

Popular stereotypes frequently present the scientist and the artist as extreme opposites in their pursuit of understanding - the scientist as being objective, disciplined and rational, and the artist as being subjective, impulsive and imaginative. Yet are they really so very different in the ways they look at the world? To what extent do you consider these stereotypes accurate, and to what extent do you consider them distortions of the ways in which the sciences and the arts give us their knowledge?

Is there a difference between an artist and a scientist, except their profession? Are people born to be professors? Have some people a 'rational' brain? Or is it so that the artist have a bigger right brain-half than the scientist? Has an artist a greater ability to express him- or herself? – Is it a genetic question?

One thing is obvious: people are not the same, everyone is individual with individual interests and hobbies. Some like to paint and some like to play with atoms and molecules. But the question remains; Is there a genetic difference between a scientist and an artist?

Undoubtable is that the public opinion of scientists and artists is as two extremists. One as rational, often alone, thinking, and the other as impulsive, 'flower-power' and poetic and philosophical. How come?

I believe that the human brain works in a way that is similar to a computer's way of storing information on a hard disk, or maybe the other way around, in files and directories, different directories for different kinds of information. That is, if we hear about an artist, we categorize him with quite many attributes; impulsive, subjective, imaginative, etc. etc. But then, why do we have these attributes? And more interesting, why is it a general opinion? Is it based on internal preferences, inborn values, or external impressions, gained from others?

When I first read the question above, I realized that this is my idea of normal scientists and artists. But I also understood that this is only a generalization based on the definition of the two professions. First, let me try to define science, taken from Longman's Dictionary of Contemporary English; "*knowledge about the world, especially based on examination and testing, and on facts that can be proven*". So according to this definition, a scientist must find his knowledge after he has done some kind of observation, either it is on a piece of paper or he has seen something. This is the way he draw conclusions and makes proofs, but that does not make every scientists objective, disciplined and rational. This is a generalization based on the way the scientist draws the conclusions.

If this is true and many people still thinks that the stereotypes are true, how can this be? I believe that persons that work a whole life as a science may develop a skill to see the world with a scientist's eyes. He will automatic draw a conclusion from what he uses to work with, based on logical thinking. Let me take an example. Two people are walking in the forest, one scientist and one artist, when they suddenly observe a stone that is hanging in freely in the air. The scientist quickly walks to the stone and starts to feel and measure how big the probability is for this to occur and later try to reconstruct it home in his laboratory. The artist on the other hand starts to think of what kind of material he will use when he later will paint it home in his studio.

This story is of course made up and exaggerated, but I think this is approximately what would happen, after they both just stared at the stone and thought they were dreaming.

What I want to show is that people learn what they should think of, but basically both scientists and artists think the same way. I would call this *selective conception*; conception is influenced of earlier observations and conclusions.

The question also states that a scientist cannot be an artist and vice versa. But, there was once a man called Leonardo da Vinci. He is the proof that this is not the case. He painted perhaps the world's most famous painting, Mona Lisa, but he also constructed airplanes and helicopters, tanks and submarines. He served as a military engineer and in the Royal Opera-House Orchestra. I believe that there cannot be any scientist that lacks interest in art, nor that there is an artist that never thinks rational. We are not made to be extreme scientific or extreme artistic.

So the conclusion is that both the artist and the scientist are the same in their way of thinking, but they will learn to think in certain patterns, what I call *selective conception*. People will then think of a scientist as a person that always is objective, disciplined and rational, and an artist as a person that always is subjective, impulsive and imaginative. The fallacy with this kind of thinking is that you generalize and think of everyone into these or other patterns, which might not be right. Be ware of the dangers with preconception.

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