

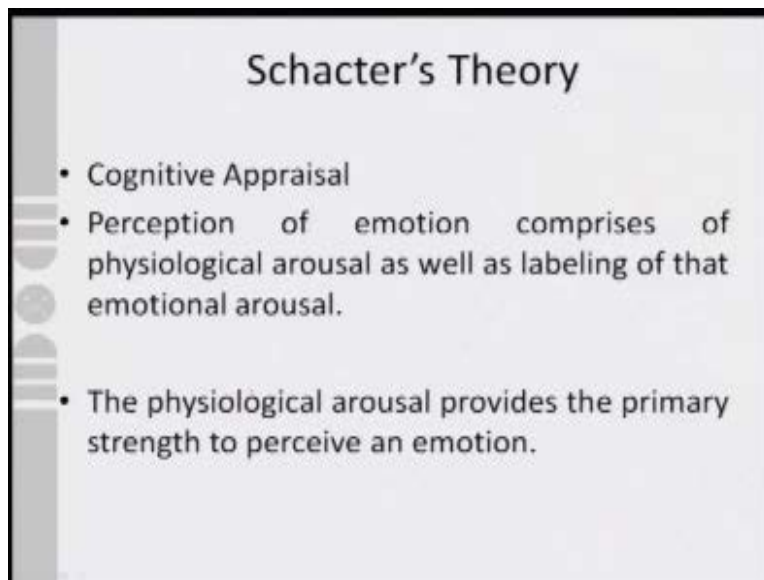
Indian Institute of Technology Kanpur
National Programme on Technology Enhanced Learning (NPTEL)
Course Title
A Brief Introduction of Psychology

Lecture – 20
Emotion

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Now that we have discussed the biological theories trying to explain emotion, we are not going to talk about the cognitive theories now. The Schacter's theory is something that talks about the cognitive appraisal okay.

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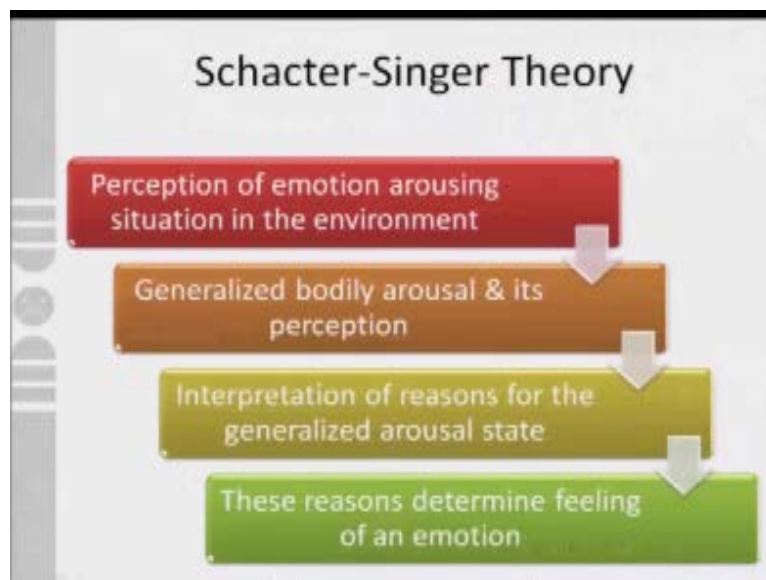


Appraisal is a mechanism where you know, better think about the experience that you are having. So what this theory says is, that the perception of emotion basically comprises of the physiological arousal, as well as labeling of that emotional arousal. So you experience the

physiological arousal okay, which actually provides the primary strength to perceive an emotion. But then you try to label this.

So once you have the physiological arousal you try to assign a meaning to this very emotional arousal, you try to label it.

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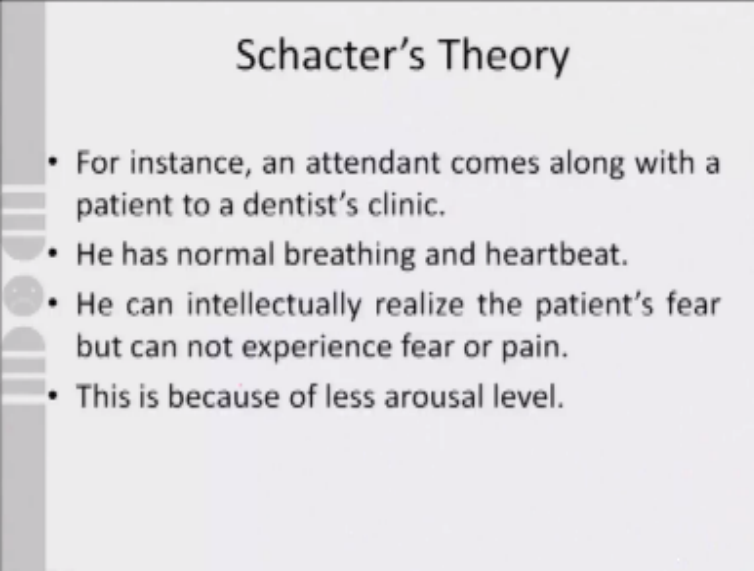
So according to Schacter-Singer perception of emotion arousing situation takes place in the environment, you remember this was the first thing and it has remained common right from James-Lange theory to Cannon-Bard theory okay, everywhere you have the perception of emotional arousing situation in the environment. Then this leads to the generalized bodily arousal and its perception okay, which is again no common to the biological theories.

But then the addition is that after you have the generalized bodily arousal and the perception of the bodily arousal, you try to interpret okay, and you try to interpret this bodily arousal okay, and try to give a reason for this generalized arousal okay. Why is it that experience this type of state okay. And these reasons basically, they determine the feeling of an emotion okay. So the

situation is perceived, you have a bodily response, you try to understand, you try to interpret, you try to give reason to the physiological changes, the body arousal.

And this state of arousal the reason that you give, that reason determines what emotion will be experienced and therefore it is called cognitive appraisal theory.

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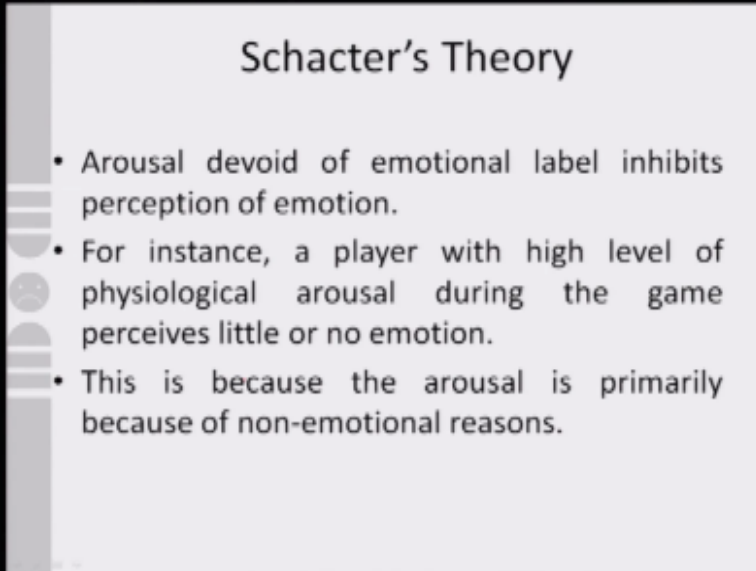


Schacter's Theory

- For instance, an attendant comes along with a patient to a dentist's clinic.
- He has normal breathing and heartbeat.
- He can intellectually realize the patient's fear but can not experience fear or pain.
- This is because of less arousal level.

For instance an attendant comes along with the patient okay, to a dentist clinic okay. He has normal breathing and heartbeat. Now he can intellectually realize the patient's fear, but cannot experience fear or pain okay. This is, because of the lower degree of arousal level okay.

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A presentation slide titled "Schacter's Theory" with a light blue background and a dark blue header. The title is centered in a large, bold, black font. Below the title, there is a bulleted list of three points. To the left of the list, there is a vertical bar with four circular icons: a blue circle, a green circle, a yellow circle, and a red circle. The first icon is partially obscured by the text of the first bullet point.

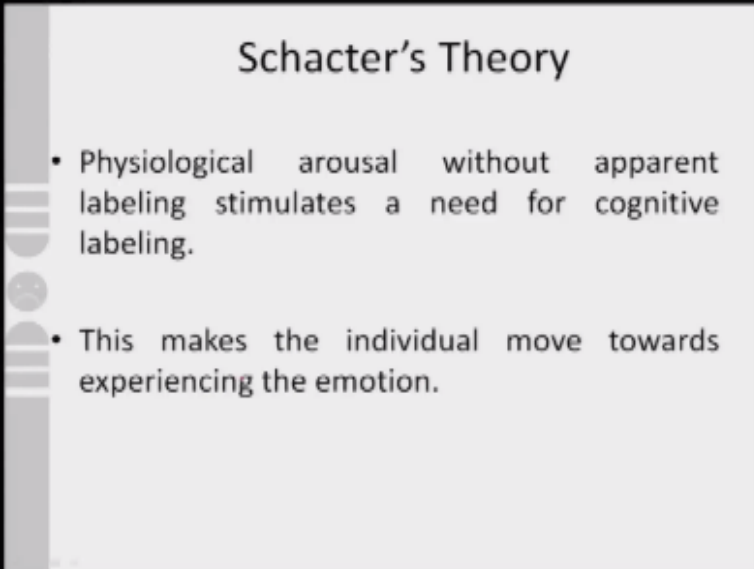
Schacter's Theory

- Arousal devoid of emotional label inhibits perception of emotion.
- For instance, a player with high level of physiological arousal during the game perceives little or no emotion.
- This is because the arousal is primarily because of non-emotional reasons.

Now arousal which is devoid of emotion level they inhibits perception of emotion, means if you are not able to identify the arousal that has taken place okay, you will not be able to perceive the emotion. For instance, a player with high level of physiological arousal during the game perceives very little or no emotion, this is because arousal is primarily, because of non emotional reasons know.

So this is now in one situation you take the example of a dentist clinic, the second situation where you take a player in the ground okay, and in both the situation such the theory says.

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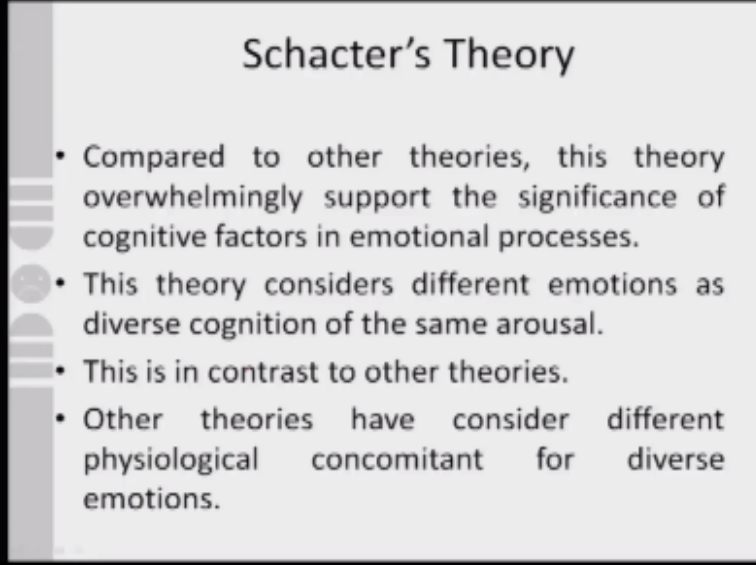
A presentation slide titled "Schacter's Theory" with a light gray background and a dark border. On the left side, there is a vertical gray bar containing four circular icons: a horizontal bar chart, a sad face, a neutral face, and a happy face. The title "Schacter's Theory" is centered at the top in a bold, black font. Below the title, there are two bullet points, each preceded by a dark gray circular icon. The first bullet point describes physiological arousal without apparent labeling leading to a need for cognitive labeling. The second bullet point states that this process moves the individual towards experiencing the emotion.

Schacter's Theory

- Physiological arousal without apparent labeling stimulates a need for cognitive labeling.
- This makes the individual move towards experiencing the emotion.

That the physiological arousals know, without apparent labeling stimulates a need for cognitive labeling okay. And this makes the individual move towards experiencing the emotion. So by default once you have the physiological arousal you will try to find the reason behind that arousal. And once you find the reason behind the arousal okay, if you have been able to identify the reason fine, you have performed the task of cognitively labeling the arousal and that gives the meaning.

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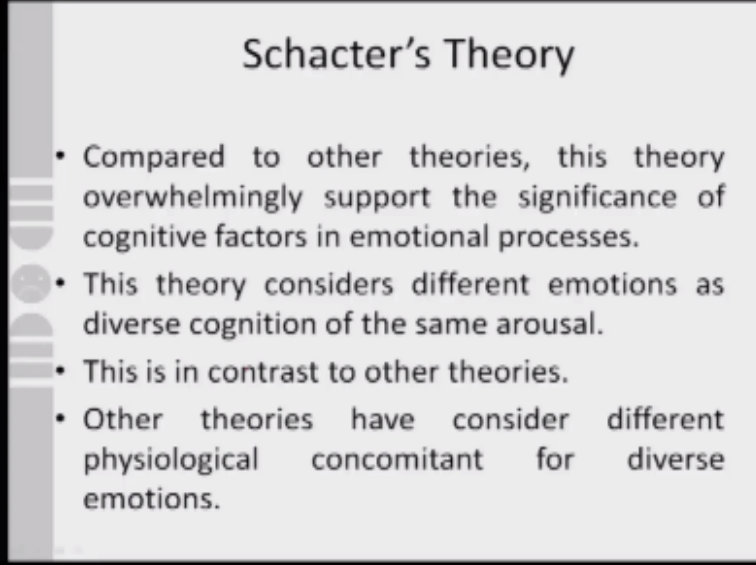
Schacter's Theory

- Compared to other theories, this theory overwhelmingly support the significance of cognitive factors in emotional processes.
- This theory considers different emotions as diverse cognition of the same arousal.
- This is in contrast to other theories.
- Other theories have consider different physiological concomitant for diverse emotions.

Now compared to other theories, this theory overwhelmingly support the significance of cognitive factors in emotional processes. And therefore this theory basically considers different emotions as diverse cognition of the same arousal. So there is a change in the heartbeat, there is a change in a pulse rate, there is a change in the Galvanic that can response, but then although the heartbeat changes okay.

The pattern of change that has taken place according to this theory is not important, why has the pattern changed, use yourself search a meaning for this, you yourself assign a reason for this, and once you have assigned the reason for this, this becomes the source of your emotion okay.

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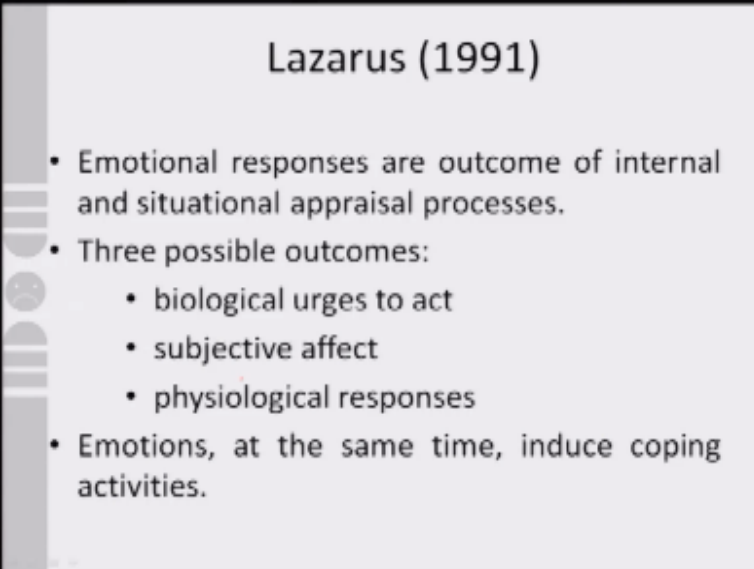


Schacter's Theory

- Compared to other theories, this theory overwhelmingly support the significance of cognitive factors in emotional processes.
- This theory considers different emotions as diverse cognition of the same arousal.
- This is in contrast to other theories.
- Other theories have consider different physiological concomitant for diverse emotions.

So this is now in contrast to other theories, because this theory basically considers that different emotions are basically diverse cognition of the same arousal level that takes place. Other theories have considered different physiological concomitants for diverse emotion. So this is a major point of distinction between the biological theories and this very specific theory, Schacter-Singer theory of emotion.

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The slide is titled "Lazarus (1991)" and contains a bulleted list of points. On the left side of the slide, there is a vertical bar with several circular icons, including a sad face and a neutral face.

- Emotional responses are outcome of internal and situational appraisal processes.
- Three possible outcomes:
 - biological urges to act
 - subjective affect
 - physiological responses
- Emotions, at the same time, induce coping activities.

Now Lazarus now said that emotional responses are basically outcome of internal and situational appraisal processes okay. And according to Lazarus there are three possible outcomes, the biological urge of the individual to respond, to act, the subjective affect the emotion, and the physiological response.

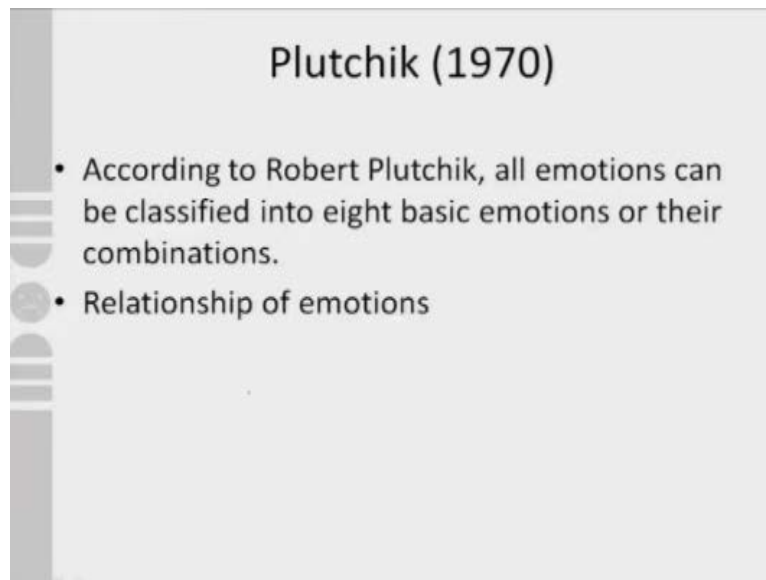
And therefore emotions at the same time okay, along with performing the task of – affect it also induces coping activities and that is the reason why the literature in psychology and later on you will come across emotion focused coping and problem focused coping, the two coping strategies that has proposed by Lazarus now that we have talked about know the biological and cognitive theories of emotion.

Let us now talk about how many types of emotions are their okay if I ask you how many emotions are there I am sure you will come across with an erosive list of emotions psychologists have tried to no find out how many basic emotions are there basic emotion would mean that these set of emotions will have very distinct features their characteristics will not overlap with other emotions okay, so if the characteristics of happiness does not overlap with the

characteristics of sadness then happiness and sadness qualifies to be two distinct basic emotions okay.

Before I come to how many basic emotions have been no finally agreed upon in the literature in physiology let us first look at the proposal given by Plutchik.

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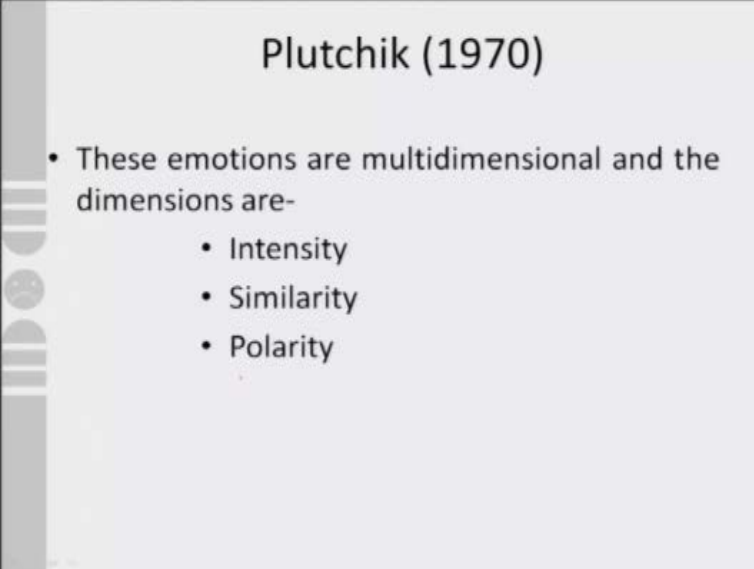
According to Robert Plutchik all emotion can be classified into eight basic emotions okay but what you he no nicely did was that he said that all these basic emotions you can also think of their combinations okay and the best was that he talked about the relationship among these emotions.

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Joy, trust, fear, surprised, sadness, disgust, anger and anticipation these are the eight basic emotion that Plutchik has talked about, now that Plutchik proposed eight basic emotions he said that these emotions are.

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The slide features a light blue background with a vertical grey bar on the left side containing a series of horizontal lines and a small circular icon. The title 'Plutchik (1970)' is centered at the top in a bold, black font. Below the title, a bulleted list describes the dimensions of emotions.

Plutchik (1970)

- These emotions are multidimensional and the dimensions are-
 - Intensity
 - Similarity
 - Polarity

Basically multidimensional okay and primarily he set at on the basis of the intensity, similarity and polarity okay intensity the high the low the medium similarity how common it is with the other one and the polarity no completely no on this side or completely on that side the positive or the negative okay Plutchik said that these three dimensions okay are extremely important when you think in terms of combining okay these eight emotions and then trying to look at what would be the overall outcome of such type of combinations.

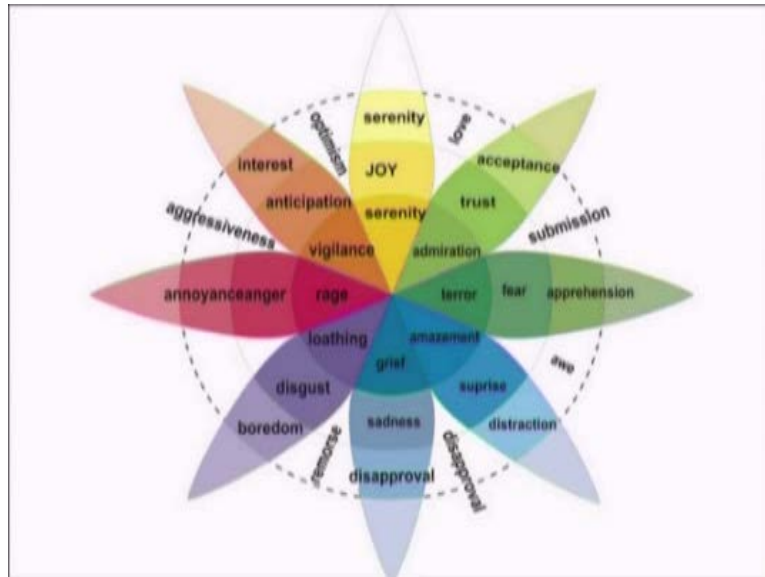
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Plutchik (1970)

- Plutchik arranged the primary emotions in a circle and the derived emotions in a third dimension based on intensity.
- There are mixed support for this emotion solid.

Now Plutchik arranged the primary emotions in a circle and then derived motion in the third dimension based on intensity okay there are mix supports for this emotion solid that Plutchik had proposed but it is important for us to understand okay and will also look at example which would substantiate what Plutchik was trying to propose.

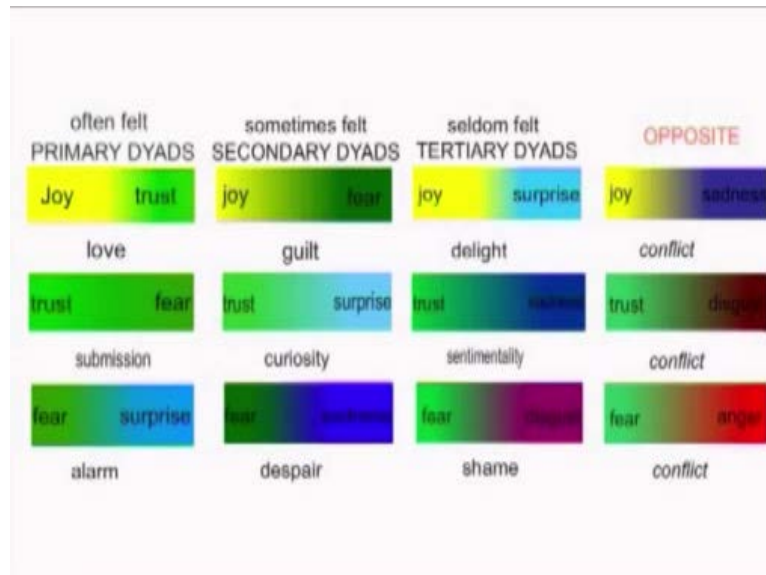
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You can see the ring of a basic emotions right here we had just talked about them according to Plutchik the variation in intensity can give birth to another experience for example fear it intensifies and then can become terror and if it loses a bit of its intensity it becomes apprehension similarly added intensity converts surprise to amazement were has loss of intensity changes it to destruction again if you look at the other one convergence take place in other basic emotions also sadness converts to grief and disapproval discuss the loathing and boredom anger to rage and annoyance, anticipation to vigilance and interests, joy to serenity and trust to admiration and acceptance.

According to Plutchik these basic emotions can combine to give another sense of feelings these combinations are call dyads for example when joy combines with anticipation optimism is born when trust combines with fear submission evolves and so forth we will come to them little later.

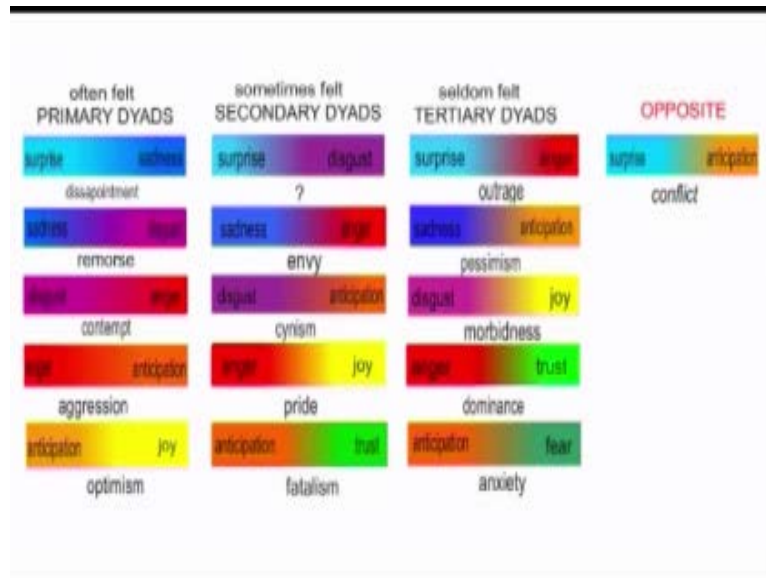
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According to Plutchik joy and trust can combine to generate love lust and fear combined to generate submission, fear and surprise combined to generate alarm these three are primary dyads and are often felt now joy and combined with fear to generate guilt, trust can combined with surprise to generate curiosity and fear can combine with sadness to generate despair these are secondary dyads and are sometimes felt joy can also combine with surprise to generate delight trust with sadness to generate sentimentality and fear with disgust to generate shame these are tertiary dyads and are seldom experienced.

One could think of opposite emotions combining together but these would lead to conflicts let us now look at other primary dyads.

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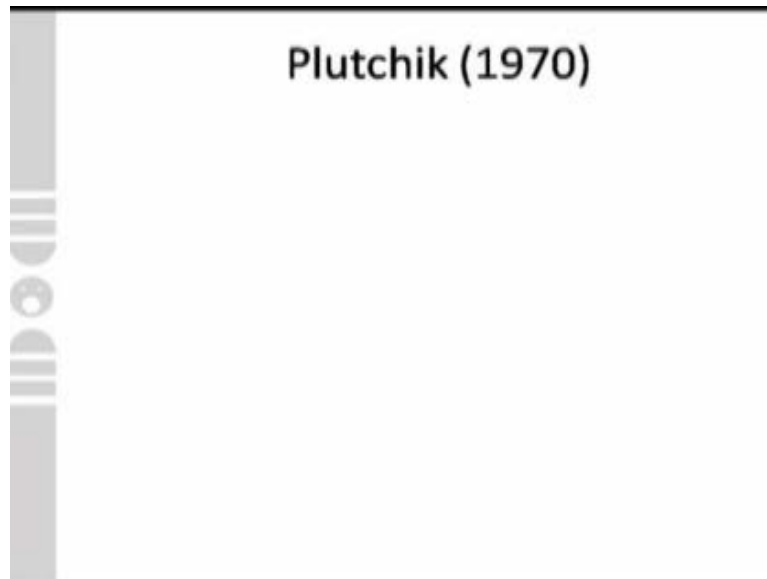


Surprise and sadness combine to generate disappointment, sadness and disgust combined to generate remorse, disgust and anger combined to generate contempt anger and anticipation combine to generate aggression and anticipation and joy combined to generate optimism let us now look at other secondary dyads sadness and anger combined to generate envy, disgust and anticipation combined to generate cynicism, anger and joy combined to generate pride and anticipation and trust combined to generate fatalism.

Let us now look at other tertiary dyads surprise and anger combined to generate outrage, sadness and anticipation combined to generate pessimism discuss and joy combined to generate morbidness.

Anger and trust combine to generate dominance and anticipation and fear combined to generate anxiety, another example of opposite emotions combining together is surprise and anticipation as you know these generates conflicts.

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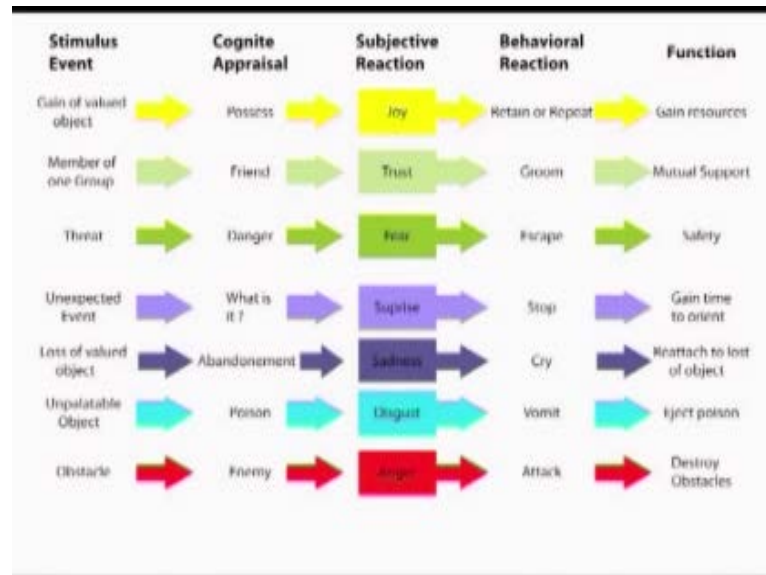
Plutchik has beautifully explained how the whole chain of events is completed during any emotional state.

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We have an even that provides stimulus, this is cognitively appraised, this leads to some subjective reaction it is manifested in some form of behavioral reaction and finally the function is accomplished. You can see certain stimulus on the screen and see this full chain.

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Now here we are going to look at the stimulus events, the cognitive appraisal, the subjective reaction, the behavioral reaction and the function. Now gain of valued objects is the stimulus event you have to posit this is the cognitive appraisal, you have the subjective reaction, you have the joy you retain or repeat it that is your behavioral reaction and finally you perform a function that is you gain the resource.

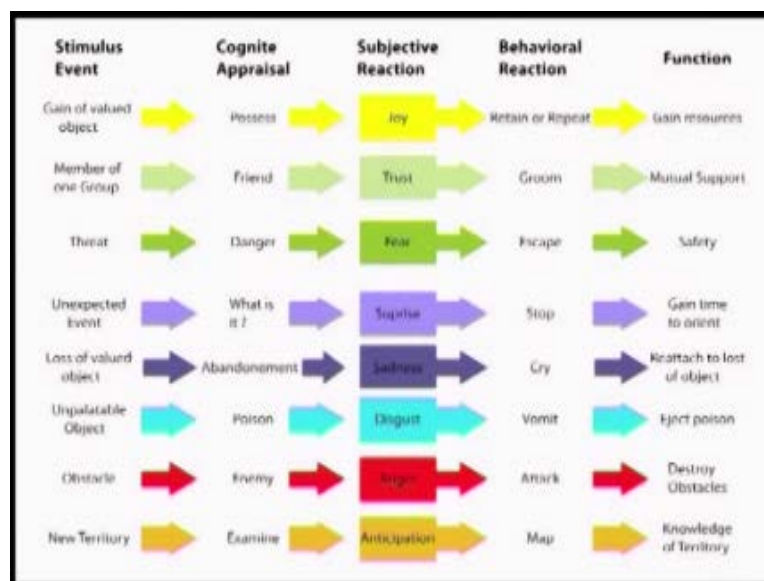
Now you are member of 1 group, you consider yourself to be a friend this is a cognitive appraisal you have trust towards your group members, this is your subjective reaction you groom your behavior accordingly that is your behavioral reaction and the function that it performs is the mutual support you support your members and your team members they support you. Now you have threat that is the stimulus event.

You cognitively appraise that you are in a situation of danger the subjective reaction is that of fear, Escape is the behavioral reaction and then the function that you perform is that find you look for safer options you look towards safety. Now you have an unexpected event, you just think what is it? This is the cognitive appraisal, the subjective reaction you are surprised, the behavioral reaction you stop.

And then you gain time to orient yourself, this is the function that you perform. You have loss of valued object, you have a sense of abandonment, this is your cognitive appraisal you feel sad this is your subjective reaction, you cry because of that feeling that is the behavioral reaction and then reattach to loss or object, this is the function that you perform. You have an unpalatable object.

And then the cognitive appraisal you think it could be poison you are disgusted this is the subjective reaction you vomit that is the behavioral reaction and this is how the poison gets ejected this is the function that it performs. Now you have an obstacle cognitively you appraised that fine he or she is my enemy the subjective reaction you feel anger, the behavioral reaction you attack.

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And this is how you destroy obstacles this is the function that it performs. So basically when you look at this colored object the subjective reactions you have joy, trust, fear, surprise, sadness, disgust and anger and these are considered to be the emotions. Now you have new territory you

examined them because you examine them what is a part of your cognitive appraisal you have a subjective reaction.

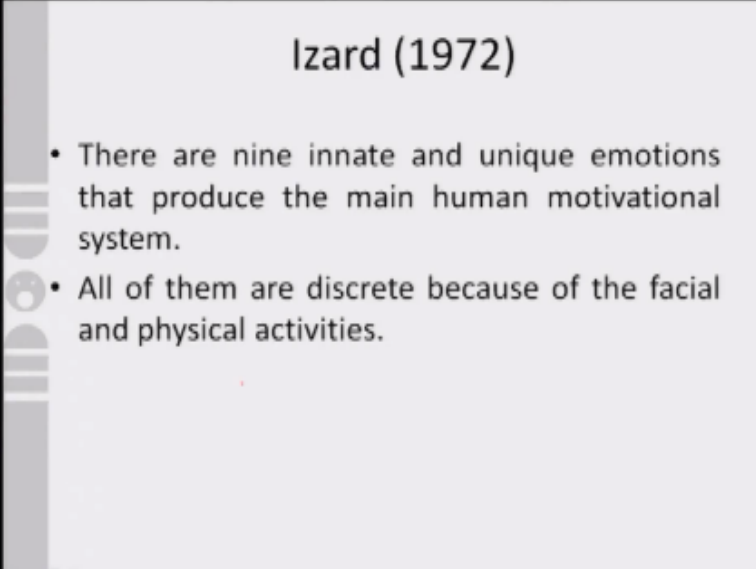
You have an feeling of anticipation, then finally you go for a behavioral reaction you map them and then finally you know the territory you have the knowledge of the territory, this is the function that it performs. Right now we were talking about the Plutchik's theory where we talked about the combination of two of the basic emotions. Look at this news item.

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What you saw actually till now is a son who is bereaving the death of his father, A father was assassinated and see the expression on his face and the words that he speak primarily you will get what patriotic was trying to say that you can still have the combination of two of the primary emotions. The second attempt to identify basic emotion was made by Izard.

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Izard (1972)

- There are nine innate and unique emotions that produce the main human motivational system.
- All of them are discrete because of the facial and physical activities.

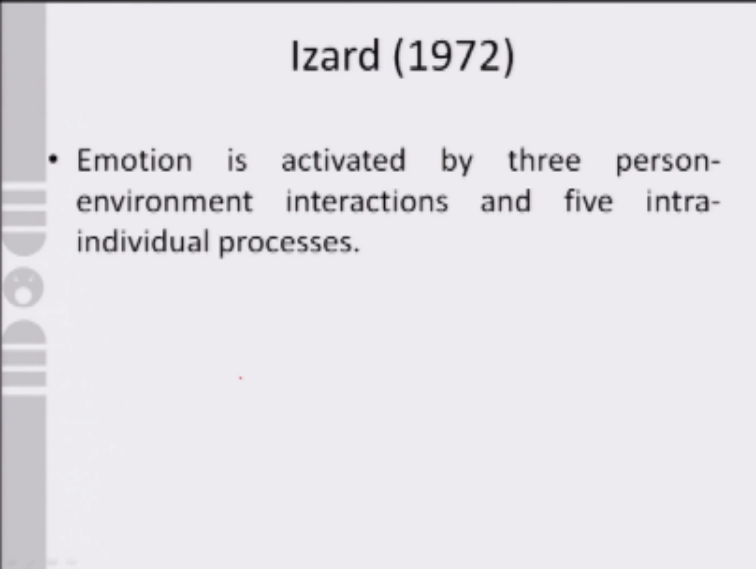
Who said there are nine innate and unique emotions that produce the main human motivational system. All of them are discrete because of the facial in the physical activities.

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According to Izard interest, enjoyments, surprise, distress, disgust, anger, shame, fear and contempt these are the nine basic emotions, I repeated once again, he said that we have interest, enjoyment, surprise, distress, disgust, anger, shame, fear and contempt and these are the nine basic emotions.

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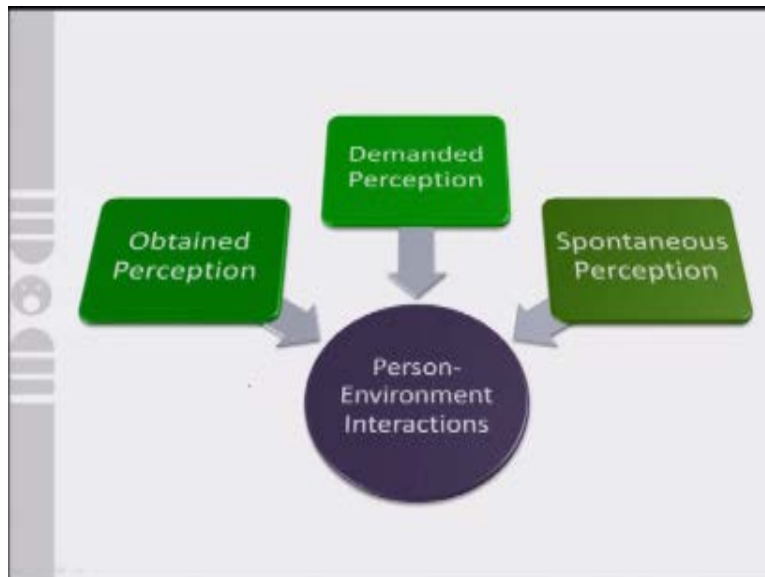


Izard (1972)

- Emotion is activated by three person-environment interactions and five intra-individual processes.

According to Izard, is motion is activated by 3% environment interaction and five types of intra-individual processes.

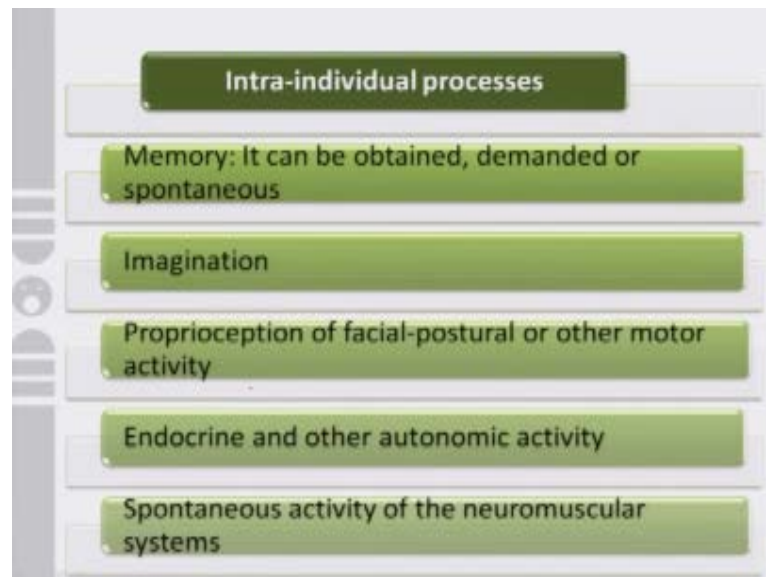
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Okay, so you have the person environment interaction, and then the obtained perception, the demanded perception and the spontaneous perception, so you can know very easily relate okay, what we discussed in our first module where we were talking about the process of sensation and perception, the whole thing of assigning meaning to the stimulus that you perceive in the environment that is presented in the environment okay.

How you know go for an in depth analysis, how that perception induces sudden bodily changes within you, and how that bodily change you try to assign a meaning to it, which also in turn facilitates the personal environment interaction. Now the five different known intra-individual processes that Izard talks about, where memory imagination.

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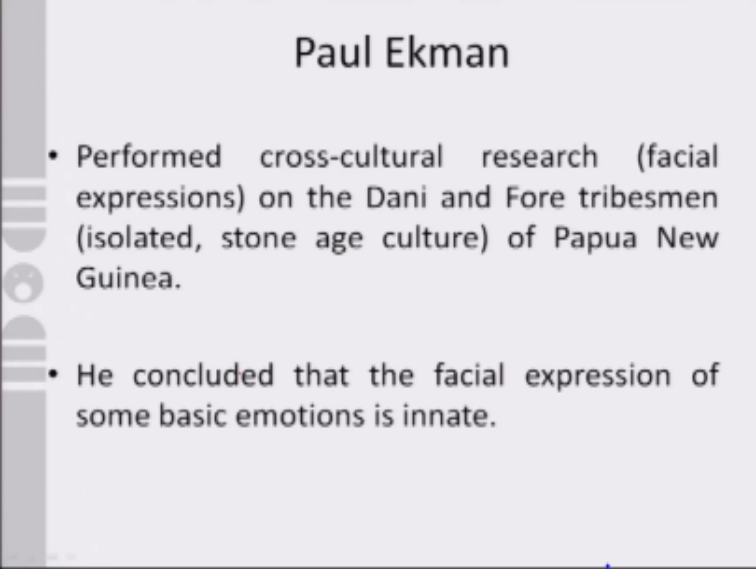


Proprioception the activities of the endocrine and other autonomic activities and the spontaneous activities of the neuromuscular systems, so he said that memory which can either be obtained it will be demanded or it would be a spontaneous plays an important role in our interaction. How you imagine things the proprioception of the facial postural and other motor activities. How much is the functioning and activation of the endocrine and other autonomic functions, and then how is spontaneously the neuromuscular system they respond, and these factors also know would help you have this type of a interaction okay.

Which in turn will try to produce certain type of motivational state, so basically what Izard said was, that we have innate emotional states okay, and the uniqueness all these emotions okay, basically produce the motivational system also okay, and then he said that the physical activities and the facial activities okay, they are discreet. But basically emotional and motivational states he was trying to propose that the overlap.

The reason why we took Izard here was, that Plutchik that said that there are eight basic emotion Izard says that there are nine basic emotions, and then came the proposition by Paul Ekman,

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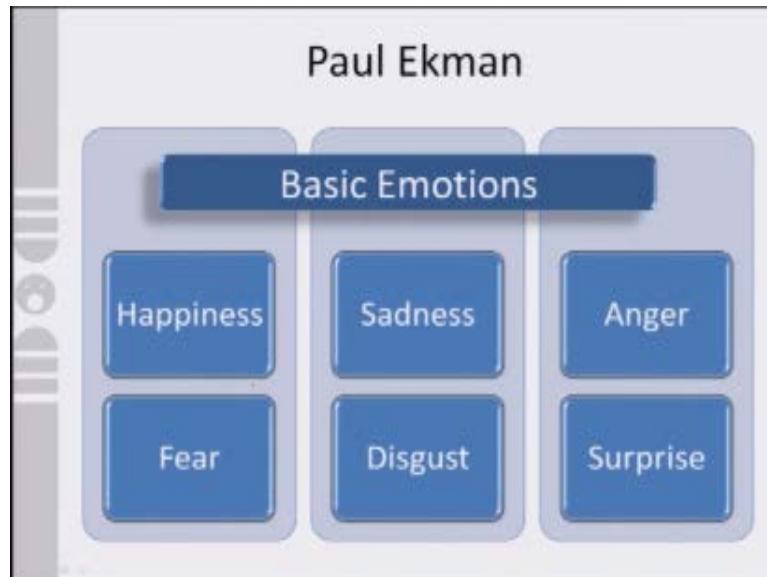


Paul Ekman

- Performed cross-cultural research (facial expressions) on the Dani and Fore tribesmen (isolated, stone age culture) of Papua New Guinea.
- He concluded that the facial expression of some basic emotions is innate.

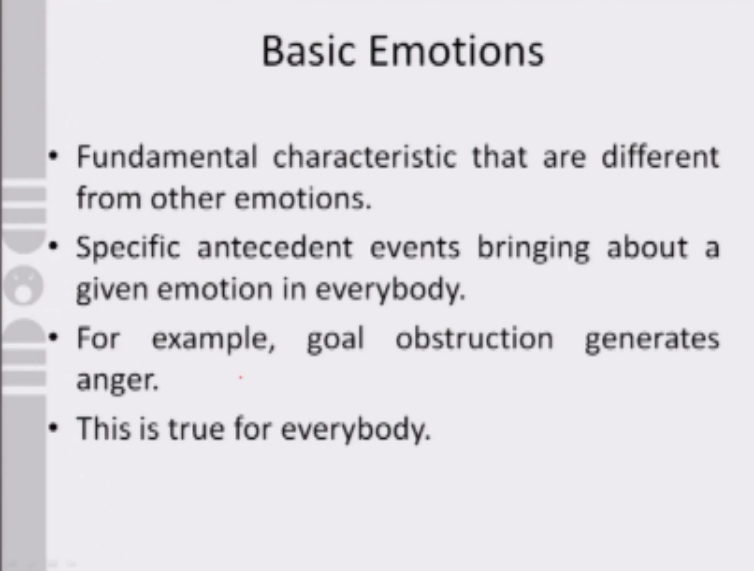
Ekman perform cross cultural research okay, on the Dani and the Fore tribes of Papua New Guinea, and then he concluded that there are some know, basic expressions which are very, very innate.

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And according to Paul Ekman, we just have six basic emotions happiness, sadness, anger, fear, disgust and surprise, just six basic emotions rest all are combinations of these emotions.

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Basic Emotions

- Fundamental characteristic that are different from other emotions.
- Specific antecedent events bringing about a given emotion in everybody.
- For example, goal obstruction generates anger.
- This is true for everybody.

Now basic emotions, basically they are fundamental characteristics are different know, so happiness, sadness, disgust, fear, anger, surprise okay, none of these emotions they are fundamental characteristic will overlap, and therefore specific antecedent events will bring these the emotions okay, and accordingly the bodily changes okay, that you see in these emotions might physiologically show you certain type of a patterned. But then in terms of subjective experience they are unique.

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