# ORIGINS AND EVOLUTION OF LANGUAGE 2022-2023

## UNDERGRADUATE ASSESSMENT

**Essay 1**: a 1500-word essay on _one_ topic selected from the list below, worth 50% of the course mark. Deadline: 12.00 noon, Thursday 2nd March 2023.

**Essay 2**: a 1500-word essay on _one_ topic selected from the list below (must be a different topic than that tackled in essay 1), worth 50% of the course mark. Deadline: 12.00 noon, Thursday 13th April 2023.

## MSC ASSESSMENT

**Essay 1:** a 1500-word essay on _one_ topic selected from the list below, worth 40% of the course mark. Deadline: 12.00 noon, Thursday 2nd March 2023.

**Essay 2:** a 1500-word essay on _one_ topic selected from the list below (must be a different topic than that tackled in essay 1) or your own topic (see below), worth 60% of the course mark. Deadline: 12.00 noon, Thursday 13th April 2023. For essay 2, MSc students have the option of setting your own question, rather than selecting from the list below: any such question must be agreed in writing by Kenny by noon on Monday 3rd April (remembering to allow time to discuss – if you want to set your own topic, contact Kenny early).

**Word limits are <u>excluding</u> the references section:** the references section does not count towards the 1500 word limit. Obviously we don't want to penalize you for reading and citing widely.

**Word limits are <u>strict</u>:** you will be penalized if you go over 1500 words.

**If you have questions about the assessments**, they must be asked by the following deadlines – I won't respond to questions between these dates and the hand-in because I'll be on strike (essay 1) or on holiday (essay 2).

Essay 1: no questions after 12 noon, Friday 24th February

Essay 2: no questions after 12 noon, Friday 7th April

**General advice on the essays, for both undergraduates and MScs**

First and most importantly, **use the PPLS Skills Centre!** They can give you brilliant advice on all the stuff I mention here, and more.

The essay is your opportunity to show that you understand more than the content of the lectures and set readings – you should take it as a chance to show that you have carried out independent reading, can produce your own interpretation of the material you have read, and use it to build your own argument. The topics were chosen with this in mind, and are often areas we have touched on in the lectures or readings but which leave lots of room for you to explore the literature independently and develop your own ideas. To help you get started on each topic, I have provided a couple of potential 'starter' references for each topic that you might find useful – you should use these as your gateway into the literature (see advice below on how to do this). **Essays which don't depart significantly from the set content of the course (lecture and tutorial readings) and/or which only work with the 'starter' readings will receive a very poor mark.** We are looking for critical engagement with the literature – ideally your essay will show that you have approached the question in an open-minded but skeptical manner, carefully seeking out, scrutinizing and evaluating the evidence behind theories and ideas, and drawing your own conclusions that represent a fair consideration of the available evidence.

Organize your essay in sections: an introduction (describing the topic, why it is interesting and outlining your position/what you are going to argue) followed by some content sections and a conclusion. Use informative section headings.

Be clear and to the point in your argumentation and precise in the terminology – the word limits are quite tight, so I expect you to be concise. Simple clear language is easier to read and more concise; no need to aim for flowery language to impress us.

Provide references in a consistent format – I prefer the APA style, but another style is fine if you are consistent. For APA citations you can find a helpful guide here on in-text citation format and the format for the reference sections in the Purdue University Online Writing Lab pages (start at "In-text citations: The basics"), and you can see the sample references below for an idea of the APA format for reference sections.

There's no need to avoid the 1st person singular: I would much rather read "I will argue" than "We will argue" (this is an individual assignment, who is "we"?) or god forbid "It will be argued here".

**Advice on how to find additional relevant articles**
Having a quick google on "language evolution" isn't really going to help very much, so you need to be more targeted in identifying relevant articles to read. The starter articles for each topic are intended to give you an opening into the literature, so you should use them to guide your initial search (but don't feel constrained by them). There are several ways you could find more additional articles.

You could check for other relevant work by the same authors: most people have a personal and/or institutional webpage listing some or all of their publications (e.g. here's mine), and they might also have a profile on Google Scholar (e.g. here's mine).

You can also work outwards from a focal paper, using its reference list and looking for it in the reference lists of other papers. You can look at the reference list of the paper you are reading and chase up papers that they cite – if the people who wrote the focal paper did a decent job of their lit review, the major relevant papers will be included there, which will allow you to work backwards in time from your focal paper. In order to work forwards in time, you have to find papers which cite the focal paper you are reading – if someone has come along subsequently and done something on the same topic, they should cite your focal paper. Fortunately, various tools exist to make this kind of search easier. Google Scholar is useful here – for every paper, it provides a list of papers which cite that paper, allowing you to work forward in this way. Web of Science makes it easy to go both forwards and backwards in time – find your focal paper on there (e.g. search by the title), and you can access a linked list of papers it cites and papers that cite it. And of course you can apply these procedures recursively – there may be relevant papers in the papers that cite a paper that cites your focal paper, and so on.

A combination of these techniques should get you started, and will probably generate more papers than you can possibly read, so you need to be somewhat selective. Use the title and abstract of a paper to get the gist of what it's about, and pursue the papers which you think will provide the most relevant evidence, or which are most helpful (or most difficult) for the argument you are trying to develop. And look for converging evidence – few single papers provide an uncontroversial and definitive "truth" on any subject, but a converging body of work showing the same sort of results should give you more confidence.

**A word on ChatGPT**
Bear in mind that the University's academic misconduct guidelines make it fairly clear that your assessed work is supposed to be your own work, and that submitting an essay written by a machine could be classed as plagiarism, falsification, cheating or personation. You should also be aware that mechanisms for detecting machine-generated text. Having played around with ChatGPT a bit myself (including experimenting with its responses to these essay questions), I'd add the following observations: 1) the text it produces is obviously incredibly impressive for a machine, but for an undergrad or Masters essay is quite superficial and lacks the critical engagement and evidence of both wide and specialized reading we are looking for (which is slightly ironic since it's certainly read quite widely); 2) its answers sometimes contains interesting or unexpected links that could be worth pursuing, but it's often prone to fantasizing evidence that does not exist; 3) it does particularly badly with references, and frequently produces references to papers which either do not exist (they are often hybrids of existing papers) or which do not contain content relevant to the claim they are being cited to support.

**ESSAY TOPICS**

[Nearly all articles cited here can be accessed via DiscoverEd; if not, I have included a preprint link]

1. A protolanguage is an intermediate stage between the non-linguistic communication systems of early hominids and modern language. Were the earliest forms of protolanguage more akin to music, or pantomime? Whatever your answer is, be sure to explain what sources of evidence you can use to support your argument, and how your hypothesis can be tested.

   Arbib, M. A. (2005). From monkey-like action recognition to human language: An evolutionary framework for neurolinguistics. *Behavioral and Brain Sciences, 28,* 105–167.
   Fitch, W. T. (2006). The biology and evolution of music: A comparative perspective. *Cognition, 100,* 173-215.

2. The capacity to reason about the mental states of others – mindreading or theory of mind – plays a key role in language learning and language use. This relationship could be one-way (theory of mind constitutes a precondition for language) or *reciprocal*, where access to language facilitates learning about mental states in others. Does this reciprocal relationship exist, and if so what does it tell us about the co-evolution of language and theory of mind?

   Heyes, C. M. & Frith, C. (2014) The cultural evolution of mind reading. *Science, 344*, 1243091.
   Woensdregt, M., & Smith, K. (2017). Pragmatics and language evolution. In M. Aronoff (ed.), Oxford Research Encyclopedia of Linguistics. Oxford: Oxford University Press. [Preprint version]

3. Is language a tool for thought, where externalizing those thoughts for others is a secondary function? Or a tool for communication, where its function in externalizing our thoughts and sharing them with others is crucial to understanding the evolution of language?

   Asoulin, E. (2016). Language as an instrument of thought. *Glossa, 1,* 46.
   Piantadosi, S. T., Tily, H., & Gibson, E. (2012). The communicative function of ambiguity in language. *Cognition, 122,* 280-291.

4. There is a small industry in studying the ability of humans and non-human animals to learn artificial grammars. Some people think this work is important for understanding key cognitive differences between humans and non-human animals, and therefore the evolution of language in humans. Others think it's either badly done or conceptually flawed or both. What do you think, and why?

   de Vries, M. H., Monaghan, P., Knecht, S., & Zwitserlood, P. (2008). Syntactic structure and artificial grammar learning: The learnability of embedded hierarchical structures. *Cognition, 107,* 763-774.
   Milne, A. E., Wilson, B., & Christiansen, M. H. (2018). Structured sequence learning across sensory modalities in humans and nonhuman primates.

5. A recent trend in evolutionary linguistics has been to simulate the process of language evolution experimentally, studying how languages are shaped by their learning and use in laboratory populations of adult humans. However, adult humans may not be the ideal population to use for these studies, for example because they already know at least one natural language. Is this concern valid, and can it be overcome by studying EITHER humans communicating using a novel medium e.g. drawings) OR computational simulations of the same processes? [Your answer should focus on communication in a novel medium <u>or</u> simulation, not both]

   Fay, N., & Ellison, M. E. (2013). The cultural evolution of human communication systems in different sized populations: Usability trumps learnability. *PLOS ONE, 8,* e71781.
   Kirby, S., Tamariz, M., Cornish, H., & Smith, K. (2015). Compression and Communication in the Cultural Evolution of Linguistic Structure. *Cognition, 141,* 87-102.

6. Languages spoken in different communities differ from one another. To what extent is this cross-linguistic variation shaped by non-linguistic factors, such as the different physical environments or social systems in which they are spoken?

   Wray, A., & Grace, G. W. (2007) The consequences of talking to strangers: Evolutionary corollaries of socio-cultural influences on linguistic form. *Lingua, 117*, 543-578.
   Everett, C., Blasi, D. E., & Roberts, S. G. (2015). Climate, vocal folds, and tonal languages: Connecting the physiological and geographic dots. *Proceedings of the National Academy of Sciences, USA, 112,* 1322-1327.