UNIVERSITY OF CAPE TOWN
IYUNIVESITHI YASEKAPA • UNIVERSITEIT VAN KAAPSTAD

WEEK 5 AGENCY
STEP 5.1. INSTINCTS AND LEARNING

00:00:00

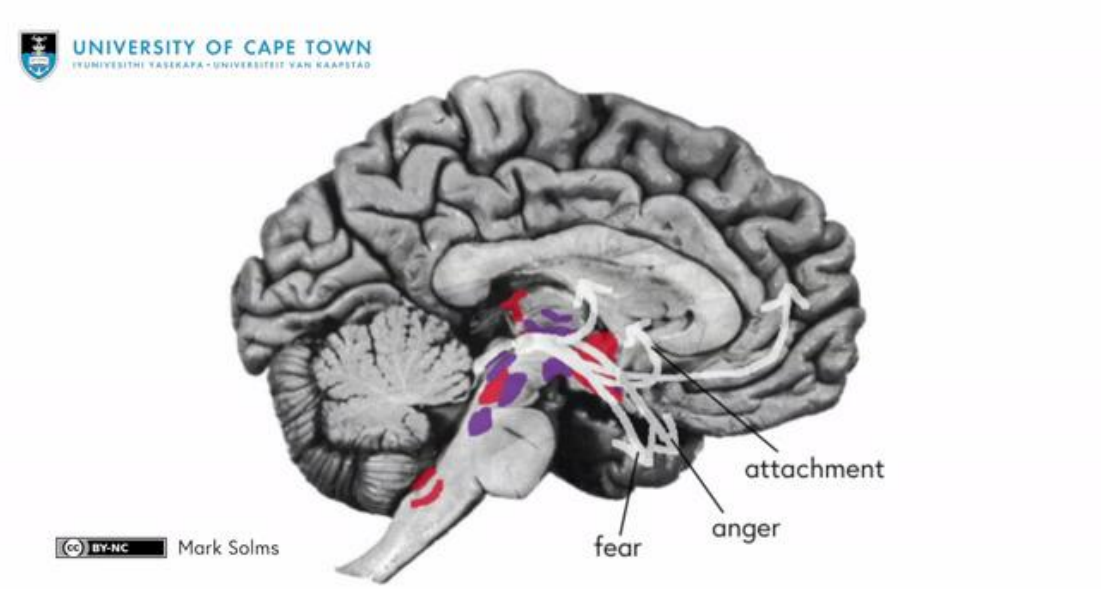
We're almost there. Today, I want to introduce you to the **fourth and final defining property of a mind**. Philosophers call this property "**agency**". I'm not going to approach the topic philosophically, though. I want to give you a scientific point of view on what agency is all about.

First, we have to take a few steps backwards. In earlier lessons, I told you that at the level of the upper brain stem, there are basic consciousness-generating mechanisms and the basic ingredients of consciousness are pleasure and unpleasure. Then, built above that are limbic circuits for varieties of pleasure and unpleasure, the most important of which is seeking, which is a particular type of pleasure, this pleasure of optimism, of enthusiasm, of interest in the world.

This system, the seeking system, the intentionality system, makes us engage with objects, engage with the things around us because that's where our needs can be met. That's where our biological problems can be solved. While we're doing this foraging, while we're trying to find the things that our hearts desire, we bump into other things, new problems.

For one thing, we are not the only creatures. Each one of us beloved selves are not the only creatures in the world. So I might be seeking something that some other creature is also seeking. Then, we've got a competition on our hands. Or worse than that, I might be the creature that another creature is seeking. I might be the object of some predator's desire.

We have built into our brains-- into these **instinctual action systems** that I'm talking about today, we have built into our brains ways of dealing with these biological situations of universal significance, the situations that generate fear, anger loving attachment feelings, and so on. These inbuilt tools for living, we can't afford to learn about. You can't afford to learn what to do if you walk off a cliff. Let me see what happens if I walk off. Yeah, whoo, bam. You're gone. It'll be the last thing that you learn and you won't survive and you won't reproduce, so that tendency won't be passed on.



Those who have an inbuilt or an innate fear of walking off cliffs-- when they approach the cliff, they feel their fear of heights kicking in and they walk backwards or freeze-- they will survive or they're more likely to and to reproduce. And so this kind of behavioural tendency gets built into the brain. That's the fear system. There's also a rage system. There's also an attachment system, and so on. As I say, these are basic tools for living built into our brains.

There's seven really complicated ones that we know about and all mammals share these **seven basic emotional systems**. They're also really simple ones, like hunger and thirst. These are particular emotions that incline us to behave in particular ways. Eating is not the same as drinking. Likewise, say, surprise-- oh!-- or disgust-- ugh! These are different feelings which motivate us to do different things, just as the feeling of fear motivates us to do something quite specific.

But the seven really complicated interesting ones, which we share with all mammals and which means incidentally that they're 200 million years old because mammals deviated from birds-- avians and mammals, 200 million years ago is where they separated from each other. Some of these inclinations are older than that. For example, attachment, pair-bonding, birds do it and mammals do it. But these are at least 200 million years old.

Here's the problem. What about things that didn't even exist 200 million years ago, like electric sockets? There's a good reason to fear sticking your finger into an electric socket, but it can't have been built into our brains 200 million years ago. We have to learn about that. So things have to be added to these basic inbuilt predispositions. This is **learning**.

I said in the last two lessons something about learning, how seeking, how engaging with the world, enables the animal to make meaning of the world, to learn about what different situations and scenarios and places represent, what their meaning is within a biological framework or scale of values. This learning makes our minds much more

complicated than seven basic emotion systems allow for. And that's because the world is much more complicated than having just seven problems.

But here comes a new problem. Once you learn all these nuances, once you fill the gaps between these basic instincts and you add to these basic instincts, you have a great many competing possibilities as to what you might do in a novel or unpredicted situation. How do you decide which of these things do I do? How do you decide between competing alternatives? It's at this point in the life of the mind that agency kicks in.