

How do Emotion, Attention, Thought, and Arousal Work Together?

By:

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C O N N E X I O N S

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Table of Contents

1 Unconscious and Conscious Processes	1
2 Cognitive Performance	11
3 Cognition and Emotion	25
Attributions	34

Chapter 1

Unconscious and Conscious Processes¹

A Study by Douglas Derryberry and Mary Klevjord Rothbart titled "Arousal, Affect, and Attention as Components of Temperament"² concluded that "This study demonstrates that the general temperamental constructs of arousal, emotion, and self-regulation can be successfully decomposed into more specific subconstructs revealing interesting patterns of relations."

I believe that statement makes a lot of sense - there are several key factors that influence what a person is going to feel, and the main ones are probably affect, arousal and attention. If you think about it, when you are in a social situation, your affect is constantly changing, and so are your levels of arousal and attention. Those things constantly fluctuating is going to determine the emotions you are feeling on a moment to moment basis. Your attention can change and be directed at many different things in a brief time period - the only other significant factors other than the attention

¹This content is available online at <<http://cnx.org/content/m43627/1.1/>>.

²Derryberry, D., + Klevjord, M. "Arousal, Affect, and Attention as Components of Temperament" Journal of Personality and Social Psychology 1988, Vol. 55, No. 6,958-966

changes are going to be your affect (which shows your subtle emotions) and your arousal (which shows your more powerful emotions).

Actually your thinking and physical response is also going to be significant - in the study they had a number of items they defined - here is the "thinking" one:

Cognitive Reactivity (CR). The amount of general cognitive activity in which the person engages, including daydreaming, problem solving, anticipatory cognition, and the ease with which visual imagery or verbal processes are elicited by stimulation. "A continuous flow of thoughts and images runs through my head."

In a way there is always a continuous flow of thoughts and images running through a humans mind. People are always processing information from their minds or from their environment. I would think that the cognitive thinking aspect directs the emotional and physical ones. Information or thoughts trigger you to feel different things or react in different ways all of the time, probably many different times in a minute. Every slight physical reaction, such as you looking at something different, or shifting your position, or a subtle change in affect, was somehow triggered by thought.

In this article I am going to analyze things such as... what types of emotion are generated in which high arousal situations, and what is the level of attention involved. For example, when you are in a high intensity social situation, your arousal and attention are higher, but there is also fear. By "arousal" in that example I don't mean sexual arousal, I just mean non-sexual arousal.

The thoughts someone experiences all of the time are incredibly complex, my understanding from observing my own thoughts is that you have natural impulses that cause thoughts to arise automatically all of the time. These thoughts usually aren't clear to the

person having them that they are having the thought possibly because it directs a behavior or response that they aren't aware they are doing. For example if you experience an emotion generated by someone else in a social situation, your affect might change in a subtle way that you are not aware of. That change in affect is an unconscious thought because thought was necessary in order for your affect to change.

In the study they separated out these natural impulses (which I would say are unconscious thoughts) into the positive ones and the negative ones:

Inhibitory Control (IC). The capacity to suppress positively toned impulses and thereby resist the execution of inappropriate approach tendencies. "I can easily resist talking out of turn, even when I'm excited and want to express an idea."

Behavioral Activation (BA). The capacity to suppress negatively toned impulses and thereby resist the execution of inappropriate avoidance tendencies. "Even when I am very tired, it is easy for me to get myself out of bed in the morning."

Your positive emotions might cause you to want do something and because you are so positive about it there is that strong, impulsive drive which could cause you to do things. It is the opposite with negative emotions, if you feel very strongly these feelings are going to cause you to do things and think things automatically in order to satisfy the feeling.

This "impulsive drive" as I called it in the previous paragraph, is related to a persons level of arousal. Arousal would be someones stronger, more potent emotions and therefore would cause someone to become impulsive because the drive is powerful. If you are feeling very strongly (such as high arousal), then you are going to be consciously and unconsciously motivated to think and do things you wouldn't otherwise do. In addition, I already mentioned how

even without feeling strongly, people have many different reactions in a minute (such as slight changes in affect). These probably increase if you are feeling more strongly. That makes sense, when you are talking to someone and you say something that gets a reaction, the other person usually changes their expression more or something.

The amount of arousal someone experiences can change from normal to high in a certain time period, or high to low in a similar time period - this was defined in the study:

- *Rising Reactivity (RR)*. The rate at which general arousal rises from its normal to its peak level of intensity. "I often find myself becoming suddenly excited about something."
- *Falling Reactivity (FR)*. The rate at which general arousal decreases from its peak to its normal levels of intensity. "I usually fall asleep at night within ten minutes."

So, as I have said, a higher arousal rate is going to result in more reactions from you, or as the people who wrote that study called it, "rising reactivity". A higher arousal rate is also going to cause your attention to change in some way, too. I would think it would cause your attention to increase normally, but it is possible that more excitement or arousal could cause you to pay less attention, though usually when people have more energy they are more attentive. Here is from the study again how they defined someone's ability to focus their attention and someone shifting their attention:

Attentional Focusing (AF). The capacity to intentionally hold the attentional focus on desired channels and thereby resist unintentional shifting to irrelevant or distracting channels. "My concentration is easily disrupted if there are people talking in the room around me."

Attentional Shifting (AS). The capacity to intentionally shift the attentional focus to desired channels, thereby avoiding

unintentional focusing on particular channels. "It is usually easy for me to alternate between two different tasks."

Snygg and Combs speak of a "narrowing of the perceptual field under tension," which means that when people are tense and anxious, they tend to be less observant and less aware of their environment. As these authors say, "the girl too concerned over her appearance entering a room is only too likely to be unaware of the disastrous carpet edge in her path."³

There is likely to be many things that people do and think that they aren't aware of. I would say that each minute you have a few unconscious thoughts you aren't aware of. These thoughts probably influence your emotions in subtle ways. These thoughts are going to be influenced anxiety, arousal, your attention, (and, obviously, what is happening). There are obvious unconscious thoughts, such as something you might notice you missed later on, and there are (I believe) more subtle unconscious thoughts, a great level of detail in emotion and thought that occurs every second. Analyzing that level of what is going on I think could reveal more about what someone is feeling and thinking.

The following passage by Lindgren, Henry Clay⁴, shows how unconscious processes operate in everyday life.

Even though it constitutes a denial of reality, repression often serves a useful function in that it enables us to adjust more easily to the demands of life, relatively unhampered by unpleasant thoughts and feelings and unaware of contradictions in our behavior. It enables us to perform tasks and operations that would be difficult or impossible if we were

³D. Snygg and A. W. Combs, *Individual Behavior*. New York: Harper, 1949. Pp. 110-111.

⁴Lindgren, Henry Clay, (1959). *Psychology of personal and social adjustment* (2nd ed.), (pp. 44-65). New York, NY, US: American Book Company

*CHAPTER 1. UNCONSCIOUS AND
CONSCIOUS PROCESSES*

bothered by recurring painful reminders of past failures or by other disturbing thoughts and memories.

...our conscience or superego plagues us with guilt feelings whenever we indulge in thoughts and actions that run contrary to the accepted standards of our culture. These feelings often cause us to repress certain thoughts that might otherwise lead us to perform forbidden or disapproved acts. Some actions that are disapproved are violations of moral standards, while others involve certain patterns of behavior that are less acceptable than others. For example, there is a tendency in our culture to repress feelings that would lead to an emotional display. Under most circumstances we disapprove of weeping in public, and this attitude leads us to repress feelings of deep sorrow, particularly when we are with others. We condone kissing in public on certain occasions, provided it is more or less formal and perfunctory. But if a nine-year-old girl throws her arms around her mother and effusively kisses her — say, on a streetcar or in a department store — the mother is likely to be embarrassed and to scold the child. These are examples of a cultural pattern which stresses emotional control and which regards the expression of strong emotions as babyish, immature, unmannerly, or even abnormal. Thus the typical American not only expresses less emotion than, say, the typical resident of the Mediterranean countries, but will often deny that he feels any emotion at all when faced by situations that would evoke considerable emotionality on the part of the Mediterranean person. In our "flight from emotion," we often try to present ourselves as calm, reasonable, competent, and efficient persons, even though we may not feel this way. We stress the intellectual aspects of our behavior and attempt to deny to ourselves and others the presence of strong feelings. Unconscious feelings do not always reveal themselves through such obvious means as a slip of the tongue. Usu-

ally they express themselves indirectly through subtle little mannerisms, quirks, facial expressions, tones of voice, and so on.

But is that the full mystery behind unconscious operations? It couldn't be - there must be a lot more going on unconsciously that needs explanation. For instance, in each different social situation there are probably different emotional responses. Your anxiety, arousal, attention, perception and emotions could vary - I already stated that those were the main factors involved with psychological functioning.

The following passage (also by Lindgren) shows the importance of empathy, it also explains a little how it impacts your perception and anxiety:

Empathy, as used in this sense, is the ability to be aware of the feelings and attitudes of others without necessarily sharing them. We gain this awareness by observing the speech, facial expression, posture, and body movements of others. As one four-year-old said, " I k n o w m y M o m m y 's mad, 'cause she walks mad." Empathy is the result of sensitive and acute perception. Like other forms of perception, it m a y be sharpened or dulled, depending on the state of our emotions. Sometimes anxiety can serve to sharpen empathic awareness, but usually it operates to distort it.

Empathy, and its influence on anxiety and perception, is just one aspect of psychological functioning. It has to do with how connected people are to other people, but there are many aspects about how people are connected and a complex emotional and intellectual exchange that occurs moment to moment when people interact. Your perception, connectivity, anxiety, arousal, feelings and thoughts are constantly changing.

This next passage by Lindgren mentions how interactions are sort of like unconscious interchanges of feeling:

CHAPTER 1. UNCONSCIOUS AND CONSCIOUS PROCESSES

Most of us are capable of empathizing most of the time, and as we empathize with one another, we find our actions and attitudes conditioned or affected by one another's feelings. This amounts to a sort of communication or exchange of "feeling-tone" that takes place below the level of consciousness. In many, if not most, situations involving two or more persons, the interchange of feeling-tone at the unconscious level is of greater importance than the verbal exchange at the conscious level.

Lindgren shows an example of feeling-tone by a salesman who is hiding contempt for some of his customers. Even though his contempt isn't obvious in his tone and gestures, nevertheless those customers end up feeling tense and stressed. Here is another example he uses to show how teachers do a similar thing:

Teachers, too, are in a position to use or misuse the communication of feeling-tone. Some teachers are technically competent, but so unsure of their relations with others that they attempt to "cover up" by being grim or pedantic or hypercritical. Teachers of this sort usually succeed in communicating the very feelings they are trying to hide, with the result that the class becomes tense, hostile, or just bored. Other teachers are able to empathize with their students to the point that they can determine whether students understand or are confused, whether they are receptive, or whether they are in a mood calling for a change of pace and subject matter.

Lindgren also showed how some things are unconscious, people may come up with reasons for their behavior, but the real reason could be something that is unconscious and beneath their awareness. The feeling-tone that people convey is similarly beneath awareness most of the time. People could be acting one way, but be communicating something completely different unconsciously.

Here is another example he gives and a conclusion:

The communication of feeling-tone is essential, too, in courtship. Two people may meet accidentally and discuss the weather or the latest television program in a casual fashion. Yet while this desultory conversation proceeds, there is an exchange of feeling-tone, and each may begin to feel the effects of mutual attraction and warm feelings. This experience leads to other meetings, until the participants are sufficiently aware of their feelings to make them a subject for communication on the conscious level.

In the situations we have described above, the words spoken at the conscious level do not necessarily give clues to the communication taking place at the feeling level. And, as we have indicated, the latter type of communication really plays the more important part in attitude formation, motivation, and the course of action people actually will take.

Here is another conclusion he makes, which shows that you cannot hide or act differently, your feelings are there and going to determine what occurs:

- The ability to put oneself in another's place and sense his attitudes and feelings is an unconscious process termed "empathy." It is highly necessary- if one is to understand others and communicate with them effectively. If we are not empathic, we are in danger of being chronically disappointed in others. Thus we must be aware of how others feel, and of the fact that their feelings are frequently at odds with what they say. At the same time, we must be aware of our own feelings, which have an effect on others. There is, in short, an exchange of feeling-tone.

Emotions lie at the heart of social interactions. Subtle changes in emotion occur all of the time, and these changes are going to influence what you think and do, and also the larger, more potent emotions that you feel. Empathy is just one important aspect of how emotion

works in a social interaction, without it there would be a disconnection, and much of the subtlety involved might not occur. For instance the "subtle little mannerisms, quirks, facial expressions, tones of voice, and so on" might not occur at all.

Chapter 2

Cognitive Performance¹

Someones beliefs and views of the world are obviously going to influence how they socially interact - along with their personal history. Their personal history is going to matter because it is who the person is - people use knowledge of past events and especially experience from them to guide behavior in social interactions. Knowledge may be activated whenever the proper conditions for retrieval are met - that basically means when the time is right, your knowledge is going to be used accordingly.

So someone's knowledge about the world and their understanding of the world is going to be used in social situations (their semantic memory), and so is memories of their personal history (their episodic memory). Knowledge is contextualized, whatever someone knows, this knowledge was learned from some experience that may also be recalled (consciously or unconsciously) at various times.

People might also use knowledge of their attitudes and preferences, their abilities, shortcomings, behaviors or their identity as a whole. They use their knowledge of their own history and of the world around them. They use this knowledge on a moment to moment

¹This content is available online at <<http://cnx.org/content/m43629/1.1/>>.

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