Cognitive Processes Seminar, G4270, Summer A 2021: Self-reflective Consciousness Prof. Janet Metcalfe jm348@columbia.edu 212-854-7971 401B Schermerhorn

In this seminar we will investigate self-reflective consciousness, which has been dubbed by Tulving, autonoetic consciousness. This kind of self-reflection is at the very core of our humanness (according to philosophers ranging all the way back to Descartes). Of what it consists is a topic that will be open to debate and scrutiny in this seminar.

One possibility is that it is our ability to mentally time travel. Episodic memory may be at the core. But so, too, is our projection of ourselves into the future, at least in our imaginations. These two may be linked. Another possibility, and one of the main reasons that many people are fascinated by the field, is that metacognition is, itself, this kind of consciousness. Or it may be the precursor. The 'self' appears to be critically involved in this kind of subjectivity. And this kind of subjectivity itself is malleable. We will investigate new research on mind wandering, flow and also on mindfulness. We will take up the issue of whether any non-humans have the kind of consciousness that we call 'mind.'

The ability to understand what others are thinking and to take into account the other in our actions may be foundational for our concept of our selves--an inherent and critical part of self-reflective consciousness. There have been some fascinating findings concerned with mirror neurons, that may play an important role in these processes of conceptual understanding, motor understanding, other understanding, and self understanding.

Our ability to tell whether we are the agent or someone else is, is fundamental, of course, but not automatic. Our autonomy as humans, and our conception of free will, depends upon knowing about our own agency, and yet this capability is fragile. We will look at the breakdown of this capability, and its consequences in schizophrenia, autism and depression. This kind of consciousness not only may not be present in non-human animals, but may also show distinct developmental trends. Finally, our legal system makes certain assumptions about free will and responsibility. We will examine these in light of what we know scientifically about these constructs.

Readings will be mutually chosen by the presenting students for each week and Professor Metcalfe. The readings for the following week will be posted at the end of the day each Friday. A file of potential readings is enclosed, though, depending on student interest and background, other readings may be used.

Evaluation: Each student will co-present two seminars (each worth 25% of the grade). You will meet with me on the Friday in advance about the readings we will assign and, together, you and your partner will be responsible for the class. During the first part of each class you and your partner will make a presentation about the topic. Then we will split into two breakout rooms to discuss the issues. You will be responsible for one breakout room; your partner for the other. The professor will jump between breakout rooms. For the last part of the class we will all meet again, and discuss and resolve the issue. When possible, the breakout rooms will take opposing sides to an issue, and the final part of the class will explore the issues that come to light. 25%

will be assigned for weekly participation when you are not a primary presenter. There will be a 10-12 page paper due on the last day of class that makes up the final 25% of the grade.

Class *Topic* Presenting: Introduction Kinds of consciousness 2 **Evolution of Consciousness** 3 & future projection Metacognition 1, evolution 4 of self-reflection & self Metacognition 2, functions 5 Of metacognition Agency--knowing the self 6 Mirroring and mirror 7 neurons and theory of mind--knowing others 8 Selfishness and psychopathology of empathy Altruism and joint action 9 10 Mind wandering Mindfulness, wonder and 11 curiosity Pathologies of self-other 12 boundaries--schizophrenia, autism

13	Intention, free will, and the law	
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