into something that's more meaningful, into what we would consider to be objects," Dr. Sinha said in a lecture at a TED conference in November, 2009. "And nobody knows how this integration happens."²⁴

Oliver Sacks, professor of neurology and psychiatry at Columbia University and the author of many popular books about the strange workings of the human mind, wrote about learning to see objective reality in *The Mind's Eye*:

Although seeing objects, defining them visually, seems to be instantaneous and innate, it represents a great perceptual achievement, one that requires a whole hierarchy of functions. We do not see objects as such; we see shapes, surfaces, contours, and boundaries, presenting themselves in different illumination or contexts, changing perspective with their movement or ours. From this complex, shifting visual chaos, we have to extract invariants that allow us to infer or hypothesize objecthood...The world of objects must be learned through experience and activity: looking, touching, handling, correlating the feel of objects with their appearance.²⁵

Neuroscientist and artist Beau Lotto gave a TED talk in 2009 entitled "Optical Illusions Show How We See" that illustrates the process Dr. Sacks describes above. One of Mr. Lotto's demonstrations involved a drawing of various geometric shapes. He isolated two sections of the drawing that conveyed exactly the same visual information to the viewer's brain—same shape, size, and color. Then he revealed where these two areas fit into the larger diagram: one was the shaded side of a yellow box while the other was an illuminated side of an orange box. They may have conveyed exactly the same information to my retina, but when I looked at the complete picture I saw different colored boxes, one in shade and the other not. The two surfaces didn't look the same to me, even though I knew they were identical.²⁶

Our brains interpret information differently depending upon the context.

Mr. Lotto stressed this as the most important point in his talk: "The light that falls onto your eye—sensory information—is meaningless, because it could mean literally anything...There's no inherent meaning in information. It's what we do with that information that matters. So how do we see? We see by learning to see."

Clearly, the information about the world that comes in through our eyes does not match the image of the world in our mind. A great deal of mental processing—the analysis of sensory input using beliefs and assumptions—must occur in order for us to decipher visual stimuli into meaningful objects.

Quantum physicist David Deutsch, in his book *The Fabric of Reality*, concludes that our mental processing results in an inaccurate model of reality:

We realists take the view that reality is out there: objective, physical, and independent of what we believe about it. But we never experience that reality directly...What we experience directly is a virtual-reality rendering, conveniently generated for us by our unconscious minds from sensory data plus complex inborn and acquired theories (that is, programs) about how to interpret them...Since our concepts and theories (whether inborn or learned) are never perfect, all our renderings are indeed inaccurate. That is to say, they give us the experience of an environment that is significantly different from the environment that we are really in. Mirages and other optical illusions are examples of this. Another is that we experience the earth to be at rest beneath our feet, despite its rapid and complex motions in reality.²⁷

Some people may still protest that our mental processing allows us to build a model that accurately represents the physical reality right in front of us. This however, is not true. I've already given examples of people not seeing things right in front of their eyes, here's another:

For many years I lived in a small town. A woman who also lived there had beautiful waistlength hair that I (enviously) admired. I was only a casual acquaintance of hers (in a small town you are at least a casual acquaintance of everyone). One day I saw her in a restaurant and her hair was at least a foot shorter; when I exclaimed about her haircut she replied, "Do you know you are the first person to mention it even though I cut my hair a couple of weeks ago? People who work with me every day didn't even notice."

Psychologists Christopher Chabris and Daniel Simons have developed fascinating experiments that demonstrate how easily we can miss aspects of physical reality that are right in front of us. You can experience their most famous experiment yourself: "selective attention test," on YouTube (I won't give any more information because it can only be experienced if you don't know what the experiment is about; I highly recommend you try it, it's an amazing experience).

Chabris and Simons conclude from their experiments that the ability to focus our attention and block out details not relevant to the task at hand is a very important skill that evolution has given to humans. The analysis/evaluation filter looks for patterns and information that will be beneficial to our survival and screens out irrelevant data. This filter, in the researchers' words, is looking at the world with "expectations and goals."

In the book describing the above-mentioned experiments, they write: "Expectations are based on our prior experiences of the world, and perception builds on that experience. Our experience and expectations help us to make sense of what we see, and without them, the visual world would just be an unstructured array of light, a 'blooming, buzzing confusion' in the classic words of William James."²⁸

For example, when we are driving, if the red color of the leaves on a tree by the side of the road was as interesting to us as the red brake lights on the car in front of us, we would never make it alive through a day. We have to prioritize and filter.

We do not see actual reality. As these scientists have shown, we don't even see physical reality accurately. Our beliefs, expectations, and inborn and acquired theories filter physical reality to produce an individual mind-generated objective reality.

*

Because our objective reality is the product of beliefs, it is subject to error and change.

A common example of change in the perception of objective reality is the Copernican revolution. Once upon a time everyone believed that the sun (and everything else up there) revolved around the earth. There was scientific evidence to support this view, in addition to everyday personal observation. Then a Renaissance astronomer named Nicolaus Copernicus presented irrefutable proof that the reverse was true. Suddenly, "reality" changed. Today, we all "know" that the earth revolves around the sun (that is, we take the word of our scientists— personal observation would still convince most of us that the "rising" and "setting" sun revolves around the earth). Reality was not remotely affected by the human race's beliefs about what was going on. Reality was simply what was. The only thing that changed about reality was our beliefs

about it.

So-called objective science is affected by the belief-filters of scientists. Alan Lightman describes this effect in *Great Ideas in Physics*: "The exploding star of A.D. 1054, the Crab Nebula, was sighted and documented by the Chinese, but nowhere mentioned in the West, where the Aristotelian notion of the immortality of stars still held sway. We often do not see what we do not expect to see."²⁹ This is an old example, but science is still being affected by subjective-belief-led fashions in thought.³⁰

About the Author

Kathleen Brugger is a philosopher, writer, videographer, and entrepreneur. She is the coauthor, with her husband Arthur Hancock, of *The Game of God: Recovering Your True Identity*. She lives in Asheville, North Carolina with Arthur and their cat, Cat.

Connect with me online at KathleenBrugger.com. For more insights about universal human insanity, visit the We Are ALL Innocent by Reason of Insanity website.

End Notes

Throughout the book, I have used "Webster's New Universal Unabridged Dictionary" as my source of definitions. http://www.merriam-websterunabridged.com/

- 1 *Mark Twain's Notebook*, Mark Twain, p. 345 http://archive.org/details/MarkTwainsNotebook
- 2 Anthropologists' view of race: http://www.aaanet.org/stmts/racepp.htm The American Anthropological Association published a "Statement on 'Race'" in 1998; note the fact that the group put race in quotes. Their conclusion is that race is an invented concept, developed by European colonial powers to justify exploitation of the rest of the planet.
- 3 *The Heart is a Lonely Hunter*, Carson McCullers [Houghton Mifflin, 1940]
- 4 "Brain Time," by David Eagleman, 2009 http://www.edge.org/conversation/brain-time
- 5 Triumph the Insult Comic Dog: http://youtu.be/LHa7iQJ_fEw
- 6 *Monty Python and the Holy Grail*, film by Monty Python, 1975 http://www.youtube.com/watch?v=zIV4poUZAQo&list=UUGm3CO6LPcN-Y7HIuyE0Rew (at very beginning of clip can see servant with coconuts)
- 7 "The Boxer," Paul Simon, released 1969 http://www.paulsimon.com/us/music/paul-simons-concert-park-august-15-1991/boxer
- 8 The Far Side, by Gary Larson, http://www.thefarside.com/
- 9 Discovery of galaxies: http://earthguide.ucsd.edu/virtualmuseum/ita/04_1.shtml
- 10 *Up From Eden*, Ken Wilber (New Science Library, 1981), p. 103-4 *Journey to Ixtlan*, Carlos Castaneda (Simon and Schuster, 1972)
- 11 Peter Paul Rubens, especially his "Venus" portraits http://www.peterpaulrubens.org/
- 12 Dutch tulip bubble: http://en.wikipedia.org/wiki/Tulip_mania In the 1630s a craze for tulips swept the Netherlands and the price of bulbs skyrocketed. A futures market in tulip bulbs was created, and farmers and workers sold everything they could to buy into the market. A single bulb was as valuable as a house. Then one day the market crashed—consensual reality had gotten too far out of touch with actual reality—and the price of a tulip bulb dropped to a more rational level.
- 13 "The Meaning of Life," Monty Python, (film) transcript: http://sfy.ru/?script=mp_meanlife

- 14 Roy Grinker study: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1575075/ Dr. Grinker coined the term "homoclite" to describe a psychologically normal individual; he also did a follow-up study of the same individuals fourteen years later: http://archpsyc.jamanetwork.com/article.aspx?articleid=491142
- 15 A Path with Heart, Jack Kornfield (NY: Bantam Books, 1993), p. 23
- 16 *This Is It*, Alan Watts, [Colliers Book, 1967 paperback] p. 26 (originally published 1958)
- 17 *A New Earth: Awakening to Your Life's Purpose*, by Eckhart Tolle [Penguin, 2005] paperback p. 73
- 18 "Song of Myself," Leaves of Grass, Walt Whitman
- 19 Zen and the Art of Motorcycle Maintenance, Robert Pirsig [William Morrow, 1974]
- 20 I won't pretend to have read *A Critique of Pure Reason*, by Immanuel Kant. This information is from general books on philosophy.
- 21 *Incognito: The Secret Lives of the Brain*, David Eagleman, [Pantheon Books, NY: 2011], p. 83
- 22 Abstract reasoning in animals: chimpanzees and apes, evidence also in parrots. http://blogs.smithsonianmag.com/science/2012/08/african-grey-parrots-have-the-reasoning-skills-of-3-year-olds/
- 23 Pilgrim at Tinker Creek, Annie Dillard, 1974
- 24 Pawan Sinha at TED conference, November 2009, "How Brains Learn to See" http://www.ted.com/talks/lang/eng/pawan_sinha_on_how_brains_learn_to_see.html
- 25 *The Mind's Eye*, Oliver Sacks [Alfred A. Knopf, 2010] p. 73 [originally read in "A Man of Letters," *The New Yorker*, June 28, 2010, page 22]
- 26 Beau Lotto TED Talk: http://www.ted.com/talks/beau_lotto_optical_illusions_show_how_we_see.html 3:20 - 4:35 (it's interesting from the beginning)
- 27 The Fabric of Reality, David Deutsch [Penguin, 1997] p. 120-1, 136
- 28 *The Invisible Gorilla: And Other Ways our Intuitions Deceive Us*, Christopher Chabris and Daniel Simons [Crown Publishers, 2010]
- 29 Great Ideas in Physics, Alan Lightman [McGraw-Hill, 2000]
- Fads in science:
 From *Hidden Reality: Parallel Universes and the Deep Laws of the Cosmos*, by Brian Greene [Vintage, 2011], p, 230:
 "Hugh Everett, in his PhD thesis in 1956, suggested that the concept of multiverses could

bridge the gap between Albert Einstein's and Neils Bohr's positions on probability. But this paper was ignored until Neils Bohr died because no one wanted to go against the orthodoxy of the day."

film)