

“All Men Are Created Equal”

-The Greatest Lie Ever Told-

By Dean L. Gano; 9/16/2019

The other day my grandson, who is 13 asked: “why do some adults make statements that are so obviously wrong?” I asked: “Like what?” He said: “Like all men are created equal. It is just so obvious that is not true - everyone is so different!”

I told him he was absolutely right, but what our Declaration of Independence actually says is that all men are born with certain unalienable rights – the right to Life, Liberty and the pursuit of Happiness. But unfortunately many politicians over the years have used the notion that “all men are created equal” to promote their agenda by misusing the obvious meaning of the words.

The Declaration of Independence states: “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. – That to secure these rights, Governments are instituted among Men, deriving their just powers from the consent of the governed,” - etc.

Because this is old English, it does not conform to the grammatical rules of today, but if you read it carefully the meaning is very clear. First of all, like my grandson noted, it insults our intelligence to say that all men are created equal. Equal in what regard? Totally equal? Like they all have the same physical features or physical and mental abilities? NO! That would be as my grandson pointed out – so obviously wrong.

The answer to what it means by “equal” comes in the next set of words. “They are endowed by their creator with certain unalienable Rights” - not some general idea of totally equal in every way, but some very specific ways such as the right to Life, the right to Liberty, and the right to the pursuit of Happiness. The declaration then continues to discuss how these very specific “certain unalienable Rights” will be secured.

To better understand what is meant by these words, let’s let the English teacher update the Declaration’s grammar to present time, and see how it reads:

“We hold these truths to be self evident, that all men are created equal, **in** that they are endowed by their Creator with certain unalienable Rights, **and** that among these **rights** are **the right to** Life, **the right to** Liberty, and the **right to the** pursuit of Happiness.”

Given this gross misuse of the words from our Declaration of Independence, we have to ask why? Why do people perpetuate such obvious untruths? And it’s not just our teachers and politicians who are speaking these untruths, but highly

respected leaders like Abraham Lincoln. What is wrong with their thinking? What are they thinking? Are they thinking? What is thinking?

Thinking Defined

The American Heritage Dictionary defines “thinking” as a way of reasoning; judgment.

Wikipedia defines thought as: “a goal oriented flow of ideas and associations that leads to reality-oriented conclusions.” With this definition, we also need to understand what “reality” is – something we have, unfortunately, never been taught; and one of the biggest failures of our education system.

So, what are these ways of reasoning that lead to reality?

Humans, like most animals, exist by interacting with the world they live in. They observe how things interact and utilize that knowledge to survive. We use various strategies such as trial and error, experimentation, and creative design to tweak the systems we live in and then think about what happened. At the core of thinking is understanding the observed/sensed cause and effect relationships. By understanding these relationships we are able to control our future and thus pursue happiness.

Again, like all creatures, some humans are better at this process of thinking than others. Some use strategies that follow the path of least resistance, or provide the most entertainment value, while others use principle-based strategies that work the same way every time and thus assure repeated success.

But the real question is: what is the purpose of thinking?

I think the purpose of thinking is to find ways to successfully navigate our world. To fully understand thinking we need to understand how the brain is wired and functions. We also need to understand the structure of thinking, such as perception, logic, and strategies. So let’s get into it!

Perception exists within each mind and is a consecutive four-step process:

1. The neural process of receiving information from the senses.
2. Processing the sensed data in the mind to form knowledge.
3. Using this knowledge to developing operational strategies as they relate to what we already know.
4. Establishing conclusions and prototypical truths.

Let’s take a closer look at this process to see what we can learn.

Our Unique Senses

Receiving data from the senses is unique to each one of us. Our sight, hearing, touch, smell, and taste are different than other people — sometimes significantly different. Some people need glasses to see, others don't. Our senses are developed early in life and are a direct function of our environment. Research indicates that children who are visually entertained in the first year of life establish more neural connections and hence have more active minds.ⁱ

The brain reserves certain areas for each sense. The visual cortex, for example, is located at the rear of the brain, the sensory cortex along the sides, and so forth. As each sense is stimulated, neurological connections are being made in the respective portion of the brain. Patterns are recognized and value assigned to each stimulus in each sensory portion of the brain.

The development of each sensory portion of the brain is a function of the genetic structure of the mind and environmental stimulation. Each sense is on a genetically coded timeline for development. Once that time frame has passed, the sense is pretty much done forming.

The acuity of each sense depends on the richness of the environment to which it is exposed during the window of opportunity. For example, if a child is completely blindfolded for the first three to six years of life, the sight portion of the brain will not develop and the child will never see, even though the eyes are completely functional. Physicians have found that covering one eye of an infant for a short period of time (a week or more) will likely cause that eye to be less developed than the other one, resulting in the need for glasses¹ and in a different perspective of the world.

And so, on goes the development of our senses, such that every person senses the world differently and creates his or her own unique sensory perception.

Processing Data

In the thought-provoking book, *Descartes' Error*,ⁱⁱ Antonio R. Damasio, M.D., provides great insights into the workings of the mind. Dr. Damasio and others have found the causes of learning in the physical nature of the mind. The brain is made up of billions of cells known as "neurons," which consist of a cell body, a main output fiber called an "axon," and input fibers known as "dendrites." These neurons are interconnected in circuits and systems within the brain. Brain functions, including our ideas and thoughts, occur when neurons become active through an electrochemical process. Each time we have a new thought or experience something new, axons and dendrites "connect" via a synapse as part of this electrochemical process. If the same thought or experience is repeated, the same physical connections become stronger. Figure 2.1 shows a simplified version of this process.

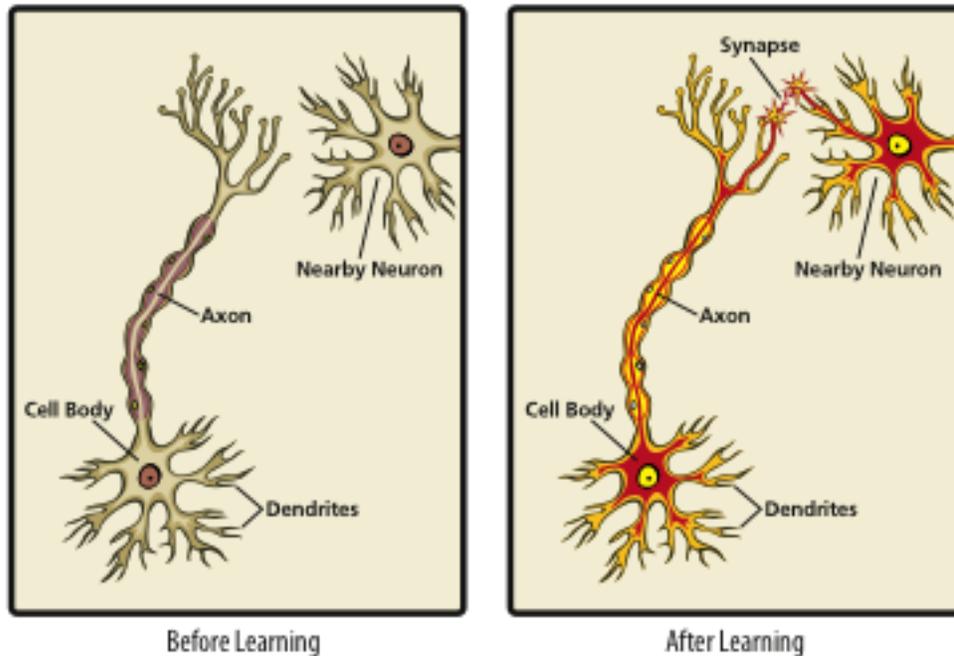


Figure 2.1. Impact of Repeated Stimulation on Learning

This is not to suggest that one connection constitutes a specific piece of conscious knowledge. It is much more complicated than that, but the observation that these neurological connections occur during learning and actually grow in size and strength with repeated exposure to a given stimulus means that we have a predilection or bias when given the same stimulus. Hence our perceptions are “hard-wired,” so to speak.

Scientists have recently discovered there are other biological processes that also strengthen these connections. Without going into all the detailed causes, we now know that new ideas require new connections and therefore new ideas are at a disadvantage to old ideas. This does not mean we cannot learn new things, but it does mean we must remove or modify existing connections in order to register new thoughts. Old connections that are no longer needed are actually dissolved (physically) by special compounds in the brain.ⁱⁱⁱ These normal brain processes help explain the notion of “truth” or opinion and we can now understand that for the mind to accept a new truth, we not only have to create new neural connections, we may have to abandon existing ones and that takes time and energy, which an economizing brain is reluctant to provide.

Also, as data or information is sensed, it is processed into categories for economy of thought. We assign nouns to things and verbs to actions. Everything is sorted, prioritized, and possibly stored. Categorization in the mind is physical. Nouns are stored in one physical location of the brain and verbs are stored in another location.

We all have our own interests and abilities based partly on our environment and partly on our genetic makeup. Growing up in Africa with Jane Goodall as your mother would provide you with different knowledge than if you grew up in a poor neighborhood in a large city, such as New York. The resulting personalities and perspectives would also be quite different. So, while we share many common characteristics, we each possess our own unique knowledge base.

Our Unique Strategies

A key aspect of perception is how we order knowledge. The ordering process is what we call “strategies.” For example, an infant may learn that crying causes hunger to go away because it causes someone to feed him. From this causal relationship, children may learn the strategy of whining to get their way. Depending on reinforcement from our environment, we will adopt or abandon a given strategy.

If we obtain our goals with a given strategy, we will retain it as part of our belief system. Each strategy becomes part of the mind’s operating system, and every person uses different strategies for dealing with life’s problems. One person may find success in stealing, while another finds failure. Or, in the business world one person may use the strategy of building networks to advance whereas another might use the strategy of working long hours on many projects. Hence, each person will determine the “best” strategy based on his or her own experiences, where “best” is unique to each person and is centered around what works to meet their goals and objectives.

Our Unique Conclusions

The mind is continually sensing, ordering, and developing strategies. It is always open to new possibilities but to varying degrees depending on how hard-wired the existing idea is. As adults, we seek validation of existing beliefs (knowledge and strategies) and do not like change. Inherent in our operating system, however, is the prototype strategy. We know from past experience that sometimes things don’t happen exactly as they did the time before so we reserve the right to change our belief system. In effect, we naturally establish prototypical truths that are the best we know now but are subject to change given strong enough reasons to do so. For example, for most of us the earth does not move under our feet and this is the truth. Anyone who has experienced an earthquake, however, knows this is not valid — the earth does move and it can move violently. If you have felt the earth move under your feet or have seen a wave in the earth move across a field, your first perception may be one of disbelief, but you soon change your belief system to accommodate the evidence.

We hold our belief systems open to change by the use of a prototypical conclusion.

Our unique perception of the world, coupled with our unique interaction strategies, combines to form unique people with unique prototypical truths. All these factors are continuously evolving, some more so than others; but there is clearly no way to be anything but unique individuals. No two people will hold the exact same set of prototypical truths, not even conjoined twins who obviously live in the same environment.

Thinking Processes

So now that we have an understanding of how the mind works biologically, let's examine some of the strategies and logical processes we use in the process of "thinking."

Street Smarts

The most basic approach to thinking, discussed throughout history, from Buddha^{iv}, about 2500 years ago, to present time, is causal observation. Sometimes referred to as "street smarts," this strategy calls for observing our environment with an eye toward cause-and-effect relationships. For example, if you see smoke, you know there may be a fire, because you understand the set of causes associated with smoke. While causal observation serves us well, there are no commonly accepted principles of causation to actually guide us in this strategy. Instead we use various other strategies, such as linear thinking, categorization, storytelling, common sense, and various forms of problem analysis. Let's examine each of these failed strategies.

Linear Thinking

Like a string of falling dominos, when we simply ask why, why, why, we believe that A caused B, B caused C, C caused D, and somewhere at the end of this causal chain there is a magical single cause that started everything, i.e., the root cause.

In the thirteenth century, St. Thomas Aquinas of Sicily taught us the fallacy of this strategy when he proposed that: "potency cannot reduce itself to act."^v Or, as he clarified with this example: "the copper cannot become a statue by its own existence." It requires the conditional cause of the copper's existence and the actions of a sculptor. Unfortunately, this simple and important observation has not been understood or incorporated into everyday thinking, and most people continue to see the world linearly. We ask a few why questions and then stop. Often times because the answers stop coming.

Think about your last conversation with a three year old. After just a few answers to their continual "why" questions you give up and say something like: "well, because that's just the way it is." This is not effective thinking, but rather the

normal path of least resistance most humans take. Thinking takes a lot of energy and time and unless it gives us quick gratification, we simply don't do it.

Categorization

As we discussed earlier, the human brain is designed to categorize and establish biases, so let's explore how we use this biological pre-condition in the act of thinking. Instead of identifying the actions and conditions of each effect, as St. Thomas Aquinas would have us do, this strategy places causes or events in a predefined box, which implies some causal information.

For example we might choose to categorize a group of people as "deplorables," and thus imply that they are not worthy of our respect. There are no specifics about values or ideas, or causal understanding this group may possess, just a label - a category. It is sometimes called "identity politics" and is a flawed strategy because it ignores reality and obfuscates the truth.

The categorization strategy is part of a larger, very simplistic strategy, which goes on to suggest that if we can categorize something, we can implement standard solutions. For example, if something is bad, we must act against it, or if something is good, we should revel in it. Or, if the training is inadequate, we can make it better, but "inadequate" is not an actionable cause and "better" is not a specific solution.

Categorical strategies like labeling a group "deplorable," does nothing to advance the understanding of the group or system. Rather, it displays an ignorance of reality and a disdain for the truth. It is simpleminded thinking that again does not require much energy and people who seek the path of least resistance like that.

Like the causal observation strategy (street smarts), categorizing is at the core of pattern recognition, which is a fundamental biological process built into the genome of higher life forms, so it is only natural that we would utilize categorical thinking in our daily activities. Because categorization is a natural brain process, people who use these methods think they are effective. When asked to explain all the causal relationships of a given event, they can't do it, but they usually have a good understanding of the main causes and may even be able to explain some of the causal relationships. At the same time, they are unable to effectively communicate them, because these relationships reside in the mind, not in a form that can be shared and openly discussed with others.

Categorical thinking processes simply do not delineate causal relationships and thus the ideas being considered while using this strategy are often incomplete or simply incorrect. When other people cannot clearly understand the reasons (causal relationships) behind a decision to change, or are not able to share their causal understanding of the event, they are often very reluctant to accept any proposed solutions — often resulting in conflict and disagreement.

In addition to what we learned from St. Thomas Aquinas, that every effect has at least two causes, as early as the fifth century BC, Buddhist writings reveal that “as a net is made up of a series of knots, so everything in the world is connected by a series of knots.”^{vi} At the heart of this observation is a fundamental principle that all causes are part of a very complex, infinite set of causes, yet we ignore this simple observation when using prescribed categorical problem-solving strategies.

Buddha went on to state that duality and categorization are simple-minded constructs that ignore the reality of causal relationships. For example, is it good or bad that the lion eats the gazelle? Neither — it is an event consisting of many complex and interactive causal relationships. Using the duality of good or bad/right or wrong simply puts the event in a category and ignores the causal relationships of the event.

Storytelling

Linear Language, Linear Thinking

With a new appreciation for cause-and-effect relationships as discussed in [Effective Problem Solving](#), let’s take a deeper look at storytelling and language. Stories, our primary form of communication, conflict with the cause-and-effect principle in three ways:

1. Stories start in the past, while causal relationships start with the present.
2. Stories are linear, while causal relationships follow the branches of the infinite set.
3. Stories use inference to communicate meaning, while legitimate causal relationships require clear evidence of the existence of each cause.

Let’s examine a simple story to see how detrimental these conflicts are.

The Story: The little handicapped boy lost control of the run-down wagon and it took off down the hill on a wild ride until it hit the little blind girl next to the drinking fountain by Mrs. Goodwin. The little boy was in the wagon the whole way but was not injured. The boy’s mother should never have left him unsupervised. The root cause of the girl’s injury was human error.

Stories Start in the Past

As you can see, the story starts in the past at the top of the hill and progresses through time from the past to the present, from the beginning of the ride to the end, from the safe condition to the stated problem of injury. The conflict this creates is that by going from past to present we do not see the branched causal relationships of actions and conditions. If we could know every cause of this injury example, we would see a diagram of cause-and-effect relationships similar to Figure 1.6. That

is, we would see a set of ever-expanding causes starting with the injury and proceeding into the past. To express what we know causally in story format, we would first need to express all the causes on the right-hand side of the diagram, i.e., starting from the past. Our language and the rules of storytelling simply do not allow for this. We cannot express sixteen causes and then tell what they caused and so on. No one would sit still for a story told this way because stories are about people, places, and things as a linear function of time.

Stories Are Linear

As we look at this simple story, or any story, we find our language restricts us to a linear path through time and space. Stories go from A to B to C, linearly through time without regard for the order of causal relationships. We are told of the little boy losing control of the wagon as it goes down the hill and strikes the little blind girl. There is no ever-expanding set of branched causes expressed like those in Figure 1.6.

We have the ability to escape this linearity and express branches if we use the words “and” and “or,” but the rules of grammar tell us not to use these connecting words excessively. The best we can accomplish is one or two branches for each sentence. The conflict arises because the cause-and-effect principle dictates an infinite set of causes for everything that happens, while stories are created and expressed linearly.

Storytelling, whether it is ancient history or a recent event description, is a linear understanding of an event in a time sequence from past to present, and totally ignores the cause-and-effect principle. Because we do not understand the branched causes of the infinite set, we use our own understanding of cause, which is generally to follow the action causes. Because we typically fail to see conditions as causes, we ignore them and primarily focus on a linear set of action causes, which are often initiated by people.

Stories Use Inference to Communicate Causes

Since good stories seem to provide us with a valid perception of what happened, we need to question how this can occur in light of the above conflicts. The key word here is “perception.” When we read or hear a story, our mind provides most of the information (Carter, 1999. p. 149)¹. As we read the words, we are busy creating images in our mind’s eye. These images are created from past experience and assembled into a sequence of events.

Because the sequence of events (the story) does not express the branched causes of the infinite set, we must make up for it somehow and we do this by inference. We infer causes within the story that are not stated. For example, we read that the little handicapped boy lost control of the wagon. Since no cause is stated for how he lost control, we can infer anything our mind will provide, and we do just that if

questioned about it. Did being handicapped somehow cause the loss of control? Could be, and many people might make that assumption, but it would be wrong.

Furthermore, stories infer cause by the use of prepositions such as “in,” “on,” “with,” etc. Prepositions and conjunctions by definition infer a relationship between words, and the relationship is left to the reader. The word “and” is often used to mean “caused.” In this story we read that the boy lost control of the wagon and it took off down the hill, meaning the loss of control caused the wagon to take off down the hill. Within this “and” is the potential for many causal relationships and they are left for the reader to interpret. For me, the “and” between lost control and took off down the hill is obviously a broken steering mechanism, while someone else may picture lack of control by a paraplegic little boy as the cause, and the next person sees the wagon wheel strike a rock that causes the wagon to veer sharply. Because we do not express what is happening causally, each word in the story provides the reader with the opportunity to know more about the event than is stated — to interpret the situation from his or her own biased mind, which is not necessarily what actually happened.

In the end, each one of us thinks we know what happened, but we really don't because stories do not express the full set of causal relationships. Our linear language and the linear thinking behind it prevents us from knowing and expressing what happens in any given situation. Couple this with the notion of common sense and the false belief in a single reality and you have the causes for miscommunication and ineffective problem solving that is so prevalent in every human endeavor. You also have the cause of why almost every decision-making meeting/process includes conflict and arguments.

What we need is some way to communicate and assemble the causal relationships that each one of us brings to the table. By breaking away from storytelling and knowing the causal set for the problem at hand, we can find effective solutions every time. Just imagine what would happen if politicians were required to create a cause and effect chart before they enacted laws to solve a problem. Jane Goodall, on *60 Minutes* on 6 May 2018, summed up why politicians use storytelling to communicate when she said: “You can never win an argument by appealing to people's head, it's got to be by the heart. And, I use the power of storytelling, writing, and imaging.”

The Narrative

Because we view and understand the world through our storytelling, we create a narrative; a story that we create in our mind that reflects how we view a certain situation, idea or event. Once we create this narrative or hear it from some other source, we hold it as our prototypical truth and repeat it to others - usually people with the same cultural or political bent. Each time we repeat it or think about it, we make stronger neural connections, especially if our friends agree with us and

validate our thinking. And, because of how our brain biologically makes stronger physical neural connections it becomes more “real” – it becomes the truth.

So instead of understanding the causal reality of a given situation, idea, or event by understanding the evidence-based causes of it, we create a story-based world that is void of clear and rational thought.

Knowing this common strategy is horribly flawed, we could develop a strategy that says, I need to make sure I am thinking causally, not just listening to stories that support my existing beliefs and biases. But then, that takes a lot of effort and since we humans are predisposed to take the path of least resistance, most people don't do this. It's an extra step in the thinking process that consumes too much mental energy.

The really sad part about this lack of clear and rational thought, is the fact that politicians, who are just as lazy if not more so, know this is how most people think, so they capitalize on it. They know the best storyteller wins the day and when and if a rational person who thinks and speaks causally comes along to explain the causes of a problem, their complex picture of reality gets lost in the discussion.

For a good example of this, sit back and listen carefully to the next time you meet with friends who are trying to solve a problem. The person who tells the best story, usually the leader of the group, wins the day. Ask yourself if the prevailing story is based in evidence-based causes or just good storytelling using innuendo and categorical thinking.

Common Sense

In 1995 a terrorist named Terry Nichols bombed a federal office building in Oklahoma City. When convicted in a trial the following year, a jurist lamented, “If I learned anything from this, it is that two people can look at the same situation and see two completely different things.” Indeed, how could this happen? Where is the common sense? The evidence was obvious, the decision clear. What's wrong with some people anyway? We usually end this line of thinking by concluding that some people just don't have any common sense.

When asked, most of us believe we have our world pretty well figured out and are good problem solvers. We also believe that most of those around us are equally good at problem solving. In fact, we seem to believe that reality is the same for everyone. We believe that if we are able to think of it, it must be common to everyone else. Sometimes, when people don't act according to our preconceived ideas, we say they don't have any common sense. We may even question our friendship with them because we certainly don't want to associate with idiots.

Common sense is defined as the common feeling of humanity. With tongue in cheek, it can be defined as that body of knowledge that my friends and I share. In either definition, it is anything but common because we don't have the same friends or the same realities as the next person.

Common sense is often used as an excuse for explaining why others do not "see" things the way we do and then punishing them for it. I once heard a chemical plant manager say after a series of safety incidents, "Since when did our people start checking their common sense at the gate?"

Each one of us is unique, and our genetic building blocks and the environment in which our perceptions were developed cause that uniqueness. Understanding this uniqueness calls into question the notion of common sense. What does it mean to have common sense when not a single person has the same view of the world or holds the same belief system? Indeed, what is real? What is reality? Can we know it? When we use the word "reality," we assume that there is a single reality and everyone can see it. By understanding the biological impossibility of perceiving the world the same, the notion of a single reality can now be seen as the illusion it is.

Bias

In today's culture, the notion of "bias" is a very bad thing. It is politically incorrect to have any biases, especially if they involve groups of people outside your own group. What these PC police fail to understand is that having a bias is a natural biological process that we cannot escape. Studies⁷ have shown that from the time we are born, we subconsciously learn that we belong to a certain group and continue to learn what the norms of that group are. If there is a difference in someone else, we subconsciously know they are of a different group and we should be on guard. Our biases are often subconscious, meaning we don't even know we know it and they only show themselves when we experience certain situations. Bias is a very important thinking process that helps ensure our survival by subconsciously warning us of possible dangers. Creatures who do not have them do not fair well in this world, and for the PC Police to rant against bias just shows once again how incapable they are of thinking causally.

In his incredibly insightful book; *Before You Know It*,^{vii} John Bargh provides some details of how the subconscious mind works to provide biases we know nothing about at the conscious level. One of his most interesting experiments shows how we begin learning the notion of trust at a subconscious level from the time we are born.

In one experiment he also found that people who value honesty as the most important characteristic were able to properly and easily discern the difference between the actions of an honest and dishonest person 100% of the time. For some people, like politicians, who do not value honesty as the single most

important trait, they cannot identify honest actions from dishonest ones when presented to them at a fast pace. Given a button to slow down the information flow, this second set of liberal minded study participants were usually capable of identifying the difference, but it required conscious thinking. So, this teaches us that some people have a very well developed sub-conscious mind that has a bias for honesty and knows the difference between right and wrong without even consciously thinking about.

Another form of bias is confirmation bias, where we seek examples of evidence to confirm our beliefs. The more examples we can find, the more valid our “truth” is. The problem is that no matter how many such examples you find, you are not proving the proposition. The right thing to do is to look for cases that would disprove it, but that would require hard work and the lazy human mind is unlikely to do that.

In addition to the hard work of finding a negative example, the human mind is also burdened with the need to be needed or liked, so when our friends also confirm our bias, the truth becomes even stronger. This is a condition called groupthink and it is very ineffective. So, we need to understand that by agreeing with others, we not only confirm our “truth,” but we are given a badge of membership in a given group, and while this feels good, it is a horribly ineffective thinking strategy.

Intent and Meaning of Equality

So, now that we have a better understanding of what “thinking” is, what does “all men are created equal” mean and why do politicians and teachers misuse the words from our Declaration of Independence? If they are doing so, they are either, totally ignorant of the intent and meaning, or they are playing politics. Let’s look a little closer.

Ever since these words were first written, politicians have used them to pander to ignorant voters? And they continue to do so because it makes sense to people who may feel disenfranchised in some way and the politicians can gain their trust and the subsequent power the politicians crave.

But why would a teacher spread this ignorance? I have no idea, but probably because they have never been taught how to think using the fundamental principles discussed in [Effective Problem Solving](#) as a guide.

If taught properly and according to the person who wrote these words, Thomas Jefferson, the meaning is: equality under the law. Jefferson stated that: “people are of equal moral worth, and as such deserve equal treatment under the law.” The point is; this statement: “that all people are created equal,” is not to be taken literally and those who misuse it are trying to create a reality that simply does not conform to the sensed world.

If we are to avoid being subjected to untruths like this one, we need to be better thinkers. And to be a better thinker, we need some simple strategies and tools that can help us overcome the natural human conditions of linear thinking, storytelling, unconscious bias, and categorizing. Using the principles defined in this website to guide us, we can see the fallacy of conventional wisdom and be more successful than the next fellow.

ⁱ Carter, Rita. *Mapping the Mind*. University of California Press (1998), p. 106.

ⁱⁱ Antonio R. Damasio. *Descartes' Error*. New York: Grosset & Putnam (1994).

ⁱⁱⁱ Richard M. Restak. *Receptors*. New York: Bantam Books (1994). Robert Ornstein and Richard F. Thompson. *The Amazing Brain*. Boston: Houghton Mifflin (1984).

^{iv} Luang Prinyayogavipulya. *Concise Principles of Buddhism*, second edition (1957).

^v Vernon J. Bourke. *The Pocket Aquinas*. Washington Square Press (1960), p. 67

^{vi} Bukkyo Dendo Kyokai. *The Teaching of Buddha*, 202nd revised edition. Society for the Promotion of Buddhism (1966), p. 54.

^{vii} Bargh, John. *Before You Know It*. Touchstone (2017).