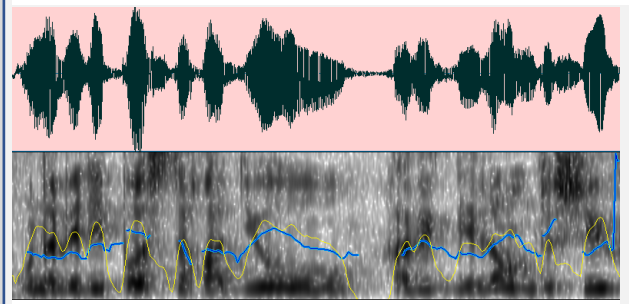


LangAge corpora:
Ms. Moreau
participated in eight relatively extensive (ca. forty-five minutes) life story interviews in her native language of French with the same individual (AG), over a nine-year period from 2005 until 2014 near Orléans, France; she was diagnosed with dementia in 2013.

What are narrative crystals? – Short consolidated autobiographical narratives that speakers tell multiple times across interactions. These narrative ensembles contain crystallized cores that are highly stable in terms of some combination of lexicon, grammar, and prosody surrounded by more variable building blocks associated with other aspects of the recounted events.

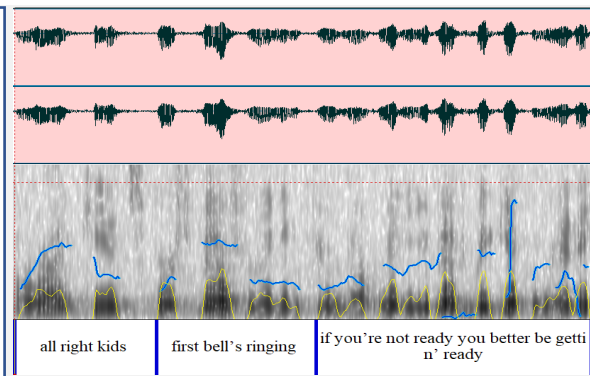


on avait des postes à radio (pau) avec des lampes dessus
we had radio sets with lamps on top

Two longitudinal data sets of interviews in dyadic, intergenerational settings covering the transition from normal aging to dementia and dementia. Discovery and identification of **narrative crystals** through repeated listening: **memory** was activated by salient **melodic patterns**, persistent throughout the series of recordings. Observation of their function in discourse as stepping stones in the rushing stream of conversation

Theoretical background: Models of normal aging and dementia communication (Hamilton 2019); narrative analysis in discourse linguistics frameworks (Chafe 1998); formulaic language (Wray & Perkins 2000)

Methodological innovation: Focus on scene (vs. „event“), stability (vs. co-construction in interaction)



Carolinans Conversations Collection (CCC as described in Pope & Davis, 2011): **Ms. Taylor** was living with a moderate stage of dementia and participated in twenty-five relatively brief open-ended, informal conversations (most were ten-fifteen minutes) in her native language of English with twenty different student visitors to her North Carolina (USA) assisted living residence over a period of seven months (2005-2006).

“First bell’s ringing”: one of nine tellings by Ms. Taylor

I can hear my mother on Sunday morning we went to a Lutheran Church in Brookfield and I can hear my mother on Sunday morning “all right children / the first bell’s ringing if you’re not ready / you better be gettin’ ready” we knew to be ready



on Sunday I always remember that there was we had radios with lamps on top you know these were the first the first devices and every Sunday afternoon / there were the Concerts Colonne at that time that’s what they were called from Paris which broadcasted a conce- a concert so my father / I still see him sitting astride his chair and we were not allowed to disturb him / he was listening to his concert

“Sunday concert”: one of eight tellings by Ms. Moreau



Functional uses of narrative crystals as stepping stones within conversations: The analysis of Ms. Taylor's use of narrative crystals within a naturally-occurring conversation demonstrated their functions at **discourse topic transition points**. In these situations, the relative fixed nature of the crystal was sometimes a double-edged sword; as it frequently appeared to ease Ms. Taylor's navigation of the dyadic interaction (serving as a 'stepping stone' in the 'rushing waters' of the ongoing interaction), its **lack of flexibility** (i.e., audience design) occasionally contributed to meaning-making challenges for her conversational partner.

A prosodic analysis for articulation rate by sections undiscovered differences between sections dedicated to past vs. present topics; articulation rate increased when narrative crystals were performed; they contribute to a perception of a greater fluency and potentially protect resources, keeping learned content accessible.

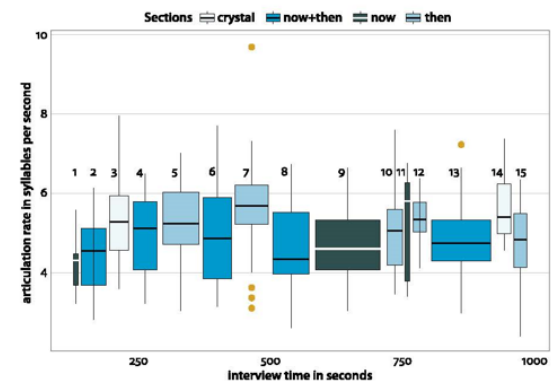


Figure 3. Ms. Moreau’s articulation rate in the opening of October 2014 according to 15 sections

Conversational partner (pseudonym)	Mouth of conversation	BUILDING BLOCK I we went to (a Lutheran) church	BUILDING BLOCK II on a Sunday morning	BUILDING BLOCK III she'd hear the bell ringing	BUILDING BLOCK IV and (I'd hear her) she'd yell	BUILDING BLOCK V "all right children, (the) first bell's ringing."	BUILDING BLOCK VI we knew to be ready	BUILDING BLOCK VII and we went
Ms. Arfield	Oct 2005							
Ms. Woolard	Oct 2005							
Ms. Goldman	Nov 2005							
Ms. Parton	Nov 2005							
Ms. Asmus 1	Mar 2006							
Ms. Asmus 2	Mar 2006							
Ms. Bagley	Mar 2006							
Ms. Dorton	Apr 2006							
Ms. Pagett	Apr 2006							

Figure 1. Building blocks in Ms. Taylor's *First bell's ringing* narrative crystal (n=9)

Why should we care about narrative crystals?

- Series of tellings account for the underlying narrative and its meaning even in its nuclear variants.
- The importance of scenes and their visual and acoustic reflects memory processes.
- Narrative crystals are as much a resource in discourse as other elements of formulaic language and help to identify strategies of managing challenging situations of dementia discourse.
- The prosodic shape of narrative crystals distinguishes them from surrounding discourse and gives evidence for a facilitated access to them.

Future work is to be dedicated to the process of transformation from narratives of personal experience into narrative crystals, and the onset of stable elements.

Are memory functions supported by the melodic elements of narrative crystals?

Analysis started with building an inventory of tellings for each participant, selection of the most consistently repeated tellings: 7 tellings in Ms Taylor, 8 tellings in Ms Moreau. Soundfiles were annotated in PRAAT, for repeated elements on all linguistic levels and their embedding in discourse. **Internal architecture:** as a result from iterative labelling of the individual tellings, the **ensemble** of recurring **building blocks** were identified and accounted for the included elements of stability and variability. The most stable building blocks were qualified as **crystallized core** of the tellings.

Gerstenberg, Annette & Heidi E. Hamilton. 2022. Older adults' conversations and the emergence of "narrative crystals": a new approach to frequently told stories. *Narrative Inquiry*. 1–34.