

Guided Research in Linguistics and English Language Seminar Descriptions

Please note that some seminars are available in both semester 1 and semester 2 so entries below may be repeated. You are welcome to indicate you would be willing to take a seminar in either semester by listing it in choices, please note that it is not possible to take the same seminar twice. As a reminder, you will need to provide a ranked list of at least three seminars you would like to take.

Guided Research seminars are available at 10 or 20 credits. Regardless of credit weighting, the seminar content will be the same; the only difference is in the assessment whereby the 10-credit variant will have a slightly shorter final assessment and the midterm carries more weight than the 20-credit variant. Note the following two constraints, which are in place to help us provide access to as many students as possible to the seminars they rank highest:

- Maximum one Guided Research course per semester
- If you list two Guided Research courses, at least one must be for 20-credits

For those students who transferred from another programme to enrol on MSc Linguistics, some recommendations have been made by academic staff in order to 'specialise' in your original research area. Please note that these are only recommendations and you are welcome to rank seminars in the order of your interests; and similarly, due to the quota restrictions on each seminar, it may not be possible to 'specialise' entirely in your original research area.

No specific recommendations have been made for those who transferred from MSc English Language, choices should reflect student interests.

Seminars in semester 1

Agreement

Peter Ackema <https://www.ed.ac.uk/profile/peter-ackema>

A lot of natural languages (though not all) show a curious phenomenon: the morphological shape of one element in a sentence can vary depending not on its own properties, but on the properties of another element in the sentence. This is what is known as agreement. In English, for example, the finite verb in a clause shows a shape ending in *-s* when the subject of the clause is third person singular, but not otherwise: *she likes to sing* versus *I like to sing*. In other languages, we encounter agreement for other features besides person and number as well, such as gender. We also encounter agreement between other elements than subject and finite verb, for instance between possessor and possessed in a possessive Noun Phrase. The phenomenon of agreement can shed an interesting light on the interplay of morphology, syntax, and semantics, as the morphology by which agreement expresses itself can be influenced by factors such as the word order between the 'controller' and the 'target' of agreement, the case morphology born by the controller, and the semantics of the controller.

We will start by going through the first three chapters of Greville Corbett's book *Agreement* (Cambridge University Press, 2006), and then look at literature that discusses the syntactic, morphological and semantic factors that condition agreement. Depending on people's interests, we can also look at issues such as how agreement is processed / produced and the acquisition of agreement.

Bilingual Interaction

Joseph Gafaranga <https://www.ed.ac.uk/profile/joseph-gafaranga>

A distinguished linguist (Jakobson) is reported to have said that bilingualism is the “real problem of linguistics”. The aim of this seminar is to introduce participants to the study of bilingualism, focusing on its conversational dimension.

Content

a) Setting the background

The study of bilingual interaction has been undertaken against the background of negative attitudes towards its object, namely the use of two or more languages in the same conversation. This section will highlight this background and clear other preliminary issues.

b) Rehabilitation of bilingual interaction

Given this background, much of the research so far can be described as a rehabilitation effort. This section will survey the main contributions to that effort and reflect on the way forward for the discipline.

c) Applied language alternation studies

Knowledge about bilingual interaction has been used to address real-life problems in areas such as language socialisation, language in education and language in the workplace. Participants will be introduced to this fast-growing area of applied research.

Three types of learning activities are planned: practical tasks, reading and firming-up sessions. Learning will be assessed by means of (a) a short critical reading task and (b) a longer task (e.g. a research proposal). Guidance on both pieces of assessment will be provided in due course. There is no one textbook for this seminar. Instead a theme-by-theme reading list will be included on Learn.

Research Area:

- Applied Linguistics
- Developmental Linguistics

Cross-linguistic variation and universals in semantics

Wataru Uegaki <https://www.ed.ac.uk/profile/wataru-uegaki>

The aim of this course is to introduce students to the state-of-the-art research on *cross-linguistic variation and universal in semantics*. We will discuss semantic universals and variation in a variety of empirical domains, ranging from relatively well-studied domains, such as colour terms and quantifiers, to under-studied areas such as modal auxiliaries and attitudinal predicates. Each class will consist of a seminar block and an exercise block. The former will involve student-led presentation of a research article and associated discussion. In the latter, the students will have chances to check their understanding of the materials by trying to come up with *possible and impossible languages*, given the theoretical proposals discussed in the seminar block.

By the end of the course, students will familiarize themselves with known semantic universals and variation in a number of empirical domains and understand a range of theoretical explanations for them. Furthermore, the students will be able to solidify their understanding of formal machineries in semantics through readings and discussion.

Descriptive analysis of intransitive verbs in Shilluk

Bert Remijsen <https://www.ed.ac.uk/profile/bert-remijsen>

In this data-driven research seminar, students engage with the descriptive analysis of intransitive verbs in Shilluk, a West Nilotic language spoken in South Sudan. This topic, on which there are no earlier publications, presents challenges – and opportunities to develop expertise – in a) syntax and semantics and b) morphophonology, phonology and phonetics. As for a), intransitive verbs appear to divide into different form-based classes depending on whether they are antipassive, unaccusative, or ambitransitive, and they also present derivations affecting voice and valence. As for b), Shilluk intransitive verbs present rich systems of morphological marking, and much of this marking involves tone and vowel length.

During the first two weeks, you will gain understanding of key grammatical concepts, Shilluk morphosyntax, and Shilluk phonology. From week three onwards, we start video-call sessions with a Shilluk consultant, and the course becomes more hands-on. From this point, students will participate, on a weekly basis, in a) a whole-group elicitation session; b) a small-group elicitation session; and c) a whole-group session to discuss findings and problems. As seen from this schedule, the course requires active involvement, and synchronous learning activities predominate. Willingness to spend considerable time working on your session notes is essential.

This seminar builds on and extends your expertise in syntactic / semantic phenomena such as semantic roles and tense-aspect-modality. You will also develop expertise in ear-based transcription, and use Praat to deal with tone and vowel length. As a function of the availability of native-speaker consultants, the course topic may shift to the same phenomenon (intransitive verbs) in a closely-related West Nilotic language (Nuer or Dinka)

(also available in semester 2)

Disentangling bilingualism and language impairment

Vicky Chondrogianni <https://www.ed.ac.uk/profile/vicky-chondrogianni>

Bilingual children with typical development and with limited exposure to one of their two languages display a linguistic profile that resembles that of children with language impairment. In this seminar, we will discuss why bilingual children with otherwise typical development may exhibit such profiles and how we can differentiate them from children with language and/or communication impairment. We will review the linguistic and cognitive profiles of preschool and school-aged bilingual children with typical development and of children with three types of developmental language disorders: Developmental Language Disorder (DLD), autism spectrum disorders (ASD) and developmental dyslexia (DD). We will ask in what ways typically developing children differ from their language / communication-impaired peers at the level of morphosyntax, vocabulary acquisition, phonological working memory and executive functioning.

Provisional Outline:

Week 1: Intro to childhood bilingualism

Week 2: Intro to developmental language disorders (DLDs)

Week 3: Phonological working memory in bilingualism and DLDs

Week 4: Morphosyntax in bilingualism and DLDs

Week 5: Sentence processing in bilingualism and DLDs

Week 6: Vocabulary and lexical organisation in bilingualism and DLDs

Week 7: Executive functioning in bilingual children and children with DLDs

Week 8: Is there a cumulative effect of bilingualism on language impairment?

Week 9: The way forward: bilingual assessments

The first assessment is a data analysis exercise and the second a critical essay.

Research area:

- Developmental Linguistics

Early Germanic Dialects

Bettelou Los <https://www.ed.ac.uk/profile/bettelou-los>

The first part of this seminar introduces students to a number of Early Germanic Dialects (Gothic, Old Norse, Old Saxon, Old Frisian, Old English and Middle English) and significant developments in their phonology, morphology, syntax and lexicon. We will also discuss aspects of the surviving texts like their reception, i.e. what audience they were meant for, and what purpose they served; and what text type they represent (genres, translations) – these are all aspects that affect how useful these texts can be for linguistic research.

The first assessment is a short assignment on the linguistic aspects. The second part of the seminar involves an independent piece of work from a range of topics on offer, on linguistic as well as more literary ("reception") aspects.

(also available in semester 2)

Endangered Languages and Language Documentation

Laura Arnold <https://www.ed.ac.uk/profile/laura-m-arnold>

Language endangerment is one of the most pressing issues in linguistics today: thousands of the world's minority languages are under threat, as speakers shift to regional and national languages of social, economic, and educational prestige. In this course, we will explore the consequences of this situation for speakers of these languages, the discipline of linguistics, and the global community at large. In particular, we will focus on the relationship between language endangerment and the rapidly emerging subfield of language documentation, the aim of which is to create as comprehensive a record as possible of the language and culture of a given speech community.

Not only do these documentations serve to create permanent records of local cultural, historical, and biological knowledge; but they also contribute primary linguistic data from little-studied languages for further analysis, regardless of theoretical framework. By the end of this course, students will have a good understanding of the issues surrounding language endangerment; they will also have developed a strong foundation in the history and theory of language documentation, and gained a working knowledge of best-practice procedures in documentation, including methods, hardware and software, ethics, community engagement, project planning, and funding applications.

Assessment will be: (i) an annotated bibliography, due mid-semester; and (ii) a mock grant proposal for a documentation of a language of the student's choice, due at the end of the semester.

Experimental Approaches to Language Evolution

Simon Kirby <https://www.ed.ac.uk/profile/simon-kirby>

The last ten years has seen an explosion of interest in empirical approaches to the origins and evolution of language. Whereas once it was seen as being primarily amenable only to speculative theories, it is now considered a topic that can be investigated in the experiment lab. Arguments about the origins of language based only on appeals to plausibility are now being replaced by ones that stand or fall on the results of experiments with human participants. We will look at why this has happened, and how it is possible to make hypotheses about language origins that make predictions which can be tested experimentally.

We will cover two of the main paradigms in this new area - the silent gesture paradigm, and iterated learning. These recreate in a miniaturised lab setting the process of language emergence and language transmission respectively. Students will be organised into small teams and develop, run, and analyse their own silent gesture experiments. These experiments require participants to communicate a range of meanings (usually displayed as cartoon illustrations, videos, or written phrases) using only gesture and no speech. In doing so, they spontaneously improvise strategies (for example, word order) to convey information. These are remarkably consistent across participants but do not necessarily reflect the native language the participants speak. Because of this, silent gesture is seen as a window onto the cognitive biases that may be at play in the very early stages of language emergence.

Research area:

- Developmental Linguistics

(also available in semester 2)

Global Englishes

Claire Cowie <https://www.ed.ac.uk/profile/claire-cowie>

In this seminar, students will explore recent case studies of contact between English and other languages in intensely multilingual environments. For historical reasons, English is assumed to be the code associated with globalisation in these situations. However, they are more likely to be characterised by a complex mix of contact Englishes (such as Singlish or Nigerian Pidgin English), which have local associations, L1 Englishes such as American or British English, and regional languages. Depending on the context, platform or medium, there are different rules of engagement and meanings for these codes. Understanding of the case studies will be supported by more theoretical reading in the subfields of sociolinguistics of globalisation, World Englishes, and translanguaging.

Case studies feature: Bollywood and Nollywood films, migrant groups in Singapore, hip hop artists in South Korea and Japan, domestic and medical labour outsourced from the Philippines, outsourced voice based services from India, online forums connecting the Nigerian diaspora, English as a Medium of instruction in universities in the Middle East.

We will pay attention to the formal properties of varieties of English in each situation; and also the language ideologies associated with the language contact phenomena. The short assessment will consist of a literature review; in the longer assessment students will undertake a qualitative analysis of globalisation and language contact in a form of media (film, music, social media, or online forum).

Research Area:

- Applied Linguistics

Historical Phonology and Phonological Theory

Patrick Honeybone <https://www.ed.ac.uk/profile/patrick-honeybone>

This seminar will be based on reading, with some taught input. We will consider a fundamental issue in historical phonology which links closely, and in several different ways, to concerns in theoretical phonology: is phonological change exceptionless? We will see that there is major disagreement about this in the literature, and we will consider how that can be the case. You might think that the answer should be easy: yes or no? But we will see that the question is, in fact, difficult (and therefore interesting) to answer in multiple ways. For example, there is disagreement about how to interpret certain types of historical data and cases of change, and there is also even disagreement about what we mean by 'phonological change'.

The first part of the seminar will set the scene and will consider some of the basic issues, with some taught input; we will then move on to consider a set of readings which engage with this issue from a number of perspectives, covering such topics as the existence of 'lexical diffusion', the distinction between change in lexical and postlexical phonology, and the existence and interpretation of frequency effects. We will see that attempts to answer this basic question ('is phonological change exceptionless?') have connected with fundamental issues in phonological theory and arguably go to the heart of our understanding of what phonology is.

Lexical Processing

Itamar Kastner <https://www.ed.ac.uk/profile/itamar-kastner>

This seminar will provide an overview of the central questions in lexical processing - the study of how humans comprehend individual words. We will examine the various processes taking place from the moment we first read or hear a word until we have a complete mental representation of it. This involves understanding why the past tense of a nonce word like "gleed" can be "gled" (alongside "gleeded"), whereas that of "bledge" would be "broge"; how exactly we figure out that a "writer" is someone who writes but a "corner" is not someone who corns; and under what circumstances do speakers of Arabic read words differently than speakers of English. Starting from the original wug study and working our way towards cutting-edge neurophysiological methods, we will see how technological advances have allowed researchers to give increasingly detailed answers to the central questions of morphological processing and word structure. Throughout the seminar, our focus will be on how this work can inform research in formal linguistics, while gaining a general overview of the psycholinguistic findings and models.

Students will submit a project proposal as their main form of assessment. This proposal will outline an experiment that could be run in the future, letting students apply the methods surveyed in the seminar to their own interests.

(also available in semester 2)

Multimodality

Sumin Zhao <https://www.ed.ac.uk/profile/sumin-zhao>

It is a truth universally acknowledged that linguistics is the scientific study of language. However, some linguists are interested in things like gestures, emojis, comics, and selfies!

In this seminar, we will look at the works of these misfits. Through a mixture of readings, multimedia resources, and learning activities, we will explore the fascinating field of multimodality and its relation to various branches of linguistics. We will investigate gestures and embodied resources in naturally occurring conversation [approx. 3 Weeks], the grammar of comics [approx. 2 Weeks], self-portraiture, selfies and grammatisation [1 Week], and emoticons, kineticons & emojis [approx. 2 Weeks].

You will complete two assessments. The first will be a multimedia essay (video essay, photographic essay or comic strips) on types of co-speech gesture and their functions. The second will be a small research project on one of the multimodal resources we discussed in the seminar. High-level analytical skills in syntax and phonology are essential for succeeding in this seminar.

Online Experiments for Language Scientists

Kenny Smith <https://www.ed.ac.uk/profile/kenny-smith>

Many areas in the language sciences rely on collecting data from human participants, from grammaticality judgments to behavioural responses (key presses, mouse clicks, spoken responses). While data collection traditionally takes place face-to-face, recent years have seen an explosion in the use of online data collection: participants take part remotely, providing responses through a survey tool or custom experimental software running in their web browser, with surveys or experiments often being advertised on crowdsourcing websites like amazon mechanical turk or prolific academic. Online methods potentially allow rapid and low-effort collection of large samples, and are particularly useful in situations where face-to-face data collection is not possible (e.g. during a pandemic); however, building and running these experiments poses challenges that differ from lab-based methods.

This course will provide a rapid tour of online experimental methods in the language sciences, covering a range of paradigms, from survey-like responses (e.g. as required for grammaticality judgments) through more standard psycholinguistic methods (button presses, mouse clicks) up to more ambitious and challenging techniques (e.g. voice recording, real-time interaction through text and/or streaming audio, iterated learning).

Each week we will read a paper detailing a study using online methods, and look at code (written in javascript using jspsych) to implement a similar experiment. We'll also look at the main platforms for reaching paid participants, e.g. mturk and prolific, and discuss some of the challenges around data quality and the ethics of running on those platforms. No prior experience in coding is assumed, but you have to be prepared to dive in and try things out; the assessment will involve elements of both literature review and coding.

Research area:

- Developmental Linguistics

Quantifiers and numbers

Chris Cummins <https://www.ed.ac.uk/profile/chris-cummins>

Language provides us with many ways to talk about quantity – for instance, we can use numbers, we can use proportions (such as *half*), we can use less precise quantifying expressions (*few, some, many, most*) and we can relate quantities to fixed reference points (*more than half, about 100*). Expressions of quantity are interesting to researchers in semantics and pragmatics for several reasons. From a formal semantic perspective, quantifiers such as *some* and *most* appear to invite a straightforward analysis based on mathematical intuitions – but as applied to natural language,

these analyses turn out to be problematic in subtle ways. For instance, though it's true that more than 50% of people are female, hearers do not endorse the assertion *most people are female*. From a theoretical pragmatic viewpoint, the wide choice of possible quantity expressions for a given situation makes this area an interesting testbed for theories about the role of alternatives in pragmatic meaning. And, in terms of real-life communication, the accurate description of quantity is crucial in many important domains, whether we're talking about finance, medical risk, or indeed scientific research itself – and much of this is underexplored within linguistic semantics/pragmatics.

This guided research course will look at some of the major themes in the study of quantifiers and numbers, from a theoretical and experimental perspective, and explore their significance to linguistics more broadly.

(also available in semester 2)

Semiotics

John Joseph <https://www.ed.ac.uk/profile/john-e-joseph>

Linguistics is a component part of semiotics, the study of signs. But to what extent are the signs of language unique, and what do they share with signs of other sorts? This is a long-standing question, with ramifications not just for linguistics but for evolutionary science, anthropology, psychoanalysis, legal theory, the analysis of art, music, film and a wide range of other fields. The guided readings for this seminar will include the key classic texts (Locke, Peirce, Saussure, Lady Welby), later structuralist approaches (Hjelmslev, Barthes, Lacan, Greimas) and recent developments in semiotic enquiry (biosemiotics, object semiotics, multimodal communication).

Each student will identify an area of application which particularly interests them, and which will be the topic for their essay; and then will draw up a short set of further readings in that area in consultation with the instructor, for them to pursue in preparing the essay. The potential areas of application are wide ranging, and include topics which fall squarely within linguistics: phonology, morphology and syntax all have a semiotic dimension, as do more obviously semantics and pragmatics; semiotic processes, including iconicity, are central to enquiry into language origins and evolution, as indexicality is to sociolinguistics and linguistic anthropology. Other potential topics are ones which push the disciplinary boundaries of linguistics forward, including translation theory, multimodal communication, and consideration of the political nature of the linguistic sign.

Hence each student will be able to select a specialist topic which suits their individual orientation and plays to their particular strengths.

Research Area:

- Applied Linguistics

Sign Language Phonology

Michael Ramsammy <https://www.ed.ac.uk/profile/michael-ramsammy>

This guided research will focus on theoretical approaches to Sign Language Phonology, typically exemplified through British Sign Language (BSL) and American Sign Language (ASL). A familiarity and interest in models of phonology for spoken language is recommended: e.g. Autosegmental Phonology, Metrical Phonology, Optimality Theory.

There will be reading assigned each week, which will consist of journal articles that will supplement a core text. We will cover a number of topics relating to sign language phonology

including, but not limited to the following: phonological representation of signs, phonological constraints on signs, the role of iconicity, aspects of variation and change.

Research area:

- Phonetics

Speech Technology

Simon King <https://www.ed.ac.uk/profile/simon-king>

We will attempt to disentangle truth from marketing hype in current speech technology research. Over the last 5 years, there has been a shift from academic peer-reviewed publications to unreviewed technical reports and blog posts, most notably from the major technology companies. Some of this is positive: these new formats are immediate, contain engaging examples and demonstrations, and reach a wide audience far beyond any academic conference or journal paper. But the downside is that unreviewed material can be biased, selective or downright misleading. For example, examples might be cherry-picked to illustrate only what the authors choose.

We will try to uncover what real advances have been made, using text-to-speech synthesis as an example domain. Together, we'll first carefully select a representative group of peer-reviewed papers, unreviewed technical reports (e.g., from arXiv) and blog posts. Then we'll read them closely together and discuss the pros and cons of each format. We'll work as a group, then each student will write up independently.

Students will get the most out of this seminar if they have prior learning experience in speech, but none are essential provided you are willing to tackle some technical, engineering-oriented papers. You are likely to need to do some background reading before you can understand some of the papers.

What's Where When Why: Linguistic Diversity, Typology, and Historical Linguistics

Pavel Iosad <https://www.ed.ac.uk/profile/pavel-iosad>

How do we approach the study of diversity and variation across languages? Why are some structures rare, and others common? Why do certain features tend to occur together? Explaining such patterns, which are pervasive across language families and linguistic subfields, is the aim of linguistic typology. A venerable tradition, going back to Wilhelm von Humboldt in the early 19th century, gives a role to structural factors, by identifying 'types' that languages belong to, and the properties associated with them. Linguistic structures, however, do not exist in a vacuum, and patterns of variation are often related to contingencies of history. Closely related languages, for instance, are often typologically similar. In the early 20th century, the notion of 'language areas' was crystallized and thereby introduced geography into the mix. A better understanding of the mechanics of language contact also led to deeper insights into how it influences patterns of diversity.

As a result, linguistic typology has increasingly abandoned its focus on structural properties of languages, moving towards a research programme that aims to explain how linguistic diversity patterns in space and time: from 'what' to 'where', 'when', and of course 'why'. In this seminar we will look at the range of diversity in a number of domains of grammar, consider some key concepts of linguistic typology, and analyse the ways in which theories of grammatical structure and the study of language change, history, anthropology, and geography all contribute to understanding the diversity of human language.

(also available in semester 2)

Seminars in semester 2

Acoustic correlates of phonological contrasts

Rebekka Puderbaugh <https://www.ed.ac.uk/profile/rebekka-puderbaugh>

Phonemic contrasts and phonological categories form the basis of phonological theory, yet their relationship to the phonetic reality of speech sound is not yet fully understood. Due to phonetic variability across speaker characteristics, speech styles, dialects and languages, establishing phonetic descriptions of phonological categories is not straightforward. Despite this, phonemes are identified according to phonetic parameters such as voice, place, and manner and transcribed using symbols that represent these phonetic dimensions to some extent. Such definition suggests that sounds that are transcribed using the same symbols in different languages will sound similar to each other, but there are often substantial differences both in the acoustic detail of the sounds, as well as in the auditory impressions of them.

This seminar will focus on the acoustic presentations of segmental phonemic contrasts, with particular attention on the variation and overlap of various acoustic correlates across categories that are nominally the same in different languages. Readings will include studies of cues to voice, place and manner in consonants, as well as dispersion and uniformity in vowel spaces. For the first assessment, students will review studies of a particular contrast (or series of contrasts) of their choice, then for the second assessment compare previously reported measures to those found in at least two further languages that also exhibit such contrasts.

Research area:

- Phonetics

Analysing and Transcribing Dialect Data

Warren Maguire <https://www.ed.ac.uk/profile/warren-maguire>

In this module, students will learn how to orthographically transcribe audio recordings of non-standard dialect speech using the software ELAN (<https://archive.mpi.nl/tla/elan>), which creates time-aligned, multi-tiered transcriptions. The variety that will be analysed and transcribed is the Mid-Ulster English dialect of south-west Tyrone. Students will learn a transcription protocol, how to handle data ethically, and how to transcribe natural, non-standard conversational speech (both general principles and ELAN specifics). In addition, they will learn about the dialect exemplified in the recordings and about some of its key features.

Each student will be given a different short sample of the dialect to transcribe and analyse. The first assignment will consist of a literature review of general studies of the dialect and of a particular feature or features that will be analysed in the second assignment. The second assignment will consist of the orthographic transcription of the audio data, a report on the methods and procedures followed, and an analysis of one or more selected features (reviewed in Assignment 1) in the recording that has been transcribed.

This guided research module will provide training in a range of linguistic and more general skills that can be transferred to further study and to the workplace, including ethical data handling, accurate orthographic transcription using ELAN, and analysis non-standard variables in speech.

Research Area:

- Applied Linguistics

Articulography — Technology and Applications

Korin Richmond <https://www.ed.ac.uk/profile/korin-richmond>

Much research in Linguistics and Speech Technology has naturally focussed on speech as an acoustic signal, since that is how it is transmitted between people, and it can be easily recorded and reproduced like that. But any natural acoustic speech signal is produced by manipulating speech articulators like the tongue or lips. Measuring and recording these is referred to as articulography. Articulatory data has myriad uses, from helping us understand speech production and perception to improving speech technology. This seminar group will cover key concepts and trends in the acquisition and use of articulatory data, including current research in the area.

Study will involve:

- Introduction to the literature and previous work. This begins with an overview of ways to measure articulatory data, evaluating their relative strengths and weaknesses (e.g. by paper presentations and discussion). We shall then move on to how articulatory data has been exploited in research and practice. There will be opportunity to choose closer reading of specific examples of interest. This is to be summarised in a short assessed reading report.
- Having established familiarity with the topic, we shall delve deeper into practical and methodological issues by means of group-based project work. An ultrasound-based articulatory dataset will be provided (e.g. our UltraSuite or Tongue and Lips (TaL) corpus), and research options suggested (i.e. a specific hypothesis or question to answer). There will be some scope for varying project work according to students' interests and skills. This work will be assessed by an individually-written short report.

Research area:

- Phonetics

Bilingualism over the lifespan

Antonella Sorace <https://www.ed.ac.uk/profile/antonella-sorace>

How do people become bilingual at different stages in life, and what are the linguistic and cognitive effects of knowing more than one language? This course will examine and compare the main features of child bilingualism and adult bilingualism, from the perspective of language development and its interfaces with other cognitive domains. It will also focus on experimental methods for addressing specific research questions related to children and adults learning languages at different ages.

Research area:

- Developmental Linguistics

Community Studies in Sociolinguistics

Lauren Hall-Lew <https://www.ed.ac.uk/profile/lauren-hall-lew>

This course introduces students to the traditional methodology of variationist sociolinguistics: the community study. Students will be introduced to every aspect of classic research design, with particular attention paid to the role of social theory in both methodological and analytic decisions.

This is a highly reading-intensive and writing-intensive option, suited to those students whose

primary interest is sociolinguistics.

Each week requires over 100 pages of reading and the production of at least 200-300 words of writing for formative feedback. The first half of the semester entails a thorough reading of all of William Labov's landmark study, *The Social Stratification of English in New York City*. The second half of the semester will explore at least three other studies (a combination of books and journal articles, to be chosen by vote among the students). Every week, each student will submit a response to that week's reading. These responses will be circulated among other class members, and students will be required to comment on at least two other students' responses.

The first assignment will be a partial summary of Labov's New York City study for a particular non-academic audience (to be decided by the student, in consultation with the instructor). The second assignment will be a project proposal for a new community study.

Research Area:

- Applied Linguistics

Descriptive analysis of intransitive verbs in Shilluk

Bert Remijsen <https://www.ed.ac.uk/profile/bert-remijsen>

In this data-driven research seminar, students engage with the descriptive analysis of intransitive verbs in Shilluk, a West Nilotic language spoken in South Sudan. This topic, on which there are no earlier publications, presents challenges – and opportunities to develop expertise – in a) syntax and semantics and b) morphophonology, phonology and phonetics. As for a), intransitive verbs appear to divide into different form-based classes depending on whether they are antipassive, unaccusative, or ambitransitive, and they also present derivations affecting voice and valence. As for b), Shilluk intransitive verbs present rich systems of morphological marking, and much of this marking involves tone and vowel length.

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(also available in semester 1)

Dialect Syntax

Caroline Heycock <https://www.ed.ac.uk/profile/caroline-heycock>

In this seminar we'll look at recent work that aims to bring together (a) detailed empirical study of dialectal variation within the syntax of a single language and (b) theoretical syntax in the generative tradition. This has recently become a very dynamic area of research that has broken down some

traditional academic boundaries, and also has the potential to increase the understanding of syntactic concepts by non-academics. Topics will include appropriate methodologies; examinations of how empirical dialect study and syntactic theory building can be mutually beneficial; specific case-studies of syntactic phenomena.

As well as readings from the literature, part of the work for the course will involve interacting with existing online resources. A central focus for this will be the recently developed Scots Syntax Atlas (SCOSYA), but participants will be encouraged to also look at other available corpora/databases, including the Yale Grammatical Diversity Project, and Multilingual Manchester.

The assessed work for the seminar will consist of an annotated bibliography and a project. The nature of the project is fairly open and can depend in part on the interests of each participant. It could for example be an analysis of a particular phenomenon drawing on data from available resources, such as those mentioned above, or a worked-out proposal (possibly including a pilot) for a study of a syntactic phenomenon that has not been fully investigated and that is expected to show dialectal variation (whether in English or in any other language).

Early Germanic Dialects

Bettelou Los <https://www.ed.ac.uk/profile/bettelou-los>

The first part of this seminar introduces students to a number of Early Germanic Dialects (Gothic, Old Norse, Old Saxon, Old Frisian, Old English and Middle English) and significant developments in their phonology, morphology, syntax and lexicon. We will also discuss aspects of the surviving texts like their reception, i.e. what audience they were meant for, and what purpose they served; and what text type they represent (genres, translations) – these are all aspects that affect how useful these texts can be for linguistic research.

The first assessment is a short assignment on the linguistic aspects. The second part of the seminar involves an independent piece of work from a range of topics on offer, on linguistic as well as more literary ("reception") aspects.

(also available in semester 2)

Experimental Approaches to Language Evolution

Simon Kirby <https://www.ed.ac.uk/profile/simon-kirby>

The last ten years has seen an explosion of interest in empirical approaches to the origins and evolution of language. Whereas once it was seen as being primarily amenable only to speculative theories, it is now considered a topic that can be investigated in the experiment lab. Arguments about the origins of language based only on appeals to plausibility are now being replaced by ones that stand or fall on the results of experiments with human participants. We will look at why this has happened, and how it is possible to make hypotheses about language origins that make predictions which can be tested experimentally.

We will cover two of the main paradigms in this new area - the silent gesture paradigm, and iterated learning. These recreate in a miniaturised lab setting the process of language emergence and language transmission respectively. Students will be organised into small teams and develop, run, and analyse their own silent gesture experiments. These experiments require participants to communicate a range of meanings (usually displayed as cartoon illustrations, videos, or written phrases) using only gesture and no speech. In doing so, they spontaneously improvise strategies (for example, word order) to convey information. These are remarkably consistent across

participants but do not necessarily reflect the native language the participants speak. Because of this, silent gesture is seen as a window onto the cognitive biases that may be at play in the very early stages of language emergence.

Research area:

- Developmental Linguistics

(also available in semester 1)

Language and music

Graeme Trousdale <https://www.ed.ac.uk/profile/graeme-trousdale>

In this seminar, we'll look at three topics in the study of the relationship between language and music as cognitive systems. These are:

- The relationship between phonological rhythm and rhythm in music
- Syntactic structures and harmonic structures
- Meaning in music and language

We'll look at a range of methodologies used to explore these topics, including corpus linguistics and corpus musicology, and experimental approaches, and draw on a wide variety of musical styles and languages. This will lead us to consider in detail the theoretical issues that both prompt and emerge from empirical work.

You will be expected to submit an annotated bibliography for the first assessment, and an essay for the second. In order to get the most out of this seminar, you should have, or be willing to acquire before the seminar starts, a basic understanding of the fundamentals of music theory, and standard notation on musical staves. There are a number of print and online sources that you could make use of in this regard, and if you have any questions or concerns about your level of musical knowledge, please contact the seminar leader who will be able to advise you.

Research area:

- Phonetics

Learning sounds and words

Mits Ota <https://www.ed.ac.uk/profile/mitsuhiko-ota>

In this seminar, we will survey and discuss current research findings on how we learn the sounds and words of a language in two particular contexts: 1) when infants and young children are exposed to their first language and 2) when adult speakers learn a second language. In each of these contexts, we will first look at basic accounts of how phonological contrasts and phonological forms of words are acquired.

We will then examine the relationship between the two, focusing on questions such as: Can sound categories be learned without knowledge of words? How do we store phonological information about individual words in our mental lexicon? How does our lexicon affect our phonological knowledge? Are there phonological biases in word learning? This seminar presupposes basic knowledge of phonetics and phonology (Introduction to Phonology, or Phonetics and Laboratory Phonology, or equivalent). Familiarity with language acquisition is desirable though not a requirement. However, students should be warned that readings for the seminar will consist of articles that tend to be heavy on quantitative analysis related to acoustic phonetics, experimental data, and statistics.

Activities will consist of independent reading of the assigned articles and discussion of key issues with the instructor and fellow students. Assessment will consist of an annotated bibliography and an essay. Students are encouraged to develop their own specific topic of investigation within the scope of the seminar.

Research Area:

- Applied Linguistics
- Developmental Linguistics
- Phonetics

Lexical Processing

Itamar Kastner <https://www.ed.ac.uk/profile/itamar-kastner>

This seminar will provide an overview of the central questions in lexical processing - the study of how humans comprehend individual words. We will examine the various processes taking place from the moment we first read or hear a word until we have a complete mental representation of it. This involves understanding why the past tense of a nonce word like "gleed" can be "gled" (alongside "gleeded"), whereas that of "bledge" would be "broge"; how exactly we figure out that a "writer" is someone who writes but a "corner" is not someone who corns; and under what circumstances do speakers of Arabic read words differently than speakers of English. Starting from the original wug study and working our way towards cutting-edge neurophysiological methods, we will see how technological advances have allowed researchers to give increasingly detailed answers to the central questions of morphological processing and word structure. Throughout the seminar, our focus will be on how this work can inform research in formal linguistics, while gaining a general overview of the psycholinguistic findings and models.

Students will submit a project proposal as their main form of assessment. This proposal will outline an experiment that could be run in the future, letting students apply the methods surveyed in the seminar to their own interests.

(also available in semester 1)

Linguistic Complexity

Matt Spike <https://www.ed.ac.uk/profile/matthewspike>

All languages are equally expressive: any thought which can be expressed in one language can be expressed in any other. However, languages show huge variation in terms of what they *must* express, and in the ways in which they do it. *Linguistic complexity* is an emerging topic in contemporary linguistics, and attracts the attention of researchers from linguistic typology, formal linguistics, sociolinguistics, psycholinguistics, evolutionary linguistics, cognitive science, and beyond.

This course will address some key questions involving linguistic complexity, including:

- Are languages spoken by smaller, more remote communities (e.g. Inuktitut, Archi) more morphologically complex than globally distributed languages (e.g. English, Mandarin)?
- What does it mean for languages to be more or less complex, and how can we measure this?
- Is greater simplicity in one aspect of a language's grammar (e.g. morphology) balanced by greater complexity in other aspects (e.g. syntax)?
- Can we use sociological, cultural, or cognitive factors to explain variation in linguistic

complexity?

- Are creoles - as some have argued - the world's simplest languages, or are they – as others have argued – of comparable complexity to more established languages?
- How can we integrate insights into language complexity from language description and comparison with work using theoretical, experimental, and computational approaches?

This course will primarily consist of a curated selection of readings which provide an introduction to these topics (and others) and serve as a framework for students to conduct self-led research on a specific question (of their own choosing) in more depth.

Research area:

- Developmental Linguistics

Neuroscience of Speech Production

Alice Turk <https://www.ed.ac.uk/profile/alice-turk>

In this guided research seminar, we will explore neural anatomy & physiology as it relates to current theories of speech production, with a focus on sound production. The goal of the course is critical evaluation of existing theories of speech production in light of current understanding of the anatomy and physiology of the brain. Readings will include basic introductory neuroscience texts, as well as current theoretical and empirical work in the fields of phonetics and speech production.

Research area:

- Phonetics

Parsed historical corpora

Rob Truswell <https://www.ed.ac.uk/profile/robert-truswell>

Parsed historical corpora are collections of historical texts annotated with a representation of syntactic structure. They have revolutionized research into syntactic and semantic change over the last 25 years, because they allow researchers to track the diachronic development of syntactic structures automatically, and independently of the lexical items that instantiate those structures. This makes them ideal for quantitative investigation of any research questions involving basic word order and/or unbounded dependencies, topics which are particularly resistant to efficient large-scale study in traditional corpora. In this seminar, we will read classic and recent studies which use parsed historical corpora.

We will also cover the design of corpus studies (choice of corpus, design of queries) and analysis of corpus data. Students will also conduct their own corpus studies, technology permitting. Research with parsed historical corpora lies at the intersection of syntactic analysis, historical linguistics, and quantitative linguistics. Students will get the most out of this course if they are interested in these areas and are comfortable with simple programming tasks using the command line. However, nothing beyond Intro-level syntactic theory will be presupposed.

Predictability and Informativity

Hannah Rohde <https://www.ed.ac.uk/profile/hannah-rohde>

The premise of this course is that communication depends in part on the belief that people will tell us things that we're interested in hearing. In this sense, language can be understood as a channel by which speakers convey, among other things, newsworthy and informative messages (i.e., content that is otherwise unpredictable to the comprehender). We therefore might expect

comprehenders to show a preference for such messages.

However, psycholinguistic studies on language comprehension often point to a preference for the opposite (i.e., processing ease for real-world predictable content). Several decades of research have shown that comprehenders can deploy knowledge about situation plausibility to generate fine-grained context-driven predictions about upcoming words.

This course reviews this work and then considers how to test whether comprehenders can also deploy this knowledge in favor of newsworthy content. The goal is to draw a distinction between our guess of what a speaker is likely to encounter in the world and what they are likely to **say** about it. We will read psycholinguistic papers on predictability and formal pragmatic papers on informativity. We will discuss how to design experiments that test language users' awareness of these two components during processing.

Assignments will consist of crafting two pieces that constitute important components of experimental psycholinguistic papers: a Methods section (assignment 1) and a Results & Discussion section (assignment 2).

Prosody and Meaning

Catherine Lai <https://www.ed.ac.uk/profile/catherine-lai>

This class will explore how prosody affects how speech is understood, and how this fits into formal semantic and pragmatic frameworks. As a specific case study, we will explore the relationship between prosody and information structure, and how this affects presupposition projection. For example, people usually perceive the embedded clause 'Alex ate the cake' to be presupposed in 'Jean didn't REGRET that Alex ate the cake' but not in 'Jean didn't regret that ALEX ate the cake'. However, the relationship between presupposition projection and prosodic focus is less clear when we look at more complex and realistic discourses.

To build up the tools to understand why we observe the data we do, we will look at the following:

- What is prosody? How do we analyze it?
- What is information structure? How does this affect prosody?
- What sort of discourse structures do we need to understand how prosody affects pragmatic phenomena like presupposition projection? e.g. Questions Under Discussion.
- What sort of experimental methods can we use to test theories of prosody and meaning?

A major component of this class will be critically evaluating experimental approaches to understanding these problems. The current syllabus focuses mainly on issues in English prosody, but students are welcome to look at similar issues in other languages. Students will get the most out of the class if they have some experience in formal semantics, pragmatics, and phonetics.

Research area:

- Phonetics

Quantifiers and numbers

Chris Cummins <https://www.ed.ac.uk/profile/chris-cummins>

Language provides us with many ways to talk about quantity – for instance, we can use numbers, we can use proportions (such as *half*), we can use less precise quantifying expressions (*few, some, many, most*) and we can relate quantities to fixed reference points (*more than half, about 100*). Expressions of quantity are interesting to researchers in semantics and pragmatics for several

reasons. From a formal semantic perspective, quantifiers such as *some* and *most* appear to invite a straightforward analysis based on mathematical intuitions – but as applied to natural language, these analyses turn out to be problematic in subtle ways. For instance, though it's true that more than 50% of people are female, hearers do not endorse the assertion *most people are female*. From a theoretical pragmatic viewpoint, the wide choice of possible quantity expressions for a given situation makes this area an interesting testbed for theories about the role of alternatives in pragmatic meaning. And, in terms of real-life communication, the accurate description of quantity is crucial in many important domains, whether we're talking about finance, medical risk, or indeed scientific research itself – and much of this is underexplored within linguistic semantics/pragmatics.

This guided research course will look at some of the major themes in the study of quantifiers and numbers, from a theoretical and experimental perspective, and explore their significance to linguistics more broadly.

(also available in semester 2)

What's Where When Why: Linguistic Diversity, Typology, and Historical Linguistics

Pavel Iosad <https://www.ed.ac.uk/profile/pavel-iosad>

How do we approach the study of diversity and variation across languages? Why are some structures rare, and others common? Why do certain features tend to occur together? Explaining such patterns, which are pervasive across language families and linguistic subfields, is the aim of linguistic typology. A venerable tradition, going back to Wilhelm von Humboldt in the early 19th century, gives a role to structural factors, by identifying 'types' that languages belong to, and the properties associated with them. Linguistic structures, however, do not exist in a vacuum, and patterns of variation are often related to contingencies of history. Closely related languages, for instance, are often typologically similar. In the early 20th century, the notion of 'language areas' was crystallized and thereby introduced geography into the mix. A better understanding of the mechanics of language contact also led to deeper insights into how it influences patterns of diversity.

As a result, linguistic typology has increasingly abandoned its focus on structural properties of languages, moving towards a research programme that aims to explain how linguistic diversity patterns in space and time: from 'what' to 'where', 'when', and of course 'why'. In this seminar we will look at the range of diversity in a number of domains of grammar, consider some key concepts of linguistic typology, and analyse the ways in which theories of grammatical structure and the study of language change, history, anthropology, and geography all contribute to understanding the diversity of human language.

(also available in semester 1)