



# On Brilliance and Inspiration

A short story on where it *really* comes from.

## Dennis K. Gregory

This is yet another excerpt from **The Pit**. Here the discussion concerns the origins of inspiration..... something we all experience from time to time.

Scene description:

An ancient story of Greek antiquity is introduced here by Dennis to the guests to show that true brilliance is not something that we can take credit for. It also happens to be quite funny. Do enjoy!

Dennis: [stands to respond to all the comments] Let me thank you all for those charitable comments and responses; as I feel them to be generated by kindness. Unfortunately, you are giving credit to the wrong person. I am not trying to be facetious, and I deeply pray that I do not come across as having a false modesty; **heaven forbid that!... especially** when I say that my mind is both small and puny: because it is.

Please listen to this and pay close attention, as I consider this point to go directly to the heart of my credibility, lest you come to the erroneous conclusion that I am a wise man, which would be tantamount to completely missing the main point of this event.

I hope to now show, via a story, that true intuition, insight, brilliance, inspiration and major ideas are a **gift from GOD**, and therefore nothing one can claim any credit for.

My mathematics brethren will especially love this one, although we all should appreciate it.

This is a story entitled “Archimedes and the Golden Crown”. Many have called it the greatest flash of intuition in the history of science.

Around 250 B.C., the city of Syracuse, under the protection of the Roman Empire, had its own King, and was a thriving metropolis. The King was Hieron II. He commissioned a goldsmith to craft a new crown for him and gave him an ingot of pure gold from which to make it. Now the King, a very smart and practical man himself, weighed the gold ingot carefully before he gave it to the goldsmith and carefully weighed it again after receiving the crown; this obviously to ensure that he was not being cheated. After weighing the crown, which he considered a beautiful work of art, he found that the two weights matched exactly. Good deal!.....so he thought at first.

He then began to wonder: what if the goldsmith substituted some copper of the exact same weight? The two weights would be exact and the goldsmith would have kept some of his pure gold to himself; an unforgiveable crime!

This possibility gnawed at him to no end, as he could not figure out a way to prove if the goldsmith cheated him or not. Fortunately, he had a relative, named Archimedes, whose wisdom was well know among the aristocracy, whom he summoned to explain his problem. His job was simple: determine if the crown was pure gold through and through, or if the goldsmith substituted a small amount of a lower value metal, like copper, as he crafted the King’s crown.

Archimedes attacked the problem with the then known fact that gold was the most dense material known, which of course meant that a given amount of pure gold would take up less volume than any other metal ***of the same weight***. It was also known that the density of copper was roughly half that of gold. He went on to calculate that 100 grams of pure gold would have a volume of 5.18 cubic centimeters. He further calculated that 100 grams of what *appeared* to be pure gold but was in fact only 90% pure gold and 10% copper, would have a volume of 5.78 cubic centimeters. If this was the result of an actual test on the King's crown, the difference would be noticeable and show that the crown was only 90% pure gold with the remaining 10% pure gold neatly tucked away in the goldsmith's strongbox! All he had to do then was to measure the volume of the crown and compare it to the volume of pure gold of the same weight.

Is everyone still with me? [most all respond yes, and you can see the interest in their eyes. Even Lucifer and his doomed relatives anxiously await the conclusion of this story] Good!

The mathematics of the time made it easy to measure the volume of many shapes like cones, cubes, cylinders or any flattened object of simple regular shape.

The way the story goes, Archimedes ran to the King and told him that he had a solution to his problem! All he had to do was to pound the crown into a flattened regular shape of which he could then measure the volume and determine if the crown was pure gold or not.

The King, clearly irritated, immediately told him that he had absolutely no intention of ruining the crown, a very satisfactory work of art by pounding on it, and that he could have thought of that himself without him; as he too, understood the principles of mathematics. He then ordered Archimedes to find a different solution: one that would not require damaging the crown.

Archimedes then set out to find a different solution. No one knows for sure how long he thought, nor how hard he thought, nor how many hypotheses he discarded along the way. This is what we *do* know. Are you folks ready for this? [all eagerly respond yes]

Totally exasperated with this problem, Archimedes decided to clear his mind and visit the public bath house where he could relax and forget about that stupid crown; at least for a while. Half the aristocracy in Syracuse would be there and he could engage in everything from steaming himself, getting a massage, exercise and engage in local conversations about the latest scandals in town.

Once all the socializing and exercising was completed, he finally decided to take a bath. The problem was that the not so bright bath attendant filled the tub all the way to the brim. As a result that error, as he slowly lowered himself into the tub, the water began to overflow. It is not sure exactly when it happened, but soon after he sat himself on the bottom of the tub and noticed all the water slop he created, it hit him like a bolt of lightning!

Excited and passionate beyond reason, he leaped out of the tub, not bothering to put on his clothes, and ran all the way home, naked through the streets of Syracuse, screaming Eureka! Eureka!; which in Greek translates to “I’ve got it! I’ve got it!”.

The solution to the King’s problem was then quite simple and an easy one to explain to all:

If an object is not affected by water in any way, and is immersed in water, it will displace an amount of water *equal to its own volume* since two objects cannot occupy the same space at the same time! Now suppose that a vessel was made large enough to hold the crown and had an overflow spout built into the middle of its side where the water overflow would go into a separate container. The crown would then be lowered into the vessel and the overflow would be captured into a separate container. Next you perform the exact same experiment with an equal weight of known pure gold. The water would again overflow as the gold displaced the water. You now compare the two separate containers to see if their volumes were equal. If they were, the crown was indeed pure gold, if not, and the crown displaced more water, it could therefore be declared as impure.

As the story goes, at least as I understand it, this experiment was indeed performed on the King’s crown. From this, it was then determined that the crown was not pure gold; upon which time the King summoned the goldsmith .....and had him executed for thievery! [sits]

Leonardo da Vinci: [stands smiling] A brilliant and terrific story my friend! [sits]

Albert Einstein: [comments from his seat] What a dazzling display of fundamental mathematics; and a very funny story!

Adrienne: [stands to comment] I didn't understand all of the math details, but I am sure I understood the basic story line. I agree with Mr. Einstein; that was very funny! [sits]

Dennis: [stands to continue] Yes indeed, that was a funny story. However, there is a true core principle that I am about to explain that the story represents.

I just explained to you good people why I think **GOD** must be placed above **LITERALLY ALL ELSE**. There were ample generous comments giving me credit for the analysis; which I responded by telling you that you are giving credit to the wrong person.

Now let's connect the dots of this story to my statement that I am not the one responsible for creating that well accepted analysis. I believe that many of you will recognize yourselves in this and stop to consider your own experiences with inspiration, and if you should ever give yourself credit for it.

The core principle of this story, and how it relates to our discourse, lies in the inability of Archimedes to come up with the solution *until he decided to drop the matter altogether* and go out to relax himself in the public bath house. It is trying to show us that true inspiration is an **involuntary action of the mind**.

Think of how many times you yourself came up with that 'truly great idea'. Be honest, were you able to sit down and 'will it', the way you will solutions to many simple problems? Or, did you in some form drop any thought of it, only at some point in the future; **'it just came to you'** i.e., the proverbial *light bulb going off!*

The truth is that inspiration, brilliance and intuition works as does your heart beating.....you do not, *thank GOD*, **have to think about it**. If HE deems it good for you, HE will simply reveal it to you; in HIS own way and in HIS own time!

I personally like to work out several times a week. The positive effect on my physique and general health are the direct result of my *intentionally* doing something. The same goes when I solve ordinary life problems; like how to juggle school, work and exercise and still have time for entertainment and, of course, worship. My mind can willfully devise solutions for that. But what about my 'intentionally' understanding how GOD works in our lives? No matter how many attempts to 'intentionally' come up with answers to such a deep problem, I fail. I then have to stop, pray, and let GOD do his thing through *involuntary processes* as spoken of in our story. There is no other way; at least for me.

What is the point of all this?

GOD knows all of our weaknesses and works DIRECTLY through *involuntary processes* to ensure that we can meet our needs. We all know that we forget things from time to time. Who would dare say that is not true for them? But what if we forget, while totally thinking about a serious issue, to keep our heart beating? Who in their right mind would give themselves credit for their heart continually beating for their entire life, no matter how many difficult things we go through. GOD MUST BE GIVEN CREDIT; for any fool should be able to see this.

So it is with inspiration; *another* involuntary process **that bypasses our free will** and works completely under the control of GOD. Accepting credit for our inspiration, brilliance and great ideas is therefore completely unjustified, in my humble opinion. For He knows that we are all small and inadequate for many of life's deep, critical and pressing issues; like remembering to keep our hearts beating, or solving truly difficult problems and therefore need His assistance. Does this make sense to everyone? [sits]

Darryl: [comments from his seat] I followed you through out. Yes, it makes perfect sense to me.

Claudia: [stands to speak] Dennis, I fully understand and agree with what you just said. However, there may be many people who will always believe that they are smart enough on their own, and that those true great ideas come from **them**. [sits]

Bart: [comments from his seat] That was a wonderful explanation of why you feel GOD should be given credit for those insightful explanations you gave us; and not yourself. Good job! That gives me a lot to think about.

Sigmund Freud: [stands to comment] I of course cannot validate if what you've just said is true. However, I will say without hesitation, that there is no known scientific theory as to exactly where true inspiration comes from: it is a complete mystery to us psychiatrists. In all honesty, I have no scientific reason not to agree with your analysis. As far as I am concerned, it makes full sense to me and I will accept it as it stands on its own.

Dennis: [responds to the group] I apologize for that somewhat lengthy explanation of why I cannot take credit for your generous comments. And as I continue to claim that my mind is both small and puny; let me give added support to this by once again falling back on authority.

Listen to this divine verse from Psalms Chapter 139 Verse 6 (NIV) as I see it applicable to our story; and to questions concerning GOD:

**“Such knowledge is too wonderful for me, too lofty for me to attain”.**

## **WHAT SAY YOU???**