PSYCH3850B
Culture, Evolution & Human Social Life

Mondays & Wednesdays 16:30 - 17:45, U-Hall: C640

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OFFICE HOURS:
Thursday 10:00am-12noon.
Or by appointment.

What will we be doing?

Understanding human life on earth in evolutionary perspective is an inherently multi-disciplinary endeavour, covering the full range of the natural and social sciences, as well as subjects in the humanities like history and philosophy. This is because we are biocultural creatures—a complex amalgam of biological and cultural traits. These have allowed to spread across the planet, occupy every ecosystem, and alter the environment to suit ourselves (although now we seem to be on the road to destroying ourselves...) through a vast range of cultural inventions and innovations. One of these inventions is the practice of science itself, which also comprises an aspect of human social and cultural life. Hence, in this course, we will take a meta-analytical approach, studying aspects of human biocultural evolution, as well as critically evaluating scientific theory and practice. We will deal with a variety of issues that take us literally from the cradle to the grave, covering topics as diverse as breastfeeding and the human microbiome to bioethical dimensions of selfhood to the idea that our minds may not be bound by our skin and skull but extend out into the world, to human organ transplants and shifting definitions of death. By the end of the semester, you

will have gained a clear idea of what scientific analyses entail, be able to identify when poor theorizing is being used, and construct a well-supported argument for or against a given position or idea.

How will we do this?

We'll do this by reading, thinking and talking. You will have to come to class prepared, and that means being prepared to do the necessary reading. The whole aim is to help you gain skills of critical analysis and demonstrate your ability to read closely and understand the arguments presented in the papers. If you don't read the material, you simply will be unable to do this.

The course will combine lectures and class room discussions. The class is quite large, and discussions can be easier in smaller groups, but we will persevere. One reason for doing so is that it will allow the course to reflect your interests, and it provides a means by which you can reflect on what you have been reading in a more active way than otherwise might be the case. One important thing to remember is that it is completely fine to admit ignorance of something, or lack of understanding, or to ask a question you might secretly think is daft. Ignorance is the engine of science, and so is failure. This is something we'll discuss in more detail in the course, but being a good scholar or scientist is not being right, but being curious, being honest and being driven by a lack of knowledge/understanding.

What resources will we use?

We'll make use of articles from the primary literature, which are given at the end of the syllabus. Some of these will be empirical scientific articles, some will be review articles and there will be a few philosophical and anthropological pieces in there as well. In some weeks, the readings will relate directly to the lecture content, and in others, they will be designed to add a new slant or perspective on the lecture material. This means it is essential that you both attend the lectures and do the readings in order to get the most out of the course.

How will my efforts in class be assessed?

You will be continuously assessed throughout the semester, and there will a final exam. You will be expected to produce the following:

1. Reading summaries:

In order to ensure you stick to the reading schedule, each week you will write a short summary (half to one page) the assigned readings from the primary literature. You will hand these in at the beginning of Wednesday's class each week, and t**hey will count for 25% of your grade on a pass-fail basis** (i.e., you must hand in a compete set of satisfactory summaries to receive the grade, or else you will fail this component of the course). Unsatisfactory summaries will be returned and will need to be improved in order for them to count. That is, you cannot do the bare minimum and hope to pass this component of the course. This is not because I wish to be a mean and terrible person, but because these summaries really work for class preparation, and will also give you regular practice writing

something every week. Also, although as senior undergraduates you shouldn't need any such encouragement to complete the readings, hard-won experience tells me that the time-management skills of the average undergraduate are rather under-developed.

To accommodate any unavoidable and unforeseen circumstances, like illness, a complete set will comprise 9 out of 10 weeks' worth of readings (i.e., you can have one free pass over the semester).
These summaries are designed to help you read more closely, and reflect on whether you understand the paper, and if not identify where you're having problems. As such, they should be written in your own words, and should not contain direct quotations from the paper. Putting everything in your own words is something you can only do if you understand what you have read. If you don't understand something — great! That's what you're here for: if you understood everything perfectly, you wouldn't need to take any classes. So, if you don't understand something, explain why in the summary. An unsatisfactory summary is one where no effort has been made; an honest effort to understand the paper, and explain your problems is another matter entirely. It provides me with the means to help you, and guide your learning and understanding more thoroughly.

READING SUMMARIES ARE DUE EVERY WEDNESDAY IN CLASS

2. Critique of a published paper:

In addition to these summaries, you undertake a critical analysis of an empirical paper from the psychological literature. You will be given the opportunity to rewrite your critiques based on the feedback you receive, and hence to improve your grade. You can either select from a list of papers I will provide, or you can choose one of your own (subject to my approval). More details on this will be given in class, and we will have a dedicated workshop on this assignment during the semester. **This assignment will count for 35% of your mark.**

Your assessment should do the following (a) identify the overall study question and the soundness of the theoretical reasoning (b) identify if specific hypotheses and predictions are posed (b) assess the strengths and weaknesses of the study's design and analysis with respect to the study aims and (c) assess whether the conclusions are well justified or whether alternative interpretations are possible and, if so, what these might be. By sharpening the skills involved in reading published articles closely, identifying their assumptions (both explicit and hidden), spotting any potential flaws in logic and understanding what constitutes good science, you will be in an excellent position to apply these skills in both your other classes and in your everyday life, when

As the explicit aim here is to help you develop your skills at producing clear, well thought out and cogent arguments, you will have the chance to re-write your assignment, using the comments I provide, in order to improve them. Any re-written work will be remarked and if you do better, you will be awarded this as your final grade for this component. If you end up doing worse, you will receive the best mark as your final grade for this component. Re-writing is therefore a no-cost exercise for you: you can only do better, you cannot do worse.

In order to ensure this remains manageable, given the size of our class, we will run this as follows:

(i) You will hand in a draft of your critique on WEDNESDAY OCTOBER 26th. This will be marked and receive a grade. If you are happy with this grade, then you do not need to rewrite the critique and the mark will be entered as your mark for this component of the course. You can, of course, hand your report in earlier if you wish, and give yourself more re-writing time if needed.
(ii) If you are not happy with your mark, and wish to improve, then you can re-write your critique, the deadline for handing in a rewritten critique for further feedback will be MONDAY NOVEMBER 14th. You can hand it in as many times as you like before this date (the only constraint being the time needed to re-read and re-mark it).
(iii) The FINAL deadline for handing in your critique for its FINAL grade will be: MONDAY DECEMBER 4th.

Important: you should note that merely 'cosmetic' revisions (i.e., improvements to spelling and grammar alone, with no attempt to revise content, are unlikely to receive a higher mark).

A note on formatting:

Your papers do not have to conform to any specific format (e.g., APA). Simply ensure they are printed double-spaced in a sensible, legible font; that your name is clearly shown on the front page; use in-text citations of the form Author (date), and ensure that all sources used are fully referenced at the end of the paper, using this format:
Other, A.N. (date) Title of article. Journal Title Vol. No: Page numbers.
Other, A.N. (date) Title of book. Publisher, Location.
Other, A.N. (date) Title of book chapter. (Title of book, Editors), Publisher, Location.

3. Final exam:

This will consist of short answer questions and/or possibly multiple-choice questions designed to test your conceptual knowledge of the course. This will comprise **40% of your final mark.** Your final grade will be calculated as shown in the table below:

A+	91-100	C+	67-69
A	86-90	C	63-67
A-	81-85	C-	60 – 62
B+	78-80	D+	55 – 59
B	73-77	D	51 – 54
B-	70-72	F	< 50

What is the basis for grading of the written assignment?

To get an A-grade your assignment should have:
• a clear statement of the issue at hand and clear organization
• adequate support and reasoning for its claims
• be interesting and thoughtful
• show logical transitions within and between paragraphs that contribute to a fluent style of writing.
• make a cogent and logical argument
• have few, if any, mechanical, grammatical, spelling, or diction errors.
• demonstrate a command of language in a clear and direct manner.
• uses sources and examples intelligently, correctly, and fairly.

A B-grade assignment shares most characteristics of the above but:
• may have some minor lapses in organization and the development of its argument.
• may lack appropriate or adequate evidence for some of its claims.
• may contain some sentence structures that are awkward or ineffective.
• may have minor mechanical, grammatical, or diction problems.
• may be less distinguished in its use of language.
• may make some good points but not really provide any significant insights.

C-grade assignments will show the following, compared to a B-grade assignment :
• may have a weaker thesis and less effective development of ideas and examples.
• may contain some lapses in organization.
• may contain shifts in voice that make the essay harder to follow.
• may have poor or awkward transitions within or between paragraphs.
• may have less varied sentence structures that tend toward monotony.
• may have more mechanical, grammatical, and diction problems.
• is likely to be less distinguished in its handling of the topic.
• may use sources in ways that are inappropriate or awkward.

D-grade or Failed assignments are seriously flawed. They are likely to:
• have no clear thesis or central topic.
• display random organization.
• lack adequate support or specific development.
• include irrelevant details.
• fail to fulfill the assignment or be unfairly brief.
• contain major and repeated errors in diction, syntax, grammar, punctuation, or spelling.
• plagiarize. The policies governing student conduct can be found on pages 63 to 68 of the University Calendar; a useful guide to avoiding plagiarism may be found on the Library's website at http://www.uleth.ca/lib/guides/plagiarism.asp.

Date	Topic	Readings
September 7th	**Introduction**	No reading
Sept 12 & 14th	**Science as Culture** SCIENCE is often spoken of as though it operates autonomously, and is somehow independent of human beings ("Science tells us...Science has shown"). But science is a human activity, conducted by people who come with a variety of flaws and biases. This week, we'll take a look at scientific activity from this kind of perspective as a means to identify what science is and isn't.	Peterson, D., 2016. The baby factory: difficult research objects, disciplinary standards, and the production of statistical significance. *Socius: Sociological Research for a Dynamic World,* 2, 1-10.

Date	Topic	Readings
Sept 19th & 21st	**Getting Biosocial** EVOLUTIONARY approaches to human behaviour often get bogged down in debates concerning the relationship between nature and nurture, or biology and culture, or instinct and intelligence. These are often placed in opposition, despite the fact that we know this is a false dichotomy. Here, we will continue the discussion from last week by considering how we can think of human behaviour as biocultural, and what this means for our understanding of ourselves, and for how we conduct scientific studies of human behaviour.	Marks, J., 2013. The Nature/Culture of Genetic Facts. *Annual Review of Anthropology,* 42, pp.247-267. Derksen, M., 2007. *Cultivating human nature*. New Ideas in Psychology, 25(3), pp.189-206.
Sept 26th-28th	**Natural Selection and Human Health** THIS week, we'll continue with the theme touched on last week concerning natural selection and human health. First, we'll consider the fact that natural selection doesn't care about our health, before considering the issue of public health in evolutionary perspective more broadly.	Page, A.E., Viguier, S., Dyble, M., Smith, D., Chaudhary, N., Salali, G.D., Thompson, J., Vinicius, L., Mace, R. and Migliano, A.B., 2016. Reproductive trade-offs in extant hunter-gatherers suggest adaptive mechanism for the Neolithic expansion. *Proceedings of the National Academy of Sciences,* 113(17), pp.4694-4699. Omenn, G.S., 2010. Evolution and public health. *Proceedings of the National Academy of Sciences,* 107(suppl 1), pp.1702-1709.

Date	Topic	Readings
Oct 3rd & 5th	**How to make a human** THIS week, we take a biocultural approach to human development, which means discussing some very old ideas along with some new ones. Specifically, we will consider aspects of Bowlby's attachment theory along with Harlow's notorious experiments on infant monkeys, plus Vygotsky's theory of children's cognitive development. We will consider how these have been brought up to date by evolutionary theorists such as Sarah Hrdy.	Vicedo, M., 2010. The evolution of Harry Harlow: from the nature to the nurture of love. *History of psychiatry,* 21(2), pp.190-205. Hrdy, S.B., 2007. Evolutionary context of human development: The cooperative breeding model. *Family relationships: An evolutionary perspective*, pp.39-68.
Oct 3rd & 5th	**Building Babies** I'LL be perfectly honest, this week we'll simply be discussing some aspects of human birth and development that I find fascinating. The reason why I find them fascinating is, however, because they make you think of human birth and development in new, interesting, and highly biocultural, ways.	Levy, B.R., Chung, P.H. and Slade, M.D., 2011. Influence of Valentine's Day and Halloween on birth timing. S*ocial Science & Medicine,* 73(8), pp. 1246-1248. Schaal, B., Marlier, L. and Soussignan, R., 2000. Human foetuses learn odours from their pregnant mother's diet. *Chemical senses*, 25(6), pp.729-737. Marcobal, A. and Sonnenburg, J.L., 2012. Human milk oligosaccharide consumption by intestinal microbiota. *Clinical Microbiology and Infection,* 18(s4), pp.12-15.
Oct12th (no class on Oct 10th)	**WRITING WORKSHOP**	

Date	Topic	Readings
Oct 17th & 19th	**Being your "self"** THIS week, we'll consider a more psychological topic that lends itself to a more biocultural understanding: we will be thinking more deeply about what it means to have a "self", and ideas suggesting that the individual self is fundamentally social: if we were not as social as we are, we would not develop the kinds of selves that seem to characterise human beings.	Bratton, M.Q. and Chetwynd, S.B., 2004. One into two will not go: conceptualising conjoined twins. *Journal of medical ethics*, 30(3), pp. 279-285. Gawande, A. 2009. Hellhole. The New Yorker http://www.newyorker.com/magazine/2009/03/30/hellhole
Oct 24th & 26th	**The looping effects of human kinds** Here, we'll consider the ideas of Canadian philosopher, Ian Hacking, who considers how the reflexive nature of human cognition, that we discussed last week, can lead to the production of new 'human kinds'. His argument has relevance to how we think of psychiatric conditions, and how the social sciences may help to generate their own subject matter. We'll also consider how human technology can help transform traditional categories and require us to think differently about what counts as 'natural'.	Hacking, I., 1995. The looping effects of human kinds. In: *Causal cognition: A multidisciplinary debate,* pp.351-394. Inhorn, M.C. and Birenbaum-Carmeli, D., 2008. Assisted reproductive technologies and culture change. *Annual Review of Anthropology*, 37(1), pp.177-196.

Date	Topic	Readings
Oct 31st & Nov 2nd	**Niche construction** NICHE construction is the idea that organisms create their own environments in ways that lead to new selection pressures operating on them, that is, an organisms' own activity can lead to a new set of selection pressures, and so organisms can, in effect, select for their own genes. Here, we will consider this debate in the context of human evolution and sociality, extending our discussion from last week about what it means to be 'natural'.	Scott–Phillips, T.C., Laland, K.N., Shuker, D.M., Dickins, T.E. and West, S.A., 2014. The niche construction perspective: a critical appraisal. *Evolution*, 68(5), pp.1231-1243. Downey, G., 2016. Being human in cities: phenotypic bias from urban niche construction. *Current Anthropology*, 57(13), pp.S52-S64.
Nov 7th and 9th	**No classes**	**Reading week**
Nov 14th & 16th	**social learning and cultural variation** THE capacity to learn socially and cooperate with others on a large scale are distinctive human features. This week, we'll consider these capacities from the perspective of gene-culture co-evolution, and show how insights from this work can be tied to some of the classic research in social psychology, by the likes of Stanley Milgram and Solomon Asch.	Mesoudi, A., 2015. Cultural evolution: A review of theory, findings and controversies. *Evolutionary Biology,* pp.1-17. Mesoudi, A., Chang, L., Murray, K. and Lu, H.J., 2015. Higher frequency of social learning in China than in the West shows cultural variation in the dynamics of cultural evolution. *Proceedings of the Royal Society of London B: Biological Sciences,* 282(1798), p.20142209.

Date	Topic	Readings
Nov 28th & 30th	**Extended Minds, Scaffolded Minds** IS the mind confined purely to the head as tend to assume? Philosophers Andy Clark and David Chalmers suggest otherwise in their classic paper "The Extended Mind". They argue that humans recruit and exploit various kinds of material objects to augment and enhance the power of our biological brains, with the result that the boundaries of the cognitive system are expanded, spilling over to the environment. Kim Sterelny, another philosopher of mind, has suggested, however, that thinking in terms of niche construction and "scaffolding" is a more productive way to think about human minds. Here, we discuss these alternative viewpoints, assess which seems more appropriate for understanding human behaviour, and ask if there's a 3rd way that brings these together.	Clark, A. and Chalmers, D., 1998. The extended mind. *Analysis,* 58(1), pp.7-19. Sterelny, K., 2010. Minds: extended or scaffolded?. P*henomenology and the Cognitive Sciences*, 9(4), pp.465-481.

Date	Topic	Readings
Dec 4th & 6th	**Inventing a new death** DEATH would seem to be a wholly biological phenomenon. You're either alive or you're dead. As we'll discover here, it isn't actually that simple. How we define death is subject to variation across time and place; it's even possible to be 'twice dead'. Looking at death from a biocultural perspective brings us full circle because there are similar debates concerning reproductive rights and the beginnings of life. And what better way to celebrate the end of the semester and the arrival of the holidays than thinking about death?	Lock, M., 2004. Living cadavers and the calculation of death. Body & Society, 10(2-3), pp.135-152. Nair-Collins, M., 2015. Clinical and ethical perspectives on brain death. Medicolegal and Bioethics, 5(September), pp.69-80.