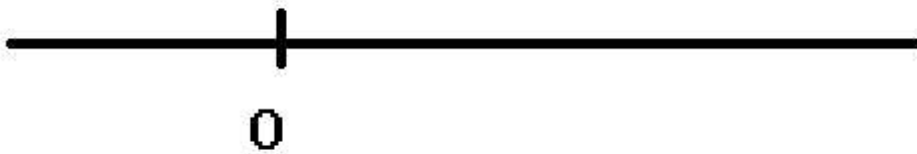


DIMENSIONS

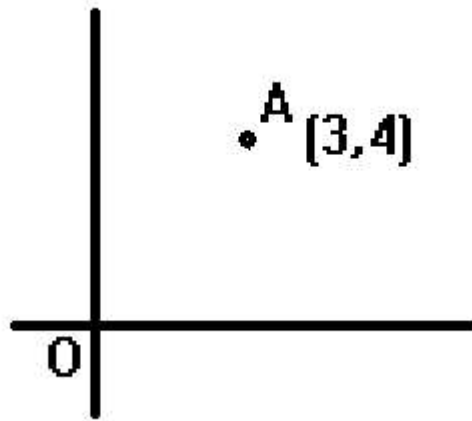
Dimension. This word is generally not taken into account when we talk about mysteries and fictions (at least for now), like time travel. But this word holds in it many truths. So, I would like to devote a writing on this topic.

So, let us start with the definition of Dimension. In general, dimensions denote the position of particle (Both material and astral). To understand this better, consider the senario. Suppose, you are on a line. Now you fix any point on it and call it origin, and now all the distances measured will be simply the distance of the point from that so-called origin.

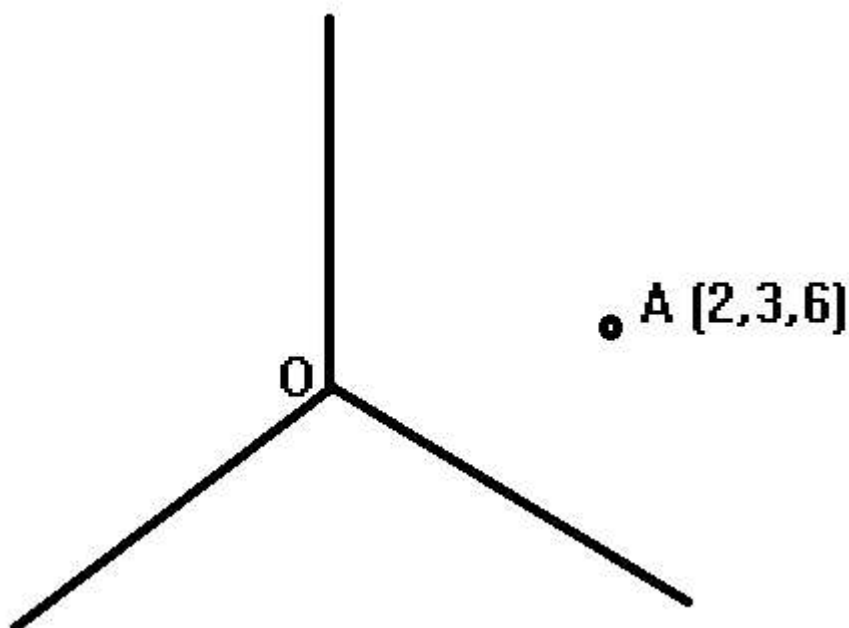


So, that's the idea. Now, let us move further and consider the second dimension. Now consider that you are on a plate. So, you have two degrees of freedom. You again fix any arbitrary point to be your origin and all the distances you measure are the distances from this point.

So, we can say that an ant is at a distance of 5 units from O. We further go on to simplify the senario. We now consider two mutually perpendicular lines which meet at origin, and call this the Axes. Now, we can measure the distances from these two lines. And, now we can say that the ant is at the co-ordinate (3,4).



Now, if you understood the concept, We can move to the third dimension. Now consider the world in which you live. This spatial world has three visible dimensions. If we fix any arbitrary point in space, and consider three mutually perpendicular lines (any three intersecting non-coplanar lines would suffice, but for simplification, we consider perpendicular lines), meeting at O , we can find the distances of objects from these lines and know the position. So, now we can say that an ant is at the position $(2,3,6)$. And we find that the ant's distance from origin is 7 units.



Let us now move further. This was the introduction to dimensions, and these were what we experience. Let us try to dig deeper.

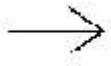
THE HIGHER DIMENSIONS

Now, consider the ant. if we say that the ant is at (2,3,6), would that be complete information? Maybe not. Consider the fact that the ant was present at A, at any particular time T. So the modification would be that the ant is at (2,3,6,T). But, still we cannot guarantee that the information is complete, because we cannot prove what we don't have. So, our modern science cannot provide information beyond this.

So, let us head towards The Ancients Myths (So called). Professor Stephen Hawking predicted as many as 11 dimensions to be present. But, if we consider our texts, it has been stated that there are as many as 64 dimensions in the universe. Now, if we consider 64, it is a very good

number.

But, we still haven't got a grasp on this term. What does it mean to know more dimensions, or why should it effect us. I think that it should affect us, because all of this humanity may be based on the very knowledge of dimensions.



It has been said that, humans have chakras in them, vertically aligned in the body. I know it sounds absurd, but so do many other things. Now, to give you some observations. There was a TV serial called 'Shaktiman', in which the person lights all the chakras and becomes invulnerable. Also, in the very famous Hanuman- Chalisa, there is a line, "Asta-siddhi, nav-nidhi ke daata", If you have ever thought what these Siddhis mean.

Also depicted in many texts, Siddhi is a process to achieve greater control over body. It is also said that everyone who is born must die, but it contradicts the saying that Hanuman is immortal. Why is Hanuman considered immortal? It is simply because of the fact that he lighted all his chakras.

But, what happens when these chakras are lighted. So, we have to undertand a fact that our body is made up of same material as the universe. We are part of the universe, and till we are ignorant of this, our chakras are closed. Opening chakra, connects a person to the nature, and more and more one connects to the nature, more powerful they become. Now, what happens is that when a person meditates, he goes inside himself to find the truth and then comes the enlightenment that he is not different from

nature.

And, so with each chakra opening, he becomes a higher dimensional being. Each chakra corresponds to 8 dimensions. And opening all 8 chakras makes a person a 64-Dimensional being. Sounds magnificent. But now another question arises. What is a multi-dimensional being and what is special about him.

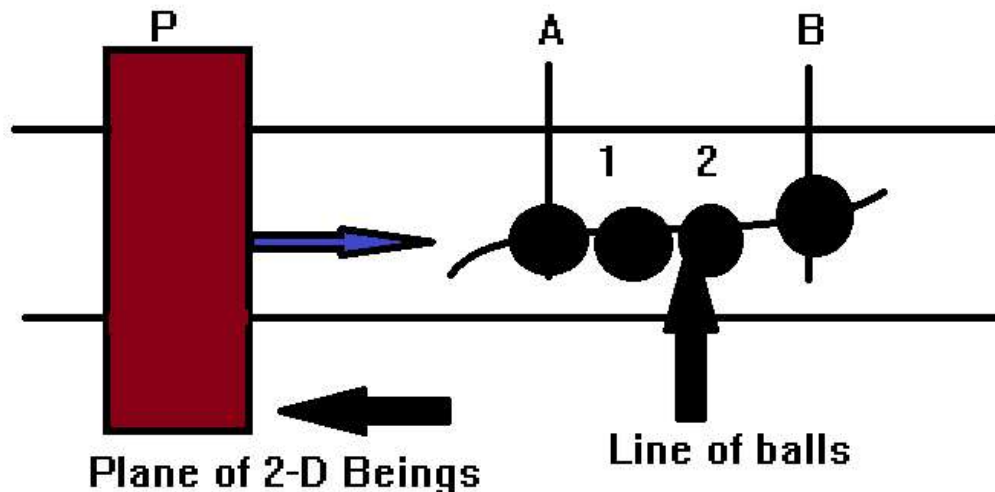
So, let us focus on that. To understand this, let us consider an example. Suppose that there are two-dimensional beings, those which live in two dimensions. What happens, when you throw a ball through their plane? What do they see? They will see a circle, which initially enlarges, reaches a maximum and then recedes. Now, this phenomena cannot be explained by their physics, and they will deem this to be a miracle. But, it can be governed by our laws of physics. So, we are 3 dimensional beings, who can create miracles in two dimensional world.

What if we use this analogy for our dimension? What if there are 4 dimensional beings and their laws are very different than ours, and what we consider miracles, might just be Physics to them.

Let us try to understand this through an example. So, one question has been talked a lot about. Is the future fixed, or does it depends on our actions?

The answer, that most people tell, is that their actions define their future, because they want to feel in control of their future. But, is it the truth? Let us consider the other case, that the future is fixed.

Take this example-



Consider a plane P , on which two dimensional beings reside. And consider a line of infinite discs, perfectly merging into each other (four of which are magnified). Now, consider that the plane moves from left to right. What does the two dimensional being observe?

First the plane comes to position A , then goes to position 1, then position 2 and then position B . What the two dimensional being observes is that the disc is moving from A to B , and the disc will only reach B , if it has left A . It sees the entire motion of the disc from A to B , and infers that the path is arbitrary. But what we observe, is completely different. We see that the discs were already present, even before the plane had arrived, and it is the plane, which simply passes through the discs. And since we see all the discs simultaneously, we say that presence of disc at B has no relation to the presence of disc at A . And so we come to the conclusion that the position of discs were predetermined, and no events of plane P has altered the discs.

Now, consider the same analogy, to us. Suppose there are 4-Dimensional beings looking at us. For those 4-D beings, time would simply be a spatial co-ordinate, and similar to

the discs, they would be able to see an event, throughout, without it depending on any other event, similar to previous analogy, that all the discs are simultaneously present. So, following this theory, all that we do and are doing, is pre-determined, and it is not our actions, that make the difference. That means, all that we do, is pre-decided and we are just moving through the events.

Now, this brings us to the next question. What are We?

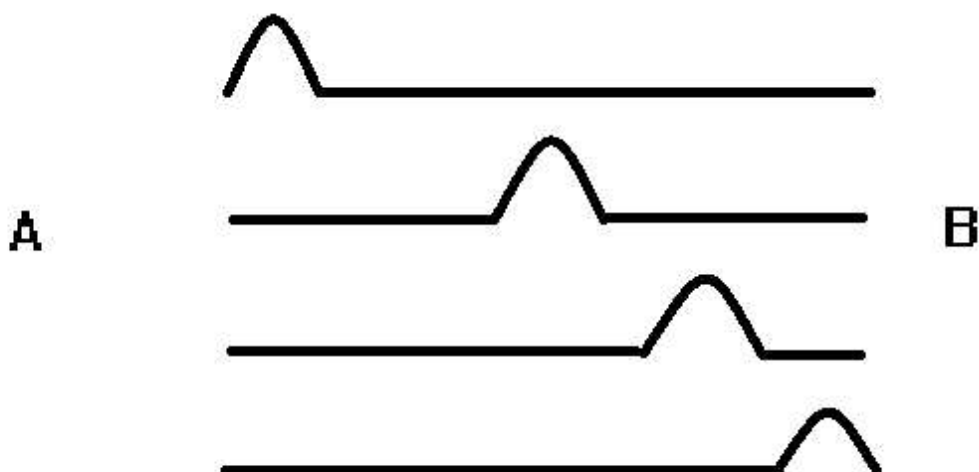
THE PROBLEM OF SELF

Self, this has been a topic of talks from the beginning of time. What are we actually? And when are we born? Is it when the sperm meets Ova, or when a child comes out of womb, or some other state? We will try to answer that question.

What I suppose is that we are similar to the 2-D beings, which move on plate. Let us go deeper.

When I said that all the events are pre-decided, I meant that, even your bodily actions are pre-decided. For example, you jumping on a table, on a certain date, at a certain time, is predecided. So, did you choose to jump? What if you did not jump? The answer is actually pretty simple. You did not choose to jump, and it could not have happened that you would not jump. If you wouldn't, then that would simply mean that it was predecided that you would not jump.

Following this condition, we now try to define Self, or rather sometime called soul. We are just like a wave on a string, which moves forward along the string and provides sense to the string, without hampering its properties.



And all the Soul that is talked about is just a sense, an energy, as it is defined, and this is in consistency with the definition of Soul.

Now we come to the next question, when are we born?

When the wave is created at A, there is not one particular point, which is said to be the origin of wave, similarly, it is not a particular point at which we are born. It is the entire process of merging the soul with body, and creating what I like to call, "THE WAVE OF LIFE."

But, this would also mean that the soul is not eternal, it finishes, as soon as the string is over. But, that is not just what finishing means, is it? Since wave is an energy, it just merges with the nature, and does not particularly "Finishes".

The next problem, that can be discussed using the concept of Dimensions, is TIME TRAVEL.

TIME TRAVEL

Now, we come to the most mind-boggling topic, the TIME.

Since we are talking about predecided events, what does

time particularly mean? It is a bit difficult to understand. Time is just the wave's property, and cannot be defined exactly. What we are more interested, is on the topic of time travel.

When this topic comes, it brings along new problems, some of which we are going to discuss.

1. The Grandfather Paradox- If Time travel is possible, what would happen, if someone goes to the past, and kills his grandfather, before his marriage, because without marriage, the person would not be born and can-not kill the grandfather. So, what happens here? It is clearly a Paradox.

2. If Time travel is possible, why don't we have a time traveller already?

We will come back to these questions, but first let us discuss the theory. So, as I have supposed, that all events are predecided, is there really no choice? That's not the truth. We do have choices, but for all of our choices, there are different timelines, already established and going on with us. We discuss the theory in detail, but first, I would like to give a postulate-

"OUR PAST CANNOT DEPEND ON OUR FUTURE."

What really happens is that, at Big Bang, or some other event, time started. Time came to existence, and all of it came simultaneously, and due to different choices that the nature has, it came in various forms, each a slightly different from each other. In one time-line, one electron spin may be different than the other, and this sets up a chain reaction, and the entire time-line changes.

Now, if we say that time travel is possible, it may happen that, when the fabric of reality is torn, we may end up in

any of the timelines, and not necessarily in ours. And suppose that the person present there looks like your grandfather, and you kill him, nothing will change, because you did not kill your grandfather, and as to speak for that timeline, it was predecided that you would come on that particular time, and kill that particular man.

Now, one may ask that, even though there is a very low probability that we end up in our own timeline, what if we do, and kill the grandfather, what then?

So, as I have already discussed that every event is predecided, it would be predecided that you end up in your own timeline. And, if nature allows that, it may lead to erasing of your timeline. But of course, the probability to this is $1/\text{infinity}$.

That is what happens when we ask the question, why don't we have time travellers?

Even if a time machine is invented, and with all the problems, can move through time-lines, the probability that it ends up in our time-line is $1/\text{infinity}$. This is probably why we don't see time travellers.

This can also lead to another conclusion. What if we already had time travellers?

GODS. It may be possible, that they came from the future, and planted civilization on Earth, in our timeline, and went away, and the probability that they will come back is also $1/\text{infinity}$. That is why we are not able to get in contact with any.

CONCLUSION

Finally, I come to the conclusion that, all that we do, and all that we think we will do, is pre-decided. We also

discussed Time Travel, and this theory seems to solve the paradox. But, still this has many shortcomings, that we will try to rectify over TIME.

-Bidhan Arya

-I am providing some pictures, to understand things better.

