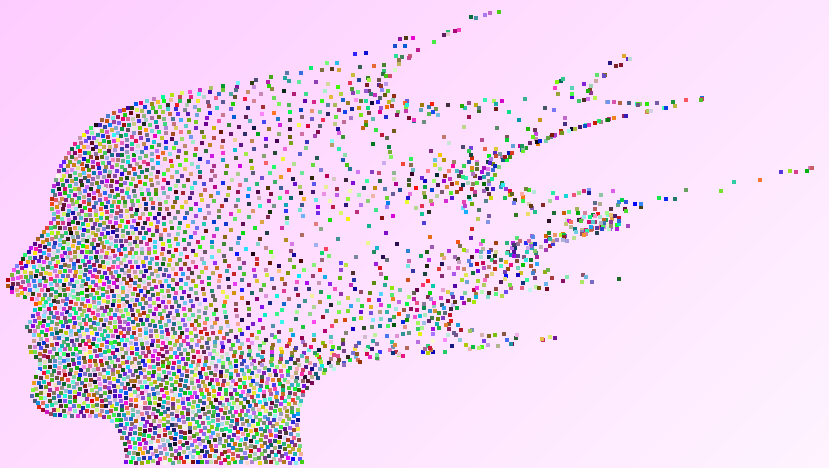


BOOK OF ABSTRACTS

VARIATION AND
COGNITION IN LANGUAGE
30th LIPP Symposium



Welcome!

We are pleased to announce the 30th LIPP Symposium, to be held from May 21 to 23, 2025, at the Literaturhaus in Munich. Organized by members of the Graduate School Language & Literature of LMU Munich, this year's symposium will focus on the theme "Variation and Cognition in Language". It aims to bring together distinguished scholars from the fields of variationist sociolinguistics and psycholinguistics/cognitive sciences to explore innovative perspectives on the relationship between language variation and cognition. Join us for three days of stimulating discussions, insightful presentations, and collaborative networking opportunities in this dynamic field of study!

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Stina Viher



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I. KEYNOTES

Sociolinguistic monitoring in England: Exploring phonetic, pragmatic, and speech-planning features

Erik Schleeef

University of Salzburg

Abstract

Sociolinguistic monitoring is hypothesised to be a cognitive process that tracks the speech signal for socially meaningful cues of variable features and monitors their frequency (Labov et al. 2011). While there is disagreement on whether or not there is a dedicated module that focuses on sociolinguistic variation or whether this variation is processed by general monitoring processes (Campbell-Kibler 2016, Austen & Campbell-Kibler 2022), there is consensus that sociolinguistic monitoring occurs in both production and perception. Ideas about sociolinguistic monitoring have been most widely tested in perception – in the form of the matched-guise test in which the frequency of target features is manipulated, e.g. (ing) as *-ing* or *-in*. Labov et al. (2011) found speakers in the U.S. to be heard as more unprofessional with increasing numbers of *-in* but Levon & Fox (2014) did not find this to be the case in the UK, due to the lower social salience of the variable.

This presentation further pursues the generality of the monitoring process by exploring whether only classic sociolinguistic variables are subject to sociolinguistic monitoring or if it also applies to variable speech-planning features. We do this with the goal of finding out how specialized the process of sociolinguistic monitoring is. While variation in (ing) and (t)-deletion as well as the discourse-pragmatic markers *you know* and *like* are inherently sociolinguistic in nature, filled and unfilled pauses are clearly associated with speech planning (see Fruehwald 2016).

The study includes 600 respondents in England (100 per variable), who were recruited via *Prolific*. Similar to Labov et al.'s original design, participants rated seven versions of the same news report with varying frequencies of either (ing)- and (t)-variants, *you know*, *like*, *um* or unfilled *pauses* on a *professionalism*-scale. Guises were based on one speaker and one text and differed only in the occurrence of a given feature. The survey also assessed whether participants became aware that a respective variable had been manipulated.

In line with Levon & Fox's (2014) findings for (ing) in the UK, varying frequencies of (ing) and (t)-deletion did not prompt evaluation differences overall. However, participants who realised that (ing) had been manipulated did evaluate guises with more apical variants as less professional. This response pattern was found across all variables: awareness of the attitude

target resulted in more negative evaluation and a different distribution of evaluation across token numbers.

For all other variables, an increase in token numbers of *you know*, *like*, *um* and *pauses* elicited lower *professionalism* ratings. This suggests that sociolinguistic monitoring also applies to speech-planning features and is not sociolinguistically specific. Our results support proposals that argue that there is no need for specialised cognitive modules to explain sociolinguistic behaviour (see Campbell-Kibler 2016) and that what has been described as ‘sociolinguistic monitoring’ can be captured by more general cognitive processes.

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Language learning never gets old: Comparing the effects of lifelong multilingual experiences to later life language learning on the cognitive and psychosocial health of older adults

Merel Keijzer

University of Groningen

Abstract

In 2019, we started a 5-year project at the Bilingualism and Aging Lab (BALAB) in Groningen with the aim of comparing the cognitive and psychosocial effects of lifelong multilingual experiences in aging to those induced by learning a new language in older adulthood. We set out to investigate the effects of these differential experiences in relation to other sustained life experiences that are known to impact cognitive and psychosocial health, most notably musical training.

We conducted an epidemiological study where we collected multilingual experience data from 11.000+ older individuals and related that to their cognitive functioning using Lifelines, a population-based cohort study comprising 10% of the Northern Dutch population (Sijtsma et al., 2021). We additionally conducted a randomized control trial intervention of three months where the effects of an English language course were compared to those of a guitar course and lecture series. We included healthy older adults and those with cognitive problems or past depression.

In this keynote address, I present the main findings of the project, including 1) the cumulative advantages that were found for language and music experiences in the epidemiological study; 2) the lack of significant differences in cognitive and psychosocial health following a three-month language or music intervention; 3) the different domains impacted by language versus music training, and 4) the markedly larger improvements of learning a new language in older adults with (a history) of cognitive problems or depression. I discuss the implication of these results for models relating bilingualism to cognitive flexibility and well-being. Since the start of the project the subfield of later life language learning has grown exponentially. I will therefore end by presenting the results of a recent meta review in our lab directly comparing the brain and cognitive reserve findings of lifelong multilingualism versus later life language learning on the basis of available studies to date.

Patterns of variation in language processing and learning

Adriana Hanulíková

University of Heidelberg

Abstract

This talk begins with the premise that everyone speaks with an accent, and that accents naturally vary within and across speech communities. The ability to navigate accent variation is crucial for successful communication. In many parts of the world, children grow up exposed to multiple language varieties, whether regional accents, learner accents, or distinct languages and dialects. Research on such heterogeneous contexts presents mixed findings: while some studies highlight cognitive and linguistic benefits, others emphasize challenges associated with perceived "non-standard" input.

One possible explanation for these mixed findings is that numerous studies have compared monolingual and bilingual children's performance in language tasks, often treating bilingualism as a categorical variable based on criteria like parental native language or percentage of non-dominant language input. However, these criteria are inconsistent across studies, complicating direct comparisons. A more recent trend is to use gradient assessments of exposure to better understand how varying input influences language processing and learning. This can be done by quantifying the proportion of input a child receives in a given language or accent, for example, measuring daily interactions with speakers of different varieties.

In this talk, I will explore the extent to which both the quantity and quality of language exposure shape language processing abilities. I will discuss how exposure to accented speech can present both cognitive challenges (e.g., increased processing effort) and benefits (e.g., greater listening flexibility). Additionally, I will examine how listeners evaluate accented speech and the social consequences of these perceptual processes. Ultimately, this talk will demonstrate how input variability serves as a powerful lens for exploring the cognitive architecture of language acquisition, the mechanisms of language processing, and the formation of social preferences.

Be(a)ware of the cognitive elephant in the sociolinguistic room

Hans-Jörg Schmid

Ludwig-Maximilians-Universität in Munich

Abstract

A central goal of quantitative sociolinguistic research is to identify variables that condition the use of linguistic target variables. We commonly distinguish between the following types of conditioning variables:

- ⇒ internal formal, semantic or discursive variables (e.g. phonological or syntactic environment, animacy, stativity, information structure),
- ⇒ situational variables (e.g. medium, formality, genre),
- ⇒ demographic social variables (e.g. region, age, gender, ethnicity, education),
- ⇒ other social variables (e.g. network structure, indexicality, prestige, identity, solidarity),
- ⇒ cognitive variables (e.g. constraints on planning, limited memory capacity, imitation/priming/persistence),
- ⇒ and, on a different level of analysis and explanation, random variables (e.g. speakers or participants, specific lexemes or test items, conversations).

In my talk I will explore the idea that all types of variables have a cognitive component or are ultimately 'cognitive' in nature, in the sense that they must somehow be represented in the minds of speakers to have an effect on their linguistic choices. I will discuss in which way they are represented and argue that predictive usage-based theories of linguistic cognition may have a lot to offer for sociolinguistic theory and practice.

To support my claims, I will re-analyze the results and findings of various sociolinguistic studies. Potential benefits of adding a usage-based cognitive perspective to sociolinguistics relate to all types of predictor variables, including internal, situational and social ones. The main added value, however, may lie in fresh explanations of thorny issues such as interindividual differences, intraindividual differences as well as effects of usage frequency and lexical items. I will also discuss methodological implications of a more cognitively-informed view of quantitative sociolinguistics.

II. TALKS

Language attitudes across the lifespan and the impact of significant life events on discontinuity in sociolinguistic perception

Mason A. Wirtz

University of Zurich

Abstract

According to an early proponent of the lifespan perspective on sociolinguistic variation, “life is about change” and thus “development is lifelong” (Eckert 1997: 157). The few lifespan developmental studies on sociolinguistic perception, including language attitudes, highlight that sociolinguistic development is protracted, with changes continuing across childhood, adolescence, and even well into adulthood (Dossey et al., 2020; Jones et al., 2017; McCullough et al., 2019a, 2019b). While these studies are based on dialects and accents of *English*, it has been hypothesized that this “protracted trajectory of development in dialect perception might be expected across languages and cultures” (McCullough et al., 2019a, p. 134). The present study is the first to put this assumption to the test, focusing on language attitudes towards (non-)standard varieties of German.

Additionally, it has been suggested that the kind and degree of linguistic lability across the lifespan is shaped by an individual’s lived experiences and reactions to life-stage specific linguistic demands (Buchstaller, 2015; Eckert, 1997). From this it follows that shifts in evaluative judgements may be particularly sensitive to life-course transitions. We thus investigate the effects of three major life events (MLEs) (specifically: *beginning a degree, entry into the workforce, retirement*) on changes in language attitudes.

304 Austrian respondents (M=48.9y, SD=18.7y, range=14–84y) completed a matched-guise task. Each guise comprised a 15-second greeting sequence, which was spoken in either a standard German or Austro-Bavarian dialect variety in either a status-stressing context (i.e., at the doctor’s office) or in a solidarity-stressing context (i.e., in a bakery). Participants were asked to rate each of the four stimuli on the indexical domains of *friendliness, intelligence, professionalism, and overall impression* on 11-point slider scales. To determine whether MLEs are associated with interindividual discontinuities in language attitudes, participants were asked to indicate (a) which of the three aforementioned MLEs they had already experienced (if any), and (b) of the three MLEs, which one (if any) they are likely to experience next in the next five years. For (a) and (b) they provided the approximate month and year of the MLE.

Employing generalized additive modeling, we found individuals in midlife and later life (approximately 45+ years) tended to downgrade non-standard varieties in status-stressing contexts. This trend may reflect either (a) generational change in societal beliefs about non-standard varieties, or (b) processes of age-grading, such that “as people become more embedded in workplace norms of standard language, their evaluations of what constitutes an appropriate accent for professional employment become more rigid” (Levon et al. 2021: 368). These findings also appear to substantiate McCullough’s et al. (2019a) hypothesis that the protracted developmental trajectory of sociolinguistic perception is expectable across languages and cultures. Concerning the role of MLEs, we found that retirement in particular is associated with a heightened adherence to conservative societal norms as concerns the contextual (in-)adequacy of certain language varieties, specifically with respect to the use of non-standard varieties in status-stressing settings.

The current findings add to the international research concerning *how*, *when*, and *why* sociolinguistic perception skills undergo change across the lifespan.

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Salience in regional language processing: An EEG study

Paula Rinke, Milena Gropp, Jürgen Erich Schmidt & Mathias Scharinger

Philipps-Universität in Marburg

Abstract

In dialectology, *salience* refers to the perceptual conspicuousness of linguistic features, often explaining why certain regional phenomena are more prone to sociolinguistic degradation (Kehrein, 2015). Despite its importance for understanding language variation, the concept remains difficult to define (Auer et al., 1998; Kerswill & Williams, 2002), and little is known about its underlying neural mechanisms. While previous studies have relied on behavioral measures, such as acceptability judgments (e.g., Elmentaler et al., 2010) or salience ratings (Kiesewalter, 2019), systematic investigations of the underlying neural mechanisms remain rare.

This study addresses this research gap by exploring the neural correlates of regional language salience through EEG and time-sensitive Event-Related Potentials (ERPs), with a focus on early automatic responses, particularly the N100 component. The N100, a negative brain response occurring between 80 and 150 ms, is highly sensitive to acoustic and phonetic changes (Remijn et al., 2014) and has been shown to reflect the neural processing of dialectal features (Scharinger et al., 2011).

In the present study, the rating study by Kiesewalter (2019) is implemented into an EEG set-up that contrasts words containing a single regional feature with varying salience values. Stimuli consist of 159 Standard German words containing a single regional feature from Northern Low German (n=53), Upper Saxonian (n=53), or Central Bavarian (n=53) dialects (e.g., Standard German *Rad* [ʁa:t] as Central Bavarian [ʁat]). Three trained speakers (two male, one female), each representing one dialectal region, produced the stimuli. Salience values are retrieved from the original study by Kiesewalter (2019) and range from 0 (not salient) to 6 (very salient).

The experiment includes two parts: In the first part, target words are presented in sentence context. Thus, target words with regional features are embedded in Standard German sentences and presented in either sentence-final (test condition) or sentence-medial (distractor) positions. All sentences are presented across two blocks, and participants perform a dialectality rating after each sentence. Analogously to Kiesewalter (2019), the participants rate the preceding sentence on a 7-point scale (1: Standard German; 7: Completely Dialectal). To eliminate contextual influence, the second part of the experiment presents target words in isolation. An additional control condition includes fully Standard German words – free of regional features – produced by a female speaker. All target words are repeated three times and presented across three blocks.

EEG recordings are conducted during both experimental parts using 32 active electrodes placed on a standardized 10–20 system. EEG analysis focuses on early neural responses, specifically the N100 time window, to investigate how regional salience affects auditory perception. Since the N100 reflects sensitivity to acoustic and phonetic variation, we hypothesize that regional features with higher salience ratings elicit stronger neural responses.

By linking neural data to behavioral salience judgments, this study enhances the theoretical understanding of salience and highlights underlying neural correlates. This interdisciplinary approach combines dialectological and neuroscientific perspectives, offering new insights into regional language perception and variation. Results from this ongoing experiment will be presented at the symposium.

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The online processing of causal and concessive relations in authentic sentences: Evidence from eyetracking

Markus Frank & Alisa Fenske

Ludwig-Maximilians-Universität in Munich

Abstract

Connectors such as *because* or *although* are linguistic elements that explicitly mark discourse relations. Previous research has found that passages following a connector are read particularly fast (e.g., Cain & Nash, 2011, Mak & Sanders, 2013). This effect could arise because readers do not need to make the mental effort to infer the relation between the current and the preceding clause when it is explicitly marked by a connector (see Mulder, 2008). There are conflicting findings as to whether there are differences between different discourse relations, however. In particular, some studies found no or weaker facilitatory effects of causal compared to other connectors (Murray, 1995). This has been interpreted as evidence for a “causality-by-default” principle: a causal relation may be assumed by default, and thus can be understood as easily with or without explicit marking through a connector (see Sanders & Sweetser, 2009). An additional factor that may contribute to the absence of effects in some studies could be the use of stimuli materials that were constructed for the purpose of the study (as e.g. Blumenthal-Dramé 2021 has tried to do). Researchers’ focus on constructing clear examples could lead to there being less room for ambiguity than in naturally occurring texts, and this may make connectors less helpful. On the other hand, the overall greater variability of natural texts could also override any effects of connectors, which would suggest that processing advantages of connectors could appear exaggerated in experiments with constructed materials compared to real-world reading situations.

Against this background, the current study looked at the processing of sentences containing causal and concessive relations that were drawn from a large corpus of written German from newspapers and internet blogs (DWDS). We selected 80 bi-clausal sentences that either contained the connector *weil* (because, see 1) or *obwohl* (although, see 2).

- (1) *Das Rennen musste ungefähr bei Streckenhälfte unterbrochen werden, weil ein Mann zwischen die Wettkampfboote geschwommen ist.* ‘The race had to be interrupted about halfway through because a man swam between the competing boats.’
- (2) *Nach dem Unglück war der Reputationsschaden für die Werft enorm, obwohl die Crew sich in die Rettungsinseln retten konnte.* ‘After the accident, the damage to the shipyard’s reputation was enormous, although the crew managed to escape to the life rafts.’

60 adult German native speakers read these sentences for comprehension, interspersed with filler sentences of different structures, while their eye-movements were being tracked. The

connector was omitted in half of the sentences. We found shorter first fixation durations as well as shorter total reading times on the initial noun phrase of the second clause when there was a preceding connector than when there was none, independent of the relation. We conclude that connectors facilitate reading of authentic texts, and that there is no evidence of a causality-by-default principle. We will conclude our presentation with perspectives for future research.

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Grasping register appropriateness – a ranking study of metalinguistic awareness

Milena Kühnast, Samantha Weller, Nicole Schumacher, Anke Lüdeling & Beate Lütke

Humboldt-Universität zu Berlin

Abstract

Qin and Uccelli (2020) define register flexibility as "the ability to flexibly use a variety of linguistic resources [...] with the awareness of which are the most appropriate for the communicative contexts". Therefore, the notion of contextual appropriateness represents one of the central issues in research on metalinguistic awareness. It is intrinsically concerned with the appraisal and categorization of communicative contexts. Theoretical approaches to register such as Systemic Functional Linguistics (Hasan, 2014) model communicative contexts as configurations of situational parameters belonging to the dimensions of *tenor* (setting, properties and social relationships of interlocutors); *mode* (oral, written); and *field* (topic and communicative goals). Grasping the notion of register appropriateness requires a better understanding of the mapping between situational appraisal and linguistic behavior, of what represents a basis for comparison between linguistic and non-linguistic elements of register knowledge. Here, the notion of formality serves as a first approximation, as it applies to situations and registers.

We report data from two ranking studies conducted with bachelor students enrolled into programs of German studies.

Research questions: Which situational features do German native speakers explicitly consider most important when determining situational formality? What is the subjectively estimated influence of those features on the choice of linguistic strategy?

Study I: Participants (N = 156) ranked situational features proposed in the SFL-framework in 2 parallel tasks. First, participants ranked the importance of the following features for the assessment of situational formality: relationship to the addressee, location, topic, mode/channel, addressee's properties, discourse type, and communicative goals. Later, they ranked the same features as cues guiding their own language use. The mean ranking scores show a consistently parallel appraisal of situational features as formality indicators and register cues. *Social relationship* and *location* were ranked highest, while *addressee's properties* and *mode* were ranked lowest. Only *communicative topic* received significantly different rankings suggesting that it was considered a stronger cue for linguistic adaptation.

Study II: The updated design splits the ranking of situational features into two tasks with tenor-related and field-and-mode-related items. In the first task, we used separate items for *familiarity* and *social hierarchy*. In the second, we added *occasion* as a situational

feature associated with the notion of formality in German. Participants (N = 50) ranked *occasion* and *communicative goals* as the most important formality and register cues. The mean ranks of the tenor-related features revealed a preference for *location* in situational assessment, while *familiarity* and *hierarchical relationship* with the addressee guide linguistic variation.

The studies provide empirical insights on metalinguistic reflection on situated variation. Results from both studies suggest, that features ranking high as indicators of situational formality (*location*, *social relationship*, *occasion*) were also considered as important cues for linguistic adaptation. This consistency was also observed for *mode* (oral, written) ranked low in both studies, a result hinting at the generation-related effects of communicative practices on register development. We will contextualize our findings by discussing the feasibility of formality and appropriateness as auxiliary notions in the theory of metalinguistic awareness.

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Learner-directed registers in foreign language learning

Katie Von Holzen

TU Braunschweig

Abstract

When addressing language learners, adult L1 speakers modify their speech. The speech used with infants (infant-directed speech; IDS) and foreign-language learners (foreigner-directed speech; FDS) has been found to have greater vowel hyperarticulation and slower speech rate in comparison to adult-directed speech (ADS), but pitch modifications (e.g., higher pitch peaks and average pitch) have only been consistently found in IDS (Piazza et al., 2022; Soderstrom, 2007). This variability in acoustic features may be due to the role they play in supporting language learning. Vowel hyperarticulation and lower speech rate are thought to improve speech perception and comprehension, which would benefit both infant- and foreign-language learners, pitch modifications are thought to draw infants' attention to speech (Uther et al., 2007). Experimental evidence supports this hypothesis for IDS in both infancy (e.g., Ma et al., 2011; Thiessen & Saffran, 2005) and adult foreign language learners (Golinkoff & Alioto, 1995). Although FDS has been found to facilitate word learning in adult learners of English (Piazza et al., 2023), this evidence comes from learners who had already gained some proficiency in English. To better understand the didactic consequences of learner-directed registers at all stages of acquisition, the current study examines whether both IDS and FDS facilitate word learning in adult *ab initio* learners of Chinese.

Thirteen German-speaking adults with no prior experience learning Mandarin Chinese have participated so far in the experiment, with a final sample goal of 90. Using a procedure similar to Golinkoff and Alioto (1995), they first viewed a series of 10 objects (e.g., bottle), each paired with two sentences produced in Mandarin Chinese that presented the label of the object in utterance-final position (e.g., Zhe shi yi ge PING). Then in the test phase, participants viewed three of the previously familiarized objects while one of the objects was labeled (e.g., PING) and were instructed to select the corresponding object (e.g., bottle). In a between-subjects design, the sentences participants heard were produced using either an ADS, IDS, or FDS register. Acoustic analyses of the sentence stimuli confirmed previous evidence of a lower speech rate and higher pitch peaks and average pitch for both IDS and FDS in comparison to ADS (p 's < .01). The vowel triangle for FDS was also greater than ADS, showing vowel hyperarticulation. However, the vowel triangle for IDS was unexpectedly smaller, but overall showed more within-category variability, which has been found in some studies of IDS acoustic characteristics (e.g., Rosslund et al., 2024).

Participants' accuracy in selecting the correct object was modeled using a general-linear mixed model, revealing a significant main effect of register (p < .01). Accuracy was greater for both participants familiarized with IDS (p < .001) and FDS (p < .01) in comparison

to participants familiarized with ADS. Accuracy was significantly above chance (33%) for both IDS and FDS ($p < .05$), but not ADS. Taken together, these preliminary results suggest that learner-directed registers may facilitate foreign language word learning, even in the absence of prior knowledge of the language.

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How is variation reflected in native and non-native speakers' minds? Insights from a psycholinguistic experiment on French and Spanish

Birgit Füreder

University of Salzburg & University of Mannheim

Abstract

Language is a highly variable system – in terms of its structural-functional make-up and even more so with respect to its usage. While some domains appear fairly 'regularised', others prove to be especially sensitive to variation. The latter is also the case for periphrastic verbal constructions, a frequent but at the same time highly variable construction type in Romance (cf. also Pusch/Wesch 2003 inter al.). Consisting of two verbs – sometimes linked by a preposition or conjunction – they form a single predicative unit (with different degrees of compositionality). Variation can be found on several levels:

- (a) formal make-up: different types of auxiliaries (e.g. copula or motion verbs; cf. it. *stare per* + INF 'be about to do' vs. fr. *venir de* + INF 'have just done') and infinite verbs (e.g. infinitive or gerund; cf. fr. *aller* + INF 'will do' vs. sp. *estar* + GER 'be doing');
- (b) functional range: covering temporal, aspectual, modal and diathetic values, often in combination with pragmatic-discursive functions (cf. e.g. it. *stare* + GER expressing progressivity, sp. *tener que* + INF expressing obligation);
- (c) diasystematic variation: e.g. diatopic (cf. sp. *soler* + INF vs. *acostumbrar* + INF, both expressing habituality, the former being more frequent in Peninsular Spanish, while the latter is more present in Latin American varieties) or diachronic (cf. e.g. fr. *aller (en)* + GER vs. sp. *ir* + GER [both expressing progressive-cumulative values] in contemporary language use; see also CRFC and CREA);
- (d) combinatorial properties: restrictions based on formal and/or semantic reasons or usage preferences (cf. e.g. different inchoative constructions in Spanish: *empezar a* + INF ['begin to'], which can be combined with a wide range of verbs in the infinitival slot, vs. *echar(se) a* + INF ['suddenly begin to'], which shows strong preferences for verbs such as *reír* 'laugh', *llorar* 'cry' and *correr* 'run' [cf. also Gómez Torrego 1999 and Bosque 2009]).

In order to examine how this variation is reflected in the speakers' minds, a self-paced reading experiment (cf. Just et al. 1982) was conducted, with reading times, acceptability judgements, a comprehension task and reaction times. The stimulus material consisted of isolated sentences in French and Spanish containing periphrastic verbal constructions from the tempo-aspectual domain, which were presented to natives and highly-proficient non-natives (B2-C2 in French or Spanish, respectively). Operationalising mental representations by means of

the subjects' behaviour in the judgement and comprehension tasks, results from a small cohort (N=32; 15 French, 17 Spanish) suggest the following tendencies:

- (i) Native and non-native speakers show different entrenchment effects as to diatopic variation according to their varietal background and/or contacts (cf. also Füreder 2024).
- (ii) Regarding combinatorial preferences (cf. Wolf 2018 on collocations), non-natives tend to overgeneralise the combinatorial scope, where more differentiation would be needed.
- (iii) Gerundial constructions with motion verbs exhibit strong variation both among natives and non-natives (probably due to diatopic and combinatorial variation as well as overlapping semantic-pragmatic functions).

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Bridging the gap: Contrast in the use of counter-argumentative connectors in Spanish by native speakers and German learners. The role of textbooks

Belén Álvarez García

Ludwig-Maximilians-Universität in Munich & European School Munich

Abstract

Counter-argumentative connectors are an important aspect of text cohesion and coherence. Among them, those such as *pero* ('but'), *aunque* ('although'), *sino (que)* ('not... but'), *sin embargo* ('nevertheless'), *no obstante* ('nevertheless') and *en cambio* ('instead') stand out. However, their acquisition by learners of Spanish as a foreign language (EFL) is often complex. This is particularly evident at intermediate level, where learners should already have mastered these six units (specially in B2) according to the *Common European Framework of Reference for Languages (CEFR, 2001)*.

Therefore, this study, which is part of the author's doctoral thesis, focuses on comparing the use of these connectors between native speakers (from the peninsula, mainly from the centre and the northwest) and EFL German students at B2 level, with the aim of identifying patterns of use and learning difficulties and reflecting on their possible causes, with particular attention to textbooks.

To carry out the study, data from native speakers in the Corpus de Referencia del Español Actual (CREA), Corpus del Español del Siglo XXI (CORPES XXI), Corpus Val.Es.Co 2.0, Corpus AMERESCO, Corpus ESLORA, Corpus MEsA and Corpus PRESEEA were analysed. These data were supplemented by the results of a linguistic questionnaire for native speakers in order to determine the usage preferences of these connectors in different contexts. On the other hand, samples of written productions of German-speaking learners up to level B2 were collected (either from existing corpora such as CEDEL2 and CAES or from an internal sample conducted at the Ludwig-Maximilians-Universität München), which allowed a comparison of usage between the two groups.

The results show that while native speakers use a greater variety of connectors and greater contextual flexibility, EFL learners tend to use *pero* as the main connector with little differentiation from others such as *no obstante* or *en cambio*. This pattern may be related to the inadequate teaching of pragmatic and semantic functions in textbooks, where simplified grammatical explanations predominate without an emphasis on their discursive use, as observed in the conducted analysis.

To summarise, this study points to the variety of use between native speakers and learners as well as the limitations of current teaching and learning of counter-argumentative connectors. Also, it suggests the need of more integrated and contextualised teaching approaches in which more attention is paid to pragmatic differences and reflection on their use

in specific contexts. Nevertheless, it is recommended that research should continue in this area, which is so necessary but sometimes somewhat forgotten.

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Never too old to learn: The effects of later life language learning on cognition and well-being

Louisa Richter^{1,2}, Jascha Rüsseler¹, Greg Poarch² & Merel Keijzer²

University of Bamberg¹

University of Groningen²

Abstract

Investigating ways of promoting healthy aging has never been more pressing than in our rapidly aging society. An emergent field is dedicated to exploring the impact of later life language learning, given that life-long bilingualism has been shown to influence cognitive reserve (Berkes & Bialystok, 2022). In the absence of lifelong bilingualism, language learning has been proposed as a particularly effective later life training, as the activated brain regions overlap with areas often affected by age-related cognitive decline (Antoniou et al., 2013).

To date, investigations into later life language learning and its cognitive effects have produced mixed results, pointing to a need for replication to increase comparability across studies (Pot et al., 2019; van der Ploeg et al., 2020). Some studies report course-induced enhanced cognition (Bak et al., 2016; Meltzer et al., 2023; Pfenninger, & Polz, 2018), but this has not been robustly found. Following mixed findings, Ware et al. (2017) suggest that L2 learning could - in the absence of cognitive boosting effects - at least help maintain cognitive functions. Moreover, later life language learning appears to be a promising method for increasing overall well-being (Pfenninger, & Polz, 2018; Ware et al., 2017).

Though some studies have started comparing later life language learning to other interventions to enhance or maintain cognition, it remains unclear which type of intervention is most beneficial and, critically, also feasible for older adults at different stages of cognitive decline. In our study, we investigate the effect of a language intervention (learning English in a non-anglophone environment) compared to a combined physical and cognitive training (playing cognitively demanding board games and movement) on cognition and well-being in older adults with varying cognitive decline (from cognitively healthy to beginning stages of dementia).

Both interventions comprise of 8-week long courses with two 2h sessions in face-to-face teaching as well as three 30-minute practice sessions at home each week, followed by a daily questionnaire. The pre- and post-measurements encompass a variety of questionnaires, behavioral tasks as well as task-based (non-verbal Stroop task) and resting-state EEG. Data collection commenced in January. In addition to the test battery, we will present preliminary findings, more specifically on the impact of the language intervention on behaviorally measured executive functioning as well as cognition and well-being.

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Cross-language activation in the multilingual lexicon: Differences in L2 vs. L3 learners' pupillary responses during word recognition

Freya Gastmann^{1,2} & Greg Poarch²

Ludwig-Maximilians-Universität in Munich¹

University of Groningen²

Abstract

Language users vary along several dimensions, one being whether they are monolingual, bilingual, or multilingual speakers. Research on bilingual language processing has yielded ample evidence that bilingual speakers cannot simply “deactivate” one language while using the other, resulting in language co-activation of a speaker’s first (L1) and second language (L2). For multilingual speakers, this process is even more complex as words and grammar not from just one, but two (or even more) languages may affect the processing of an additional language (Lago et al., 2021). Moreover, for domain-general cognitive control, previous research has demonstrated enhanced executive function for third language (L3) learners over L2 learners (Poarch, 2018).

To gain further insight into language comprehension in multilinguals, we examined differences in word recognition between two learner populations, namely L2 vs. L3 learners. For this purpose, we tested 45 adolescent low-intermediate L2/L3 learners of English (mean age = 13.5, $SD = 0.6$). All learners were native speakers of German, with either no additional L1 ($N = 30$) or a second native language ($N = 15$). The groups showed no difference in their English proficiency, length of English language immersion in school, and SES. Participants performed an English visual Lexical Decision Task with German-English cognate and non-cognate words. Cognates are translation equivalents with a form and meaning overlap across languages (e.g., German-English *Kaffee-coffee*) and have been found to be processed faster and more accurately by multilinguals than noncognates, i.e., translation equivalents without such overlap (e.g., German-English *Tasse-cup*; see Dijkstra et al., 2010, in adults; Gastmann & Poarch, 2022, in children). This cognate facilitation effect is considered evidence for co-activation of languages. Beyond decision accuracies and reaction times (RTs), changes in participants’ pupil dilations were measured to assess cognitive effort during word recognition. Specifically, larger pupil dilations indicate higher mental load (Mathôt, 2018). In line with previous research with children and adults, we predicted overall cognate facilitation effects for accuracies and RTs, with smaller effects in the L3 group due to comparatively less German exposure. For changes in pupil dilation, we predicted overall smaller changes for cognates compared to noncognates (Guasch et al., 2017) as form overlap between languages should facilitate cognate processing and thus induce less mental effort. Again, we assumed weaker effects in the L3 group.

Mixed effects analyses yielded overall cognate facilitation effects in both accuracies and RTs, with cognates being processed more accurately and faster than noncognates. Interestingly, for accuracy, the analysis revealed a main effect of group, with overall higher accuracies for L3 learners. To analyze changes in pupil dilation over time, cluster-based permutation analyses (CPA) were performed on subsets of L2 vs. L3 learners. Analyses revealed a significant cognate facilitation effect in L2 learners, with greater pupil dilations - and thus higher cognitive load - for noncognates. For L3 learners, CPA did not yield any differences in pupil responses to cognates vs. noncognates. We will discuss the results and possible limitations of this study against the backdrop of previous research on differences between L2 and L3 learner populations.

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Exploring the origins of variability in linguistic representations: The role of presentational timing in word form learning

Johanna Funk^{1, 2} & Florian Hintz^{1, 2, 3}

Philipps-Universität in Marburg¹

Center for Mind, Brain and Behavior, Philipps-Universität in Marburg and Justus-Liebig-Universität in Giessen²

Max Planck Institute for Psycholinguistics in Nijmegen³

Abstract

In order to use language, humans draw on stored linguistic representations. The kinds of representations they store, and the quality of these representations differ from person to person. Variability in linguistic representations arises in part from individuals' experience in using language and from variability in general cognitive skills involved in processing language.

Critically, another contributing factor is the context in which the representations are acquired. For example, when learning new word meanings, the informativeness of the surrounding words appears to be important (Chaffin et al., 2001). For the acquisition, linking and comprehension of novel written and spoken word forms, learning environments that focus the relationship between orthography and phonology are more effective than environments focusing on the relationship to semantics (Taylor et al., 2017). Interestingly, research on dyslexic participants has shown that synchronous co-activation of both orthographic and phonological representations is essential for efficient reading comprehension (Meyler & Breznitz, 2005; Perfetti, 2007). The latter results move the role of timing during word learning into focus, which so far is almost entirely unexplored (but see Apfelbaum & McMurray, 2017; Cospers et al., 2022).

Using a novel experimental paradigm, we took a fresh look at the role of presentational timing during word form acquisition. Over the course of three weeks, our participants learned Mandarin Chinese spoken and written (using the Pinyin notation) word forms. The word forms were either presented in synchrony (same onset) or in asynchronous fashion (spoken preceding or following the written word form). In the first two experiments with native speakers of Dutch, we observed a recall advantage for asynchronous over synchronous presentation at subsequent test in each session, which required the generation of written forms when cued with the corresponding spoken form. In a third pre-registered experiment, we replicated the paradigm in native speakers of German. In addition, we tested the robustness of this advantage across two additional tasks (Funk et al., 2024). Finally, we assessed verbal and non-verbal skills of our participants using a subset of the Individual Differences in German Language Skills (IDLaS-DE) test battery (Bethke et al., 2024).

We successfully replicated the previous results in a sample of participants with German rather than Dutch language background. The results from the two additional tasks also provided evidence for the notion that asynchronous rather than synchronous presentation benefits word form acquisition, albeit that the effect was restricted to early phases of learning. Taken together, our results support the claim that the context in which representations are acquired, here presentational timing, influences how well these words are stored and linked.

In ongoing analyses, we are linking variability in word form learning (across the three learning sessions) to variability in verbal and non-verbal skills as assessed using the IDLaS-DE test battery. These analyses will complement the group-level results and provide more fine-grained insights into the mechanisms underlying the processes leading to variability in linguistic representations.

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Literacy enhances spoken word recognition: Evidence for online recruitment of orthographic knowledge in a strongly interactive mind?

Florian Hintz^{1, 2, 3}, Milou Huijsmans⁴ & Falk Huettig^{3, 5, 6}

Deutscher Sprachatlas, Philipps-Universität in Marburg¹

Center for Mind, Brain and Behavior, Philipps-Universität in Marburg and Justus-Liebig-Universität in Giessen²

Max Planck Institute for Psycholinguistics in Nijmegen³

Behavioural Science Institute, Radboud University⁴

Center for Cognitive Science, University of Kaiserslautern-Landau⁵

Faculty of Psychology, University of Lisbon⁶

Abstract

People vary substantially in their ability to use language. How does this variability arise? Cultural experiences can be a powerful influence on human cognition. Previous research, using a variety of experimental methods, provided inconsistent and contradictory evidence for the notion that experience with *written* language (literacy), a human cultural invention, affects *spoken* language processing. Here, we chose an individual differences approach to investigate whether literacy predicts the speed of spoken word recognition and what the potential mechanisms underlying such interactive effects might be. To address our research questions, we analyzed a large dataset that is unprecedented in size (number of participants) and depth (number of skills assessed), obtained using the Individual Differences in Dutch Language Skills (IDLaS-NL) test battery (Hintz et al., 2024). I will briefly introduce the IDLaS-NL test battery, which captures (1) linguistic experience, (2) nonverbal processing speed, (3) working memory, (4) nonverbal reasoning, (5) word production, (6) word comprehension, (7) sentence production, and (8) sentence comprehension. The main focus of my presentation, however, will be on examining the relationship between written language experience and spoken word recognition. To that end, we analyzed the data of 655 typically developed native Dutch adults between 18 and 30 years who carried out a standard spoken word recognition task, lexical decision (ALDT). Participants listened to Dutch words and nonwords and judged their lexical status as quickly as possible. We performed drift diffusion modelling on the lexical decision response times and focused on drift rate as an indicator for the amount of auditory information that individuals accumulate before deciding on non/words' lexical status. Hierarchical regression analyses on participants' drift rate parameter revealed that literacy predicts speed of spoken word recognition beyond control (age, education), domain-general (nonverbal processing speed, working memory, nonverbal reasoning), and phonological and semantic (rhyme judgment, semantic categorization, antonym production) predictors. We conjecture that these results are most consistent with the notion that online recruitment of orthographic

knowledge increases the efficiency of spoken word access, a hypothesis that future confirmatory research could usefully be directed at.

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Individual differences in online research: Comparing lab-based and online administration of a psycholinguistic battery of linguistic and domain-general skills

Kyla McConnell^{1, 2}, Florian Hintz^{1, 3, 4} & Antje S. Meyer^{1, 2}

Max Planck Institute for Psycholinguistics in Nijmegen¹

Donders Centre for Brain, Cognition, and Behavior, Radboud University, Nijmegen²

Philipps-Universität in Marburg³

Center for Mind, Brain and Behavior, Philipps-Universität in Marburg & Justus-Liebig-Universität in Giessen⁴

Abstract

Psycholinguists increasingly conduct studies online, outside of controlled laboratory environments. Data collected online have shown promising validity and consistency, and many group-level effects replicate online (e.g., Germine et al., 2012). Yet it is not necessarily the case that paradigms that produce sensible data at the group level will also be reliable in an individual difference paradigm, which requires precision at the participant level (Hedge et al., 2018).

We report performance on fifteen tasks from a psycholinguistic individual difference battery, including assessments of linguistic experience (antonym production, author recognition, idiom recognition, vocabulary, prescriptive grammar and spelling), speech production (maximal speech rate, Rapid Automatized Naming, verbal fluency), and domain-general skills (Corsi span, digit span, nonverbal IQ). 149 native Dutch speakers aged 18-30 took part in the study in the lab and 515 demographically similar participants completed the battery online.

The descriptive data from both settings (online and in-lab) is highly comparable, with most tasks showing <5% difference between settings in the raw data. We fit a Bayesian mixed model predicting a participant's performance by the interaction between task and setting and a random intercept by participant. Most tasks show a very small effect of setting and almost all credible intervals cross 0. Despite this, there are a few tasks worth noticing. In the Spelling task, participants online had better scores ($\beta = 0.139 [-0.0605, 0.3347]$) compared to in the lab ($\beta = -0.1426 [-0.3778, 0.0871]$). On the other hand, participants in-lab had better scores for nonverbal IQ ($\beta = 0.0848 [-0.1507, 0.3183]$) compared to online ($\beta = -0.0915 [-0.2925, 0.105]$).

We can thus conclude that the underlying distributions are similar across both settings, but do the tests measure the underlying cognitive constructs in the same way? To assess this, we fit a confirmatory factor analysis and followed the procedure for establishing measurement invariance (Meredith, 1993). Similar to the results from the mixed models, the Spelling test and the Antonym Production test had different results by setting. In all other tests, we

found no systematic differences in how the tests measure the underlying constructs based on whether they are conducted in the lab or online.

In both analyses, we found higher scores in the spelling task from online participants, suggesting that they might have sought external help (e.g. by looking up answers) when unsupervised. At the same time, we see a role of motivation in other tasks (Christianson et al., 2022). Online participants may be less motivated for difficult tasks like nonverbal reasoning (Raven's Advanced Matrices) and under-stimulating tasks like Antonym Production, leading to lower scores. However, since nearly all credible intervals from the model cross 0 and measurement invariance is established, our results indicate that there is no reason to assume that participants tested online will underperform compared to lab-based testing. Overall, we conclude that there is reason for optimism in the future of online research into individual differences.

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Tracing intra-individual variation of pragmatic markers over time

Nicole Benker

Ludwig-Maximilians-Universität in Munich

Abstract

The present study constitutes a case study of intra-speaker variation in the use of pragmatic markers over time from the perspective of usage-based construction grammar. Specifically, the study investigates fluctuations in usage frequency within a set of mitigators that draw on the semantic field of truth/fact (e.g., *honestly*, *to tell you the truth*, *I must admit*, *not gonna lie*, *truth be told*, *for real*, etc.).

Only a few studies have examined intra-individual variation over time, such as Harrington (2006, 2007), which explored sound change, and Neels (2020), which investigated the grammaticalization of the *let alone* construction. These previous studies suggest that the linguistic system does not remain stable over an individual's lifetime but is, in fact, malleable and susceptible to change.

The present case study contributes to this body of work by offering a quantitative investigation of intra-speaker variation and entrenchment in the use of pragmatic markers over time, employing the Entrenchment-and-Conventionalization Model (EC-Model; Schmid, 2020). Regarding entrenchment, the EC-Model posits that through repeated usage within specific contexts, speakers strengthen association patterns between form and meaning mappings, competing forms and meanings, the sequential order of items, and the connection between form-meaning pairings and their usage contexts. Linguistic items that speakers frequently encounter in similar contexts become routinized and thus more easily activated and reused. Frequent exposure to and use of similar low-level items can lead to the formation of higher-level abstractions, i.e., schematization.

The data for this study comprise the transcripts of 275 live video streams (~7.5 million words) by a 25-year-old native speaker of American English, recorded from 2018 to 2024 (i.e., ages 19–25). From these transcripts, approximately 6,200 TRUTH-markers were extracted.

The analysis reveals that the most frequent variants (*honestly*, 2,858 attestations; *to be honest*, 1,164 attestations) remain relatively stable over time, while medium-frequency items are highly frequent in one year but (almost) completely disappear the next (e.g., *I'm not gonna lie*, 305 attestations, mostly in 2018; *I won't lie*, 150 attestations, mostly in 2022). Furthermore, the data contain a substantial number of low-frequency items that occur only once or twice.

The relative stability of high-frequency items suggests that these types are fully entrenched and routinely activated. Medium-frequency types, however, do not appear to reach

full routinization. Although these items achieve high frequencies for short periods, they are easily replaced by other items. This indicates that the determining factor for pragmatic markers to become entrenched is not merely high frequency of exposure and use, but specifically high frequency sustained over longer periods. The large number of low-frequency types further suggests that some degree of schematization has occurred, allowing for ad-hoc formations.

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Grammaticalization, reduction and the emergence of variants: The ‘sort/kind/type of X’ construction in spoken American English

David Lorenz¹ & David Tizón-Couto²

Lunds Universitet¹

Universidade de Vigo²

Abstract

As an exemplary case for studying how cognitive and communicative factors affect on-going variation and change, we present a new approach to the English construction *sort/kind/type of X* (SKT). Previous research has documented its grammaticalization from binomial (N of N) to qualifying, adverbial and pragmatic marker (cf. Ajmer 1984, Brems & Davidse 2010, Margerie 2010, Denison 2011, Reichelt 2021; consider the function in *I like this kind of music* vs *I kind of like this music*). In usage, this means that the function and category is determined by context as well as expectations derived from experience. In a view of grammaticalization as increasing ‘ancillarity’ (decreasing discursive prominence; Boye & Harder 2012), we should also expect prosodic backgrounding and phonetic reduction to accompany more grammaticalized functions.

Desemanticization, decategorialization and phonetic reduction have been frequently discussed in connection with the SKT. Phonetic reduction leads to variant forms represented as *kinda* and *sorta*; regarding prosody, Dehé & Stathi (2016) have found that increasing grammaticalization is associated with decreasing prosodic prominence. On the other hand, reduction can also result from articulatory factors (speaking rate, phonological context), social context or item frequency. Therefore, an open question is how these factors interact in the usage of SKT along the grammaticalization cline. Do prosodic changes mark the earlier stages of the cline (as suggested by Dehé & Stathi 2016: 939), and does phonetic reduction only occur at later stages? Are specific reduced variants (such as *kinda*) more strongly tied to a specific function than prosodic patterns (as would follow if forms are mentally stored but prosodic patterns are not)?

By way of a detailed analysis of actual realizations in a large data set, we can pitch these factors against each other to test whether grammaticalization really has a backgrounding or reducing effect in spontaneous usage. We present a quantitative analysis of 1,243 SKT items extracted from two different corpora of North American spoken English: the Santa Barbara Corpus of Spoken American English (Du Bois et al. 2000-2005), of spoken conversation, and the Buckeye Corpus (Pitt et al. 2007), of personal interviews. The tokens have been analyzed for function, phonetic form, prosodic prominence and duration; information on co-text, context and speaker attributes are extracted from the corpora.

We apply a structural equation model to capture the interrelations between variables. The results reveal a mixed picture. Especially *kind of* shows a pattern of realizations that partly confirms the hypothesis that more grammaticalized forms are backgrounded and more reduced – though reduction is also strongly affected by articulatory factors, suggesting that there are hurdles to the entrenchment of *kinda* as a distinct grammaticalized variant. Realizations of *sort of* show some similar trends but appear more variable. We suggest that these items represent the grammaticalization of a constructional pattern: *kind of* as the most frequent one leads developments that also affect *sort of*, which consequently trails behind.

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III. POSTER

Gender-Inclusive Language in Media Discourse: A Comparative Analysis of Gendered Person References in German and Chinese Press Texts

Yuemeng Zhu

Ludwig-Maximilians-Universität in Munich

Abstract

Language variation plays a crucial role in reflecting and shaping social norms, with gender inclusivity being a prominent topic in sociolinguistic research. This study examines how gendered person references are used in Chinese and German media publications, focusing on how translation influences gender representation. While German exhibits a threefold gender distinction in its lexicon and inflectional morphology, there are no explicit gender markers like articles in Chinese, resulting in different linguistic strategies for expressing gender-relevant distinctions.

Through a qualitative analysis of press reports available in both languages, this study compares person references and pronoun usage in original and translated texts, based on a self-built corpus from a collection of translated press texts in both German and Chinese. This research investigates how these structural differences play out in bilingual news texts and how the shifts in referential strategies during translation influence discourse interpretation.

For example, in German, 'teacher' appears as *der Lehrer* (masculine) or *die Lehrerin* (feminine), where gender is explicitly marked through the article and the suffix. Neutral forms like *Lehrkraft* or *die Lehrenden* are also available in gender-inclusive contexts. In Chinese, the equivalent term 教师 is inherently gender-neutral. When gender needs to be clarified, context or additional modifiers like 男教师 (male teacher) or 女教师 (female teacher) are used, which function similarly to expressions in English.

The findings suggest that translations may introduce or omit gender distinctions, occasionally leading to unintended changes in meaning. This raises questions of how translation influences the way gender is presented in media. The comparative analysis tries to answer the following questions: How do German and Chinese languages differ in their strategies for gendered person references? What transformations occur when the gendered language is translated between these two languages? How do such shifts impact the perception of gender in media discourse?

This research contributes to sociolinguistic discussions on gender and language policy and addresses typological differences between languages through the comparative research

of the linguistic practices in German and Chinese media texts. It also highlights the importance of flexible language practices in multilingual and cross-cultural media landscapes, promoting more frequent and effective communication across linguistic barriers.

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Motivational and cultural factors in Japanese ESL learners

Rebeka Braxator

Eötvös Loránd University in Budapest

Abstract

This paper aims to answer the question of why English proficiency in Japan is so low despite the country's constant efforts to improve its citizens' language skills. Japan is well-known for its low English proficiency, and there are numerous theories as to why Japanese people struggle to learn the language. These theories focus mainly on language differences, such as syntax, word order, issues with pronunciation, and the writing system. While these factors can play a role in making learning more difficult, this paper argues that they cannot fully explain the low proficiency of the whole nation. Drawing on personal teaching experience and focusing on cognitive and social processes, this paper presents a complex theory on why Japan—a nation that has the financial means to invest in education—falls behind in English proficiency.

While linguistic differences may contribute to learning difficulties, they fail to address the deeper cultural and motivational factors that influence learning outcomes. This paper argues that cultural norms, such as Japan's high-context communication style and societal emphasis on avoiding mistakes, significantly hinder students' willingness to take the risks necessary for active language learning. These elements are not merely byproducts of linguistic or structural challenges but are deeply rooted in Japan's education system and social fabric. The study draws on Edward T. Hall's (Hall 1990:200-202) and Hofstede's (2001, Hofstedeinsight 2022) frameworks to contextualize how Japan's collectivist and shame-sensitive culture impacts language learning. In Japan, social harmony and conformity are prioritized, making it culturally undesirable to stand out or expose oneself to potential criticism—key challenges in learning to communicate in a foreign language. The concept of shame, explored through the work of Lynd (1958:27) and Sakuta (1967:18), further illustrates how sensitivity to exposure discourages learners from making mistakes, thus impeding the trial-and-error process vital for second-language acquisition.

The paper also utilizes Dörnyei's (1994:275; 1998, 2009) L2 Motivational Self System to analyze Japanese learners' motivational profiles. The 'ought-to L2 self,' defined by societal expectations, may play a more important role in the learning experience of Japanese students than the 'ideal L2 self,' which focuses on the goals and aspirations of the individual. The Japanese education system, which prioritizes grammar-based, test-oriented instruction, further compounds the issue by stripping English of its communicative purpose. Students learn to pass exams rather than to use the language, resulting in a disconnect between their studies and real-world application. The strong influence of the "ought-to" self, combined with vague or abstract goals for English use, limits students' motivation and engagement. In conclusion,

Japan's low English proficiency stems from a complex interplay of cultural norms, rigid educational practices, and the lack of practical incentives for learning the language. As the benefits do not outweigh the risks and effort involved in learning a foreign language, many Japanese do not deem it important to improve their skills, leading to low proficiency across the nation.

Individual differences in verbal fluency: The role of linguistic knowledge, processing speed and working memory in healthy young adults

Kyla McConnell^{1,2}, Berit Reise³ & Antje S. Meyer^{1,2}

Max Planck Institute for Psycholinguistics in Nijmegen¹

Donders Centre for Brain, Cognition, and Behavior, Radboud University in Nijmegen²

University of Osnabrück³

Abstract

“Name as many animals as you can in one minute.” The verbal fluency (VF) task is simple to administer, requires no special equipment, and yet is a valuable diagnostic tool for Parkinson’s disease, Alzheimer’s disease, and more (e.g., Arias-Trejo et al., 2021). Although the task is simple, it involves not only language skills but also memory, processing speed, and other executive functions. Yet despite the widespread use of the VF task, there is significant debate as to the relative impact of language experience compared to domain-general skills (Aita et al., 2019; Amunts et al., 2020).

We analyze verbal fluency data (2 semantic trials (naming animals/foods) and 2 phonemic trials (listing words starting with M/S)) for a large sample of young, unimpaired Dutch native speakers (N = 515). All participants completed an extensive individual differences battery, allowing us to calculate multi-test factor scores. Further, we compared three scoring methods: sum scores, the number of correct words a participant names (the classic performance indicator); first RT, the time to the first utterance; and subsequent RT, the time when half of the items have been named, indicating when retrieval slows (Shao et al., 2014). The two temporal variables can also be quickly and objectively automatically extracted (Balogh et al., 2023). Correlations reveal that individual differences are positively correlated and higher sum scores correlate with quicker first RTs and slightly later subsequent RTs.

Linear mixed effects models show main effects of linguistic knowledge ($\beta = 0.09$, $p < 0.0001$) and processing speed ($\beta = 0.06$, $p = 0.01$) for both VF types. The fact that linguistic knowledge has the largest effect size means that verbal skills are more predictive of VF scores than executive function. There is a main effect of WM for phonemic VF only ($\beta = 0.08$, $p = < 0.0001$), suggesting that memory load is higher when listing words starting with a letter rather than from a semantic category. Interactions between trial type (semantic/phonemic), scoring method, and individual differences reveal that sum scores are more affected by all IDs than the temporal variables are, and this is particularly true for linguistic knowledge. First RTs are also affected by processing speed but subsequent RTs are relatively unaffected by all IDs.

Taken together, our results indicate a strong role of linguistic knowledge for VF performance. This also has practical implications for clinical use; participants who read more and

have larger vocabularies should be expected to score higher regardless of other factors. In terms of VF type, domain-general skill seems to play a stronger role in phonemic VF tasks, especially WM. Finally, while sum scores are more affected by both verbal and nonverbal skills, automatically extracted temporal variables provide an additional perspective on VF performance.

Language contact and identity work in a long-term bilingual heritage context: the case of the Mennonites in Ontario

Miriam Neuhausen

University of Heidelberg

Abstract

Despite their shared nomenclature, Mennonite communities are themselves heterogenous. I investigated how Mennonites in Ontario linguistically perform different Mennonite identities. I conducted 40 sociolinguistic interviews in 2018-19 with 54 speakers affiliated with communities ranging from the traditional “horse and buggy” Old Order Mennonites to the mainstream Conference Mennonites. While the former object to modern technology, cars, and the internet, the latter make full use of modern amenities. The degree of bilingualism in the different communities indexes this social continuum; while the Old Orders still use Pennsylvania German as a first language, the Conference Mennonites have shifted to English. For the latter group, English is the only way to signal their Mennonite identity.

In a variationist case study, I explored the Pennsylvania German consonant clear /l/ (in coda position) in Mennonite English across the four different communities. While Pennsylvania German displays clear /l/ across the board, Canadian English features dark(er) /l/ in coda position and clear(er) /l/ in onset position.

In order to account for the social and linguistic complexities of the individual speakers, I developed the social variable “socio-spatial distance from the Old Orders”, based on Stuart-Smith et al.’s (2007: 255) notion of the “local socio-spatial history”. The variable captures the three dimensions of social mobility, dialect contact, and network density. I propose that the greater a speaker’s socio-spatial distance, the greater is their social mobility, contact with English, and social network—and the darker their /l/.

In a linear mixed-effects model, the variable is statistically significant and suggests that degree of contact with English plays a role in /l/ darkness. However, the findings also indicate that speakers who left as baptised adults, or as “full members” of the church, may also use the variant to index their heritage. These speakers describe the group of speakers who have been in extensive contact with both the Old Order community and mainstream society, and produce extremely clear tokens in onset cluster position when describing instances of conflict.

A heritage speaker’s L2 “target” may not be to sound like their monolingual neighbours but to signal their heritage—or, as Simonet (2010: 675) puts it, they “may ‘choose’ to have an accent for social-indexical reasons rather than this accent being the consequence of a cognitive constraint”. This has also been shown in previous research, e.g. in rural areas of Louisiana, where younger speakers produce an accented variety of English, or the “Cajun way of speaking”, which is not a result of L1 interference from the heritage language French, as it is no longer spoken by younger speakers (Dubois & Horvath 2000: 291).

The results illustrate that in this setting, language contact is not the only factor accounting for variation and shows how speakers with conflicting identities, e.g. those who left the Old Orders, produce language, contributing to an emerging body of research on the linguistic negotiation of conflicting identities (Levon 2015; Jones 2018; VanderStouwe 2023).

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Effect of individual differences in semantic knowledge and control on the extent of contextual prediction during reading

Veronika Prigorkina¹, Yali Pan² & Steven Frisson²

*Vrije Universiteit Amsterdam*¹

*University of Birmingham*²

Abstract

Language comprehension is an active incremental process, which to some extent involves anticipating the upcoming speech content based on a multitude of linguistic and extralinguistic cues (e.g., Dell & Chang, 2014; Dijkgraaf et al., 2019; Friston, 2010; Garrod & Pickering, 2015; Ito et al., 2020; Kaiser & Trueswell, 2004; Laszlo & Federmeier, 2009; Sedivy et al., 1999; Van Berkum et al., 2005). It is reliably shown to make fixation duration on more predictable words shorter and to increase the probability of skipping such words altogether (e.g., Brysbaert & Drieghe, 2024; Luke & Christianson, 2016). At the same time, predictive processing is a very flexible mechanism, effectiveness of which depends, among other things, on individual life and language experiences (e.g., Dijkgraaf et al., 2019; Hintz et al., 2017; Huettig et al., 2011; Ito et al., 2018; James et al., 2023; Kousaie et al., 2019; Lemmerth & Hopp, 2019; Mani & Huettig, 2014; Rommers et al., 2015).

Despite extensive research on individual differences in predictive processing, the role our individual conceptual system, represented by semantic knowledge and semantic control (Lambon Ralph et al., 2017), may play for semantic prediction has not yet been considered. Semantic knowledge refers to our capacity to store and access conceptual information, such as meaning of the words, properties of the real-world objects they refer to, contexts they are usually encountered in, and other associated world knowledge. At the same time, semantic control is an ability to selectively retrieve and inhibit the components of semantic knowledge, which allows us to activate only relevant information in a way that respects the task and context at hand. A number of studies suggest that Semantic Knowledge (as a prominent prediction cue; Altmann & Kamide, 1999; Dijkgraaf et al., 2019; Federmeier et al., 2002; Huettig & Altmann, 2005; Kamide et al., 2008) and Semantic Control (as a contextually-sensitive executive capacity, guiding activation of semantic features in a top-down manner; Frisson et al., 2017; Wu & Hoffman, 2022; Hoffman et al., 2018; Yee & Thompson-Schill, 2016; Hintz et al., 2017) might be directly implicated in predictive language processing. Therefore, I hypothesised that greater individual semantic knowledge and semantic control capacities might have a significant positive effect on the extent to which a person predicts semantic information in reading, and, thus, benefits from it during integration of more predictable words. With the ever-growing importance of studying individual and contextual factors of psycholinguistic phenomena to gain a deeper understanding of the language processing system (e.g., Kidd et al., 2018, p. 156), this seems to be a non-trivial question.

For this purpose, I performed a re-analysis of the eye-tracking and MEG data from a study targeting semantic predicting during reading (Pan et al., in prep.) in combination with comparable personally collected eye-tracking data. The participants from both studies were additionally tested on their semantic knowledge and semantic control capacities (Wu & Hoffman, 2022). Using hierarchical regression analysis, I tried to see whether the size of the prediction effect reflected by overt (first fixation duration, gaze duration, and skipping probability), as well as covert attention markers (MEG-based coherence in response to Rapid Invisible frequency Tagging; see Pan et al., 2021; 2024, for details) could be explained by the participants' individual performance on semantic knowledge and semantic control. No significant effects were found for either of the dependent variables, suggesting that neither semantic knowledge, nor semantic control do not systematically affect the extent of prediction employed during reading by native speakers. This goes in line with work of James et al. (2023), who reported individual differences in language experience to affect more general patterns of visual scene observation but no systematic variation in semantic prediction effect in the Visual World Paradigm.

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Personal and demonstrative pronoun resolution in Chinese L2 learners of German: Evidence from offline questionnaires

Leyang Ren

Ludwig-Maximilians-Universität in Munich

Abstract

This study assessed interpretation preferences for different pronominal forms in Mandarin, a pro-drop language and in German, a non-pro-drop language (Chomsky 1981). We looked at whether L1 Mandarin L2 German speakers show command of the division of labor between personal and demonstrative pronominal forms in German, and whether this changes as a function of proficiency. Experiment 1 examined differences in interpretation preferences associated with pronominal forms in Mandarin (pro and overt pronoun). Experiment 2 focused on the offline resolution of German personal and demonstrative pronouns in Chinese learners of German, and compared it to that of L1 German speakers. Our results revealed no significant correlation between general language proficiency, as measured by a LexTALE task (Lemhöfer & Broersma 2012), and learners' resolution of demonstrative pronouns and indicated substantial individual differences. Learners exhibiting a subject antecedence preference for both personal and demonstrative pronouns were distributed across a wide range of proficiency levels. We argue that the subject preference, which is target-like for personal pronouns but non-target-like for demonstrative pronouns, could be due to L1 influence or a general learner preference (Roberts et al. 2008; Schimke et al. 2018). The lack of general proficiency effects supports the interface hypothesis (Sorace & Filiaci 2006) and suggests that pronoun resolution preferences may not develop on par with other areas of language use during second language acquisition.

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Is polite polite enough? How conceptual and linguistic awareness influences Kui and Khmer bilinguals and how they handle their hypocognition linguistically

Stefanie Siebenhütter

Waseda University in Tokyo

Abstract

This paper discusses cognitive factors in language variation and change, and the social dimensions of language variation in the case of hypocognition and examines how minority speakers perceive and handle the socioculturally grounded conceptual gap linguistically. By investigating the concept of politeness of bi- and multilingual minority Kui speakers, i.e., when shifting to Khmer language for political, economic or social status reasons. Politeness is an important strategy in Modern Khmer and not limited to the use of pronominal forms but also lexically represented. In Khmer, various verbs to express politeness in accordance with the social situation can be used. The Kui society is less hierarchically structured, and therefore Kui language does not lexically encode social status. There are two main questions to answer in this sociolinguistic approach: (1) How do Kui L1 speakers deal with conceptual gaps and linguistically expressed differences in social hierarchy, i.e., politeness, when using the socially high-status language Khmer? (2) Are Kui L1 users aware of the different concepts of politeness, when switching to Khmer? Additionally, it is asked if their possibly different lexical representation for politeness is affecting their L1 usage when switching back to Kui. The paper further discusses methodological strategies that can be used to answer these questions.

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