# The exhalations whizzing through the… er? SQUARE and NURSE in Lancashire English

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The SQUARE-NURSE merger is traditionally claimed to be a feature of Lancashire English and sources such as the Survey of English Dialects support this view. The merger is a feature of present day Bolton phonology (see Shorrocks, 1998). There is little traditional dialect data for inner Manchester varieties. However, what data there is suggests that these varieties have a contrast. Given the close proximity of towns such as Bolton and inner Manchester, in my MSc research I am investigating the potential for dialect levelling with respect to the SQUARE-NURSE merger.

I will report on a pilot study carried out in Bolton, using old age pensioners and teenagers as informants. Preliminary results suggest that the merger is still present in the speech of both age groups in Bolton, but that there is some variation between speakers, and in the speech of some individual speakers. Upcoming research will look at the status of the merger in inner Manchester and Salford, and in locations in between Bolton and inner Manchester in order to investigate the effect of prolonged contact between speakers with the merger and speakers with a contrast.

# The effects of frequency on vocalic variation in Scots and Scottish English

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The description of vocalic variation in Scotland is often presented as a bipolar phonological system ranging from 'Scots' to 'Scottish Standard English' (Stuart-Smith 2003). It has been claimed that within this system, there are two main types of vowel: those which are shared throughout the 'Scots'-'Scottish Standard English' continuum, e.g. the vowel in the BET lexical set (from Aitken 1984), and those which are alternating such as the OUT vowel, where speakers can select either the 'Scots' variant [ʉ] or the 'Scottish Standard English' variant [ʌʉ] (Stuart-Smith 2003: 117). Sociolinguistic studies of alternating vowels (see, for example, Macaulay 1977; Eremeeva and Stuart-Smith 2003) have described this variation primarily in terms of the age, gender and social class of the speakers. However, these methods lack the ability to explain the variation that occurs within social categories when a range of variants are used to different degrees.

This paper examines the pattern of variation in two 'alternating' vocalic variables in data collected from 16 adolescents who form a community of practice in Fife. The data were collected in 2005 using the ethnographic method of long-term participant observation (Eckert 2000). Variation in the OUT lexical set exists primarily between the stereotypically 'Scots' variant [ʉ] and the 'standard' variant [ʌʉ]; variation in the COT vowel exists between the 'standard' [ɔ] variant and the 'Scots' [o] variant.

I will expand the analysis beyond that provided in other accounts by explaining some of the ways in which a cognitive approach to language structure can incorporate aspects of this linguistic variation. After introducing the theoretical framework Cognitive Grammar (Langacker 1987; 1991), I will explain how variation in these data can be better understood with notions of entrenchment in a schematic network in cognition.

The first part of the paper examines the relationship between word frequency and patterns of variation in the OUT variable. Specifically, it shows that higher frequency words are statistically more likely to occur with the [ʉ] variant than low frequency words for these speakers. This variation is then related to a model of sound change proposed by Bybee (2002) which is usage-based and focuses on word frequency as a motivating factor in lexical diffusion. The second part of the paper compares the variation between both variables and explains this with the Cognitive Grammar notion of entrenchment. I will argue that the difference between the patterns of variation in these variables is primarily the result of differences in 'schema strength' (Taylor 2002:275).

## Language evolution in the context of human evolution

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Language evolution tends to be treated independently of human evolution or the human evolutionary model considered is not made implicit at all. I argue that a consideration of the most probable class of human evolutionary models has a profound impact on the plausible language evolution scenarios. For example, the probability of saltational, one big mutation models for the appearance of modern language is greatly decreased while that of gradual, accretionary models increased. I will also discuss the case of human FOXP2 gene, usually taken to support a saltational, recent evolution of modern language.

## Phonology without orthography and the extent of the phonological deficit in dyslexia

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The observation that most people with developmental dyslexia show a persisting deficit relative to controls on phonological awareness tasks has led to the hypothesis that dyslexia is caused by a phonological impairment. However, because of the similarity between the units of phonology and the units of conventional orthography, this deficit cannot be unambivalently attributed to a phonological source – it could equally be a tautological description of dyslexics' literacy difficulties.

In order to examine whether the phonological difficulties of people with dyslexia extend to areas of phonology which are not represented orthographically, I have turned to suprasegmental phonology, and specifically stress-based minimal pairs, the suprasegmental analogy of phoneme-based minimal pairs. In my talk I will present the results of a small-scale pilot study which aimed to establish whether or not unimpaired speakers were able to carry out a minimal pairs discrimination task based on stress pairs.

Although the study showed that the task was quite difficult for unimpaired speakers, at the same time it identified ways to modify the task to make it easier. Once the task is brought within the reach of unimpaired speakers, it will be possible to use it as a tool to see whether dyslexia is genuinely a pan-phonology deficit, or whether the deficit is restricted to those aspects of phonology which have orthographic counterparts.

## Subject verb agreement: How is gender processed in Slovene?

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Attraction effects, where speakers erroneously make a verb agree with an intervening ('local') noun rather than with the subject head noun, are well established with plural local nouns (e.g., Bock & Miller 1991). For example, sentences like "The baby on the blankets are crying" are well-attested in English, whereas singular errors after a plural head ("The babies on the blanket is crying") are less common. According to some models (e.g., Eberhard 1997), this because the singular form is unmarked. Harrison *et al.* (2004) found that although the pattern of errors was much more complex with a system involving three number values, the dual appeared to be the most marked.

Although grammatical gender clearly differs from number, being an inherent noun property rather than varying with discourse context, similar effects have also been observed with gender agreement (e.g., Meyer & Bock 1999, Vigliocco & Franck 1999). Hartsuiker *et al.* (1999) also found that feminine head nouns were more susceptible to number agreement errors than masculine or neuter head nouns, but this is likely to be due to the fact that feminine singular nouns take the same determiner as plural nouns in German rather than any inherent susceptibility; and they did not look at gender agreement per se.

Using the same sentence completion paradigm, I examined subject verb agreement in a three-way gender system to see whether one gender is more marked than the other two.

I will discuss the most common patterns of errors and what the implications are for theories of agreement processing and the role of markedness.

# The evolution of colour vision and colour terms

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By three months, most infants have functioning trichromatic eyes (i.e., eyes capable of normal colour vision), and young children can easily deal with (e.g., discriminate) objects on the basis of colour. Yet the misuse of colour terms by children, both in production and comprehension, is the rule rather than the exception. These facts (compounded by the Sorites paradox) might be taken to suggest that, given enough time, colour term systems should be free to evolve to any configuration. However, the World Color Survey shows consistent features in the colour systems of the world's languages. The problem may be resolved by considering the conditions under which a language (or a group of people) would develop words which look (distributionally) like colour terms. In this talk I will argue that the evolutionary history of colour vision implies these conditions share similarities across cultures and that these similarities explain the common features of different languages' colour terms.

# Investigating orthographic, phonological and adjacency influence on Rapid Automized Naming (RAN) deficits in developmental dyslexics

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We examined dyslexic Rapid Automized Naming (RAN) deficits. Experiment 1 varied task format and suggested that whereas control performance is facilitated by preview of the subsequent stimulus, dyslexic performance is not. Follow-up experiments compared dyslexic and control performance on three types of confusing (similar) letter sets (visual, onset and rhyme), with confusing items presented adjacently (adjacency confusion) or non-adjacently (non-adjacency confusion). If dyslexics found processing adjacently confusing items more difficult than controls in a particular letter set, it would be considered as potentially contributing to the RAN dyslexic deficit. Of the confusing letter sets, Experiments 2 (visual) and 3 (phonological onset) did not demonstrate that dyslexics have a problem with adjacently confusing items, but Experiment 4 (rime) did. We conclude that impaired parafoveal (visual) processing is not responsible for the dyslexic RAN deficit, but use of executive processes to co-ordinate similar rime information in the phonological loop may be problematic.

# Segmental and suprasegmental cues to prosodic boundaries

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The existence of different constituents/boundaries within theories of prosodic phonology is signalled by several cues, such as intonational contours, segmental sandhi, articulatory strengthening etc. (e.g. Nespor and Vogel's (1986) constituents were mainly derived from the application of segmental sandhi). The manifestation of most of these phenomena has been tested separately, showing that there is good reason to assume that they are regulated by a prosodic structure (e.g. durational lengthenings at the proximity of higher prosodic boundaries). One assumption of many papers is that all of those cues can be considered as correlates of the same structure.

My research aims to 1) test the assumption of whether segmental and suprasegmental phenomena can be considered as cues to the same structure, and 2) to investigate the nature of this constituency. I propose to simultaneously investigate the correlates of intonational contours, durational patterns and segmental sandhi in Greek, and discuss potential mismatches between the structures they signal. Furthermore, taking into consideration how recent research suggests that the phonetic output of those processes is gradient and not categorical, I will also investigate whether they signal scalar differences between boundaries, or more gradient transitions.

In this talk I will present the motivation for my study, as well as the preliminary design of an experiment I am planning to run.

# Language shift, ethnolinguistic vitality and historical sociolinguistics: testing the models

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The study of language shift can be divided into three main currents. The first of these, from the late 1950s, focused on issues of diglossia and domains. This was followed in the 1970s by studies in language ecology and ethnolinguistic vitality. Finally, from the 1990s research has also drawn on social network theory. Each of these research methods views the topic from a different angle and as such they complement rather than replace each other.

When researching historical cases of language shift, the lack of available data and live interviewable subjects has consequences for research methods. This is what is called the 'bad data problem'. Consequently, I will argue that the available data from cases of language shift in Early Modern Europe is most suitable to research according to ecology and ethnolinguistic vitality methods. Although subjective ethnolinguistic vitality data (Bourhis et al. 1981) will not be available, objective data can be obtained using models like those by Giles et al. (1977), Tandefelt (1988) or Edwards (1992).

I will test this hypothesis by using Edwards' model to obtain data on the ethno-linguistic vitality of Shetland Norn, a language that died in the late 18th century after a language shift to Scots.

# Implicit learning in adult second language acquisition: the issues of awareness and abstractness

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Implicit learning research with non-linguistic artificial grammars has demonstrated that participants use knowledge they cannot report. This has been explained either as grammatical knowledge held without awareness or as information about surface aspects of strings. These interpretations represent orthogonal dimensions: awareness and abstractness. This experiment considered both with a linguistic learning target.

*Ab initio* learners were presented with a Persian target structure which involved a long-distance dependency. The learning phase used a source-localisation memorisation task to encourage both unaware and surface-based learning. The subsequent test phase included timed and untimed grammaticality judgement tests and a multiple-choice sentence-correction task. Items were contrasted in grammaticality and in whether they contained a novel word pair.

The sentence-correction task was used to divide the participants into those with explicit reportable knowledge of the grammar and those without. Both the Learners and the Non-Learners were found to respond to the grammaticality judgement tests on the basis of the abstract grammatical rule rather than surface string chunks. Contrary to expectations this was the case in both the timed and the untimed versions.

The Learners performed significantly better than the Non-Learners in the untimed grammaticality judgement test, utilising their explicit knowledge. There was no difference between the groups in the timed version, suggesting that explicit knowledge could not be employed and that the grammatical information used must have been implicit. Evidence was found of both implicit and explicit abstract knowledge.

# Case study using music in foreign language education: teaching French to 13-year-old schoolchildren

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Many researchers have reported that music and songs can be used in foreign language teaching to efficiently increase learners' language skills (see Medina, 2003, 1990; Isenberg & Jalongo, 1997). However, few empirical studies exist to support these claims. Filling this gap in the literature will give educators confidence in using music to support all aspects of language learning. Several studies have shown that music is particularly effective in teaching early literacy skills (see Register, 2001) and that songs act as a memory aid when teaching content in other subject areas (see Wallace, 1994; Lamb and Gregory, 1993; Gfeller, 1983). Might these effects of music carry over even more strongly into second language learning?

This empirical, real-world study aims to offer scientific support for the beneficial effects of using music in teaching beginner-level French to native Scots English speakers. Through the generous help of Learning Tapestry, two groups of S2 students matched for age, socioeconomic status, musical training, and language background were identified. The study will measure differences in terms of acquisition of grammatical structures, vocabulary, and phonological skills in French, comparing their skills at the beginning with their skills at the end of the programme. The research attempts to ascertain which musical techniques, strategies, and activities are more effective, allowing educators to harness these effects to promote the enjoyment and efficiency of second language learning.

## Mid tone in Santo Domingo Nuxaa Mixtec

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According to underspecification theory, the expectation is that in a tone system with three levels one of those levels would be underspecified, usually mid. However, evidence from Nuxaa Mixtec presents a very different picture. I posit that there are three different levels in the input: high, mid and low. The interesting feature is that not all tones which are phonetically 'mid' in the output are 'mid' in the input. In this paper I will present data to show that output 'mid' tones come from three sources: one, some of these 'mid' tones are the default tone which is inserted when no other tone is available; two, others are indeed mid in the input; while three, others are low in the input.

## What is case alternation in Estonian all about?

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This talk will focus on case variation in Estonian objective cases, a phenomenon which has intrigued Finnic linguists for ages. This case alternation has been particularly puzzling because morphological case, being essentially a nominal category, is commonly viewed as marking verbal categories such as aspect. I will provide a short overview of the phenomenon along the lines of standard academic grammars of Estonian, as well as explain how current case theories attempt to account for this type of case variation both in Estonian and Finnish (a language which is closely related to Estonian). In the light of the canonical ways of accounting for case variation, I would like to introduce some results of the acceptability and/or grammaticality judgement tasks which were administered to (naïve) native speakers of Estonian. The tasks which focussed on case variation in various linguistic contexts provide rather surprising results, and have implications for the standard, static theories of case which do not enable to take into account any interaction between linguistic context and the properties of the morphological case, not to mention lexical information of the case-marked term. That is, the preliminary analysis of the results suggests that interpretations of morphological case are radically underspecified and are mostly a result of inferential effects.

## Investigating the goals of speech production: the integration of emphasis-cuing parameters

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During speech production, many physical parameters are manipulated to produce an intelligible signal. The current study examines one way in which these parameters might be integrated into larger functional units.

In this experiment, we investigate the integration of emphasis-cuing acoustic parameters, as seen in the following sentence pair: 'They aren't sending a woman. They are sending a *man*.' The production of emphasis involves several acoustic parameters: duration, frequency, intensity, and spectral balance. Are these produced as an integrated unit? (In other words, does a disruption to one triggers a compensation in the others, as when lip-movement compensates for jaw obstruction in bite-block experiments?) Or are they produced independently of one another? Utterance-final words with and without emphasis were elicited. Manipulation of sentence type (statement/question) generated different F0 environments for the utterance-final words. The F0 manipulation characteristic of questions obscures the F0 cue to emphasis, so that frequency contributes more to signalling emphasis at the end of statements than at the end of questions. Measurements of other parameters associated with

focus – duration, intensity, and spectral balance – were made to determine whether they responded. Initial results and their implications will be discussed.

# "Listenership" in Japanese face-to-face interaction: the contribution of laughter, especially in its interaction with nodding and verbal backchannelling

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In relation to the listener's behaviours, there have been no empirical studies of laughter in Japanese conversation. In fact, laughter is also important in determining the listener's role in Japanese. Looking at the listener's responses, we need to clarify how verbal and non-verbal behaviours interact with each other.

Moreover, considering the listener's role in Japanese, some studies have clarified that the Japanese listener uses backchannels and nodding more frequently than others, such as the English listener (Maynard, 1990; Clancy et al., 1996). In order to discover the reasons why the Japanese listener frequently tends to employ certain response activities, the issue of listenership might go beyond exploration of the listener's role. It is crucial to investigate how "listenership" – meaning "what is expected of the listener" – functions in Japanese conversation.

The purpose of this study is to explore what is involved in listenership in Japanese interaction. To investigate listenership, I shall seek to shed light on laughter co-joining with verbal backchannelling and nodding; additionally, I shall try to clarify their common motivations which may lead to the identification of the functions of listenership in the sequential organisation of Japanese conversation. Furthermore, I shall examine the correlations between the listener's activities and social factors, and how these interconnections influence Japanese listenership.

In this presentation, I will talk about existing research on listenership and its particular relation to the listener's role, with specific attention to laughter, backchannelling, and nodding. I shall also describe my research design and discuss some samples of analysed data.

# Was recursion the key evolutionary step in the emergence of language?

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A recent proposal (Hauser, Chomsky & Fitch, 2002) has suggested that the crucial defining property of human language – the only property which is both unique to humans and unique to language – may be recursion. In this paper, I offer a much-needed critical analysis of what is meant by the term recursion, and what its place in language is. Following this, I examine three reasons why Hauser, Chomsky & Fitch's recursion-only hypothesis cannot be correct. Firstly, recursion is neither unique to language in humans, nor unique to our species, appearing in domains such as music, social cognition, and theory of mind. Secondly, human language consists of many properties which are unique to it, but which are clearly independent of recursion, for example word order, and the lexicon. Thirdly, recursion does not even appear to be a necessary feature of human communication, as is evidenced by the Pirahã language. Consequently, recursion cannot be the key defining property of human language, and thus, is unlikely to have been the pivotal step in its evolution.

# The impact of lexical collocations on the origin of emphatic DO

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Whilst there is a substantial literature on the development of DO (including celebrated analyses by Engblom (1938), Ellegård (1953), and Kroch (1989)), study into its lexical associations has been considerably overlooked. This may be due, in part, to the recent focus on the effects of sociolinguistic factors. For instance, Nurmi (1999), working on the Helsinki-based Corpus of Early English Correspondence, explores the role of age, gender and social aspiration in the development of DO.

This paper re-examines a sample of the Helsinki data from a new language-internal perspective, identifying collocations that have not previously been explored empirically and forming a pilot-study for a larger Ph.D. project. Using the Corpus of Early English Correspondence Sampler, I investigate the verbs that are associated with the periphrastic construction in affirmative and negative statements in the sixteenth and seventeenth century. During this period, DO declines in the affirmative clause type, becoming associated with negative statements.

By identifying collocates of DO in affirmative statements from both a synchronic and diachronic perspective, it will be revealed that three distinct semantic sets of verbs, including verbs of desire, emotion and assertion, undergo a growing association with DO, as the use of the periphrastic construction declines. I relate this development to the onset of the Present Day English discourse function of emphatic DO. Whilst Ellegård (1953) proposed that emphatic DO was the result of an increasing association with inherently emphatic negative utterances, I suggest a causal role for the lexical associations of affirmative DO in creating an independent and specific emphatic function.

# Scientific news as a genre: a linguistic account of distortion of scientific information

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The communication gap that exists between the scientific community and the public should not be underestimated. Bridging this gap is important, especially in medical research as its findings will affect the public at large. The communication gap can be bridged through popularisation of science. In science popularisation, science journalists function as mediators who can convey scientific information to the public. However, scientific news is reported by the scientific community to be 'distorted'. The term 'distortion' has been used by the scientific community to refer to biased and sensationalised reporting. In minimising 'distortion', a variety of remedies such as guidelines, 'precision journalism', and 'critical medical journalism' have been offered by the scientific community. The emergence of these remedies suggests that the journalists should be held responsible for the 'distortion' that occurs in scientific news reports. Nevertheless, the efficacy of these remedies is questioned by the journalists. Thus, the present study will provide an alternative account of the distortion that is reported to occur in scientific news. This study will argue that, instead of viewing 'distortion' in terms of bias and sensationalism, the term distortion could be used to refer to the gap between scientific news reports and scientific research reports. Consequently, distortion could be explained with reference to scientific news reporting as a specific genre. The methodology that will be used in this study is the English for Specific Purposes (ESP) approach to genre analysis.

# What's so special about quantifiers?

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I present the merest sketch of an alternative to Generalized Quantifier Theory. GQT is not very good at dealing with vagueness, or so I argue. Moreover, it fails to capture the analogy between vague quantifiers 'many', 'few', 'most', etc., and vague adjectives 'big', 'small', 'heavy', 'light', etc.

Keenan & Stavi suggest that 'many' is not truth-apt. Westerståhl, on the other hand, opts for "contextual variables". I criticise both attempts to deal with the problem.

I suggest an alternative from an externalist and naturalistic semantic perspective. We break the problem down into two. First is the metaphysics. What is *being many*, *being big*, *being heavy*, etc. and, while we're at it, what is number? What is it that seven swans, seven cats, seven stones, etc. all instantiate? Second is the semantics. What is the nature of the correspondence between 'many' (or MANY) and *being many*?


# Is auditory word recognition direct or indirect?

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Models of spoken word recognition tend to make the assumption that the recognition of words involves the previous recognition of smaller, phoneme-sized units. I am investigating this issue with a combination of word learning, repetition priming and phonetic categorisation. So far, results have not been conclusive. While the data from the phonetic categorisation task is consistent with a model that has no intermediate level of phoneme recognition, the data from the repetition priming task is ambiguous.


# Syntax-discourse interface in L2 learners

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Recent research in second language acquisition has suggested that divergence from native speaker behaviour in L2 learners may not be due to a deficit in syntactic representations, but rather difficulty integrating these syntactic representations with other sources of information, such as discourse information. However, as yet there is very little online research into processing at the syntax-discourse interface in L2 learners. In this paper I report an experiment in progress investigating the development of the syntax discourse interface in English speaking learners of L2 German.

The syntax-discourse interface is considered to be the availability of more than one syntactic option, the choice of which is determined by discourse conditions. The current study (based on Kaiser & Trueswell, 2004) exploits the discourse implications of word order variation in German. In German, word order variation is used to encode the information status of entities. SVO word order is considered unmarked, whereas OVS word order signals that the O is most likely to be old, or familiar information, and the S is more likely to be a new, or unfamiliar entity. As English has relatively fixed word order, L2 learners of German must acquire the link between word order and discourse to comprehend sentences in a nativelike manner. The impact of several variables such as amount of naturalistic exposure and proficiency will be analysed, shedding light on developmental progression. This study will use the visual-world paradigm, which allows analysis of the incremental interpretation of the sentence.