WEEK 3 ANSWER TO QUESTION 4
STEP 4.2 ASK MARK

So, to the fourth and final question for this week, question four: “Is the Freudian sense of the unconscious the same as that in cognitive or affective or social neuroscience? If not, how is it defined within neuropsychoanalysis?”

So the standard view would be that the cognitive, that the unconscious – that cognitive or affective or any neuroscientists speak of – is not the same thing as the Freudian unconscious. That's the standard view.

Both cognitive scientists and psychoanalysts will tell you that they're talking about different things when they talk about the unconscious. Cognitive scientists say the unconscious is simply automatised, subliminal information processing. So it's all your cognitive gymnastics that you get up to – perceiving, thinking, deciding, judging, etc. – all of these cognitive operations, going on without consciousness.

There's nothing especially emotional or motivational or sexual or instinctual about it. It's just unconscious cognition. The Freudians say “no”, they've got another kind of unconscious which is this *repressed* unconscious, this *dynamic* unconscious, where you're withholding things from consciousness because you would be upset or overwhelmed to be aware of them. So you kind of protect yourself from having to think these thoughts which are so charged and so unwelcome.

So there are these two different kinds of unconscious. In the cognitive neuroscience literature on the one hand, and psychoanalytical literature on the other. I don't agree, though, that they are two different things, these two different definitions of the unconscious. The way I think it works is like this. When you've solved a problem – consciousness is a very small place, we have a very limited capacity for holding things consciously in mind, and this has been measured. In fact, we can hold roughly seven or eight bits of information in mind consciously at any one point in time; you can juggle in consciousness – in what we call working memory – seven or eight bits of information.

So it's a limited resource. Think about all the information processing that's going on in your head all the time, not only in relation to current events, but in relation to everything you've learned in the past. There's a gigantic amount of information processing going on, of which seven or eight bits at any one point in time are conscious. So consciousness, being such a limited resource, is applied highly selectively.

It's applied, in my view, only to those cognitions which require you to feel your way through them, in other words, the salient cognitions. The ones that matter, where

there's uncertainty as to the answer, and you need to have a qualitative, valanced basis for making a decision in one way or the other. As opposed to once you've solved the problem, you automatise it.

For example, you move house. You need to find your way to work. You need to be very, very conscious about how do you get there. But the second, and the third, and the fourth, and the fifth week you know, you're no longer paying attention to how you get there, you just go there automatically. You just do it unconsciously.

So, in the cognitive view, that's how conscious cognitions become unconscious cognitions. They become automatised. They become subliminal, because they no longer need conscious attention.

Now, what's left out of account in that picture is: what do you do with problems that you can't solve? Imagine you think consciously about “how do I get to work?” Well, actually, that's a problem everyone can solve. But what about a problem like “how do I make babies” when I'm five years old? And how do you do that? You can't solve it. You can't solve it, you can't do it. It's just impossible.

In fact, all sorts of problems, especially in childhood, heartfelt problems, problems that really matter to the child. There's just no way they can solve it. “I want to be big”, “I want to drive a car”, “I want to be like daddy” – but you can't. You can't do it, sorry. So why do you keep on pondering how am I going to do it? How am I going to do it? That would be a waste of this very limited resource of consciousness.

So, what I think we do is we render our solutions unconscious, even though they're not yet solutions. They're prematurely or illegitimately automatised. That is how, in my view, the Freudian unconscious – the repressed – comes about. These are premature, illegitimately automatised solutions to life's problems which we can't solve.

Because we haven't solved them, they behave differently from the normally automatised cognitions. Normally legitimately automatised cognitions are automatised, precisely because they no longer require consciousness, because they're no longer problems – they're solved.

These prematurely automatised ones – which is what I'm saying the repressed consists in – are not real solutions. They don't work, so you keep on banging into the fact that this doesn't really work in the world, and this is why they give rise to feeling. Feelings are demands for mental work. Feelings are problems – unsolved problems.

So this is what Freud called the threat of “the return of the repressed.” What's been repressed – in other words, what's been automatised illegitimately – constantly bangs on the door, wants to re-enter consciousness. And this is why they give rise to feeling. That is actually what feeling means. That's what feeling is: feeling is a demand for cognitive work that has not yet been performed, a solution that has not yet been found.

So that's both a standard answer and my own personal view on the matter of the difference between the cognitive neuroscience unconscious and the Freudian unconscious. I think they really are the same place. Thanks, see you next week.