

Filling in the Blanks—Constructing a Reality from Our Beliefs
by Tom Kinney (UFR-VA)
Presented May 22, 2011 -- 26 minutes

Bulletin quote:

Oh, how sweet it is to hear one's own convictions from another's lips. Goethe (1749-1832)

Opening Words:

In general, we presume that our senses define reality. In actuality, there is whole lot of guessing and filling in the blanks going on. There is always too much information to take in and process so the brain selects what it believes to be significant and ignores the rest. Why? It's neurologically efficient, and the brain is our biggest energy burner. What the brain selects and how it interprets what our senses supply depends heavily upon our beliefs and our interpretation of previous experiences. Let's use our auditory mechanisms of the brain as an example. It selects a relatively narrow band from all the noise that invades the ear and tries to make a match based upon experience. Even repetitive patterns of random sounds can be transformed into words, complete sentences, and music as our brains subconsciously force those signals into some level of sense based upon experience. CD's of auditory illusions, created by UC San Diego's Diana Deutsch, are available for anyone who wishes to explore this phenomenon of the brain guessing and filling in the blanks. Or we can experiment with this phenomenon by putting our brains on idle and see what reality it comes up with. On our annual 4000 mile jaunt south in our van, during the quiet times late in a long day, I've heard the hum of the tires begin to match the music of Johnny Cash that we may have turned off hours ago. Our van tires aren't really singing Johnny Cash tunes....are they? Or are they indeed, and I'm just

denying that reality? Knowing more about how the brain fills in the blanks might impact how strongly you wish to defend your grip on your own reality?

(Cue chords and lights)

As we pass the offertory basket this morning...imagine with me you're in our van at 1 a.m.with the moon lighting the broken clouds as we're rolling south over the gently rolling hills and ridges along Interstate 35 southwest of San Antonio...contemplating the good and bad we've done in our lives...listening to the wailing of the tires...when they begin to sing.....

“Ghost Riders in the Sky” by Hank Stupi

Main Talk—

Thanks, Hank. Very well done. And thanks to the “man in black.”

This talk is a potpourri of elements of the seven UU principles: From #1, the dignity of every person, from #2 compassion in human relations, from #3 acceptance of one another and encouragement of growth, from #4 the free search for truth, from # 6 a goal of a community of peace and liberty, and from #7 respect for all. Collectively, they are us, our hoped for reality.

There have been multiple laboratory tests proving that a group of people experiencing the same event report entirely different interpretations—and, in some cases, vehemently defend their reality of what their brain recorded. Expectations, personal experience, and beliefs all play a part in interpreting what our senses send to our brains. Thus our beliefs do indeed govern nearly every aspect of our lives.

For those who study the nature of human consciousness, beliefs may seem like a trickster constantly playing with our mind. And yet beliefs are our most important human commodity. With them we build civilizations, make and stop wars, create music and art, and determine our relationship to the universe and to each other. Beliefs make us fall in love or drive us into hate. That is why it is so crucial to explore how they work. Beliefs will determine our destiny.

As is my reality, beliefs, and habit in these talks, I offer credit and thanks to the contributors, in this case, Anthony Storr's *Feet of Clay*, Andrew Newberg's *Why We Believe What We Believe*, and the 19th century philosopher, Robert G. Ingersoll among others for their concepts, insights, and some of these words as a reminder that we all stand on the shoulders of those who have gone before.

Beliefs tell us how to pray, or not, how to vote, whom to trust, and whom to avoid. Once beliefs are established, some of which are truly historic rooted in our childhood, we rarely challenge their validity, even when faced with contradictory evidence. Richard Posner, Professor at University of Chicago Law School and later Federal Appeals Judge, coined the phrase "solidarity value," the tendency for some people wanting not to be informed, and even less so challenged, in their beliefs. Rather, they want to see a champion defending their preconceived view of the world. It is exceedingly easy to customize your access so that you will only read what people "on your side" are saying and rarely to never be exposed to a credible dissenting viewpoint. When we encounter others who appear to hold differing beliefs, we are tempted to dismiss or even disparage them, even when their beliefs are fundamentally similar to ours. For example, Christianity, Judaism,

and Islam all embrace similar notions of God, yet according to one poll nearly one-third of Americans believe that each of these religious groups worships a different deity. The majority of human beings share similar ethical values, but we tend to ignore the similarities and focus on the discrepancies. Ignorance is only partly to blame. A more significant reason is that our brains are instinctively prone to reject information that does not conform to our interpretation of prior experiences and what we believe we know. Simply put, old beliefs, like bad habits, die hard.

We create our own reality. Current research indicates that many of our prior experiences, especially our memories about ourselves—particularly those about our early years—are partly a form of wishful thinking, and the internal cognitive process that attempts to restructure our autobiography in a positive light. In other words, each time we recall an old memory, we tend to deemphasize its negative aspects while highlighting, and often embellishing, the positive aspects. As we also know, some overdo this trait well beyond childhood. According to Reide Hastie and Robyn Dawes: *We quite literally make up stories about our lives, the world, and reality in general. The fit between our memories and the stories enhances our belief in them. Often, however, it is the story that creates the memory, rather than vice versa.*

False memories, and the beliefs they generate, are common, and memories can be fabricated. One eminent psychologist, Elizabeth Loftus, had conducted experiments involving more than 20,000 individuals that document how easy it is to create false memories, and thus false reality. “Give us a dozen healthy, well-formed (subjects), and

our own specified world to handle them in,” writes Dr. Loftus, “and we’ll guarantee to take any one at random and train it to become any type of memory that we might select...regardless of its origin or the brain that holds it.” An example from one of Loftus’ studies is that more than one-third of the adult subjects were convinced to believe that they had interacted with Bugs Bunny during a childhood visit to Disneyland. Half of those believed that they had shaken hands with him or hugged him and more than one-fourth “remembered “ touching his tail or ears or hearing him say “What’s up, Doc?” Bugs Bunny, of course, is a Warner Brothers creation and does not appear at Disneyland. As one staff writer at the LA Times put it, if Bugs were to show up at Disneyland, “the wascally...wabbit would be awested on site.”

If we **understand** the neuropsychology of the brain, our beliefs will be able to grow and change as we interact with others who have different views of the world. Further, we will be able to accept that others have differing beliefs from ours without feeling a need to denigrate their world view—now rejecting denigrating statements is where UUFR can lead the way. After years of study, brain scientist Newburg sees that a profound chasm exists between the world “out there” and our internal consciousness, and that fundamental disconnect prevents us from ever truly “knowing” reality. This key concept, the acknowledgment of this disconnect, may temper how we defend or act upon our interpretation of reality and, equally important, how we react to others who have a different interpretation of reality.

Because we can never get outside ourselves, we must make assumptions, beliefs—usually lots of them—to make sense of the world “out there.” The spiritual beliefs we adhere to and the spiritual experiences we can have are also influenced by our neural circuitry and its limitations. We can experience those spiritual beliefs—or anything else, for that matter—only through the functioning of our brain.

Science has yet to verify the existence of consciousness beyond the brain, however such beliefs in souls, etc., can generate a sense of peace and equanimity within the brain making us feel more connected with the world and increase the empathy we express toward others. And that’s good.

However, when the neural circuits involved in moral assessment are damaged, one’s ability to interact morally with others can be severely impaired. In one well-documented case of an injury to both frontal lobes, the injured began to act aggressively with little provocation and he displayed no sense of empathy for others or remorse for his own actions. He failed to accept responsibility for those actions, justifying his episodes in terms of the failures of others. Malfunction in these areas can result in too much emotion or no emotional reaction at all. The ability to empathize with others is essential for establishing moral beliefs, for if we don’t understand or know how to focus upon jpe another person feels, we have less ability to respond in a kindly manner.

Emotions stimulated by moral issues and those stimulated by non-moral issues are governed by different parts of the brain. These areas play an important role in controlling negative emotions such as fear and rage.

Newburg proposes that we evolved of such empathetic beliefs to help us to flourish and survive:

- They help us to organize the world in meaningful ways
- They give us our sense of ourselves.
- They allow us to socialize with others.
- They guide us in our moral and educational pursuits.
- They help to regulate the emotional centers of the brain.
- They help us take action in specific ways.
- They allow us to accomplish our goals.
- They heal our bodies and minds.

We tend to create a reality we prefer. Neither children nor adults have a well-developed capacity to distinguish the accuracy of their underlying beliefs. In fact, adults are particularly vulnerable with regard to maintaining self-deceptive beliefs, especially when comparing their own intelligence and attractiveness with other people's. For example, in various surveys conducted over the years, approximately 90 percent of the respondents believed that they were smarter, healthier, and more industrious than the average individual. With plumbers and industrialists, **objective quality** and the **success of their product** forces their realism. It leaks or it doesn't. It functions and sells or not.

However, where true objective measurements are absent and politeness and mutual support distort feedback, these self-deceptive beliefs are less challenged. Newburg, as a professor at the University of Pennsylvania as well as a brain researcher, claims his favorite study is of university professors where 94 percent believed that they were better at their jobs than their colleagues. Obviously, statistically, nearly half of those professors would have to be wrong. Newburg points out that when people over estimate their personal abilities, unfortunately, their self-deception causes them to suspend their ability

to test reality. Bragging or pontificating more often than not exposes this self-deception and the underlying insecurities.

On the other hand, too much pessimism in beliefs can lead to depression, which suppresses the functioning of essential neurotransmitters. This, in turn, leads to physical inactivity, instability of moods, and a number of physical symptoms and diseases. Thus it seems the brain, in its innate wisdom, biases us toward optimistic beliefs. Interestingly, a code phrase for depression is “I’m just being realistic.”

Optimism can be very beneficial, helping us to overcome situations that seem difficult or threatening; and extreme optimism concerning recovery from a life-threatening disease may make the difference between survival and death, since positive beliefs can stimulate the immune system in healthy ways. Studies have shown that those with expectations of success had more helper T-cells, which support immune response; and more effective natural killer cells, which destroy substances that are poisonous to cells.

It is, of course, true that beliefs have been used to suppress others or to justify immoral or sadistic acts. But if we so choose, (and these are Newburg’s words) they can also connect us with transcendent dimensions of experience, be it seen through religion, science, or the innate curiosity of a child-like imagination. Most important, they can give us inspiration and hope, essential tools for confronting those moments of confusion and doubt that are so often part of life.

How then can we ascertain reality? Every religion and every philosopher usually begins with a basic unquestioned assumption. Descartes, for example, began by doubting the truth of all his previous beliefs leaving only that he himself existed. “I think, therefore I am.” Spinoza regarded thoughts and the physical universe as different aspects of a single substance, which he sometimes called “God” and sometimes “nature.” In contrast, certain forms of Buddhism reject all these beliefs, suggesting instead that the world, as the mind perceives it, is an illusion. Buddhist practices of meditation attempt to silence all thought—all of one’s beliefs—so that what the mystics call the “true nature of reality” can be perceived. Depending upon the assumptions we begin with, our beliefs about reality will differ. And maybe we can learn to be more comfortable with that.

Spinoza managed to abolish the dualism between mind and nature, but in the process, he removed the “otherness” of a personal God who could intervene in human life. To the religious orthodoxy of the seventeenth century, such a non-personal god could never provide a sense of comfort, meaning, or solace. That was a perception of reality too much at conflict with their beliefs. So Spinoza was branded an atheist by his contemporaries. Today, however, many people have no difficulty in embracing this form of natural spirituality. Spinoza’s words: “By God, I mean a being absolutely infinite—that is, a substance consisting in infinite attributes, of which each expresses eternal and infinite essentiality.”

For centuries, visual and auditory stimulation have been used to induce mystical experiences. Newburg’s words used earlier were “connecting us with transcendent

dimensions of experience” to which he has applied his science to observe “those mystical experiences arrived at through religion or the innate curiosity of a child-like imagination.” In many beliefs and practices, chanting, drumming, music, dance, incense, candles, and colored lights can trigger visions of otherworldly realms. Gregorian chants, Hindu mantras, and Navaho sand paintings have all been used to transport the practitioner into states that alter the neural processing of his senses. In some Pentecostal churches, it’s speaking in tongues. To the casual listener, what they say sounds somewhat like a foreign language, but for the practitioners, this speaking is a door to an inner experience that is profoundly meaningful to them. Such practices deliberately disrupt the perceptual organization of the brain. In this way, practitioners **alter the reality** in which they normally live, in the hope of perceiving spiritual realms that benefit so many. Lest you wonder, I don’t classify my van tires singing Johnny Cash tunes one of the spiritual realms to which I aspire. However, if you do, I would be happy to loan you the van with the promise to bring it back with a full tank.

Current research has identified specific neurons that are sensitive to holistic representations; however, the majority of our neurons reduce and categorize experience into objective fragments. This may explain why reductionist thinking is so predominant in human culture, and why holistic perceptions are so often dismissed skeptically. Because holistic processes are organized differently, they provide us with a very different view of the world. For example, if we see a group of dark-skinned people who are speaking a strange language and dancing around a fire, we might make the holistic assumption that they are a mystical tribal people with shamanic beliefs. Of course

reductionist processes might turn out that we were just observing a group of Tibetan's engaged in a holiday celebration.

Spiritual experiences also seem to rely on the holistic functions of the brain; this may explain why individuals describe such experiences in broad, sweeping, poorly defined terms. In fact, words like “enlightenment”, “transcendence,” and “spirituality” have proved very difficult for scholars to define because holistic processes do not operate according to the principles that govern the other cognitive functions of the brain.

What is spiritual? A 2003 UCLA study concluded that 80 percent of those surveyed considered themselves spiritual, but these researchers had included in their definition anyone who actively sought creativity, inspiration, or meaning and purpose in life. One could argue that most people, atheists included, would embrace similar goals and ideals. Here is a quotation from the project description: *Spirituality points to our interiors, our subjective life, as contrasted to the objective domain of material events and objects. Our spirituality is reflected in the values and ideals that we hold most dear, our sense of who we are and where we come from, our beliefs about why we are here—the meaning and purpose we see in our lives—and our connections to each other and to the world around us. Spirituality also captures those aspects of our experience that are not easy to define or talk about, such as inspiration, creativity, the mysterious, the sacred, and the mystical. Within this very broad perspective, we believe spirituality is a universal impulse and a reality.*

When definitions become this broad, it's no wonder that we here wrestle with just what is spiritual. Since the terms spiritual, religious, mystical and transcendent are often used interchangeably, it becomes even more difficult to put a finger on the spiritual state of America. Newberg considers any momentary uplifting event as falling into this category. His work shows how surveys are inclined to overestimate the number of religious people in America.

Buddhist meditation attempts to teach practitioners how to accentuate this holistic awareness by temporarily suspending the processes of logic. In comparison, western religious practices tend to be more reductionists, often applying causal reasoning and logic to build a theology. However, most western religious traditions also have rich mystical elements and a holistic awareness on which the practitioner can feel connected with the universe or God.

If you have experienced some personal inner conflict over spiritual concepts, this may help. We are born with two hemispheres in our brain that will, over time, develop two distinctly different worldviews, and our consciousness does not seem to like this very much. The right side of the brain wants to exclaim, "This is it—this is the whole picture." But the left side intrudes, saying, "No, you're wrong—look at all the inconsistencies and differences and pieces of the puzzle that have been ignored."

Neurological studies seem to confirm this inner conflict by showing that each person is capable of thinking both ways, though not necessarily at the same time. Feeling more free to question our beliefs, our reality, we can help ourselves and others grow.

Addressing to what extent we should be concerned about the relationship between reality and our beliefs, Anthony Storr offers:

Both revelation and delusion are attempts at the solution of problems. Artists and scientists realize that no solution is ever final, but that each new creative step points the way to the next artistic or scientific problem. In contrast, those who embrace religious revelations and delusional systems tend to see them as unshakeable and permanent...

Religious faith is an answer to the problem of life. The majority of mankind want or need some all-embracing belief system which purports to provide an answer to life's mysteries, and are not necessarily dismayed by the discovery that their belief system, which they proclaim as "the truth" is incompatible with the beliefs of other people. One man's faith is another man's delusion.

Whether a belief is considered to be a delusion or not depends partly upon the intensity with which it is defended, and partly upon the numbers of people subscribing to it."

And here's another option, another solution. This one from the nineteenth-century philosopher Robert G. Ingersoll, a secular moral hero if ever there was one, who founded his beliefs in a naturalistic worldview, giving him freedom from:

The fear of eternal pain...from the winged monsters of the night...from devils, ghosts, and gods....no chains for my limbs—no lashes for my back—no fires for my flesh—no master’s frown or threat—no following another’s steps—no need to bow, or cringe, or crawl...I was free. I stood erect and fearlessly, joyously faced all worlds...And then my heart was filled with gratitude, with thankfulness, and went out in love to all the heroes, the thinkers who gave their lives for the liberty of hand and brain—for the freedom of labor and thought—to those who fell in the fierce fields of war, to those who died in dungeons bound with chains—to those who proudly mounted scaffold’s stairs—to those whose bones were crushed, whose flesh was scarred and torn—to those by fire consumed—to all the wise, the good, the brave of every land, whose thoughts and deeds have given freedom to the sons of men. And then I vowed to grasp the torch that they had held, and hold it high, that light might conquer darkness still.

Ingersoll would undoubtedly wish for you, on your journey, the same freedom, supported by beliefs that create your own wonderful version of reality. And isn’t that **one** of the key things that UUFR is all about? Thoughtful people exploring and helping one another?

*****end*****