

IN the Light of Logic
By Mark Graeser

Post hoc, ergo propter hoc (“false cause”)

Marilyn vos Savant writes a popular column in Parade magazine on the practical benefit of logic and mathematics. She wrote a book that recently came to my attention called *The Power of Logical Thinking Easy Lessons in the Art of Reasoning...and Hard Facts About its Absence in our Lives* (St Martin's Griffin New York, N.Y.1996). She knows what she's talking about – Vos Savant is listed in the Guinness Book of World Records under the title “Highest I.Q.” I found that she is not interested in flaunting her intelligence but genuinely tries to educate the public to the urgency of logical thinking. Since that has been the object of this column also, I thought it would be appropriate to pass on a bit of her insight, to wit:

Nearly everyone who influences public opinion – from social leaders to politicians – uses syllogisms to arrive at incorrect conclusions, and it is difficult to believe that this is usually by accident. After all, the conclusions nearly always “prove” the point the person wants to make. I'd go so far as to say that never before, in the history of this country, have citizen's been so jerked around logically to the point where they have become incapable of making reasonable decisions. This has begun to evidence itself in incredible jury verdicts. By using every logical error known to mankind in an effort to further one or another special interest, we have begun to reap what we have sown – the seeds of intellectual weakness and mental disorder (p. 79).

In her discussion of logical fallacies, she discusses *Post hoc, ergo propter hoc* (literally “after this, therefore because of this”). One event happens after another event, which is then considered the cause of the first event. This is the kind of thinking that results in the vast majority of the world's superstitions. When John Schoenheit was in Haiti, he was conversing with an American who was an agricultural adviser there. He was trying to educate the people that rocks were not alive, and could therefore be removed from fields to make them suitable for cultivation. Because rocks seemed to “appear” after rainstorms, being heaved up by the wet earth, the people assumed that they were alive and sprung up like plants.

But this fallacy, also called “false cause,” is often employed by politicians eager to take the credit for an improved economy, a drop in crime, etc. One president's economic policy may not bear fruit until his term is over, and his successor then takes the credit.

The Biblical Relevance

This thinking occurs in Christian thinking as well. For instance, many churches teach that salvation occurs after some kind of work on our part and is therefore caused by it. After a lifetime of faithful participation in church activities, sacraments and so forth, a Christian may be worthy of eternal salvation. In other words, their salvation occurs after their lifetime of works, and is therefore caused by it.

Ephesians 2 interrupts this fallacious reasoning, when it says that salvation is “not of works, lest any man should boast.” Romans 10:9 declares that when we “confess with our mouths Jesus as Lord and believe in our hearts that God raised him from the dead we will (absolutely) be saved.” But even this is not a *quid pro quo* (“this for that”), as indicated by the following verse (KJV), which says: “for with the heart man believeth *unto* righteousness; and with the mouth confession is made *unto* salvation.” In other words, our confession and belief satisfy a necessary condition, but are not the cause of our salvation. The cause is God’s grace and love, who counts our simple belief in Christ as sufficient righteous work when it really isn’t.

Romans 3:24 (KJV): solidifies this truth, when it says “being justified freely [literally, “without a cause”] by His grace through the redemption that is in Christ Jesus.”

This distinction between a necessary condition and a sufficient cause is very helpful when analyzing biblical data. For instance, God is considered the cause of many events in the Old Testament that appear to be the result of His arbitrary and “sovereign” rulership of the earth. But in light of what Jesus later revealed about the will and heart of God, we can see that God was not the direct cause of many things that happened, which were actually caused by the sin and idolatry of people. For instance, the flood of Noah’s time was actually caused by the compounding of sin on the earth, to the point that “every thought of every heart was only evil continually.” (Gen. 6:5 – NASB) Man’s sin, therefore, was the actual cause of the Flood, which was God’s righteous response to evil.

The Devil’s influence on God’s people was a hidden cause of many tragic events in the Old Testament, but because His people were without spiritual insight He allowed them to believe that He was the cause of everything.

The proper understanding of the relationship of cause to effect is one of the great missions and benefits of true science. The discovery of the invisible and destructive influence of some bacteria and microbes as a cause of disease was a great day in human history. Before that, sickness and disease were thought to be caused by a host of other things, like sin in the bloodstream. Blood letting and leeches were often thought to cure disease because they removed the impure blood and allowed the body to produce more blood, which was hopefully purer. Many people who would have otherwise survived the disease, died because the blood letting weakened their immune system.

The Practical Value

The fallacy of false cause also dominates our practical lives, particularly when we think that others are causing our problems. We think that because certain problems occurred after person X entered our lives, that person X is the *cause* of our problems. The fact is, we may have had latent weaknesses that were never revealed until a certain person was the catalyst for our weakness to show up. But they did not actually *cause* our weakness, they were merely the occasion (or the invitation, perhaps) for our weakness to be revealed.

Looked at from this perspective, difficult people and circumstances in our lives can serve us powerfully. Instead of running and hiding, we can observe how we react, and choose different behaviors as appropriate. We can choose to use difficulties as a springboard to cause change in us, instead of using all our energy to change the circumstances or the people that seem to be “causing” our problems. Obviously, there are limits to this kind of thinking, because sometimes we must remove ourselves from people and circumstances that threaten our health and sanity. But do we habitually run from adversity before we have even considered that God would lead us *through* it instead of around it? When the Apostle Paul prayed to have his difficult circumstances removed, the Lord told that there was grace sufficient for direct assault over them.

When I lived in Florida, I installed window film on glass. With statistical regularity, a certain number of glass panes would crack some time after the film was installed, due to the increased expansion and contraction of the glass caused by the heat absorption of the window film. Unless I explained to my customer that this was out of my control, they expected me to replace the glass and the film at my expense, thinking that I had caused the broken glass. But, in fact, the film did not crack the glass. The film was the occasion by which an existing flaw in the glass was revealed. It may have cracked after many years of expanding and contracting even without film being put on it. Or it may have gone 30 years without cracking, the flaw in the glass not being stressed sufficiently to reveal itself.

When we reason on the sound basis that 1) Jesus is our Lord and 2) we reap what we sow, we are able to see how the real cause of our suffering may be that we are bowing to idols (our true “lords”) or allowing others to victimize us because of our failure to establish health boundaries or to consider other alternatives. Many times stressful circumstances and situations serve to reveal our weaknesses, which are the cause of many of our problems. We are able to hide these things from ourselves and others under “normal” circumstances, but they are still there, undermining and sabotaging our commitments and relationships. And when our weaknesses are revealed and we are forced to deal with them, we are strongly tempted to hate the person, place or thing that has “caused” our discomfort. This is fallacious thinking that stunts our spiritual and emotional growth as human beings.

When I was 21, I participated in an Outward Bound course at the Hurricane Island facility in Maine. One of the guys in my “watch” was a guy about my age who became a chronic whiner and complainer whenever we experienced adversity, which was often. Finally, we had enough of his bellyaching and told him to shut up unless he had something constructive to contribute to whatever our problem was. In response to our chiding, he offered this weak explanation: “I’m really not like this, guys. You should see me at home.” With one voice, we explained to him that what we were seeing was “the truth” and his life at home was a “disguise.” This was the purpose that he came on the course, to see what he was really made of. When it turned out to be unflattering, he took refuge in excuses instead of facing reality and working to change.

So how do we handle stress and adversity? With patience, courage and personal responsibility or excuses and blame-shifting? In the end, logical thinking will push us to grow and break through to the reservoirs of resourcefulness that our Creator has put within us all. Logical thinking based on Scripture is a powerful tool to aggressively confront our sin nature and move us in the direction of Christ-likeness.