## Design Thinking A Primer Professor Dr. Bala Ramadurai Intro to Design Thinking Course Preview and History of Design Thinking

Hello and welcome back to design thinking course. I have already briefed you about four stages of design thinking. Empathize, Analyze, Solve and Test. So, these are stages that I sort of thought of when we were design this course for the first time, I do not know, maybe a few years ago. One thought kept coming back to me saying, will this stand the test of time? Will these four stages, does it make any sense? Has anybody done work like this before? So, I was not quite sure, so, I have this passion for travel, always go on places where I have not been before, like many other people would love travelling.

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So, I planned a trip to one of India's ancient caves. Right now, we are actually standing in one of the Buddhist caves which is close to 2200 years old, very very old. Much older than any of us obviously. Okay, so, I wonder what connection these caves, these set of caves, have, with design thinking. We will find out.

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We are right now in Bhaja Caves. This is about 60, 70 kilometres from Pune, India, and these are the set of 2200 year old caves, about 20 odd caves mainly for prayer, meditation and served as living quarters here for the monks. All you see around me are caves, which were used for living and they would come back and pray. Monks used to live here, sort of like a monastery.

So, I was intrigued when I said okay I need to be finding out more about these caves. And I found out that the people had devoted a lot of time into praying Buddha, Lord Buddha. So, I got curious and I said, : can I find out what is it that he is doing? So, it is one of my preparatory ,you know, preparation for travel. So, I normally do that and I said let me find out, go online, and I found out.

Then, I came to this point where I saw the main teachings of Lord Buddha when he attained his enlightenment after 49 days of meditation. He went to his first set of students in Sarnath which is close to the heart of India and there he gave his discourse, first ever discourse to 5 of his students. So, his 5 students listened to him in rapt attention to what Lord Buddha had to say after his enlightenment. Those were four noble truths.

So, I am going to be telling you what those noble truths are, and then, I will let you guess what we are going to talk about next after that, I will let you do the connection.

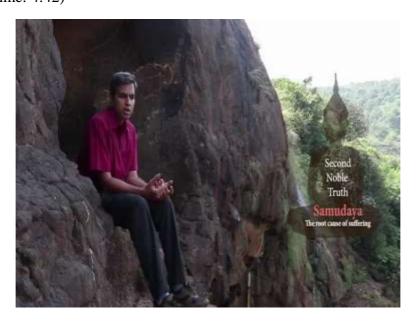
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The first noble truth as specified by Lord Buddha was "Dukkha" or suffering. There is suffering and in the world. Acknowledge that there is suffering in the world. Now, it may seem like a depressing place to start but Lord Buddha sighted that suffering could be because of death, birth, ageing, diseases and your attachment to material possessions of your not meeting your desires, or losing somebody that you like. These could be your reason for suffering.

Now, he was in hinting on you giving up all of this and being a recluse in the world. He was merely suggesting you to be aware that suffering is part and parcel and it is two sides of the same coin; happiness on one side and suffering on the other. So, they are one and the same, you are looking at the same thing. So, that was his first noble truth "Dukkha".

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The second noble truth that Lord Buddha talked about was "Samudaya" or finding out the root cause; what is the root cause of suffering? The waterfalls that you saw just now, came from a source on the top. So, what is the root cause the source of your suffering? You can meditate about it, you can talk to experts, you can talk to your community, your family support and get the root cause of what is it that you are going through, what is the root cause of your particular suffering. This was his second noble truth "Samudaya".

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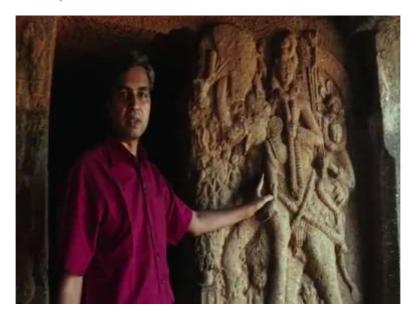




The third truth is that of "Nirodha" or Cessation; put an end to the suffering. This was Lord Buddha's third truth. This is once you find out the root cause of what you are suffering is now it is upto you to figure out how is it to end the suffering, how do we mitigate it, how do we reduce it, can you meditate on it, can you ask your friends, your community, your support community, your family? What is it that you can do? This was Lord Buddha's third teaching "Nirodha".

Now, I want you to give. I will show you a cool thing in this. These caves are 2200 years old at-least as I have already mentioned. Now, we probably have heard of this instrument or some of you even play this instrument called "Tabla". I would like you to look at what a "Tabla" looks like 2200 years ago and here it is. If I can get you to point, there is a lady playing the "Tabla", it's one of the drums and the second drum is here. I guess that is the second drum. So, she is playing the "Tabla". This is one of the earliest evidences found of the "Tabla".

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And what you also see is, Lord Indra riding on his "Airavat" or white elephant. This is the elephant that he rides all across the heavens. He is the Lord of the heavens, Lord of the weather and that is what he does.

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And on my right you can see the Sun God "Surya" on his chariot with the 4 horses, and you can see part of the wheel, you can see the Sun God, I guess with his consorts riding across the heavens. This is amazing. For me, this is amazing. Both of these are sculptured so well and it is to the test of time.

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The fourth noble truth is "Marga" or the path; you set yourself a path based on what you have done so far in the three noble truths. It is to mitigate the suffering, to put an end to the suffering. You set yourself on a course to end the suffering, to put an end so that is "Marga" .The way you want to do it the path forward which sets you to liberation or Nirvana. That in all were the four noble truths.

To re-iterate, it is first one is- "Dukkha", acknowledgement of suffering. "Samudaya", where you find the root cause of suffering. Third is "Nirodha": put an end to the suffering, and fourth is "Marga", set yourself a path to the end of suffering. Now, what has this got to do with design thinking, if you have not figured it out, I will lay it out for you.

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So, what is the connection between design thinking and the four noble truths of Buddha? It is basically that you have empathised, where you put yourself into the shoes of your customer and know their suffering to what is it that they are going through, really find out? Go into the depths of experience what they are experiencing to find out what they are going through. The second is analyse, where you find the root cause of their suffering, why is it that they are going through such an experience, is it something that what is the root cause, find out where is it that you can really help.

Then comes solve, which is, you put an end to their suffering by offering your solutions, your creativity, your ideas coming and you solve what is it that they are suffering is and how to end that. Finally, is the testing peace where you set yourself a path saying this is how I am going to end their suffering. This is the path I am going to embark my suffering. I go back to my customer, offer them whatever your solution is to make sure that their suffering is ended, their problems are over, they are much happier than they were before.

So, these are the four stages, and I found out they were correlated and I said, "Wow. This is amazing. This is great. We have 2200 years ago evidence that somebody else had already come up with and this actually works. At the same time I was bit crestfallen, I thought I had come out with the, "I was the first one to come out with these four stages," unfortunately I was 2200 years old or rather 2200 years late.

So, it is okay. So, as long as the method works and it is of use to somebody it works. So, these are the four stages that you will be using as part of the design thinking course. Thank you.