Memory
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Lecture - 29
Forgetting - V

Hello, I welcome you all to the lecture series on memory. In the previous lecture, we discussed forgetting, and in forgetting, we talked about the concept of source monitoring failure. Now, why these source monitoring failures happen is because of several reasons. Why is it important in forgetting? As we know, forgetting helps us to remove the trash, unwanted information, and irrelevant information from our memory system.

If this doesn't happen, then we may be inclined to get confused with a lot of information about what we had for breakfast, last several days, weeks, months, weeks. What did we have for lunch, and what did we have for dinner? Mix of information. If this filtering of information, if this washing of information does not happen, then a person will get confused, and it will be a bit chaotic for an individual to execute day-to-day tasks. So forgetting, in some instances, seems to be a beneficial factor in human memory. So when we were talking about monitoring, we discussed how we monitor the sources. The monitoring of sources depends on familiarity, frequency, and dominance. But what happens when this monitoring fails? What happens when this failure occurs, and to what extent does it affect human memory?

To discuss this, the first point is the new it along effect or hindsight effect. The new it along effect refers to the term for when people report their information before they truly did. What does this mean? What this means is that they do have an understanding that this is going to be the information related to the question that which has been put forward to them or the task which has been put to them.

Now, in such instances, what we have seen is that context seems to play a major role. Context provides a lot of insight to an individual. And this is exactly the same thing which we have been discussing in semantic memory. Once you have learned something, Once you have information about something, then how we are storing the information, we store information in relation, in association.

So when this association, when this relationship is established, then people tend to know this information before they truly experience the information. So information has not

been experienced yet. Reality monitoring is not there at all, but because of their prior experience, it happened. And people believe that they knew this information by hand. Now, in addition to this, there is another form of failure, crypto amnesia.

What is this? It is an act of unintentionally presenting an idea as one's own. Something which you have encountered and you didn't pay attention to it, but unconsciously you have registered that information. That unconscious collection of information, which you have unconsciously collected, you stored it after some time has passed—days, weeks, months, years—you brought that information from your unconscious mind. And then you present it as your own. So it is a form of plagiarism, a form of plagiarism but without your intent, without knowing that it has been done.

So in many instances, we have believed this cryptomnesia, where it has been observed in the music industry, where people repeatedly have listened to a song, a rhythm, a melody, and after several years, that form of melody, the rhythm, the piece of that small pleasant music, starts getting reflected in their original composition of music. So this cryptomnesia, and this is not intentional, by the way, as I mentioned earlier. So this is an unintentional thing. The individual believes that the idea originated with him or her.

But in fact, it was there in the system from some place. Now, this becomes very difficult to trace down when and at what time you have registered or encoded this information. Another form of source monitoring failure is reality monitoring. The judgment of whether a memory was something you truly experienced or something you imagined, such as a dream. So this has been a challenge in many instances.

People do believe that the information which they have collected. They have experienced it. For instance, every now and then, we are sitting in front of the television, roaming around on the streets, and we experience a lot of information related to vacations. And then we see people undergoing several vacations. People are traveling.

People are traveling inland or outside the country. Such immersive experiences, sometimes while sitting in front of the television, make it very difficult for them to distinguish if that experience which they are feeling is actually their experience or something which they may have been dreaming about. Such understanding, people feel, has been a part of reality monitoring. And reality monitoring is

Ensures the check That what is real And what is not real Reality monitoring ensures What you have truly experienced

And what you haven't. Experienced it. But you have just learned it. Or you may have collected the information. And you have imagined it altogether. And another such failure is the confabulation. Confabulation. Confabulation is a fully imagined memory, which is not real at all and is usually made to cover up the loss of memory.

Confabulation has been seen in those individuals who have Korsakoff syndrome. And earlier we have discussed chronic alcoholism. This chronic alcoholism leads to amnesia. The loss of memory, the loss of information. And when this loss of information occurs, individuals try to fill these gaps.

How do they fill these gaps? They fill these gaps with some made-up information. The information which they can collect or provide, which is not so real, which hasn't happened. So here, people just imagine that something has happened, but actually, in the real sense, it truly doesn't exist. And they just try to fill those gaps.

So confabulation seems to have that side to it. And many times, in the case of law, people just confess with this imagined memory. And they try to add something. Just to ensure that people should not be raising a question to them, 'What has happened?' Where has the information been lost?

And many times, people intentionally do this, knowing the fact that they do not have, they lack that amount of information. And to fill that lack of information, they provide some additional information. Taking this conversation further down the line with respect to forgetting, we have also seen that there is some bias. How is this bias there? Certain social situations present us with pressure to confirm our memories as well.

What are those situations? You are attending a birthday party of your dear one. You are attending a wedding party of your dear one. You are attending an anniversary party of your dear one. In such instances, the demand to recollect information from stored data is very high.

To fulfill this demand for recollection of information, many times people are biased towards certain contexts, certain familiarities, certain dominances, certain frequencies of information. Context definitely provides insight to an individual and has been very helpful to the individual in overcoming the loss of information. One such instance is the concept of embellishment, which denotes the change and addition changes and additions or additions of information.

Addition of new information. We make to a memory as part of retrieval. And it is really quite common. When somebody asks you, 10 years ago, do you remember our social gathering? We were having this and that event, and you were dancing.

Do you remember the song you were singing that time? Now, that time you may not be recollecting; you may not have the recollection of information. In order to do so, you tend to provide information where you are certainly inclined to; you have a bias towards it. So, in such instances, people tend to give their most favorite song. Okay, this is the song which I was playing.

Or this is the song which I was singing. Or this is the song I might have suggested. So, what we understand is that in many instances, social situations assist us and sometimes also create pressure. Create pressure to impress or entertain. So that we update our memory, we add information to our memory, we add information to our stored memory to please our audience, and this addition and subtraction, this modification which we are making to our stored memory, is the embellishment.

Now, the act of enhancing a story changes the literature as well. Why? Because some information which you have stored or consolidated had a different impression altogether. So, if we take the circle and this line, if this figure as our initial memory, and if we do modification in these

And if this undergoes embellishment, then what will happen? The memory, which was this, has been added with information. The grids. And this is a new memory. Now that we have done the modification, in order to enhance this story, this story, sorry, to enhance this initial memory story,

We have made these changes. And when we have made these changes, the retrieval of this new memory will not be a retrieval. If this is retrieval 1, then this will be retrieval 2. If we have to retrieve this. For this retrieval, we may need this information.

But for this retrieval, we need this information. Because the addition has already happened. Some may say, let us do the subtraction. So, we just talk about this. This is also a new memory.

If we are referring to this as new memory 1, then we can say this is new memory 2. What is the modification? Grids are gone. Lines are gone. Sorry, not the grids.

Lines are gone. So, the retrieval will also change. Because the story has changed. So the classical experiment done by Bartlett, which we have discussed earlier, also relates to embellishment. Tversky and colleagues asked people to retell a story in accurate and entertaining ways.

In accurate and entertaining ways, they tried to add information to make the story more pleasant. To enhance and enrich the story. They started to add more and more information. And what did they find? They found that retrieval was affected by embellishment.

More and more addition, more and more subtraction an individual did. The retrieval also changed. So recognition is said to be the same, but the retrieval changed. In recognition, we are not recalling or recollecting the information. In recognition, we are matching the information.

We are matching the information which is already present. So the matching of information, if we are talking about a story, about a cow and a sheep, Then we just have to match what is a sheep and what is a cow. This information, this fact, will not change. It was a sunny day.

It will not change. But when we are talking about the retrieval, the recollection of information, establishment, then what we will see, it depends on the content, context, frequency, familiarity, and dominance of the information as well. In relation to this, what we have also seen is forgetting in many instances, as we were discussing that forgetting assesses the individual. In some cases, memories do not exist at all, but the individual tries to create the memories. They construct these memories.

And once they construct the memory, these individuals believe that yes, the information is there. It might have been there. I may be able to forget the information. I may have a tendency not to recollect detailed information, but the information might have been there. And this becomes really difficult and challenging, as we were discussing earlier, about the imagined memory versus truly experienced.

So here, while the recollection of information, something which you have truly experienced, while recollecting the truly experienced information, you may have some bits and pieces. You may also lose some information. And in order to fill those gaps, you add some information. While doing so, you are mixing the truly experienced memory

with the non-experienced memory together. As a result, the memory which is shaping up collectively becomes a false memory.

So which is not really existent or truly an individual has experienced. So memory is that are simply not true but as they are. So constructive nature of the memory. False memory test, Dees, Roediger, and McDonald did a very brave study, and what they did in this study, which was being, they proposed this procedure, DRM procedure, and in this simple procedure to test the false memory.

Participants were being provided the list of words. The list of words included sand, water, and waves. Now, when the individual sees the list of sand, water, and waves, he or she starts collecting them together, and when the participant is being asked to recall the associated words on that list. The participant mistakenly recalls beach.

Why? Because beach is associated with sand. At the beach, you get water, and at the beach, you see the sea waves. So, the participant created a false memory here. created a false memory for this word.

The word on the list seemed to activate the missing words strongly enough that it would be required to. So, on the list, even if the word doesn't exist, participants tend to believe, participants tend to strongly bias that those words are also there on the list. So, when we talk about baking a cake, cake, sugar, flour, yeast, and then such a list is given to them. They will be inclined to recall egg or milk, without which you cannot prepare. So, such false creation of memory is happening because of their inclination.

Because they tend to activate those items, that information also which was present but was not associated with the task itself. And this is what mostly happens. These are the fillers, you know, you fill the information. Because there is a loss of information, a loss of information has happened, and in order to fulfill those gaps and losses, you tend to provide some non-experienced or non-existent information there. Now, the missing word, another thing, the missing word is like a lure that can trick participants into believing that it was there on the list.

As we told you, a participant feels that there might have been such information that might have been there. So, Renninger and McDormand, when they proposed this monologue DRM, they also found participants were confident that the lures were originally on that list. Even when they were told not to guess, they still believed that that information was there. Now, this association, because we discussed this earlier also, when we are storing

the information, when we are doing the encoding, when we are doing the registry of this information, for the easiness, we do it in association with information. So, when we are talking about water, water alone has many associations with many words.

Sun, plant, life, H2O, holy, India, oceans, drinks, universal solvent, etc., etc. This is how the association is happening. And this is mostly because of our semantic memory. And this seems to be getting activated over time. So, the recall of the lure is viewed as a kind of false memory.

The lure, the thing which is making you biased that such a thing is there on the list itself is actually assisting in the creation of false memories. So what we have learned in this session on forgetting is the forms of source monitoring failure, and how the monitoring failure is happening. Then we also discussed suggestibility, bias, and false memories. With this, we are ending the session on forgetting.

And in the next session, we are going to start a new topic. The new topic for our discussion will be memory disorders. And in memory disorders, we are going to study a few case studies. With this, we end this session. Thank you.