UNIVERSITY OF CAPE TOWN
IYUNIVESITHI YASEKAPA • UNIVERSITEIT VAN KAAPSTAD

WEEK 5 ANSWER TO QUESTION 3

STEP 5.10 ASK MARK

So question 3-- to what extent do you feel that we have free will and so it can be the first cause of some act? Or do you feel that our acts are always motivated by some prior cause? Thought may be able to inhibit emotions, but in thinking now about alternatives, we expose ourselves to their emotional impact hypothetically and ultimately make our choice on that basis. So perhaps free will is an illusion derived possibly from our experience of thought.

This is a very complicated question. And I'm going to answer the simple part of it first and then elaborate. And hopefully this will deal with some of the more complex aspects of the question.

I don't believe that there is such a thing as free will in the old philosophical usage of the term. I think that as we've understood better the laws governing human thought processes, starting from psychoanalysis with Freud's famous claims that there wa s a psychical determinism, that everything had a cause-- not only in the external aspects of nature, but also that internal part of nature that we call our minds. The mind too follows the laws of cause and effect.

And then since Freud, everything that we've learned in the 20th and now the beginnings of 21st century from the neuro-scientific point of view has given us only more reason to believe that our minds and the organ of the mind are just part of nature. And that the ways in which they behave are governed by laws just like everything else in the universe.

So in the old sense of free will I think that we're using the term now-- it has a kind of drama attached to it that doesn't really belong to it. Because I think when you place the phenomena covered by that term in the context of what we know about the laws governing the human mental apparatus, if I can call that, then you see what's meant by it. They are phenomena, which could be called free, which is to say voluntry, but that doesn't mean that they are without prior causes.

The question of prior causes is also quite a complex issue, because the prior causes start with immediate prior causes-- what led to my act in the seconds leading up to it. And then what about the whole of my life history, which in turn shaped how I behaved in these last few seconds and minutes. And then behind that is the whole evolutionary history of the

species-- what designed the apparatus that operates in that way through evolutionary time?

So all of these prior causes constrain the ultimate, the final, free action. All I'm saying there is something very simple, which is that there are degrees of freedom, that they are variables that very substantially constrained our freedom. In the end, though, we've developed prefrontal lobes, which give us this selectivity, which give us this flexibility, which gives us this range of options, and the capacity to choose from that range of options, which nevertheless is produced by that prior evolutionary history that designed the apparatus that's producing the options-- your prior life history that gives your particular adjustments, settings, to your an individual human mental apparatus, and then the clear and present feelings now governing the situation. All of those things constrain the degrees of freedom.

I use the example in the lesson that yes, you can, like Daniel, walk into the lion's den if you want to. But the chances of you walking into the lion's den are greatly reduced by the feelings of fear and the compulsive urge to freeze or to flee that come with them. So the chances of your walking into the lion's den are greatly reduced by that strong motivational factor, which comes from these prior causes.

When it comes to the ultimate choice-- which one of these things am I going to do-- as I say, the range of choices is shaped. So again, it's not really free in any absolute, philosophical sense.

And then speaking more scientifically, more mathematically, I think that all that one is really saying is that there are a great multiplicity of variables. And when you combine all of those variables, you end up with a probabilistic weighting which determines the outcome. It's not a simple, linear chain of cause and effect. There are all of these different variables influencing the ultimate outcome. And when you use statistical theory, you see that it's not really free. It's constrained. That's how I see it.

I think the essence of the point there is that when the concept of free will was first formulated in philosophy, it had a different context. It had a different sort of set of connotations and denotations than it has today with our understanding of evolutionary biology and the shaping of the human mental apparatus and the influence of life events on further refining that apparatus and then on the specific ways in which feelings work in relation to cognition. So we end up with a rather different picture of it.

I want to add a little footnote if I may. Free will -- these famous experiments of Benjamin Libet-- in case any of you think I'm mispronouncing his name, that's how he pronounces it -- Benjamin Libet-- L-I-B-E-T.

He did these famous experiments where the experimental participant makes a voluntary movement of the finger and simultaneously looks at the hand on a big clock which tells you exactly what millisecond you were at direct when you made the decision. And famously, what Libet observed was that with electrodes on the supplementary motor area

here, he was able to observe that the readiness potential-- the brain gearing itself up to perform the action-- preceded by, depending on which experiment you're looking at, something like, say, 300 milliseconds, it precedes the thought I'm going to act.

And this led to the conclusion, well, clearly there's no free at all, because in fact the action is already about to happen. All preparation is there a good 300 milliseconds before you decide. And clearly that's not the decision, because it's already on its way.

I have a rather different take on that. And I want to just quickly tell you about it. I think that like so much else in this course, it boils down to the distinction between the affective instinctual, raw feeling-- in this case, volitional intent, and on the other hand, the cognitive apparatus, the representations, the ideas, that kind of picture to the mind's eye, that intent, and most specifically, the reflexive sort of re-representation of it. Not just, I'm going to do it, but I'm aware of myself having made the decision that I'm going to do it. This is what we call declarative cognition.

I think the mistake is to think that the declarative cognition is the beginning of the mental process of free will. The process begins with this inchoate, inarticulate, non-representational, affective push from below, from the brain stem-- in this case, via a SEEKING system. I'm going to do something. I have intentionality.

But it's not in the words that I've just used. There's no "I" there thinking about itself performing the action. That first surge, I believe, is what's then picked up with readiness potential. Then what follows roughly 300 milliseconds later is the re-representation of this urge, of this volitional push into a representational picture of oneself in one's body making this precise action with one's finger, and then in addition the verbalisation, the declaration "I am going to do it," I think that that's where the mysterious gap comes from. And I hope from what I've said you can see I don't think it's such a mystery at all.