

## PSY4301B: Exam essays spring 2019

Please write one exam essay, either A or B:

A. Discuss the assumption that to a considerable extent, conscious thinking is a social phenomenon.

B. Discuss why humans are so much smarter than animals. Take as your point of departure what Pinker calls the “cognitive niche” and “metaphorical abstraction.”

### GRADING INSTRUCTIONS

#### Grading instruction, question A

Amongst the articles that are required reading in this course, the paper by Baumeister & Masicampo (B&M) is the most central source when discussing question A. Yet other papers on the reading list also contain relevant material, and Pinker (2010) is worth pointing out. Furthermore, the interested student may know that the notion that consciousness has social functions is not new, and that authors such as Mead, Vygotsky and Humphrey formulated hypotheses on this basis many years ago.

B&M's line of thinking is based on evolutionary arguments: Several researchers have assumed that primates' intelligence developed largely to meet the demands and opportunities associated with social competence, and that this development has continued after early humans arose. Relevant psychological functions include decision making, theory of mind (ToM), empathy, socially relevant complex learning, self-regulation and rule-governed behavior.

Below are some important issues discussed in B&M's paper:

\* Tomasello (1999) has conjectured that participation in a culture through language was the essential step that transformed a primate brain into today's human brain with great cognitive abilities. B&M claim that “Conscious thought is for incorporating knowledge and rules for behavior from culture. The role of conscious thought is to reshape and reprogram automatic responses through input from culture.”

\* B&M reinterpret the primary function of Gazzaniga's “left-brain interpreter.” According to their reading of Gazzaniga, his view is that the main job of the left-brain interpreter is “Furnishing an autobiographical coherence and sense of self.” B&M claim, however, that “a more important function is to render one's activities and experiences in language so that they can be readily shared with others.”

\* B&M believe that consciousness is of great importance for collaboration in groups, as it allows people to discuss and negotiate plans.

\* B&M assume that storytelling requires consciousness. They believe that when experience is structured as meaningful stories, it can help us understand social events and predict the future. Stories can transfer knowledge among individuals, in the form of fiction or gossip, for example.

\* B&M assume that theory of mind (ToM) requires consciousness, and that decisions regarding trust in others require theory of mind. This is important for social interaction, not least because financial transactions are often consequential, and such transactions are influenced by the

parties' degree of mutual trust. ToM is also important for the distribution of tasks in a group, and in order to shape what we expect from others, B&M claim.

\* Self-control or self-regulation requires consciousness. B&M write: "Self-regulation is an important adaptation for culture because it allows people to alter their behavior to bring it into line with the rules, laws, norms, and other standards that the culture has." Illustration: "By simulating distal outcomes, consciousness can activate the relevant motivations. To pursue the example of motivational conflict, it can stoke desires for the long-term goal or desires to live up to the moral ideal, thus making them salient enough to compete with the tempting stimulus." "Without conscious thought, a stimulus might activate some motivation or impulse and produce a response that would be deemed antisocial by others, which could therefore jeopardize the person's position within the social group. Even today, rule-breakers are excluded from groups and relationships through such means as divorce, termination of employment, and imprisonment."

\* On consciousness and the self: "A solitary, solipsistic creature would not find much need to develop a self, except in the most rudimentary sense of unity of body. The job of the self is to relate the animal body to the social group. Culture requires more in the way of selfhood and identity than simpler social systems might. Conscious thought facilitates acting as a self, which is to say a unity that is mindful of its place in society, including roles and moral reputation."

\* One cannot explain one's behavior in the absence of consciousness. "... we suggest the goal of explaining oneself is to secure and maintain social rewards, including approval, validation, and acceptance by the group. The true inner reasons for the action are therefore much less important than the ability to reconcile the actions with the values and norms of the group."

\* In addition to the above perspectives from B&M, relevant points in Pinker's article include his claim that many aspects of human cognition, several of which must be assumed to be at least partly conscious, contribute to social interaction and cooperation. He points out the important role of language in this regard, and hypothesizes that there has been a coevolution of cognition, language, and sociality.

An acceptable essay should touch upon several of the points above, and describe at least some of the reasoning behind them. A better essay has greater breadth and depth than a poorer essay. In addition to this, an outstanding essay sees that there may be objections to B&M's reasoning, and may also be able to include findings and argument from other papers on the reading list or from the scientific literature at large.

### **Grading instruction, question B**

In his 2010 paper (see reading list), Pinker states two hypotheses about human cognition. He explains both succinctly in the paper's abstract. The first hypothesis is that intelligence is an adaptation to a knowledge-using, socially interdependent lifestyle, the "cognitive niche." This embraces the ability to overcome the evolutionary fixed defenses of plants and animals by applications of reasoning, including weapons, traps, coordinated driving of game, and detoxification of plants. Such reasoning exploits intuitive theories about different aspects of the world, such as objects, forces, paths, places, states, substances, and other people's beliefs and desires. The theory explains many zoologically unusual traits in *Homo sapiens*, including our complex toolkit, wide range of habitats and diets, extended childhoods and long lives,

hypersociality, complex mating, division into cultures, and language (which multiplies the benefit of knowledge because know-how is useful not only for its practical benefits but as a trade good with others, enhancing the evolution of cooperation).

The second hypothesis is that humans possess an ability of *metaphorical abstraction*, which allows them to co-opt faculties that originally evolved for physical problem-solving and social coordination, apply them to abstract subject matter, and combine them productively. These abilities, Pinker claims, can help explain the emergence of abstract cognition without supernatural or exotic evolutionary forces and are in principle testable by analyses of statistical signs of selection in the human genome.

The more complete the description of the two hypotheses, the better the student's grade. It is not expected that students will be able to go much beyond description of the hypotheses and their bases. A good grade is certainly due, however, to anyone who -- in addition to a good description -- might be able to carry out something approaching a real discussion based on question B.