Bridging formal and sociolinguistic approaches to language contact and code-mixing

PAPER ABSTRACTS

Thursday 27 April

PLENARY 1:
Interpreting outcomes of language contact – postmodern perspectives
Hilde Sollid (UiT The Arctic University of Norway)

Studying outcomes of language contact is a multidisciplinary endeavour depending on insights from a range of disciplines, and because of this there is a lack of conceptual coherence both across and within the disciplines, which in turn is opening a space for diverging interpretations of the same empirical observations depending on the researcher’s epistemological stance. This is challenging, but also a fruitful space for theorisation on new linguistic practices in multilingual spaces if language contact research is crossing epistemological bridges between theoretical perspectives.

In my talk, I revisit data from previous fieldworks to explore interpretations of a specific use of demonstratives in a Northern Norwegian contact variety (Sollid 2013), where the demonstrative phrase has alternative number/gender agreement compared to written standard Norwegian, cf. example (1a-1b) respectively. I will first address a conceptual incoherence within sociolinguistics, before I introduce the ideas of parallel grammars in Eide & Sollid (2011) where theories of sociolinguistics and generative grammar are combined in order to interpret linguistic variation that emerge in multilingual settings.

Example (1a): Contact variety: det der storslettingan the-NEUT-SG there storsletting-MASC-PL-DEF
Example (1b): Written standard: de der storslettingene the-PL there storsletting-MASC-PL-DEF
(‘those from Storslett’)

Simplifying the picture, in sociolinguistics there is two main approaches with slightly different ontological underpinnings (cf. Svendsen & Quist 2010). In the variety-approach new linguistic practices are analysed as parallel to other varieties of the same language (cf. the ethnolect concept in Sollid 2013). Thus, the goal is to understand how the outcome of the multilingual practice (i.e. 1a) is part of a variety that is considered to be more or less bounded. In the practice-approach the focus is on how speakers create and negotiate meaning in interaction using available linguistic resources (cf. the languaging concept in Jørgensen 2008). Thus, the focus is on how speakers use (1a-1b) and what social meanings that are indexed, but there is less focus on the grammatical aspects. Both these approaches are useful for a comprehensive understanding of the new linguistic practice exemplified in (1a-1b), but the question is how to overcome the different ontological underpinnings. Here, the ideas of parallel grammars (Eide & Sollid 2011) might be helpful. In the parallel grammar approach the focus is in the individual speaker and her collection of arbitrary and idiosyncratic set of sub-grammars. These sub-grammars are micro-level systems, for instance the demonstrative systems in (1a-1b). These can
contradictive with respect to formal aspects and social indexicality, and they are also more or less purposeful in different social settings. At this point there seem to be an ontological relationship between the parallel grammar approach and the practice approach, as the sub-grammars can be compared to a speaker’s range of linguistic resources.


PAPER 1:
Linguistic and sociolinguistic factors in language change: Grammatical gender in Norwegian dialects
Guro Busterud, Terje Lohndal, Yulia Rodina & Marit Westergaard (NTNU & Universitetet i Tromsø)

The goal of the present study is to discuss the relation between linguistic and sociolinguistic factors that have been argued to play a role in an ongoing change in the grammatical gender system of L1 speakers of Norwegian. The change from three genders (masculine, feminine, neuter) to two (masculine, or common, and neuter) has been attested across a number of dialects and is characterized by substitution of the feminine indefinite article ei (e.g., ei bok ‘a book’) by the masculine form en (e.g., en bok) (cf. Conzett et al. 2011 for the Kåfjord and Nordreisa dialects; Lødrup 2011 for the Oslo dialect; Rodina & Westergaard 2015 and Alsos 2016 for the Tromsø dialect; Stabell 2016 for the Alta dialect).

According to Rodina and Westergaard (2015), the nature of the change is due to the process of language acquisition (referring to the way the system changes, e.g., which properties are more vulnerable than others and therefore change faster). Relevant factors explaining the nature of the change are syncretism (between masculine and feminine), frequency in the input, lack of transparency, as well as early acquisition of declensional forms (bound morphemes) compared to the indefinite articles (Rodina & Westergaard 2013).

At the same time the cause of the change appears to be sociolinguistic. For example, language contact with Saami and Kven (languages that do not have grammatical gender) is argued to have caused a reduction in the dialects of Kåfjord and Nordreisa (Conzett et al. 2011), which the high prestige of a spoken variant of the written standard bokmål seems to be responsible for the change in e.g. Oslo and Tromsø.

We present results from a production experiment testing gender marking in indefinite and double definite forms among children, adolescents and adult speakers in Trondheim (n =71). This study presents new evidence regarding gender marking in the Trondheim dialect, showing that the change in this dialect is more advanced compared to the Tromsø dialect. The observed pattern will be discussed in light of several sociolinguistic factors, such as ‘city
jumping’ (cf. Trudgill 1974, 1983; Taeldeman 2005; Vanderkerckhove 2009) and geographical closeness to Oslo and Standard East Norwegian.


**PAPER 2:**

**Strict and sloppy bidialectals: differences in online processing**

Björn Lundquist, Øystein Vangsnes, Janne Sønnesyn (Universitetet i Tromsø, Høgskulen på Vestlandet)

How does being bidialectal affect one’s processing strategies? Do bidialectals have a set of predictions and expectations common to both varieties, or do they maintain distinct processing modes? This paper reports the findings from a study of dialect mode in online language comprehension, and the correlation between online comprehension and production. Students from a high school in Sogn in central Western Norway (n: 42, age: 18) took part in two eye tracking experiments (Visual World Paradigm), one with spoken stimuli presented in the local dialect, and one with stimuli presented in the Oslo dialect. The same students also did a production experiment which targeted different morpho-syntactic and morpho-phonological features within the noun phrase.

All the pupils were users of the minority written standard Nynorsk and associated their own Sogn dialect with this language variety, whereas the Oslo dialect was perceived as representing the majority written standard, Bokmål. The students have been formally taught Bokmål alongside Nynorsk from age 14, but since the extracurricular exposure to Bokmål is massive already in pre-school age, these students are effectively bidialectal/bilingual from an early age. At the same time, the traditional dialect contains several grammatical and/or phonological properties which are not present in Nynorsk either. Indefinite NPs with feminine and masculine nouns are given in 1, and the corresponding definite forms are given in 2; features present in the dialect but not Bokmål are boldfaced, features present in neither Bokmål nor Nynorsk are boldfaced and italicized:

1. **ei rau-e bok/vesk-a**
   - en rød bok/vesk-e
   - ei raud bok/vesk-e
   - a red book/bag (fem)

2. **ein rau-e hane**
   - ein raud hane
   - en rød hane
   - a red rooster (masc.)

   **Sogn**
   **Nynorsk**
   **Bokmål**

   **English**
The results from the production test showed that many speakers mixed markers from two or three of the systems, resulting in inconsistent use of e.g. the strong/weak feminine marker (\textit{den rau-e bok-i} – \textit{den rau-e pil-a}), final vowel in indefinite weak feminines (\textit{tromm-e} – \textit{vesk-a}), and use of articles (\textit{ei grønn bok} – \textit{ein svart bok}). Other speakers had more consistent patterns, some of them following the traditional dialect pattern, but most of them missing out on the traditional adjectival markers.

The purpose of the eye tracking study was to see whether the speakers adjusted their parsing strategies depending on dialect mode: are they aware that the masculine article \textit{en/ein} can be followed by either masculine or feminine nouns in the Oslo dialect, but only a feminine noun in the local dialect? Have they transferred a parsing strategy from the local dialect (only masculine nouns after \textit{ein}), or has the local grammar been affected by the input from Bokmål to the extent that both masculine and feminine nouns are expected after \textit{ein}?

The results showed that one group of speakers could adjust their online processing to the correct dialect mode, showing clear evidence of expecting only masculine nouns after \textit{ein} in the local dialect mode, while expecting either feminine or masculine (but not neuter) nouns after \textit{en} in the Oslo mode (as diagnosed by anticipatory looks to a picture depicting a masculine/feminine noun in the eye tracking experiment). The other group showed no signs of a higher expectation of a masculine than a feminine noun after \textit{en/ein}. The two groups also differed in their production profiles: the first were more consistent in their production, i.e. showed less mixed patterns than the other group.

We suggest, based on this result, that some speakers are more likely to build an extended unified mental grammar when acquiring new dialects, incorporating some free variation, while other speakers draw stricter lines between different dialects. In our presentation we will discuss different factors that may influence people into one or the other category.

**PAPER 3:**

\textit{Predicate nouns in Heritage Norwegian: stability and attrition}

Kari Kinn (University of Cambridge)

English and Norwegian are not completely uniform with regard to how articles are used. An important difference concerns singular predicate nouns: while Norwegian uses bare nouns for (objectively characterising) predicates (\textit{Han er lærer}, lit. ‘He is teacher’), English requires the indefinite article (\textit{He is a teacher}).

This paper discusses the use of articles vs. bare nouns in \textit{Heritage Norwegian (HerN)}, spoken by bilingual (HerN–English) individuals in North America. Most HerN speakers are third generation immigrants who have acquired Norwegian as an L1, but whose dominant
language is English. The study draws on data from the CANS corpus and more recently conducted interviews. I will show that most HerN speakers follow the Norwegian pattern; however, English-style predicate nouns with indefinite articles are also found, and I will explore the nature of this phenomenon.

I will present evidence that the English-style pattern does not correlate with nouns that are borrowed from English. This is somewhat surprising in the context of Hasselmo’s (1974) study of Heritage Swedish, and it can be taken to indicate that the use of the indefinite article is not a direct grammatical effect of lexical borrowing (see King 2000).

Differences between heritage languages and the non-heritage baseline are often interpreted as either attrition (erosion in the course of a speaker’s lifespan) or incomplete acquisition/restructuring (change between generations). If we hypothesise that English-style predicate nouns are due to restructuring, and combine this hypothesis with a formal analysis whereby bare nouns both in the predicate positions and other contexts lack a Number projection (e.g. Munn and Schmitt 2002) certain predictions arise. We can expect the English-style pattern to be relatively stable within individual speakers, and also, potentially, that speakers who use the English-style pattern for predicates disallow bare nouns in other contexts too. A relevant context is nouns with a type reading (e.g. Jeg har førerkort, lit. ‘I have driving license’) (Borthen, 2003).

My results (so far) suggest that English-style predicate constructions in HerN are best understood as attrition and not restructuring: there is considerable intra-speaker variation, and speakers who use the indefinite article with predicate nouns still allow bare type nouns.


PAPER 4:
The CS/borrowing debate: Evidence from English-origin verbs in American Norwegian
Maren Berg Grimstad (NTNU)

A common feature of bilingualism is that the speakers in question will mix the languages they have in their repertoire, and the mixed item is often a single word. Such lone other-language items have received much attention, and a main issue has been whether to classify them as code-switches (CS) or borrowings and how to define those terms. Some say they are part of the same diachronic continuum, in which case there is no reason to assume that they undergo different morphosyntactic processes (Myers-Scotton 1993, Thomason 2003). Others, however, see the two as fundamentally distinct processes, meaning their formal analysis could differ as well (Poplack & Meechan 1998, Poplack 2012, MacSwan & Colina 2014). Finally, Muysken (2000, 2013) belongs to the second group with regards to formally separating what he calls code-mixing from lexical borrowing, but, importantly, he also separates code-mixing into four distinct subgroups: insertion, alternation, congruent

1 http://tekstlab.uio.no/glossa/html/?corpus=amerikanorsk
lexicalization and backflagging, of which the three first ones are relevant for my data.

By investigating English-origin verbs in a spoken corpus of the heritage language American Norwegian ((1)-(2), Johannessen 2015), I show that the way they pattern concerning their inflectional morphology can be explained by adopting an exoskeletal approach to grammar (e.g., Borer 2005), in which the syntactic structures are generated independently from the lexical items. This will be combined with a late-insertion approach to morphology, e.g., as in Distributed Morphology (Embick & Noyer 2007, Embick 2015).

This analysis provides a novel perspective on the CS/borrowing debate, in which Muysken’s code-mixing typology is shown to fit with both the data and the proposed formal model. Furthermore, this model eliminates the need for setting apart lexical borrowing as something formally distinct from code-mixing, since I assume that all roots are stored in one list rather than each language having its own mental lexicon in the mind of bilinguals. This also means that I do not have to formally distinguish these mixing phenomena from non-mixed items. The only formal distinction is between the three relevant subtypes of code-mixing, identified by whether the item in question is morphosyntactically integrated into the recipient language or not. Whether an item is perceived to be a novelty, an established loanword or a native word, on the other hand, is all about the speaker’s encyclopedic world-knowledge and influenced by such factors as the items’ frequency and dispersion across the speech community – what Muysken collectively refers to as its listedness. This means that both the sociolinguistic insights concerning a diachronic continuum as well as the formal insights concerning morphosyntactic integration and distinct formal analyses are preserved.

(1) vi bare satt der og watcha da
we just sat there and watch.PAST then
‘we just sat there and watched, then’

(2) mange av # de orda som vi e liksom # corrupted
many of # those words that we e sort of # corrupted
‘many of # those words that we e sort of # corrupted’


PLENARY 2:
Lessons from a ‘damaged brain’: The emergence of hybrid grammars
Enoch Aboh (University of Amsterdam)

In the literature, the term code-mixing/switching refers to examples such as (1) in which the speaker merges different grammatical systems into one sentence.

(1) Dáwè lî nò flín mì djà la vie est un combat. [Gungbe/French]
man DET HAB remind 1SG that DET life is DET struggle
‘The man reminds me that life is a struggle.’

While example (1), is produced by a neuro-typical brain (i.e., that of this author), Fabbro (1999: 153-5) reports example (2), which was produced by an aphasic polyglot suffering from pathological code-mixing.
One cannot distinguish between these two examples formally: the cognitive process that selects the relevant linguistic components of code-mixing appears to be undamaged in this aphasic speaker. What is impaired instead seems to be the inhibitory mechanisms responsible for deactivating lexical selection from the competing languages (cf. Abutalebi, Miozzo and Cappa 2000: 54).

These examples are commonly studied in relation to polyglots only. Yet, the fact that the cognitive process underlying code-mixing in (1) is so entrenched in speakers, and prevails in absence of relevant executive functions (2), suggests that it must be a basic property of the human learning device. I argue in this talk that this process, recombination, is present in all learners (monolinguals and bilinguals alike). During acquisition, recombination allows learners to select relevant linguistic features from heterogeneous inputs and recombine them into a mental grammar whose extensions represent individual idiolects, which Aboh (2015) characterizes as hybrid grammars. In supposedly ‘monolingual’ settings, outcomes of recombination are less noticeable because learners develop closely related variants. Yet, studies on the Flemish regiolect, the so-called tussentaal (De Caluwe 2007, Ghyselen 2015, 2016), as well as on ethnolects indicate that such mixes become apparent once the variants combined are more contrastive or involve typologically and genetically different languages (1-2). Monoglots operate on closely related variants (e.g., registers or dialects of the same language), while polyglots operate on more contrastive variants (i.e., typologically and genetically different languages). I conclude that learners develop an array of grammars that are combined during communication.


PAPER 5:
Two indigenous languages of Siberia in contact: a story of a late mixed language
Olesya Khanina (Russian Academy of Sciences)

The present paper is devoted to a mixed language that developed in the 20th century beyond the Arctic circle at the Tajmyr peninsula. Tajmyr is home to several indigenous languages that have a long history of mutual contact, in many cases multilateral: Tundra Nenets, Nganasan, Enets (Tundra and Forest dialects, sometimes considered different languages), Dolgan, Evenki, and Russian. There are only a few studies of the language contact consequences using these rich data (e.g. Siegl 2015 or Stern 2012), and the particular case discussed in this paper has never been reported in the literature.
The story started when a big group of Tundra Enets migrated from their traditional lands around what is now the Vorontsovo village to richer Awam Nganasan lands in the end of 1930s to avoid famine and probably also to hide from the Soviet expansion. Tundra Enets and Nganasans had been neighbors for centuries and mixed Tundra Enets – Nganasan households were common even before the migration (cf. Dolgikh 1962). The languages are related (both Samoyedic, Uralic), but different enough not to be mutually intelligible, though some kind of bilingualism in Nganasan, maybe only receptive, had been normal for most Tundra Enets (cf. Khanina & Meyerhoff, Subm).

The result of the migration was a suddenly increased quantity of mixed Tundra Enets – Nganasan marriages. By the end of the 1970s, there were no exclusively Tundra Enets families in the area, and by the beginning of the 2000s only a handful of elders considered themselves Tundra Enets and could speak Tundra Enets, all of them passed away since then. Thus, the process of the Tundra Enets dilution in the more numerous Nganasan community is over, both linguistically and ethnically.

Curiously, no linguist has ever paid attention to the peculiarities of the linguistic system the migrated Tundra Enets and their descendants used when speaking their heritage language, ‘Awam Tundra Enets’. However, recordings from 1970s, 1990s and early 2000s all show exemplars of the same stable lect with some characteristic features of a mixed language: Tundra Enets substance vocabulary with Nganasan discourse markers and some Nganasan morphology. As languages were related, some similarities could not help being noticed by native speakers: as a result, processes close to dialect leveling were also observed, when Tundra Enets morphemes were used or pronounced the way the cognate Nganasan morphemes were used or pronounced. E.g. Tundra Enets -sij is an affix of an Anterior/Passive participle that can be used in non-finite contexts only, while its Nganasan cognate -sua/-sja/-süa/-siə, IPA [so, se, sə, se], is used only finitely as a Past marker: Awam Tundra Enets used -sij as a finite marker in contexts of the standard Tundra Enets Past and Perfect.

Phonetic outlook of Awam Tundra Enets words also differed from the standard Tundra Enets. Though the changes were more sporadic than regular, it is clear that they could go in one of the three directions, either Tundra Enets sounds underwent the same changes as Russian loanwords did (e.g. /p/ > /f/, as no /p/ in Nganasan), or they changed to etymologically cognate variants (e.g. /tʃ/ > /ʃ/), or they got involved into the same variations that were common in Nganasan (e.g. /b/ > /ɓ/ or /w/).

The paper will describe some linguistic phenomena which differentiated the Awam Tundra Enets from the standard Vorontsovo Tundra Enets, i.e. the Tundra Enets spoken by relatives from the migrated group who either stayed in their traditional lands or returned home when the famine was over. I will use own field records for the latter and digitized sound recordings from a number of sources for the former. Finally, I will discuss methodological issues involved into a study of a lect that no one speaks any more with the help of remaining elders speaking one of the two languages that contributed to the mixed lect (i.e. Vorontsovo Tundra Enets and Awam Nganasan).

Summing up, Awam Tundra Enets represents an interesting case of a quick formation (most probably, in one generation) of a 'creolized' or mixed language that had a short life due to the short life of the ethnic group that spoke it. Similar cases from other parts of the world are known to linguistics, but they are quite few and new data to the pool would definitely contribute to a more fine-tuned modeling of the forms of language contact on the basis of its social history and functions.
Language contact may induce changes varying from simple loan words to breakdowns of morphosyntactic systems. Could the social and political status of a language predict what kind of linguistic changes are likely to occur when in close contact with other languages?

In sub-Saharan Africa variants of the Fula language phylum (including Fulfulde and Pulaar) take on different forms depending on the sociolinguistic environments in the many countries they are spoken. Fulfulde in Northern Cameroon has undergone radical changes due to its socio-political status. The language was introduced in the region in pre-colonial time by nomadic herdsmen, soon to be followed by powerful jihadist groups making alliances with or starting to rule the residing peoples. Linguistically, this led to a lingua franca, a simplified and pidginized Fulfulde, used for public purposes by the numerous peoples in the region. In colonial time, under predominantly French influence, the status of the language changed gradually, and we are now left with various linguistic levels, or strata.

“Fulfulde went out for a journey to the South, left Maroua [in the far North], came to Garoua and fell sick. It arrived in Ngaoundéré and died. Was buried in Banyo.”

(Popular saying)

“Pure Fulfulde”, called Laamnde, prevails within nomadic groups, among scholars, and in certain regions, especially in the far North. The idea of a pure language is still vivid among Fulophone speakers. Simplified Fulfulde, however, has suffered a breakdown of the complex noun class system (Métagno-Tatou 1998) and a simplification of the extensive verbal morphology (Fagerli 1994 and 1997). Mother tongue speakers have adopted certain of these changes, and are in addition facing the challenge of French and English in their everyday life. Loan words, code-switching and code-mixing is the rule (Bello 1997).

Based on the Fulfulde case I will argue that the kinds of linguistic change that are likely to happen to a language largely depend on the socio-political status of the language.
This paper investigates the role of linguistic and social factors in the outcomes of African American English in contact with Geechee in southeast Georgia, USA. As one of the few areas where the existence of a creole language indigenous to the United States has been well documented, southeast Georgia is particularly unique, even when compared to South Carolina, in that little is known about contact among African Americans in the coastal and inland areas and its effects on African American language varieties spoken there. At least two contact varieties, African American English and the English-lexifier creole Geechee, have been spoken alongside one another in this region for over two centuries. Both African American English and Gullah-Geechee developed as a result of language contact. Though they share structural similarities (e.g. lexical, phonological and morphosyntactic), contemporary African American English is viewed as a dialect of English, while Geechee is classified as an English-lexifier creole. Geechee speakers in Georgia have been undergoing a prolonged shift to English as a result of increasing contact with American English dialects such as African American English, Southern White Vernacular English, and General American English. Despite many structural similarities, the degree of mutual intelligibility between present-day varieties of Geechee and African American English has not been examined. Mutual intelligibility between closely related language varieties has been shown to be determined by attitudes, linguistic distance between varieties, and contact among speakers along with other language experience (Gooskens 2007). Perceptual dialectology has provided great insight into speakers’ awareness and understanding of language varieties and the social meanings they attribute to various linguistic features (Preston 1999; Long & Preston 2002). This paper uses perceptual dialectology methods to elicit attitudes toward African American language varieties in southeast Georgia and examine speakers’ ability to understand these language varieties. My findings reveal that phonological features are most salient in influencing perceptions of linguistic difference among African Americans and that morphosyntactic differences, while important from a linguistic standpoint, appear to be below the level of awareness for many respondents. Younger respondents perceive the speech of speakers aged 65 and older as least intelligible with their own variety, and the language varieties spoken by speakers from areas where Geechee communities reside are described as the most distinctive, particularly by respondents who reside outside of these regions. With regard to linguistic factors, I show that it is precisely in the places where African American English and Geechee differ structurally that we can find evidence for ways in which Geechee might have influenced the morphosyntax of African American English and vice versa. This research highlights the importance of using a range of theoretical and methodological approaches to examine the sociolinguistic dynamics of high-contact varieties, and it sheds light on the links between contact, linguistic variation, identity, language attitudes, and language change.

Previously described cases of contact-induced changes in constituent order have shown that languages with flexible orders become more rigid due to contact (Heine 2008). This project compares two cases of ongoing contact between Malayalam (Dravidian) and English as spoken by Malayalam-dominant bilinguals in Kerala, the Malayalam-speaking state in India. I present results from formal acceptability judgment tasks conducted in Kerala which show that age, which correlates negatively with measures of English contact, correlates positively with flexibility: increased contact with English results in decreased flexibility in Malayalam.

Malayalam as spoken in Kerala has been in intense contact with English for generations, which has resulted in changes at the level of the lexicon and phonology (Kala 1977, Asher & Kumari 1998). The canonical order in Malayalam is SOV, but all 6 logical orders are grammatical, and changing the order does not result in a change in truth-conditional meaning. Given this, how do we expect experience with English to affect constituent order in Malayalam? I consider two alternatives. It could be that Malayalam speakers with a high level of English contact borrow the canonical SVO order from English wholesale, which would result in a preference for SVO. Alternatively, high-contact Malayalam-speakers could be less tolerant of movement in general, resulting in an increased preference for the canonical order in Malayalam, SOV. I propose an operational definition of flexibility as being the relative preference for canonical SOV over non-canonical but grammatical orders.

An acceptability judgment experiment was used to measure relative preference. 44 native-speakers of Malayalam residing in the same district of Kerala participated in this study. The task was conducted in participants’ homes or places of work, and language background and attitude surveys were conducted with each participant. Participants were aged from 18-82, and care was taken to ensure that speakers were from a variety of backgrounds and socio-economic statuses.

Participants rated the six logical variants of transitive sentences on a 7-point scale. Malayalam has no subject-verb agreement and differential object marking; each experimental stimulus had three constituents: an animate subject, an inanimate object, and a verb. This ensured that the semantic role of each argument would be unambiguous. Stimuli were distributed among six lists pseudorandomly using a Latin Square. Audio stimuli were used, to avoid possible effects of diglossia. Each participant heard five tokens of each condition and 40 filler items of varying acceptability, resulting in 70 total items.

The 1-7 ratings were transformed into z-scores in order to account for individual differences in use of the scale. Age was used as a proxy for language contact, as it corresponds with measures of language contact in this population (medium of grade school instruction, level of engagement with English media, attitude towards code-switching and language mixing). The population was split into “Younger” and “Older” based on a median split in age. The “Younger” participants rated the canonical SOV order significantly higher (p<0.0001 for each) than they did the other non-canonical orders, reflecting less flexibility than “Older” participants, who did not rate SOV any differently from other non-canonical orders.
The data presented here is evidence for a shift from flexible to rigid in a case of ongoing language contact, and it demonstrates that the flexible-rigid pattern cannot be described by wholesale borrowing of the surface word order of the contact language; Malayalam speakers who are English-proficient are not just translating English sentences into Malayalam, rather, contact with English is affecting how speakers treat the canonical order in Malayalam. These results are discussed in comparison to data from constituent order in Korean heritage speakers, for whom similar results were found, suggesting a common source of reduced flexibility in these two populations.
PLENARY 3:  
*Principled grammatical fragmentation: Rethinking contact-induced change and obsolescence*  
Felicity Meakins (University of Queensland)

Languages undergoing accelerated change as the result of language obsolescence are often characterised as displaying high levels of variation and optionality in comparison with conservative varieties of the language. These characteristics are assumed to be symptomatic of grammatical fragmentation and a lack of systematicity. Elsewhere in linguistic theory, variation is treated as a crucial component of language evolution, representing the principled reorganisation of a linguistic system (Croft, 2000; Labov, 1994; Mufwene, 2001). In this talk, I use two case studies from northern Australia to argue that, while variation and optionality in grammatical systems is one effect of language obsolescence, these changes are nonetheless highly rule governed. Furthermore they can represent an increase in linguistic complexity rather than reduction or simplification which is often described for situations of language obsolescence (Campbell & Muntzell, 1989; Dorian, 1981, 1989).

Case study one is noun class marking in Jingulu (Mirndi, non-Pama-Nyungan), a highly endangered language of the Jingili people (Meakins & Pensalfini, 2016). Jingulu was documented by Chadwick in the 1970s and later by Pensalfini in the 1990s. During this time, Jingulu had undergone a number of changes, including in the noun class system. Jingulu distinguishes four genders: masculine, feminine, vegetable and neuter. NP modifiers such as adjectives and demonstratives generally show agreement in gender with the head noun, however Pensalfini (1999) also observed that modifiers can optionally ‘disagree’ with their head. Disagreement is principled and hierarchical with masculine-marked modifiers optionally found with heads of all four genders and neuter-marked modifiers optionally found with heads of the vegetable gender. This system was not in place when Chadwick first documented the language 20 years prior, suggesting the phenomenon described is the result of language obsolescence. Interesting similar ‘disagreement’ is found in other Australian languages which have undergone so-called normal historical change.

Case study two is of optional subject marking in Gurindji Kriol, a mixed language spoken by Gurindji people (Meakins, 2009, 2015). Optional subject marking involves variation within a cell in a paradigm, i.e. the (non-)use of a case suffix where the grammatical role of the nominal is unaffected by non-use. It developed when the Gurindji ergative marker was retained in the process of the formation of the mixed language, but also came to mark intransitive subjects. In Gurindji, the ergative marker was grammatically obligatory, whereas in Gurindji Kriol, the nominative (<ergative) became optional. Therefore, optionality developed in the nominative cell where an alternation now exists between the forms -ngku/-tu and a zero morph. The variation is driven by a number of semantic, syntactic, and information structure features including animacy of the agent and word order. Thus, optional subject marking in Gurindji Kriol is an example of a contact-induced change which involves the complexification of an inflectional paradigm rather than its simplification.
In Maningrida, northern Australia, code-switching is a commonplace phenomenon within a complex of both longstanding and more recent multilingual practices. Fourteen Indigenous languages representing three language families are spoken among 2500 people, alongside increasing use of local Englishes and contact varieties (such as Kriol, spoken further south in the Maningrida region, and right across northern Australia). Individual linguistic repertoires are typically large, but strong ideologies exist dictating rights/responsibilities around language ownership and use. A variety of code-mixing practices is observable between local Indigenous languages, and is now also widespread between local languages and English. Code-switching has been a feature of the longstanding stable ‘egalitarian’ multilingual ecology of the region (Singer & Harris 2016), yet the practice is also symptomatic of a changing local language ecology, shaped by the large-scale incursion of English and implicated in the emergence of a local urban koine.

In this paper, I give a brief overview of code-switching practices in Maningrida, and consider the nature of both linguistic and social constraints on their shape and function. Much work in the literature attributes the shape of code-switching to predominantly linguistic factors, such as the interaction of the grammars of the contributing languages, while allowing that social factors may influence more macro aspects, such as the choice of the matrix language or motivations for the practice itself (e.g. Backus 2003, Meakins 2011, Pfaff 1979). First, I address core linguistic/typological effects, and consider whether the observable code-switching patterns may be accounted for by general predictions from the literature, and the typological congruence of the languages implicated. Next, I consider
social-psychological and ideological effects, derived from such locally salient pressures as the important connection between language and territory, and the perseverance of small-scale multilingualism (Lüpke 2016) in the region. I demonstrate that while linguistic/typological factors are able to account for many observable tendencies in the data, there is reason to include language-external social motivations in accounting for not just the function, but also the shape of code-switching in northern Australia.

This paper contributes novel data from multilingual interactions in Maningrida, where code-switching is evident both between local languages and also with English and Kriol. Little published work addresses code-switching between Indigenous Australian languages only, but I consider what data exists in available accounts from northern Australia (e.g. Coleman n.d.; Evans 2010; Haviland 1982; O’Keeffe 2016; Sutton 1978), as well as data featuring mixing between Indigenous languages, Kriol and/or English (e.g. Meakins 2012; McConvell 2002; O’Shannessy 2012) to highlight broader tendencies, constraints and particularities. This paper is intended to demonstrate the importance and value in looking beyond purely language-internal motivations influencing the shape of code-switching practices, and suggests that in fact such a dichotomy may not always be tenable in understanding the diverse outcomes of language contact.

Code-mixing practices are not only an oral phenomenon of modern times, but have always been part of communication in multilingual settings. During the Middle Ages, Latin and Low German were important foreign languages in Norway: Latin as the traditional language of learning and the church, and Low German as the dominant trade language in the North Sea area. Both these languages were used in mixed-language writing, and this paper will address code-mixing practices found in late medieval texts from Norway (cf. Berg in press).

Certain formulaic phrases in official letters and charters were normally written in Latin, even to domestic recipients, a practice governed by genre-specific rules of letter writing. In more informal registers, we also find intra-sentential codeswitching. It seems to be a general tendency that code-switching is mainly found in unofficial notes and administrative writings (Schendl 2012). Example (1a) from a cadastre switches from Norwegian to Latin, whereas (1b) from an account manuscript switches from Low German to Norwegian.

(1)  a. Odals breffuet fek oss Birgita vxur seu relicta viri prefati
 [allodial letter]-DEF gave us Birgita, wife or widow [man said]-GEN
 ‘Birgita, wife or widow of said man, gave us the allodial letter’

    b. […] all ding dodtt saa dat he blyfft minnum here skyldug viij voger fiisk
       all things dead so that he becomes my-DAT lord indebted 8 voger fish
 ‘All things settled such that he owes my lord 8 voger fish’

Besides such examples of codeswitching, accounts especially abound with Latin words and phrases that to a certain degree may have been termini technici in these kinds of texts, as in (2a), yet the expressions in (2b) can hardly be explained in this way.

(2)  a. reddidi ei; misi ei
      ‘I repaid him’; ‘I sent him’

    b. sic credo; dubito
      ‘I think that’; ‘I doubt’

Examples such as these show that the scribes at work were people who worked and thought in several languages and exploited their whole linguistic repertoire in their written output.


Determiner asymmetry in mixed nominal constructions: the role of grammatical and social factors in data from Miami and Nicaragua

Jeffrey Blokzijl, Margaret Deuchar and M. Carmen Parafita Couto (Leiden and Cambridge)

This paper focuses on the question of which factors influence the language of the determiner in mixed Spanish-English nominal constructions like *el town* ‘the town’ versus *the ciudad* ‘the town’. Previous studies (Liceras *et al.*, 2008; Moro, 2014) found more Spanish determiners in mixed nominal constructions, such as *el town*. They suggest that Spanish determiners are preferred in mixed nominal constructions because of their grammaticised nature. However, they did not take into account that the language of the determiner generally matches the matrix language (Herring *et al.*, 2010). In other words, the language of the determiner tends to be in Spanish if the morphosyntactic frame (matrix language) of the clause is Spanish but in English if the morphosyntactic frame is English. So *el town* would occur in a Spanish frame with a Spanish verb while *the ciudad* would occur in an English frame with an English verb.

We use a larger set of data than previously to test the hypothesis that the matrix language is the main influence on the language of the determiner in both mixed constructions (e.g. *el town, la ciudad*) and unmixed or same language (*the town, la ciudad*). We used Spanish-English data from Miami (30 hours) and, for comparative purposes, Spanish-English creole data from Nicaragua (14 hours). We extracted clauses with mixed and unmixed nominal constructions containing determiners and nouns. The matrix language of each clause was coded as the language of the finite verb.

In the Miami data, 98% of the determiners in 8586 nominal constructions were in the same language as the verb of the clause. In the Nicaragua data, we have found a 97% match in the 316 nominal constructions analysed so far.

This led us to the insight that any asymmetry lies in the choice of the matrix language rather than that of the determiner. But we found a greater tendency to switch from the determiner to the noun when the matrix language was the language of lesser prestige, i.e. from Spanish determiner to English noun in Miami, and from English creole to Spanish noun in Nicaragua. We will discuss explanations for this result, drawing on previous findings regarding (i) work on switching towards the language of power in India (Bhatt 2013), (ii) switching asymmetries in the Miami data (Fricke & Kootstra 2016) and (iii) the argument that switching is a marker of information content (Myslin & Levy 2015).

We conclude that while the language of the determiner is influenced by matrix language, other factors influence its noun complement.


PLENARY 4:

*Unexpected congruent lexicalization: when typological distance does not preclude grammatical integration*

Ad Backus (Tilburg)

In much of my work I have been attempting to account for language contact data in a framework that is loosely based on the usage-based approach to linguistic theory formation that has been the cornerstone of much of what is often referred to as ‘Cognitive Linguistics’. That has culminated in three recent papers that explore the usefulness of the usage-based approach for language change, borrowing, and codeswitching, respectively (Backus 2014a, 2014b, 2015). Similarly, in various recent empirical projects on Turkish-Dutch contact in the Netherlands, a usage-based approach has informed the design of the study and the way in which results were interpreted. In this presentation, I will focus mostly on recent work on codeswitching data that show the following characteristics: high intensity of mixing, many examples that are difficult to classify as either insertion or alternation, and increasing grammatical integration of Turkish and Dutch lexicons and grammars. Together, these suggest that when the intensity of codeswitching is high, the boundary between the two languages starts to disappear. This in turn means that the phenomenon of congruent lexicalization, typically assumed to be frequent only when the languages in contact are typologically very similar, can occur in a pair of languages as diverse as Turkish and Dutch. In the presentation I will aim for two things. First, I will present data in support of the generalizations sketched above. Second, I will discuss some implications for our theories of language contact and of language itself.


PAPER 12:

*Phases and Case in code-switching*

Tonjes Veenstra and Artemis Alexiadou (ZAS Berlin, Humboldt University Berlin)

Poplack (1980) famously claimed that code-switching could only take place between free morphemes and could never take place between two morphemes within the same word. Later research, e.g. Jake et al (2002), has shown that this restriction is too strong. However, it is also clear that not everything goes. There are a number of generalizations that we can extract from the literature and our own research, two of which we address in this paper, both related to the fate of inflectional morphology. The first generalization is that although it is possible to code-switch between a derivational morpheme and the root, it is not possible to code switch between a derivational morpheme and an inflectional morpheme (González-
Vilbazo 2005: 131). This generalization bears one interesting exception: Case morphology. It is possible to add Case morphemes to words that belong “in the other language”, as in (1):

(1) Beriştı report-acc şrayb’n write yapıyor. do.PROG

‘He is writing the report.’ (Backus 1996: 87)

We argue in this paper that the theoretical construct phase underlies a number of restrictions on code-switching, and accounts for the above-mentioned generalizations by invoking Lopéz et al (2017)’s Block Transfer Hypothesis (BTH) which states that ‘the material that is transferred to the interfaces is sent in one fell swoop.’ The consequence of this hypothesis for code-switching is the following: code-switching may take place at phase boundaries but not within the phase.

In the first case the derivational morpheme does not need to be in the same language as the root but it has to be in the same language as the inflectional morphemes. The phase system accounts for this directly under the assumption that a derivational morpheme is a spell-out of a categorial morpheme, v or n. The root, being the complement of v or n is transferred independently of the derivational morpheme. On the other hand, the derivational morpheme and the inflectional morphemes are transferred in the same phase, which bars switching between them. In the second case, there is one type of inflectional morpheme that is independent of whatever inflectional or derivational morphemes it c-commands: the case morphology. Phase theory can also account for this directly. Consider the structure in (2):


In this structure K is the head of the nominal phase (Bittner & Hale 1996). As a consequence, the complement of K transfers independently of K – K itself transfers with a different higher phase, either the v phase or the C phase, and switching is possible.


PAPER 13:

Code-switching in the NP: Investigating gender assignment strategies in Purepecha-Spanish bilinguals
Kate Bellamy and M. Carmen Parafita Couto (Leiden)

In this paper we investigate how Purepecha-Spanish bilinguals assign gender in mixed nominal constructions using data from production and comprehension tasks. Purepecha (isolate) spoken by around 100,000 people in the state of Michoacán (Mexico) has no grammatical gender, while Spanish has a two-way gender system. Studies of Spanish-Basque and Spanish-English codeswitching (e.g. Parafita Couto et al., 2015; Dussias et al.,
2013; Liceras et al., 2008) demonstrate the existence of different gender assignment strategies in mixed nominal constructions: (i) analogical criteria where the gender of the noun’s translation equivalent dictates the assignment, (ii) phonological cues from the ungendered language that coincide with gender assignment in the gendered language, or (iii) a default gender preference.

We used a forced-switch director-matcher production task (adapted from Gullberg et al., 2009) to investigate which gender assignment strategies were favoured by our participants (N = 11). We elicited mixed nominal constructions with intended target responses of the type la joskwa roja ‘the red star’, where only the noun is in Purepecha and the rest of the phrase in Spanish. Target stimuli were controlled for gender and canonicity in Spanish. A total of 377 N-Adj combinations were elicited. Of these, 180 included nouns with a masculine translation equivalent, with 178 (99%) also displaying a masculine adjective, and only 2 (1%) appearing with a feminine adjective. The remaining 197 N-Adj combinations had a feminine translation equivalent. Of these, 58 (29%) appeared with a feminine adjective, i.e. their gender matched according to analogical criteria but 139 (71%) appeared with a masculine adjective, thereby displaying a gender mismatch.

The production results indicate that the participants are employing a masculine default strategy for gender agreement between nouns and adjectives. This is surprising given the presence of feminine-like phonological cues in Purepecha, such as word-final -a in eskwa ‘eye’, and ma ‘one, a(n)’, that could trigger either analogical or phonological agreement strategies (see Parafita Couto et al. 2015 for a similar effect in Spanish-Basque bilingual behaviour). In order to investigate whether the gender assignment preferences found in the production data can be replicated in comprehension data, we are also currently running an online grammaticality judgement task. Data analysis is ongoing, but results from both tasks will allow us to discuss the interaction between the comprehension and production systems in Purepecha-Spanish bilinguals, in the context of existing formal models of code-switching.