

Social Behavior and the Brain: An Introduction to Social Neuroscience
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Week - 04
Lecture – 20

Hello and welcome to the course Social Behavior in the Brain and Introduction to Social Neuroscience. I am Dr. Ark Verma, an associate professor at the Department of Cognitive Science at IIT Kanpur. This is the last lecture of the fourth week and we are going to talk about a slightly interesting topic. So far in the last four lectures, we talked about activations of prejudice, stereotypes which happens automatically and we have talked a little bit about regulation and trying to suppress those things. In today's lecture, I am going to talk about a extreme form of prejudice.

When all of this fails, an extreme form of prejudice referred to as dehumanized perception. Now, as we have seen so far you know in the in the last 18-19 lectures that racial biases, stereotypes, prejudice swiftly follow the recognition of social stimuli such as the face and efforts for the regulation of these biases and control of prejudice therefore, need to be engaged for us to avoid the influence of these you know biases on our overt behavior. So, there are different motivations we studied. when you are intentionally internally you want to control bias you want to keep out of these prejudice and so on.

And then there are also external pressure social cues that make you do that all right. Sometimes it happens it may happen that these things may not work and if these things do not work and you are extremely you know prejudice and there is this extreme implicit tendency to have a prejudice for certain groups of people, then it can land us to a very different territory, it can land us to a territory of extreme prejudice. Extreme prejudice has consequences, it changes the way we cognize about the other individual, we understand, recognize, react to people from these other groups, other racial groups, other religions, other gender, other caste anything like that. Now, one of the fundamental questions that has been asked across a bunch of disciplines including psychology, philosophy, neuroscience, several other disciplines, theology for that matter has been about the nature of the human mind. What is the human mind? How does it manifest? What is it made up of? How does this interact with this world and so on? So, there are a lot of these questions that we keep asking ourselves.

Even more fundamental question, however, can be what does it mean to be human? Who are human beings? What are they made up of? What does it mean to be human as supposed to be an another animal or as supposed to be a piece of furniture? if you were to ask this if I were to ask this in a large class the response could be you know that oh

humans have a mind they have an inner life they have feelings and emotions and they understand and they have a free will there are any number of things you will say there are any number of things that will basically imply that we are thinking and feeling beings. all right. And previous you know older thinkers have also said for example, Descartes you know Descartes dictum of cogito ergo sum basically answers this question partly it says that you know because I think therefore, I am certain of the fact that I exist all right. How do you apply this to somebody else? How do you make sure that somebody you know some of these other people also exist? you will need to apply the same logic that they also think they also have feelings emotions inner life they also you know have a free will and so on and this is something very interesting this is something that is the essence of social cognition this is something that that is the essence of how do we interact and behave with others how do we interact with others how do we understand them all right how do we empathize with them how do we mentalize their internal lives also So, that is that is all good, but is it possible that sometimes we do not do that, is it possible that sometimes we treat people of certain outgroups may be different race, may be different you know religion, gender, age anything any of these in group out group thing you can say.

The screenshot shows a web browser window displaying a video annotation tool. The browser address bar shows the URL: chitralekha.ai4bharat.org/#/task/62647/transcript. The page title is "Chitralekha" and it is powered by EkStep Foundation. The user is logged in as "Irfan Ahma". The video is titled "Lecture 20". The video player shows a man speaking. Several annotations are overlaid on the video, each with a number in a red box and a timestamp. The annotations are:

- 16** (00:03:23-252 to 00:03:28-435): How do you make sure that somebody you know some of these other people also exist?
- 15** (00:03:28-435 to 00:03:29-195): How do you make sure that some of these other people you know also exist?
- 90** (00:03:29-195 to 00:03:58-529): you will need to apply the same logic that they also think they also have feelings emotions inner life they also you know
- 75** (00:03:58-529 to 00:04:00-273): You will need to apply the same logic that they think they also have feelings, emotions an inner life they also you
- 53** (00:04:00-273 to 00:04:22-105): So, that is that is all good, but is it possible that sometimes we do not do that, is it possible that sometimes we treat people of certain outgroups may be different race, may be different you know religion, gender, age anything any of these in group out group thing you can say
- 43** (00:04:22-105 to 00:04:23-005): So, that is all good, but is it possible that sometimes we do not do that? Is it possible that sometimes we treat people from certain outgroups, who may be of different race, religion, gender, age, or any of these in-group/out-group distinctions, differently?
- 27** (00:04:23-005 to 00:04:23-005): So, is that possible that we do not
- 24** (00:04:23-005 to 00:04:23-005): So, is it possible that we do not consider

So, is that possible that we do not consider them having their internal lives, having their feelings and thoughts and emotions and wills and that entire paraphernalia. if we are not able to do that then what we are doing is we are dehumanizing them see the logic is very simple the essence of being human is to have this inner life the essence of being human is to have this inner feeling thoughts emotions will choice and so on and so forth in a case where you are not able to ascribe any of these things to this group of individuals then

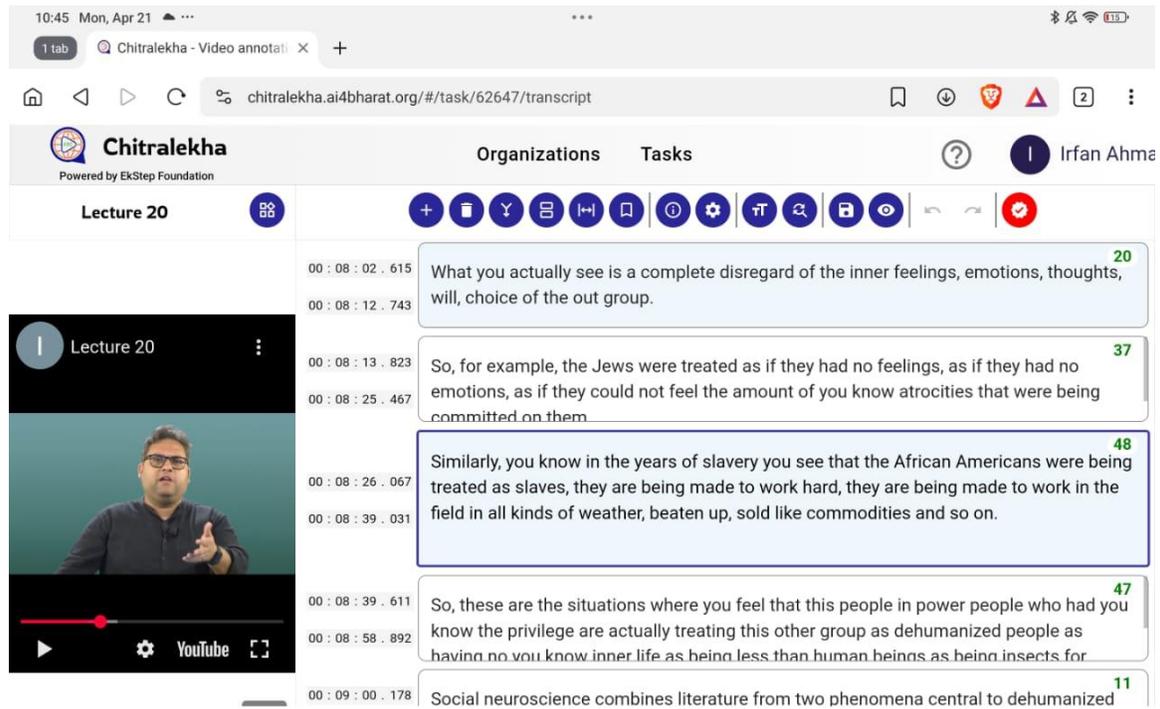
basically what you are doing is you are not treating them as human you are thinking that they are not humans you are in a sense dehumanizing them.

Now, there are various ways to look at it. For example, Appiah, you know, proposes a very interesting thought experiment. What is it? He says that imagine that there was a machine that looked and felt and sounded like and did all the things that your mother did for you, all right. How would you be able to tell that this machine is not really your mother? It is performing all the same functions, taking care of you, providing you with affection and comfort and all of the things that mothers do. How do you know that this machine is not your mother? And the answer that I am sure a lot of you will quickly shoot back is that no, no, no the machine does not have the inner feelings, machine does not feel, it does not have the subjective experiences that our mothers keep having moment by moment, day by day and so on.

So, the idea here is that we consider this aspect of inner life as a very important as a very basic aspect as a very basic determinant for somebody being human and not being a machine or not being another animal. So, this implies that even when you are considering other people when you are thinking about them when you are talking with them when you are interacting with them. We basically perceive or attribute mental states to them, we attribute feelings to them, we attribute decisions to them and so on and that is referred to as perceived humanity all right. So, Harrison Fiske talk about this as perceived humanity. what if something else happens what if there is this opposite when you cannot perceive that oh this person might also be having thoughts this person might also be having a will or this person say for example if you are treating somebody unfairly if you are treating somebody badly you know if you are exercising violence on people a lot of times you know people overlook the capability of understanding what the other person is feeling if you are beating up somebody brutally if you are hurting them verbally If you are designing you know policies or decisions that are going to you know harm a particular group of people, what is it that you are doing? You are dehumanizing them, you are basically not considering that they also have an inner life, they also have feelings, they also have you know all of these composites that basically go in for somebody being an actual human being.

So, dehumanize perception is a rather interesting concept and it may a lot of times have its origins in extreme prejudice. When individuals consider the target as less than a human being implying that they could not be attributed any feelings emotions you know and hence they do not deserve empathy kindness and so on. In the previous lecture I was mentioning to you you know movies like Django Unchained from Quentin Tarantino, other movies like 12 Years a Slave or say for example, if you see any number of movies about the holocaust all right. What you actually see is a complete disregard of the inner feelings, emotions, thoughts, will, choice of the out group. So, for example, the Jews

were treated as if they had no feelings, as if they had no emotions, as if they could not feel the amount of you know atrocities that were being committed on them.



The screenshot shows a web browser window with a single tab titled 'Chitrallekha - Video annotati...'. The address bar shows the URL 'chitrallekha.ai4bharat.org/#/task/62647/transcript'. The page header includes the Chitrallekha logo, 'Powered by EkStep Foundation', and navigation options for 'Organizations' and 'Tasks'. The user 'Irfan Ahma' is logged in. The main content area features a video player on the left and a transcript on the right. The video player shows a man speaking, and the transcript is synchronized with the video. The transcript includes the following text:

00 : 08 : 02 . 615 What you actually see is a complete disregard of the inner feelings, emotions, thoughts, will, choice of the out group. 20

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00 : 08 : 13 . 823 So, for example, the Jews were treated as if they had no feelings, as if they had no emotions, as if they could not feel the amount of you know atrocities that were being committed on them. 37

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00 : 08 : 26 . 067 Similarly, you know in the years of slavery you see that the African Americans were being treated as slaves, they are being made to work hard, they are being made to work in the field in all kinds of weather, beaten up, sold like commodities and so on. 48

00 : 08 : 39 . 031

00 : 08 : 39 . 611 So, these are the situations where you feel that this people in power people who had you know the privilege are actually treating this other group as dehumanized people as having no you know inner life as being less than human beings as being insects for 47

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00 : 09 : 00 . 178 Social neuroscience combines literature from two phenomena central to dehumanized 11

Similarly, you know in the years of slavery you see that the African Americans were being treated as slaves, they are being made to work hard, they are being made to work in the field in all kinds of weather, beaten up, sold like commodities and so on. So, these are the situations where you feel that this people in power people who had you know the privilege are actually treating this other group as dehumanized people as having no you know inner life as being less than human beings as being insects for example. Social neuroscience combines literature from two phenomena central to dehumanized perception. You know, if you consider dehumanized perception and we are going to study it in some detail in this lecture, two phenomena come to mind. First is mentalizing, the ability to actually infer other people's feelings and mental states and so on and then this aspect of dehumanizing.

We will talk about them in more detail as we go ahead. and social neuroscience seeks to explore this phenomena using theoretical frameworks from cognitive as well as developmental neuroscience. So, let us let us quickly jump into that. Now Harrison Fiske proposed that dehumanized perception could be a psychological response to social targets who elicit the negative basic emotion of disgust, all right. So, if you know the people from the out group make you so uncomfortable, they incite the feeling of disgust not just negative evaluation, not just the fact that you do not like them, not just the fact that you are you know you do not agree with them.

But rather the feeling of disgust where you actually you know do not want to entertain the possibility of having any relations with them. You know very interesting scene from the movie Inglourious Bastards comes to my mind where Christoph Waltz is interviewing this milkman in their farm and he is talking about you know Jews as mice who spread plague and diseases and so on. And you can see that in that conversation there the overriding feeling from at least Christoph Waltz who plays this you know plays the character of Hans Lander and German you know general, Nazi general, the overriding feeling in that conversation is of disgust and yes people want to override disgust, they want to avoid disgust, they do not want to you know even consider or engage with things that give disgust. and that is when people start treating the outgroup as inhuman as dehumanized all right. So, it has been argued that the medial prefrontal cortex and area that is implicated in mentalizing you know understanding the feeling of others may not be actually as active for targets of dehumanized perception as it is for other social targets.

So, in scenarios like these you know when you are treating this other individual with a lot of contempt with a lot of disgust with you know if you are not treating them as human beings interestingly for such kind of targets the medial prefrontal cortex is also not recruited. So, there is there seems to be a fundamental difference here, there seems to be a fundamental difference in the way the mind, but not only the mind the brain treats these kinds of people. Also interestingly you know in a bunch of these studies that have tried to study dehumanized perception. people have been shown that they fail to think or consider the minds of these dehumanized targets to the same extent as the social targets. So, they do they do not treat them as having the same kinds of feeling, they do not treat them with the same degree of empathy and so on.

On the top on you know in addition the participants describe these you know targets of dehumanized perception as ill-mentioned, as inept, as unfamiliar, as dissimilar, strange, not uniquely human or typically human, prone to violence and so on. So, what is happening is that there is so much negative attributes that are linked with this other you know group that you start on the basis of you know on a combined valence of all of these negative things you start you know getting this feeling of disgust and when you start getting this feeling of disgust what you fail to do is to consider that this is also a group of people that has the same kinds of feelings, that has the same kinds of emotions and thoughts and will and choices and aspirations that you would have. And that is a very characteristic gruesome sort of feature of dehumanized perception. Now, let us let us start studying this in some detail. So, the first thing that we want to study to a certain degree is this ability of mentalizing.

What is mentalizing? Mentalizing is has been used interchangeably with theory of mind and it basically refers to a process that involves inferring the mental states of other people's internal states of other people's minds and this can be both a deliberate process or it can be a automatic process. For example, if you are imagining a social target mind

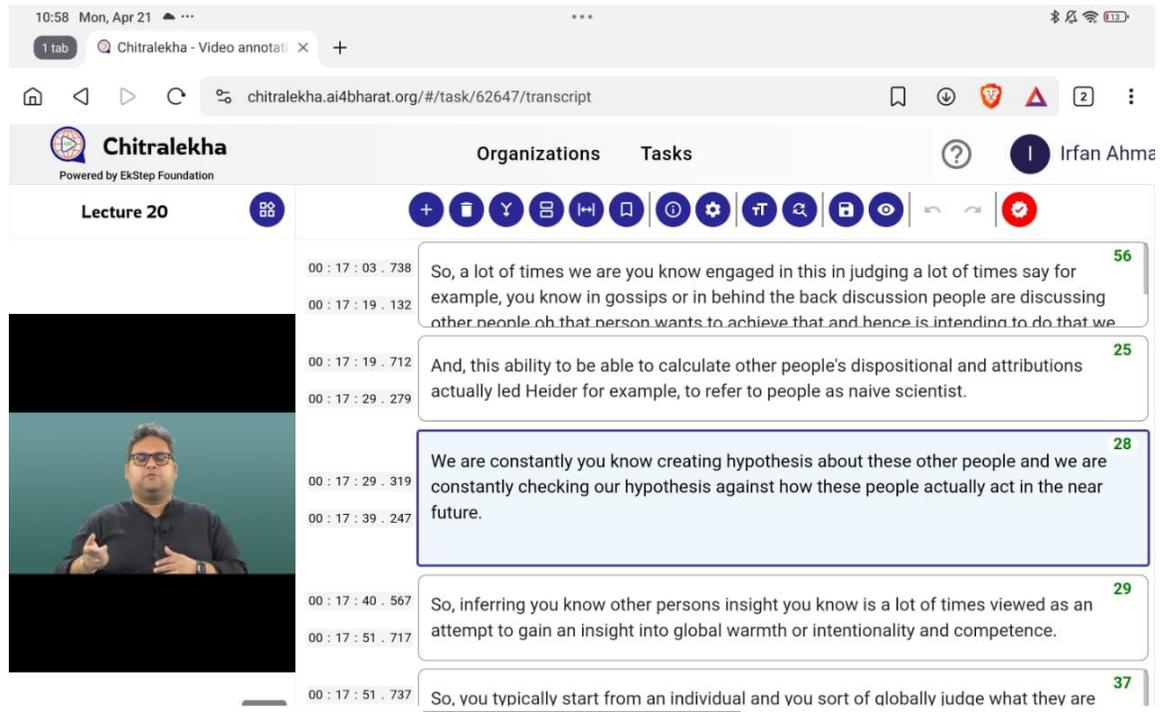
you know people put you in that position that imagine how this group of people might be feeling. So, if you are imagining or how this person might be feeling the way you have behaved with him or her for that matter. So, imagine a social targets mind is imagining a social targets mind is influenced by information that is inferred from the person, the environment or let us say a third source maybe there is a narrative, maybe there is a propaganda, maybe there is a lot of history that you have been taught. prior experience for that matter you know and all of these sources converge and they basically can have different kinds of components just people's understanding of other people's individual dispositions and their beliefs on the basis of these informations the way you judge this other person's disposition or the way you judge their beliefs can also sort of change and It includes for example, this concept of mentalizing includes for example, goals that you infer from people's bodily actions.

So, for example, if there is a glass of water on a given table and I am moving towards it and I am sort of thirsty, you can infer from my action that I am going to drink water. or for example, attention what is it that I am looking at if I am looking at say for example, you know in a supermarket in those aisles which are filled with lots of products if I am eyeing something again and again I am going back to that may be you can basically judge from my gaze the attention you know that I am paying to certain components. or also emotion that is again as we have seen you know in much much detail in previous lectures that can be inferred from people's facial expressions. So, mentalizing includes all of these three components, how do you judge somebody's goals, how do you look at what they are paying attention to or how do you infer the emotion that they are experiencing at a given point in time. Also, people generally believe that goals like intentions can actually predict behaviors.

Obviously, if I know what is the goal of a certain person in this room, I can be you know able to judge what they are going to act like, what they are going to do next. Also, intention can be, this is a very interesting part. If you look at this, a lot of times people can attribute intention to inanimate objects as well, suggesting that this process is not just limited to people. A lot of times you will see people saying, oh, my car is acting a bit weird today. You know cars are machines they do not have internal states they are not acting weird or anything it is just not working the mechanics of is faulty it is something that has mechanically gone wrong, but you will see people say that all the time they say oh my bike is not starting it is it has a mood of its own it starts when it wants to and does not when it does not want to.

So, we do this a lot of time. So, interestingly we have this capability or tendency to you know attribute intentions to even inanimate objects all right. Also other kinds of theory of mind research you know further separates a perceived intent, biological motion, episodic memory retrieval and decouples mental states from reality. So, there is there is a lot that gets covered under you know what all comprises of theory of the mind and we will talk

we will keep talking about that to and fro, but just pay attention to how is it that we can ascribe internal states to you know inanimate objects, but not to the targets of disgust. People interestingly are able to infer others personalities a process that basically involves understanding a social targets mind as containing both goals and intentions.



The screenshot shows a web browser window displaying a video player interface for 'Lecture 20' on the Chitrallekha platform. The video player is on the left, showing a speaker. On the right, there is a subtitle track with several lines of text, each with a green number in the top right corner. The text in the subtitles is as follows:

- 00 : 17 : 03 . 738 So, a lot of times we are you know engaged in this in judging a lot of times say for 56
- 00 : 17 : 19 . 132 example, you know in gossips or in behind the back discussion people are discussing 56
- 00 : 17 : 19 . 712 And, this ability to be able to calculate other people's dispositional and attributions 25
- 00 : 17 : 29 . 279 actually led Heider for example, to refer to people as naive scientist.
- 00 : 17 : 29 . 319 We are constantly you know creating hypothesis about these other people and we are 28
- 00 : 17 : 39 . 247 constantly checking our hypothesis against how these people actually act in the near future.
- 00 : 17 : 40 . 567 So, inferring you know other persons insight you know is a lot of times viewed as an 29
- 00 : 17 : 51 . 717 attempt to gain an insight into global warmth or intentionality and competence.
- 00 : 17 : 51 . 737 So, you typically start from an individual and you sort of globally judge what they are 37

So, a lot of times we are you know engaged in this in judging a lot of times say for example, you know in gossips or in behind the back discussion people are discussing other people oh that person wants to achieve that and hence is intending to do that we do that all the time. And, this ability to be able to calculate other people's dispositional and attributions actually led Heider for example, to refer to people as naive scientist. We are constantly you know creating hypothesis about these other people and we are constantly checking our hypothesis against how these people actually act in the near future. So, inferring you know other persons insight you know is a lot of times viewed as an attempt to gain an insight into global warmth or intentionality and competence. So, you typically start from an individual and you sort of globally judge what they are about, what they are going to do and you know whether you have to be warm towards them and so on.

Again a bunch of things included here. it seems that the way this process operates is that the first personality inference suggest that the targets general good or will be able to tell you about the targets general good intent or ill intent. The second basically suggest that targets degree of agency how involved how willingly the person is doing this good thing or a bad thing and it is this is something that you can very easily infer if somebody is actually good, but is engaged in doing some not so very good things, you will be able to,

you know, infer that, oh, the person is not willingly doing this. He is doing this because of some, you know, somebody is making them do that or there is some other reason that there is compelling them to do that. Inferred warmth and competence on the other hand can also be used to predict the behavior that guides social interaction.

If you feel warmly towards somebody else, you feel automatically connected to somebody else, you will also that will govern your the way you will socially interact with these individuals. If you infer other people say for example, as cold or you get a cold vibe with them, you get an unfriendly vibe with them, obviously your social interaction will get you know colored by that kind of impression. It is interesting that as I was saying people you know sometimes try and judge the behavioral tendencies of non-human targets as well sometimes animals and pets and you know even objects for that matter. People make dispositional attributions to objects all the time you know suggesting that this is not really limited to people this is not really, you know this idea of anthropomorphism or personification of animals and objects it is something that this is a automatic process and it is not linked it is not exclusively reserved just for people, but it is something that we can exercise you know at will for that matter. Now, inferring other people's mental states allows us to predict their actions and it is a very important aspect of the same you know how do we interact with them, how do we judge their goals and intentions.

Conversely, if we experience a failure to infer a person's disposition, it would involve a very basic you know failure of a very basic cognitive process about somebody. see social cognition is all about ah understanding how people interact with others so if you cannot judge their actions if you cannot judge what they are going to be doing ah if you cannot judge how they are feeling ah you are basically failing to perform a very basic cognitive process again something that you know kicks in at a very early stage 100 milliseconds or so if we you know remember we have seen in previous studies. If we do not do that that is what is referred to as dehumanized perception. So, it is a fundamental difference in the way we treat individuals. and it is surprising because how you fail at something that you are very typically good at doing.

People are very good at inferring you know other people's dispositions from even very thin slices of their behavior. You observe somebody on the television, the way they are interacting with their colleagues, the way they are interacting to their subordinates and even if you seen just a snippet of their behavior during an interview or during a program that is running on stage, you will You know people are very good at saying oh this person is a very arrogant guy or is a very humble guy from just a snippet of their behavior. So, people are actually good at doing this. Why are they failing to do this with respect to these dehumanized targets is the interesting question. Also these spontaneous first impressions are not something that come and go you know they seem to have a very strong space of memory, they seem to be very long lasting.

So, you might have heard that saying you know first impression is the last impression. The first impression that you have of somebody stays with you for the longest time and in that sense it will color and it will influence your judgment, it will you know moderate the amount of information that you will retain about an individual. All right and this basically is been referred to as part of the attribution theory you know in it was part of Solomon Asch's first impression formation experiments and has basically talked about this ability of how people make these spontaneous dispositional attributions about others and the dimensions that sort of moderate how we are doing these attributions. a very similar activity again part of mentalizing is perspective taking. What is perspective taking? It can be referred to as a more conscious form of mentalizing which describes the process of you know intentionally inferring other people's mental states.

Basically, if I ask you to take the perspective of a slave, you know, several hundred years ago who was working in the Americas and in the West and was being, you know, tortured and made to work and so on and so forth. I can ask you to take the perspective of a Jew, you can watch any number of Holocaust movies, you can take the perspective of a Jew who is suffering those atrocities, who is suffering those heavy discriminations and being made to, I mean treated like almost animals. So, this perspective taking is a very conscious, it is a deliberative process that moderates conscious and unconscious prejudice. A lot of times we talked about in the previous lecture that people who have an internal locus of control, a high sensitivity of conflict monitoring are able to suppress their prejudice much better. So, if you are engaging in perspective taking which is a very deliberate activity, it can actually moderate your conscious and unconscious prejudice towards these other people whose perspective you are being asked to take.

Now, inferring others mental states deactivates these stereotypes also through the greater overlap between the self and the other. Now, remember in the first week when we are talking about empathy, when we are talking about judging facial emotions, what are we talking about? We are talking about the fact that when people have to assess other people's pain, they use the empathic circuit, they use you know the same model mental model that oh if I would have you know been hurt in the same way, how much pain would I feel? and in that sense when you take that perspective it will automatically put you on the same pedestal as this other individual and automatically deactivate the you know subsequent stereotypes that exist and in that sense it is a rather interesting as a rather potent activity. So, these effects and and perspective taking does not you know only work with real groups, it works with real groups and minimalist groups as well. Minimalist groupings are basically a paradigm that comes from Tashfel and Turner who say that even if I randomly divide the people in this room into group A and group B, they will still have these group biases. Now, perspective taking has also been implicated in moral reasoning, in altruism and in aggression.

So, when people are reasoning that somebody has done this deed and whether this was the morally right thing to do or not a lot of times people actually involve you know themselves in taking perspective. If I were in that place of that individual I would not have stolen you know food from the restaurant even if I was suppose I was going to die of hunger. So, people can do this and then they can rationalize oh because the person was dying of hunger and in this harsh and unfair world basically you know stealing just a piece of bread should not be considered as immoral. So, maybe I will rationalize I will say oh you know the person's act was correct. So, in moral reasoning perspective taking has been treated as rather important.

In altruism, why are we kind towards others? Why do we try and donate? Why do you try to help others? Because you can, to a certain extent, at least take the perspective of, oh, these people must be suffering. Say, for example, when COVID happened, a lot of people engaged in donations and helping each other out because they were understanding the pain and the difficulties that others were going through. And again, you can see perspective taking is a very important ingredient of altruism. Similarly, aggression for that matter you know understanding aggression, understanding why somebody gets angry and resort to violence that is also very interestingly understood by this mechanism of perspective taking. Again, when I am implicating perspective taking all of these three things.

And not saying that it is the only thing responsible, but it is a very important component of these activities. So, when people fail to take the perspective of dehumanized targets, they feel disgust which is very strictly negative emotion and which is often links to moral violations and then subsequent aggressive responses. So, basically what is happening what might be happening is that you know the people in in Nazi Germany who are committing these atrocities were not able to take the perspective of the suffering Jews. The people who are practicing slavery were you know employing and buying and selling these slaves. And making them work you know like animals were not able to or consciously decided not to take the perspective of these other individuals, because if they would have taken perspective committing those atrocities would have become impossible.

So, this is again something very interesting, it is a very interesting component of whether you consciously decide to put yourself in this other person shoes, if you do not then obviously, you are pushing yourself towards the dehumanized perception of these social groups, alright. So, this is just one aspect of dehumanized perception that I have talked about in this lecture. We will talk about, we will talk more about dehumanization in the lectures next week with the next class. Thank you.