

## The Shadow of the Doubt

Robert Tilden February 12, 2017

### Opening Reading

Usually, I prepare my presentations by seeing what the topic is, find some biblical references, see what Churchill had to say about it, and fill in the gaps. Not today. Today will be about equal parts modern and Hindu. The reading is from the Katha Upanishad which reflects Indian thought from the first millennium BC.

### Reason –

#### From the Katha Upanishad, Chapter III, verses 3-9.

(I combined two different translations from Sanskrit)

[3] Know this: The soul is a passenger, the owner of the chariot,  
The chariot is the body,  
reason is the body's charioteer,  
and mind the reigns that curb it.

[4] Senses, they say, are the chariot's horses,  
Their object the path before them;  
What, then, is the subject of experience?  
*'Soul, sense and mind conjoined,'* wise men reply.

[5] One who has no understanding, whose mind is unrestrained,  
cannot control the senses and will be like a person driving the chariot with wicked  
steads.

[6] But the reverse is the case of that person whose horses are good and well-trained,  
and when the charioteer is capable of understanding.

[7] If the driver of the chariot is bereft of understanding, his mind is ever impure, the  
goal is never reached and the chariot is hurled down. A person without self-control  
returns to this round of never-ending birth and death.

[8] He whose senses are controlled and whose intellect is purified; he does not come  
back

[9] The man whose charioteer is wisdom.  
Whose reins a reasoned mind controls,  
Reaches the journey's end.

## The Shadow of the Doubt

### Introduction

In 2007 Ronn Smith gave a presentation titled 'On Wings of Faith and Reason' in which he presented Faith and Reason as 'Two wings on which the human spirit rises to the contemplation of Truth' attributed to Pope John Paul II. Faith makes use of deductive reasoning starting from a general axiom which applies to each and every particular. Reason relies on induction where particulars are examined and studied and from them a more general statement is made. Therefore Faith is all encompassing while Reason is more circumspect.

Ronn revisited the topic in 2015 with a presentation by the same name, second edition. The update was mostly that the barrier between Reason as exemplified by Academia and Science and Faith as exemplified by Religion and Theology has only widened. His examples were of Academicians dismissing Faith as a source of truth. He said: *For me faith and reason are not alternative paths to truth. I will argue that in isolation, each can be a path to self-delusion. The journey of discovery is guided by reason and propelled by faith. You can no more ignore one of them than you can maneuver a sailboat with only the rudder or only the sail. In many ways they are symmetrical, each one sustaining yet restraining the other.*

Both presentations are available on our website and I think they are both well worth reading.

I will try to expand on the relationship between Reason and two additional concepts Faith and Doubt. Continuing the flight imagery of Pope John Paul II, the destination is truth; the wings are faith and reason, while the tail is doubt. For the more mechanically inclined, the first airplanes had double wings, an extra dose of faith and reason then. It didn't take long though for the modern looking planes to evolve. A Boeing 777 has large wings and a prominent tail; many fighter jets designed for nimbleness and speed such as the F-14, F-15, F-18, and now the controversial (even doubtful?) F-35 all have twin tails. If you are more inclined to the metaphysical recesses of your mind than to the engineer in you, imagine a bird, still the tail is ever-present, even on the flightless ostrich.

I cannot take credit for discovering this lost link to the holy trinity faith-reason-doubt, a few short quotes from some notables:

*"If you would be a real seeker after truth, it is necessary that at least once in your life you doubt, as far as possible, all things."* Rene Descartes.

*"Doubt is an incentive to truth, and patient inquiry leadeth the way."* --Hosea Ballou

*"Sometimes I think it is my mission to bring faith to the faithless, and doubt to the faithful."* And also *"Doubt isn't the opposite of faith; it is an element of faith."* Paul Tillich

Hosea Ballou is widely regarded to be a founder of the Universalist Church in America and preached at the Second Universalist Church of Boston from 1817 until his death in 1852.

When children turn two or so, they discover the power of the word 'No', changing the busy but simple world of parenting into a much more complicated one. A few years later the second shoe drops, children up-the-anti even more when they discover 'Why'. Together these two concepts can be described as doubt, Why Not? And we never have come up with the definitive answer.

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I want to explore the relationship between the three elements. I think the first critical part is to define the scope of reason and the scope of faith. We all like to think of ourselves as reasonable, that we do things for a reason, with purpose. These are very motivating and positive self-images, they look great at the head of your resume or on your headstone. But much of what we do is irrational and capricious. If I had to stop and think about what I do all the time I would never get anything done. If I had to stop and make a rational choice about what font to use before I started typing, I could spend hours reviewing the options and never get the first word on my screen. The mind had developed irrational shortcuts, there is no real reason why I used Calibri; baby boys wear blue and baby girls wear pink, again, for no reason. If you add up the decisions and choices we make each day, a very large proportions of them are chosen without thought. Furthermore, Behavioral scientists have shown that people routinely behave irrationally: paying \$3.40 or more for a cup of coffee, gambling at a casino when you know the House always wins.

For the rare case when we do reason, at the base of Reason is a process of rationalization. We work through an issue and come to rational conclusions but this process is work and requires energy and effort and time. All these are resources which we only have a limited amount of. I spent five years getting a master's degree in geology. If someone was to ask me about geology of Eastern Crete or certain aspects of metamorphic clays I would perhaps be qualified to give a valid scientific opinion. This is the level of modern science today. This specialization is extreme; the scope of each person's horizons is so narrow relative to the whole that very few have a broad understanding of any single scientific discipline.

Plate tectonics is today widely accepted but the interesting thing about this theory is its history of acceptance. Geologists specializing in metamorphic rocks accepted the theory between 1910 and 1920. All other geologist, could not without a valid energy source to move the plates. This knowledge did not become available until the 40s, and the discovery of nuclear fusion the theory was not generally accepted until the 60s. You could say that several generations of

metamorphic geologists believed in the theory of plate tectonics without the complete scientific understanding of it. They took a scientific leap of faith.

When Science was young there existed polymaths, people who distinguished themselves in several fields. Isaac Newton was instrumental in math- developing calculus and in several different realms of physics: optics, mechanics, thermodynamics, and astronomy to name a few. Nicolaus Copernicus was a mathematician, astronomer, physician, classics scholar, translator, governor, diplomat and economist. But the sun of the day of the polymath has set. These days we seek a specialist; the general medical practitioner is not as prestigious and makes much less than the specialist. Isaiah Berlin described generalists as foxes and specialists as hedgehogs, 'a fox knows many things, but a hedgehog one important thing'. Alas, we live in a world overrun by hedgehogs.

Scientific articles, these days are typically authored by a team of three to eight; one reason is that any single researcher would have a hard time mastering all the different aspects related to the work. It is necessary for scientists to trust one another, to take it on faith, as it was.

II

The immediate things I know derive from my senses. I know it is daytime, I see the sun is out. I know the wind is blowing, or not blowing, by sound. When I skype with my mom, who lives in Israel, ten time zones away if the sun is out for me, it is very likely not out for her. I know this, as I have an understanding of how the earth spins around its axis while the sun stays in place. This level of knowledge is fundamentally different than seeing. Suppose I see that it is high noon in Wyoming and I am skyping my mother and she tells me it is mid-day in Israel. I am now faced with conflicting evidence and I would have to reconcile this somehow. The things that get questioned are the things I thought I knew but now see I may not have this is doubt.

First Am I awake? This may be a dream; do I trust my own senses?

Is my mother trustworthy? I thought she loved me but... you never know. Furthermore I could doubt her senses or her motives.

Can I question the celestial order of the world? How the earth is revolving around its axis? This science is probably truly settled, Copernicus published his theory in 1543 and it has since been accepted for the most part even by the Catholic Church.

But even very successful scientists become outdated. Galen, 129-210 AD, was another polymath, influential in various scientific fields including anatomy, pathology, pharmacology, talk-therapy (what we would now call psychology), logic and philosophy. He was *the* authority on medicine until perhaps the 17<sup>th</sup> or 18<sup>th</sup> centuries. Our very own UU saint, Michael Servetus,

a polymath is his own right: Theologian, physician, cartographer, astronomer, translator, poet, and Renaissance Humanist wrote one of the first works to question Galen, *Christianismi Resitutio* (1553) describing the role of the circulation of the blood. So overturning Copernicus is not out of the question. Servetus, as a theologian questioned the trinity and was burned at the stake for it. After his death his ideas influenced the very early Unitarians.

Galen was settled science for 1400 years. Copernicus, claimed that the sun was at the center of the universe. But, the existence of a rotational center to the Milky Way, being different than the sun, was speculated upon in 1750. When this was proved exactly, I am not sure. Newton's theories held for over 200 years but were replaced by Einstein's theory. Einstein in turn may have some explaining to do as I hear that something out there is faster than the speed of light. So Einstein's time in the sun may have lasted only about 100 years.

Like Moore's Law that says computers double their processing speed every two years, the rate in which science overthrows settled science is also increasing. My examples are from the A-list of scientists, and the disciplines are the most prestigious sciences. This tendency is even stronger in more esoteric fields such as archeology or linguistics. It isn't that Galen, Copernicus, Newton or Einstein are wrong, they just aren't right. To say 'I believe in the scientific method' is, I think, legitimate. To say 'I believe in science' is not. I think it is a kin to a battered wife who goes home to her husband to be beaten up again and again. Maybe this time the theory will hold. The scientific method has doubt built into it. I would bet money, nay; I believe that any scientific theory is destined to be debunked.

I recommend listening to college courses available to watch for free online. One of the most popular such courses is given by Professor Shelly Kagan of Yale, in which he explores existence after death and half of the course is about the soul. Almost all he has to say about the soul comes from Plato. It seems, therefore, that our knowledge of the soul has barely advanced in the past 2,400 years. When it comes to some things, there is nothing new under the sun. Plato's work has petrified the field of soul-searching. The shadow of the doubt in other fields brought forth revolutions; Galen for example is rarely mentioned in medical school.

### III

Faith camouflaged as Reason. This has become so common it is the rule with science. The general public does not understand science. It is so common though to hear, especially about climate, 'I am not a scientist and neither are you but are you denying global warming'? Would we accept that attitude if I was to say 'I am not a theologian and neither are you but do you deny God?'

It can be disconcerting to reflect on how much of our knowledge is based on the testimony of others, whom we believe such as scientists, historians, and other “authorities.” Peter Coffey was surely close to the mark when he wrote:

People do not generally realize—because it needs a little reflection to realize—what a vast proportion of our knowledge comes to each of us individually through this source. Through it each of us has *all* his knowledge of the facts of history, *most* of his knowledge of the facts of geography, *all* his knowledge of what is actually going on the world outside the very limited corner that falls under his own personal notice. Nine-tenths of the human race accept “scientific knowledge” only on authority, and that of the other tenth, the scientists themselves, each accepts nine-tenths of *his* scientific knowledge on the authority of his fellow scientists and without exploring or verifying it for himself,—inasmuch ten lifetimes, not to speak of one lifetime, would be too short to carry out such verification. (*Epistemology, or the Theory of Knowledge*, 1917) He wrote that in 1917.

Belief is not rational, it is not reasonable. It is common to dismiss beliefs such as Moses parting the sea, the virgin birth of Jesus or Mohamed’s night flight on horseback as not rational.

But let’s examine some other common beliefs. In America it is common to believe in the declaration of independence: that all men were created equal. First, created? Really? Second, Equal? Really? Just like I have never seen the sea part or a virgin mother or a flying horse, I have never seen a man created, (apart from procreation) and I’m not equal or the same as anyone and neither is anyone else. And yet we act as if it was true. Our legal code is founded on this aspiration which most of us know is not true. We act on this belief just like some religious people act on their belief in their religion, and we act on what we believe to be the scientific facts of the day. In the late 50’s pregnant women were prescribed a wonder drug, Thalidomide, to help manage morning sickness. This modern medicine caused over 10,000 babies to be born with shortened limbs – a horrible birth defect. This was modern science; medicine had already pushed forward with vaccinations and anti-biotics. Should the mothers to-be of the 50’s not have had faith in modern medicine? It lacked comprehensive understanding just as we still do not possess this full understanding. Has the pharmaceutical industry learned its lesson? The opioid epidemic we are in the midst of suggests not. The lawyers promising class-action benefits due to rogue drugs and medical devices suggest not.

### Conclusion

‘Belief mode’ is much more common than ‘Reason mode’. Some common beliefs you might hear: I believe in free markets, I believe in democracy I believe in evolution, in the soul, I believe in God. Show me a single free market or a true democracy. Who witnessed evolution? Where is the soul? What is the proof of God?

To be more precise, the knowledge of the highest certainty is, well, *certain*. These are the things I have worked out rationally and have, or believe I have, a great understanding of. On other things, say, Einstein's theory of relativity I may be *uncertain* about, because I lack rational understanding and cannot follow the mathematical equations myself. I would further describe my relation to the theory thus: 'I *believe that* Einstein's theory is correct'. *Believe in* is an aspirational goal that may not even be real. *Believe that* is a leap of faith in something that I accept but have not derived to rationally myself.

I tried to convey to you what my Holy Trinity is, Reason, Faith and the Shadow of the Doubt

Ronald Reagan said 'Trust but Verify'. I trust but I cannot verify because I lack understanding and resources. I therefore compensate with doubt.

*Uncertainty is passive; Compensating with Doubt is active.*

Donald Rumsfeld made famous the terms known-knowns, known-unknowns and unknown-unknowns.

Being aware of the known-unknowns gives you a great advantage; compensating with doubt. this is what I was getting at when I stated I believe that Einstein's theory is correct. Being open to the possibility of unknown-unknowns is a kind of humbleness, when an unknown unknown comes along, many times it shakes the foundations, forces a revision, compels us to restock our assumptions, in other words the things we believed in. A good many of us never do this. I think it is fairly common to go through this process just before you reach maturity. To be prepared to re-examine our foundations several times in a lifetime takes a perspective on life or a mind-set that is youthful, but also very humble, and that I think the world can use a lot more of.

["No man ever steps in the same river twice, for it's not the same river and he's not the same man"](#)<sup>1</sup>. Each one of us pilots their own river boat down the river of life. Like the Ganges or the Wild Mississippi of old, no two passages are the same, the river cuts thru its banks reworking its flow in new streams, rediscovering old routs while abandoning other courses. A pilot may float the river for a lifetime yet never experience the same river twice. The wise pilot knows that he does not know what is beyond the river's next turn.

1: Herodotus

## Closing Readings

### Faith-

“Intellect takes us along in the battle of life to a certain limit, but at the crucial moment it fails us. Faith transcends reason. It is when the horizon is the darkest and human reason is beaten down to the ground that faith shines brightest and comes to our rescue.”

— *Mahatma Gandhi*

### Doubt-

“You are never dedicated to something you have complete confidence in. No one is fanatically shouting that the sun is going to rise tomorrow. They *know* it's going to rise tomorrow. When people are fanatically dedicated to political or religious faiths or any other kinds of dogmas or goals, it's always because these dogmas or goals are in doubt.”

— *Robert M. Pirsig, Zen and the Art of Motorcycle Maintenance: An Inquiry Into Values*