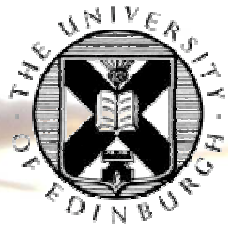# Conference Prospectus

ULAB2011 | Edinburgh | March 25-27

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- **Schedule**
- **Abstracts**

Schedule

Friday

- **21:00** Pre-Registration at Greyfriars Pub

Saturday

- **9:30** Registration
- **9:45** Introduction

1. **10:00 Richard Littauer** (University of Edinburgh 4th year) *Modelling the Evolution of Speech Segmentation*
2. **10:20 Joel Girling** (University of Edinburgh 3rd year) *The Dialect of Milton Keynes: An Analysis of the Past and the Present*
3. **10:40 Anna Bruggeman** (University of York 3rd year) *The Entertainer - An Ethnographic Case Study on Identity Projection by an 11-year-old Moroccan-Dutch Child*

- **11:00** Coffee Break

4. **11:20 Rebecca Jackson** (University of Salford 3rd year) *When is Possession not Possession?*
5. **12:00 Aimee Keay** (University of Sussex 3rd year) *Jehovah's Witnesses' Linguistic Identity: An Analysis of the Watchtower Publication.*
6. **12:20 Fiona Edwards** (University of Sussex 3rd year) *A Comparative Corpus-based Approach to Investigating the Metaphor 'Language Death'*
7. **12:40 Jody Rae** (University of Edinburgh 4th year) *Vowel Length: Scottish Vowel Length Rule vs. Word Frequency*

- **13:00** Lunch

8. **14:20 Alison Biggs** (Cambridge Graduate Degree, Presenting Undergraduate Work) *The Unmarked Preposed Object in Mandarin and its Function in the Low Periphery*
9. **15:00 Abigaël Candelas de la Ossa** (University of Edinburgh Graduate Degree, Presenting Undergraduate Work) *Speaking as a Woman: Gender, Silencing, and Agency in Public Discourse*

- **15:20** Coffee Break

10. **15:40 Stephanie Maia** (University of Edinburgh 4th year) *Bilingual First Language Acquisition with a View to Attrition*
11. **16:00 Judith Gottschalk** (Ruhr-Universität Bochum Graduate Degree, Presenting Undergraduate Work) *Storage of Linguistic Knowledge in the Mental Lexicon: An approach within Role and Reference Grammar*
12. **16:20 Jon William Carr** (University of Glasgow 4th year) *Language Evolution on Stella Fructa: The Effects of Novel Variables on an Iterated Learning Model of Linguistic Evolution by Cultural Transmission*
13. **17:00 David M. T. Arnold** (University of Edinburgh 3rd year) *On the Origin of Myths and Myths of Origin: How Views on the Origins of Languages can be More Significant than Genetic Ethnicity in Forming Group Identity.*

- **17:20** Dinner
- **Then** Pub Crawl

Sunday

- **09:00** Optional walk up Arthur's Seat, meet outside Old College

14. **11:30 Lilian Fullerton** (University of Edinburgh 4th year) *Evolutionary Linguistics, Alien Languages and Duality of Patterning: What can Slide Whistles tell us about the Evolutionary Emergence of Combinatorial Phonology?*
15. **11:50 Timothy O. Bazalgette** (University of Cambridge Graduate Degree, Presenting Undergraduate Work) *Who Posh Have I Been Talking to? An Investigation into a Class of Non-Standard Adjectival Wh-phrases in English.*
16. **12:10 Teresa Kieseier** (University of Konstanz 4th year) *Phonological Features of North Carolina English*
17. **12:50 Elizabeth Anderson** (University of Edinburgh 4th year) *The Perception of Tones with Missing Fundamental Frequencies in Beginning and Advanced Students of Mandarin Chinese*

- **13:10** Lunch

18. **14:30 Plenary Speaker: Martin Kohlberger** (University of Edinburgh Graduate Degree, Presenting Undergraduate Work) *A Phonological Overview and Analysis of Aspirated Stops in Central Highland Ecuadorian Quichua*

- **15:30** ULAB General Meeting
- **16:30** Wine Reception

There will be a poster session display throughout the conference that can be viewed during coffee breaks and lunch.

Monday

- **09:00** Optional breakfast at Pollock Halls, JMC

Abstracts

1. **10:00 Richard Littauer** (University of Edinburgh 4th year)
   Modelling the Evolution of Speech Segmentation
   Topics: Evolutionary Linguistics, Phonology

   Recent studies have shown that 8-month-olds can segment continuous strings of speech syllables into word-like units using only statistical computation of syllables, without relying on acoustic or prosodic cues for word boundaries. (Aslin et al. 1997, 1998; Mattys et. al, 1999) These studies looked at phonotactic regularities and syllable transition probability, but did not take into account different types of statistical processes. In this study, I used a computational simulation to examine four different statistical processes that may be used to parse uninterrupted phonological strings: word recognition, word frequency, syllable transition count, syllable transition probability (as well as a priori word retention and recognition). Each of these four techniques is judged by analysing word pairs against a pre-existing syllable string created using a limited lexicon. The word pairs contain one of the original words and a scrambled, random, or chopped word. The more probable word is put into a list used to create the next string; By filtering the output of these processes through an Iterated Learning Model over hundreds of generations, the aptitude of each different statistical process to explain syllable segmentation in infants can be ascertained. This study will present a more complete picture of not only syllable segmentation but also the evolution of lexical discreteness and phonotactic rules, by analysing the trends in transitional probabilities word-internally for each generation. I will present my findings, which will be published in my forthcoming dissertation.

2. **10:20 Joel Girling** (University of Edinburgh 3rd year)
   The Dialect of Milton Keynes: An Analysis of the Past and the Present
   Topic: Dialectology

   My proposed abstract is based on my current dialectology project which is entitled:
   Do vowel and consonant sounds of young (24-35) and old (65+) speakers in Milton Keynes differ? If so, how? Discuss the similarities and differences the results have with previous work done by Kerswill and Williams (1990).
   Milton Keynes, linguistically, is a very interesting case for dialectology because its initial population was made up of migrants (nearly 85%) to the area in the late 1960's and the children born there developed new accents that differed from their parents. Kerswill and Williams, in 1990, collected sounds from young children (aged 4 to 12) who have been in MK all their life and compared them to traditional forms from elderly participants who had been living around MK before it was opened in 1967.
   My presentation will be based on my study that extends Kerswill and Williams research to ask the questions whether this "young children" demographic still have the same sounds 20 years on and whether old speakers will also have their accent change and challenge if there is a "critical window" for change.
   The conclusions I hope to reach are that "young children" from 1991 were over the coming decades still evolving their phonological capabilities and their vowel and consonant sounds are different in 2011. Elderly speakers will still reflect the same sounds of elderly speakers from Kerswill and Williams study in 1991 and this would support a "critical window" for change at a certain age.
   As well as this diachronic analysis over time, I will also investigate the differences (and similarities) between 24-35 year olds and 65+ informants. If there are too many differences then I could conclude that the critical window is still open between the age groups. However if the consonant and vowel sounds are very similar or identical then I can say that all informants are past this "critical window" for change.
   These conclusions remain to be seen until I get my results through a phonological questionnaire and interview at the end of March. However I hope to give a presentation on the overview of my project and what I expect to find.
   NB: The Kerswill and Williams work I am referring too is
   http://eprints.lancs.ac.uk/1082/1/download.pdf

3. **10:40 Anna Bruggeman** (University of York 3rd year)
   ## The Entertainer - An Ethnographic Case Study on Identity Projection by an 11-year-old Moroccan-Dutch Child
   Topic: Language Variation

The aim of my research is to examine whether identity projection is linked to linguistic performance and how multi-levelled identities are constructed through use of language. I undertook a small ethnographic case study focusing on the speech of one 11-year-old Moroccan-Dutch bilingual child whom I observed in the classroom and during computer tasks and board game settings. Additionally, I interviewed both the subject and one of his teachers and used results from a friendship questionnaire filled in by his classmates.

The linguistic variable under investigation was grammatical gender of the definite and demonstrative determiner, relative determiner and attributive adjective in Dutch (cf. Hulk & Cornips 2006; Cornips 2008; Cornips & Hulk 2008). There were two reasons for choosing this variable in particular: firstly, non-target use of grammatical gender has been found to be a marker of 'ethnic' language use (Nortier & Dorleijn 2008; Cornips 2008). For the subject, growing up in an ethnic minority environment, variation could thus be expected to carry social significance. Secondly, if this indeed proved to be the case, it would provide an argument against incomplete acquisition (cf. Cornips, Van der Hoek and Verwer 2006; Cornips 2008).

The subject's productions involving grammatical gender were noted down. Subsequently, results were organised in two different ways: i) according to social context (classroom, etc.) and ii) according to interactional stance (Bucholtz & Hall 2010). The total number of relevant productions was 312, of which 31 were non-target. The distribution across different social contexts showed that variation was most prominent in the classroom (11%) and least common in the interview context (4%). For interactional stance, classification of non-target items only was carried out in order to consider the significance of each of these instances individually. The items were judged as belonging to one the following stances: 'cool kid', 'story teller', 'uncooperative', and 'serious' ('default' constituting the unclear cases). The lowest number of non-target grammatical gender productions occurred with 'serious' stance and relatively many instances were observed when a 'cool kid' identity was adopted. With regard to the type of instance of grammatical gender, the large majority of non-target use concerned the demonstrative determiner, with adjective, relative pronoun and definite determiner accounting for the remaining third.

The results showed that the way the subject positioned himself had a large effect on the degree of non-target use. In addition, the words produced most inconsistently (i.e. with both many target and non-target functional elements) are very frequent ones. Based on these facts, I argue that the subject's variation with regard to grammatical gender is primarily constrained by the degree of attention he wishes to attract. However, there are many limitations to this study, not least of all the limited amount of tokens. Additionally, it has to be kept in mind that most judgments are based on personal observation and may have only partially uncovered the subject's attitudes.

4. **11:20 Rebecca Jackson** (University of Salford 3rd year)
   When is Possession not Possession?
   Topic: Pragmatics

When is possession not possession? A relevance-theoretic solution to the problem of the possessive in English.

In English, it is possible to use possessive determiners in an NP even when the referent cannot be thought of as being possessed by the person picked out by the pronoun. Compare (1) with (2 -3):

(1) My jacket is in the hallway. [A jacket that the speaker owns.]
(2) My programme is on T.V. [A T.V. programme that the speaker owns???]
(3) Your vase is on the table. [A vase that the hearer has given to the speaker and cannot 'own'.]

The speaker of (2) might be understood to be referring to a television programme he wants to watch or likes to watch. But interpreted in a context in which the speaker is a television producer, it will be understood to be referring to a programme he has made. However, it is not clear what, if anything, either interpretation has to do with a 'standard' notion of possession. What is clear is that any attempt to solve this should account for as many usages of possessives as possible, regardless of whether they are considered to be 'standard' or 'non-standard'.

This paper begins by setting out how this problem might be tackled on the assumption that a possessive determiner encodes a concept. First, I consider the view that possessives are polysemous, but show that there are both empirical and theoretical arguments against this approach. I then examine the idea that non-possessive uses of possessives are explained in terms of Lakoff and Johnson's (1981) notion of conceptual metaphor, and show that this fails for reasons similar to the polysemy hypothesis. Finally in this section I consider the idea that a possessive determiner encodes a concept of POSSESSION which is adjusted in context by processes of pragmatic enrichment (Carston 2002). However, as I will show, the notion of grammatical possession should not be confused with the concept of possession that plays a role in our thoughts and inferences - any more than the (grammatical) gender of a word should be confused with our concept of biological gender. Indeed, it seems that possessive pronouns do not encode conceptual information at all.

In the second part of the paper, I argue that these expressions can be analysed within the framework of Sperber & Wilson's (1986) relevance theoretic pragmatics as semantically encoded constraints on the recovery of explicit content (Blakemore 1987, 2002). According to this analysis, a possessive determiner does not itself encode a constituent of a conceptual representation (or proposition) which is interpreted for relevance, but activates a procedure for assigning reference. Using naturally-occurring data from native speakers of English, I show how this analysis not only provides a natural explanation for the variation in interpretation noted above, but also explains why a possessive determiner cannot be used in any context at all.

References:
Blakemore, D (1987). Semantic Constraints on Relevance. Oxford: Blackwell
Blakemore, D (2002). Relevance and Linguistic Meaning. Cambridge: Cambridge University Press.
Carston, R (2002) Thoughts and Utterances: The Pragmatics of Explicit Communication. Oxford: Blackwell.
Lakoff, G & Johnson, M (1981). Metaphors We Live By. Chicago: University of Chicago University Press.
Sperber, D & Wilson, D, (1995) Relevance: Communication and Cognition. Oxford: Blackwell

5. **12:00 Aimee Keay** (University of Sussex 3rd year)
   Jehovah's Witnesses' Linguistic Identity: An Analysis of the Watchtower Publication.
   Topic: Sociolinguistics

   This research illuminates specific linguistic features of Jehovah's Witnesses' language use in their official publication The Watchtower. Using discourse analysis, patterns and features in the text are identified and argued to form part of the community of practice's linguistic identity. Six months of The Watchtower are scrutinised (January – June 2007), with particular focus on thirteen personal narratives in the 'life story' section of the publication. The linguistic features of The Watchtower that can be seen to relate to Jehovah's Witness identity are outlined and examined, looking at the implications and connotations associated with the particular usage.

   The noun phrases examined highlight the 'family relationship' aspect of Jehovah's Witness identity, seen in lexical items such as brotherhood, sister, brother, and bethel family. Of particular interest is the complementless use of the nouns service and work in constructions such as on the service, highlighting insider presupposed knowledge about the benefactor of such service (i.e. Jehovah).

   Verb phrases examined include to witness (extended to apply to the organisation's preaching work) and to serve, which is frequently used to describe any preaching activity, emphasising the implication of 'a service' to Jehovah. This relates to the noun servant, a term that inversely implies a higher position in the organisation. This study also considers Beckford's (1978) notion of progressive enlightenment (according to which, Jehovah's Witnesses describe conversion as a progress and not 'sudden enlightenment') in relation to verb aspect (perfective, imperfective and perfect).

   When considering grammatical patterns, the exclamative sentence type is frequently used in The Watchtower to signal emotion, emphasising the connotations of the construction for the community.

   One final consideration of this study is insider-outsider categories, given their key relationship to identity. These are considered through a focus on pronominal choice (particularly the 'inclusive' and 'exclusive' we), and the juxtaposed structure of opposing views, both of which are prominent in The Watchtower.

   At present, this study highlights the interesting lexical and semantic implications made by The Watchtower. It forms part of larger research project, which involves a triangulation analysis comparing The Watchtower to individual member's use through interviews and questionnaires. The questionnaire and interview data, which is currently being collected, will provide a contrastive data set and it is hoped that this comparison will emphasise the link with identity, and highlight the relationship between the individual's constructions and the official publication.

6. **12:20 Fiona Edwards** (University of Sussex 3rd year)
   A Comparative Corpus-based Approach to Investigating the Metaphor 'Language Death'
   Topic: Cognitive Linguistics

   The phrase 'language death' is used by both linguists and in the media to describe a language falling into disuse or disappearing. This paper explores the use of the metaphor 'language death' through the conceptual metaphor LANGUAGE IS A LIVING ORGANISM. Lakoff and Johnson (1980) suggest that our conceptual systems affect our perception of reality and how we act upon these perceptions. Surprisingly, very little research has been done on the effect of using this metaphor to describe this phenomenon, which is of both social and political interest. This paper presents a metadiscursive examination of the use of LANGUAGE IS A LIVING ORGANISM in a corpus of academic texts and another of newspaper articles that discuss 'language death'. This research builds on previous work such as Crystal (2000), who supports the use of the metaphor, whereas de Swaan (2004) criticises 'language death' as a misleading metaphor.

   Taking lead from López and Llopis (2010), metaphorical pattern analysis (hereafter MPA) was employed in order to analyse the data. MPA was applied by searching for the term language and then looked for the metaphors in those sentences. This revealed the conceptual metaphors such as LANGUAGE IS AN OBJECT (language loss) and LANGUAGE IS A LIVING ORGANISM (language death). The use of a corpus-based methodology and MPA has been illustrated by Stefanowitsch (2006) as highly effective and a more extensive and accurate model than introspection, which has been traditionally used when identifying conceptual metaphors. Stefanowitsch argues that MPA is especially beneficial when the aim of the investigation is to uncover subtle differences within a given general concept. Thus, using it in this study should effectively reveal subtle differences in the source domain selected for mapping onto the target domain LANGUAGE for language in the comparison of linguistic texts and newspaper articles. This paper not only seeks to draw attention to the effect of using these conceptual metaphors when discussing languages in danger, but also compares the treatment of 'language death' in the news and linguistic texts and discusses how linguistic ideas are communicated to the public.

7. **12:40 Jody Rae** (University of Edinburgh 4th year)
   Vowel Length: Scottish Vowel Length Rule vs. Word Frequency
   Topics: Phonetics, Phonology, Scots

I'll be presenting the outcomes of my undergraduate dissertation on the interference effects of the Scottish Vowel Length Rule and word frequency.

Both use certain properties of a word to predict the length of its vowel, but the properties in question are independent of one another. I'll be focusing on what happens when the two rules disagree with each other, do they compromise, or does one win outright over the other? And likewise; if the rules agree with each other, are the effects amplified in any significant way?

As well as giving overviews of both rules and their effects, I will be going into the differences between phonemic and phonetic rules and which ones speakers are more inclined to follow.

8. **14:00 Alison Biggs** (Cambridge Graduate Degree, Presenting Undergraduate Work)
   The Unmarked Preposed Object in Mandarin and its Function in the Low Periphery
   Topic: Syntax

Mandarin is canonically an SVO language, but direct objects may occur preposed and unmarked between the subject and verb.

(1) Ta pingguo bu xihuan chi
    3SG apples NEG like eat
    He doesn't like apples

This SOV construction is semantically marked, however the function of the preverbal object as either a topic or focus remains unclear despite extensive examination (Lu 1994; Shyu 1995, 2005; Ernst and Wang 1995; Paul 2005).

This talk examines the unmarked preposed object (UPO) from the perspective of the cartographic framework. Particular reference is made to Paul (2005), in which it is proposed that, based on the cartographic hierarchy, the preverbal object should be in SPEC of an Internal Topic functional projection.

A review of the semantic and syntactic evidence as to the domain the UPO occupies suggests it in fact displays properties cross-linguistically identified by the cartographic framework as typical of focus elements. The semantics of the UPO are distinct: it requires a contrastive reading, and it must be interpreted as definite or generic. Syntactic evidence relates to compatibility with a resumptive pronoun, weak crossover effects, and sensitivity to tense nodes.

The classic version of the universal hierarchy of information structure permits a single focus functional projection and recursive topic projections (Rizzi 1997):

(2) IP (Top*) (Foc) (Top*) vP

However, the Mandarin UPO may occur with another focus construction (lian… ye 'even') (both underlined elements are considered focused):

(3) Ta xiyiji lian yi ci ye mei you yong
    He washing machine even one time also NEG have use
    He's never once used the washing machine

This is problematic for analysis of the UPO as a focus element. I therefore suggest adopting the structural hierarchy as modified by Beninca' and Poletto (2004: 70). (Following Belletti (2004) I assume the structure of the low IP area mirrors that of the CP domain).

(4) CP [TopP [TopP… [FocusP…]]] IP --> IP [TopP [TopP… [FocusP…]]] vP

Beninca' and Poletto's hierarchy is non-recursive but multiple Focus Projections are permitted. Critical within this approach is that all functional projections must exhibit distinct semantic and syntactic properties. I suggest that the distribution and interpretation of the Mandarin UPO already discussed suggests a systematic variation that supports recognition of these distinct functional projections.

9. **15:00 Abigaël Candelas de la Ossa** (University of Edinburgh Graduate Degree, Presenting Undergraduate Work)
   Speaking as a Woman: Gender, Silencing, and Agency in Public Discourse
   Topics: Language, Gender

   This paper examines Elinor Ochs's claim that Western White middle class mothers are silenced (1992). Using evidence from radio programs that are marked as "women's space" (eg, Women's Hour) , as well as unmarked programs (eg, Today), I will argue that the situation in radio discourse is not as clear-cut as Ochs suggests, but that women's access to public discourse spaces is highly problematic. I will rely Ochs's analysis of gender-role silencing, as well as Rae Langton's analysis of the infelicity silencing of women (1993). It seems that certain gender stances afford access to public discourse spaces, and that challenges to women's lack of agency is afforded, but that speech acts are more readily taken up in marked contexts where women's agency is erased (cf Meyerhoff 2004, 2007). Along the way I will argue that the cognitive science notion of affordance (Steedman 2002a, 2002b) is a useful addition to speech act theory.

10. **15:40 Stephanie Maia** (University of Edinburgh 4th year)
   Bilingual First Language Acquisition with a View to Attrition
   Topic: Developmental Linguistics

Vulnerability at the interfaces between syntax and discourse pragmatics has been attested in different forms of linguistic development including bilingual first language acquisition, monolingual first language acquisition and native language attrition (e.g. Müller and Hulk, 2001, Serratrice 2005, Sorace and Serratrice 2008). One particularly fruitful area of study has been that of the null and overt pronoun conditions found in romance languages. In European Portuguese, the null subject condition is used to refer to the subject of the matrix clause whilst the overt pronoun refers to the object of a matrix clause. Studies in Italian, which exhibits the same tendencies, have shown that in the process of acquisition, there is some considerable optionality in the overt pronoun condition, leading to delayed development in bilingual children. During native language attrition, similar difficulties can be found in the overt condition with regards optionality (e.g. Tsimpli et al 2004).

If the same effects can be seen in both acquisition and attrition, it seems important that linguists persue an explanation which takes a unitary approach. Carminati (2002) proposes that it is the common processing strategies employed in pronoun resolution which gives lead to this optionality. Language general processing strategies compete with language specific processing strategies, reinforcement of a language general processing strategy over that of a language specific processing strategy; or lack of experience of a language specific processing strategy can be said to create this sort of optionality.

This study takes a 2.6 year old Portuguese-English bilingual, Isabel, whose Portuguese input has been provided by an attrited native speaker of Portuguese. Isabel's preferences in anaphora resolution were assessed using a 'comprehension test'. The experiment consisted of two puppets. The puppets would have a 'conversation' which one would then report to the Portuguese 'puppeteer'. The puppeteer would the relay the information to Isabel in either a null or overt pronominal form:

"Aqui está o Panda e aqui está o Tigre." [Puppets converse]
"O Tigre disse que tem fome! Quem está tem fome?"

Results from the study show that, although Isabel has little experience of the null subject condition, she correctly associates the null subject form with the matrix subject. In the case of the overt pronoun, Isabel struggles and wrongly assigns the overt pronominal form to the matrix subject as often as she does to the object.

These results are supportive of Carminati (2002) processing strategies. The fact that Isabel is dominant in English, and has received attrited input does not seem, at this stage, to affect the strategies she applies to anaphor resolution. Taken with evidence collected from experiments in other languages, such as those in Italian, we can see a picture emerging where a unitary approach and processing strategies certainly seem to be an exciting and plausible way forward.

11. **16:00 Judith Gottschalk** (Ruhr-Universität Bochum Graduate Degree, Presenting Undergraduate Work)
    Storage of Linguistic Knowledge in the Mental Lexicon: An approach within Role and Reference Grammar
    Topics: Syntax-Semantics Interface, Mental Lexicon

This talk aims to introduce a theory of the mental lexicon for German verbs of motion within the theory of Role and Reference Grammar [RRG] (cf. Van Valin 2005). The issue of how Aktionsarten and particularly verbs of motion with their various alternations are structured will be dealt with. In addition, their storage in an RRG-compatible lexicon will be investigated. A time line model of RRG-Aktionsarten based on Reichenbach (1947) will be developed to give a description of the structure of events assumed in RRG.

In this talk I will deal with German Aktionsart alternations of the following form:

(1) a) Mulder   renn-t.
        Mulder   run-3sgPRES (Mulder is running.)
    b) Mulder   renn-t   nach   Black Mesa
        Mulder   run-3sgPRES   to   Black Mesa (Mulder is running to Black Mesa.)

The sentences in (1) show an alternation between the two RRG Aktionsarten Activity (1a) and Active Accomplishment (1b), which have the binary semantic features [-static], [+ dynamic], [- telic], [-punctual] for (1a) and [-static], [+ dynamic], [+ telic], [-punctual] for (1b).

In previous RRG-analysis, this kind of alternation was explained via lexical rules. These rules state that Activity is the basic Aktionsart of motion verbs. Active Accomplishments are derived from this basic Aktionsart (cf. Van Valin and LaPolla 1997: 111).

However, human knowledge is often represented in terms of inheritance networks. In this talk I will use a model of inheritance networks to modify the present version of the lexicon in RRG. This network explains alternations of the kind displayed in (1) using lexical inheritance.

I will argue that basic Aktionsarten are not needed in the lexicon if Aktionsarten and operators are analyzed and decomposed in terms of inheritance networks. I will furthermore show that, accepting the idea of inheritance networks, multiple lexical entries become superfluous for verbs of motion that occur in a multitude of contexts with different Aktionsart readings.

As a result, verbs are stored as follows. In the lexicon, they are stored in inheritance networks. Within these networks they are stored as lexical neighbourhood clusters in an underspecified way. This means verbs are stored hierarchically within a lexical inheritance network in a lexical fingerprint. These fingerprints contain only the lexical information which is idiosyncratic to the verb. Any additional information is inherited from the verbs which rank higher in the hierarchy. This inheritance is non-monotonic.

In such a hierarchy, the most general verb is the root of the network. The more specific a verb, the further down in the hierarchy it is represented.

Accepting this model, we do not need a workshop module and lexical rules as suggested by Van Valin and LaPolla (1997) and Van Valin (2005). Aktionsart alternations are then regarded as a result of lexical inheritance.

This unification approach is particularly suitable for implementations in computer software used in language modelling and applications for language technology. Such applications are programs in machine translation, grammar checkers and question answering systems.

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Reichenbach, Hans. 1947. Elements of Symbolic Logic. New York: Radom House.
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Van Valin, Robert D., Jr., and Randy J. LaPolla. 1997. Syntax: Structure, meaning and function. Cambridge: Cambridge University Press.

12. **16:20 Jon William Carr** (University of Glasgow 4th year)
Language Evolution on Stella Fructa: The Effects of Novel Variables on an Iterated Learning Model of Linguistic Evolution by Cultural Transmission
Topic: Evolutionary Linguistics

It is suggested that human language arose as a function of three adaptive processes: evolution by natural selection, individual learning, and cultural evolution (Kirby and Hurford 2002). In this paradigm, biological evolution is intrinsically difficult to explore due to the ephemeral nature of language; however, the interface between learning and cultural evolution has recently been tested in a variety of mathematical, computational, and experimental models. These models demonstrate that systematic linguistic structure can arise in the transmission of language across multiple language users. Kirby, Cornish, and Smith (2008) introduced an experimental method for studying the cumulative effect on language of this cultural transmission. Their iterated learning model represented the first experiment on human participants to suggest that the cultural transmission of language leads cumulatively to the appearance of linguistic design without any explicit designer.

The present paper presents the results from a repeat of this experiment, which was conducted with a number of novel variables. Therefore, not only is the experimental method verified, but the resilience of the approach is tested too. The notable variables introduced in this version of the experiment are (a) an auditory modality, (b) a modified meaning-space, and (c) a modified signal-space. Despite these novel variables, learnability increases over the course of the experiment in a way that is strikingly similar to the results observed by Kirby et al. (2008). The emergence of compositional structure, however, is less forthcoming. This presents a problem: if the languages evolve to become easier to learn, yet a strong degree of compositionality does not emerge, then there must exist at least one other mechanism by which the languages optimize their successful transmission. The results suggest that this mechanism might lie in a different type of adaptation of the signal-space (i.e. the sounds and syllable structures employed by the languages). Over the course of the experiment, the languages tended to become more focused on a smaller set of syllable patterns, and this adaptation appears to make them easier to learn. Furthermore, as the signal-space becomes increasingly more focused, the probability of a chance alignment between signal and meaning becomes increasingly more likely to occur. It is therefore hypothesized that, in allowing the languages to evolve for perhaps five or ten more generations, a degree of compositional structure comparable with Kirby et al. (2008) might eventually emerge.

References:
Kirby S, Hurford JR (2002) The emergence of linguistic structure: An overview of the iterated learning model. In Cangelosi A, Parisi D (eds) Simulating the Evolution of Language (London: Springer Verlag): 121—148
Kirby S, Cornish H, Smith K (2008) Cumulative cultural evolution in the laboratory: An experimental approach to the origins of structure in human language. Proceedings of the National Academy of Sciences 105: 10681—10686

13. **17:00 David M. T. Arnold** (University of Edinburgh 3rd year)

 On the Origin of Myths and Myths of Origin: How Views on the Origins of Languages can be More Significant than Genetic Ethnicity in Forming Group Identity.

 Topics: Language Cassification, Genetics, Sociolinguistics, Language and Identity, Anthropological Linguistics

Darwin's ideas on the common ancestry of organisms with shared characteristics were, to a certain extent the product of a general period of enlightenment and intellectual inquiry. Preceding Darwin are influential figures such as Joseph Justus Scaliger (1540-1609), William Jones (1746-1794), Jacob Grimm (1785-1863), Rasmus Rask (1787-1832) and Franz Bopp (1791-1867) who recognised lexical connections between different languages and language families and the later of them went on to develop theories of common ancestry (laying the foundations of diachronic linguistics today). It was only after the work of such philologists that Darwin applied similar ideas to biological entities.

Darwin's idea is often regarded 'dangerous' for the controversial ways many have interpreted it in to normative social ideologies, such as eugenics and racism; it has been taken out of context as descriptive science. This paper asks whether analogous ideas on the relationship, classification and origins of languages can be taken out of context in a similar way to form myths of group identity and origin. Could there even be such a phenomenon as 'euglossics'?

Both language and perceived genetic ethnicity are key features in the construction of individual and group identity. This paper focuses on two situations of ethno-linguistic identity which fall at either end of a spectrum.

In Southern India there is a notion that the speakers of the Indo-European and Dravidian languages form two distinct genetic populations with the Dravidian speakers being descended from the original inhabitants of the area and the Indo-European speakers being descended from those that migrated south later on. This has led to antagonism between these groups, including the 1965 Tamil language riots. Recent genetic surveys, however, indicate that these populations, despite being linguistically heterogeneous, are genetically homogenous.

In China this phenomenon is reversed. The Han Chinese, which was considered to be a genetic group is now known to be genetically heterogeneous. This perception of genetic homogeneity was helped by the fact that there is linguistic homogeneity in the Sino-Tibetan languages that are spoken throughout this population.

There are further connotations here for cultural and language evolution in that cultural and biological descent appear to have been operating on two mutually exclusive levels.

These two case studies form the basis of a paradigm for ethno-linguistic identity: a genetically homogenous and linguistically heterogeneous population is demonstrated by the situation in India and the second is a counter-model with a linguistically homogenous but genetically heterogeneous population as can be seen in China.

Linguistic myths, then, can lead to fallacies and misinterpretations that can be potentially dangerous. The effects, however, are somewhat more subtle and less studied than those relating to genetics and ethnicity. What is more, it seems that linguistic identity can sometimes be a more powerful socio-cultural force in forming group identity than genetic ethnicity. Blood may be thicker than water, but language, it seems, may be the most viscous of the three.

14. **11:30 Lilian Fullerton** (University of Edinburgh 4th year)
    Evolutionary Linguistics, Alien Languages and Duality of Patterning: What can Slide Whistles tell us about the Evolutionary Emergence of Combinatorial Phonology?
    Topics: Evolutionary Linguistics, Phonetics, Phonology

Duality of patterning (Hockett 1960, henceforth DoP) describes the existence of two levels of linguistic structure: combinatorial phonology and compositional semantics. Where combinatorial phonology is the reuse and recombination of small, meaningless units (e.g. phonemes) into larger, meaningful units, compositional semantics is the reuse and recombination of meaningful units (morphemes; words) into constructions where the meaning of the whole can be determined as a function of the meaning of the parts.

A fundamental question in language evolution research is to understand the origins and development of DoP. With regards to combinatorial phonology, questions arise as to how and under what conditions quasi-continuous articulatory spaces (e.g. the vowel space) become segmented into the productive combinatorial units used in language.

Some insight can be gained from newly-forming natural languages, e.g. Al-Sayyid Bedouin Sign Language (Israel and Sandler 2010), but these are rare, and experimental manipulation thus isolating causative factors is difficult. Computational modelling can provide hints and has included simulations exploring how combinatorial phonology can emerge from holistic coding, typically through optimization for certain constraints (e.g. Lindblom et al. 1984; Zuidema and de Boer 2009).

Experimental work complements the above methods by enabling precise understanding of how real speakers may act. Most work on DoP has focused on the evolution of compositional semantics (e.g. Kirby et al. 2008; Galantucci 2005). It is only recently that these methods are being adapted to explore combinatorial phonology, where studies have looked at the effects of iterated learning on its development (e.g. del Guidiche et al. 2010; Verhoef 2010; Verhoef 2011).

The current paper presents a novel experimental paradigm investigating whether combinatorial structure emerges as a result of pair-wise communication: Participants engage in a game requesting and giving semantically unrelated novel objects, where the roles of 'requester' and 'giver' alternate each round. They jointly receive positive feedback if the object requested matches the object given. Participants are separated and communicate solely through slide whistles, which mirror the semi-continuous articulatory space. There are no pre-defined signals. Outputted signals are analysed for combinatoriality, and the way in which the structure of the systems changes over time is also analysed. Whilst no results are yet available, the prediction is that participants will progress from a more holistic to a more combinatorial system over the course of the game.

The paradigm presents an opportunity to better understand and test parameters affecting the degree of combinatorial reuse and thus compliments the growing body of work investigating computationally, experimentally and with real languages the evolutionary emergence of duality of patterning.

For ULAB 2011, the background body of contemporary and exciting work in evolutionary linguistics will be introduced, and the experiment and future potential experiments summarized. Some preliminary results will be outlined.
There will be opportunity for audience members to play slide whistles.

15. **11:50 Timothy O. Bazalgette** (University of Cambridge Graduate Degree, Presenting Undergraduate Work)
   Who Posh Have I Been Talking to? An Investigation into a Class of Non-Standard Adjectival Wh-phrases in English.
   Topic: English Syntax

In many dialects of English there exists a class of related wh-constructions, characterised by a wh-element followed by an adjective and no modified noun phrase. Examples of these constructions are shown below, with the relevant wh-phrase indicated with square brackets:

(1) [Who posh] have I been talking to?
(2) [Where nice] would you like to go?
(3) [What big] happened yesterday?

These constructions (henceforth all referred to with the blanket term who-posh constructions) occur almost exclusively in spoken form, and tend to be expressed in specific discourse contexts and with a specific intonation profile, and so seem somewhat ungrammatical when written and in isolation. They are nonetheless attested in native speakers, as in the following (spoken) example by a speaker from the south-west of the UK taken from the British National Corpus (KBL 4515):

(4) [What different] have you got ta do a, a tape a day or something?

In my presentation, I intend to make it clear that who-posh constructions have various interesting and unexpected properties, and show that attempts to account for these properties may reveal interesting facts about the nature of English wh-phrases in general.

I first present some preliminary evidence for the geographical distribution of these constructions, which demonstrates that the types of construction used varies largely throughout English-speaking countries. This variation, however, is not entirely random, with only certain combinations of constructions being used, suggesting an implicational hierarchy which makes clear suggestions about the emergence of the phenomenon in apparent time (Labov 1966). I then investigate the licensing of the construction in some detail, considering both the wh-elements which may enter into who-posh constructions as well as the constraints on their acceptability. In general, the constructions are more acceptable when pragmatically salient (such as when the adjective involved is prominent in the discourse), when the adjective is phonologically light, and when it is semantically unmarked. All these effects, including the phonological ones, appear to be constraints on performance rather than on competence.

Having reviewed the distribution and constraints on usage, I then move on to a formal analysis, first considering the semantics of the constructions, where it becomes clear that the lack of a noun alongside adjectival modification is somewhat problematic. This difficulty is also reflected in the syntax, and here a number of other problems arise – for instance, the construction is limited to wh-phrases and has no declarative equivalent, and also behaves variably with respect to D-linking (Pesetsky 1987). Taking a minimalist (Chomsky 1995) approach, I assess two putative analyses of the construction – one involving a covert light noun within the wh-phrase, and another making use of a reduced relative clause. I conclude that the latter of these is the most productive approach, as it accounts for more of the difficulties as well as, for instance, linking the construction to Tsai's (1994) decomposition of English wh-phrases. Such a conclusion not only explains who-posh constructions, but also sheds light on the internal structure of wh-elements in English.

16. **12:10 Teresa Kieseier** (University of Konstanz 4th year)
   Phonological Features of North Carolina English
   Topics: Phonology, Dialectology

Dialects of the American South have long been of interest to linguists due to great internal diversity (e.g. Schneider, 1996; Nagles and Sanders, 2003; Tillery and Bailey, 2008). The language of North Carolina is particularly intriguing since the state is part of two big dialectal areas. The eastern half of the state is classified as South, while its western regions are part of the Midland dialect (Eliason, 1981). Those differences as well as a discrepancy between urban and rural areas have great impact on the language spoken in North Carolina. However, some controversy regarding the future of Southern American dialects does exist. While some expect an eventual homogenization of Southern American dialects due to changing demographics and urbanization (Feagin, 2003), others state that Southern regional dialects are still very much intact (Bailey, 1996).

The present paper is based on my recent (2011) BA thesis. In order to examine the present situation of North Carolina phonology the central question was whether characteristic phonological features are still present in the speech of young adults from North Carolina. I recorded and acoustically analyzed the spoken language of 23 young adults, age 18-23, studying at the University of North Carolina at Chapel Hill. I focused on two phonological features: dropping of postvocalic /r/ (as in her, store, or brother) and monophthongization of [aɪ] (five: [faɪf] > [fa:f]). The recorded data included reading as well as free speech examples. Factors in the analysis included the morpho-phonological environments of the target sounds, as well as speaker background.

The results of the analysis are as follows: The features I tested are both still present in the speech of young adults from North Carolina although not produced in the majority of cases. I show that the morpho-phonological environment is significant such that postvocalic /r/-deletion is much more frequent in unstressed syllables and in functional-category items than in stressed syllables and in lexical elements. People from eastern North Carolina were more likely to drop the postvocalic /r/ than people from western North Carolina. Similarly, test subjects from rural regions showed a higher percentage of monophthongization than those from urban areas. Hence, parameters influencing distribution and frequency can vary across features. Both features were more frequent in free speech, demonstrating that the use of those features is influenced by conversational context.

Altogether, the results of this study suggest that it is hard to predict a general trend for the future development of North Carolina phonology, since some dialectal features might be more resistant than others. My data shows that, even though less frequent in total numbers, vocalic dialectal features might be more likely to be preserved, as they are more consistent across contexts, and within individual usage. Lastly, the fact that the features analyzed still appeared in the speech of young people, and even within a formal context suggests that they will not disappear completely any time soon.

17. **12:50 Elizabeth Anderson** (University of Edinburgh 4th year)
    The Perception of Tones with Missing Fundamental Frequencies in Beginning and Advanced Students of Mandarin Chinese
    Topics: Phonetics, Pyschoacoustics

    This study was designed to investigate whether the acquisition of the tone language Mandarin Chinese has any affect on the perception of tones with missing fundamental frequencies. Individuals perceive either the missing fundamental frequency or the lowest present partial of an MF tone and usually respond to one or the other consistently, as determined using a forced-choice pitch direction task with MF tones. This study utilized this paradigm and tested beginning and advanced learners of Mandarin Chinese at the university level, accounting for musical experience and right-handedness, both of which have been shown to increase fundamental listening. Though no evidence was found in this study to support the influence of subject variables on MF tone perception, there is evidence that stimulus variables such as the frequency of the tone and harmonic number of the partials do influence responses in the task.

18. **Martin Kohlberger** (University of Edinburgh Graduate Degree, Presenting Undergraduate Work)

   A Phonological Overview and Analysis of Aspirated Stops in Central Highland Ecuadorian Quichua
   Topics: Fieldwork, Phonetics

   Quechua is a language continuum spoken in the Andes Mountains in South America. Despite extensive linguistic fieldwork on it, some Ecuadorian dialects of it remain undocumented and some questions are unresolved. Aspirated and ejective obstruents have emerged in some Quechua dialects against the expectations of regular sound change, but the only well documented case of this innovation is a southern Peruvian/Bolivian dialect.

   The first two aims of this investigation were (1) to find an undocumented Ecuadorian dialect and (2) to describe its phonology. The third aim was to examine its obstruent system, establish whether aspiration/glottalisation contrasts exist, and determine whether they were likely to be a result of the same innovation as the one that the southern Peruvian/Bolivian dialect underwent. The dialect chosen for this study was the Cotopaxi Quichua dialect of central Ecuador and fieldwork was conducted in the Quilotoa community. Most of the data collection was done through recorded elicitation sessions with local native speakers.

   In addition to providing an overview of its phonology, this study found that Cotopaxi Quichua does indeed have phonemic aspiration contrasts. Furthermore, there is robust evidence to suggest that it acquired the aspiration through the same innovation as the southern Peruvian/Bolivian dialect.