



**Conference on Corpora for
Language and Aging Research**

APRIL 10-12, 2024

CONFERENCE BOOKLET

EBERHARD KARLS
**UNIVERSITÄT
TÜBINGEN**



WELCOME MESSAGE

Dear Conference Attendee,

We are pleased to welcome you to CLARe6, the *Sixth Conference on Corpora for Language and Aging Research* being held April 10-12, 2024, hosted by Quantitative Linguistics at the University of Tübingen.

This year's conference targets the following themes:

- Language use in later life: Our focus is on an interdisciplinary approach to language use in later life across the fields of psycho-, neuro-, sociolinguistics, applied linguistics, pragmatics, psychology, sociology, as well as healthcare and nursing, with a particular focus on older speakers.
- Language contact across the lifespan: The role of language contact in the community has been well-studied, yet much work still needs to be done on the impact of language contact across the lifespan, and specifically with older speakers, including retrograde change and age-grading.
- Interactional studies of language and aging: Much work has been carried out on real-time, longitudinal language change; however, little attention has been paid to changes in communicative interaction with older speakers with respect to discourse, communication, and dementia.
- Cognitive processing and aging: Cognitive functioning has been shown to correlate with lexical and syntactic complexity; however, results have been inconclusive. More research is needed concerning the interaction between language use and cognitive decline.

In this booklet, you will find all you need to know about participating in CLARe6. The book is organized according to the schedule so you can follow along, session-by-session.

We hope you find the conference enjoyable, productive, and stimulating!

Sincerely,

CLARe6 Scientific Committee

R. Harald Baayen
Isabelle Buchstaller

Karen V. Beaman
Lars Bülow

David Bowie
Annette Gerstenberg

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ONSITE CONFERENCE VENUE – ALTA AULA

The physical conference will take place in the Alta Aula, located at Münzgasse 30. The building is a cultural monument erected ca. 1547. It served as the main building of the university for 300 years, until 1845. Commissioned by Duke Karl Eugene of Württemberg, the building was rebuilt in a neoclassical style by his son, Reinhard Fischer. Karl Eugen gifted it to the university in 1777.



ONLINE CONFERENCE VENUE – GATHERTOWN

The online conference will take place in Gathertown. All registered participants will receive a link to join the Gathertown site. If you did not receive this link, please contact xiaoyun.jin@uni-tuebingen.de.

We request that in-person participants also join the online Gathertown site to facilitate real-time communication between the online and in-person participants.

As you can see from the picture to the right, there are four rooms:

- **reception room** where you first enter and can download a copy of the schedule and the book of abstracts, and ask questions of the conference organizers;
- **break room** where you can meet in small groups and talk with other attendees;
- **conference room** where the presentations will be held; and
- **poster room** where the posters will be presented.



If you are unfamiliar with Gathertown, please check out the following video:

<https://www.youtube.com/watch?v=89at5EvCEvk>

WELCOME RECEPTION – WEDNESDAY EVENING

A welcome reception and anniversary party celebration is planned for Wednesday evening, April 10th. It will take place in the Hohentübingen Castle (next to the Alte Aula) in the Museum of Ancient Cultures, a UNESCO World Heritage site. You will have the option to view the exhibit while socializing and meeting with friends and colleagues. Drinks and appetizers will be served.

CONFERENCE DINNER – THURSDAY EVENING

The conference dinner will take place on Thursday evening, April 11th, at Landgut Kemmler in Wankheim, a local farm just outside of Tübingen which cultivates and serves high quality, regional specialties using only fresh, local products. The cost is 50€ per person. Vegetarian options will be available. Transportation by bus has been arranged. Please allow 10-15 minutes to walk to the bus station (see the map below). The bus will depart Tübingen at 17:30 CET and return at 21:30 CET.



WALKING TOUR – FRIDAY AFTERNOON

On Friday afternoon, after the conference closes, we have arranged a walking tour in Bebenhausen, a picturesque town with a monastery and lovely walk along the river. The cost is 15€ per person. Transportation by bus has been arranged. Please allow 10-15 minutes to walk to the bus station (see the map above). The bus will depart Tübingen at 16:00 CET and return at 18:00 CET.

CONFERENCE SCHEDULE AT A GLANCE

TIME (CET)	Wed, April 10	Thu, April 11	Fri, April 12
8:30 - 9:00		<i>Coffee & Tea</i>	<i>Coffee & Tea</i>
9:00 - 9:20		KEYNOTE #2 David Britain & Hannah Hedegard	KEYNOTE #3 Shumin Lin
9:20 - 9:40			
9:40 - 10:00			
10:00 - 10:20	<i>Registration / Coffee & Tea</i>	#10 Poplack & Dion	#23 Yao & Huang
10:20 - 10:40	<i>Opening Remarks</i>	<i>Coffee & Tea</i>	<i>Coffee & Tea</i>
10:40 - 11:00	KEYNOTE #1 Simone Pfenninger	#11 Moelders & Buchstaller	#24 Wirtz & Pickl
11:00 - 11:20		#12 Oppermann & Siebenhaar	#25 Bittner et al.
11:20 - 11:40		#13 Luppi	#26 Worstbrock & Braun
11:40 - 12:00	#1 Lefelle & Gao (online)	#14 Matsuda	#27 Ivanova & García Meilán
12:00 - 13:00	<i>Lunch</i>	<i>Lunch</i>	<i>Lunch</i>
13:00 - 13:20	#2 Parkman	#15 Beaman, Bülow, Vergeiner	#28 Karl
13:20 - 13:40	#3 Dovetto & Marra	#16 Bauernfeind et al.	#29 Ramona
13:40 - 14:00	#4 Sekerina et al.	#17 Mechler	#30 Ivanova et al.
14:00 - 14:20	#5 Malyutina et al.	FREE	KEYNOTE #4 Victor Kuperman
14:20 - 14:40	POSTER SESSIONS #1A & #1B	POSTER SESSIONS #2A & #2B	
14:40 - 15:00			
15:00 - 15:20			<i>Closing Remarks</i> <i>Next Meeting</i>
15:20 - 15:40	<i>Coffee & Tea</i>	<i>Coffee & Tea</i>	FREE
15:40 - 16:00	#6 Baayen et al.	#19 Pichler et al.	
16:00 - 16:20	#7 Llorente-Belda & Schneider	#20 Karl & Rzitki	<i>Bus departs for tour @16:00</i>
16:20 - 16:40	#8 Engel & Adli	#21 Fernandez et al.	Walking Tour <i>Bebenhausen</i> <i>Monastery & Castle</i>
16:40 - 17:00	#9 Masumoto & Cheng	#22 Meini & Rosola	
17:00 - 17:30	FREE	FREE	
17:30 - 18:00	Welcome Reception and Anniversary Party <i>Museum of Ancient Cultures</i> <i>Hohentübingen Castle</i>	<i>Bus departs for dinner @17:30</i>	<i>Bus back to Tübingen @18:00</i>
18:00 - 19:30		Dinner	
19:30 - 20:30		<i>Landgut Kemmler</i> <i>in Wankheim</i>	
20:30 - 21:30			
21:30 - 22:00		<i>Bus back to Tübingen @21:30</i>	
<i>All times are CET (Central European Time)</i>			<i>(online only presentation)</i>

WEDNESDAY, APRIL 10, 2024

WEDNESDAY

IN-PERSON

KEYNOTE #1: 10:40-11:40

Language learning in later life: From significant life events to cognitive benefits

Simone E. Pfenninger, University of Zürich, Switzerland

Our entire life is characterized by different and inevitable changes, such as life transitions, critical life events, or age-related psychological and physiological changes. Such changes also affect what and how much we learn. The learning environments evolve throughout the lifespan, adapting to our changing preferences, ideas, and aspirations as we age; we also tend to select environments that align with our established knowledge and skills. For instance, in SLA and multilingualism research, change of language preferences throughout the lifetime and their differential use in specific contexts (e.g. family/friends versus school/work) are well documented. At the same time as our relationship with language and with learning shifts and changes, it remains significant. To give an example from later stages of life, first results of intervention studies suggest that as a cognitively challenging activity, language learning may, *under certain circumstances and in certain phases of the second language (L2) learning process*, have a positive effect on cognitive functions, metalinguistic awareness, and awareness of language as a whole, prevent isolation and foster linguistic flexibility, self-esteem, autonomy, social interaction and individual mobility in older adults.

In this talk, I am taking a lifespan approach to SLA, which seeks to understand continuities and discontinuities in growth and change over the whole of life and promises to make a contribution toward raising ageism awareness. To what extent is 'age' as a construct of itself of relevance in SLA in the light of huge and increasing spread of individual abilities and skills as age progresses? How does access to various resources impact on success and continuation with the endeavor of L2 learning over one's life course and the events, transitions, and experiences that shape it? How far are adult L2 learners the same regardless of age and to what extent does L2 learning in later life have its own distinctive qualities?

Drawing on my own research on L2 learning in the third age, I argue that chronological age does not determine the positioning of L2 learners across the lifespan: age is part of a complex web of social distinctions such as psychological and individual factors as well as major life events that intersect in the construction of a learner's relative status and opportunities.

Elderly care communication: insights from care facility conversations*Marie Lefelle, Grammatica, Université d'Artois**Weiwei Guo, CeRLA, Université Lumière Lyon*

"In France, the issue of providing adequate care for the elderly is currently in the spotlight. There has been a concerted effort to humanize institutional care by increasing the number of facilities and staff (Bonnet, 2008). However, the training of professionals working with elderly often focuses primarily on practical tasks. Caregivers, as well as medical-psychological aides, typically find themselves tasked with documenting their performed tasks, often neglecting the examination of whether their communication influences the outcome of these tasks, such as meal assistance. Yet, especially in specialized care facilities for the elderly, caregivers are required to communicate during their care routines, and often, the effectiveness of their communication determines the success of their tasks. This aspect of caregiving is frequently more complex than it may appear, particularly in settings where neurodegenerative disorders, such as Alzheimer's disease, are prevalent, making communication with residents challenging. Caregivers are often left to adapt to these unique circumstances with minimal training (Rousseau, 2009).

Using a corpus of authentic audio and video recordings collected during mealtime interactions at a specialized care facility for dependent elderly individuals, this study conducts a qualitative analysis of caregiver discourse in response to residents who sometimes encounter difficulties in their interactions. Our analysis encompasses two aspects. Firstly, we will observe verbal exchanges within the framework of the two discourse categories delineated by Fukaya et al. (2009), namely, discourse aimed at eliciting the activities of daily living (ADL)-related behavior or physical functioning (Type I talk) and discourse aimed at facilitating psychosocial life activities (Type II talk). We explore the distribution of these discourse types and residents' reactions to each category. Secondly, we delve into the contentious phenomenon of elderspeak, as identified by Williams (2013). Elderspeak encompasses various linguistic features, including a slower speaking rate, an exaggerated intonation, an elevated pitch and volume, repetitions, employment of a simpler vocabulary, and a reduction in grammatical complexity.

Additionally, this study places a special emphasis on humor, a topic rarely explored in communication studies with the elderly population. We investigate its linguistic mechanisms, the contexts in it is employed, its effectiveness, and other related aspects. (Heinemann, 2009; Joris, 2010). We demonstrate that caregiver discourse is closely correlated with the residents, particularly their ability to engage in the interaction. In addition to challenges related to purely human factors such as refusal and aggression, there are difficulties stemming from the pathologies affecting the elderly individuals. This study aligns with the "Interactional Studies of Language and Aging" theme of the conference and could contribute to the development of caregiver training programs better suited to the realities of care provision."

The effect of chronological age, motor control and cognitive development on speech production across the lifespan

Seren Parkman, Lancaster University

"Previous research demonstrates that increasing chronological age can lead to distinct changes within the voice. This includes changes in F0 (Harrington et al., 2007; Reubold et al., 2010), often lowering in women and increasing in male speakers (Debruyne and Decoster, 1999; Eichhorn et al., 2017; Endres et al., 1971). Additionally, decreases in F1 and F2 have been reported in previous studies (Debruyne and Decoster, 1999; Endres et al., 1971; Harrington et al., 2007; Linville and Rens, 2001). However, research differs when considering the impact of motor control and cognition on the voice as we age. The literature argues that whilst cognitive and motor control decline with age (MacPherson, 2019), there is a chance to slow this process down, and in some cases, continue to see this improve with increasing age in speakers (Seidler et al., 2010, Ramscar et al., 2013, Wright, 2016).

In the current study, I want to understand how language use may change in later life. I compare chronological age to representative measures of motor and cognitive control, to understand how age and cognition may impact on an individual's speech production. By achieving this, we can expand our knowledge of how chronological and biological age interact and impact our speech production across the lifespan, improving how we might conceptualise age in future research (Hejná and Jespersen, 2021, 2022). I predict that with increasing chronological age we will also see a decline in motor and cognitive control abilities, resulting in changes in F0, and decreases in F1 and F2. However, if speech production and motor and cognitive control measures do not correlate as predicted, perhaps in future we need to consider the influence of social factors on speech production.

For this study, 40 participants were collected from the Lancaster and Morecambe area in the North-West of England, UK. Participants were all monolingual speakers of British English and were split into two age-groups of 20 speakers: 16-35 years and 65+ years. Participants completed a series of speech tasks including: a word list, reading passage and a 10–15-minute interview. From this F0, F1, and F2 were then extracted from a range of vowels in the word list, producing 186 tokens per speaker for analysis, 7,440 tokens in total. Participants then completed a series of tasks to elicit representative motor control and cognitive information, including a digit-span task (Chan and Elliott, 2011; Gilker, 1992; Ottosson and Grahn, 2005), trail making task (Boll and Reitan, 1973; Fals-Stewart, 1992; Lu and Bigler, 2002) and diadochokinetic task (Dawson, 2020). The results of which were compared to the speech data.

Data collection is still ongoing; however, results suggest that F0, F1, and F2 do change with increasing chronological age supporting previous studies (Harrington et al., 2007; Reubold et al., 2010). In addition, younger participants overall appear to perform better in motor and cognitive control tasks as predicted (MacPherson, 2019). However, there is considerable speaker variation and results are not as linear as previously predicted. Therefore, whilst changes in speech production do appear to correlate with differing levels of motor and cognitive control, this is not consistent across all speakers. This may be a consequence of improved motor and cognitive control with age (Ramscar et al., 2013). Alternatively, older speakers might be finding ways to overcompensate for reduced motor and cognitive control abilities in their speech (Wright, 2016). Or perhaps a social explanation is needed in order to explain the results we see. These results can help us begin to understand how language, age, and cognitive and motor control interact across the lifespan, and how we may want to reconsider how we conceptualise age in future research.

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Silence and Aging: A Correlation Between Pauses and Dementia

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Aging, whether healthy or pathological, results in language changes. For instance, at the phonetic-acoustic level a correlation emerged between aging and both pitch (Brückl & Sendlemeier 2003) and speech rate (Oyer & Deal 1985). Furthermore, lexical retrieval difficulties (Folia et al. 2022) and a reduction in discourse informativeness (Chapman et al. 1995) seem to become quite common through time. As expected, such language features are also found in elderly people suffering from pathological conditions: the correlation between dementia, change in F0 and speed of articulation is a case in point (Orbelo et al. 2005; Horley et al. 2010; Meilán et al. 2014). It is then fair to ask whether language weakening paths differ between healthy and pathological aging. In the present work we will deal with language changes in older speakers with Alzheimer Disease (AD) and Mild Cognitive Impairment (MCI), with particular reference to silence in conversation. AD, a progressive neuro-degenerative disease estimated to affect about 131 million people by 2050, represents a leading cause of dementia (Brookmeyer et al. 2007), while MCI it's considered to be AD's prodromal stage (Galvin & Sadowsky 2012). The main aim of our research, which is part of the in fieri FRA project DISAGE ('DISEase and AGEing'), is to build up an Italian Alzheimer dataset. The project enrolls AD, MCI and healthy (HC) subjects matched for sex, age and education. Each participant undergoes neuro-psychological testing (MMSE, Folstein et al. 1975). Semi-spontaneous and narrative speech samples are elicited through conversation; in addition, a picture-description task is submitted to participants (Capasso & Miceli 2001). Interviews are audiotaped through a H4nPro Zoom recorder, transcribed in accordance with CLIPS transcribing norms (Savy 2006) and analyzed using the PRAAT software (Boersma & Weenink 2021). As some scholars have pointed out, the relationship between speech and silence is salient in dementia (Satt et al. 2013; Beltrami et al. 2016; Pistono et al. 2019). In particular, it has been emphasized a tendency towards the production of long pauses (> 500 msec) and disfluency chains in AD conversation (Bruni et al. 2022). Actually, our preliminary data also seem to point in this direction, confirming that dementia results in longer silence times than typical aging. As it is well known, speech analysis can support medical diagnosis in an inexpensive, noninvasive and stress-free way. Therefore, our research intends to further evaluate the hypothesis of a correlation between pauses, disfluencies and speech in AD, dwelling in particular on their frequency, duration as well as pragmatic and syntagmatic collocation, in order to understand whether they may represent a valid AD clinical marker.

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Sensitivity to Prior Context in Referring Expressions in Bilingual Older Adults*Irina A. Sekerina, The City University of New York**Aleksandra Skorobogatova, The University of São Paulo**Si On Yoon, New York University*

The discourse context influences the way the referring expressions are produced: when there are two objects from the same category in the local context (open box and closed box), the speaker uses a modifier to distinguish between them ('closed box'). But speakers often use a modifier when the two contrasting objects are separated in time. That is, although a bare noun is informative in the second local context, additional modifications (over-specification) happen due to earlier experience, i.e., lexical differentiation [1, 2]. Lexical differentiation requires memory representations of the past referents. Shekleton et al. (2022) found that despite the differences in memory both younger and older English monolinguals produced more modifiers in the Differentiation than the Non-differentiation condition (73% vs. 59%) to the same extent [3]. However, differentiation was observed only in pre-noun modifiers, but not in post-noun modifiers ('box that is open'). The present study extends [3] to bilingual older adults that speak languages with different modification systems. Brazilian Portuguese (BP) uses post-noun modifiers ('*caixa aberta*'), whereas Russian (RUS) uses both (*otkrytaja korobka* and *korobka, kotorja otkrytaja* 'open box'). We investigated whether bilingual BP-Russian older adults exhibit lexical differentiation similar to monolingual English older adults in both of their languages and whether there would be less over-specification in BP because of post-noun modification.

Method. 15 older speakers of heritage Russian in Brazil (Mage = 75.6 years) completed a referential communication task in RUS and BP. In it, 4 images were uncovered on each trial (Figure 1), and the participant described the image in the red frame. The task consisted of 24 critical sets, each of which includes: an entrainment trial, a test trial, and six fillers. The target images in the entrainment and test trials were either of the same category (the open box in the entrainment trial, the closed box in the test trial; Differentiation condition) or a different category (the eye and the box; Non-differentiation condition). The target in the test trial was the same across conditions (the closed box).

Results. Participants' descriptions were coded to establish whether a modifier was produced and whether it was pre-noun or post-noun. A mixed-effects model found a significant main effect of condition ($z = 2.35$, $p = 0.02$): like monolinguals, our participants produced more modifiers in the Differentiation than in the Non-differentiation condition (74% vs. 58%). Also, as predicted, the proportions of pre-noun vs. post-noun modifiers were different in each language (Figure 2). The modifier type (e.g., pre- vs. post-noun) modulated lexical differentiation in each language. In BP, speakers rarely produced pre-noun modifiers, but lexical differentiation was well observed in post-noun modifiers (74% vs. 62%, $z = -2.40$, $p = 0.01$). In RUS, lexical differentiation was only observed in the pre-noun modifiers (38% vs. 19%; $z = -2.71$, $p = 0.01$). Thus, despite potential decline in memory, bilingual older adults exhibited lexical differentiation in referring expressions to the same extent in both languages, but the differences in the modification systems of the two languages resulted in markedly different patterns of over-specification.

The relation between language performance and cognitive scale scores in memory clinic patients

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In mild cognitive impairment (MCI), an intermediate condition between healthy aging and dementia, the language function may be compromised along with other cognitive functions. Understanding specific patterns of co-occurrence of language and other cognitive deficits is relevant both theoretically and clinically. Theoretically, it can shape the understanding of MCI subtypes with different patterns of impairment. Clinically, it may inform patient routing: for example, if comprehensive language assessment is not possible in clinical practice for every patient, it may target those patients whose cognitive profiles suggest that language deficits are statistically most likely.

So far, the relation between language and other cognitive deficits in MCI has been investigated in few studies (De Looze et al., 2021; Kralova et al., 2016). Our study addressed it by testing whether language performance would be significantly associated with scores on two general cognitive scales (Mini-Mental State Examination, MMSE, Folstein et al., 1975, and Montreal Cognitive Scale, MoCA, Nasreddine et al., 2005) in a sample of memory clinic patients with suspected MCI. MMSE and MoCA scales were selected because they are commonly used in clinical practice for initial assessment for MCI. We administered MoCA and MMSE to 176 memory clinic patients (mean age 72.8, SD 7.6, range 55-93 years). They also performed two language tasks testing different linguistic levels: lexical (naming 30 words by definition) and grammatical (reading 30 grammatically complex sentences and responding to comprehension questions). We used linear mixed-effects models to test whether the accuracy and speed of word naming and sentence comprehension would be predicted by MoCA and MMSE scores (total scores and, additionally, the MoCA language index score, Julayanont et al., 2014) when accounting for age and education.

The MoCA total score was significantly associated with three out of four language performance measures: naming accuracy, naming response time, and sentence comprehension accuracy. The MMSE total score was not significantly associated with any language performance measures. This dissociation is consistent with previous evidence for generally low sensitivity of MMSE in MCI assessment (Chen et al., 2021; Pinto et al., 2019), even though MMSE primarily targets mnemonic deficits that should be relevant to both word retrieval and sentence comprehension. The MoCA language index score was not significantly associated with any language performance measures either, possibly due to a low number and complexity of language trials.

To conclude, a lower MoCA total score is statistically associated with lower language performance in memory clinic patients with suspected MCI, so it can be considered in clinical practice in order to select candidates for detailed language assessment. By the time of presentation, we will also complete and discuss additional analyses of how language performance relates to different subscores of MoCA and MMSE assessing specific cognitive functions.

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“This cruel disease that removes our self” – Discursively constructing dementia in an online health forum

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Discourses about dementia are a central concern of wider (media) discourses around ageing and public health. In this context, it is of special interest how the condition is discursively constructed using conceptual metaphors (see Lakoff & Johnson 1980; Kövecses 2010) as these can “reveal [the person’s] own specific and sometimes conflicting perceptions, views, attitudes and challenges” (Semino et al. 2018: 2) on dementia. Current research shows a strong focus on dementia discourses in the mass media (e.g., Van Gorp & Vercruyse 2012) as well as in healthcare settings (e.g., Thorsen & Johannessen 2021). In both contexts, however, persons living with dementia (PWD) are mainly considered in terms of their (cognitive) decline and the comprehension of non-literal language, while the voices of family care partners (FCPs) are largely heard in therapeutic contexts only.

It is still relatively unexplored territory how exactly PWD and FCPs use virtual discourse spaces to construe dementia and offer their unique perspective on the condition. Forums are especially relevant as they allow (anonymous) access to other affected persons (e.g., Kleinke 2020) when the locus of (social) movement is restricted by the condition.

The data for this talk stem from 300 posts each from pertinent threads in the FCP subforum “I have a partner with dementia” as well as the PWD subforum “I have dementia” on Dementia Talking Point (hosted by the Alzheimer’s Society UK). Established illness metaphors were identified with Wordsmith concordance searches, and then analysed with a modified Metaphor Identification Procedure (MIP; see Semino et al. 2018); a close reading of each post was further conducted to identify novel, creative metaphors.

The results show that the major metaphorical conceptualisations in FCPs (JOURNEY and LOSS; see 1) tend to highlight the impact of dementia on the FCP. Further metaphorical framings focus on the condition’s impact on the PWD, such as PERSONIFICATIONS of dementia as a negative agent. The forum may thus be used as a locus for venting, and gaining emotional support.

(1) “I have lost my Dad to the world of dementia he lives in.”

While PWD have more source domains in total (27 vs. 17 for FCPs), the majority is only represented with one single token, which may be evidence of PWDs’ differing ways of using the forum, or possibly of dementia-related changes in metaphor production. Major conceptualisations pit the PWD against the condition (LOSS, WAR; as well as PERSONIFICATION; see 3), and centre (physical) symptoms (BODIES ARE MACHINES; see 4).

(2) “This cruel disease that removes our self by stealth”

(3) “The brain is the engine that tells everything what to do”

In sum, FCPs mainly use conceptual metaphors to discursively construct their changing relationship with their partner living with dementia, while PWD use metaphors to come to terms with their condition, and to express their own struggles with (personality) changes. These findings give voice to PWD and may have implications for healthcare settings in which the PWD is predominantly construed as a WARRIOR (Lane et al. 2013).

DEMENTIA metaphor	tokens
DEMENTIA IS A JOURNEY	26
DEMENTIA IS LOSS/DECAY	21
PERSONIFICATION	15
SPLIT SELF	12
DEMENTIA IS A DOWNWARD MOTION	8
BODIES ARE MACHINES	7
DEMENTIA IS TRANSFORMATION	6
DEMENTIA IS WAR	5
DEMENTIA IS A GAME	5
DEMENTIA IS A THEATRE PRODUCTION	3
DEMENTIA IS A CONTAINER	3
DEMENTIA IS CONSUMPTION	2
DEMENTIA IS DARKNESS	2
DEMENTIA IS A ROBBER	1
DEMENTIA IS A PRISON	1
DEMENTIA IS AN INVADER	1
DEMENTIA IS HORROR	1

Table 1: FCP metaphors of dementia

DEMENTIA metaphor	tokens
DEMENTIA IS LOSS/DECAY	10
PERSONIFICATION (DEMENTIA)	10
BODIES ARE MACHINES	9
DEMENTIA IS WAR	7
THE BRAIN OF A PWD IS A CONTAINER	4
DEMENTIA IS A JOURNEY	4
SPLIT SELF	3
DEMENTIA AWARENESS IS A JOURNEY	2
DEMENTIA IS A GAME	2

Table 2: PWD metaphors of dementia (with more than 1 token)

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The controversial interrelation of multilingualism and cognition in older adults*Aldona Rzitki, University of Bern*

The research project investigates the interrelation of multilingualism and cognition in old age (65 years and older). The participants are German-polish bilinguals (n=60). The test battery consists of a questionnaire for linguistic and extralinguistic variables, a screening for executive functions (SEF), language proficiency tests, and cognition tasks such as the Stroop Task, the Verbal Fluency Task, and the Month Ordering Task.

Numerous studies from various disciplines address the question of which factors can contribute to cognitive health in old age. Throughout life, several factors can promote cognitive health. For instance, it is well established that factors like education can confer cognitive advantage in old age (Sattler et al., 2012). In linguistics, the influence of multilingualism on cognitive changes in old age has been a subject of debate for several years. While this variable was considered promising for a long time, it is now a topic of controversial discussion. But why was multilingualism assumed to be a factor that might confer advantages? According to the cognitive reserve hypothesis, it is considered that multilingualism trains the brain, enabling bilinguals to cope with (pathological) restrictions using existing cognitive mechanisms and structures (Stern & Yaakov, 2012). Additionally, bilinguals tend to experience a slower decline in gray matter in the brain as they age (Poarch, 2020). This increased brain reserve ensures that bilinguals can better mitigate cognitive deficits than monolinguals, as a lower percentage of the brain is affected when neuronal decline occurs (Stern & Yaakov, 2012).

While some studies confirm these hypotheses and show that multilingualism can delay cognitive decline, other studies cannot prove any benefits of multilingualism in old age (Van den Noort et al., 2019). In my understanding, multilingualism is an individual and highly dynamic construct that constantly changes over the lifespan (de Bot & Makoni, 2005). Variables such as the age of acquisition, input, frequency of use, or migration (among many others) need to be systematically collected, considering the lifespan perspective, to capture the nature and extent of multilingualism. This step is often omitted in quantitative studies, as multilingualism is determined solely based on a few markers. Consequently, individuals with diverse multilingual experiences are grouped, and this leads to divergent results when examining changes in cognition. However, these variables may be critical factors required to move the research debate forward and generate new insights productively. So, my main research question is how individual factors of multilingualism correlate with cognitive competencies of German-Polish bilinguals aged 65 and older. To address this question, correlations between language proficiency test results, executive function screening, questionnaire variables, and cognition test scores will be calculated.

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Corpus SIM (Senectus Ipsa Morbus). Spontaneous speech in healthy aging*Francesca M. Dovetto, Università degli Studi di Napoli "Federico II"**Patrizia Sorianello, Università degli Studi di Bari**Alessandro Panunzi, Università degli Studi di Firenze**Anna Riccio, Università degli Studi di Foggia*

The proposal presents the project “Corpus SIM (Senectus Ipsa Morbus) - Spontaneous speech in healthy aging”, that has been recently funded by Italian Government for the years 2023-2025. The aim of this project is the construction of a pilot corpus of senile speech to identify the most salient features of senile speech and the changes that occur in communicative interaction with older speakers with respect to discourse. The corpus will exploit both standardized procedures and methods for the analysis of data (spontaneous speech of elderly person) and will develop a freely accessible and implementable infrastructure that will provide free access to both scholars and clinicians.

The human aging process is one of the most complex and urgent social issues that developed societies of our time have to face. According to the 2021 census, in the last ten years the percentage of over 65s has increased by 15.2%, while that of over 80s has risen by more than 127%. The average lifespan is also increasing: currently in Italy it is 79.8 years for men and 84.5 years for women. On the linguistic side, the cognitive and physiological-motor decline faced by elderlies inevitably leads to problems linked to linguistic communication. Among the most frequent manifestations of senile speech there is a lower speech rate and higher incidences of processes which affect vocal fluency, timbre alteration, modification of vocal quality, reduction of sound intensity as well as significant phenomena of segmental and syllabic hypoarticulation.

At present, there are few studies dedicated to the characteristics of senile speech in Italian, and there are no linguistic resources freely available to the community of scholars. This gap will be filled by the construction of the SIM corpus, a pilot corpus of speech produced by healthy ageing seniors, diversified at the diatopic level and organised by gender and age group.

Speech samples will be collected through a picture description task and semi-structured spontaneous conversations (autobiographical topics widely employed in the aphasiology literature to enhance speech: family, home, work, organization of the day). All participants will undergo a cognitive assessment.

The speech data will be first automatically transcribed and annotated at several linguistic levels (phonetic, phonological, prosodic and morpho-lexical), and then manually corrected. Both processes are made with appropriate tools (see Pipeline in the attached figure). After data collection, the corpus will be analysed on various levels (phonetic-phonological, prosodic and lexical/morphosyntactic). The collected speech samples will be available in an open access network infrastructure, which will consist of a collection of services and tools for automatic text and voice processing and automatic extraction of linguistic information. This infrastructure consists of: (a) NLP tools for automatic annotation and extraction of linguistic information; (b) a multilevel collaborative annotation platform and annotated data; (c) a web-based template for annotating linguistic and clinical metadata; (d) a state-of-the-art software for prosodic annotation and acoustic features extraction; (e) a corpus querying web application.

The project will officially start in mid-October 2023, so we expect to present project earliest advancements during the conference.

Using social media to track language use and self-reported cognitive decline in mini-infarct vascular dementia

Boyd H. Davis, University of North Carolina, Charlotte

Meredith Troutman-Jordan, University of North Carolina, Charlotte

RESEARCH FOCUS: Vascular dementia is the second most commonly occurring of the dementias: it is hard to diagnose, has no 'cure', and frequently combines with other dementias, particularly Alzheimer's, as it progresses (Macoir 2023). This discussion will focus on a study of discourse in spontaneous conversational monologues in social media from over two hundred spoken and visually recorded postings on YouTube over the last five years by Stephen Paul Tamblin, a man living with what appears to be multi-infarct vascular dementia (VDmi).

RESEARCH QUESTION: By analyzing features of discourse in the public YouTube collection from Tamblin, can we better understand spontaneous language use and the use of narrative over time by persons living with vascular dementia?

CONTEXT: We offer context by briefly highlighting specific social media being used by persons with various dementias and studied by dementia researchers, including Twitter, Facebook, Reddit, Instagram, YouTube, blogs, and weblog/audiovisual diaries. Using these media may signal the importance of spoken and written personal narrative as shared by and with persons living with dementia.

METHODS: For analysis, we used Paul Rayson's interface to corpus annotation tools, Wmatrix5 (ucrel-wmatrix5.lancaster.ac.uk/wmatrix5.html) which assigns part-of- speech and semantic tags (Rayson 2008) and identifies multi-words which are two- and three-word collocations, often classified as formulaic language (Wray and Perkins 2000) or as part of familiar language (Sidtis 2021) and short phrases. For additional information about features such as metadiscourse, we used Text Inspector (<https://textinspector.com/>). For transcription of YouTube postings, we used Transcribear.com, which differentiates between British and American English, and checked against verbatim transcription.

FINDINGS: In the examples cited of orality in 238 YouTube postings as primarily monologue and reported dialogue, we see the use of familiar language, small stories, and narrative chunks as well as untethered expressions of feelings, shadow stories, bits of chronicles, and a range of uses of pragmatic repetition. Social interaction with others -- even in monologues directed to a particular if unspecified audience -- not only helps persons with various dementias to retain features of identity but may also keep some from further deterioration. Such examination demonstrates the importance of linguistic analysis in excavating new emphases for improving dementia care through content for training in more sensitive interaction and expanded communication.

The relation between verbal working memory and discourse parameters in older adults with mild cognitive impairment

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Mild cognitive impairment (MCI) is a condition between normal aging and dementia that affects lots of older adults. MCI involves a decline of many cognitive functions, especially memory (Petersen, 2003). According to many studies (e.g., Huntley & Howard, 2010; Kokje et al., 2021), working memory is more impaired in MCI than in normal aging. Linguistic skills such as discourse production and lexical access also decline in MCI (Willers et al., 2008).

The goal of our study was to determine if working memory affects various characteristics of discourse in MCI. Most studies show that syntactic complexity and length of utterances is reduced in MCI (e.g. Kokje et al., 2021). According to Kokje et al. (2021), verbal working memory and discourse comprehension are interrelated in MCI, similarly to normal aging (Choi, 2016). However, other studies have not found a significant association between these functions in MCI (Drummond et al. 2019). To the best of our knowledge, no studies have addressed the relationship between verbal working memory and discourse production in MCI. Word frequency in discourse production is certainly related to long-term memory, and there is currently no conclusive evidence on its relationship with working memory (Camos et al., 2018).

In our work, we tested the association of verbal working memory in MCI with both lexical (word frequency) and syntactic (utterance length, number of conjunctions, number of subordinate clauses) parameters in discourse production. Participants were 86 memory clinic patients with MCI (mean age 72.10, SD 7.22, range 57-85 years). Their verbal working memory capacity was tested with Rey Auditory Verbal Learning Test (RAVLT; Rey, 1964). We built general linear models to test the relation between verbal working memory scores (RAVLT immediate and RAVLT learning scores, Dawidowicz, 2021) and discourse parameters when accounting for age, Montreal Cognitive Assessment total score, and the number of years of education.

Word frequency was significantly associated with the RAVLT learning score. A possible account is that word frequency is affected by long-term memory (Camos et al., 2018), and the RAVLT learning task uses the episodic buffer that is both a storage and a link between long-term and working memory. Among syntactic parameters, the total number of conjunctions was significantly associated with the RAVLT immediate score but not with the RAVLT learning score. This association may be present in MCI due to intact articulatory rehearsal system and phonological loop (Collette et al., 1999; Hessen, 2011). Other syntactic parameters showed no association with the RAVLT scores. To conclude, word frequency and the total number of conjunctions in discourse production rely on verbal working memory, and therefore they may decline in MCI as a result of memory deterioration. The utterance length and number of subordinate clauses were not related to verbal working memory, so their change in MCI may reflect primary changes in the language function itself, rather than be secondary to the memory decline.

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Performing age: linguistic construction of 'young' and 'old' on *Hot in Cleveland**Míša Hejná, Aarhus University*

How are age identities constructed through linguistic variation? This paper focuses on female speakers approaching later adulthood. I provide two cases of how variables from a range of linguistic levels are recruited to perform specific age identities and show that these shed light on stereotypes about specific age groups in the form of constructed agelects.

The examples come from American TV series *Hot in Cleveland* (2010-2015). We find three middle-aged female characters preoccupied with being seen as attractive – and therefore young. The viewers never learn their real age, and the characters frequently misinform others about it. Two episodes in particular offer instances of highly performed age identities. Example 1. Victoria, an actress, is rejected for a grandmother part for which she is not seen as old enough. She decides to audition for the “old lady” role in character (Season 2, Episode 15). Example 2. Joy strikes a conversation with a man who is 22 and turns out to be blind. He estimates her age as 26, and Joy lies that this is indeed her age (Season 3, Episode 9). How do Victoria and Joy construct personae of “old lady” and a “woman-in-her-twenties”, respectively, through linguistic variation? A qualitative auditory analysis was applied to all scenes.

Victoria decides to “age up” to successfully audition for the role of Miss Daisy in a musical titled *Driving Miss Daisy*. In the same-titled play, set in 1948, Miss Daisy is a 72-year-old woman from the south. Victoria adopts vocalic and consonantal variation to reflect the character’s regional background. Age itself is constructed primarily through phonatory changes and body language signalling frailty, and generation-specific topics (prices, prohibition). Her pitch becomes higher and tenser when ageing up, accompanied with tremor. This corresponds to her performed “84-years-young” identity.

Joy relies primarily on linguistic variables, making a point of having to use lexicon associated with the youth (“the kids”) in order to pass as a 26-year-old. This includes examples such as *It’s so beast, for reals, totes into me, yo, and tmz’ed*, but also references to generation-specific cultural phenomena (*Harry Potter*), naming conventions (*Mark-ay for Mark, Wemmy for Will and Emmy*), and explicit othering of older generations (*Shame is for your generation.; Harry Potter is kind of a big deal for people my age.*). Especially when compared to other characters in their twenties, Joy overuses these lexical items, so much so that one of her friends threatens to smack her if she does not stop. Joy also employs lexicalised morphosyntactic constructions and phonetic variants primarily indexing informality (*how ya livin’, where /ŋ/ is realised as [n]*). The “youthful” voice quality displays a slightly lower pitch and a less breathy phonation. Combined with her “cool and hip” body language, these variants seem to index a Gen Y ~ Gen Z persona.

The two examples strongly point to awareness of agelects across a range of generations. These reflect stereotypes about

1. what happens to our bodies as we age;
2. youthfulness being associated with informality;
3. gender-specific preoccupation with conversational topics.

This is me: The discourse of dementia in literary works*Snizhana Holyk, Uzhhorod National University, Ukraine*

Age is generally seen as a significant factor when considering language use. Accordingly, the way we are used to talk about old age and dementia influences how people with dementia are perceived in society. Previous research has greatly contributed to the study of language and dementia from the societal or cultural perspectives (see e.g., Hamilton 2008). In recent findings, much attention is paid to “what survives of personhood in dementia” (Barry 2020) and what difficulties people affected by the disease experience in verbal communication. From the neuropsychological perspective, lexical impairments, sentence comprehension failure and discourse deficits are considered to be among the most common problematic issues (Kempler & Goral 2008). Furthermore, it is the social context that “narrows a person’s choices” (Behuniak 2011: 73), and dementia narratives tend to follow an established script of “later life’s unspeakable horrors” (Skagen 2020), when both the disease and the people who are diagnosed as having it are stigmatized, or even “dehumanized” (Behuniak 2011). Much of the blame for such negative perceptions has been attributed to the biomedicalization of old age when it is characterized as one of the life stages marked by decreased mental functioning. However, researchers argue that strong negative emotional responses are also reinforced by the social construction. Despite the increasing attention paid to dementia in mainstream culture, this “totalizing language continues to guide popular understandings of dementia as a blanching of selfhood” (George 2010: 586). Hence, this work aims at providing the insight into the world of the ageing self, affected by dementia, in the literary discourse. With the focus on the qualitative analysis, I attempt to highlight what language means are used by the authors to construct the identity of the people living with dementia, their communicative behavior, and how their family, carers, and friends communicate with them. When representing different configurations of people with dementia, I proceed from the assumption that literary work can play a special role in showing how these identities strive to preserve their selfhood and how they are defined by social and cultural environment. Using negative words and elderspeak is creating a negative perception of dementia, thus buttressing the decline narrative of old age. Yet, numerous findings prove that literary examples not only reflect, but also challenge dominant theories of the ageing self.

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Post-retirement dynamics in language use: LangAge corpora

Annette Gerstenberg, Eman El Sherbiny Ismail, Christian Löser, Marta Lupica Spagnolo, Friederike Schulz, Eleanor Troth, University of Potsdam

Generally speaking, older age groups tend to be defined in broad strokes in sociolinguistic research, and predominantly of interest in relation to younger age brackets. In this context, gaining insight into the internal structure of an older age group was of particular interest. With participants mostly over the age of 70, the LangAge project began as 56 biographical interviews in 2005 in the French city of Orléans, in order to facilitate the sociolinguistic investigation of advanced age. As Orléans has been the site of the large scale *Etude Sociolinguistique sur Orléans* (ESLO1, 1968 - 1970), a second phase of which was carried out and digitalised from 2008 (ESLO2), comparison of the LangAge with other age groups is still possible and fruitful, as it expands the period of language change covered by the data (Hekkel 2021).

The LangAge project proceeded with further data collection series, keeping participants stable where possible (2012: 34; 2015: 23; 2023: 7), complemented with additional recordings. Supplementary project materials consist of writing studio recordings, letters, essays, and follow-up recordings with individual participants (El Sherbiny Ismail et al. 2022).

The approach to linguistic aging follows directly on from work by Coupland and Coupland regarding the relevance of interactional situations for the co-construction of aging (1990). The chosen interview format in the subject area of Oral History situates older adults as experts of both French and local history, particularly the period of German occupation, which shaped participants' childhood. The interviews contain long monological sections with embedded narratives. The first series focused on normal aging, on the basis of pragmatically relevant criteria operationalized as "responsiveness" in terms of the cooperative principles (Grice 1975) and a minimal length (of 2000 tokens; Gerstenberg 2015). In the context of the longitudinal study, cases of cognitive impairment do occur, and have been excluded, based on the same criteria. Additionally, spouses and children of the participants provided information on diagnostics of mental health issues.

This poster will show the corpus architecture, compilation and preparation of linguistic data and metadata. In addition, inclusion of the web-based open-source publication tool LaBB-CAT, which houses the LangAge project, will also help to cover the question of interoperability and anonymisation of the time-aligned transcripts and external access to exploit and download the available corpus data.

Previous research results will be summarised under the umbrella of Lifespan Pragmatics (Gerstenberg 2020) with regards to linguistic variation, lexical richness and fillers, phonetic and prosodic phenomena from a longitudinal perspective (e.g., Kairat 2019), as well as memory work. Ongoing research themes on repeatedly told stories over the lifespan (Gerstenberg & Hamilton 2023) will also be included, focusing on stabilising phenomena of prosodic features.

In the post-retirement phase of life, linguistic aging has proven itself to be a dynamic process. Complementing experimentally elicited data, LangAge corpus data of spoken language can help to illuminate various facets of the complex and efficient adaptation processes by which "older adults may achieve proficiency in language performance" (Wingfield & Stine-Morrow 2008: 390).

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Age and speech reduction in the Buckeye corpus: the influence of word meaning on word form

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Mirjam Ernestus, Radboud University*

This talk addresses two questions at the intersection of language, cognition, and aging: (i) Does syntactic complexity change at the end of the lifespan? (ii) How is syntactic complexity related to cognitive performance? We analyzed data from the NRW80+ project (Wagner et al. 2018), produced by 200 speakers (ages 80-97) that participated in a microinterview in 2017/18 and again in 2019/20. Our dependent variables (DVs) are two indicators of complexity: utterance length in words (*len*) and the number of dependent clauses (*dep*). After excluding pragmatically incomplete or verbless utterances, our panel data set consists of 3,412 utterances.

Building on previous research on the link between complexity and aging (Kynette & Kemper 1986; Kemper 1987) and the specific role of memory capacity (Kemper et al. 1989; Kemper, Thompson & Marquis 2001), we hypothesized that (i) both indicators of complexity would decrease with higher age, and (ii) higher memory capacity should lead to more complex utterances.

Research Question 1 - Age and Aging: We fitted, for each dependent variable, mixed-effects models using the formula $DV \sim 1 + time + age + time : age + (1 + time | speaker_id)$ to test for age or aging effects. Age does not have an effect, neither for utterance length ($p_{len} = 0.988$), nor for the number of dependent clauses ($p_{dep} = 0.492$). Aging, captured by the time passed between both surveys, does not predict complexity either, neither as a main effect ($p_{len} = 0.208$; $p_{dep} = 0.121$) nor in interaction with age ($p_{len} = 0.124$; $p_{dep} = 0.224$).

Research Question 2 – Cognitive capacities: Next, we drew on the results of the DemTect screening test for cognitive impairment (Kalbe et al. 2004). We fitted separate mixed-effects models for each of its five subscores, including level of education as a possible confound: $DV \sim 1 + subscore + subscore : change\ in\ subscore + education + (1 | speaker_id)$. The results indicate that neither reverse digit span ($p_{len} = 0.263$; $p_{dep} = 0.233$), nor semantic word fluency ($p_{len} = 0.543$; $p_{dep} = 0.645$), word list immediate recall ($p_{len} = 0.053$; $p_{dep} = 0.420$), or word list delayed recall ($p_{len} = 0.123$; $p_{dep} = 0.540$) show a significant effect (see Fig. 1–4 for marginal effects plots). This means that neither short nor long-term memory capacity reliably predicts syntactic complexity in our sample.

However, the results on the number transcoding test strongly predict both measures of complexity ($p_{len} = 0.002$; $p_{dep} = 0.007$; cf. Fig. 5). In contrast to the other DemTect subtests, number transcoding reflects the cognitive capacity to strictly follow an algorithm. In sum, our results are incompatible with the received view that reduced complexity in old age is caused by memory decline. At the same time, high inter-speaker variability, and a consistent effect of education (included as a control) raise a number of questions for future work: Are the observed differences in syntactic complexity relevant from a perspective of health and life quality? Or are they mainly manifestations of individual differences in speech style?

Navigating the Complexities of Self-referentiality and Deictic Expressions in Dementia: Exploring Bilingual Contexts

Nuria Llorente-Belda, University of Granada / University of Duisburg-Essen

Carolin Schneider, University of Duisburg-Essen

At the intersection of language and dementia, pragmatic research is gaining momentum as it helps to map communicative changes that occur beneath and beyond the surface level of language (Guendouzi & Müller, 2006). In this sense, pragmatic theories shed light on the cognitive and social aspects of the discourse while also considering the context in which certain linguistic patterns are used. Within the realm of language, the phenomena of deixis (Levinson, 2006) and self-referentiality (Bartlett & Suber, 2012), play a crucial role in effective communication. Whilst deixis can give insight on how the targeted participants contextually point at themselves in spatial and temporal terms (March et al., 2006), self-referentiality helps us to observe how they linguistically construe their identity (Sabat & Harré, 1992).

In this study, the unique profile of the 14 participants, who are bilingual speakers living with Alzheimer's dementia, offers a new perspective on these phenomena; while the 'discursivist approach' (Schrauf & Müller, 2014) has largely advanced our understanding of monolingual communication in dementia, bilingual and multilingual conversations are yet scarcely investigated in this context (with the exception of e.g. Svennevig & Hamilton, 2021; Karl, 2021).

Hence, this study delves into the cognitive mechanisms that are linguistically observed behind deixis and self-referentiality in order to analyze the linguistic changes and preserved linguistic aspects that are perceived in their discourse, accounting for the language repertoire of the speakers. For such a purpose, we explore a corpus of 14 bilingual people in different stages of dementia, taking into account that code choice as well as code-switching may also affect how they refer to and construe themselves. Employing a corpus-based method approach, manual annotation and combining quantitative and qualitative analyses through the tools of MaxQDA (2022), we focus on the interplay between deictic patterns and how indexicality, agency, self-attributes and the discursive projection into the public merge to construe themselves. Preliminary results indicate different levels of agency: On the one hand, the Self as the agent observed through binary expressions (e.g. modals; can-can't), but on the other, the scalar conceptualization of the mind as an external entity which can exert control over them.

Grammatical complexity: It's neither about memory, nor age*Eric Engel and Aria Adli, University of Cologne, Germany*

This talk addresses two questions at the intersection of language, cognition, and aging: (i) Does syntactic complexity change at the end of the lifespan? (ii) How is syntactic complexity related to cognitive performance? We analyzed data from the NRW80+ project (Wagner et al. 2018), produced by 200 speakers (ages 80-97) that participated in a microinterview in 2017/18 and again in 2019/20. Our dependent variables (DVs) are two indicators of complexity: utterance length in words (*len*) and the number of dependent clauses (*dep*). After excluding pragmatically incomplete or verbless utterances, our panel data set consists of 3,412 utterances.

Building on previous research on the link between complexity and aging (Kynette & Kemper 1986; Kemper 1987) and the specific role of memory capacity (Kemper et al. 1989; Kemper, Thompson & Marquis 2001), we hypothesized that (i) both indicators of complexity would decrease with higher age, and (ii) higher memory capacity should lead to more complex utterances.

Research Question 1 - Age and Aging: We fitted, for each dependent variable, mixed-effects models using the formula $DV \sim 1 + time + age + time : age + (1 + time | speaker_id)$ to test for age or aging effects. Age does not have an effect, neither for utterance length ($p_{len} = 0.988$), nor for the number of dependent clauses ($p_{dep} = 0.492$). Aging, captured by the time passed between both surveys, does not predict complexity either, neither as a main effect ($p_{len} = 0.208$; $p_{dep} = 0.121$) nor in interaction with age ($p_{len} = 0.124$; $p_{dep} = 0.224$).

Research Question 2 - Cognitive capacities: Next, we drew on the results of the DemTect screening test for cognitive impairment (Kalbe et al. 2004). We fitted separate mixed-effects models for each of its five subscores, including level of education as a possible confound: $DV \sim 1 + subscore + subscore : change\ in\ subscore + education + (1 | speaker_id)$. The results indicate that neither reverse digit span ($p_{len} = 0.263$; $p_{dep} = 0.233$), nor semantic word fluency ($p_{len} = 0.543$; $p_{dep} = 0.645$), word list immediate recall ($p_{len} = 0.053$; $p_{dep} = 0.420$), or word list delayed recall ($p_{len} = 0.123$; $p_{dep} = 0.540$) show a significant effect (see Fig. 1-4 for marginal effects plots). This means that neither short nor long-term memory capacity reliably predicts syntactic complexity in our sample.

However, the results on the number transcoding test strongly predict both measures of complexity ($p_{len} = 0.002$; $p_{dep} = 0.007$; cf. Fig. 5). In contrast to the other DemTect subtests, number transcoding reflects the cognitive capacity to strictly follow an algorithm.

In sum, our results are incompatible with the received view that reduced complexity in old age is caused by memory decline. At the same time, high inter-speaker variability and a consistent effect of education (included as a control) raise a number of questions for future work: Are the observed differences in syntactic complexity relevant from a perspective of health and life quality? Or are they mainly manifestations of individual differences in speech style?

Trusting Speakers Living with Dementia*Yoshiko Matsumoto and Alan Cheng, Stanford University*

There is a common perception that persons living with dementia (PLWD) display serious communication breakdowns. In clinical and cognitive studies, a significant source of communicative difficulty is often attributed to “discourse deficits” in the ability of PLWD, including “referential cohesion errors” (Dijkstra, et al. 2004) such as the unclear use of pronouns and demonstratives. Other studies, however, suggest that dementia does not implicate a discourse-pragmatics specific impairment (Almor et al. 1999); such studies characterize the discourse of PLWD as more reliant on meaning-based features of discourse rather than grammatically based features and on the conversation partner’s efforts (Ellis 1996). Then, what if we do *not* assume that explicit referential expressions are always required in a cohesive discourse or that the success of communication relies solely on the speaker’s accuracy and completeness? Would a more pragmatically and interactionally-based perspective toward discourse without the above assumptions assist in understanding PLWD? Would conversations following this perspective run more smoothly?

Considering these questions, this paper examines 14 digitized interviews of older Japanese adults living with dementia collected by DIPEX-Japan (Database of Individual Patients’ Experiences). Japanese discourse is chosen for this investigation because the use of Japanese fits the conditions described above, i.e. explicit referential expressions, including those of predicate arguments, are not syntactic requirements, and therefore construed by interlocutors is necessarily based on semantics and pragmatics of the conversation. Silent reference, or ellipsis of referential expressions, is common (e.g. Kuno 1973) and interactional strategies based on semantics and pragmatics, such as “Trust – Ensure” (Matsumoto, forthcoming), are used in discourse.

The examination of the conversations between PLWD and interviewers in the DIPEX-Japan database reveals that, even when the identity of a nonexplicit referent or demonstrative is unclear, interviewers seem to trust the existence of a referent inferred from the story and proceed without interrupting the flow to ascertain specific referents. When the identity of a referent becomes important, they then prompt for further information to narrow down the reference.

Examples are given on the following page. In A:14, it is not clear what A (a PLWD) has quit, although it is inferable that it relates to what A does with flowers. Understanding the essence of the intended content, Q narrows down the referent by offering her guess rather than directly asking what A quit. In A:21, the subject referent of *ganbatteru* ‘trying hard’ is not mentioned and ambiguous at least between the speaker A or the flowers, but Q does not pursue ensuring her interpretation, since the expressed sentiment is what matters there.

This study focuses on referential issues of discourse with PLWD and is *not* intended to suggest that no communication problem is found in discourse with PLWD in Japanese, that everyone should conduct conversations with PLWD following the Japanese practices, or that the discourses of Japanese and PLWD are equivalent. However, the common Japanese interactional strategy toward referential indeterminacy might beneficially be employed to

facilitate communication with PLWD even in different languages.

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Examples

A: Interviewee (PLWD) Q: Interviewer

(words) : words that are not said in Japanese but are supplied for intelligibility

(()) : positions that typically require referential expressions in English but no expressions are used in Japanese

Translations: First line – literal translation; Second line – more natural translation

- 1 Q: *eeto, jaa mainichi, nanika tanoshimi ni sareteru koto tte nanika arimasu ka?*
Um, so is there something (()) look forward to every day?
Um, so, is there something (you) look forward to every day?
- [2 – 5 skipped]
- 6 A: *hana. hana wa suki desu.*
Flowers. Flowers, (()) like.
Flowers. (I) do like flowers.
- [7 - 10 skipped]
- 11 Q: *sore wo dokka ni sagashi ni ikareru n desu ka?*
So do (()) go somewhere to search for that?
So do (you) go somewhere to look for those?
- 12 A: *iya. sore wa ne, sugu soko ni aru, aru n desu yo, chi, chi, chicchai no ga.*
No. Well, (()) are right there, right there, the s-s-small ones.
Well, the s-s-small ones are right there, right there.
- 13 *demo, sore wa nee, hontoo ni chiisai, chiisai node, ka-kawaisoo nanode,*
But, well, (()) are really small, small, so (()) are p-pitiful, so
But, well, (they)'re really small, really small, so (it)'s sad/so (I) feel bad, so
- 14 *ano, moo yamemashita.*
uh, (())'ve already quit (()).
uh, (I)'ve quit.
- 15 Q: *miteru dake?*
(()) only look at (())? (You) only look at (them)?
- 16 A: *soo.*
Yes.
- 17 Q: *hai.*
Okay.
- 18 A: *datte, anmari kawaisoo deshoo? dakara.*
Because, aren't (()) pitiful? That's why.
Because, isn't (it) sad/too bad? That's why.
- 19 Q: *demo, mainichi sore o mi ni ikareru to, nanika.*
But, when (()) go to see that every day, (()) something?
But, when (you) go see them every day, (do you, like, feel) something?
- 20 A: *soo, soo, soo, soo, soo.*
Yes, yes, yes, yes, yes.
Yes, totally!
- 21 *Soo suru to ano, a, mada ganbatteru no ne, tte iu kanji de [laugh]. hai.*
When I do that, uh, oh, (()) still trying hard, that kind of feeling [laugh]. Yeah.
When I do that, uh, it feels like (I'm/they're) still trying my/their best [laugh]. Yeah.
- 21 Q: *wakarimashita.*
I see.
I see.
- 22 A: *hai.*
Yeah.
Yeah.

THURSDAY, APRIL 11, 2024

IN-PERSON

KEYNOTE #2: 9:00-10:00

"It was just like you're on a merry-go-round, the change was a phenomenal speed": real time change across the lifespan in Falkland Island English

David Britain and Hannah Hedegard, University of Bern, Switzerland

We present here the first results from a panel study of real-time change in the English of the Falkland Islands (FIE), a British Overseas Territory in the South Atlantic Ocean. The Falkland Islands are extremely sparsely settled, housing a population of just over 3500 in an area larger than Jamaica and Cyprus. It has been argued that the emergence of a new dialect of English there has, given the sparse settlement, been slow (Trudgill 1986). Colonial settlers came mostly from Scotland and the English South-West in the 19th century, but following a whaling boom in the early 20th century, the population declined until 1982 when Argentina briefly but unsuccessfully invaded the islands. Subsequently there has been a sharp population increase, as the local economy has grown thanks to the sale of fishery and oil exploration licences and an expansion in tourism. The lives of the islanders, too, have changed quite considerably, and there are now much closer physical and emotional ties to the UK than ever before.

Our ongoing investigations of the English spoken on the Islands have been motivated partly by a wish to learn more about the trajectory of the colonial dialect that emerged there, but partly to see whether post-Conflict changes on the islands have led to linguistic change. We consequently built a real-time corpus of FIE, as a result of two fieldwork trips, one by Andrea Sudbury in 1997 and one by Hannah Hedegard in 2020. In 2020, Hannah was able to rerecord 24 speakers that Andrea had recorded in 1997, providing us with a large panel corpus to investigate real-time change.

We present the results of the analysis of two linguistic variables from our panel corpus here:

- The realisation of the MOUTH diphthong /au/ (as in 'down', 'town', 'out'): this is highly variable in FIE, showing ongoing change with respect to nucleus quality, effects of following phonological environment, offglide quality and diphthong trajectory.
- The existence and extent of a TRAP-BATH /a/-/ɑ:/ split (are the vowels in 'bat' and 'bath' or 'lass' and 'last' the same or different?): this too is highly variable, with the split having become more apparent over apparent time – older speakers show much more overlap in the two vowel sets than younger.

In our presentation, we assess the extent of lifespan change for these variables, specifically comparing older and younger speakers in our panel corpus, to investigate a) if lifespan change has taken place for these variables at all, and b) if it is faster at particular times in the lifespan of an individual.

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Speaking while aging*Shana Poplack and Nathalie Dion, University of Ottawa*

The working assumption in variationist sociolinguistics is that language acquisition is virtually arrested after the critical period (Lenneberg 1967). This enables the speech of the oldest members of a community to be recruited as a benchmark, and any deviation from it in younger generations to be construed as change. But the inference of stability embodied in this Apparent Time Hypothesis (Bailey et al. 1991; Labov 1963, 1972) has recently been challenged. Gerontologists, psychologists and a growing number of linguists assure us that “old age” is neither homogeneous nor stable: a single individual may be positioned differently on a scale of chronological, physiological, speech and social ages (Buchstaller & Beaman 2021; Gerstenberg & Lindholm 2019; Pecchioni et al. 2004; Rubin & Rubin 1986). Their language use may be just as diverse, but more corroborating evidence is needed. Contributing this is the mandate of the new project we describe in this paper.

A major barrier to addressing questions on the homogeneity of speech in old age is the dearth of useful data on the older sectors of society and the difficulty in accessing more (e.g. Pichler et al. 2018). In the Speaking While Aging project, we capitalize on the presence in existing corpora of Canadian French and English of 135 individuals aged between 65-104 (150-200 hours of vernacular speech) to create the Golden Age corpus. Most 5-year intervals between those endpoints are robustly populated, providing an ideal opportunity to trace developments across several temporal slices, as well as to effect intra-individual, inter-individual and cross-linguistic comparisons.

In terms of analysis, we first attempt to properly characterize change per se, by deploying methods to distinguish it from stable variability, and going beyond variant frequencies to consider conditioning, productivity and contextual dispersion of variant selection. We aim to shed light on the role of level of linguistic structure by comparing phonological with (morpho)syntactic change, both intra- and inter-individually. Analyses will be performed both over the lifespan (Beaman & Buchstaller 2021; Sankoff 2019; Evans Wagner & Buchstaller 2018) via Stars Speak, a companion corpus we are currently constructing (following the model of Harrington et al. [2000], Mackenzie [2017], Shapp et al. [2014], etc.) and as a check, in the Golden Age sample. In each condition we contrast the behaviour of variables known in the community to be both stable and in flux. Participants will be characterized not only in terms of biological age, but also “speech” age (using a speech-based (dis)fluency index), and to the extent possible, social age. The latter is particularly important since relative integration into or isolation from the wider society can be expected to exert a non-negligible effect on propensity to change. Since participants cannot be queried directly, standard methods to obtain relevant information are precluded; through content analyses of their recorded data, we will develop a novel measure of social age based on audience design (Bell 1984), as inferred from their manipulation of the components of Narratives of Personal Experience (e.g. Labov 2013; Labov & Waletzky 1997). Resulting profiles will serve as independent variables in statistical analyses of significant predictors of change. The opportunity to learn and obtain feedback from CLARe experts is a key motivator for the proposed presentation.

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Quotative Variation Across the Life-span: Findings from a longitudinal panel study

Anne-Marie Moelders and Isabelle Buchstaller, University of Duisburg-Essen

This presentation reports on intra-speaker malleability in the quotative system, a highly dynamic domain and “a good place to catch language change in action” (Tagliamonte & D’Arcy 2004: 493). While much is known about the longitudinal competition between more traditional variants and fast-spreading innovations (Buchstaller 2015), the vast majority of research on quotation relies on apparent time and trend corpora. And whereas these data have reported far-reaching changes in varieties of English world-wide, we lack empirical evidence across the adult life-span on the maintenance of *be like*, an innovation associated with youthful incoherence, informal speech, and young female speakers (Buchstaller 2011; Tagliamonte & D’Arcy 2007). Apparent time data paints a conflicting picture: Singler (2004) and Buchstaller (2013) find evidence of “correction” away from *be like* amongst speakers in the mid-30s, whereas Tagliamonte and D’Arcy’ (2007:213) report on communal change, “with speakers increasing their use of *be like* throughout their lifetime”.

Our panel analysis adds a life-span perspective to the discussion. We draw on a dataset of 22 speakers (1351 tokens) from the North East of England who were grouped in five sequential age cohorts and re-recorded an average of 7 years later. When considered consecutively, these age-bands cover the adult life-span as a whole, which allows us to test for age effects in linguistic lability during ongoing language change. Our panel data allows us to demonstrate that retrenchment (Downes 1984), hitherto mainly postulated for stable variables, is observable in a change in progress, provided that the incoming form is associated with youthful styles, making it socially costly for middle aged and younger male speakers (Buchstaller 2015, see also Conn 2005). More specifically, we observe two main diachronic patterns across the life-span:

- Incrementation amongst speakers in the 20s in line with predictions based on trend data
- Retrenchment amongst speakers ages 30+, the age ranges which have been pegged as “career-rising years” in the sociolinguistic and socio-psychological literature (Guimarães 2014, Labov 2001).

Crucially, amongst the younger age brackets, quotative choices are highly gendered ($p < 0.001$), where women continue to increment and men tend to decrease rates of *be like*. We interpret the gender asymmetry in the younger age brackets as a consequence of the heterosexual market (Motschenbacher 2011; Eckert 1996), in which heteronormative language practices established during youth perpetuate throughout the whole life-span.

Finally, mixed-effects regression modelling in R (Bates et al. 2015) suggests that the linguistic conditioning underlying quotative choices remains relatively stable across the speakers’ life-span. *Be like* is entering the system conditioned by the constraints reported in the literature (Buchstaller 2013) and, apart from the constraint of noun encoding the speaker, we observe no intra-speaker lability in the grammatical contexts that constrain quotation. These findings inform the increasing thrust in panel analysis to explore the relative malleability in intra-speaker grammar across the life-span (see Buchstaller et al. 2021; Fonteyn & Petré 2021; Beaman 2024).

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Individual variation across the lifespan (IVaL): Insights from East Central Germany

Simon Oppermann and Beat Siebenhaar, Leipzig University

Over the past decades, general changes of larger speech communities have been well studied, mainly in an apparent-time approach, but increasingly with an additional real-time comparison. Although every speech community consists of linguistic individuals, their participation in these broader changes has only just begun to be examined. Recent studies suggest that in most parts of the East Central German (ECG) regions, the old basic dialectal structures have been replaced by a new regiolect (Rocholl, 2015, p. 309; Siebenhaar, 2019, p. 430), levelling out, on the one side, horizontal differences between neighbouring dialects and, on the other, vertical differences between standard and dialects. So how do the ECG speakers navigate the community trend of levelling, given their supposed poor register competence (e.g. Kehrein, 2012, pp. 222–223), which leaves them with little room for individual variation?

One of the possible patterns of individual lifespan change is stability (Sankoff, 2019, p. 198), so that community language change is shaped by generational differences. In a recent study on the realisation of ECG monophthongisation (Oppermann & Siebenhaar, 2023), this individual stability was largely confirmed in three Leipzig speakers. Using publicly available data from the German zoo docusoap “Elefant, Tiger & Co.”, speech data from more than 20 individuals recorded across at least 15 years can now be analysed. Many more speakers were recorded across shorter time spans. What makes this corpus unique is that it’s filmed exclusively at Leipzig zoo, i.e. at the speakers’ workplace, guaranteeing stable occupation, stable socioeconomic trajectories and stable communicative situations, leaving age(ing) as the main varying factor.

To investigate the correlation of age(ing) and the (in)stability in use of regiolectal variables, selected vocalic and consonantal ECG phenomena are measured acoustically. For this presentation we focus on the centralisation of rounded back vowels, on the raising of /a/, and the monophthongisation of MHG. *ei*, *ou*, *öu* on the vocalic side, and for the consonants we deal with the coronalisation of the palatal fricative /ç/. For vowels, the measurements consider the dynamics of the spectral properties (formants and DCT coefficients), and for the fricatives we refer to the DCT coefficients of spectral curves. Using these methods, several, highly individual lifespan patterns can be observed as the speakers age, confirming and extending the observations made in both, earlier and recent lifespan panel studies (e.g. Bausch 2000; Beaman, 2021; Bülow & Vergeiner, 2021; Bowie, 2019; Oppermann & Siebenhaar, 2023; Siebenhaar 2002; see also the edited volumes Beaman & Buchstaller, 2021, Wagner & Buchstaller, 2017). Moreover, because we have a very dense temporal survey network, our analyses can complement existing studies, which often compare only two time points, with accurate time trajectories.

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On the triangulation age factors – multilingual memory – language competence in interviews with *Kindertransportees**Rita Luppi, Università di Bologna*

Despite being one of the few universal aspects of human existence, the very concept of ageing is inconsistent and varies according to the area of inquiry (cf. e.g. Bowie & Gerstenberg 2023). Just to name a few categorisations, age can be seen as a) a numerical variable, b) a biological or c) social phenomenon as well as as d) an interaction construct (cf. Fiehler & Thimm 2003). While the linguistic consequences of ageing might also be due to the new social and cultural scenarios, hence to the life (and identity) changes brought along by being and growing old (cf. e.g. Fiehler 2010), an increasing body of literature has been devoted to exploring the biological factors affecting aspects of communication of older speakers. With this respect, studies have focused, among others, on the identification of age markers in speech production, e.g. lower speech rate, increased occurrence of pauses and lower syntactical complexity.

Drawing on the interactionist notion of age (cf. Coupland, Coupland & Giles 1991) as a variably definable social category (cf. Fiehler & Thimm 2003: 13), my presentation aims at contributing to exploring the Conference topic on language use in later life by presenting first results on the analysis of the role of age factors in the corpus FEGB – Flucht und Emigration nach Großbritannien (Flight and Emigration to Great Britain). The corpus, which is accessible through the Database for Spoken German of the Leibniz-Institut für Deutsche Sprache in Mannheim, comprises 42 language biographies (cf. e.g. Franceschini 2010) collected by Eva-Maria Thüne (University of Bologna) between 2017 and 2018 in the UK predominantly with *Kindertransportees*, i.e. Jewish children who escaped Nazi Germany and Austria thanks to the operation known as Kindertransport (cf. e.g. Thüne 2019). At the time of migration, the Kinder were between three and 16 years old and had different levels of language competence both in German and in English (cf. Thüne 2020); at the time of Thüne's interviews, most of which were conducted in German, the interviewees' age ranged from 81 to 97. By conducting a quantitative-qualitative analysis of the number, typology (cf. Schwitalla 2012) and duration of the pauses occurring in selected interviews by means of the EXMARaLDA and tools (cf. e.g. Schmidt 2012) and the CLARIN infrastructure (cf. e.g. Schmidt, Hedeland & Jettka 2017), I thus aim to address the following questions: 1) are there any differences in the number and duration of the pauses occurring within an intonation unit (*Haltepausen*) and those produced at the end of an intonation unit (*Auslaufpausen*)? 2) do they show a peculiar function related to recollection processes and the narration topic? First results are consistent with pilot analyses on the corpus FEGB (cf. Luppi 2023) and reveal a complex and multifaceted scenario, characterised by the triangulation age factors – multilingual memory – language competence.

Universal Dependencies in a lifespan*Kenjiro Matsuda, Kobe Shoin Women's University*

Universal Dependencies (UD) has been applied to many languages as a framework to annotate the grammar (i.e., parts of speech, morphological features, and syntactic dependencies) consistently in a cross-linguistic manner, providing over 200 treebanks for 100 languages (<https://universaldependencies.org/>) since early 2010s. Extended from typological studies, it is now applied to genre studies within a single language (Wang and Liu 2017), where, while locating a significant effect from genre differences on the dependency distance (i.e., the mean distance between the head and its dependent), it is concluded that the dependency distance is primarily determined by universal cognitive factors.

As aging impacts cognitive abilities, one might wonder how aging affects the dependency within a lifespan of a speaker. To address this question, we used Okazaki Honorific Survey (OSH) Database (<https://mmsrv.ninjal.ac.jp/okazaki/>) (Matsuda 2012), which collected the responses from three questionnaire-based surveys (in 1953, 1972, and 2008) on honorifics and its consciousness in Okazaki City conducted by the National Institute for Japanese Language and Linguistics. OSH consistently asked and transcribed 11 questions on what the respondent would say in a given situation to gauge their politeness. The samples comprised three trend samples, where respondents were selected from a random sample of the city residents each year, and the panel sample where the respondents were traced in the following surveys. For the current study, we chose 17 speakers (eight females and nine males) from the panel sample, who were interviewed in all three surveys. All the responses were analyzed using spaCy (<https://spacy.io/>), a natural language processing library in Python, and the mean dependency distance (MDD) was calculated for each speaker (Liu 2008, Liu et al 2009, Jiang & Liu 2015). As a first estimate, we used the results of the first and the third survey.

The result revealed that the MDD value increased significantly from the first to the third survey. While both gender groups showed a compact MDD distribution in 1953, male respondents in 2008 showed significant variance than the female respondents, with some showing much higher MDD value and others showing lower MDD value than in 1953. The female group distribution remained compact, with the whole group moving upward. (Figure 1). Checking the respondents' schooling, occupation, and average level of politeness, we failed to find any solid correlates for the respondents who increased/decreased their MDD to a higher degree, which forces us to conclude that the increase/decrease is solely due to the individual differences of the respondents.

Our result demonstrates that the aging effect on the MDD is influenced by gender difference. Given that the dependency distance is shown to be a reliable measure of syntactic complexity (Liu 2008, Liu et al. 2017, Yadav et al, 2020), it suggests that while female respondents linguistic ability show a stable increase after aging, male respondents' linguistic ability shows significant individual differences. (464 words)

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Space and time in dialect attrition and retention across the lifespan*Karen V. Beaman, University of Tübingen**Lars Bülow and Philip C. Vergeiner, University of Munich*

The notions of space and spatiality have been unexamined and undertheorized in variationist sociolinguistic research (Britain 2013), particularly in panel studies involving language change across the lifespan. Yet, space and time, although distinct concepts, are integrally interwoven and “co-implicated” in social, cultural, and political change (Merriman et al. 2012). The fact that “social relations are constructed over space” (Massey 1985:12) affirms that space and time cannot be dichotomized. Thus, the research question we seek to address is how space and time interact to affect language change across the lifespan.

This study investigates linguistic variation and change in three Upper German dialect communities: Stuttgart and Schwäbisch Gmünd in Swabia Germany and Ulrichsberg in the East-Central Bavarian region of Austria. These communities differ in terms of population size, urbanity/rurality, as well as in space and mobility (Britain 2013): Stuttgart is a large, urban metropolis with over one million inhabitants; Schwäbisch Gmünd, 100 kilometers east of Stuttgart in the Swabian Alps, is a mid-sized, semi-rural town with about 60,000 inhabitants; and, Ulrichsberg is a small rural village in Upper Austria with about 3,000 inhabitants (cf. Beaman 2024; Bülow & Vergeiner 2021; Bülow et al. accepted; Vergeiner et al. 2020, 2022; Wallner in prep.). Our combined panel corpus comprises 32 speakers – 7 from Stuttgart, 13 from Schwäbisch Gmünd, and 12 from Ulrichsberg – who were each interviewed twice, 35-40 years apart. These six samples are comparable in terms of the time of recordings, genre of conversation, and methods of investigation, providing a unique opportunity to analyze lifespan change in three distinct socio-spatial settings: urban, semi-rural, and rural.

We analyze six phonological and two morphosyntactic variables by measuring the frequency of the dialect variant relative to its corresponding standard variant ($n=45,806$). Specifically, we look at the degree to which the variables behave similarly or dissimilarly in the three communities and what socio-cultural factors are at play. Our statistical approach comprises both distributional and multivariate analyses, considering the effects of recording time, community, age, gender, education, local orientation, and variable type.

The results show that lifespan change proceeds differently in each community. In accordance with the *Gravity Model* (Trudgill 1974), dialect use is greatest in the rural countryside (90%), followed by the semi-rural town (37%), and then the urban center (19%) (see Figure 1). While there is notable dialect attrition across the lifespan in the urban environment (loss of 15%) and in the semi-rural town (loss of 14%), there is no reduction over the lifespan of speakers in the rural environment (see Figure 2). Multivariate analyses of the social constraints on dialect use show different factors affecting each community: younger speakers in Stuttgart have moved more quickly to the standard language ($p<.001$); those with lower local orientation scores in Schwäbisch Gmünd have lost dialect variants ($p<.01$); and, the more highly educated individuals in Ulrichsberg have converged toward the standard ($p<.05$) (see Figure 3). The findings from this study underscore the importance of considering the socio-historical impact of space and time together when investigating linguistic change across the lifespan.

Figure 1. Dialect use in three communities

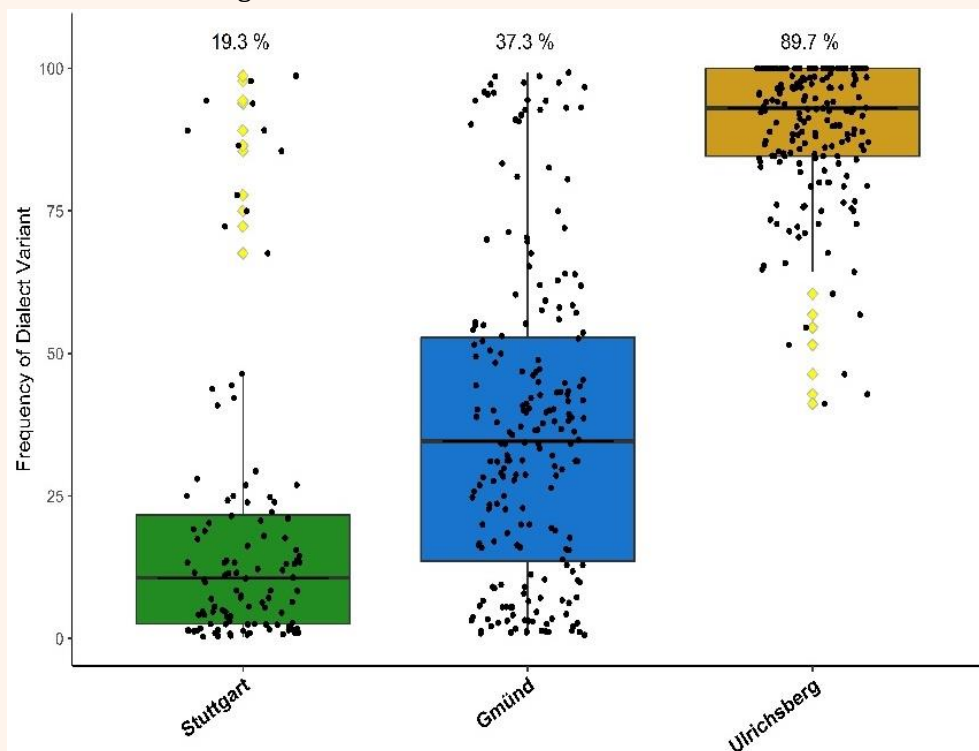


Figure 2. Dialect use across the lifespan

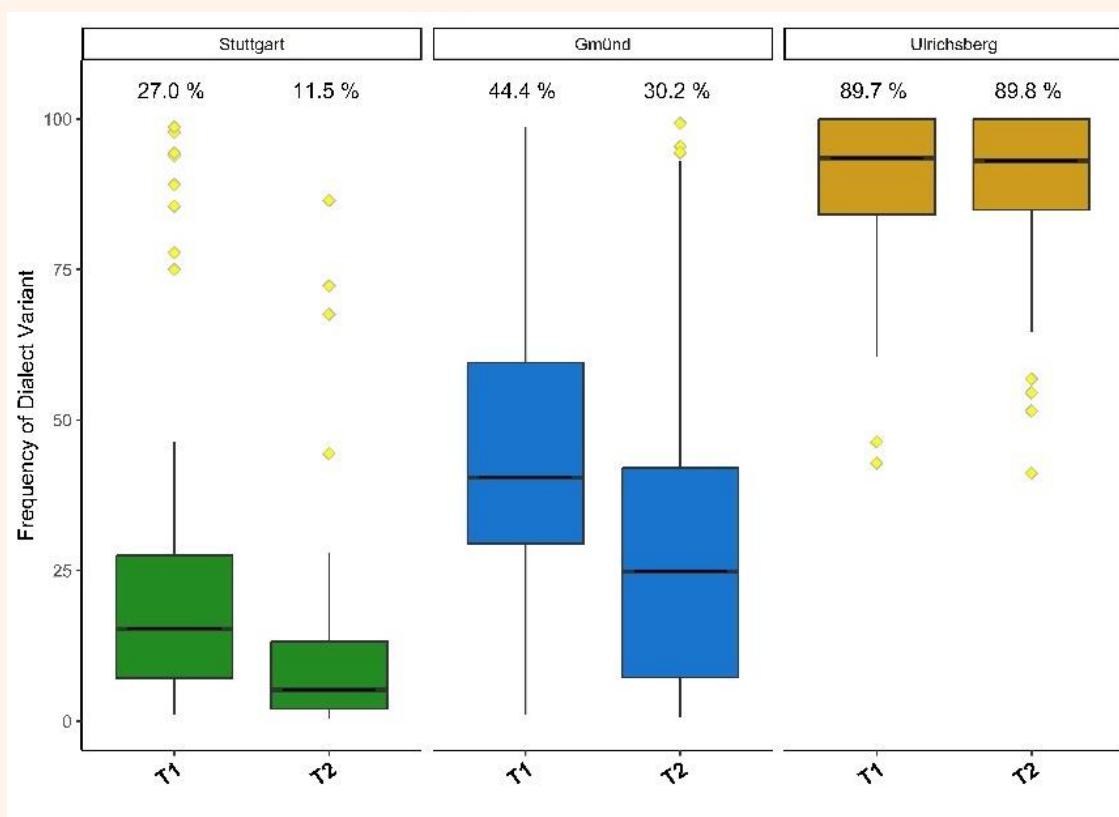
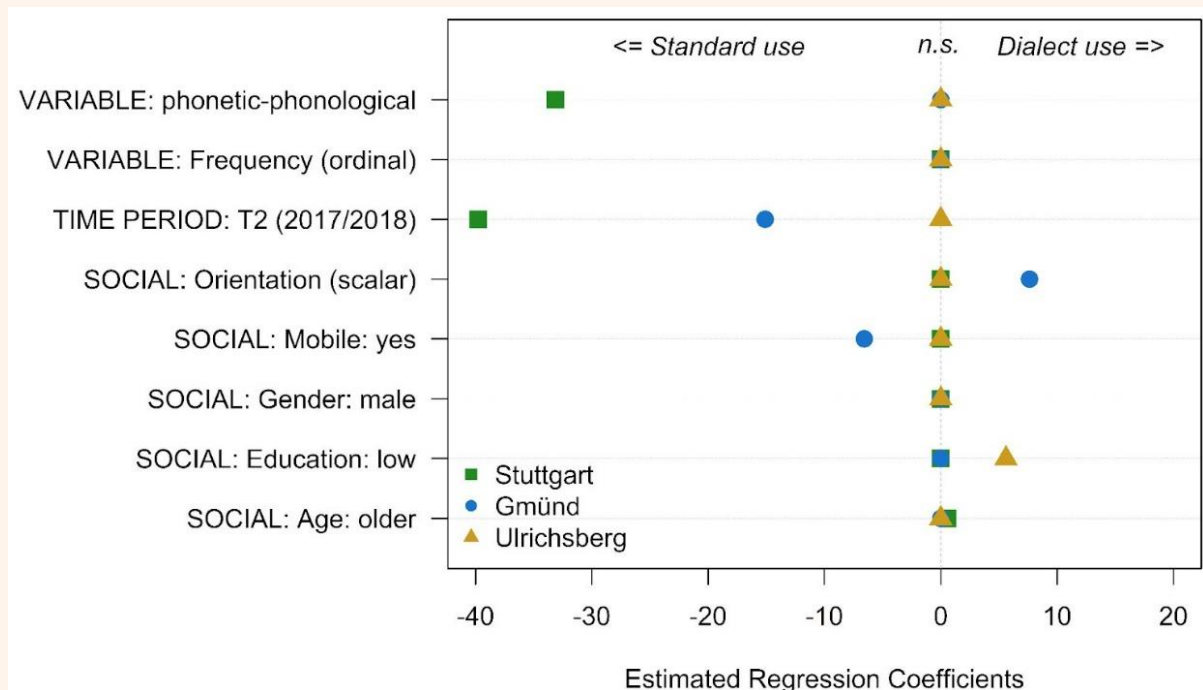


Figure 3. Factors affecting dialect use across the lifespan



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The stylistic correlates of ageing: Evidence from a dynamic panel corpus that covers the adult life-span

Lea Bauernfeind, Anne-Marie Moelders, James Grama, University of Duisburg-Essen

Life-span change and style shifting do not occur independently (Buchstaller 2015; Wagner 2021). Instead, speakers modulate their linguistic behaviour according to considerations that are situated at the intersection of cohort and lifespan-specific marketplaces (see Rickford and Price 2013; Tetreault 2017; Riverain-Coutlee and Harrington to appear). Research suggests that stylistic presentation of self is contingent on a wealth of factors that interact with speaker age. These have been shown to include the conversational topic and the type of speech activity (Labov 1972; Rickford and McNair-Knox 1994), accommodation to interlocutors, cohort and community (e.g., Bell 1984; Tetreault 2017; Wagner 2021), as well as the speaker's orientation to the social meaning of linguistic resources (see papers in Eckert and Rickford 2002). A persistent challenge for panel research is how to disentangle bona fide intra-speaker change from momentary stylistic shifts in linguistic choices, due in large part to a lack of larger panel datasets that allow us to unpack stylistic effects.

This talk addresses the relationship between stylistic shifts and intra-speaker change by drawing on a unique panel corpus consisting of 17 speakers from the North-East of England; aged between 27 and 53 at the time of first recording, and recorded an average of seven years later. We investigate variability in two variables differentiated by level of linguistic structure and socio-indexical meaning: the FACE vowel and the first-person possessive (1POS). To unpack the effect of style shifting, each recording includes a comparable range of socio-situational contexts. Stylistic variation is conceptualised along two different dimensions: attention paid to speech (an axis of casual-careful-reading; see Labov 2001) and addressee (following Bell's 1984 audience design model). Operationalising these measures allows us to develop a multifaceted model of style shifting, and to hone in on the relationship between synchronic variation and diachronic change.

Analyses reveal a complex relationship between ageing and style. First, the range of stylistic shifts across time is highly contingent on age group. A single cohort – the 30s age group – exhibits the greatest stylistic variation in both variables, albeit in opposing directions, with FACE undergoing lifespan change, and 1POS undergoing retrograde change. By contrast, older speakers (40 and above) have developed relatively stable stylistic ranges with more limited shifts across stylistic axes. For the oldest 50+ speakers, stylistic shifts are only evident in stigmatized 1POS when talking with an unfamiliar interlocutor, the most formal of the contexts considered. These findings are discussed in terms of extant models of variation and change across the lifespan that rely on marketplace pressures (cf. Bourdieu & Boltanski 1975). Our analysis paints a differentiated picture of the relationship between momentary style shifts and more permanent intra-speaker change across the entire adult lifespan. By honing in on the relationship between variation (at one time point) and change (between time points), the present study informs models of intra-speaker linguistic lability (see Rickford 2021; Wagner 2021).

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Age and gender effects in evaluating younger and older voices: Evidence from a cross-regional perception experiment

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This study examines the perceptions of speakers as they (do not) conform to age-related linguistic expectations, aiming to shed light on the nuanced interplay of age and the perception of linguistic variation. Previous research suggests that evaluative reactions to voices are influenced by a variable's social salience and (social) characteristics of the listener (Labov et al. 2011; Levon & Buchstaller 2015). While the socio-indexical meaning of (ing) differs in the US (Campbell-Kibler 2007) and the UK (Levon & Fox 2014), we lack comparative data from studies with identical methodological setups across two locales (but see Schleef et al. 2017).

The present study addresses this gap by exploring how the perception of (ing) is mediated by speaker and listener age and gender, when US and UK listeners rate Anglo-British speakers. This paper reports on listener responses to 16 naturally occurring samples from eight speakers from the North-East of England, two women and two men in their 20s and two women and two men in their 40s. Short guises were manipulated acoustically to create two stimuli per speaker: one with alveolar and one with velar (ing) variants. Careful sampling of a large corpus of sociolinguistic interviews (Corrigan et al. 2012) ensured that all stimuli-rich guises were stringently controlled for topic, sound quality, and f0. Guises were presented in the context of a job application as a local radio host. US and UK listeners rated speakers on discrete 6-point Likert scales for status ("professional"; "intelligent") and social likeability attributes ("friendly"; "trustworthiness") and were asked to estimate speakers' ages and places of residence. Data was collected using PsychoPy with similar setups in England (n=42) and the US (n=25, ongoing); trials were complemented with locally targeted post-experimental questionnaires.

Linear and ordinal regression models on age estimates (n=995) and evaluative ratings (n=3365) reveal four main findings: (1) Listeners in both locales react to real-life age differences in speakers' voices, as reflected in higher age estimates for older speakers ($p < 0.001$). (2) Perceptions of professionalism are highly contingent on speaker age and gender: listeners rate male speakers in their 40s higher on professionalism ($p < 0.001$) and intelligence ($p < 0.001$) than female speakers, even when they consistently produce vernacular [n]. Younger female speakers are perceived as significantly more friendly and trustworthy than younger male speakers ($p < 0.001$) and speakers in their 40s overall. (3) Listener age and self-reported gender play a mediating role on social evaluations with older male respondents rating speakers as less professional than younger female listeners ($p < 0.01$) (Levon et al. 2021). (4) Finally, listener evaluations do not vary by geographic region (US/UK).

Overall, the study reveals the intersectional nature of age and gender in sociolinguistic perception, providing a more finely differentiated picture of the ways in which age- and gender-related stereotypes impact speaker evaluation. These findings further provide a perceptual lens that allows insights into how indexicalities of stable variables may motivate differences in individual linguistic choices across the lifespan.

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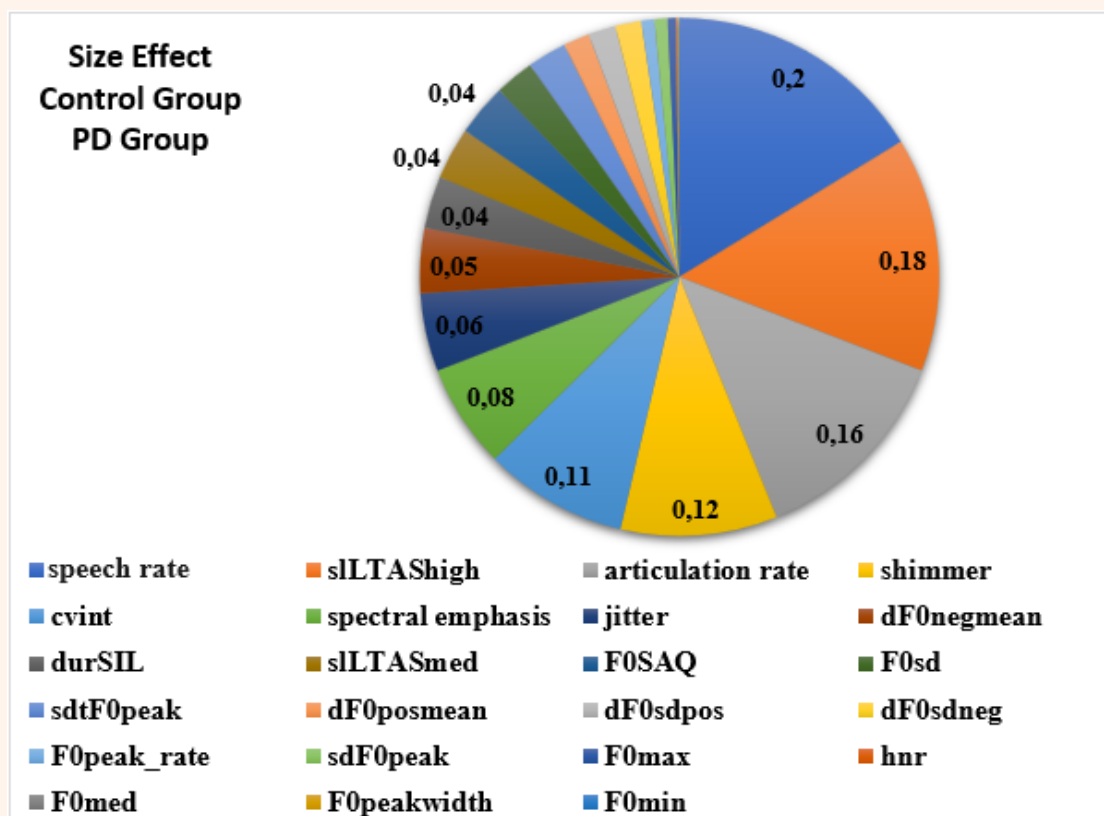
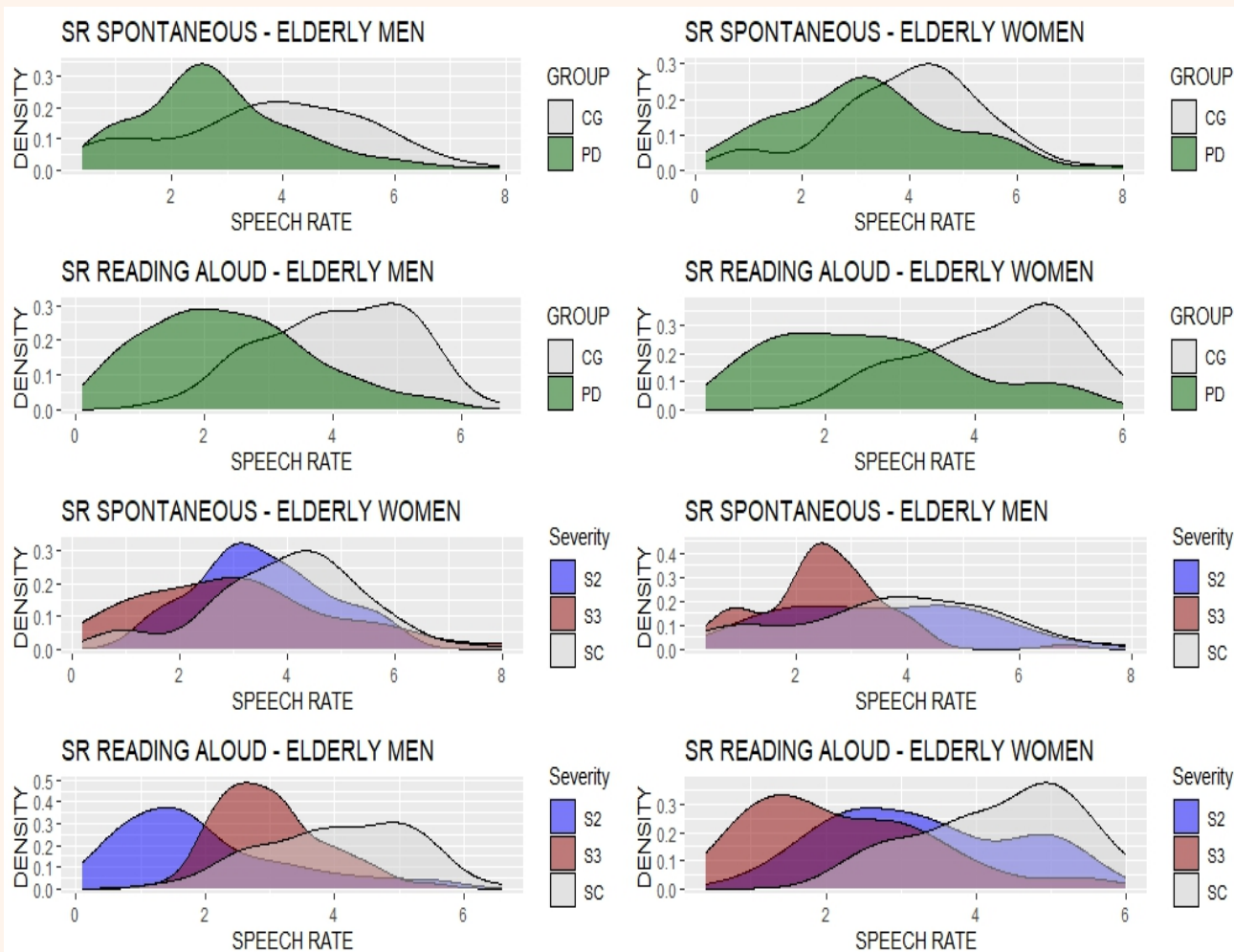
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Vocal Changes in Elderly Individuals: Implications for Parkinson's Disease and Aging

Lucas Manca Dal'Ava and Plinio Almeida Barbosa, University of Campinas

This study aimed to assess differences in acoustic parameters from different phonetic dimensions in spontaneous and reading aloud speeches among the elderly, with a specific focus on evaluating the impact of Parkinson's disease (PD) and non-pathological aging on speech of elderly individuals. Parkinson's disease significantly influences the speech characteristics of elderly individuals, resulting in vocal changes such as monotony in pitch, breathiness, roughness, and reduced maximum phonation time. Natural aging process leads to modifications in speech, resulting in similar vocal changes such as monotony in pitch, breathiness, and reduced maximum phonation time, but also reduced intensity, variable speech rate, imprecision in the articulation of consonants (especially fricative sounds), respiratory incoordination, and inappropriate pauses. These aspects are commonly recognized as presbyphonia. We run an experiment which included two distinct recordings for each individual. Initially, participants were recorded while reading a designated paragraph aloud, followed by a recording capturing their spontaneous commentary on the passage they had just read. A cross-sectional comparative study was carried out, involving elderly individuals diagnosed with Parkinson's disease and healthy individuals matching in age and sex/gender. Three distinct participant groups were formed based on disease stages determined by symptoms and medical records. These groups were categorized as follows: a control group (CG) and an experimental group (PD), which was further subdivided into two subgroups, namely, S2 for elderly individuals in the second stage of PD and S3 for those in the third stage of PD, according to the Hoehn Yahr Degree of Disability Scale. Acoustic analyses were applied in Praat, where the recordings were manually segmented into chunks of speech and silent pauses. Then, vocal parameters, encompassing fundamental frequency, intensity, and speech and articulation rates, were obtained through a Praat script. Moreover, from the set of parameters assessed, size effects were computed which pointed out that parameters such as speech rate, high-frequency LTAS slope (between 0-1000/4000-8000 Hz), shimmer, articulation rate, and intensity coefficient of variation exerted the most significant influence on the sample's outcomes. The graphics on the next page highlight the most relevant parameter, speech rate, showing a distribution in a lower interval for PD individuals with differences depending on severity. The other graphics in the second page highlight the size effect of all analysed parameters, in order of importance. These findings contribute significantly to a deeper understanding of vocal alterations in elderly individuals affected by Parkinson's disease and carry implications that extend into interdisciplinary domains, including healthcare and applied linguistics. Furthermore, this research contributes to an understanding of natural language functioning during the aging process, highlighting the potential utility of speech biomarkers in clinical assessment and the treatment of geriatric pathologies. It also offers insights into therapeutic approaches in voice therapy for this age group.



The corpora FEGB, IS, ISW, and ISZ: Biographical interviews for migration linguistics, conversational and narrative analysis, and aging studies

Simona Leonardi (University of Genoa); Eva-Maria Thüne (University of Bologna); Rita Luppi (University of Bologna); Ramona Pellegrino (University of Genoa)

This poster aims at presenting four corpora of language-biographical, narrative face-to-face interviews in German which can be fruitfully analysed in studies that combine tools from migration linguistics, conversational and narrative analysis, as well as aging research. The four corpora are archived at the 'Archive for Spoken German' (AGD) and accessible on the platform DGD (*Datenbank für Gesprochenes Deutsch*, 'Database for Spoken German').

Three corpora (FEGB, i.e. "Flight and Emigration to Great Britain", IS, "Migrant German in Israel", and ISW, "Migrant German in Israel: Viennese in Jerusalem") consist of interviews with 1st generation former migrants from Nazi-Germany and occupied territories to Great Britain (FEGB) or Palestine/Israel (IS, ISW), while the interviewees from the corpus ISZ are 2nd generation migrants to Palestine/Israel; in fact, most of them are children of speakers from the corpora IS and ISW.

The corpus "Flight and Emigration to Great Britain (FEGB)" was collected in 2017 in Great Britain by Eva-Maria Thüne. It consists of 42 interviews (length: 45-170 min) with former German-speaking refugees in the UK, who fled as children or young adults from German speaking countries; 24 speakers could be rescued thanks to the action named "Kindertransport" (s. Thüne 2019 and 2020; Thüne/Brizic 2022). At the time of the interview the speakers were between 81 and 97 years old.

The corpora IS ("Migrant German in Israel"), ISW ("Migrant German in Israel: Viennese in Jerusalem"), and ISZ ("2nd Generation Migrant German in Israel") were collected by Anne Betten and collaborators between 1989 and 2019, mostly in Israel (cf. Betten 1995; Betten & Du-nour 2000; Betten 1998 on aging). The corpus IS comprises 188 recordings with 185 speakers; at the time of the interview the speakers were between 43 and 100 years old. The corpus ISW consists of 24 interviews with 24 speakers aged between 69 and 90 years old at the time of the interview. The corpus ISZ contains 100 interviews with 66 speakers; at the time of the interview, they were between 33 and 88 years old.

Both the corpora IS and ISZ include several interviews with the same speakers, so that longitudinal studies are possible – the first time they were interviewed within this project the speakers from the ISZ-corpus were still in their 30s or 40s, whereas the last time they were from their late 60s to 88 years old (cf. Luppi 2022 for a pilot study).

All the corpora address questions relating to language contact, as the forced migration of the speakers from the corpora FEGB, IS and ISW caused a reshuffling of their language repertoire, whereas the speakers from the corpus ISZ usually have Hebrew as their most important language since their childhood and maintained German as heritage language.

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Analysis of Age Effects in European Portuguese Speech: segmental and suprasegmental level

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The global older population is growing, and Portugal is a prominent example, with the percentage of people aged 65 and over increased from 9.7% to 23.4% between 1970 and 2021. Although the aging process causes specific alterations in the speech organs, the knowledge about the age effects in speech production remains scarce.

Motivated by the lack of European Portuguese (EP) speech data, this work aims to fill knowledge gaps in age-related segmental and suprasegmental speech changes, exploring beyond traditional static acoustic features. Understanding these changes is essential for the development of automatic speech recognition systems suitable for order's voices and also for clinical assessment of speech disorders. Speech data of 112 healthy adults of the central region of Portugal (native speakers), between the ages 35 and 97, obtained through standardized recording and segmentation procedures, were collected, containing all EP oral vowels produced in similar context, and also a sample of semi-spontaneous speech.

The segmental analysis included 36 disyllabic words, with the vowels [i], [e], [ɛ], [a], [o], [ɔ] and [u] in stressed position and the vowels [i] and [e] in unstressed position, mostly composed by a CV.CV sequence (C-consonant, V-vowel), embedded in a carrier sentence "Diga... por favor" ("Say... please"). The speech corpus for suprasegmental analysis consisted of the "Cookie Theft picture" description. The recorded data were segmented for pauses over length 250 ms and several acoustic measures were extracted using Praat scripts.

The most relevant age-related results at segmental level includes: vowel duration increases in both genders (Figure 1); F0 tends to decrease in women and slightly increase in men (Figure 2); a general tendency to formant frequencies decrease for females (Figure 3); changes that were consistent with vowel centralization for males (Figure 3), confirmed by the vowel space acoustic indexes (namely, the F1 and F2 range ratios, vowel articulation index [VAI], and formant centralization ratio [FCR]); and no evidence of F3 decrease with age, in both genders.

Despite speech being inherently dynamic, most of the acoustic studies have focused on static features. This study also explored dynamic features of vowel formants, using the first 3 DCT coefficients (C0 to C2) in different classification models, which revealed that the addition of dynamic features improved the age classification accuracy. Vowel classification also benefited from dynamic features but with lower magnitude. Thus, dynamic features of vowels provide important information about the speaker and are an interesting source of speaker-discriminating information, being that aging speech is characterized by vowels with higher trajectory slope of F1 (in both genders).

At suprasegmental level, aging speech is characterized by: shorter descriptions with higher pause time for males (Figures 4); faster speech and articulation rate for females; and lower HNR for females in semi-spontaneous speech. Also, speaking F0 tends to decrease in women and to slightly increase in men with age.

This study provides new information on aging speech for a language other than English and highlight gender-specific patterns in speech changes associated with aging. Still, the collected data could be used on other acoustic studies of speech over the lifespan.

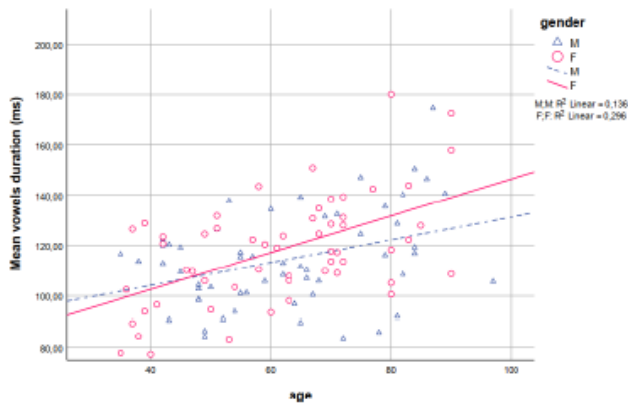


Figure 1: Scatterplot and regression lines for vowels duration by age and gender. Each symbol corresponds to one speaker. Solid line and circles: females; dashed line and triangles: males.

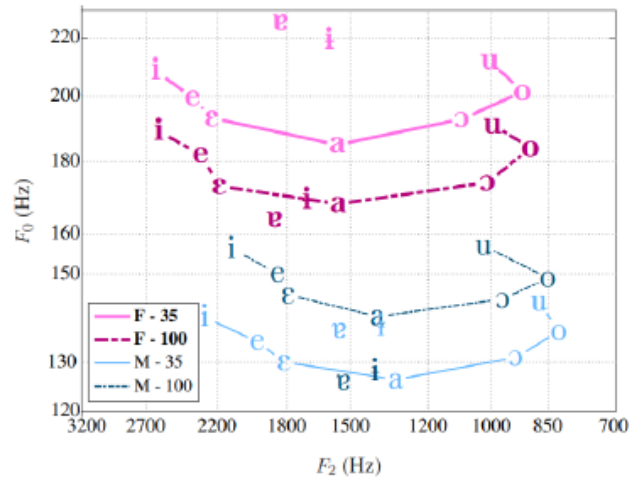


Figure 2: Mean value of F_0 as a function of vowel and age. Top: women; bottom: men. Solid lines: 35 years; dashed lines: 100 years. This figure was drawn using equations of linear regression (of each vowel by gender) replacing the variable age by 35 and 100 (as an approximation to the age of the oldest speaker of the sample).

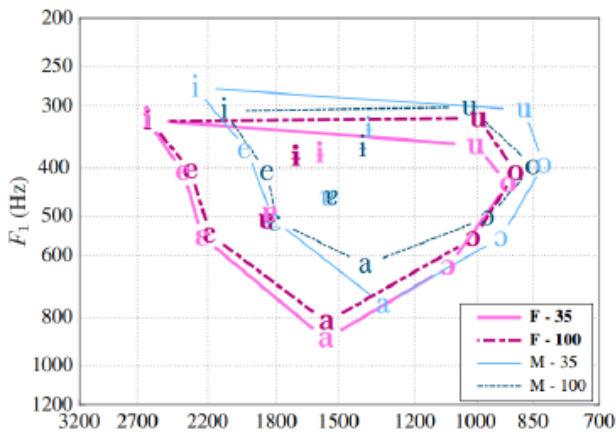


Figure 3: Vowel Space for men and women as a function of age. Bold lines and symbols: women; non bold lines and symbols: men. Solid lines: 35 years; dashed lines: 100 years. This figure was drawn using equations of linear regression (of each vowel by gender for F_1 and F_2) replacing the variable age for 35 and 100 (as an approximation to the age of the oldest speaker of the sample).



Figure 4: Scatterplot and regression lines for mean pause duration by age and gender. Each symbol corresponds to one speaker. Solid line and circles: females; dashed line and triangles: males.

**Building and working with a panel corpus across decades of speakers' lives
(and decades of recording technologies)**

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Conducting panel research into language and aging requires building a corpus in which the same speakers appear more than once over time. Because panel research involves the passage of time, though, researchers have to make certain that they understand the potential confounds that come from the development and use of such a corpus. This is particularly the case when the corpus involves archival data, because the researcher does not have control over all of the variables that could result in such confounds.

This poster discusses a specific example of a corpus built from archival recordings: a collection of publicly broadcast sermons delivered between 1940 and 2020 by leaders of the Church of Jesus Christ of Latter-day Saints, which crucially contains many of the same speakers repeatedly over the course of decades, and which has been successfully used to study variation across the lifespan. At first glance, it would seem that the confounds in using this corpus for the study of variation across the lifespan would be minimal, because the style and content of the sermons remains relatively constant across the corpus, the sermons are all delivered in similar locations (one of three buildings within a city block of each other), the social statuses of the speakers remain constant over their appearances in the corpus—and there isn't even the possibility of any sort of interviewer effect, because there is no interviewer. Essentially, this seems to be the perfect corpus to study language across the lifespan.

However, in reality, there is no “perfect corpus”. For one example, working with this corpus—and, in fact, any corpus that covers several decades—requires dealing with the simple fact that the mechanics of creating recordings have changed over time. Recording and mastering technologies have changed multiple times from the 1940s to the 2020s, which means that one has to question whether the formants obtained from a recording from, say, 1940, 1980, and 2020 can really be compared directly or not, and that is the case even for formants obtained from recordings of the same speaker. Further, this fact may have an effect on any given speaker's production, if for example they spoke more forcefully in earlier years not because they had more muscular force but simply because they knew they had to speak more loudly for microphones to pick up their voice clearly—but the word may is important here, because that cannot be assumed to have been the case.

This poster, then, discusses the development of this corpus, with a focus on recognizing these sorts of potential problems researchers face when working with this corpus specifically and with corpora using archival data more generally. This includes providing recommendations for ways to minimize the effects these issues present, and how to strategically choose linguistic variables that are less likely to be affected by them.

Aijudele brumblubrum ‘they have a sing-song’ – Prosodic change over the lifespan*Fabian Tomaschek and Karen V. Beaman, University of Tübingen*

The role of prosody in language change is a largely understudied area in sociolinguistic research, and studies of prosodic change across the lifespan are virtually non-existent. Sociolinguistic studies have generally focused on the segmental phonological or morphosyntactic characteristics of spoken language (e.g., Labov 1963, Cheshire 1982). The reason for this has been attributed to the technical difficulties of measuring complex, interlocked, prosodic features and to the relatively soiled subdisciplines of phonetics and sociolinguistics (Holliday 2021). The current study bridges this gap by investigating prosodic change over the lifespan of 20 speakers of Swabian, a dialect spoken in southwestern German by ca. 800,000 speakers, first recorded in 1982 and again 35-years later in 2017. Our study covers two communities, the large, urban center of Stuttgart with over one million inhabitants and the mid-sized, semi-rural town of Schwäbisch Gmünd with about 60,000 inhabitants, and is also balanced for gender (9 females and 11 males).

To measure prosodic change, we use two metrics: *tempo* and *pitch*. For *speech tempo* (ST), we detect peaks in intensity based on phrase duration, separating segments with pauses longer than 500ms and calculating the distance between the peaks. For *pitch*, we measure oscillations in fundamental frequency (F0), a metric which has been associated with expressive and emphatic language and varying cultural and stylistic aspects of speech (e.g., Clopper & Smiljanic 2011). We use F0 within a window of +/- 1.5ms around the intensity peaks, keeping a minimum of 50 Hz and a maximum of 600 Hz constant across males and females. Due to our small sample, we bootstrap 1000 measures of pitch and tempo for each speaker by randomly selecting 100 phrases from each speaker and calculating mean speaking tempo and mean F0 in them.

Figure 1 shows the prosodic change across the lifespan of our 20 speakers based on community membership. Speakers in the large, urban center of Stuttgart (solid lines) have increased their both their *pitch* (left plot) and *speech tempo* (right plot) across their lifespans. While speakers in Schwäbisch Gmünd showed higher pitch in 1982 than those in Stuttgart, this difference is reversed in 2017, with Stuttgart speakers showing higher pitch in 2017. Moreover, we observe a significant change in *tempo* only in Stuttgart; tempo has remained stable across the lifespan for speakers in Schwäbisch Gmünd. Figure 2 shows prosodic change across the lifespan based on gender. Echoing the results from Figure 1, both males and females have increased their pitch over their lifespans, however, women have greatly increased their *speech tempo*, approaching that of men.

The findings from this study reveal that speakers' pitch and tempo change across their lifetimes, likely in response to changing societal pressures. We surmise these pressures relate to the increasing speed of daily life and to the entrance of more women into the workforce, competing for jobs with men (Luekemann & Abendroth 2018). This study shows how transformative societal change is reflected in prosodic change in both the community and across the lifespan.

Figure 1. Prosodic Change Across the Lifespan by Community

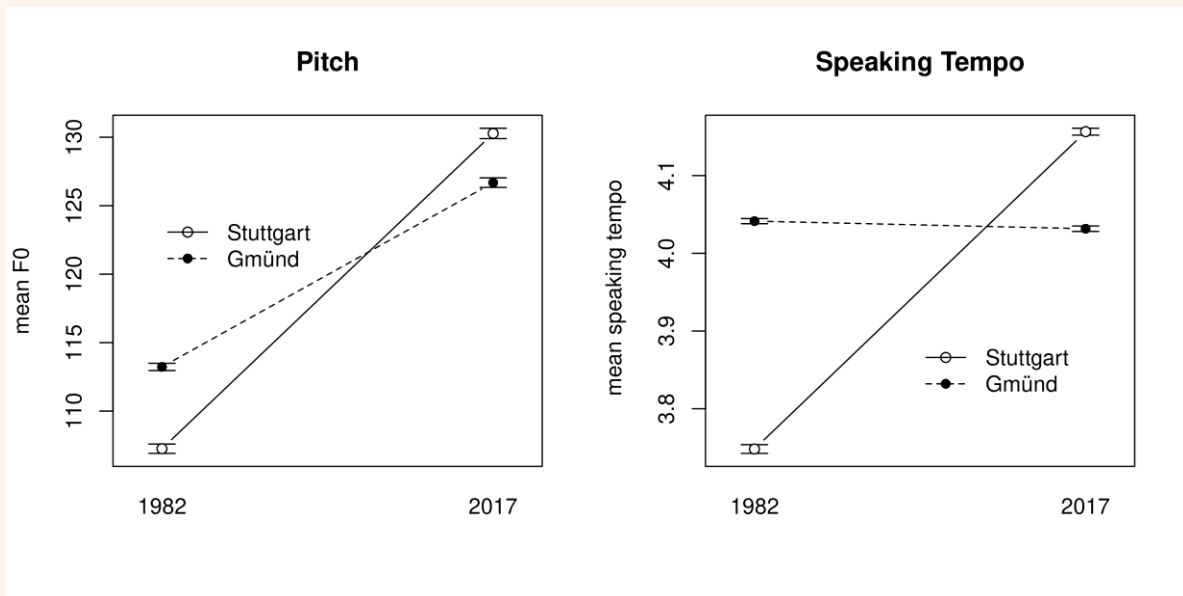
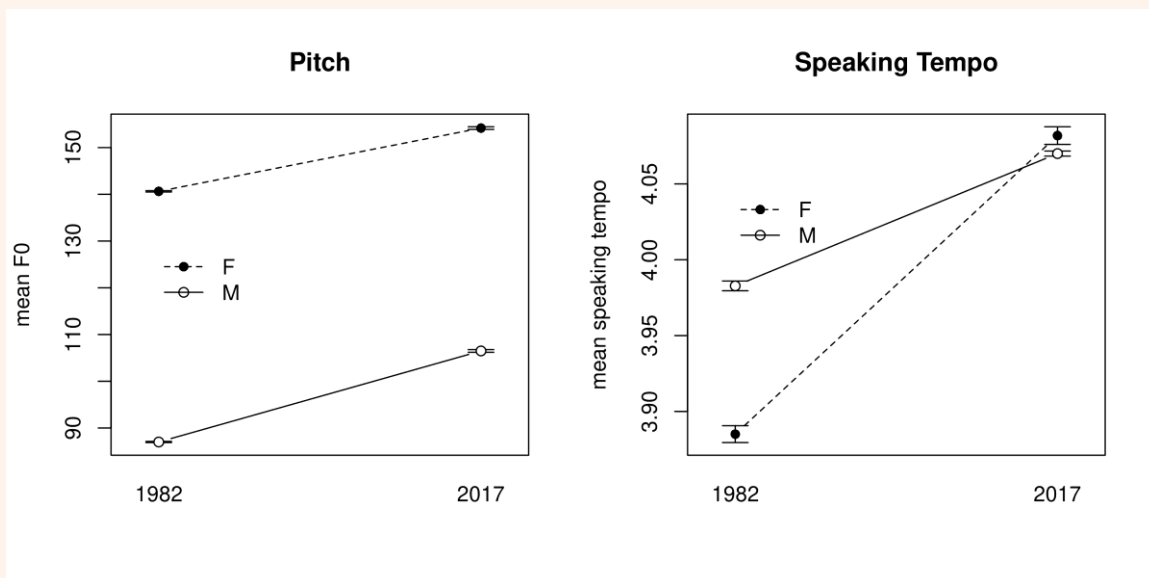


Figure 2. Prosodic Change Across the Lifespan by Gender



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Intensive Change Across the Life-Span? Exploring Intra-Speaker Malleability in the Intensifier System in a Panel Sample from the North East of England

Hannah Sawall, Isabelle Buchstaller, Lea Bauernfeind, Yasmina Bouziani, and Elisavet Kyriakoudi, University of Duisburg-Essen

This talk explores changes across the life-span in the system of intensification, which has been described as the site of one of the most vibrant diachronic changes in the English language (Mustanoja 1960; Méndez-Naya 2008). Research on a number of varieties world-wide has shown high turnover rates, with innovative forms (so, dead, all) competing with older, often decades-old variants (such as very, really, quite; Barnfield & Buchstaller 2010; Ito & Tagliamonte 2003). To date, investigation of changes in the intensification system has been conducted exclusively on the basis of apparent time and real time trend data. But only panel data, re-recordings of the same speakers as they age, provide us with the predictive power to trace patterns of linguistic malleability within the individual speakers.

What we lack, thus, are intra-speaker panel designs that explore the degree and the determinants of intra-speaker malleability in the system of intensification. Our analysis relies on an innovative panel corpus from the North East of England that covers the entire adult life-span. The panel contains 24 speakers (ages 19-53) in six consecutive age-cohorts. This allows us to explore the repercussions of longitudinal changes in the system of intensification within the individual speaker. Our research questions are as follows:

- (i) Do younger speakers push forward incoming forms as they grow older, adapting their system towards the direction of the community-wide trend (Harrington et al. 2000; Sankoff 2005 *inter alia*)? Do older age cohorts past critical age follow along with the waves of incoming forms throughout the later life-span? This would be a case of life-span change, a pattern whereby speakers “are swept away with the historical language change in the community” during their adult lives (Sankoff & Blondeau 2007:562).
- (ii) Alternatively, do we observe retrograde change, against the community-wide trend, a much less frequently observed pattern, when post-adolescent speakers move away from changes in progress? Only few panel analyses have reported patterns of retrograde change, which have generally been interpreted on the basis of linguistic marketplace pressures (Beaman to appear; Moelders 2022).

Longitudinal panel analysis reveals that long-term competition within the intensification system manifests itself in distinctive developmental trajectories. Longitudinal diachronic patterns are captured across the lives of our panel cohorts (e.g., protracted incursion of so). Moreover, we observe the gradual encroachment of really into the territory formerly held by very, which real time trend data has traced for decades (Ito & Tagliamonte 2003; Barnfield & Buchstaller 2010) being recruited for marketplace-related meaning making as speakers are moving into the middle age ranges (see Wagner & Sankoff 2011). Age-specific effects of prescriptive pressures have been described in previous panel research on the quotative system (Moelders & Buchstaller 2023) and our analysis shows them to be operative for the system of intensification as well. More specifically, our study reports on life-span effects in a fast-moving and complex variable on the basis of a panel cohort that spans the entire adult life-span.

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Journal of Language and Aging Research (JLAR): a venue for a growing community*David Bowie, University of Alaska**Annette Gerstenberg, University of Potsdam*

The sixth Conference on Language and Aging Research (CLARe6), ten years after the first CLARe network meeting, clearly shows that the topic of language and aging has become increasingly recognized. To sustain this dynamic, as researchers in language and aging we created a new platform to provide for the permanent representation of different research directions in the field: *Journal of Language and Aging Research* (JLAR), a venue for the sharing and promulgation of research. JLAR includes research papers, of course, but can also include other items such as reviews and editorials, and allows for the publication of special issues and conference reports (Bowie and Gerstenberg 2023). Despite the increasing interest in the study of language and aging, many fields within linguistics largely ignore the effects of age or at most consider it to be a variable that merits attention only insofar as it is methodologically convenient. And even when age is considered as part of linguistic analysis, *aging*—that is, the processes involved in age changing over time—tends to overly simplified.

One side effect of this is that aging is often framed—both explicitly and implicitly—as necessarily being connected to *decline*. This is at some level reasonable, given commonly-held assumptions about age and aging, but most humans actually experience several decades of aging in which there is no decline that pushes communication outside the bounds of what is called “normal.” It is thus worth questioning our idea of normality, and what this discourse of decline is referring to. For example, to what extent are markers of what is called “decline” really reflections of actual decline? And what does it mean when there is a decrease in one measurable cognitive feature correlated with age (presumably, an age-related decline) that is accompanied by an increase in a related cognitive feature? If we focus only on the downward changes, we risk strengthening ageist social constructions of aging rather than reflecting aging’s realities.

JLAR provides a venue to compare and confront very different approaches, as language and aging research will particularly benefit from intra-linguistic along with inter-disciplinary exchange. It invites us to increasingly take into consideration different cultures and languages, and especially understudied languages, which can lead to the development of new tools to use in the study of the intersection of language and aging.

JLAR was developed in cooperation with the University of Hamburg Libraries using the Open Journal System framework. It provides transparency in the journal’s administration while allowing it to be a part of the scholarly ecosystem via modern network identifiers such as DOIs and Crossref, with automated inclusion in databases such as Google Scholar and Semantic Scholar. The journal is published using an Open Access license and will progressively contribute to making language and aging research part of Open Science. JLAR provides a way to reach out not just to the academic community, but also to older adults themselves and their social environment, while offering insights that respond to society’s interest in and fascination with aging.

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Social predictors of later-life (ing) variation

*Heike Pichler, Scarlett Hart, and Sophie Krol, Newcastle University, UK and
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A large body of research across varieties of English highlights the remarkable consistency of contextual constraints on the variation illustrated in (1) and (2) between velar and alveolar nasals in word-final (ing) (e.g., Labov 1989; Mechler & Buchstaller 2019; Tagliamonte 2012). This paper reports patterns of (ing) variation among older adults in Tyneside, north-east England, to explore how social experiences that diversify older adults in particular impact their use of (ing) in ways not previously acknowledged in the literature.

- (1) He just left everything[ŋ] up to me. Managing[ŋ] the money, the house and everything[ŋ].
 (2) Funny enough, I was re- just recalling[ŋ] this last night, talking[ŋ] to a friend who I was out with.

The investigation is based on 5256 tokens of (ing) extracted from sociolinguistic interviews collected in 2019-2020 from 47 Tyneside adults aged 70+. Auditory analyses established high rates of alveolar nasals in the data (61%) – a finding in line with previous research on (ing) in Tyneside English (Mechler & Buchstaller 2022) and individuals' tendency to eschew normative linguistic pressures in later life (Downes 1998). In terms of macro-social and linguistic predictors, the results are consistent with previous studies: alveolar nasals are favoured by working-class speakers, with verbal categories, and with preceding velar and following coronal consonants (e.g., Hazen 2008; Schlee et al. 2011; Wagner 2012). However, the most important constraints on (ing) variation by far are social network diversity and size, as measured by questionnaires adapted from social gerontology (see Berkman & Syme 1979). Those older adults who regularly interact with young people, i.e., the frontrunners in vernacular language use (Eckert 1997), have significantly higher rates of alveolar nasals than those older adults who primarily interact with same-age peers (68% vs 48%); this pattern is particularly pronounced among those older adults with small social networks (80% vs. 64%).

These findings align with research in social gerontology: it is the quality of interactional networks in terms of age diversity, rather than their size alone, that impact patterns of behaviour in later life (Charles & Carstensen 2010). The findings highlight the importance of going beyond analysing macro-social predictors of language variation to advance our understanding of language use in later life and produce age-comprehensive theories of language use.

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Eliciting narratives from different groups of older respondents: Consideration of methodology and experimental design

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The effect of cognitive impairment on the macrolinguistic features of a narrative has already been researched, e.g., in studies on individuals with age-related impairments. The linguistic behavior of cognitively healthy (non-impaired) older participants frequently serves as a baseline for people with different cognitive impairments (ranging from MCI to a specific (mostly early) stage of dementia (mainly Alzheimer's disease) (see Pistono et al. 2018; Karalı et al., 2022)). These studies identify differences between the groups on the macrostructural level of the narratives, which can be roughly summarized as a reduction of "mandatory" elements (cf. Pistono et al. 2018) or the naming of goals, attempts, or outcomes (Karálı et al., 2022), depending on the degree of cognitive decline. Thus, macrostructural features serve as a starting point to delve into the correlation of linguistic and extralinguistic features. A closer look at the methodology of these studies reveals several differences that lead to new questions. They can be at least divided into those concerning a common framework or terminology, the methodology used for data collection, and the justification of the respective baseline. While differences in terminology are easier to resolve, the impact of the chosen way of eliciting a narrative and the comparison with normed values in different ways are of greater importance concerning the possibility of comparing existing data.

This presentation will focus on methodological issues and provide insights into the process of eliciting narrative data from 15 older participants (70+ years of age) divided into three different groups (5 per group) with respect to their scores on cognitive tasks, the Month Ordering Task (MOT) or the Screening for Executive Functions (SEF), resulting in a group of high performers (with the highest scores on both tests), a group that scored well on the SEF but lower on the MOT, and a third group with lower scores on the SEF and an inability to complete the MOT. For the collection of narrative data, the MAIN assessment was used, which allows for a systematic assessment of macrostructural elements (cf. Gagarina et al. 2019). We will show that the general findings fit into the picture above of a gradual decline of certain elements while at the same time broadening the view by addressing methodological choices and their impact on the results. Among these, we will focus on the circumstances of the experimental setting (computer-assisted or not, in familiar or unfamiliar settings, with or without a time limit) and the concrete instructions for telling the story, including the naming of an addressee. We will show that for the first group, the experimental setting has the lowest and the instruction the highest impact on their macrostructural characteristics, for the last group exactly mirrored (the middle group lies in between). In doing so, we aim to provide methodological advice for eliciting narratives from different groups of older participants.

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Prediction, aging, and age-related hearing loss

Leigh B. Fernandez, Muzna Shehzad, and Lauren V. Hadley, University of Kaiserslautern-Landau and University of Nottingham

As we age there are natural consequences to our sensory and cognitive systems which can have direct impact on language processing. In terms of auditory decline, “presbycusis” is the bilateral, symmetrical, and progressive loss of hearing as we age¹. Unlike people with normal hearing (NH), people with hearing impairment as a result of presbycusis (HI) are constantly faced with degraded auditory signals which leads to more effortful listening and a greater reliability on the cognitive system to extract meaning². This increased reliability can interfere with other cognitive operations which can further impact language processing and memory, leading to errors during listening, difficulty with complex syntax, and reduced memory for linguistic information².

One potentially promising area for investigation and intervention is language prediction. That is, the use of linguistic context to engage in the pre-activation of linguistic information before it is encountered. Prediction should help language processing be more accurate given that less stimulus information is necessary to identify constituents, faster given that predicted constituents will be identified and accessed more quickly, and easier given that less cognitive costs are necessary to comprehend more predictable constituents³. Despite the potentially promising benefits of prediction in HI, there is little to no research investigating prediction with HI. Additionally, research investigating prediction across the adult lifespan (>50 years old), is conflicting, with some authors going so far as to report “...findings across multiple behavioral paradigms and measures and focusing on different aspects of context processing have produced evidence for nearly every possible outcome of age-related change.” (pg. 217)⁴. We believe the current research touches on the *language use in later life* theme. Additionally, it touches on the *cognitive processing and aging* theme given that it investigates the cognitive processes involved with prediction and in difficult listening environments.

We tested predictive abilities in three age-matched groups (70.72 (sd: 6.12) y.o.) using eye-tracking and the Visual World Paradigm⁵: NH with auditory information presented at 70dB, HI with auditory information presented 70dB presentation (creating level-matched presentation), and HI with dB presentation individually set to intelligibility (i.e., dB set to the level that the participant could repeat 70%+ of the words – creating a high-effort group). We test whether these groups make predictions by investigating the timing of looks to a target word (e.g., guitar) in contextually constraining sentences (e.g., *The singer plays the guitar*) relative to looks to other potential targets (e.g., a semantic competitor *microphone* (semantically related to *singer*)). Using a divergent point analysis⁶, we find that all groups make predictions (i.e., they look to the target before they hear it) but there is a graded effect: both HI groups are later than the NH, and the high effort HI group predicts later than the level-matched group (see Figure 1). We argue that older adults are able to make predictions but HI impacts the cognitive processes that context affords thus leading to delays in prediction particularly in the face of more difficult listening environments (high-effort) and more difficult linguistic items (when there is semantic competition).

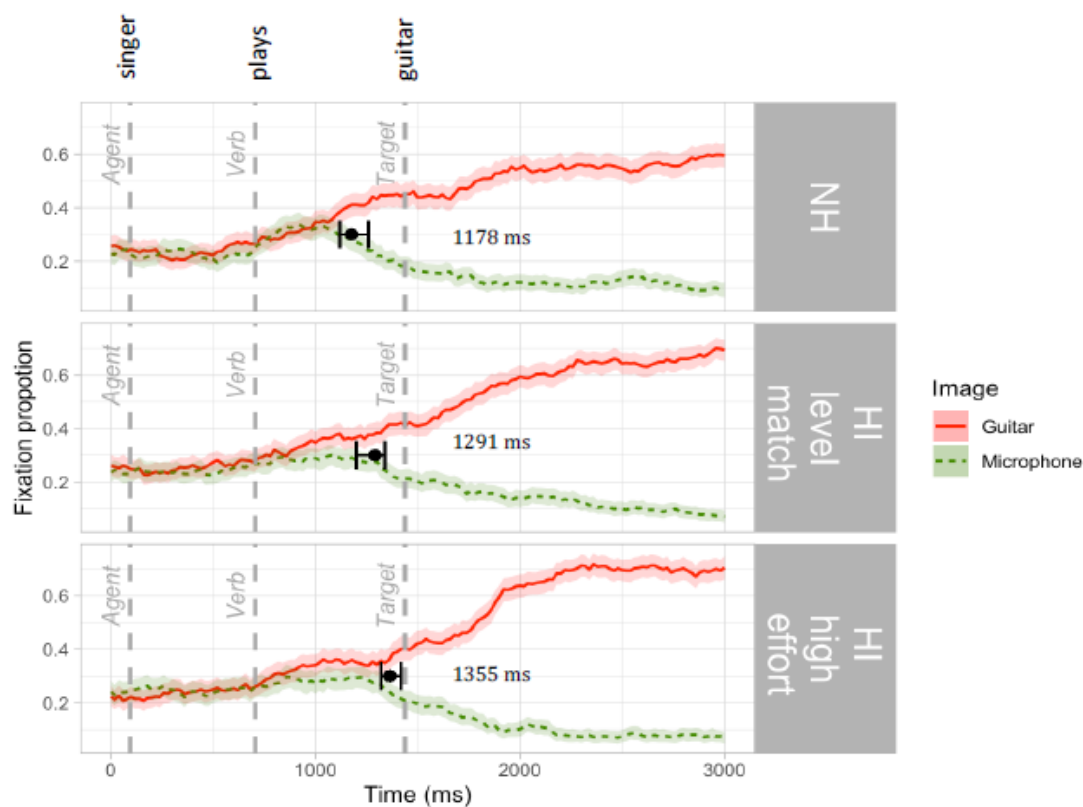


Figure 1. Divergence point and 95% confidence intervals superimposed on the fixation proportion of looks between the target (*guitar*) and the semantic competitor (*microphone*) while hearing *The singer plays the guitar*.

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Vulnerability to Disinformation in Older Age*Cristina Meini and Martina Rosola, Università del Piemonte Orientale*

This talk concerns the following research question: Are older adults especially vulnerable to disinformation? In particular, are they more vulnerable than the general population? To tackle this issue, we draw on research concerning cognitive biases and changes in pragmatic abilities in older age. Disinformation poses a significant challenge to contemporary society, as it has, according to many, the potential to undermine the stability of democratic systems, put public health at risk, and undermine the credibility of science (Allcott and Gentzkow, 2017; Benkler, Faris And Roberts, 2018). Although dating back to ancient times, in the era of mass media, the internet, and social media, the problem has become exceptionally prominent. We focus on two of the most serious forms of disinformation: fake news (Croce and Piazza 2021) and conspiracy theories (Brotherton and French, 2014; Brotherton, 2017). Such forms of misinformation are especially effective due to several cognitive biases, such as the conjunction fallacy, the intentionality bias, the illusion of explanatory depth, the proportionality bias, and the need for closure. We argue, however, that older adults are especially vulnerable to disinformation due to several factors affecting this age group more than the general population. A first type of factor responsible for a greater vulnerability of older people to fake news and conspiracy theories is constituted by cognitive aspects such as the need for consistency and source amnesia (e.g., Schachter et al., 1991; Johnson et al. 1993; Siedlecki et al. 2005; Simons, et al., 2004). Moreover, motivational aspects and affiliative needs, tied to the loneliness of older age (Grundy, 2006; Baars, 2017; Casey and Holmes, 1995), make it easier for older people to fall into epistemic bubbles and, more worryingly, into echo chambers (Nguyen, 2020), the ideal locus of fake news and conspiracy theories. Last but not least, pragmatic abilities, such as recognizing intentions and decoding figurative language, decline with ageing (Messner 2015), making it more difficult for older people to correctly interpret a message and its producer's intentions. This, in turn, makes it more difficult for older people to tell genuine news from fake ones. For this reason, we contend, specific attention to this segment of the population in tackling the problem of disinformation is called for. The contribution to this talk for the themes of the conference is twofold. On the one hand, it concerns the topic of language use in later life insofar as it deals with studies on the decline in pragmatic abilities in older age. On the other hand, it especially concerns the topic of cognitive processing and ageing given that it explores the influence of cognitive factors on information decoding and comprehension. To this extent, thus, this paper is fitting for the conference and can provide valuable insights into the broader topic of language and ageing.

FRIDAY, APRIL 12, 2024

IN-PERSON

KEYNOTE #3: 9:00-10:00

Framing and eldercare communication: Towards a socio-cultural practices approach to language and aging

Shumin Lin, National Yang Ming Chiao Tung University, Taiwan

Aging occurs in social, cultural contexts. It follows that eldercare is socially and culturally construed and conducted. While research on eldercare communication has yielded valuable insights into communicative features between care workers and older adults, there is still much work to be done to understand how eldercare and communication reflect or instantiate social or cultural orders. Drawing on my multi-year, multi-sited ethnographic research on the practices of care and communication in adult day centers (ADCs) in a major city in northern Taiwan and in an Asian American community in a metropolitan area in the American Northeast, this presentation underscores two main theoretical and methodological points.

First, theoretically, communication within eldercare interactions is a socio-culturally situated practice. A practices approach (Bourdieu, 1977) to eldercare communication provides a way of describing aging-in-context and uncovering the meanings of aging, care, and communication relevant to individuals participating in the care practices in specific socio-cultural contexts. In my investigations, I discerned differences in the ways participants framed these situated practices. Participants in Taiwan framed ADCs as school (Goffman, 1974). Care workers and older adults interactively positioned themselves and were positioned as teachers and students respectively. Older adults, especially those who were little educated, appreciated the opportunity to be “educated.” Didactic interactions and seemingly patronizing speech directed towards older adults were not taken up as demeaning, but as a form of care. By contrast, the ADC in the Asian American community in the US was framed in a business/service model, with the elders treated as valuable customers in the competitive ADC market of Asian American communities. Embedded within this model is the emphasis on autonomy and personal choices.

Second, methodologically, as most behaviors and interactions become routinized, habitual, and naturalized, “with the original reasons for their occurrence difficult to resurrect” (Miller and Goodnow, 1995, p. 7), the meanings of the practices may not be transparent to the researcher. Sustained relationship with the care participants and institutions as well as long-term ethnographic observations leads to “valuable ethnographic insights that help situate research findings” (Hamilton, 2023, p. 9) in social, cultural contexts. This presentation illustrates the utility of such a methodology to understand the socially culturally situated meanings of eldercare communication.

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Comparison of Macro-Structural Narratives between Mild Cognitive Impairment and Healthy Ageing

Quan Yao and Lihe Huang, Research Center for Ageing, Language and Care, School of Foreign Languages, Tongji University

Background: The timely detection of mild cognitive impairment in the elderly is a crucial prerequisite for early intervention, yet the effective and timely identification of high-risk populations for cognitive impairment remains a persistent challenge in this field. The MSSG (Main Concept, Sequencing, and Story Grammar) is a multi-level analytical approach that has shown potential utility through large sample studies in individuals with aphasia and traumatic brain injury. However, it has not yet been explored in older adults with cognitive impairment.

Aims: The study explored macro-structural narrative difference between MCI and healthy ageing, and detected potential linguistic markers of MCI through comparing the macro-linguistic narrative discourse between two groups.

Method: Twenty-seven individuals with MCI and twenty-seven cognitively healthy older adults participated in a story recall task of "the Cowherd and the Weaver Girl". Transcripts of the produced narratives were encoded, and five macro-linguistic variables were compared: main concepts composite, sequencing, essential story grammar components, total episodic components, and episodic complexity. The rater reliability coefficients were all above 0.9 ($p < 0.001$), demonstrating high inter-rater agreement. In addition, binary logistic regression and receiver operating characteristic curve analysis were used for differentiation between two groups.

Results: Persons with mild cognitive impairment scored significantly lower than the healthy control group on all five variables ($p < 0.01$ or $p < 0.05$). Differences were also practically significant with medium to large effect sizes (Cohen's $d = 0.61$ - 0.82). The scores of main concepts composite (OR=1.518, 95%CI=1.071-2.150, $p = 0.019$), total episodic components (OR=0.187, 95%CI=0.036-0.985, $p = 0.048$) and episodic complexity (OR=3.639, 95%CI=1.056-12.544, $p = 0.041$) the influential measures for group classification with an AUC of 0.817 (95%CI=0.706-0.928, $p < 0.001$).

Conclusions: This study shows that macro-structural narrative is a useful tool for revealing declined language abilities in participants with MCI. These discourse measures can serve as potential linguistic markers to help differentiate between MCI and healthy aging, thus facilitating early diagnosis and intervention for mild cognitive impairment.

Characteristics of major life events as catalysts for retrospective perceptions of linguistic change across adulthood

Mason A. Wirtz and Simon Pickl, University of Salzburg

Introduction and contribution to the conference themes

Approaches to understanding how age affects the in/stability of the linguistic repertoire remain controversial. Many sociolinguists continue to treat age as the sum of a person's lived years, and embark on analyses that attempt to link physical aging to patterns of language variation and change (for a discussion, see Wagner, 2012). In recent years, however, it has been cross-disciplinarily argued that the age factor may best be deprived of its status as a simple physiologically induced variable (e.g., Ellis, 2006; Birdsong, 2018; Singleton & Pfenninger, 2022) in lieu of being rechristened and treated as a complex sociocultural variable. Eckert (1997) was an early proponent of this perspective, encouraging sociolinguists not to consider 'age' per se as the rationale for changes in patterns of language variation, but rather to disentangle physiological maturation from the "life experiences that give age meaning" (p. 167). Nevertheless, to date there have been no attempts to investigate the impact of life events and event-related characteristics as catalysts for (perceived) change in speakers' patterns of language variation, an issue which we intend to tackle in this talk based on survey data from German-speaking participants from Austria.

Aims

We present initial results from an ongoing online experiment addressing the following research question: To what extent are characteristics of major life events associated with perceived changes in (a) the productive use of varieties and (b) varietal affective factors?

Methods

To date, data have been collected from 125 participants from Austria (108 women, 18 men; age: $M = 37y$, $SD = 18y$). Participants completed an online experiment in which they were asked to identify a life event that significantly influenced their use of languages and/or varieties (e.g., first job, retirement, parenthood, etc.). Following Luhmann et al. (2021), participants then provided information on six event-related characteristics of this lived experience (e.g., the emotional significance of the event, the impact of the event on their social lives). Participants were then asked to retrospectively judge the extent to which the same event impacted on both their productive use of language varieties (e.g., use of standard German and dialect with friends, family, at work, etc.) and varietal affective factors (e.g., dialect identity, attitudes toward standard German [Steiner et al., 2023]).

Results

Initial analyses using Bayesian multilevel models indicate that after particularly emotional events, participants indicated more positive attitudes towards standard German. There is also tentative evidence suggesting that more stressful events are associated with a decrease in cross-contextual dialect use and also with an increase in the degree to which participants accommodate to their interlocutor's speech. The predictability of an event may also be change-inducing, e.g., becoming close friends with a non-dialect speaking person correlate with more positive attitudes towards standard German, while more predictable events such as retirement can strengthen one's local dialect identity.

Conclusion

Exploring how individual differences in life event experiences influence perceptions of individual-level linguistic change provides a complementary approach to investigating change in the linguistic repertoire above and beyond mere physiological maturation.

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Reduced use of *eigentlich*, *sogar*, *schon*, and *wohl* in spontaneous speech a decade prior to clinical diagnosis of Alzheimer's Dementia – a pilot study*Dagmar Bittner, Leibniz-Zentrum General Linguistics, Berlin**Claudia Frankenberg, Universität Heidelberg**Johannes Schröder, Universität Heidelberg*

It is well known now that language use starts changing in the prodromal phase of Alzheimer's Dementia (AD). Typically, this is attributed to the cognitive decline, specifically the attention and memory deficit, that goes along with the disease. It is, however, an open question why the early changes in speech are exactly of the kind they are. To answer this question requires to identify in detail what it is that makes words less accessible, clauses syntactically less complex, texts less coherent etc. In our talk we will provide evidence from a pilot study that certain types of evaluative expressions belong to the linguistic phenomena pathologically affected in the prodromal phase of AD. By relating these findings to findings on pronoun use we hypothesize that the earliest pathological changes in language use occur with information on how the speaker values the factual information he gives.

The data investigated stem from biographical interviews elicited with 10 participants of the ILSE cohort study matched to 5 pairs of subjects; one subject developing mild AD 10-12 years after data elicitation and one subject that stayed cognitively healthy over this period. The matching included for gender, education, central place of living (Leipzig vs. Heidelberg area) and some other factors. At the time of data elicitation all subjects were 60-63 years old and cognitively healthy. The linguistic data base consists of the first 8000 words produced in the biographical interviews. For each subject we counted the frequency of use of more than 130 potentially evaluative expressions. 35 expressions were produced frequently enough to conduct group comparisons. Group comparison of the frequency of use of these expressions was based on the total number of data points for both groups (100%). A proportion of less than 25% for the AD group was taken as considerably lower frequency of use. It appeared with four of the 35 expressions: *eigentlich* 'actually', *sogar* 'even', *schon* 'really/quite', and *wohl* 'probably'. For each of these expressions analyses were performed on the presence of positive/negative context, use of synonymous expressions as well as on structural features of the utterances. There is no evidence that positive/negative context and/or compensation by synonyms explain the low frequency of the four expressions in the AD group. There is, however, a lower frequency of clauses with a copula verb containing one of these expressions compared to the CTR group. Further, there are group differences in the types of phrases placed in the scopus of the single expressions.

The latter results indicate problems with certain types of evaluative information. Over the next few months, we will compare the semantics of the four expressions with those of evaluative expressions that are not affected by group differences. We expect that this will allow us to determine more precisely the type of evaluative information that is already affected in the prodromal phase of AD.

Estimating Speaker Age from Voices*Carolin Worstbrock and Angelika Braun, Universität Trier*

Estimating a given speaker's age based on listening to their voice alone is an everyday task which we routinely carry out when talking to someone whom we do not personally know on the phone. It is generally agreed that listeners are good at this task, but there are some unresolved issues which are addressed in the present study. It re-examines the question of accuracy based on a large number of speakers and listeners; it looks at the issue of own-age bias, which implies that a listener is better at estimating speakers of their own age; it asks whether there is a difference in performance between male and female listeners, and it addresses the question of whether or not accuracy varies with subjective certainty. We also studied whether smoking had an influence on age estimation. Finally, regression analyses are carried out in order to establish which acoustic cues are used by the listeners when assessing speaker age. 40 male native speakers of German took part in the experiment. Six of them were young (i.e. between 25 and 30 years old), and 34 were middle-aged (i.e. between 31 and 58 years of age). Half of them had never smoked in their lives, the other half were smokers who had been smoking at least 20 cigarettes a day for a minimum of 10 years. Their task was to read "The North Wind and the Sun" out loud and then phonate the vowel /a/ for at least five seconds. We had a total of 67 listeners, 34 of them women and 33 men. The former ranged in age from 18 to 54 years (20 young and 14 middle-aged), the latter from 18 to 57 years (19 young and 14 middle-aged). Their task was to assess the speaker's age and to state their confidence on a five-point Likert scale. The following acoustic parameters were measured: average fundamental frequency (F0) and speaking tempo based on the text, and Jitter, shimmer, and harmonics-to-noise ratio (HNR) as well as four spectral moments based on the sustained vowel.

Results show that the average difference between a speaker's actual age and his perceived age is 8.34 years, however, with a wide range suggesting that there are "difficult voices" and possibly also listeners who are simply bad at the task. Smokers were easier to assess than nonsmokers. There was no own age bias, but younger speakers were generally rated better than older ones. We found no significant difference between female and male listeners. Finally, a random forest analysis established that HNR and speech rate were the parameters most frequently used in order to estimate speaker age.

A practical implication of our findings is in the forensic domain, where assessing the age of an unknown speaker forms part of speaker profiling. This is a task which is carried out whenever there is an unknown voice, e.g. in kidnapping cases, which has to be analyzed by the forensic phonetic expert for clues to age, sex, regional / language background, and idiosyncrasies.

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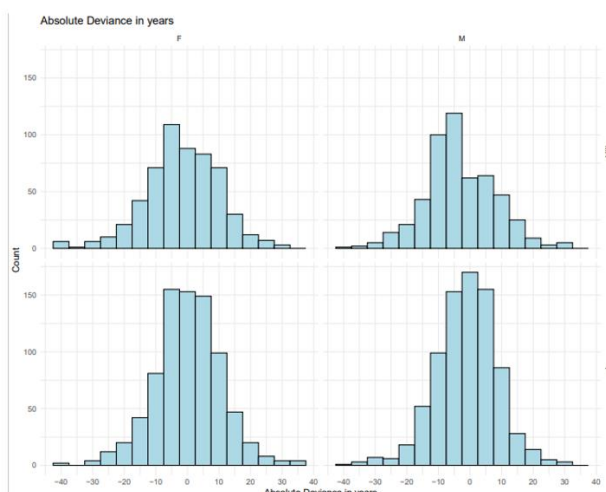


Figure 1.: Absolute Deviance in years

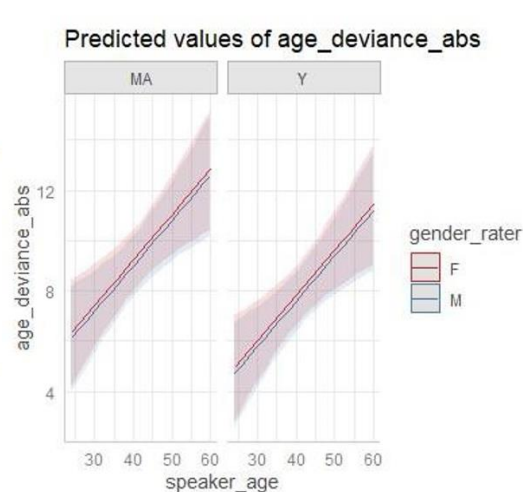


Figure 2.: Regression model for accuracy by gender and age

Where are the words? And which words? Understanding semantic impairment in healthy aging and Alzheimer's disease

Olga Ivanova, University of Salamanca, Spain

Juan José García Meilán, Institute of Neuroscience of Castilla y León, Spain

One of the hallmarks of the progression of cognitive decline in Alzheimer's disease (AD) is lexical-semantic impairment. There is strong evidence that the type of lexical-semantic impairment in AD significantly correlates with the severity of dementia and global cognitive deterioration (Tchakoute et al., 2017), being qualitatively different from the lexical difficulties of healthy aging (Ivanova et al., 2020). A generally accepted view suggests that patterns of lexical-semantic impairment in AD correlate with such psycholinguistic patterns as typicality, age of acquisition, frequency, and propositionality of word-concept relations (cf. Venneri et al. 2018). Yet, the question of how the remaining words, when matched for such psycholinguistic and semantic parameters, are organized in terms of cognitive availability has been so far very scarcely approached.

In this research, we address it by analyzing indexes of lexical availability for two semantic categories – “*animals*” and “*fruits*” – in a sample of Spanish-speaking older adults with AD, MCI, and non-pathological senescence (NPS) (n = 416). In our previous research, we showed that “*animals*” is a highly preserved semantic category even in progressive AD, while “*fruits*” is significantly disrupted after the onset of cognitive impairment. Considering this, we analyze the lexical items composing both semantic categories across the three groups of older speakers by focusing on three parameters: (a) quantitative and qualitative aspects of preserved semantic networks; (b) bigram characteristics of preserved semantic networks (directionality, node salience, and distance between items); and (c) force of connection between preserved lexical-semantic items. In doing so, we base our analysis on the software LexPro. Our results allow to observe important differences in the preservation of semantic networks according to both the typology of the group (NPS vs. MCI vs. AD) and the semantic category per se. We discuss our results in light of the correlation between cognitive impairment and semantic memory, as well as from the perspective of linguistic theory.

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Differences in narratives of young and middle-aged adults: What do they tell us?*Katrin B. Karl, Universität Bern*

Research on age tends to focus either on language acquisition in childhood (broken down in great detail into different stages) or on age-related decline and dementia in old age. Little attention is paid to the area in between (roughly 20 to 65 years). When adults in this age range are included, they are often presented as a base line but “are rarely viewed as interesting per se” (Fløgstad & Lanza, 2019, p. 177). They serve as a supposedly homogeneous comparison group with an idealized image of a person with complete language acquisition and flawless speech. This notion is hardly compatible with the lifespan perspective, which includes possible changes in linguistic behavior throughout an adult’s life (cf. Beaman & Buchstaller, 2021). The idea of a complete and full-fledged acquisition of language is challenged by a study by Gagarina et al. (2019a), which focuses on the narrative abilities of adults between the ages of 20 and 35 and shows that their participants do not reach maximum story complexity in narratives.

This leads to the crucial question of how to describe and model the linguistic behavior of adults of different ages. Moreover, we have to consider whether, on such a basis, a comparison between adults and children, respectively older people (as has often been done in the past) is methodologically appropriate.

In line with this underlying question, my presentation will concentrate on the narrative level and will examine the narrative abilities of adults in two age groups and compare them systematically. For this purpose, the MAIN assessment is used, which allows the structured collection of narratives of picture stories and systematically evaluates their macrostructure (cf. Gagarina et al. 2019b). For data collection one hundred adults were asked to tell two stories, each with a different addressee. The participants were divided into two age groups (young adults between 20 and 25 and middle-aged between 45 and 50) and in three languages (Russian, German and Polish). The narratives of each person were analyzed for macrostructure according to the MAIN protocol. This allows for comparisons between languages, addressees, and age groups, which will be focus of the presentation. I will show that there are group mean differences in story complexity scores. In the discussion, I will elaborate on the broader context for interpreting these scores. For this purpose, results from accompanying cognitive tests (which show no significant differences) and pragmatic behaviors will be used. It will be emphasized that the differences found cannot be attributed to age (in the sense of numerical age) alone but to more complex interrelationships, such as life stage, including parenthood. In this sense, a multi-perspective view of language change in adulthood is advocated, leading to the recommendation not to use an idealized basis for comparisons between different groups of adults.

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Narratives of language use in later life in autobiographical interviews with German-speaking Israelis

Pellegrino Ramona, Università degli Studi di Genova

As a result of the so-called ‘narrative turn’ or ‘biographical turn’ in the humanities and social sciences, biographical aspects have played an increasingly prominent role in linguistics, in particular in multilingualism research. Approaches considering language biographies have proven particularly fruitful in the analysis of autobiographical narratives to examine the role of languages in an individual’s life, and to reconstruct the linguistic repertoire of a speaker. Over the last decades, the notion of linguistic repertoire has been expanded to take into consideration the way ideologies are related to language use (*Sprachideologien*), and the bodily-emotional dimension as a key aspect of the “lived experience of language” (*Spracherleben*).

The object of my research is the corpus *Emigrantendeutsch in Israel: Wiener in Jerusalem (ISW)*, which is part of the so-called ‘Israelkorpus’ (*IK*), currently archived at the *Leibniz-Institut für Deutsche Sprache in Mannheim (IDS)* and accessible via *Datenbank für Gesprochenes Deutsch (DGD)*. The corpus consists of narrative autobiographical interviews with Israelis who fled from German-speaking central European regions to Palestine/Israel mainly as children or adolescents in the 1930s, and were interviewed by the German linguist Anne Betten and her collaborators in the years 1989-2019 in Israel. These interviews can be understood as language biographies, as speakers often thematize their language skills and attitudes, especially with respect to German, Hebrew and English (languages that shaped their everyday life in Palestine/Israel), but also to languages they came into contact with in their family before fleeing (e.g. Yiddish and Polish), and other languages learned after migration (e.g. Dutch and Spanish).

The corpus ISW contains 28 interviews: 25 were recorded in 1998-2000, 3 in 2010-2011. The latter were conducted with three already interviewed speakers, who mainly retold central (language-)biographical experiences. In my presentation I will first provide quantitative data of the corpus ISW. Then I intend to focus on the 3 speakers who were interviewed again more than 10 years after their first interview.

The analysis is aimed at answering the following questions: which languages play a role in the elderly life of the ISW-speakers (when they mainly lived in Israel) in comparison to their childhood (which they mostly spent in Europe)? Which linguistic strategies are employed by the interviewees to express their positioning towards languages in later life, e.g. proximity/distance to the German language and cultural area? Through the comparison between the last three interviews and the previous interviews with the same speakers it will be possible to observe whether there are any differences in the narration of the equivalent linguistic-biographical experiences approximately 10 years later in terms of lexical choice, expression of emotions, display of linguistic ideologies, and positioning.

The study envisages a quantitative and qualitative analysis within the frame of narratological research with tools provided by the software MAXQDA.

Perception of Language and Communication Barriers in Multilingual Aging Speakers in Doctor-Patient Interaction

Olga Ivanova, University of Salamanca & Institute of Neuroscience of Castilla y León, Spain

Pedro Álvarez-Mosquera, University of Salamanca & University of South Africa

Mantoa Motinyane, University of the Western Cape, South Africa

Khanyiso Mwanda-Jonas, University of the Western Cape, South Africa

Multilingual speakers outnumber monolingual speakers worldwide. Considering the general increase in life expectancy in many countries, the number of multilingual older adults will also continue to increase. One of the main challenges multilingual older adults face is ensuring efficient communication in clinical settings, where both language-related and communication-related barriers can arise (cf. Brindley et al., 2014; Ramkissoon & Khan, 2003). In some contexts, the dominant language of the older adult can differ from the dominant language of the clinical settings, negatively affecting information transmission between doctors and patients. Such difficulties can be exacerbated by the clinical conditions of the older multilingual themselves, who may experience communication limitations due to both their age and clinical state.

Efficient communication is crucial for assuring both the quality of life of the elderly and the proper diagnosis of aging-related conditions, for example, dementia. Yet, little attention has been paid to what aging multilinguals consider to be the main communicative limitations in doctor-patient interactions, as the majority of studies have focused on investigating communication strategies employed by medical staff (cf. Jansson, 2014). In this paper, we aim to identify communicative difficulties and limitations as perceived by aging multilinguals representing different social, sociocultural, and ethnic groups. Relying on a Qualtrics-based qualitative questionnaire, we compile a dataset examining the perspectives of aging multilinguals from South Africa, bilingual territories of Spain (mainly, Galicia) and multilingual immigrants residing in European countries regarding language and communication barriers in clinical interactions. Our aim is not only to delineate the angles of what multilingual aging speakers perceive as limitations for efficient clinical communication but also to identify those limitations that are universally recognized as the most prevalent and constraining across various social, sociocultural, and ethnic groups.

Findings are interpreted through the lenses of sociolinguistic and communicative approaches to aging. Moreover, we propose several preliminary solutions for the most vulnerable cases of multilingual aging in light of the recent results on multilingual elderly healthcare and individual factors (Hadziabdic et al., 2015; Pot et al., 2020). In this way, the present paper specifically contributes to two theme lines of the CLARe6 conference: language use in later life and interactional studies of language and aging.

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KEYNOTE #4: 14:00-15:00**Corpus analyses of personal narratives by older adults before and throughout the pandemic**

Victor Kuperman, McMaster University, Canada

This talk aims at showing how corpus analyses of language data from a population in distress can serve as a valuable source of insights into the psychological state of that population. The talk presents the Cognitive and Social Well-being (CoSoWELL) corpus, i.e., a large collection of narratives written by North American older adults (55+ years old), supplemented by demographic and psychological participant data. The current release of the CoSoWELL corpus (version 1.0) consists of over 1.7 million words produced by over 1,500 participants over eight test sessions, with a pre-pandemic baseline in March 2019 and seven sessions conducted during the pandemic. The written language data consists of personal written narratives about events in the distant past, recent past, and future, tapping into distinct facets of autobiographical memory. Extensive questionnaires on loneliness, social isolation, and memory functioning were administered as well. We conducted computational topic modeling and linguistic analyses to chart how emotional and cognitive well-being of older adults changed in the course of the pandemic. We also identified demographic and psychological factors that predicted individual vulnerability to the psychological impact of the pandemic. The findings provide new evidence about the timeline and nature of the emotional and cognitive response to the distress brought about by the pandemic. It also illustrates the benefits of joint use of language corpora with psychological data about the writers.

SOME LOCAL RESTAURANTS IN TÜBINGEN

The conference venue is in the city center which offers many nice, local restaurants. Here is a short list, all within walking distance in the downtown area.

Mauganeschtle

Burgsteige 18

www.mauganeschtle.de

Swabian specialties, in particular Maultaschen 'Swabian ravioli'

Neckarmüller

Gartenstraße 4

www.neckarmueller.de

Swabian specialties and beer

Die Wurstküche

Am Lustnauer Tor 8

<http://www.wurstkueche.com/>

Swabian specialties

Ludwigs

Uhlandstraße 1

<http://www.ludwigs.cc/>

Café with salads and light plates, located in the Hotel Krone

Al Dente

Bursagasse

<https://aldente-tuebingen.de/>

Italian specialties

Traube

Neckarhalde 14

<http://griechen-tuebingen.de/>

Greek specialties

Collegium

Lange G. 8

<http://www.collegium-tuebingen.de/>

Casual café and bar with light bites

Kichererbse

Metzgergasse 2

Lebanese vegetarian, falafels

JOURNAL ON LANGUAGE AND AGING (JLAR)

The Journal of Language and Aging Research (JLAR) is a peer-reviewed open-access journal focusing on the intersection of aging and language. JLAR has been established in recognition of an emerging community of scholars that is working to discover what actually is happening with language during this varied yet universal process of aging we are all experiencing, and to provide a venue for those investigating this fertile topic to share their findings with each other and with the wider scholarly community.

In JLAR we adopt an inclusive approach, studying both language-related phenomena and the later stages of life in order to learn both about and from aging. By creating a journal dedicated only to the intersection of language and aging, we aim to allow for disciplinary diversity united by the common message that aging is linguistically highly relevant. JLAR is therefore meant to give comprehensive visibility to linguistic research on aging, and allow it to emerge from being unrepresented and underrepresented.

If you want to keep updated on topics in language and aging research, and our initiatives JLAR and CLARe (Conferences on Language and Aging Research), please subscribe to our mailing list, <https://lists.uni-potsdam.de/mailman/listinfo/lar-list>

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