

Sense perception



**ASSIGN
BUSTER**

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We perceive the world through our five senses: Sense perception is the active, selective and interpretative process of recording or becoming conscious of the external world. So can we really rely on our senses to tell us the truth? There are so many times when our senses can be influenced by instinct, emotion, and beliefs. For example, if we are in the middle of a forest and scared, we probably start to see and hear things that aren't there. This shows that our senses are not dependable enough to give us a true representation of our surroundings. Different people perceive things differently, so how can we rely on incompatible abilities to give us a clear and consistent perception? Different species view the world differently. Birds can see ultraviolet light, some fish like whales use SONAR for location, and some beetles make use of the earth's magnetic field to locate their nests. There are so many senses that are still unknown and none of us have experienced, so how can we decide which one gives the best representation of reality? The human senses are limited. We can hear only up to a frequency of 20 to 20,000 Hertz. We can see only up to a wavelength of 390 to 550 nanometers. We can feel and bare only certain temperatures. We can't smell as well and as far as dogs can. We only feel the touch of certain textures, and we can only taste foods that are taste buds are designed for. In spite of being aware of these limitations, how can we rely on our five senses to give us accuracy and truth in the world around us? Our sensory organs don't think. They simply just send information to the brain and its left to our interpretation. For example, every morning we see the sun rising in the east and setting in the west. The sun isn't really moving in the sky, but the earth is spinning. When we see this our eyes aren't lying, it's just the way we

interpret it. Another example is when we see a mirage in a desert thinking its water. Our senses can be deceiving in so many ways, but we still tend to rely on them to create and define our reality. Our own small world. Eyewitness is known to be the best evidence. But is the eye really seeing the truth? We have a remarkable ability to see, but not necessarily look. There are so many things that we hear, see, smell, taste or touch everyday but they don't all always register in our memory. One morning in 1980, a bomb exploded in Bologna station: 85 people died, and the clock stopped ominously showing 10. 25, the time of the explosion. This image became a famous symbol for the event, but the clock was repaired soon after, and worked perfectly for the next 16 years. When it broke again in 1996, it was decided to leave the clock showing 10. 25 permanently, as a memorial. The researchers asked 180 people familiar with the station, or working there, with an average age of 55, about the clock: 173 knew it was stopped, and 160 said it always had been, ever since 1980. What's more, 127 claimed they had always seen it stuck on 10. 25, ever since the explosion, including — fairly excellently — all 21 railway employees. So can we really rely on our senses and trust our memory to remember each detail of the event perfectly? When it comes to hearing, we hear things all the time everyday. We don't necessarily notice all of them, but some we do and some that our important, we may even remember . As kids, we all remember playing the game Chinese whispers. We would whisper a sentence into each other's ears and then had to repeat it to the next person exactly the way we heard it. It very rarely happened that, the last person said exactly what the first person had thought. This example may seem trivial, but is it not our senses deceiving us? If two smells cross our nose at the same time our brain will try to jump from one smell to

another, give up, and then eventually smell something that may not even be there. When we smell one of our favorite foods, we sometimes start thinking about a memory or something that may have happened in the presence of that food. Our sensory organs immediately link that smell to an incident. Here, our emotions take over our reason, and we believe that we are smelling something that doesn't exist. Why does this happen? Its all our senses deceiving us. It's as is our imaginations are stronger and more powerful than our 5 senses. When we look at an area of knowledge such as Natural Sciences, the disciplines are chemistry, biology, physics, astronomy and earth sciences. Astronomy is the science of celestial objects and phenomena that started outside the Earth's atmosphere. There is an interesting theory on what the universe maybe. Our senses perceive it as space with several elements such as the stars and planets because that's what we know. What's beyond is left to our imagination. What if the universe is someone's hair and the stars, the dandruff. It may sound absurd, but it can be possible. The structure of the universe and that of the brain cell is the same. They are identical but differ in size. So what if our universe is just a brain cell in the head of a giant or if we look at it the other way round, how many universes could be inside us? Another example of our senses deceiving us is if we take a piece of wax. It will have a certain appearance, shape, smell, colour, feel and taste to it. However, once we start heating the wax our sensory attributes start to change. If we looked at the wax only through our physical senses then it would seem different from the wax before it was heated. However, they both are still the same. This shows that we have to rely on our mind as well, and we cant blindly rely on our senses because they can mislead us about information and qualities of the substance. The

bent Pencil- This is experiment is due to the law of Physics based on refraction, we will notice that when a pencil or a ruler is immersed in water, it appears to be bent. However, it doesn't appear bent once its been taken out of the water. This once again shows that our senses cannot be trusted as sources of knowledge, as they make us see and believe things that may be just an illusion. Once again, based on another law in Physics, is the concept of weightlessness in an elevator. If a weighing scale is put in an elevator and a person is made to stand on it, his or her weight will be greater than what it usually is. However while coming down the elevator, we feel lighter or at least seem lighter, as the weighing scale will show a much lower reading. We have not actually lost weight while coming down. It is just are senses playing tricks on us and making us believe what we see and in some cases, feel lighter than we are. We are always aware that we are using our five strong senses, but never conscious. It's due to this that our senses tend to be deceiving. These five senses*, define our reality, and how we see the world. " Seeing is believing. " — We see. We register and our mind interprets. That's how the universe works, perceived differently by different people. We all just have different interpretations of the same reality, relying solely on our individual perception of the world. ----- [1]. From Bad Science via Folens Psychology Blog [2]. http://www.coursework.info/International_Baccalaureate/Theory_of_Knowledge/What_is_the_role_of_sense_perception_in_L853751.html