

Proverbs and formulaic sequences in the language of elderly people with dementia

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Dementia

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Abstract

Some types of formulaic (routine and familiar) language seem to remain fairly intact in people with language and memory disturbances, making it a useful tool for both testing language skills and supporting language retention and use. Proverbs can reasonably be considered a subset of formulaic language, and while it is known that the ability to *understand* proverbs is compromised in dementia, completing them ought to be relatively easy, if proverbs are stored holistically like other kinds of formulaic language. However, this study reports how three people with dementia often struggled to complete proverbs in a game used in a day-care centre to stimulate the memory and language skills. By examining their responses and relating them to the causes of formulaic language patterns, it is argued that these games are not as appropriate a tool for stimulating memory and language skills as might be first thought. Although they do provide a much-needed opportunity for sustained patient-carer interaction that transcends the basic delivery of physical care needs, the games contravene some of the guidelines offered by Orange (2001) regarding the best way to support people with Alzheimer's Disease in constructive interaction.

Keywords

conversation analysis, dementia, formulaic language, idioms, language skills, proverbs

Introduction

The puzzle of poor performance in a proverbs game

This paper explores an apparent puzzle in the behaviour of elderly people with dementia – their unexpectedly poor performance in games where they have to complete a proverb after hearing the first half. Their difficulty seems contrary to general predictions about the types of language best-preserved when language and/or memory are impaired. It has been

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well-documented (e.g. Van Lancker, 1987, Van Lancker Sidtis, 2009, Wray, 2002, 2008a) that ‘some types of speech are dramatically unaffected by brain damage causing language disturbance’ (Van Lancker Sidtis, 2009, p. 446), including:

serial speech (such as counting), memorized expressions, sayings, nursery rhymes, familiar lyrics, prayers, clichés, yes, no, greetings and salutations, onsets of sentences (‘I want, I can’) as well as idiosyncratic recurrent utterances in individual patients’ repertoires. (Van Lancker Sidtis, 2009)

Bayles (2004, p. 292) confirms that amongst those in even the most advanced stages of Alzheimer’s Disease ‘many retain common social phrases such as “I don’t care” and “I don’t know”’ (see also Kempler, 1995, p. 104).

It is widely accepted that expressions with a non-literal meaning (e.g. *take something on the chin*), grammatically irregular form (e.g. *come a cropper*), or socially specific usage (e.g. *dearly beloved, we are gathered here*), are stored holistically in memory, since on-line construction and decoding using the normal language rules would give the wrong outcome. Proverbs, like idioms, being non-literal in meaning and having a strong holistic association with a social or cultural truth, thus fall into this category. Following Wray’s (2002, p. 9) definition, we will refer to multiword expressions that appear to be holistically stored and retrieved as *formulaic sequences*.

We might predict, therefore, that proverbs would be relatively well preserved, at least as memorized forms, after brain damage. However, the data presented below reveal that two people with Alzheimer’s Disease and one with Vascular Dementia struggled to complete proverbs in a game designed to stimulate interaction and language use, and in this paper we consider the reasons for the difficulties.

Formulaic sequences in dementia

Much of the early research into formulaic sequences in acquired language disorders focused on aphasia, but there has been increasing interest in their role in the language of people with dementia, particularly Alzheimer’s Disease (e.g. Davis, 2005; Davis & Bernstein, 2005; Hamilton, 1994; Wray, 2008a; Wray, 2010). Dementia is not a specific disease, but a group of symptoms caused by disorders affecting the brain. In order to be diagnosed with dementia, a person needs to show serious problems with two or more cognitive functions, such as memory and language. These cognitive changes must be severe enough to affect the functioning of the individual. For an extensive overview of cognitive-communication disorders in dementia, see Bayles & Tomoeda (2007).

Vascular Dementia and Alzheimer’s Disease (AD) can have very similar symptoms, even though the causes – reduced blood flow to the brain in Vascular Dementia, and the specific pathology of plaques and neurofibrillary tangles in AD – are quite different (UCSF Memory & Aging Center, 2009). There are still very few studies of language impairment in Vascular Dementia (Maxim & Bryan, 2006, p. 94), and although communicative functions are usually noted as a symptom, more detailed accounts are needed (Bayles & Tomoeda, 2007, p. 89).

The linguistic symptoms of AD feature semantic and pragmatic difficulties at an earlier stage than phonological or syntactic ones (see, for example, Kempler, 1995). Bayles (2004), itemising the key language problems in mild, mid-stage and advanced AD, attributes them to the progressive loss of recent memory. At first, individuals find it difficult in conversation to remember what they have just said, so that they leave sentences unfinished and repeat themselves. It also becomes hard for them to follow the content of extended input. By the

mid-stage, general temporal and spatial disorientation, along with problems in generating ideas, result in much-reduced coherence in output. In the advanced stages, only isolated vocabulary and routine formulaic expressions remain (pp. 291–292).

In a longitudinal study of the language of a woman with AD, Hamilton (1994, p. 185) showed that turns could remain syntactically well-formed long after the meaning was disordered, so that her language would not necessarily appear unusual if analyzed out of its interactional context. Wray (2008a) has suggested that the level of syntactic capacity in people with AD might be lower than is often inferred from their output, because they are able to retrieve not only irregular, but also regular multiword strings formulaically, with the grammar embedded, and because they can respond formulaically to input in a manner that gives the appearance of comprehension (see Brewer, 2005, pp. 91–93 for examples). This proposal is most plausible if people with AD can access both complete formulations and holistically stored ‘frames’ that contain slots for the insertion of content words (e.g. *give ___ to ___; would you like some ___?*). Using such frames would give the appearance of commanding grammar, while poor memory and/or confusion resulted in grammatically appropriate but contextually incongruous selections for the slots.

It is increasingly evident that for people with dementia, as also for those with aphasia, formulaic sequences can be a lifeline to a semblance of normality, making their role as a potential stimulus and support for effective interaction worthy of consideration and research (e.g. Davis, 2006, 2007; Davis, Russell-Pinson, & Smith, 2008; Wray 2008b). However, research has shown that individuals with AD can experience increasing difficulties in interpreting idioms, metaphors, and proverbs (Amanzio, Geminiani, Leotta, & Cappa, 2008; Papagno, 2001; Papagno, Lucchelli, Muggia, & Rizzo, 2003). Orange (2001) advises carers, in normal communication to ‘avoid figurative language because the person may interpret them [sic] literally (e.g. “he gave you the cold shoulder?”)’ (Orange, 2001, p. 239). Interpreting proverbs requires pragmatic decoding and abstract thinking, making tests of proverb interpretation a potential diagnostic (e.g. Campanha et al., 2008; Code & Lodge, 1987). However, the ability to produce proverbs seems to be relatively preserved, and recall activities feature in some rehabilitation programmes (e.g. Arkin, 2001; Chapman, Ulatowska, Franklin, Shobe, & Thompson, 1997). Recall, particularly the completion of a proverb started by someone else, does not require the same level of abstract engagement as interpretation does – indeed it is possible to complete the form without any decoding at all.

Thus we see a confusing picture, whereby proverbs, being formulaic sequences, ought to be well-preserved, and sometimes are found to be, at least in recall. Yet the proverb recall game often was not successful. To contextualize the later discussion of why, we must consider briefly the reasons why multiword expressions might be resilient to brain damage at all.

The reasons for the resilience of multiword expressions after brain damage

A variety of explanations exist for why at least some kinds of formulaic sequence appear to be relatively spared in acquired disorders. They derive, however, primarily from research into aphasia. One possibility fairly easily extended to dementia is that it is less taxing to achieve a communicative effect using formulaic sequences than using novel language, because formulaic sequences contain all, or at least much, of the total meaning within a single unit in memory.

Another explanation is that holistic expressions are stored and accessed outside the main ‘language areas’ of the left hemisphere and in this way avoid the direct effects of a localized

trauma with linguistic symptoms. Specifically, not only of the preservation of some formulaic sequence after damage to the language areas, but also the observed disruptions to the comprehension and/or production of fixed expressions with a non-literal meaning after damage to some other areas of the brain, suggest that some language might be stored holistically in the right hemisphere (see Van Lancker, 1987 for an extensive account of such claims), in an interhemispheric region (see Wray 2008a, pp. 190–191 for a review of evidence for this), or in regions of the left hemisphere stimulated by the situation and function in which the expression is appropriately used (Wray, 2002). However, this sort of explanation is more suited to the localized nature of damage leading to aphasia than the kinds of less predictable loci of deterioration associated with dementia.

A third possible reason for the preservation of formulaic sequences is the first-in-last-out principle, whereby formulaic language acquired early in childhood, including songs, rhymes, lists (the alphabet, numbers etc.) remains longest. However, it is doubtful if proverbs can reliably be considered early acquisitions.

Thus, different explanations for retention implicate proverbs to a greater or lesser extent. Later, we will return to these explanations, in the light of the evidence from the data.

Data collection and analysis

The data, collected as part of a larger study into language in people with Alzheimer's Disease and Vascular Dementia, are video recordings of conversations at a day-care centre for Swedish-speaking elderly people with dementia and memory disturbances in southern Finland. Finland has a stable Swedish minority community of c.5.6 per cent of the population, and supports appropriate monolingual day-care provision, such as this centre. There are no strong reasons to anticipate differences between data from this setting and from equivalent centres in Sweden itself, though the data do reveal features of the local dialect.

Collected over a three month period, the 30 hours of recordings include two-party and multi-party talk between nurses working at the day-care centre and one or more elderly speakers with dementia. Several different types of communicative activities feature, including conversations over lunch and coffee, and chatting while playing games. The aim of the activities at the day-care centre is to provide the elderly people with cognitive and linguistic stimulation. The interactions were transcribed using the conventions of Conversation Analysis, elaborated by Gail Jefferson (see Atkinson & Heritage, 1984). A list of the transcription symbols used is given at the end of the paper.

The proverb game material consisted of a bundle of cards with Swedish proverbs and sayings printed on them. This material was semi-commercial, in that it was designed for dementia carers to use but had been bought by the centre, rather than produced in-house. During the game, the carer would read the first part of a proverb aloud, and wait for one of the patients to complete it. The nurse would then read out the completion on the card, to check whether the response was correct. The activity was always initiated by a carer.

We will focus particularly on three participants, referred to as E1 (male, Vascular Dementia), E2 (male, AD) and E3 (female, AD), who displayed different reactions to the activity and performed with different degrees of success. We are not aiming to comment on the potential contribution of their particular stage or symptoms of dementia to these responses but rather to explore how the subtleties of the interactional situation might have affected what happened. At first glance, one might infer that E1 and E2 enjoy this game, in that they laugh and joke about the proverbs. Carers might make the same inference.

(1) SOM MAN BÄDDAR FÅR MAN LIGGA			(1) AS ONE MAKES THE BED, (SO) MUST ONE LIE		
01	N2:	som man bäddar,	01	N2:	as one makes the bed,
02		(0.5)	02		(0.5)
03	E2:	får man ligga	03	E2:	one must lie
04	N2:	bra?	04	N2:	good?
05	E3:	<u>hmph?</u>	05	E3:	<u>hmph?</u>
06		(3.8)	06		(3.8)
07	N2:	de som göms i <u>snö</u> ,	07	N2:	what is hidden in <u>snow</u> ,

We cannot, on the basis of the observational data, confirm or counter this interpretation, for we do not know how E1 and E2 really felt. However, we will suggest that laughter could be an indication of less positive reactions to the game than simple enjoyment. Meanwhile, the researcher notes that, although it is not particularly evident in the examples used here, E3 displayed increasing signs of anxiety as the activity proceeded, getting upset as she repeatedly failed to perform the task.

Three health care providers (N1, N2, and N3) participated in the conversations. N1 was a student of health care, working at the day-care centre during the summer. She ran one of the games. N2 was the nurse in charge of the day-care centre, and the instigator of a second game. N3 was an assistant nurse who participated in the first game. The researcher (R) participated rather passively in the conversations, making occasional comments.

First, it is important to note that the proverb game can and does work – if it did not, it obviously would not be used. In this study, around 50 per cent of rounds were successfully completed, and the difficulties outlined later must be viewed in this context. Example 1 (box (1)) illustrates a successful round. N2 gives the first half of the proverb, equivalent to the English ‘you make your bed, you lie on it’. E2 correctly completes the proverb after only half a second’s thought. In line 7, N2 proceeds with the next proverb, to which the completion would be *kommer fram i tö*, ‘turns up in the thaw’.

Problematic responses to the proverbs game

In this section, we examine a series of extracts that between them reveal a number of problems with the proverbs game. We amass, in the process, a series of observations that we will take forward into the discussion later.

Example (2) illustrates an unsuccessful round. The first half of the proverb ‘the right man in the right place’ is introduced by N1 in line 1. Both E1 and E2 respond, indicating that their turn-taking behaviour is intact. However, E2’s news-receipt token *jaha* (‘uhuh’) seems to treat N1’s input as if it were a piece of information rather than a prompt in a game. It is not clear whether he has understood the content of N1’s utterance. E1’s response (line 5) indicates that he finds something in N1’s utterance problematic. He combines the strategies of repeating and questioning, perhaps in pursuit of a repeat of the preposition *på* (short and unstressed, making it difficult to hear), or perhaps more generally seeking a completion to what he has detected to be only half a proposition.

N1 responds to E1’s question by repeating the first half of the proverb, and now E1 responds with the news-receipt marker *aj* (‘oh’), uttered with smiling voice. This could indicate that he has successfully achieved a repeat of the word *på*. However, if so, it does not lead to any attempt to complete the proverb. Alternatively, he could, like E2, be

(2) RÄTT MAN PÅ RÄTT PLATS			(2) THE RIGHT MAN IN THE RIGHT PLACE		
01	N1:	rätt <u>man</u> på,	01	N1:	the right <u>man</u> in,
02		(1.7)	02		(1.7)
03	E2:	jaha	03	E2:	uhuh
04		(0.4)	04		(0.4)
05	E1:	rätt man å va	05	E1:	the <u>right</u> man and what
06		(1.0)	06		(1.0)
07	N1:	rätt <u>man</u> (0.3) på,	07	N1:	the right <u>man</u> (0.3) in,
08		(1.8)	08		(1.8)
09	E1:	*aj*	09	E1:	*oh*
10	N1:	rätt plats	10	N1:	the right place
11		(0.9)	11		(0.9)
12	E1:	aj	12	E1:	oh
13		(0.6)	13		(0.6)
14	N1:	°här står så°	14	N1:	°it says so here°

(3) NÄR KATTEN ÄR BORTA DANSAR RÅTTORNA PÅ BORDET			(3) WHEN THE CAT'S AWAY THE RATS DANCE ON THE TABLE		
01	N2:	när katten e borta,	01	N2:	when the cat's away,
02		(2.0)	02		(2.0)
03	E3:	så, (0.8) <u>vadå</u>	03	E3:	then, (0.8) <u>what</u>
04		(1.4) ((N2 vänder sig mot E3))	04		(1.4) ((N2 turns towards E3))
05	N2:	dansar rättorna på borde	05	N2:	the rats dance on the table
06	E3:	heh heh heh	06	E3:	heh heh heh
07	N2:	<u>mm</u> : ((ler))	07	N2:	<u>mm</u> : ((smiles))
08	N3:	mm	08	N3:	mm
09		(2.9)	09		(2.9)
10	N2:	alla goda ting,	10	N2:	all good things,

responding generically to N1's utterance as if it were a statement because he has failed to understand its purpose or meaning. N1 by now seems to have some sense that neither E1 nor E2 is going to supply the missing part of the proverb and so she completes it herself. E1 again supplies a response turn (line 12), but not one that can be reliably construed as indicating recognition or comprehension. N1's comment about the text completion (line 14) may be a means of taking the edge of a delicate situation: by referring to the game card as an external authority, she distances everyone from the response, as something, perhaps, that no reasonable person could be expected to know unless they had the card to read. As illustrated in another example, it is also possible that she did not, herself, know this proverb – a matter of some significance in our later discussion.

In Example (3), E3's response (line 3) shows recognition of the incompleteness of the prior turn. As such it is possible that E3 wants to play the game but simply does not know the completion of the proverb (though this response is still, arguably, pragmatically inappropriate to a context in which it is E3's task, not N2's, to complete the proverb). Nevertheless, if we consider E3's aim as to provide a go-ahead marker that will pass the

(4) ROM BYGGDES INTE PÅ EN DAG			(4) ROME WASN'T BUILT IN A DAY		
01	N2:	Rom byggdes inte,	01	N2:	Rome wasn't built,
02		(2.1)	02		(2.1)
03	E3:	<u>vafför</u> int	03	E3:	<u>why</u> not
04		(0.3)	04		(0.3)
05	N2:	på en dag	05	N2:	in a day
06		(0.2)	06		(0.2)
07	E3:	heh heh (0.2) varför int	07	E3:	heh heh (0.2) why not
08		(0.6)	08		(0.6)
09	N2:	de vetdu den e <u>stor</u> (.) [Rom staden	09	N2:	that y'know it's <u>big</u> (.) [Rome the town
10	E3:	[heh heh heh	10	E3:	[heh heh heh
11	N2:	e ju <u>jättestor</u>	11	N2:	is <u>really</u> huge

turn back to N2 to supply the missing information, we see that she is successful. In ordinary conversation, this is the default response, since it is much more common for an incomplete utterance to be completed by its instigator, rather than by someone else (cf. Schegloff, Jefferson, & Sacks, 1977; Schegloff, 2000).

Observation 1: The proverb game breaches normal communicative practice, and requires particular pragmatic understanding and a suspension of engagement with content for information. Meanwhile, E3's response to the completion of the proverb is a laugh (line 6). A previous study (Lindholm, 2008) shows how tricky it can be to determine the function of laughter in this position in the sequence. On the one hand, E3's laughter may simply signal amusement. However, it may also be an attempt to avoid revealing lack of comprehension. In line 10, N2 accepts that the round is over, for she introduces the first part of the next proverb, *alla goda ting är tre*, 'all good things come in threes'.

In Example 4, as elsewhere, a lengthy pause following the prompt signals problems. Here, though, E3's response is a *why*-question, suggesting that E3 has taken the half-proverb to be a novel piece of information. However, we must be careful in our interpretation of E3's intention. This kind of reply could be given in jest, as a deliberate subversion of the game. On the other hand, it could indicate a failure to understand the rules of the game, or indeed that a game is being played at all. N2 produces the required second part, *in a day* (line 5), perhaps intending to increase E3's understanding, at least in relation to the false construal that Rome was not built at all. E3 however responds in line 7 by laughing and repeating her *why*-question. Again, it is possible that she is simply continuing with her joke. But it is more likely that she has not been able to make anything of the proverb completion, failing to understand the utterances in lines 1 and 5 to be parts of the same proverb unit. N2's reaction indicates that she believes so, for she steps out of the game and engages with E3's question, explaining why it would be impossible to build such a big city in a day. E3 responds only with laughter (line 10), not revealing whether she has understood N2's explanation. Laughter is a useful response in many situations, and sits particularly comfortably in a game. However, it does not necessarily indicate either that humour has been extracted from the content, or that there is genuine amusement or enjoyment.

Observation 2: Participants in the proverb game are not necessarily enjoying themselves just because they laugh. Laughter and a smiling voice may give these comments a playful nuance, but see Lindholm (2008) for alternative interpretations of these reactions.

(5) SILA MYGG OCH SVÄLJA KAMELER (i)	(5) STRAIN AT A GNAT AND SWALLOW A CAMEL (i)
01 N1: sila <u>mygg</u> och,	01 N1: strain at a <u>gnat</u> and,
02 (0.5)	02 (0.5)
03 E1: (äh) (0.8) * <u>ingenting</u> annat*	03 E1: (ah) (0.8) *nothing else*
04 [heh heh heh]	04 [heh heh heh]
05 E2: [heh heh] heh	05 E2: [heh heh] heh
06 N1: [sila <u>mygg</u> å svälja kameler	06 N1: [strain at a <u>gnat</u> and swallow a <u>camel</u>
07 E2: heh [heh]	07 E2: heh [heh]
08 E1: [aj] *jag bryr [mej int om] å svälja	08 E1: [oh] *I don't [want to] swallow a
09 E2: [de e nu då-] ¹	09 E2: [well it's ba-]
10 E1: kameler* di tar lite emot (.h) i	10 E1: [camel* they stick a little (.h) in
11 hal[sen	11 your th[roat
12 E2: [fastnar i magen	12 E2: [get stuck in your stomach

Example (5) again features laughter, as well as displaying more clearly a contrast between poor performance in the game and a general capacity to engage in meaningful exchanges. As before, neither E1 nor E2 is able to complete the proverb. E1 responds instead with a generic completion, 'nothing else' (line 3) that could effectively close that round of the game. This completion reveals his understanding that something is required, but may indicate some frustration or boredom associated with his inability to provide the expected answer. In fact, this is a typical communication pattern used by E1. When he encounters problems in providing a response during the game, he often responds with phrases like *ingenting*, 'nothing', or *ingenting annat*, 'nothing else', or, in keeping with his manner of handling a much wider range of difficult communicative situations, makes a meta-comment followed by laughter. Note that E2 joins in with his laughter (line 5).

N1's reaction is to produce the whole proverb. She seems to treat the previous turn as a rather strong signal of E1's incapacity to produce the correct response. While N1 is focused on the game, E2's laughter seems to spur E1 into a more apposite comment (lines 8, 10-11), and E2 then joins in with his own quip. Here we see clearly that both E1 and E2 have understood the words of the proverb at the literal level, and have found the idea of swallowing a camel rather ridiculous. They are operating outside the rules of the game, but using the prompts of the game as a mechanism for creativity.

Observation 3: The creative, humorous responses indicate that turn taking is intact and that games can be a useful prompt for language use and interaction.

In Example (6) the request on E1's part (line 13) for clarification indicates that he is not familiar with the proverb. He has misheard *sked* ('spoon') as *själ* ('soul'), words that are pronounced very similarly in Swedish. He also requests repetition of the subject of the clause, notably using a different grammatical construction (*har...ingen* becomes *vem e utan*), even though he could have asked *vem har ingen själ, sa du?*, 'who has no soul, did you say?' N1 deals with his difficulties by repeating *den fattige* ('the poor man') as a focused response to E1's question, and then uttering the whole proverb. E1's 'let' construction in line 22 seems to reject the complete proverb and may indicate comprehension problems.

In Example (7), E3 is faced with the same proverb that E1 and E2 had in Example (5). E3's response in line 3, which follows a long pause, is a repetition of the proverb in the previous

(6) NÄR DET REGNAR MANNA FRÅN HIMLEN
HAR DEN FATTIGE INGEN SKED

01	N1:	när de regnar manna från himlen,
02		(0.4)
03	E2:	ja
04		(2.4)
05	N1:	har den <u>fattige</u> ,
06		(1.2)
07	E1:	((stönar))
08	N1:	ingen <u>sked</u>
09		(1.4)
10	N1:	ha ni hört de [jä
11	E1	[°heh heh°
12		(0.5)
13	E1:	<u>vem</u> e utan själ °sa du°
14		(0.6)
15	N1:	den <u>fattige</u> [när de regnar
16	E1:	[den fattige
17	N1:	manna från himlen [har den <u>fattige</u>
18		ingen sked
19	E1:	[ah
20		(0.9)
21	E1:	Ja
22		(0.8)
23	E1:	*lät honom då vara utan*

(6) WHEN IT IS RAINING MANNA FROM
HEAVEN, THE POOR MAN HAS NO SPOON

01	N1:	when it's raining manna from heaven
02		(0.4)
03	E2:	yes
04		(2.4)
05	N1:	the <u>poor</u> man has,
06		(1.2)
07	E1:	((groans))
08	N1:	no <u>spoon</u>
09		(1.4)
10	N1:	have you ² heard that one [yes
11	E1	[°heh heh°
12		(0.5)
13	E1:	<u>who</u> is without soul °did you say°
14		(0.6)
15	N1:	the <u>poor</u> man [when it's raining
16	E1:	[the poor man
17	N1:	manna from heaven [the <u>poor</u> man
18		has no spoon
19	E1:	[ah
20		(0.9)
21	E1:	yes
22		(0.8)
23	E1:	*let him be without it then*

(7) SILA MYGG OCH SVÄLJA
KAMELER (ii)

01	N2:	sila <u>mygg</u> och,
02		(3.2)
03	E3:	i de lugnaste vatten
04		[simmar som <u>största fiskarna</u>
05	N2:	[svälja <u>kameler</u> de e svårt de här
06		(0.4)
07	R:	va s[a du?
08	N2	[i s- (0.3) [sila mygg å <u>svälja</u>
09		kameler
10	R:	[de ha ja <u>al</u> [dri hört
11	E2:	[(hehe)

(7) STRAIN AT A GNAT AND SWALLOW
A CAMEL (ii)

01	N2:	strain at a <u>gnat</u> and,
02		(3.2)
03	E3:	in the shallowest waters
04		[like ³ the <u>biggest fish</u> swim
05	N2:	[swallow a <u>camel</u> this is a difficult one
06		(0.4)
07	R:	what d[id you say?
08	N2:	[in s-(0.3) [strain at a gnat and
09		<u>swallow</u> a camel
10	R:	[I've <u>ne</u> [ver heard that one
11	E2:	[(heh)

round of the game. The most we can say here is that E3 selects a proverb as a response. However she provides the complete item, rather than only the second half. N2's comment that it is a difficult proverb (line 5) could be interpreted as a rationale for E3's failure to complete it, but it may actually be a more direct observation, since it possibly was not familiar to her – was not to the researcher (line 9).

Observation 4: The purpose of the game, to prompt responses to known proverbs, is undermined if there is a risk that the respondents have never known the proverb. To what extent will a person with dementia be able to distinguish between a proverb they have forgotten, and another they have never known?

In Examples (8) and (9) we see how the situation is complicated when a response is given that is plausible (e.g. syntactically and semantically correct), but is ‘incorrect’ either in the sense that it is not the customary completion of the proverb or, more narrowly, is not the completion given on the card used in the game. N2’s prompt in Example (8) is followed by a long pause, after which E3 responds incorrectly. By initiating her utterance *så*, ‘then’, E3 both shows that she has recognized the incompleteness of N2’s first pair part and that this incomplete utterance projects a *then*-clause. However, the semantic content of the completion is suggestive of an attempt to provide something generic in place of the specific (compare *nothing else* in Example 5).

(8) NÄR MAN TALAR OM TROLLEN SÅ STÅR DE I FARSTUN			(8) WHEN ONE SPEAKS ABOUT THE TROLLS, THEN THEY STAND IN THE VESTIBULE		
01	N2:	när man talar om <u>trollen</u> ,	01	N2:	when one speaks about the <u>trolls</u> ,
02		(4.6)	02		(4.6)
03	E3:	så skrattar man	03	E3:	then one laughs
04		(0.9)	04		(0.9)
05	N2:	så står de i <u>farstun</u>	05	N2:	then they stand in the <u>vestibule</u>
06		(0.6)	06		(0.6)
07	E3:	heh heh heh	07	E3:	heh heh heh

(9) I BRIST PÅ BRÖD ÄTER MAN LIMPA/GURKA			(9) IF YOU DON'T HAVE BREAD YOU EAT LOAF ⁴ /CUCUMBER		
01	NI:	i brist på bröd,	01	NI:	if you don't have bread,
02		(0.4)	02		(0.4)
03	EI:	äter man <u>gurka</u> heh [heh	03	EI:	you eat <u>cucumber</u> heh [heh
04	NI:	[heh heh heh	04	NI:	[heh heh heh
05		((vänder sig mot EI))	05		((turns towards EI))
06		(0.4)	06		(0.4)
07	NI:	*här står de att äter man <u>limpa</u> *	07	NI:	*here it says that you eat <u>loaf</u> *
		((tittar på korten))			((looks at the cards))
08	EI:	aj(h) heh [heh	08	EI:	oh(h) heh [heh
09	NI:	[*men nu kan man	09	NI:	[*but you can of course
10		[äta gurka [<u>också</u> *	10		[eat cucumber [<u>too</u> *
11	EI:	[aj(hh) [<u>*jä</u> *	11	EI:	[oh(hh) [<u>*yes</u> *
12	NI	heh heh	12	NI	heh heh
13	EI:	va man nu har ti hands	13	EI:	well what you have available
14	NI:	*va man nu har ja*	14	NI:	*yes what you have*
15		(1.3)	15		(1.3)
16	NI:	i brist på bättre	16	NI:	if you don't have anything better

E1's response in Example (9) is less easily written off, because an unexpected completion can still be legitimate in certain circumstances. Firstly, the form of a proverb can vary between speech communities and/or over time. Variation in the proverb *you can't have your cake and eat it* led in 1996 to the identification of an American terrorist, the Unabomber, since his use of the variant *you can't eat your cake and have it too* was distinctive (*The Times*, 1996). It follows that when a proverb is printed on a game card, it might not be in the 'correct' form for some people. Elsewhere in our data, for example, both E1 and E2 complete the proverb *mycket skall man höra innan öronen....*, 'one has to hear a lot before your ears...', with *faller av*, 'fall off'. The game card read *ramlar av* ('drop off'), but a search on the internet confirmed that *ramlar av*, 'drop off', and *faller av*, 'fall off', are alternative completions of this proverb. However, in the present case, it seems unlikely that E1's completion is a common variant. A Google search did not reveal any instances of *i brist på bröd, äter man [or vi] gurka*.

All the same, this does not necessarily mean it is not a legitimate completion for E1, for there is another possible explanation for it being so. Often, we carry through our lives our own turns of phrase, jokes and alternatives to common sayings, coined years ago, or passed down through the family. A colleague of Wray reports that her mother used to say *I can forgive, but I can't... knit*, a humorous alternative to *...forget* that also fails to appear in a Google search. Were this particular woman, or her daughter, to have been asked to complete the wordstring *I can forgive but I can't__*, her rendering of *knit* would be unexpected and would appear to be a novel completion, or else an error. Yet, for her, it would be the faithful reproduction of a favourite, familiar formulaic sequence. We cannot know whether E1 had a personal habit of saying *i brist på bröd, äter man gurka*. However, the phenomenon of personal turns of phrase has been noted as a feature that complicates the understanding of aphasic output (see Van Lancker, 1987, pp. 87-89 for a review, and Wray, 2010 for some specific examples), because, without premorbid evidence, it is not possible to differentiate between longstanding idiosyncratic expressions and novel ones.

Whichever, if either, of these explanations for E1's completion is correct, a more general point arises from N1's response to it in line 7, where she uses the game card as the arbitrator of correctness, implicitly downgrading E1's offering. In doing so, she is observing a necessary custom of game playing that is used to keep order when players disagree, as best illustrated by the imposition in *Scrabble* of the Chambers dictionary as the authority for permitted words (Chambers, 1994, p. v). N2 does the same when E1 and E2 use the alternative completion 'fall off', described above. The question is whether it is legitimate, in this context, to reject well-intentioned completions on the basis of the wording on the card, since it potentially undermines the respondent's confidence in their linguistic and/or game playing ability.

Observation 5: The 'rules' of a game need to be adjusted to the context. Applying game etiquette when the game is not being played in a 'normal' fashion may be inappropriate, and could signal inadequate attention on the part of the carers to the overriding purpose of playing the game in the first place.

'Playing the game': The rules of engagement in dementia

The five observations made above, in the discussion of examples, are re-presented in Table 1. We shall use these observations to explore how the proverb game fits within the ideal communicative experience of a person with dementia. People with dementia can easily experience isolation and exclusion (Norberg, 2001), as carers make judgements about their linguistic capacity that serve to deprive them of opportunities for meaningful interaction

Table 1. Five observations from the data

Observation 1	The proverb game breaches normal communicative practice, and requires particular pragmatic understanding and a suspension of engagement with content for information.
Observation 2	Participants in the proverb game are not necessarily enjoying themselves just because they laugh. Laughter and a smiling voice may give these comments a playful nuance, but see Lindholm (2008) for alternative interpretations of these reactions.
Observation 3	The creative, humorous responses indicate that turn taking is intact and that games can be a useful prompt for language use and interaction.
Observation 4	The purpose of the game, to prompt responses to known proverbs, is undermined if there is a risk that the respondents have never known the proverb. To what extent will a person with dementia be able to distinguish between a proverb they have forgotten, and another that have never known?
Observation 5	The 'rules' of a game need to be adjusted to the context. Applying game etiquette when the game is not being played in a 'normal' fashion may be inappropriate, and could signal inadequate attention on the part of the carers to the overriding purpose of playing the game in the first place.

(Grainger, 2004). In one care home for people with Alzheimer's Disease a study observed people to have only around two minutes of non-care-task-related interaction over a six hour period (Alzheimer's Society, 2007, p. v). It is therefore important that opportunities are taken to engage people with dementia in activities that are inclusive and that stimulate linguistic interaction (Observation 3). The proverb game utilizes turn-taking, which remains intact in dementia (Causino Lamar, Obler, Knoefel, & Albert, 1994; Kempler, 1995). Eliciting the completion of a wordstring that is stored formulaically ought to enable the production of an appropriate response with minimum effort, so that it is easy to succeed. As we have seen, however, proverbs were not always so easily completed. Possible explanations include:

- (A) The proverb was once known but had been forgotten or could not be accessed;
- (B) The proverb was never known;
- (C) The person with dementia did not understand the purpose of the game;
- (D) The person with dementia was inhibited or prevented in some way from playing the game.

These explanations will be considered below, along with the potential for negative experiences during the game to counterbalance the benefits accruing from opportunities for interaction.

Explanations for difficulties in recalling proverbs in dementia

It was noted earlier that proverbs are generally accepted to be a kind of formulaic sequence, because, like idioms, they have a non-literal meaning that is different from the meaning of the parts. It was also noted that other kinds of formulaic sequence tend to be spared in aphasia and dementia. So why should proverbs be different? Perhaps this completion task is plagued by the same problems that have been observed for proverb comprehension tasks. Yet it should be possible to complete a well-known expression without thinking about its abstract meaning, in the same way as one can provide the next line of a well-known poem

as a memory reflex. Pursuing here Explanation A from the list above, in this section we shall examine a range of possible reasons for the poor performance on this task.

Our point of reference will be the three reasons why formulaic sequences more generally might be resilient to brain damage, as considered earlier. The first was that formulaic sequences are less taxing to process because they are holistically stored and accessed. This would apply to proverbs, and so predict that they would be easy, rather than difficult, to recall. The second was that formulaic sequences are stored outside the damaged areas. Brain damage in dementia is not localized in the same way as in aphasia, so we would expect variation in linguistic abilities between individuals, but not particularly in a given person's recall ability from moment to moment. The third reason was that the first language material to be laid down is the last to be lost. It was noted that proverbs are not learned particularly early. This might explain why proverbs are not easily recalled.

However, there is a fourth possible reason why the proverb game does not work all that well, and it relates to Wray's (2002, p. 235) proposal that language is stored holistically for very specific reasons based on *the primacy of need*. Wray sees effective communication as a device for promoting self and meeting personal needs (Wray, 2002, p. 91 ff.) – a significant human preoccupation. She proposes that communication, being largely driven by the need to manipulate the hearer's actions, thoughts or feelings, is most effective when speakers can maximize the likelihood of hearers interpreting their utterances as intended. This is achieved by anticipating and using the expressions that the hearer processes holistically. In other words, speakers' primary reason for using formulaic sequences is not to reduce their own processing – though this will usually also occur – but to reduce the hearer's processing.

This view of what motivates holistic storage and retrieval makes two particular predictions about which formulaic sequences will be preserved in disordered language. Firstly, after many years of accessing certain formulaic sequences strongly associated with socially manipulative functions, it is possible that they can be stimulated by reflex when the appropriate social situation arises. For instance, when someone enters the room, one greets them formulaically without activating the full language processing mechanism. If so, these expressions might be spared when higher order uses of language are no longer easy to achieve. Secondly, people with a language disorder, retaining the drive to meet their needs in interaction, would draw on whatever they can still access, to achieve that end. Under conditions of general processing or memory difficulty, prefabricated expressions would then take on a much greater role, replacing more bespoke utterances, in order to achieve key interactional goals (Wray, 2010; Van Lancker Sidtis, 2009).

Viewed in this way, it is clear that proverbs, even if holistically stored and accessed, would be unlikely to be part of the privileged set of formulaic sequences that are retained in dementia. They tend not to play a significant role in interaction – in short, we could all manage without them, where we could not manage without many other kinds of formulaic sequence, such as expressions for greeting and apologising, or even rhymes used to recall the number of days in each month. Proverbs are left, then, with the same status as any other rather infrequent item in the lexicon with an abstract meaning – they *could* be recalled, but probably would not be.

A game or a test?

The proverb game is intended to be enjoyable and facilitative. However, it shares a number of characteristics with a test. Wray (2008a, p. 192) points out that testing situations demand a

focus on language that is rarely necessary in casual conversation. Self-consciousness about linguistic deficits may be detrimental even in tests of other things, such as memory, and particularly acute when the test is of language itself. In such cases, the locutionary force of language is divorced from the words – to recall words as a list is not the same as talking about the objects they denote (Observation 1). Even talking about what one would say to someone who walked into the room is not the same as greeting someone when they do. Focused attention on language can make the retrieval of words and expressions effortful, and may even force a different type of language-related processing (Wray, 1992).

It is inevitable that people with language disorders such as aphasia and dementia will have been tested from time to time in pursuit of diagnosis. As a result, they may perceive test-like activities as identifying what they *cannot* do, rather than what they can, and may well feel intimidated by them. Davis & Bernstein (2005) report how one individual ‘refused... to participate in any interaction where the conversation partner carried notebooks or picture cards or asked content-seeking questions’ (p.60). So the proverb game could generate anxiety, possibly, constraining the range of strategies available for playing it. It is well-recognized that testing does not necessarily draw out the full range of communicative abilities (Bucks, Singh, Cuerden, & Wilcock, 2000; Davis, 2005, p. xi; Davis & Bernstein, 2005; Goodwin 2003, p. 3; Hamilton, 1994, pp. 4-5; Perkins, Whitworth, & Lesser, 1998; Snowdon, 2001). Individuals with language disturbances are often more successful in everyday conversation than formal tests would predict (Oelschlaeger & Damico, 1998, p. 971). In studies of aphasia (Heeschen & Schegloff, 2003; Oelschlaeger & Damico, 1998; Wilkinson, Beeke & Maxim, 2003) and Alzheimer’s disease (Davis, 2006; Davis & Bernstein, 2005; Perkins, Whitworth & Lesser, 1998) it has been shown that research on naturally occurring interaction is needed as a complement to clinical testing.

Testing is communicatively constraining, in that there is, or is perceived to be, a correct answer to be given in a correct way – this is at odds with the way that ordinary communication operates, where there are many ways to achieve the same communicative goal. A person with communicative difficulties will naturally develop strategies to deal with them, but such strategies are unlikely to be facilitated or valued in a testing context. For instance, the ability to initiate repair (Schegloff et al., 1977) is an important skill compensating for problems in language comprehension. Requesting clarification may allow the individual with dementia to establish a shared referent and he or she may then be able to produce an appropriate response. In a test-like situation, normal repair strategies are inappropriate – and within the proverb game, pointless. The requests for clarification in Examples 2, 3 and 4 are semantically-motivated, as if there were an open choice for potential answers, rather than a predetermined ‘correct’ completion. Either we must view these requests as indicative of the participants not understanding that they are playing the proverb game (Explanation C, see next section), or else they have a different function, as repairs. In fact, the key function of these responses is to give the turn back to the carer: a turn is inserted between the initial part of the proverb produced by the nurse and the expected completion, which delays or obviates a more pertinent response, and legitimates the nurse’s own provision of the completion. Under this interpretation, the participants are exercising resourceful management of a challenging situation – when the answer cannot be given, for whatever reason, then a strategy is adopted to repair the flow of interaction and resolve the breakdown of the exchange.

Generally, another aspect of the coping strategy can be recourse to the use of easily-retrieved formulaic expressions (Van Lancker, 1987), and, as Wray (2010) notes, perceiving formulaic language as part of the solution to impaired communicative capability rather than

part of the problem is very important, not only for understanding how it is used, but also for interpreting the intended meaning of what may superficially appear meaningless.

However, it was noted in the previous section that proverbs are unlikely to figure in the formulaic expressions used in this way, because they are too infrequent in the language to be retrieved for the key interactive purposes served, most commonly, by wordstrings associated with routine greetings, interjections and personal turns of phrase.

In short, there is a false logic to the proposal that, because formulaic language can be relatively well preserved in dementia, and proverbs are a type of formulaic language, it will be beneficial to play proverb elicitation games with people with dementia. Orange, speaking of non-test interaction, advises that ‘there is no need to test the person or to make him or her recall [word(s)] without your help’ (Orange, 2001, p. 239). While tests legitimately require such recall, it is less easy to justify in a game intended to be for fun. Our data suggest that the participants do know some of the proverbs, and they can sometimes complete them, but the test-like format of the game may inhibit them from playing the game effectively (Explanation D).

It remains true that the game is not intended to be a test, and there are certain features that demonstrate this. The healthy participants can comment freely on the responses provided by the participants with dementia, and it is acceptable for participants of both types to work together to achieve a response. However, since the participants are still ‘put on the spot’ to complete the proverb, the environment is, at least, a hybrid that features test-like elements – sufficient, perhaps, for them to experience some of the negative effects of testing.

The pragmatics of games

Games operate in a non-real world. From early childhood we become accustomed to entering and leaving alternative worlds, in which animals can talk, magical spells are possible, impossible feats are achieved, and so on. The rules of a story or game are set, often explicitly, so that participants know what is and is not possible in a particular world. Games suspend selected aspects of reality in favour of a surrogate set of rules (Observation 1). For this reason, games will be incomprehensible to anyone who fails to make this transition, as may occur if they do not have the pragmatic understanding of the principle of the game, or have not realized, or have forgotten, that a game is being played. The proverb game must be quite baffling if not seen as a game (compare Brice Heath, 2006, on how cultural differences in the ‘games’ central to a western-style education disadvantage some communities).

On the other hand, when we play games we can choose to break out of the game world. Neither we, as observers, nor the carers themselves, can be sure whether E3 in Examples 4 and 8, and E1 in Example 9, are unable to enter the world of the proverb game or have chosen to step out of it. Since dementia entails confusion and memory loss, it cannot be reliably inferred that just because someone has previously played the game successfully their rule-breaking behaviour later must be deliberate. Therefore, it remains possible that in these examples Explanation C is correct, namely, the person with dementia, at that moment at least, either does not understand the purpose of the game, or that it is being played. Corroboration comes from the fact that the games are not always introduced very clearly. For instance, the second game began with N2 saying ‘Here we have something that E2 is an expert on’. E2 replied ‘mm’. The researcher asked ‘oh, proverbs?’ and N2 answered ‘that’s right’. E3 either did not hear or did not understand this introduction. She asked ‘what was it?’, but nobody answered her. Instead, N2 simply gave the first part of the first proverb (‘in the shallowest waters...’—compare Example 7, where E3 recalls this proverb in a later round).

What makes a game worth playing?

Next we must consider whether, amongst potential games to stimulate language and interaction, the proverb game is a good choice. Here, it is useful to compare it with 'Memory Bingo', a Montessori-inspired activity for dementia in a day care setting (Bognar, 2003; Camp & Skrajner, 2004). In Memory Bingo, a common saying is read aloud, minus its final word. The players have four cards, each with one word written on. If one of their words matches the missing word from the saying, they turn it over. When all four cards have been turned over, the player has 'won', though the game continues until everyone has finished (Camp & Skrajner, 2004, p. 428). Memory Bingo aims to stimulate reminiscence and long term memory stimulation (*ibid*). However, this can only be so if the game is interrupted to permit other talk. If the game is played strictly as a game, the activity will be receptive only, and a tension reminiscent of testing could be created, as the stimuli were listened for. This observation indicates the vital importance of games being introduced and administered only by those who understand their true purpose, so that they are conducted appropriately (see later).

One potentially significant difference between the proverb game and Memory Bingo regards the frequency of the stimuli in the language. While the completion of many short multiword expressions is predictable precisely because they are frequent, proverbs, like idioms, are predictable despite not being at all frequent. In the *Corpus of Contemporary American English* (385 + million words of spoken and written text)⁵, there are seven occurrences each of *a stitch in time saves nine* and *don't count your chickens before they (are) hatch(ed)*, making them a little more frequent than *logorrhoea*, half as frequent as *efficaciously*, 20 times less frequent than *hellenistic* and 70 times less frequent than *gargantuan*. Our data show that even the researcher can be unfamiliar with a proverb (Example 7). The final comment of N1 in Example (2) may also indicate unfamiliarity on her part.

The potential for including in a game some proverbs that the participants have never known bears some consideration. As previously noted, many proverbs are rare, and 'factors, such as poor education, low intelligence, and failure to understand the concept of proverbs' (Sadock, Sadock & Levin, 2007, pp. 102-103) could contribute to a poor performance, and not only in people with dementia. The proverb game only makes sense when it is stimulating existing/previous knowledge that is potentially difficult to access, but still can be accessed (Observation 4). If one can easily complete every proverb the game is as pointless as it is if one cannot complete any. People with dementia can fail to complete proverbs for two reasons – they have forgotten or cannot access them (Explanation A) or they have never known them (Explanation B), and it may not be clear to them or anyone else which of these two conditions applies. Not recognizing cases of the latter potentially increases, inappropriately, the perception of loss of previous knowledge – surely detrimental to the participant.

It is with these issues in mind that we return to the question of what the laughter observed in the examples might signify (Observation 2). All the people with dementia in this data use laughter and smiling voice in situations that appear to be problematic. Laughter is a multi-faceted device, and can help avoid expressing problems more explicitly (see Examples 3, 4, 5, 8 and 9). In a previous study of laughter, Lindholm (2008) found that laughter was used frequently to deal with problematic situations during 'testing' activities; i.e. the testing created frequent situations where elderly people had to use face-saving strategies. Carers should, at least, keep in mind the range of things that laughter might be indicating in addition to enjoyment.

The role of carers in making the game work

Taking into account the last comment in the previous section, we turn now to the role of carers in pitching the proverb game appropriately (Observation 5). Carers enter into any activity with their own agendas, which may or may not take full heed of a range of other factors, including the individual needs and preferences of the participants, the underlying purpose of the activity as designed by some third party, and so on. For example, it could be that some people in the group can cope with the proverb game better than others, whether because of the stage of their dementia, their ability on the day, their underlying knowledge of proverbs, or their general reaction to games and tests. Meanwhile, a carer could easily underestimate the impact of a test-like format, or might not realize the importance of valuing responses that are not those prescribed. As noted earlier, people with dementia develop linguistic strategies for coping with their problems. Under a strict game regime, all such strategies would be classified as wrong answers and failures. In this way, a carer could 'innocently treat people with [Alzheimer's Disease] in depersonalizing ways that diminish their feelings of self-worth' (Sabat, Napolitano & Fath, 2004, p. 178). If it can be difficult for family members to adjust their output, and expectations of input, to the changing abilities of a person with Alzheimer's Disease (Orange, 2001, p. 233), it must be much harder for carers to track the changes in a number of different people at once.

Carers can easily become too governed by the institutional agenda of simply keeping a game going, so as to have played it. So, underpinning the carer's presentation of the game must be an awareness of what the game is supposed to be for, and a readiness to modify, even subvert, it in pursuit of a more effective achievement of that purpose. We have already seen that there is no value in using proverbs that the participants do not know at all. Although the carer's own knowledge may not be a perfect match for that of the older people, it would do no harm to pass over proverbs that the carer has not heard before, or at least to signal *before* presenting one, that she herself does not know it. In the games examined here, N1 never set aside a difficult proverb, whereas N2 did so several times.

At its best, the game will stimulate co-operation between the participants, with responses successfully constructed as a joint activity that creates, along the way, opportunities for information exchange, jokes, questions and other interpolations. In Example (9) N1, by laughing with E1, makes it possible for him to be creative and to continue his word play. Co-operation between the participants with dementia can also be effective. Sometimes a semantically empty response (e.g. Example 5) will trigger a situation in which a joke is offered, or there is a play on words. Such opportunities can be of great importance. For instance, E2 speaks less than the others. If he does not know the right answer and he is not explicitly addressed, he often does not answer at all. He provides more elaborated responses only if there is a lengthy discussion about the meaning of the proverb, or if another person develops the topic. His memory problems are probably causing slowness in the processing of the current topic; if the conversation moves too quickly away from the topic, he is unable to produce more lengthy responses. In Example (5), E1 and E2 develop jokey comments only after E1 has failed to provide the completion and N1 has given it.

In sum, we can see how important it is that the carers construe and present the game appropriately, in order to assess the likelihood of all four of the explanations for a poor performance identified earlier: A: forgetfulness; B: lack of original knowledge; C: not understanding the game; and D: being prevented in some way from playing it. In the context of Orange's petition to 'focus on information exchange rather than the person's

accurate use of words' (Orange, 2001, p. 239), we must recognize the additional layers of communication entailed in playing a game. While it has long been acknowledged that 'interpersonal relationships between nurses and patients could benefit from training in communication skills' (Grainger, 2004, p. 492), some more specific training in how to use games effectively might also be in order.

Conclusion

This paper has explored the dynamics of how a game, played in order to stimulate language and communication in people with dementia, also has the potential to be detrimental to its players. It has been noted that proverbs seem at first a good choice for such a game, since they are formulaic in nature and formulaic language is known to be relatively well preserved in dementia. For non-impaired people, completing proverbs will either be too easy, if the proverb is known, or impossible if it is not. This makes the game suitable only for those who have difficulty remembering information they used to know. However, the game easily comes to resemble a test, creating stress in the participants, and devaluing as incorrect a range of strategies that can effectively mitigate the symptoms of dementia in more conversational contexts. Furthermore, the participant may become unnecessarily discouraged if unable to distinguish between proverbs once known but now forgotten, and others never known. Carers need to keep a careful eye on whether the participants are enjoying the game or becoming undermined by it. Moreover, they need to be able to assess whether a participant has realized that a game is being played and what that entails pragmatically (e.g. that the stimuli are citations and should not be construed as novel, meaningful input). It seems that, in different situations, all four explanations for a poor performance in the proverb game could apply, along with the more general fact that proverbs are rare in use and may on that account alone be difficult to retrieve.

The role of carers is particularly important in that they are the gatekeepers of such activities. If games intended to stimulate language and communication do not work, they may be harmful to the self-esteem and confidence of the participants. Conversely, in so far as they are perceived not to work, they may be unnecessarily discarded as valueless, reducing the range of opportunities for participants to engage in language-related activities.

Notes

1. *dâ-* appears to be the first syllable of *dåligt*, 'bad'.
2. plural form.
3. 'like' is a translation of *som*, which seems to be a slip of the tongue for *dom*, the definite article.
4. 'Loaf' is a little misleading as a translation, since *limpa* is a sweetened bread considered to be of low status. Thus, the meaning of the proverb is that if you can't have something of good quality you must make do with something of poor quality. We are not aware of a proverb in English with that meaning.
5. Accessed via <http://view.byu.edu/>

Transcription symbols

- | | |
|-------|---|
| [| overlap begins |
|] | overlap ends |
| (0.6) | intervals or pauses, marked in tenths of a second |

.	falling intonation
,	continuing intonation
?	rising intonation
<u>oh</u>	emphasis
°oh°	quiet talk
oh:	prolonged sound
o-	abrupt cut off
heh heh	laughter
oh	smiling voice
(oh)	doubtful transcription
(h)	exhalation
(.h)	inhalation
(())	description of the talk or non-verbal activity

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