

## INTRODUCTION

Early psychosocial and therapeutic support for old people in situation of cognitive frailty (Rockwood, 1994) requires the ability to decipher their pragmatic, emotional and conversational abilities to ensure individual care (Duboisdindien, Bolly & Lacheret, 2017). Studies in applied linguistics have shown that frail older people develop compensatory strategies to maintain their involvement in the exchange (Davis, Maclagan & Cook, 2013; Taconnat & Lemaire, 2014) as well as their psychological identity, by using verbal and gestural PMs (either together or separately) that could inform about their cognitive resources.

## ROLE OF PRAGMATIC MARKERS IN A MULTIMODAL APPROACH

It is now recognized that Pragmatic Markers (henceforth, PMs) can contribute to the cohesion and coherence of speech by revealing expressivity and stance and regulating intersubjective processes (Fitzmaurice, 2004). By their indexical and metalinguistic dimension, they help the speakers to co-build a contextualized representation of the ongoing discourse (Aijmer & Simon-Vanderbergen, 2011: 224). By contrast, we still know very little about how PMs can also be manifested by gestural and prosodic features (Fernandez, 1994).

### What about pragmatic gestures ?

They are visible actions (Kendon, 2005) that are meaningful in context, including interactive gestures, beats, and (self-)adaptors at the lower limit of gestures (Andrén, 2010).

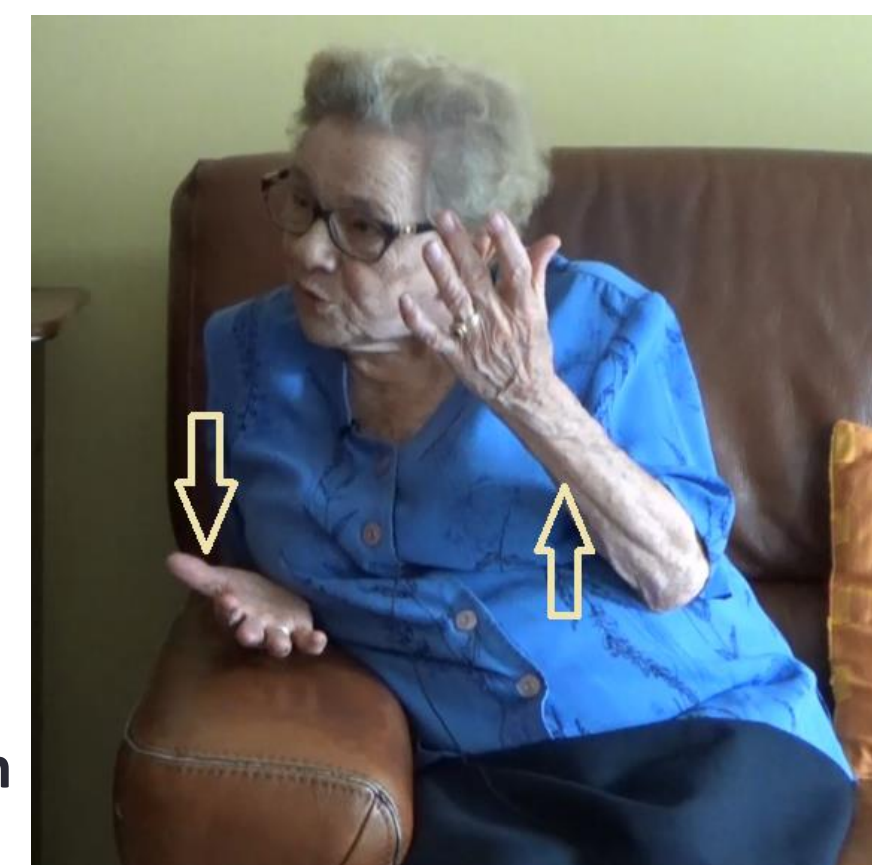


Fig 1. Pragmatic gestures in action on Constance [ageSC3.r-3\_S5] >>

## OBJECTIVES

With respect to Halliday's threefold categorization (1970), PMs are thought to be used by older people ① to organize their speech and structure the information conveyed (structuring function), ② to express their views and feelings as to preserve their identity through narration (expressive function), and also ③ to optimize the interaction between speakers (interactive function). We assume that the use and combination of PMs in various communication modes can provide relevant information about methods to appropriately preserve identity, empathic and conversational abilities in late life. It can also give useful insight into the preferential strategies used by the aging person as cognitive deterioration develops, depending on the discursive task at stake.

## METHODS

- Recrutement : between august and october 2014 : 36 ladies over 75 y. old have been evaluated into the North of France. (cognitive screening assessment; empathic profile test; autonomy assessment).
- 9 of them and there close relative, familiar have been selected.
- **Longitudinal approach** during 14<sup>th</sup> months and comprises several stages (from October 2014 to December 2015).

MONTH	INTERVIEW	TASKS	THEME	MATERIAL
M 0	First contact			
		Cognitive screening   Empathy   autonomy assessment (recrutement)		
M+1	Interview ①	Task 1A	Stage of life	Interview questionnaire
		Task 1B	Well-aging	Interview questionnaire
M+5	Interview ②	Task 2A	Visual reminiscence	Personal picture
		Task 2B	Aging and Home	Interview questionnaire
M+9	Interview ③	Task 3A	Olfactive reminiscence	Familiar scent
		Task 3B	Aging and social interactions	Interview questionnaire
M+13	Interview ④	Task 4A	Auditory reminiscence	Familiar noises
		Task 4B	Aging and Self-perception	Interview questionnaire

Tab 1. Experimental design of the longitudinal activities.

Our study is based on the CorpAGEst protocol (Bolly & Boutet, to appear), which includes a multimodal tool (Allwood, 2008) designed to analyze the verbal and nonverbal behavior of very old people (75 y. old and more) in their natural environment. We also choose sensory reminiscence activities as the least invasive method to make autobiographical discourse easier for the elderly in an ecological perspective (Baines *et al.*, 1987).

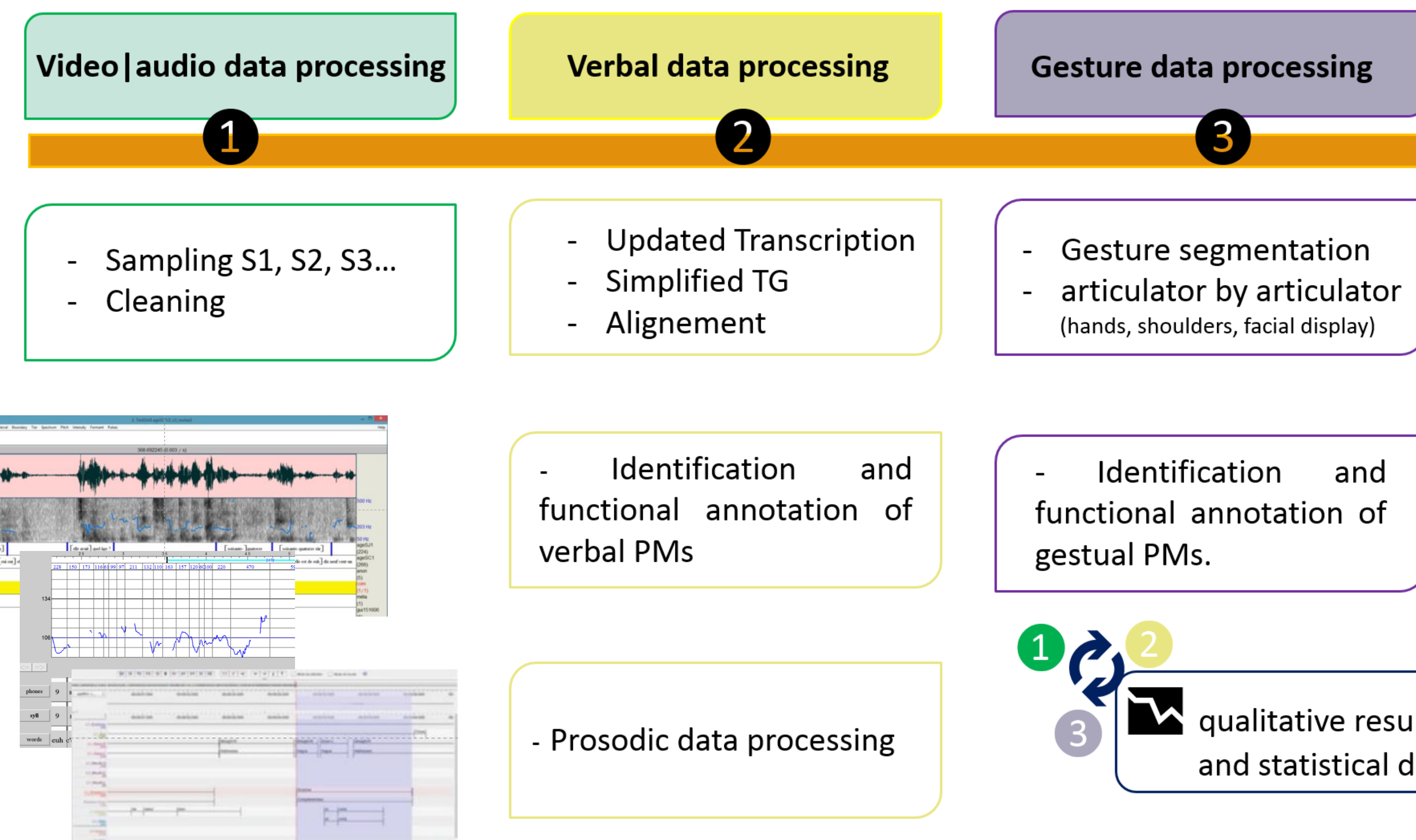


Fig 2. The pragmatic cocoon and the cognitive reserve triad.

## PRELIMINARY RESULTS

Preliminary results emerged from two exploratory studies with Constance and Tristane. The analysis of a 10 min. samples among the longitudinal data indicated functional patterns in the use of PMs and an increase over time in their use and combinations of verbal and gestural markers.

- ✓ interpersonal functions increase in time and frailty. ++
- ✓ PMs would act as an indicator beacon of frailty but also as lifeline in order to maintain pragmatics and interpersonal relations.
- ✓ emotion | cognition | motivation triad > the 'pragmatic cocoon' > in order to preserve identity and positive social face.
- ✓ more than a strategic compensation we are probably investigating the **cognitive reserve\*** effects.

\*The term cognitive reserve describes the mind's resilience to damage of the brain thanks to a set of cognitives abilities fortified by our experiences during the lifespan (Hanyu *et al.*, 2008).

## CONCLUSIONS & NEXT STEPS

- ▶▶ These results tend to confirm the hypothesized role of PMs used by the frail old speaker to compensate for cognitive decline, in order to remain involved in conversation.
- ▶▶ We will continue to explore verbal and non-verbal PMs on 3 over subjects and start the prosodic evaluation.
- ▶▶ We will investigate the impact of biographic context and thematic contents on narrative identity and PMs functions frequently used.

## CLINICAL POINT OF VIEW

This functional approach to PMs in very old people's speech, as well as approaches induced by linguistics and specifically pragmatics, undoubtedly contribute to the **urgent need for non-medical and psychosocial methods**. We also believe that such evidence-based methods will contribute, in the end, to ensure older people's well-being by answering more closely to their 'real' needs with respect to their 'real' behavior in 'real'-world settings.

### Selected references

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Tab 2. Data processing protocol step by step.

