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# Multilingual dementia care: defining the limits of translanguaging

Alison Wray

## Abstract

In multi-ethnic contexts, it is not uncommon to find that dementia carers or their clients are using a language they are not comfortable, or not fluent, in, as the medium for communication in care. In extreme cases, there could be no shared linguistic code at all. This paper asks how feasible it is to provide adequate care with inadequate mutual language knowledge. In particular, it challenges the claims of some care-providers that nonverbal communication is a legitimate substitute for linguistic interaction.

With reference to two recent models of aspects of communication (Li, 2018; Wray, forthcoming) the paper offers new insights into the necessary parameters for effective interaction. The conclusions have important implications for future decisions in dementia care. Meanwhile, the account extends the boundaries of *language awareness* by demonstrating the social importance of developing insights into linguistic practices in challenging contexts.

**Keywords:** dementia; professional practice; translanguaging; non-verbal communication; multilingualism

## 1. Introduction

The rising costs of quality dementia care in western industrialised nations have recently spawned a new phenomenon: ‘exporting grandma’ to a foreign country (Lacey & Foulkes, 2014) where lower manpower costs offer a higher standard of physical care in a more pleasant environment for less financial outlay (Kolářová, 2015). This practice raises several socially important questions, one of which regards communication. For, often, there is a very significant language barrier (Vogler, 2015, p. 103). One facility in Thailand targeting Swiss clients admits that the care staff have no competence in German, arguing that ‘in our experience verbal comprehension between people with dementia and their carers is not all that important’ (translation) (Carewell service, no date, p. 9).

As yet, there seems to be no empirical research on communication in such extreme contexts, but important observations can still be made about the likely outcome of juxtaposing the communicative challenges of dementia with those of no shared language knowledge. Can para- and non-linguistic modes, such as gesture—which are regularly

deployed both when someone has dementia and when two unimpaired interlocutors do not have common language—adequately compensate when both circumstances occur at once? One perspective suggesting they might is Li's (2018) model of multimodal translanguaging, which conceptualises linguistic 'gaps' as communicative opportunities. For Li (2018, p. 20), 'Translanguaging... means transcending the traditional divides between linguistic and non-linguistic cognitive and semiotic systems.'

To demonstrate what is potentially at stake in a dementia care context with no shared language, section 2 outlines the communicative challenges associated with dementia. Section 3 uses a small part of Wray's (forthcoming) model of communication dynamics to demonstrate how these impairments, and the broader range of situational features associated with dementia and residential care, determine the experiences and unmet needs of both people living with a dementia (henceforth, PLwDs) and their carers.

Section 4 outlines the main features of second language use in the care sector and uses the model described in section 3 to pinpoint the communicative challenges likely to arise when dementia carers and their clients are not fluent in the same language. The section concludes by returning to the extreme scenario briefly outlined in this introduction: care with no shared language at all.

Section 5 introduces Li's (2018) account of multimodal translanguaging and tests its features against scenarios that progressively approximate the extreme scenario. In this way it is possible to pinpoint in theoretical terms what sort of barriers to effective communication, and hence, overall care, there might be.

As such, the main contributions of this paper are two-fold: it offers a new method, based on existing theory, to evaluate the potential for communication to be successful against the backdrop of significant constraints; and its important insights are ones that should inform decisions about dementia care in increasingly challenging economic and social environments worldwide.

## **2. Language impairment in the dementias and the impact on communication**

The term 'dementia' covers the symptoms of several diseases that affect the brain areas associated with cognition (Camicioli, 2014; de la Torre, 2016). Language, perception and memory are variously affected in different dementias. For example, in Alzheimer's disease and vascular dementia, word-finding difficulties arise, particularly for names and low frequency items (Obler & De Santi, 2000). Proforms (e.g. *it*, *thing*) and formulaic expressions are typically used (Davis & Maclagan, 2013; Hamilton, 2008; Obler & De Santi, 2000; Wray,

2010, 2011, 2012), so that output is vague, e.g. ‘You see the thing is sometimes you get a bit when you do these things’ (Wray, 2010). Progressive non-fluent aphasia creates difficulties with phonological and grammatical processing. In semantic dementia, the link between words and their meanings is disrupted (Méligne et al., 2011; Patterson, 2014), making output fluent, but ‘empty of content’ (Neary, Snowden, & Mann, 2000, p. 48), and input difficult to understand (Hodges, Patterson, Oxbury, & Funnell, 1992, p. 1796).

Communication can also be affected indirectly. People with Lewy body type dementias experience hallucinations and problems with visuo-spatial functioning (Reilly, Rodriguez, Lamy, & Neils-Strunjas, 2010), are easily distracted, and poor at turn-taking (Roberts & Orange, 2013); these difficulties will influence what they talk about and how others respond. In vascular dementia, impaired judgement and planning typically affect decision-making, which can frustrate and confuse interlocutors. Meanwhile, slower general functioning can make comprehension harder (Freitas, Mansur, Brucki, Nitrini, & Radanovic, 2010). In Alzheimer’s disease, damage to the hippocampus disrupts the laying down of episodic memories. Memory is needed to build up shared context for the construction and interpretation of messages (see section 3).

It is not only impairments of language, memory and perception that impact on communication when someone has dementia. Inadequately trained or over-busy carers might fail to assist PLWDs in wearing their hearing aids and glasses, or might stand out of their sight-line when speaking to them. PLWDs need time to understand and express themselves (e.g. Jones, 1992; Juthberg, Eriksson, Norberg, & Sundin, 2010; Sabat, 2001), and staff sorely lack time to hold conversations with residents (UNISON, 2017). Despite numerous initiatives in communication training for carers (see Wray, forthcoming, for a review) little has changed since Sharp (2007, p. 4) reported that ‘care staff perceive communication problems as one of the biggest challenges in providing good dementia care.’

Advice to family members and carers about improving communication typically focusses on the speed and complexity of input, anchoring reference through physical objects, reiterating nouns rather than using pronouns, patiently working out the meaning of output, and summarising what has been said so far (e.g. Bayles & Tomoeda, 2014; Miesen, 1999; Small & Gutman, 2002).

People in the final stages of most dementia types become mute and largely unresponsive and carers need to adopt and recognise other modes of expression. Touch is strongly advocated in some approaches to care, most notably validation therapy (Feil, 1992; Feil & Altman, 2004; Feil & de Klerk-Rubin, 2012; Soderlund, Cronqvist, Norberg, Ternstedt, &

Hansebo, 2016). Facial and body gestures offer potential for communicating more specific messages. While integral to regular linguistic expression (Miller, 1990, p. 117), they can also, to an extent, substitute for words (Davis & Maclagan, 2013; Ellis & Astell, 2011, 2018). Rousseaux, Sève, Vallet, Pasquier, and Mackowiak-Cordoliani (2010) found that people living with Alzheimer's disease had relatively unimpaired abilities for understanding and producing gestures, even when they had difficulties with verbal communication. Goldsmith's (1996) professional carer informants considered people with dementia especially alert to the body language of others (p. 113). A study by Kunz, Scharmann, Hemmeter, Schepelmann, and Lautenbacher (2007) found that PLwDs used facial expressions to signal pain to a greater extent than did control participants. In *Adaptive Interaction* (Ellis & Astell, 2011, 2018), gesture is used to generate a new mode of communication in those no longer able to speak. The carer observes the movements that the person makes, and mirrors them back, giving the person evidence that they can still influence the behaviour of someone else.

In sum, it is clear that the absence of linguistic interaction need not mark the end of communication. But how much would non-verbal communication need to achieve, fully to substitute for language? Put the other way round, what aspects of communication would be sacrificed if a person's linguistic capabilities were set aside, in favour of non-verbal communication only?

### **3. The requirements of effective communication**

#### ***3.1 Why we communicate***

Communication is costly and cumbersome, so we need a good reason to engage in it. Wray (forthcoming) proposes that communication is driven by a core need in speakers to bring about changes in their experiential world. This world includes our perceptions, beliefs, feelings, sensory awareness, knowledge and material possessions. Because the world is constantly changing, it is constantly at risk of being less than ideal. At any given moment we might want: a door closed; the pleasure of eating chocolate; information we currently lack; reassurance—whatever will transform our experiential world into something closer to our ideal. Where we can, we will effect changes for ourselves: walking to the door to close it, fetching chocolate from the cupboard, going out to look for the cat, checking someone is present. But our experiential world is complex, and when our needs and desires extend beyond what we can fulfil for ourselves, we need to engage others as agents: get them to do, say, think or feel something that is beneficial to us. We have various tools for achieving this, but the most powerful is language.

With each individual pursuing his or her own goals, it might seem unlikely that people would be amenable to helping each other. However, mutual benefits easily accrue, as one person gains, say, a sense of value by helping someone else achieve their goal. Nevertheless, to get the hearer to comply, messages must be carefully formulated. The speaker must decide exactly what to say, and how, to ensure that the hearer is willing to respond in the desired way. This pursuit is complicated by the fact that speakers want to achieve several different goals at once. For instance, in asking someone to close the door, the speaker must take into account the power relationships, recent events and amount of inconvenience entailed, when deciding how to make the request without inadvertently damaging the relationship with the hearer.<sup>1</sup>

An important aspect of these evaluations of the context is estimating where the hearer's knowledge intersects the with speaker's own, so that information is accurately presented as given versus new. The response sought must also be one that the hearer perceives as possible, relevant and appropriate. The outcome of this process shapes the choice of language or variety, level of formality and politeness, intonation, emphasis, use of proforms, etc.

### ***3.2 Achieving communicative goals when someone has dementia***

When people are living with a dementia, there are several potential barriers to achieving their communicative goals. As we saw in section 2, dementias often cause problems with accessing linguistic resources, with processing, or with perceptions of reality. However, arguably the biggest challenge relates to the assessments of context that determine how a message is constructed. On account of impaired memory and/or cognitive processing, PLwDs may not have accurate contextual information, such as who they are with, where they are, the role of others present, what is possible and reasonable to expect, and what has already happened. Without this information, they are at significant risk of formulating their message inappropriately, which may cause confusion, offence or frustration in the hearer, and embarrassment, disappointment or humiliation in the PLwD. If the goal is not achieved, either or both parties may also feel disempowered.

Meanwhile, since a PLwD's knowledge and recall can vary even from moment to moment, a speaker attempting to achieve a communicative goal through the agency of a PLwD (e.g. asking them about something that is happening, or attempting to get them to act

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<sup>1</sup> See Wray (forthcoming) for extensive discussion of how these ideas integrate with existing theories of communication and pragmatics.

in a particular way) might be unable to judge what contextual information the PLwD needs (e.g. reminders of the topic, who people are, where they are) in order to respond appropriately. Providing too little (or, in some cases, too much) information could engender an unintended response, such as confusion or aggravation, leaving the carer feeling frustrated and powerless.

When communication no longer works as it should, we become very vulnerable. Typically, PLwDs and their carers will already be experiencing high levels of stress, which will increase the likelihood of relatively minor miscommunications creating relational difficulties, while the fear of future misconstruals constrains what is attempted in interaction.

Given all of this, it should not surprise us to find that PLwDs report feeling the urge to withdraw from communication (e.g. Bryden, 2005, 2018; Mitchell, 2018; Swaffer, 2016; Taylor, 2007). Yet it would be naïve to suppose that PLwDs who do not initiate interaction are not experiencing dissonances between the world they are experiencing and the one they would prefer, such as would typically drive us to speak. As such, reducing their opportunities to communicate significantly impacts on their capacity to exert self-determination with regard to their physical condition, state of knowledge, and sensory and emotional experiences.

A typical pattern observed in communication between carers and people living with a dementia is inconsequential small talk, such as ‘how are you?’ and ‘lovely day’. Small talk does play a legitimate role in human communication, when the speaker’s primary goal is to create or sustain a social bond with the hearer (Coupland, 2000). However, small talk cannot achieve all the goals that a speaker may want to pursue in interaction and so it will not be sufficient for carers *only* to greet PLwDs in passing, and chatter to them as they carry out care activities. Communication needs to do a great deal more, if it is to serve all the PLwD’s and carer’s needs. PLwDs often have only limited capacity to initiate interaction or respond promptly to a phatic comment, and small talk offers them little scope to get into the position where they, through their own output, can pursue what they would like to achieve.

### **3.3 Social contributors to the dementia experience**

The quality of PLwDs’ experience in communicating with others is substantially shaped by cultural and social factors. ‘Social reserve’ (Wray, forthcoming) parallels the brain and cognitive reserves associated with resistance to degenerative brain diseases and their cognitive symptoms respectively (Steffener & Stern, 2012; Stern et al., 2008). However, unlike these other reserves, social reserve does not reside in the individual whom it affects, but in the environment. It is ‘the currency of resilience located in a person’s cultural and

social context, both local and global' (Wray, forthcoming) and has four components: infrastructure (including care provision, dementia-friendly environments, and general education about dementia), social attitudes (encompassing beliefs, emotional responses and media depictions), social connections (the individual's own social networks, family relationships, etc.), and social credibility.

High social reserve is characterized by a joined-up approach to healthcare and wellbeing, support for PLwDs in continuing to participate in their community, and positive attitudes towards PLwDs' rights and capabilities, including in relation to communication. Low social reserve leaves PLwDs and their families preoccupied with shoring up broken infrastructure, fighting often uncommunicative systems to access to care and support. Meanwhile, the media's role in social reserve is also vital. If dementia is depicted negatively, then the general public, and PLwDs themselves, will feel hopeless, and not expect to find positive solutions to practical challenges, even where they are feasible (Ballenger, Whitehouse, Lyketsos, Rabins, & Karlawish, 2009; George & Whitehouse, 2014). Thus, good communication arises from, builds, and sustains social reserve; and the challenges of communication outlined above indicate why it is so often absent.

Given the core role of shared context in supporting effective communication which, in turn, enables social reserve to be sustained, what must the impact be, when a PLwD is cared for by someone who speaks a different language, comes from a different culture, and shares no contextual knowledge beyond what is visually and aurally available in the immediate environment? To explore this question, we turn to an examination of how dementia care fares in a multilingual situation.

#### **4. Multilingualism in dementia care**

PLwDs might be given care by people who are not fluent in their language for three main reasons. Firstly, in western industrialised nations, dementia care workers are often from overseas (section 4.1). Secondly, dementia affects people from ethnic minority populations. Some may never have developed full linguistic facility in the language of their host country, while others, on account of their dementia, may be losing their capacity to use it (4.2). Finally, as already highlighted in the introduction, there is now a practice of moving PLwDs to foreign countries for care (4.3).

##### **4.1 Foreign-born dementia carers**

In 2016-17, nearly 40% of adult social care workers in London were not British-born (Skills for Care, 2017). In Europe, the proportion of foreign-born care workers varies hugely,



from 70% in Italy and Greece to only 8% in the Netherlands (Colombo, Llana-Nozal, Mercier, & Tjadens, 2011, p. 174). In the USA, the figure is around 20-25% (Davis & Maclagan, 2017b). While some foreign-born care workers will have excellent command of the workplace language, the tendency for recently arrived immigrants to take on care work inevitably means that many have limited proficiency. In the care homes for the elderly where these worker demographics apply, up to 80% of residents have some form of dementia (Quince, 2013, p. 71).

The linguistic demands on dementia carers using a second language are complex (Duff, Wong, & Early, 2000; Timonen & Doyle, 2010), with potential onward impact for their clients (Manthorpe, Hussein, & Stevens, 2012). As it is unreasonable to expect them to pick up the language without assistance (Davis & Maclagan, 2017a, p. 26), deliberate intervention is required, and there have been various initiatives to combine language and professional training for dementia carers. A nurse-aide training course for non-English speakers in North Carolina includes linguistic and cultural coaching on interaction in the dementia care context (Davis & Maclagan, 2017b). The linguistic support includes a caregiver's phrasebook for greetings and conversation starters, guidance on using intonation to signal interest and to encourage talk continuation, technical vocabulary (derived from tagging chapters in a nurse-aide coursebook), and the 'quilting' technique for picking up and using information provided by the person with dementia (Moore & Davis, 2002). The cultural elements include politeness, taboos (e.g. touching) and traditions.

In Australia, Wesley Mission Queensland (WMQ), a state-wide provider of residential care, offers English language support to its existing workers, and free English classes in the community (particularly targeting recently arrived refugees) with, or aspiring to achieving, a certificate in aged care.<sup>2</sup> This language tuition focusses on typical situations within care, seamlessly combined with advice on the challenges of having an interlocutor with dementia. Language support surfaces deeper issues, however. A WMQ Workplace Diversity Officer (personal communication, Dec 2016), reported that second-language using employees were shy about speaking to managers, colleagues and residents, for fear of a breakdown in understanding. They were embarrassed to admit to taking English classes, hiding their textbooks from their colleagues. And they found it emotionally challenging, during care tasks or in the staff room, to refrain from using their first language with other staff who spoke it.

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<sup>2</sup> <https://www.wmq.org.au/news-and-events/events/2018/workplace-english-classes-for-the-community>

The experience of second language speaking carers in many ways parallels that of PLwDs: shortfalls in linguistic resources and the need for more processing time are only part of the problem. As outlined in section 3, uncertainty about the nature and extent of shared contextual information arises from both incomplete knowledge and shortfalls in taking in new information. The result is weakened potential for communicative events to achieve their goals, which can engender negative affective responses that colour relationships and shape expectations.

Can these challenges be overcome? Section 5 asks if multimodal translanguaging, in which individuals combine non-verbal signals with their knowledge and experience across language codes, can plug the communication gap successfully. But first we consider the other two causes of linguistic mismatch.

#### **4.2 Foreign-born people living with dementia**

Most research into healthcare provision for those not fluent in the language of care focusses on acute care in hospital settings (e.g. Jacobs & Diamond, 2017; Schwei et al., 2016; Squires & Jacobs, 2016). Where dementia care and multilingualism combine, however, a range of important challenges for communication are revealed (e.g. Plejert, Lindholm, & Schrauf, 2017; Rosendahl, Söderman, & Mazaheri, 2016). They include the role of bilingualism in the detection of early signs of dementia (e.g. McMurtray, Saito, & Nakamoto, 2009; Mendez, Perryman, Pontón, & Cummings, 1999), problems with the use of interpreters in diagnostic testing situations (Plejert, Antelius, Yazdanpanah, & Nielsen, 2015), and issues with low literacy in the test language (Plejert, Jones, & Peel, 2017, p. 77).

The importance of using the PLwD's mother tongue for care is frequently highlighted (e.g. Hanssen, 2013 on the minority Sami community in Finland). However, only larger minority communities are likely to furnish staff who can use the client's language. Where PLwDs have to use their second language, enforced social withdrawal, the loss of linguistic stimulation and of 'nuanced communication', and communication restricted to essential matters are typical outcomes (Rosendahl et al., 2016). For example, one second-language speaker carer unable to overcome the linguistic barrier between herself and a second-language speaker resident responded with 'soothing' and 'instrumental' comments, and 'minimal responses' that failed to address the resident's requests (Plejert, Jansson, & Yazdanpanah, 2014).

Small et al. (2015) studied interaction in two Canadian residential homes for people with and without dementia, in which most carers were second-language users of English, and most residents also were, if they spoke English at all. Of the observed interactions, 35% were

between carers and residents with no common language (Small et al., 2015, p. 289). In one home, with many Chinese residents, some carers had memorised a few Chinese words and phrases for greeting and for core care (e.g. *please, drink, swallow, good*) (p. 291). The residents, however, were powerless to convey their needs unless someone was present to interpret.

One incident reported by Small et al. illustrates the role of contextual factors (section 3). A staff-member is asking residents for their opinion on what colour tablecloths should be bought (S=staff, R=resident).

S: [name of resident], what colour table cloth? ((pointing to table cloth on table))

R: ((responds to her name being called by turning her head; looks around confused; several seconds pass, another resident repeats the question again in English to this Italian-speaking resident, who continues to look bewildered))

S: I don't think she understands.

((skips over next two residents who do not speak English and proceeds asking another resident; as she moves on, another staff member intervenes with an attempt to translate the word 'colour' into Italian, but actually uses Spanish, and without much success))

(Small et al., 2015, p. 293).

In this extract, the resident has at least two disadvantages (we do not know if she has dementia, which would be a significant third). Firstly, she does not understand the language being used. Secondly, she has no easy way to infer from context what the question might be: being asked about the colour of not-yet-purchased table cloths is hardly commonplace. As she cannot confidently home in on an area of shared knowledge with her interlocutor, she cannot establish the speaker's communicative intention. Nor can she formulate a response, since she cannot develop a communicative goal for herself.

We can imagine how confusion might proliferate, as she searches for a plausible context. Recognising a colour word, for instance, she might incorrectly infer that she was being asked to name the colour of the existing table cloth (plenty of such pointless questions are posed in elder care), and do so (whether in Italian or English). The staff member would now not know if this was a suggestion to have new cloths the same colour, or indicated a misunderstanding of some sort: that is, she, in turn, would be unable to evaluate the shared context. As a result, she would not know whether to count this suggestion, or how to respond to the resident. You don't need a mismatch of languages for this situation to arise when someone has dementia, but limited shared language increases the causes of misunderstanding.

### 4.3 Dementia care without a common language

We return now to the most extreme situation of all, where care is conducted without any common language code. According to Connolly (2012), in 2011 over 10,500 Germans (with and without dementia) were living in care homes outside their home country because it was more affordable and standards were higher.<sup>3</sup> With more than 400,000 pensioners unable to afford residential care, the German state insurers were ‘openly discussing how to make care in foreign retirement homes into a long-term workable financial model’, despite one socio-political advisory group describing the practice as ‘inhuman deportation,’<sup>4</sup> and the head of Germany’s Alzheimer’s Society observing that PLwDs ‘can find it difficult to orientate themselves in a wholly other culture with a completely different language’ (Connolly, 2012).

The care homes in Thailand mentioned earlier (for a detailed description, see Vogler, 2015) acknowledge the absence of the clients’ language and, in contrast to the commitment towards language training for carers explored in section 4.2, mostly do little to alleviate it.<sup>5</sup> The British owner of a care home in Thailand (personal communication, October 2017) commented: ‘in the case of dementia sufferers we are not talking about great conversationalists usually. You focus on language, I focus on care. To me the low care level in the West, the lack of dignity for the guest plus the costs far outweighs the language issue.’ So, what exactly is entailed in this trade off?

On the positive side, the five-star hotel-like environment is superior to most European care homes (Lacey & Foulkes, 2014; Vogler, 2015; Zander, 2017). According to a Canadian documentary featuring the Swiss-owned facility in Thailand mentioned earlier (Global News, 2014), each resident has three personal carers, working in shifts. Residents can thus safely go for walks and swims in the pleasant weather, and take as long as they need to eat the high quality food. If they need the toilet, someone will take them immediately, day or night. Visiting family have a relaxing holiday-style experience, with plenty of time to dedicate to the PLwD. Although the PLwD might go for several months without visitors, the care companies reason that those with impaired episodic memory would not remember visits anyway. Between visits, social media including video calls can connect families.

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<sup>3</sup> Destinations include: Hungary, Czech Republic, Slovakia, Spain, Greece, Ukraine, Philippines and Thailand. Japan also utilises Thai health services, again often with no shared language (Fukahori et al., 2011).

<sup>4</sup> Vogler (2015, p. 59) notes, though, that many residents are used to living in foreign countries.

<sup>5</sup> One Swiss owned home, *Vivo Bene Village*, does offer German classes for carers (Vogler, 2015, p. 43).

As for communication without a common language, the documentary shows the carers speaking freely in Thai, using touch and gesture to help the Swiss German-speaking PLWDs understand. The brochure (Carewell service, no date, p. 9) states that carers ‘know a few words and learn quickly’ (translation), which mirrors the use of instrumental Chinese vocabulary (*please, swallow*, etc) in Small et al’s (2015) study. Other communication would have to be achieved using ‘pointing, modelling, repositioning, touching and head nodding’ (Small et al., 2015, p. 291). As we have seen, these are semiotic tools that are viewed very positively in the dementia context. Perhaps, then, non-verbal means of communication can be counted as a primary, rather than supplementary, part of the linguistic package. This is what we turn to next.

## **5. Multimodal translanguaging: sufficient for dementia communication?**

### **5.1 Characteristics of (trans)languaging**

‘Languaging’, coined by Swain (2006, p. 98), is ‘the process of making meaning and shaping knowledge and experience through language.’ That is, language is a tool through which understanding is created and shared: ‘coming-to-know-while-speaking’ (p. 97). This perspective matches well the model outlined in section 3, whereby the resources of language and the processes of speech and comprehension subserve the attempt to, variously, modify and sustain shared knowledge (context) and social relationships, even while the speaker pursues other, more concrete goals.

Building on the ideas of Thibault, Cowley and Love, Li (2018) proposes that ‘languaging’ is a supraordinate activity of communication within which linguistic codes are in equal partnership with para- and extra-linguistic codes: that is, languaging is multimodal. This is because ‘human beings think beyond language, and thinking requires the use of a variety of cognitive, semiotic, and modal resources of which language in its conventional sense of speech and writing is only one’ (Li, 2018, p. 18).

*Translanguaging* occurs when more than one linguistic code is available. It is ‘the deployment of a speaker’s full linguistic repertoire without regard for watchful adherence to the socially and politically defined boundaries of named (and usually national and state) languages’ (Otheguy, García, & Reid, 2015, p. 281). Li (2018) views multilingual communication as taking place in a creative ‘translanguaging space’ where ‘language users break down the ideologically laden dichotomies between the macro and the micro, the societal and the individual, and the social and the psychological through interaction’ (p. 23), swapping whatever elements of each other’s language they can muster, and using mime and

facial expressions, etc., to clarify meanings. That is, for Li, an additional language code settles into an equilibrium with the existing multimodal features of languaging. In short, Li's account draws two aspects of languaging together: the multimodal and the multilingual. The question is, how does this combination fare when a third element, dementia, is introduced?

Applying Li's discussion to the dementia context steps outside his immediate frame of reference, which is 'everyday language practices of multilingual language users' (Li, 2018, p. 11). However, he does state that 'the main objective of a practical theory is ...to offer... interpretations that can be used to observe, interpret, and understand other practices (p. 11). Since dementia care certainly draws on a variety of para-, extra- and non-verbal means to supplement communication, it would appear amenable to the definition of 'languaging'.

The possibilities of multimodal translanguaging are illustrated in Jansson's (2014) study of a Kurdish speaker in a Swedish dementia care home. An L1 Arabic-, L2 Swedish-speaking carer mixes gestures, song, Swedish and the small amount of Kurdish language that she has learned from her husband, to reassure a Kurdish resident who is anxious about being on her own. But how dependent is such interaction on at least some shared linguistic code?

To appreciate the capacity for multimodal translanguaging to achieve communication when an interlocutor has dementia and there is *no* shared language, we need to test the parameters for 'successful' communication. Admittedly, this is not entirely in the spirit of translanguaging as a *process* featuring constant change (Li, 2018, p. 15), and 'success' is relative. Nevertheless, were it to emerge that multimodal translanguaging without a common code can only be successful if there is high confidence about shared contextual knowledge, that would indicate its unsuitability in dementia care. In order to explore the potential limitations of effective translanguaging, seven characteristics have been identified on the basis of Li's descriptions (C1-3) and their implications (C4-7). They are then illustrated using brief scenarios.

### **Characteristics:**

#### *C1. Participants have full cognitive functioning*

Translanguaging takes a lot of brain power (Li, 2018, p. 23). Speakers need easy access to the range of semiotic resources that their interlocutor knows and expects them to have. They need to be alert to the context, and able to apply a lot of pragmatics to fill in the gaps between the words and gestures (Li, 2018, p. 25).

#### *C2. Participants have a means of establishing shared context*

We saw in section 3 the importance of shared context in communication. Through memory, observation and cultural knowledge, there needs to be a meeting point between the participants that can support the effective use of pragmatics:

the Translanguaging instinct highlights the gaps between meaning, what is connected to forms of the language and other signs, and message, what is actually inferred by hearers and readers, and leaves open spaces for all the other cognitive and semiotic systems that interact with linguistic semiosis to come into play (Li, 2018, p. 25).

*C3. Both participants are able to play a relatively equal role*

Either can be the instigator of an utterance that pursues communicative goals, and the interaction is a partnership based on shared semiotic codes. In a language learning context, for example, ‘Translanguaging empowers both the learner and the teacher, transforms the power relations, and focuses the process of teaching and learning on making meaning, enhancing experience, and developing identity’ (Li, 2018, p. 15).

*C4. Both parties can be confident that they, and the other person, have a reasonable chance of making meaning*

If C1-3 apply, then each should believe the other has sufficient linguistic and cognitive resource to meet them halfway.

*C5. Non-verbal elements of communication are subject to the same constraints as the linguistic codes*

If, as Li proposes, non-verbal and verbal language are to be viewed as equal, the same characteristics (C1-4) should apply to both. Because gestures are conventionalized but (presumably) not part of extensive semantic networks in the way that words are, a high level of cognitive processing (C1) may be needed to infer, via pragmatics (C2), the intention of the gesture, which may be culturally shaped. This is particularly the case when the gesture is a conduit for achieving communicative goals, because it may have to carry more than one fairly specific semantic load. Where gestures supplement speech, both participants will use and attempt to interpret them (C3).

*C6. A correlation exists between the amount of shared linguistic code and the depth of the interaction*

Li's examples demonstrate the creative use of different linguistic codes by competent users. His conversation between two Chinese Singaporeans features seven different languages or varieties, which both evidently command (Li, 2018, pp. 13-14). The content is semantically complex, relating to feelings about a bereavement. In contrast, speakers with little shared language are likely to engage only in superficial, well-defined transactions, where both speakers have one primary type of goal in view, such as buying/selling or getting/giving directions.

*C7. An inverse relationship exists between the amount of shared code and the transitoriness of the interaction*

For an interaction to be sustained, there must be sufficient shared communicative resources. In their absence, transactions will be short and only undertaken when necessary.

*Scenario I: A shopkeeper and a customer, with little/no shared linguistic code.* For a basic sales transaction (C6), it may be enough that they have sufficient mutual confidence (C4) about sharing a small amount of relevant context (C2): the customer knows the shop sells certain goods and that the shopkeeper wants to sell them; the shopkeeper knows the customer knows it is a shop and wants to buy something that is, or might be, sold there. They operate on a relatively equal basis, as both have an agenda (C3). Both parties engage their cognitive capacities (C1) to make meaning through whatever means are available, including non-verbal ones (C5). Once the transaction is complete, the interaction ends (C7).

*Scenario II: The 'customer' from Scenario I is actually surveying shopkeepers' views about sustainability in commodities production.* This requires complex explanations and questions, the elicitation of opinions, consideration of the implications of different answers, etc; in short, a deeper level of interaction than the minimal shared language can support (C6). Tiny vocabularies in each other's languages cannot be adequately supplemented by gesture (C5) to ensure communicative goals are achieved. Because both parties need a significant level of shared context to make this exchange work (C2), the conversation soon becomes too cognitively complicated to follow (C1), and thus outstays its welcome (C7). Although the intention is that both speakers be involved equally (C3), the shopkeeper has little to gain in



return for the effort. The participants soon have little confidence that the interaction can be successful (C4).

*Scenario III: A care home interaction between a PLwD and a carer with limited/no, command of the PLwD's language.* The PLwD has impaired cognitive function, including episodic memory deficit (C1), so cannot observe the situation acutely, apply previous cultural knowledge to construct context, keep hold of the various contextual elements needed to infer and construct meaning meanings, or adapt by learning new (meanings for) words (C2). As a result, the share of interaction is unequal (C3), as well as doubly cognitively burdensome for the carer (C1), because communicating with a PLwD requires, in its own right, many of the same high-demand cognitive processes needed for translanguaging. Gesture is of limited use for the same reasons (C5). Both the PLwD and the interlocutor have low confidence that they can successfully interact (C4). Consequently, the interaction can only be superficial and instrumental (C6), and is constrained to short-lived events associated with necessary care (C7).

If C1-C7 are valid, we would anticipate that the combination of (a) communicating with a PLwD, which entails multimodal languaging in the first place, and (b) a mismatch of linguistic code, is unlikely to enable more than very basic transactional interaction to take place, for three reasons:

(1) Multimodal translanguaging is cognitively burdensome, and PLwDs have diminished cognitive capacity, while carers are already dealing with the high cognitive requirements of both communicating with someone with dementia and negotiating their own, and/or the others' limited knowledge of the linguistic code.

(2) Whereas in a shop, two unimpaired individuals may creatively fill the communicative gap, using innovative means to supplement their limited shared vocabulary, a PLwD is not in a position to create or understand such acts.

(3) Suspected and evidenced gaps in shared contextual knowledge will undermine both parties' confidence in achieving, or helping the other to achieve, communicative goals.

### ***5.2 The status of non-verbal communication in translanguaging***

As noted, for Li (2018) all semiotic elements have equal status. Drawing on the discussion thus far, there are grounds for challenging this position. Firstly, if non-verbal communication has equal semiotic status with linguistic codes, then being in an environment where gesture but no language is possible ought to be no more damaging than speaking on the phone, where language, but no gestures (excepting noises, tonal features, etc), are possible. That is clearly

not so. Rather, non-verbal communication is parasitic on C1-4, 6,7 as applied to linguistic codes. This is not because gesture cannot convey meaning without language, but because it is not a substitute for a linguistic code. Specifically, it cannot compete with the sophisticated manner in which contextual information is encoded using a mutually comprehensible linguistic code. While non-verbal communication can even have the advantage in expressing immediate information about emotions, and can be used to direct attention towards aspects of the immediate environmental context, it cannot easily index non-concrete and non-present phenomena, nor the many layers of semantic relationships available using language.

In the absence of language, gesture can only plug gaps at a superficial semantic level, where pragmatics has a chance of making up the shortfall using what is recognised as shared contextual knowledge. When an interlocutor has dementia, shared contextual knowledge cannot be assumed, and this undermines the capacity for interlocutors to rely on pragmatic inference.

Multimodal translanguaging settles at a level, according to the available shared resources. Where those resources are limited, the participants must curb their communicative ambitions and accept that the interaction will be superficial and transaction led. For them, it is probably a temporary inconvenience, till they can communicate fully again. But in dementia care there is no such escape, and such superficiality and instrumentality has been heavily criticised as inadequate for the person's wellbeing (Brooker, 2007; Kitwood, 1997; McLean, 2007). Single words and gestures cannot replace deeper semantic content. You can certainly put your arm round someone when they are upset, but without a shared language code, you can't ask 'what's the matter?' and listen while they explain the cause of their distress. Small et al. (2015, p. 294) report that 'it was rare for mutually gratifying communication outcomes to be achieved primarily through non-verbal channels.'

Li (2018, p. 26) proposes that 'language users use semiotic resources, gesture, facial expression, etc., in conjunction with language to communicate with each other.' This claim needs to be clarified. Conceptualising the relationship between linguistic and non-verbal means of communicating requires acknowledgment of an extra component. For any semantic *depth* to be possible in the communication, any reduction in the level of shared linguistic code must be balanced by a high confidence in shared knowledge, so that pragmatics can take up the strain: something difficult to achieve when an interlocutor has dementia.

## 6. CONCLUSIONS

The question posed at the start of this paper was whether people with already diminished communicative abilities can be adequately cared for if there is no common language. The conclusion drawn is that they cannot be. In the absence, for now, of any known empirical data on this matter, four major considerations were identified as pertinent to the answer:

1. The characteristics of multimodal translanguaging behaviours
2. The cognitive limitations of people with dementia, and how they affect meaning-making (particularly, difficulties with tracking context and making pragmatic inferences)
3. The potential for gesture to supplement and/or replace language
4. The role of the underpinning social environment in protecting the PLwD's 'social reserve' and hence resilience to the disease symptoms.

The concept of social reserve (section 3.2) is central in assessing the potential for overseas care to be suitable for PLwDs. Good care is person- and relationship-centred (Brooker, 2007; Brown Wilson, 2009; Kitwood, 1997; Nolan, Davies, & Grant, 2001) and it prioritises PLwDs' social reserve so as to protect their remaining abilities and provide them with opportunities for self-determination and interaction at a deep and personal level. It is very easy to overlook the remaining capabilities of PLwDs if their daily experience erodes their social reserve, because it will drive them towards hopelessness and reluctance about communicating (Sabat, 2001)

Enlightened care practices are agile to the fluctuating needs of the PLwD, and this requires attention to the minutiae of what the person does and says. Carers must progressively build up detailed knowledge about the PLwD (Moore & Davis, 2002; Rosendahl et al., 2016), so they can infer meaning when the PLwD is not able to be explicit. PLwDs require content-relevant scaffolding, including questions and follow-ups in order to maximise their expressive potential (Davis & Maclagan, 2018). If the carers are not competent speakers of the PLwD's language, this deeper level of interaction will be difficult to achieve.

While non-verbal signs are valuable in supporting instrumental physical care, and also when the PLwD has no remaining linguistic capability *at all* (e.g. Ellis & Astell, 2018), allowing non-verbal communication to replace language at an earlier point must raise questions. If PLwDs are deprived of the opportunity to use language capabilities that they

still have, they are in effect being driven to mutism at a point where they may have a great need to communicate (Brooker, 2007; Rosendahl et al., 2016; Taylor, 2007). How fair is it to expect people already struggling to make sense of the world and express ideas to now do so without any shared language code? How close can their gestures get to expressing the deep concerns, anxieties and needs that they would otherwise express (or be helped to express) using language? If their output is already hard for others to understand, how likely is it that carers with little if any language knowledge will know what they mean? As sections 4.1 and 4.2 indicate, PLwDs do not need to be overseas to encounter mismatches with the language code knowledge of their carers; where this prevents deep semantic connection, it needs attention. However, deliberately placing PLwDs in a linguistic environment in which they cannot communicate effectively, thousands of miles from those who might supplement the shortcomings of the immediate care, is particularly extreme.

The arguments made here extend beyond simply a critique of dementia care practices. They also challenge assumptions about the relationship between linguistic and non-linguistic communication, by drawing attention to a normally somewhat invisible feature of interaction: shared knowledge. As partly exemplified in earlier sections of the discussion, it is common, within and well beyond the dementia research literature, to read that non-verbal communication is semantically very powerful, even *more* powerful than language (e.g. Miller, 1990). But it has been demonstrated here that non-verbal communication is most effective *in tandem with* language. The less shared language, the more non-verbal means must be used, and we have seen that, in such multimodal translanguaging, communication is likely to be shallow and present-referenced, and to rely on the assumption of shared contextual knowledge and understanding. Once dementia comes into the picture, it undermines the reliability of shared knowledge for inferencing, and, as a result, multimodal translanguaging must be heavily compromised. It follows that depriving PLwDs of the opportunity to communicate using the language in which they have greatest facility is likely to be a significant blow for their welfare. ‘Exporting granny’ is, it seems, a step too far.

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## References

- Ballenger, J. F., Whitehouse, P. J., Lyketsos, C. J., Rabins, P. V., & Karlawish, J. H. T. (2009). Concepts of dementia and treatment. In J. F. Ballenger, P. J. Whitehouse, C. J. Lyketsos, P. V. Rabins & J. H. T. Karlawish (Eds.), *Treating dementia: do we have a pill for it?* (pp. 1-4). Baltimore: Johns Hopkins University Press.
- Bayles, K. A., & Tomoeda, C. K. (2014). *Cognitive-communication disorders of dementia* (2nd ed.). San Diego, CA: Plural Publishing.
- Brooker, D. (2007). *Person-centred dementia care: making services better*. London: Jessica Kingsley.
- Brown Wilson, C. (2009). Developing community in care homes through a relationship-centred approach. *Health and Social Care in the Community*, 17 (2), 177–186
- Bryden, C. (2005). *Dancing with dementia*. London: Jessica Kingsley.
- Bryden, C. (2018). *Will I still be me?* London: Jessica Kingsley.
- Camicioli, R. (2014). Diagnosis and differential diagnosis of dementia. In J. F. Quinn (Ed.), *Dementia: neurology in practice* (pp. 1-14). Malaysia: Wiley Blackwell.
- Carewell service. (no date). *House of help and care: baan tschuai duu lää, Care home brochure*, <http://www.carewell-service.com/documents/baan-tschuai-duu-laeae-brochure-de-neu.pdf>. <http://www.carewell-service.com/documents/baan-tschuai-duu-laeae-brochure-de-neu.pdf>.
- Colombo, F., Llana-Nozal, A., Mercier, J., & Tjadens, F. (2011). *Help wanted? Providing and paying for long-term care*. OECD Health Policy Studies, [https://read.oecd-ilibrary.org/social-issues-migration-health/help-wanted\\_9789264097759-en#page3](https://read.oecd-ilibrary.org/social-issues-migration-health/help-wanted_9789264097759-en#page3), [https://read.oecd-ilibrary.org/social-issues-migration-health/help-wanted\\_9789264097759-en#page3](https://read.oecd-ilibrary.org/social-issues-migration-health/help-wanted_9789264097759-en#page3).
- Connolly, K. (2012). Germany 'exporting' old and sick to foreign care homes, *Guardian*, 26th December <https://www.theguardian.com/world/2012/dec/26/german-elderly-foreign-care-homes>
- Coupland, J. (Ed.). (2000). *Small talk*. London: Routledge.
- Davis, B. H., & Maclagan, M. (2013). 'Aw, so how's your day going?': ways that persons with dementia keep their conversational partner involved. In B. Davis & J. Guendouzi (Eds.), *Pragmatics in dementia discourse* (pp. 83-116). Newcastle-upon-Tyne: Cambridge Scholars Publishing.
- Davis, B. H., & Maclagan, M. (2017a). Care across languages. *The Linguist*, 56 (4), 26-27
- Davis, B. H., & Maclagan, M. (2017b). Challenges and experiences in training multilingual, international direct care workers in dementia care in the United States. In C. Plejert, C.

- Lindholm & R. W. Schrauf (Eds.), *Multilingual interaction and dementia* (pp. 206-229). Bristol: Multilingual Matters.
- Davis, B. H., & Maclagan, M. (2018). Narrative and ageing: exploring the range of narrative types in dementia conversation. *European Journal of English Studies*, 22 (1), 76-90
- de la Torre, J. C. (2016). *Alzheimer's turning point: a vascular approach to clinical prevention*. Basel, Switzerland: Springer International Publishing
- Duff, P. A., Wong, P., & Early, M. (2000). Language learning for work and life: the linguistic socialization of immigrant Canadians seeking careers in healthcare. *Canadian Modern Language Review*, 57 (1), 9-57
- Ellis, M. P., & Astell, A. J. (2011). Adaptive Interaction: a new approach to communication. *Journal of Dementia Care*, 19 (3), 24-26
- Ellis, M. P., & Astell, A. J. (2018). *Adaptive interaction and dementia: how to communicate without speech*. London: Jessica Kingsley.
- Feil, N. (1992). Validation therapy with late-onset dementia populations. In G. M. M. Jones & B. M. L. Miesen (Eds.), *Care-Giving in Dementia: Research and Applications* (pp. 199-218). London & New York: Routledge.
- Feil, N., & Altman, R. (2004). Validation theory and the myth of the therapeutic lie. *American Journal of Alzheimer's Disease & Other Dementias*, 19 (2), 77-78
- Feil, N., & de Klerk-Rubin, V. (2012). *The validation breakthrough* (3rd ed.). Baltimore, MD: Health Professions Press.
- Freitas, M. I. D., Mansur, L. L., Brucki, S. M. D., Nitrini, R., & Radanovic, M. (2010). Linguistic performance in vascular dementia. *Hot Topics*, P4-143, e65-e66
- Fukahori, H., Baba, Y., Hioki, F., Monkong, S., Intarasombat, P., & Malathum, P. (2011). Healthcare services for Japanese elderly long-staying in Thailand from the perspective of the patient and healthcare providers: a survey study. *Archives of Gerontology and Geriatrics*, 53, e168-e173
- George, D. R., & Whitehouse, P. J. (2014). The war (on terror) on Alzheimer's. *Dementia*, 13 (1), 120-130
- Global News. (2014). Dementia: the unspooling mind. *16x9 Global*. Vancouver, Canada, <https://globalnews.ca/search/unspooling%20mind/>; <https://www.youtube.com/watch?v=kkvIZaSfUxc>
- Goldsmith, M. (1996). *Hearing the voice of people with dementia: opportunities and obstacles*. London: Jessica Kingsley.

- Hamilton, H. E. (2008). Language and dementia: sociolinguistic aspects. *Annual Review of Applied Linguistics*, 28, 91-110
- Hanssen, I. (2013). The influence of cultural background in intercultural dementia care: exemplified by Sami patients. *Scandinavian Journal of Caring Sciences*, 27 (2), 231-237
- Hodges, J. R., Patterson, K., Oxbury, S., & Funnell, E. (1992). Semantic dementia: progressive fluent aphasia with temporal lobe atrophy. *Brain*, 115, 1783-1806
- Jacobs, E. A., & Diamond, L. C. (Eds.). (2017). *Providing health care in the context of language barriers*. Bristol: Multilingual Matters.
- Jansson, G. (2014). Bridging language barriers in multilingual care encounters. *Multilingua*, 33 (1-2), 201-232
- Jones, G. M. M. (1992). A communication model for dementia. In G. M. M. Jones & B. M. L. Miesen (Eds.), *Care-Giving in Dementia: Research and Applications* (pp. 77-99). London & New York: Routledge.
- Juthberg, C., Eriksson, S., Norberg, A., & Sundin, K. (2010). Perceptions of conscience, stress of conscience and burnout among nursing staff in residential elder care. *Journal of Advanced Nursing*, 66 (8), 1708–1718
- Kitwood, T. (1997). *Dementia reconsidered*. Oxford: Oxford University Press.
- Kolářová, K. (2015). 'Grandpa lives in paradise now': biological precarity and the global economy of debility. *Feminist Review*, 111, 75-86
- Kunz, M., Scharmann, S., Hemmeter, U., Schepelmann, K., & Lautenbacher, S. (2007). The facial expression of pain in patients with dementia. *Pain*, 133, 221-228
- Lacey, A., & Foulkes, I. (2014, 5th January). Exporting Grandma to care homes abroad. BBC News, <http://www.bbc.co.uk/news/health-25438325>.
- Li, W. (2018). Translanguaging as a practical theory of language. *Applied Linguistics*, 39 (1), 9-30
- Manthorpe, J., Hussein, S., & Stevens, M. (2012). Communication with migrant workers: the perspectives of people using care services in England. *Practice*, 24 (5), 299-314
- McLean, A. (2007). *The person in dementia: a study of nursing home care in the US*. Toronto: Broadview Press.
- McMurtray, A., Saito, E., & Nakamoto, B. (2009). Language preference and development of dementia among bilingual individuals. *Hawaii Medical Journal*, 68 (9), 223-226
- Méligne, D., Fossard, M., Belliard, S., Moreaud, O., Duvignau, K., & Démonet, J. F. (2011). Verb production during action naming in semantic dementia. *Journal of Communication Disorders*, 44 (3), 379-391

- Mendez, M. F., Perryman, K. M., Pontón, M. O., & Cummings, J. L. (1999). Bilingualism and dementia. *Journal of Neuropsychiatry and Clinical Neuroscience*, 11 (3), 411-412
- Miesen, B. M. L. (1999). *Dementia in close-up*. London: Routledge.
- Miller, J. (1990). Communication without words. In D. H. Mellor (Ed.), *Ways of communicating* (pp. 113-124). Cambridge: Cambridge University Press.
- Mitchell, W. (2018). *Somebody I used to know*. London: Bloomsbury.
- Moore, L. A., & Davis, B. H. (2002). Quilting narrative: using repetition techniques to help elderly communicators. *Geriatric Nursing*, 23 (5), 262-266
- Neary, D., Snowden, J. S., & Mann, D. M. A. (2000). Classification and description of frontotemporal dementias. *Annals of the New York Academy of Sciences*, 920, 46-51
- Nolan, M., Davies, S., & Grant, G. (2001). Introduction: the changing face of health and social care. In M. Nolan, S. Davies & G. Grant (Eds.), *Working with older people and their families* (pp. 1-18). Buckingham: Open University Press.
- Obler, L. K., & De Santi, S. (2000). Eliciting language from patients with Alzheimer's disease. In L. Menn & N. B. Ratner (Eds.), *Methods for studying language production* (pp. 403-416). Mahwah, NJ: Lawrence Erlbaum.
- Otheguy, R., García, O., & Reid, W. (2015). Clarifying translanguaging and deconstructing named languages: A perspective from linguistics. *Applied Linguistics Review*, 6 (3), 281-307
- Patterson, K. (2014). Language disorders in neurodegenerative disease: insights into the organisation of semantic memory and language in the human brain. In L.-G. Nilsson & N. Ohta (Eds.), *Dementia and memory* (pp. 170-184). Hove: Psychology Press.
- Plejert, C., Antelius, E., Yazdanpanah, M., & Nielsen, T. R. (2015). 'There's a letter called ef.' On challenges and repair in interpreter-mediated tests of cognitive functioning in dementia evaluations: A case study. *Journal of Cross-Cultural Gerontology*, 30 (2), 163-187
- Plejert, C., Jansson, G., & Yazdanpanah, M. (2014). Response practices in multilingual interaction with an older Persian woman in a Swedish residential home. *Journal of Cross-Cultural Gerontology*, 29 (1), 1-23
- Plejert, C., Jones, D., & Peel, E. (2017). Pathways within dementia diagnosis. In L.-C. Hydén & E. Antelius (Eds.), *Living with dementia* (pp. 68-92). London: Palgrave.
- Plejert, C., Lindholm, C., & Schrauf, R. W. (2017). Multilingual interaction and dementia. In C. Plejert, C. Lindholm & R. W. Schrauf (Eds.), *Multilingual interaction and dementia* (pp. 1-22). Bristol: Multilingual Matters.



- Quince, C. (2013). *Low expectations: attitudes on choice, care and community for people with dementia in care homes*. Alzheimer's Society, [https://www.alzheimers.org.uk/sites/default/files/migrate/downloads/alzheimers\\_society\\_low\\_expectations\\_report.pdf](https://www.alzheimers.org.uk/sites/default/files/migrate/downloads/alzheimers_society_low_expectations_report.pdf)  
[https://www.alzheimers.org.uk/sites/default/files/migrate/downloads/alzheimers\\_society\\_low\\_expectations\\_report.pdf](https://www.alzheimers.org.uk/sites/default/files/migrate/downloads/alzheimers_society_low_expectations_report.pdf)
- Reilly, J., Rodriguez, A. D., Lamy, M., & Neils-Strunjas, J. (2010). Cognition, language, and clinical pathological features of non-Alzheimer's dementias: An overview. *Journal of Communication Disorders*, 43 (5), 438-452
- Roberts, A., & Orange, J. B. (2013). Discourse in Lewy body spectrum disorder. In B. Davis & J. Guendouzi (Eds.), *Pragmatics in dementia discourse* (pp. 147-204). Newcastle-upon-Tyne: Cambridge Scholars Publishing.
- Rosendahl, S. P., Söderman, M., & Mazaheri, M. (2016). Immigrants with dementia in Swedish residential care: an exploratory study of the experiences of their family members and Nursing staff. *BMC Geriatrics*, 16 (18), 1-12
- Rousseaux, M., Sève, A., Vallet, M., Pasquier, F., & Mackowiak-Cordoliani, M. A. (2010). An analysis of communication in conversation in patients with dementia. *Neuropsychologia*, 48 (13), 3884–3890
- Sabat, S. R. (2001). *The experience of Alzheimer's disease: life through a tangled veil*. Oxford: Blackwell.
- Schwei, R. J., Del Pozo, S., Agger-Gupta, N., Alvarado-Little, W., Bagchi, A., Chen, A. H., Diamond, L., Gany, F., Wong, D., & Jacobs, E. A. (2016). Changes in research on language barriers in health care since 2003: A cross-sectional review study. *International Journal of Nursing Studies*, 54, 36-44
- Sharp, S. (2007). *Home from home: A report highlighting opportunities for improving standards of dementia care in care homes*. Alzheimer's Society.
- Skills for Care. (2017). *The state of the adult social care sector and workforce in England*. Skills for Care, <https://www.skillsforcare.org.uk/Documents/NMDS-SC-and-intelligence/NMDS-SC/Analysis-pages/State-of-17/State-of-the-adult-social-care-sector-and-workforce-2017.pdf>, <https://www.skillsforcare.org.uk/Documents/NMDS-SC-and-intelligence/NMDS-SC/Analysis-pages/State-of-17/State-of-the-adult-social-care-sector-and-workforce-2017.pdf>.
- Small, J. A., Chan, S. M., Drance, E., Globerman, J., Hulko, W., O'Connor, D., Perry, J., Stern, L., & Ho, L. (2015). Verbal and nonverbal indicators of quality of communication

- between care staff and residents in ethnoculturally and linguistically diverse long-term care settings. *Journal of Cross-Cultural Gerontology*, 30 (3), 285-304
- Small, J. A., & Gutman, G. (2002). Recommended and reported use of communication strategies: in Alzheimer caregiving. *Alzheimer Disease and Associated Disorders*, 16 (4), 270-278
- Soderlund, M., Cronqvist, A., Norberg, A., Ternstedt, B.-M., & Hansebo, G. (2016). Conversations between persons with dementia disease living in nursing homes and nurses: qualitative evaluation of an intervention with the validation method. *Scandinavian Journal of Caring Sciences*, 30 (1), 37-47
- Squires, A., & Jacobs, E. A. (2016). Language and communication issues impact healthcare providers around the world. *International Journal of Nursing Studies*, 54, 5-6
- Steffener, J., & Stern, Y. (2012). Exploring the neural basis of cognitive reserve in aging. *Biochimica et Biophysica Acta*, 1822 (3), 467-473
- Stern, Y., Zarahn, E., Habeck, C., Holtzer, R., Rakitin, B. C., Kumar, A., Flynn, J., Steffener, J., & Brown, T. (2008). A common neural network for cognitive reserve in verbal and object working memory in young but not old. *Cerebral Cortex*, 18 (4), 959-967
- Swaffer, K. (2016). *What the hell happened to my brain?* London: Jessica Kingsley.
- Swain, M. (2006). Languaging, agency and collaboration in advanced language proficiency. In H. Byrnes (Ed.), *Advanced language learning: the contribution of Halliday and Vygotsky* (pp. 95-108). New York: Bloomsbury.
- Taylor, R. (2007). *Alzheimer's from the inside out*. Baltimore, MA: Health Professions Press Inc.
- Timonen, V., & Doyle, M. (2010). Caring and collaborating across cultures? Migrant care workers' relationships with care recipients, colleagues and employers. *European Journal of Women's Studies*, 17 (1), 25-41
- UNISON. (2017). *Residential care worker survey and residential care charter executive summary*. UNISON, <https://www.unison.org.uk/content/uploads/2017/06/residential-care-summary.pdf>.
- Vogler, C. M. (2015). *Receiving and providing care abroad*. (MA), Universität Wien, Vienna.
- Wray, A. (2010). 'We've had a wonderful, wonderful thing': formulaic interaction when an expert has dementia. *Dementia*, 9 (4), 517-534
- Wray, A. (2011). Formulaic language as a barrier to effective communication with people with Alzheimer's disease. *Canadian Modern Language Review*, 67 (4), 429-458

Wray, A. (2012). Patterns of formulaic language in Alzheimer's disease: implications for quality of life. *Quality in Ageing and Older Adults*, 13 (3), 168-175

Wray, A. (forthcoming). *The dynamics of dementia communication*. New York: Oxford University Press.

Zander, R. (2017). Care facilities fo elderly assisted living in Thailand. <https://iglu.net/care-facilities-for-elderly-assisted-living-in-thailand/>