

# Correlation and Causation: Responsibility

Correlation does not imply causation.  
--common saying

Correlation means there is a statistical association between two variables. Causation means that a change in one variable must result in the change of another. Causation always has a correlation, but not all correlations indicated a causation. A common example of this is that on days with hot temperatures, an increase in crime takes place, as well as an increase in ice cream sales. There is a correlation between hot days and days with high crime and high ice cream sales. But while the correlation between this disparate phenomena is well known, the problem comes in determining causation.

It's easy to assume that hot days cause an increase of crime and ice cream sales. People tend to be more emotional and want something to cool off with on hot days, and ice cream is a way to cool off. Emotional people are also more likely to act impulsively, which includes doing illegal things. The logic seems pretty straightforward -- hot days cause higher crime rates and an increase of ice cream sales. And while I personally believe that the above line of reasoning is indeed true, notice how none of it is proof. All I've done is add more items that are correlated with hot days (emotional changes and a desire to cool off), and then attempted to connect the dots. I have proposed a reasonable theory that says hot days do indeed cause an increase in crime and ice cream sales, but there is no conclusive proof here. What if there is another factor, previously not considered, that is actually causing hot days, an increase in crime and a run on the grocery store for ice cream all by itself?

Enter the scientific method, which runs various tests in an effort to disprove any given theory. Scientists will brainstorm all sorts of factors that could be a cause for a given effect, develop theories on how things are interrelated, and then test the theories. But what most people fail to understand is that science never really proves a theory is correct; it can only show that a theory is false. If the test is a failure, then obviously the theory has problems. If there is no way found to fix these problems, then the theory is considered false. But even if every test is passed with flying colors, all a scientist can say about the theory is that he has confidence in it. The more comprehensive and rigorous the tests, and the more successful the results are, the more confidence he can have in it. Theories that have survived the most vigorous of tests have been described as "laws," but they are still only theories and capable of being disproved. The cherished laws of physics formulated by Sir Isaac Newton, despite centuries of behaving flawlessly, were eventually shown to simply not work when man began to look at subatomic particles. Throughout the century since then, science has sought a way to marry Newtonian Physics with Quantum Theory, and so far every attempt has failed.

But before the gentle reader thinks I'm insane or being unreasonable, I just want to say I am not asking anyone to question *everything*. Indeed, I think our culture already questions too much. I only want to point out that so much of what we claim we "know" is really just a theory with a very high degree of certainty. And our certainty is so high that we often place our lives on the line without a second thought on the matter (such as believing in the integrity of the car we drive and in the medicinal properties of drugs). What I *am* trying to do is set the stage for how readily we accept information from so-called "experts." This was addressed by Immanuel Kant in what is commonly called his "Copernican Revolution."

For a brief background on this term, it actually goes back to the famous astrologer Nicolaus

Copernicus, who showed that the Sun does not revolve around the Earth, but rather that the opposite is true. This was such a radical departure from accepted thought at the time, that there was no vocabulary to adequately support his ideas. Indeed, 500 years later we still say the Sun *rises* in the east and *sets* in the west, even though the Sun is stationary relative to us. It's the Earth's rotation that causes the Sun to appear in the east and disappear in the west each day, but we still don't have a proper way to describe this phenomenon in everyday language. Kant did to "knowledge" what Copernicus did with a heliocentric system: create an understanding of knowledge so radically different from what was assumed before that the existing vocabulary was unable to support it. I won't go into detail on how he got there, but I am interested in his conclusions.

In short, Kant said it was all fine and good for the philosopher (and, by extension, the scientist) to contemplate the mysteries of the universe, but it was the common man's responsibility to judge the value of whatever resulted from such contemplation. Philosophers, having spent much time, effort and skill on their projects, are understandably resentful of Kant's ethics here. Sadly, the common man often feels intimidated by the well educated philosopher, and often is too easily distracted by everyday life to take his responsibility seriously. This is also understandable. It is philosophy that has led to the great quality of life we now enjoy, and a certain amount of respect is natural for those who have skills and knowledge most people don't have. But when the philosopher is not held in check by the common man, we can never show that crime and ice cream sales must always increase on hot days because there could always be some other phenomenon that is actually causing all three.

The evidence available for the existence of God in all areas of study is overwhelming, but here I will speak of science in particular. The fine tuning of the natural laws necessary for our universe to exist is so demanding that the chance of it happening by accident is as close to impossible as man can imagine impossible to be. To compare the likelihood of the universe's existence to the possibility of two people in a small town having the same fingerprints fails to do any justice at all on the matter, as an unbelievable number of identical fingerprints will be found long before we even get close to understanding just how unlikely the existence of the universe really is. And the creation of the universe is not enough; we have to explain how life came to be, and how man alone has the ability to reason. I won't spend time explaining this in detail, but if the gentle reader is curious, then I recommend Lee Strobel's book *The Case for the Creator*.

But for the skeptic, many of whom do believe it is "impossible" for two people to have the same fingerprints, there is always the possibility of the unknown keeping him from believing this universe was actually the deliberate result of an intelligent mind. No matter how much evidence is piled up in favor of intelligent design, he will still deny intelligent design because of the unknown element.

One has to remember that philosophers are human too, and they enjoy the status that comes from being part of the intellectual elite. To compound this problem, many whom are recognized as part of the intellectual elite (both Christian and skeptical) do not deserve this status to begin with. But even the least deserving of them know not to squander their *ethos* by contradicting what the common man considers obvious (such as the casual relationship between hot days and crime and ice cream sales). However, they are able to bully the common man concerning matters of great complexity because they know the common man will be ignorant of them.

In fairness to their profession, philosophers *need* to ask questions, including the existence of God. If God is the answer to everything, then asking such questions is pointless because no new insights are possible. The Christian philosopher needs to say, "I believe in God, but to increase my understanding of the universe He created requires me to set aside God as the only possible answer to

my questions." But this qualification is obviously not made by his skeptical comrades. This is the warning Kant gave mankind, and why Kant says the common man needs to judge the philosopher. The common man needs one thing that works, not an endless list of questions that can never be truly answered because any attempt to answer them must always lead to more questions. If hot days lead to crime and ice cream sales, then the common man knows to have extra police on duty and store owners know to stock up on ice cream. If a philosopher says otherwise, then forget about him -- the correlation is still so strong that there is no need to treat the matter otherwise.

The common man's right to judge the philosopher I think is best defended by what GK Chesterton claims is his "stereoscopic vision," which came from his famous book, *The Everlasting Man* --

"Mysticism keeps men sane. As long as you have mystery you have health; when you destroy mystery you create morbidity. The ordinary man has always been sane because the ordinary man has always been a mystic. He has permitted the twilight. He has always had one foot in earth and the other in fairyland. He has always left himself free to doubt his gods; but (unlike the agnostic of to-day) free also to believe in them. He has always cared more for truth than for consistency. If he saw two truths that seemed to contradict each other, he would take the two truths and contradiction along with them. His spiritual sight is stereoscopic, like his physical sight: he sees two different pictures at once and yet sees all the better for that. Thus, he has always believed that there was such a thing as fate, but such a thing as free will also. Thus, he believes that children were indeed the kingdom of heaven, but nevertheless ought to be obedient to the kingdom of earth. He admired youth because it was young and age because it was not. It is exactly this balance of apparent contradictions that has been the whole buoyancy of the healthy man. The whole secret of mysticism is this: that man can understand everything by the help of what he does not understand. *The morbid logician seeks to make everything lucid, and succeeds in making everything mysterious. The mystic allows one thing to be mysterious, and everything else becomes lucid.*" (italics mine)

Notice how Chesterton, although he called the philosopher a logician and the common man an ordinary man, essentially says the same thing Kant did. But while the common man, if left to act naturally on his own, is able to discern the useful from the useless, this is not the case for the philosopher. Indeed, the philosopher has to assume that every insight is valuable, otherwise new insights may be overlooked. Kant suggested that the more one became philosophical, the less is one able to discern between the useful and the useless. To make matters worse, much of the media, who like to think of themselves as intellectual elites, reject the healthy view of the common man. Especially on matters concerning the divine. And in their scorn of both the common man and of God, the skeptical philosopher will often engage in a deceitful tactic sometimes called "raising the bar." This is when someone asks for some evidence, but when the evidence asked for is presented, they ask for more.

They will state that unless absolute proof can be given for the existence of God, then not only will they refuse to believe in God, but they consider any such belief as foolish. But as absolute proof can never exist by human methods, there will *always* be the possibility that some previously overlooked causation can be discovered or imagined, therefore they refuse to listen to the theist. One

simply cannot win over a skeptic philosopher with evidence of causation, as "enough" will never be enough. Instead, the theist needs to get the common man to tell the philosopher that enough evidence is enough. Many of these same skeptics who seek absolute proof of God will nonetheless pick up ice cream from the grocery store on the way home in anticipation of hot days. The philosopher is not picking up ice cream because it is consistent with his quest for truth, but because the common man told the philosopher that enough was enough on the subject.

But I can forgive the skeptical philosopher easily enough. As I pointed out earlier, his skepticism is what makes the philosopher so valuable to society, and he is fulfilling the role God gave him so we can better appreciate the beauty and majesty of God's creation. What frustrates me is that so many Christian theologians act the same way, albeit from the opposite side of the faith spectrum. We also have many common man Christians who have obviously never spent time in serious contemplation of the Bible or its meaning, yet act as if they are accomplished theologians.

All Christians believe in the Bible in general, but for those who claim to believe in *sola scriptura*, or otherwise disregard any scientific evidence they dislike, the Bible is 100% *factual* rather than being 100% *truthful*. Facts are not necessarily truth, nor is truth necessarily factual. My observations here are biblically sound. Great truths from the Bible are sometimes explained without using factual evidence (Nathan's use of an allegory to reveal King David's sins stands out, and Jesus often resorted to parables), and great deceits in the Bible are sometimes completely factual (consider Satan tempting Jesus in the desert, or the many times the pharisees used the Decalogue to justify ungodly attitudes to their own people). Ultimately, *sola scripturists* deny what the Bible says must be true: that science is a virtuous profession.

The Bible tells man to both rule the world (Genesis 1:28) and to be amazed at the world (consider Matthew 6:28-29). Science allows man to do both at the same time. The Bible tells us that time is linear (Genesis 1:1), and that the universe behaves in a predictable manner (Hebrews 1:3). Both are essential requirements for science. The Bible tells us to seek truth ("I am the way, the truth and the life," John 14:6); science seeks truth in a methodical way. The Bible tells us to be honest (Exodus 20:16 and Deuteronomy 5:20); science is only useful if the scientist is honest. And while agnostics and atheists assumed for almost 200 years that science proved God did not exist (a belief that was founded on a false assumption, but I won't elaborate on that here), the last 100 years has had science providing more and more evidence that God must exist, long past the point where any sane man would accept that intelligent design must be true. But the same science that is driving man to God is also telling us that the universe is 14.5 billion years old. Just as the skeptic philosopher will deny God but also stops to get ice cream on a hot day, many Christians are happy to use their cell phones and drive cars in the comfort of air conditioning, but refuse to believe that the universe is more than 6,000 years old (or whatever age the "theologian" claims the Bible implies).

The popular Christian theory that the world is only 6,000 years old is, by the way, not really supported by the Bible as they claim. The Hebrew word "yom," which is usually translated as "days," actually can be used to describe *any* period of time, even indefinite periods. To know what period of time it measures must be taken out of context, and any measure of time taken in the context of the Bible is open to interpretation. It clearly shows at least four times in the Bible that God does not measure time like we do (Psalm 89:47-48, Psalm 90:4, 2 Peter 3:8 and 1 John 2: 17-18). Indeed, God created time ("I am the Alpha and the Omega," Revelation 22:13), so God Himself is timeless. While it is certainly *possible* for God to have created the universe in six 24-hour periods (as *we* measure time), we also have clear biblical evidence that this is not necessarily the case. And since we do have biblical commands to be amazed at the universe as well as to rule over it, we ought to listen to what science has

to tell us about how the universe behaves.

Many Christians have the courage to speak up *against* the non-existence of God, but they do not have the courage to speak up *for* the legitimacy of science. In my opinion, this is a tragic mistake. Legitimate science is on the side of the Jew and Christian, but the common man does not know of it. To reject science for arbitrary and biblically unfounded matters (like the 6,000 Year Theory) only makes the Jewish and Christian theologians look foolish before the common man. And for the faithful to make themselves look foolish concerning God only increases the *ethos* of the philosophical skeptic.

In truth, the common man has no need to believe the universe is 6,000 years old, nor to believe it is 14.5 billion years old (itself a number frequently challenged by different scientists). On the other hand, he does have use for cell phones, pharmaceuticals and other wonders that science has made possible. He also has need for morality and a purpose in his life, things that only religion can provide. These secular and theological needs and wants are not mutually exclusive, so creating ultimatums over unnecessary matters is going to backfire. But as long as theologians condemn science, the theologians will look like fools because the common man *does* see the hypocritical theologian using high tech devices like cell phones. On the other hand, science is well known for rigorously testing its theories before presenting them to the public, and it showers the common man with new wonders that work every day. Science has too strong a track record helping the common man in daily matters to be casually discarded. As long as Christian theologians casually dismiss matters they have no special knowledge of, then they will continue to lose credibility with the common man.

Instead, Christians have to recognize the scientist as the noble and biblically supported profession it is. Only then can the theologian ask the skeptical scientist the question that really needs to be asked of him -- "Why do you believe the science when it says the universe is 14.5 billion years old, but you do not believe the exact same science when it says the idea of an intelligent designer is the most certain thing we know about the universe?" This is a question the common man *can* understand, and he will expect a good answer from the skeptic philosopher. Up until now, the skeptic has been mocking the anti-scientific bent too many Christians profess (Last Thursdayism, Russel's Teapot, The Great Spaghetti Monster, Dragon in my Garage, and the Invisible Pink Unicorn are all popular jabs at the Christian 6,000 Year Theory). Christians need to ask the question that needs to be asked, and then see how well skeptics do explaining why their opinions on the existence of God contradict the evidence they claim they believe in (and in many cases, personally discovered). Perhaps then the common man won't think Christians are so out of touch after all.

Raymond Mulholland  
Original Publication Date: 10 October 2024