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Criminal Law and Human Condition

Intervista

The meeting between psychoanalysis and neuroscience. Interview with Mark Solms

L'incontro tra la psicoanalisi e le neuroscienze. Intervista a Mark Solms

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What is consciousness?
Are there any differences between the concept of "unconsciousness" according to Freud and the concept and the one developed through modern neuroscience?

Well, I think that the most important thing to say about consciousness, when comparing current views to Freudian views, is that in Freud's time everyone believed that consciousness had to do with perception. Consciousness flowed in from outside. Freud himself believed that consciousness attaches to perceptions. What Freud added, however, is that there is also what he called "affective consciousness", or emotional consciousness. In that respect, Freud was ahead of his time. But where we've shifted now is the realization that the emotional consciousness, which is the consciousness that comes from inside of the subject, is much more important than the perceptual consciousness. Perceptual consciousness, in fact, is secondary to affective consciousness, that is to say that endogenous, internally generated, consciousness is the primary form of consciousness.

So Freud's teachers all thought that consciousness came from the outside; Freud also thought that, but he thought that in addition there is also an affective consciousness. Now instead we believe that the affective consciousness is primary, and that what comes from the outside only becomes conscious via the affective consciousness.

Therefore, I think that there is really a shift of emphasis. Whereas in the past we were more concerned with consciousness as something about the outside world, now we are more concerned with consciousness as something that comes from within us.

What do these conceptions tell us about the motivations that drive our behavior? In other words, are human beings more unconscious than conscious?

Again, Freud was a pioneer in recognizing the importance of motivation and the importance of subjectivity. The importance of what comes from within us. What Freud had not realized though is how much of that has to do with consciousness. Freud thought about the drives, the internal motivating forces. He thought about them much more in terms of unconscious mechanisms, bodily mechanisms, which, in a very indirect way, affect the mind. The way we look on them now is that those internal motivating mechanisms are what generates consciousness, and so they are what generates those feelings like feeling hungry or feeling thirsty or feeling sleepy. This is the fundamental form of consciousness. It is what motivates us to go out into the world. The only reason we are interested in the outside world is that right there that is everything we may need. Therefore, feeling and motivation are part of the same thing. Feelings are the origin of consciousness; motivation is the origin of consciousness too. In essence, consciousness is what allows us to become conscious of the outside world and to attribute value, or quality, to the outside world.

Therefore, in that sense, consciousness is something qualitative. It is evaluative. The world is just things. But the meaning that those things have to us, is imbued via feeling and via consciousness. Therefore, motivation, consciousness and feeling are all part of the same thing.

What is the function of reflective consciousness, or awareness, compared to affective consciousness?

I think that in cognitive science today, we pay too much attention to reflective consciousness, and Freud made the same mistake. When do we think about consciousness? When we try to understand what consciousness is. In science, we start with reflective consciousness, because that is what dominates human consciousness. Therefore, we think this is the natural form. This is the basic kind. This is the entity.

The thing we are trying to understand is our capacity to know our own minds. But that's a very complicated, derivative form. They are just a secondary and tertiary form of consciousness. So I think it's a mistake to start with that. To start with secondary consciousness, that is to say reflective consciousness, is the wrong way to approach the problem of understanding how it all works. First, in fact, we have the primary affective consciousness. That's number one. Secondarily, it attaches to objects, so we have

feelings about things. That is perceptual consciousness. Then we reflect upon our feelings about things. It is a great advance for we humans to be able to di this, but it is only a third step in terms of understanding what consciousness is about. It is a detail; it is an additional capacity, to be able to reflect upon our thoughts about our feelings.

What is neuropsychoanalysis? And what is the new contribution given by neuropsychoanalysis to psychoanalysis?

Let me start by saying that neuropsychoanalysis studies the same thing as psychoanalysis, which is the mind. But in doing so, neuropsychoanalysis use methods which are neuroscientific methods: so that adds different perspectives in terms of what we can learn about how the mind works.

Neuroscientific methods have many advantages over psychoanalytic methods, but that is not to say it can wholly replace psychoanalytic method. The psychoanalytic method has the fantastic power of being able to explore subjective experience, but subjective experience is very hard to study objectively. So to be able to study the mind also as an object – which is what neuroscience provides –, the subject of the mind can be studied as an object by neuroscience. That means that by adding objective methods, by adding neuroscientific methods, we have a whole lot of new tools for looking at how our mind works. That is essentially what neuropsychoanalysis is trying to do.

When it comes to studying consciousness, there is a very good example of that. We would never have known, from psychoanalytic methods alone, that the fundamental form of consciousness is affective. We would not know that. Why do we know that? It is because when you look at the brain anatomically (through neuroscientific methods), you look at which part of the brain generates consciousness.

In other words, you are asking yourself: «*where* anatomically – which is something you see with your eyes – does the consciousness come from?». It does not come from the cortex. It does not come from the outside sensory perceptual parts of the brain. It comes from the deep core. That is an anatomical discovery. It is something that was discovered when damage was done to that part of the brain. And we could see where the damage is. And then we could use all sorts of other methods (like EEG, deep brain stimulation, PET imaging), which can show us which neurochemicals are activated when you're conscious and when you unconscious and so on.

What neuroscientific methods taught us, as far as consciousness is concerned, is that consciousness comes from inside, not from outside, and that it comes from the part of the brain where the drives are, which Freud thought were unconscious. It is very hard to see those things using psychoanalysis only.

Do you believe this new method can be useful in criminal law courts to help judges to take decisions about criminal responsibility?

Well, I am no expert in penal law, of course. What I am saying is based on general principles, but certainly, the general principle must be the more evidence that you have,

the better. And the more different the sources of evidence, the better. If you have only one line of evidence, then you're more likely to make mistakes, because each perspective, each viewpoint comes with its own potential errors. Therefore, to be able to see the same thing, and to check your conclusions, from multiple points of view can only be an advantage.

In fact, each method has its strengths and weaknesses. That is the reason why I do not think that we are at a point yet where you are able to say: «this person is telling the truth and this person is not», by neuroscientific methods. But I think that those methods do help us to be able to understand, at least in general terms, how our mind works.

What do you think about those theories according to which some brain dysfunctions (involving the area of the frontal cortex or of the amygdala) could explain criminal behavior?

Well, certainly there is some evidence along these lines that is available to us. It does not mean that people who indulges in violent criminal behavior have something wrong with their frontal lobes. But it does mean the other way round. If you have damage to your frontal lobes, you are more inclined toward violent and criminal behavior. You have less control over your impulses. This is already well established.

So when you ask: «can neuroscience contribute to jurisprudence?», well, there's a good example of it. People who have damage to the inhibitory parts of their frontal cortex, have less responsibility, are less capable of controlling their impulses than somebody who does not. You could go back even further than that. We do not like to remember this, but there was a time when homosexuality was considered a deviant moral choice. We did not understand the brain mechanisms involved in gender and in sexual orientation at the time.

I think the more we understand these things, the more the more we will be able to understand ourselves.

Do you think that neuropsychoanalysis can tell us something about the personal responsibility in new ways?

Yes, I think neuropsychoanalysis (and neuroscience too) can contribute to understanding these sorts of mechanisms, and ultimately can help us to understand something about personal responsibility. I do not want to, though, exaggerate. And I think it's very easy to exaggerate – you know, we often speak about "neuromania", which is the tendency to think that almost everything could be understood neuroscientifically.

I think that they are philosophical problems about personal responsibility and free will, which will always remain philosophical problems. However, I think that, again, we can make more and more solid our thinking about these sorts of things. Take the example we were talking about a few minutes ago about people who has damage to the inhibitory structure of their brain. They have less responsibility in the sense that they have less capacity to control their impulses. This surely is at the very least a mitigating factor in terms of understanding whether or not (and to what extent) somebody should be held responsible for his or her actions. One step beyond is the case of people who have, for example, REM behavior disorder. In REM behavior disorder, the person is asleep. They can

commit and they do commit violent acts. There, one would think, is no responsibility: if you are asleep and you kill somebody, you cannot be held responsible for that. And they are legal precedents that people are not found guilty.

By contrast, if you are perfectly well awake, perfectly in control of your actions and able to think ahead, you tend to be responsible for your actions. Somewhere between those two, you have people with frontal lobe lesions, with damage to their frontal lobes. They are less responsible, that does not mean there is no responsibility. And then there's all kinds of grades between those. So that's why I said that we should not believe that neuroscience can suddenly remove all of the philosophical dilemmas about personal responsibility.

But I also think that even the simple example I've just given you shows that neuroscience does have something to say. It does have something to add. Fifty years ago, we did not know about REM behavior disorder. A hundred years ago, we did not know about frontal lobe lesions. So certainly, this is progress, this is scientific progress and it has consequences for the world.

More broadly, what do you think about punishment as a way to control behavior and to change behavior?

This is actually quite an old question. There is an enormous literature in psychology about the limitations of punishment, as the leading concept of how one should deal with criminality. On the other hand, there is also a new evidence that speaks very strongly against punishment as being the best way for us to improve our society in relation to criminality. Unfortunately, as you perfectly know, the sorts of things that decide criminal law is not only science. In most countries, there is politics involved. Politics need people's support, and people desire for revenge. Therefore, I think an important task is to educate people, to educate the mass of people about the limitations of punishment. I think that we need to change popular opinion.

We do not need to change expert opinion: the evidence is strong enough. Punishment is not the best way to rectify or to improve our society as far as criminal behavior is concerned. We need to educate the general public.

Another important thing has to do with natural instinct. There is a basic value system there that that we all – as humans – share. For example, there is an innate instinct to attach. Not just humans, all mammals attach. You need somebody to look after you; even birds cannot look after themselves. It is good to have your caregiver looking after you: all mammals know that. We all know that. Our sense of values and our sense of what is right and wrong, it is not all top-down, it is not abstract. At the contrary, it is something rooted in our very nature.

I think the criminal law starts from those basic values. I think it does not start with something abstract; I think it starts with something biological, it starts with something mammalian. That there are basic values, about fear, about rage, about lust, about attachment, about maternal care, about play… and seeking, which is another instinct. It is good to be interested, to be engaged, to be interactive, to be optimistic, and to be

enthusiastic. It is bad to do nothing. To lie and lounge at home all the time, to never try anything, to never do anything, to never explore anything, to never learn anything. This is basically what we say: You're lazy! You know, it is bad!

I believe that these ethics, these values, actually come back down to very basic biological mechanisms and you can see why: biologically, is bad to "do nothing". Because you have to work to eat and to drink.

On the other hand, have a multiple values, multiple conceptions about what is good and what is bad…

Well, that is another thing that is very important. We have learnt in recent years – by which I mean since the 1990s – that there are multiple basic instinctual motivating mechanisms in mammal brain. Precisely because there are a multiplicity of them. Not two: seven. When it comes to the basic emotions, they are seven. Seven basic motivational forces. For all of that reason, the huge part of emotional maturity and learning emotional maturation and emotional development and emotional education is a balance between them. Is very hard to meet each one of those needs, but to meet all them in conjunction with each other, this is what emotional development is all about. Each of us has to learn how to deal with those contradictory needs and values. That is why life is difficult, I think.