# **Conceptual Issues in Cognitive Science**

### Symbolic Systems Small Seminar

#### This is a preliminary syllabus and will change!

SymSys 207 Autumn Term 2021 Instructor: Paul Skokowski Stanford University Wednesdays 11:30am-1:00pm Bldg 200, Room 105 Office Hours: By Appointment

Grading: 80% Participation (discussed 1st day of class); 20% Final Paper

\*\*\* MOST READINGS ARE AVAILABLE ON CANVAS WEBSITE \*\*\*

\*\* Please do readings for Week 1 before first class \*\*

#### Week 1, Sept 22nd: Course Overview & Review of Theories of Mind I

Skokowski, <u>One Philosopher is Correct (Maybe)</u>, or <u>here</u>. Australasian Journal of Logic, 2010, 9(1). Descartes, <u>The Passions of the Soul - <u>here</u>.</u> Huxley, <u>On the Hypothesis that Animals are Automata</u> - Read from "Thus far, the prepositions" through to "sum of existence." (note misspelling: 'prepositions' should read 'propositions'!) *Further Suggested Reading:* Descartes, <u>Meditations on the First Philosophy</u> (2nd and 6th) - <u>here.</u> Leibniz, <u>The Nature and Communication of Substances</u>

# Week 2, Sept 29th: Review of Theories of Mind II: Logical Positivism and Behaviorism

Schlick, <u>Positivism and Realism</u> Ryle, <u>Descartes' Myth</u>, from Concept of Mind, 1949. Putnam, Brains and Behavior, <u>here.</u> Further Suggested Reading: Wittgenstein, Philosophical Investigations, Sec. 293 (Canvas) AJ Ayer, The Nature of Philosophical Analysis, Ch. 3 in Language, Truth and Logic Carnap, <u>Psychology in Physical Language</u>

#### Week 3, Oct 6th: Mind as Matter & Functionalism

Place, <u>Is Consciousness a Brain Process?</u>, British Journal of Psychology 47:44-50, 1956.
Smart, <u>Sensations and Brain Processes</u>, Philosophical Review 68:141-56, 1959.
Putnam, *The Nature of Mental States* (or: Psychological Predicates, *Art, Mind, and Religion*, 1965.)
<u>here</u>.
Block, *Troubles with Functionalism*, in Minnesota Studies in the Philosophy of Science 9:261-325 (1978), and in *Readings in the Philosophy of Psychology*, Vol. 1, Ned Block (ed.) Harvard, 1980. (*Read section 1.2, p. 275-278, here*.) *Further Suggested Reading:*Armstrong, *The Causal Theory of the Mind*, <u>here</u>.

Feigl, The Mental and the Physical, here.

#### Week 4, Oct 13th: The Problem of Pain Visitor: Howard Fields, UCSF Neuroscience

M. Aydede, <u>Pain</u> Tye, <u>Pains</u>, Sec. 4.5 of Ten Problems of Consciousness. Fields, H., <u>Setting the Stage for Pain.</u> Fields, H., <u>Pain: An Unpleasant Topic.</u> Further suggested readings: Fields, H., <u>State-Dependent Opioid Control of Pain.</u> Skokowski, <u>Is the Pain in Jane Felt Mainly in her Brain?</u> Kripke, <u>Naming and Necessity</u>, Lecture III, 144-155. (Search for 'Descartes'. Read from the previous paragraph through the last paragraph before the Addendum.) Tye, <u>Another Look at Representationalism about Pain</u>

## Week 5 Oct 20th: Brain, Reduction, and Belief

Churchland, *Eliminative Materialism and the Propositional Attitudes* Paul and Patricia Churchland, Intertheoretic Reduction: A Neuroscientist's Field Guide Gold and Stoljar, A neuron doctrine in the philosophy of neuroscience. Behavioral and Brain Sciences 22(5), 1999. Dennett, *True Believers*, *here. Further suggested readings:* Jerry Fodor, *Special Sciences*, Synthese, 28(2), 1974 Patricia Churchland, Can Neurobiology Teach Us Anything About Consciousness?

## Week 6 Oct 27th: Neuroimaging

Coltheart, M, What has functional neuroimaging told us about the mind (so far)? Coltheart, M, Perhaps functional neuroimaging has not told us anything about the mind (so far). Roskies, A., <u>Brain-mind and structure-function relationships: A methodological response to Coltheart</u> Hardcastle and Stewart, What Do Brain Data Really Show? Further Suggested Reading: Klein, C, Images are not the Evidence in Neuroimaging.

# Week 7, Nov 3rd: Attention and Consciousness

*Visitor: Carlos Montemayor, SFSU Philosophy* Haladjian, H. And Montemayor, C., *Artificial consciousness and the consciousness-attention dissociation* Montemayor, C., *Language and Intelligence* Montemayor, C., *On the evolution of conscious attention* 

## Week 8, Nov 10th: Qualia in a Physical World

Jackson, <u>Epiphenomenal Qualia</u>, Philosophical Quarterly 32:127-36, 1982.
Nagel, <u>What is it Like to be a Bat?</u>, The Philosophical Review, LXXXIII(4), 435-450. Another version <u>here</u>.
Tye, Colours and other Secondary Qualities (On CANVAS). Read Section 5.3, pp. 144-150. (You can also read the previous pages if interested.)
Godfrey-Smith, Varieties of Subjectivity, (On CANVAS). Philosophy of Science, 87, 2020.
Further Suggested Reading:
Tye, <u>Another Look at Representationalism about Pain</u>
Skokowski, Excerpt from Three Dogmas of Internalism (On CANVAS) in Skokowski (ed.), Information and Mind, Stanford: CSLI Press, 2020.
Skokowski, <u>Temperature, Color and the Brain: An Externalist Reply to the Knowledge</u>
<u>Argument</u>, Review of Philosophy and Psychology, 9(2), 2018. (Also on Canvas)
<u>The Brain on Sonar</u>, National Geographic, 2011.

\*\*\* Note Different Time for Bill Newsome Visit: 1:00pm - 2:30pm \*\*\*

Week 9, Nov 17th, 1:00pm - 2:30pm: Neuroscience and Free Will

Visitor: Bill Newsome, Director, Stanford Wu Tsai Neurosciences Institute

Newsome, W., <u>Neuroscience, Explanation and the Problem of Free Will</u>, in Gazzaniga (ed.), The Cognitive Neurosciences IV.

Haggard, P., Nature Reviews Neurosciences, <u>Human volition: towards a neuroscience of will</u>, 2008. Gholipour, B., <u>A Famous Argument against Free Will has been Debunked</u>, The Atlantic, Sept. 2019. Further Suggested Reading:

Roskies, G. 2010. How does neuroscience affect our conception of volition?

Libet, B. 1999. Do we have free will?

Roskies, A.. Why Libet's studies don't pose a threat to free will.

Libet et al., Subjective Referral of the Timing for a Conscious Sensory Experience.

## Week 10, Nov 24th: Thanksgiving Holiday - No Class

### Week 11, Dec 1st: Integrated Information Theory

Tononi and Koch, *Consciousness: here, there and everywhere?* 

Oizumi et al., From the Phenomenology to the Mechanisms of Consciousness: Integrated Information Theory 3.0

Bayne, T., On the axiomatic foundations of the integrated information theory of consciousness Pockett, S., Problems with theories that equate consciousness with information or information processing

Further Suggested Reading:

Cerullo, The Problem with Phi: A Critique of Integrated Information Theory