

**FEBRUARY 20 2022 12:58 AM ZULFIKAR MOINUDDIN
AHMED'S EXAMINATION OF JAAK PANKSEPP AND
DOUGLAS WATT'S 2011 PAPER ON BASIC EMOTIONS**

ZULFIKAR MOINUDDIN AHMED
ZULFIKAR.AHMED@GMAIL.COM

Let me start with the clear statement that Jaak Panksepp is a great man and a profound genius. I will be examining [?]. I am interested in having a clear and simple understanding of organising emotions and learn some wisdom from the great man.

I like to have very crisp clear understanding of certain knowledge about Nature. I never studied neuroscience formally at Princeton 1991-1995, or at Columbia 1996-2000. I became interested in psychology and related fields after I had success in four-sphere theory, in my effort to understand Man, where Nature was described by four-sphere theory.

In this note Panksepp and Watt address various issues but I will just focus on those that I think are valuable.

1. What is your list of basic emotions? Are all emotions basic or just some? If some, how do you distinguish basic emotion from nonbasic emotions? What is the relation of nonbasic emotions to basic emotions?

"The cross-species primary-process ("basic") emotions refer to 'prototype emotional states' –namely, SEEKING, FEAR, RAGE, LUST, CARE, PANIC/GRIEF, and PLAY—that can be evoked by artificial activation of subcortical networks of the brain. We capitalize these terms to minimize mereological fallacies (part-whole confusions) that would hinder discourse if we simply used vernacular-emotional terms."

The discovery of these subcortical systems are without any doubt the most clear discoveries about emotions in the entire history of Science, and for this Jaak Panksepp shall be immortal. This ought to be the center of all discussion about knowledge of human emotions.

I have proposed that emotions be defined as a latent state variable from state space $E = \mathbf{R}^7$, in a recent note. Jaak Panksepp's discovery is so strong here that I believe that every serious introduction to study of emotions should begin with "... there are seven subcortical systems in the brain that produce signals which are the latent emotional state of a human being ..."

What I will be doing is to introduce a mathematical framework that is universally applicable for all scientific theories, and perhaps all others as well of emotions.

1. NEUROIMAGING OF HAPPINESS, SADNESS, ANGER, FEAR, DISGUST

Katherine Vytal and Stephen Hamann has a good detailed meta-analysis on neuroimaging support for basic emotions of Happiness, Sadness, Anger, Fear and

Disgust [?]. This sort of work is very good, because I don't really want all the details. I just want to be quite sure that a basic emotion theory is applicable to all human beings. You see, for me, this is the strange sort of moment of confusion where people seem to feel that universal human emotions is challengeable. I read all sorts of theories about skepticism. It's total anarchy in the world. I want pretty obvious things to be airtight so we have parsimonious.

I am not joking. Basic emotions are solid, and that's good. So the Descartes' six primitive passions of 1649 are not exactly the ones being tested with neuroimaging in 2010 but I am pretty damn impressed with Descartes. Good job Descartes, your theory was damn good. I like elementary parsimonious theories that are clear and true and without too many labyrinthine confusions.

And then I want them in textbooks for middle school and high school students worldwide so that we can actually all be quite clear about some of these things from childhood.

I will be quite honest, give me what the right story is. Don't make things so complicated that people will begin to have eyes glazed over and start thinking, "Oh my God, when will these people stop yakkety-yakking with all this jargon?" Most people don't care about all that and for good reason. They want to know the right answer so they don't go around having wrong ideas. That's all.

2. PEOPLE SHOULD NOT NEED A PH.D. IN NEUROSCIENCE TO HAVE BASIC MODELS OF EMOTIONS

Certain knowledge, or at least highly confirmed knowledge about emotions and how they work universally for all human beings is now scattered across dense jargon-filled papers. The world needs some clear and *rigorously accurate* account of what is known and understood *at the high school level* that is canonical and accessible for 95% of the people of Earth with literacy and intelligence to absorb this. It would be good to do this so that understanding of emotions is widely absorbed. People need to be able to use this knowledge in their daily lives.

This is a very important task as there are many positive benefits. Most people do not have time to read a very large amount of complicated books and articles. But their ordinary knowledge can improve if precise and clear and concise accounts of what is known is ubiquitous.

This is a good step for affect research and psychology too. This sort of step has transformative potential for the human race.

3. MY INTUITIVE THOUGHTS ON NATURAL KINDS AND EMOTION SCHEMAS

Jaak Panksepp identified seven primary-process subcortical systems that are most certainly nature-granted. These systems are literally 251-201 million years old and so natural kinds are appropriate for them. I am strongly in favour of the idea that signals from these systems influence all emotions, even those modified by cognitive processes. Unfortunately Carroll E. Izard died in 2017. I am examining [3].

So let me tell you what is pretty clear to me. Cognition might deflect emotions one way or another, but the signals from the seven subcortical systems will dominate all emotions anyone experience. This debate cannot really be resolved by thinking about things. Why doesn't someone at Harvard or Stanford Psychology just measure the intensity of the signals for all emotions including the ones that

are considered modified by cognition and just examine the intensities? I am fairly confident that all disagreements will be resolved after someone does some statistical analysis of the data.

Zulf's Strong Natural Kinds Emotions Hypothesis: All affective states of human beings are almost totally determined by the signal from seven subcortical emotion systems that are 251-201 million years old regardless of how we interpret the expressed emotions and what are the external circumstances.

It does not matter whether you like to call emotions 'Natural Kinds' or whatever; they are all totally dominated by the signal strength of seven ancient subcortical systems is my hypothesis. Then you can see quantitatively how much 'construction' is possible by the hookey-dookey of the neocortex. Neocortex is not generating the emotions. It's merely doing some hookey-dookey.

Here I further hypothesize that *habituation is the primary driver for development of emotion regulation by will of individuals*. All this 'cultural difference' is rubbish. It's universal. You have natural emotion streams inherited from 251-201 million evolution, and then the major effect is *habituation*. You can say it's culture or whatever. It's not. It's just *individual habituation* to hookey-dookey of cognition.

REFERENCES

- [1]
- [2]
- [3] Carroll E. Izard, Basic Emotions, Natural Kinds, Emotion Schemas, and a New Paradigm, Perspectives on Psychological Science, Vol. 2, No. 3 (Sep., 2007), pp. 260-280