

○ **COGNITIVE AND AFFECTIVE ENHANCEMENT AMONG OLDER ADULTS: THE ROLE OF LANGUAGE**

Merrill Swain OISE/University of Toronto
merrill.swain@utoronto.ca

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In this paper, one of the goals is to highlight a disciplinary intersection between applied linguistics, psychology and gerontology. Though connections between applied linguistics and psychology, and applied linguistics and gerontology, have been made in the past, the particular intersection described offers some new insights by making use of a Vygotskian sociocultural theory of mind perspective as the basis for thinking about these three disciplines. A key idea that a Vygotskian perspective adds is the notion that mind is mediated, and also it adds a particular way to view the relationship between language and thought (Swain, Kinnear & Steinman, 2011).

The research question I intend to explore in this talk, making use of several of Vygotsky's insights, is whether languaging by older adults who have been diagnosed as cognitively impaired helps to restore aspects of cognitive/affective functioning?

One might wonder how I made my way over from second language acquisition (SLA) research to gerontological research. The short form of the story is easy: it was a combination of life experiences and new theoretical thinking that brought me to this meeting place. The life experiences relate to my experiences with older adults, most notably to those with my parents, both of whom lived to age 90. Both of them had experienced cognitive decline by then. My experiences with them provided the inspiration to explore the usefulness of Vygotskian concepts I had been working with in SLA to other contexts, specifically to that of older adults experiencing mild cognitive impairment. From studies around the world, we know that about 15% of persons aged 70 and older are diagnosed with mild cognitive impairment (Petersen et al., 2009), so the issue is not a trivial one.

Several of Vygotsky's ideas have struck me as being particularly pertinent to these issues. First and foremost, Vygotsky maintained that cognition and affect are inextricably interconnected (Swain, 2011). According to Vygotsky (as cited in Wertsch, 1985, p. 189), "The separation of the intellectual side of our consciousness from its affective, volitional side is one of the fundamental flaws of all of traditional psychology...[the intellectual side] is separated from all the fullness of real life, from the living motives, interests, and attractions of the thinking being". One important implication of this perspective is that enhancing

cognition and affect go hand in hand. In the gerontological research concerned with communication and interaction, however, the focus tends to be affectively oriented.

Secondly, Vygotsky argued that from a developmental perspective, our mental processes are first mediated, that is, regulated, by objects in the external world. Then mental processes are regulated by others, particularly through the mediating tool of language. Finally, as language is internalized, it comes to regulate the individual's own cognitive processes. Although described as a developmental sequence – from object regulation to other regulation to self-regulation – in reality, among adults the locus of control moves among object, other and self, depending on an individual's need for support from the environment to carry out the mental tasks at hand. An observable aspect of mild cognitive decline can be a subtle shift from self- to other-regulation for such higher mental functions as, for example, focusing attention, recalling events, reasoning, problem-solving and decision-making. A shift from other-regulation to self-regulation can therefore be seen as a positive cognitive/affective change. The gerontological research, to my knowledge, does not look at language use as indicative of this sort of developmental change, so here is a contribution that applied linguistics and sociocultural theory can make to research with older adults.

Thirdly, and following from this last point, Vygotsky argued that *language* becomes one of our most important tools to mediate these higher mental processes. Vygotsky (1978; 1987) did not see language and higher mental processes as one and the same thing, but rather as inter-related through their genesis. He would have argued vehemently against the current cognitive views of language which see language as simply the conveyor of already worked-out thoughts; as just taking what is in the head and saying it. Instead, Vygotsky (1986, p. 219) argued that “thought undergoes many changes as it turns into speech”. “Thought”, he said, “is not merely expressed in words; *it comes into existence through them*” (p. 218).

We need a term to cover this process of “coming into existence through words,” and the term I have been using is “*linguaging*” (e.g. Swain, 2006, 2010). I do understand that there are those who do not like this word, however, as one of my colleagues said: “all other words are occupied.”

The term *linguaging* is intended to mean something different than just talking or conversing, than simply a vehicle for communication. My intention in using the term *linguaging* is to focus attention on the *process* of producing language rather than on the product itself. The concept of *linguaging* is about the use of language to mediate complex cognitive processing; in effect, to talk one's way into understanding. When it is not effortful, when it is not a struggle, then it is not *linguaging*. In my view, the concept of *linguaging* opens up how we might see the role of language in cognition: as an agent in the creation of higher mental processes and as a mediator of them. If it were not for language, how would we focus attention, consider the past, plan, and imagine the future? A person is also *linguaging* when

reasoning, problem-solving, and so forth. When language is used for these functions, the individual is languaging. My hypothesis is that if an older adult is *not* given opportunities to language, then the power to create meaning, to plan, to attend, to organize, and to problem solve will dissipate. Thus, one possible reason for mild cognitive loss among older adults may lie in the lack of opportunities they have to language. If opportunities are limited, then cognitive loss rather than cognitive maintenance or development might occur. If this is the case, then providing opportunities to language may be one route to cognitive maintenance and development, and positive affective change.

It was from these insights from Vygotsky, and my own experiences with older adults, that the current exploratory study was conceived. In essence, the study was designed to give older adults, who were socially isolated, the opportunity to engage once again in languaging through involving them in activities that were cognitively complex, necessitating the use of language to mediate thinking.

Thus the research question addressed was whether languaging by older, isolated adults, who had been diagnosed as being cognitively impaired, helps to restore aspects of cognitive/affective functioning? In other words, would we observe evidence of positive cognitive and affective change among those with mild cognitive impairment, who, over time engaged in languaging?

I knew from personal experience that there were individuals in long-term care facilities who rarely, if ever, had opportunities to language. They had few, if any, visitors due to their life circumstances, they tended not to interact with other residents, and staff were too busy to spend one-on-one time with them. It was for these reasons that I chose to conduct the research in a long-term care facility, Magnolia Place (pseudonym).

Senior staff at Magnolia Place selected the residents who would participate in our study. We requested that the individuals they chose be considered as cognitively impaired, but *not* suffer from Alzheimer's disease. We also requested that the residents be persons who rarely, if ever, had any visitors with whom they regularly conversed.

Before meeting any of our participants, the research team had prepared a set of languaging activities that could be undertaken with residents to stimulate cognitively rich interactions. These activities included doing crossword puzzles, writing poetry, reading articles from newspapers or magazines and discussing them, telling autobiographical narratives, reminiscing about the past, and so forth. (See also Hagens, Beaman & Ryan, 2003). These activities were intended to encourage languaging by the participants.

Each member of the research team was assigned to one resident. The resident and the team member met together for an hour or so, once or twice a week. These meetings took place over a period of 10 to 12 weeks, at the convenience of the resident. We always met with the resident in his or her own room. All conversations were recorded and transcribed.

As I have indicated, this research is exploratory in nature. Still, as we prepared to conduct the study, the intersections of sociocultural theory (SCT), gerontology and applied linguistics suggested contributions that SCT and applied linguistics could make to that part of the field of gerontology that pays particular attention to social interaction and communication (e.g., Carpiac-Claver & Levy-Storms, 2007). I have suggested three possible contributions below.

First, much of the gerontological literature concerning older adults in long-term care facilities has focused on the relationship between social interaction and affective change (e.g., Cattán, White, Bond & Learmouth, 2005; Ryan, Hummert & Boich, 1995), rather than on the relationship between social interaction and cognitive change. Vygotsky's point that cognition and affect are inseparable, however, suggests that although focusing on cognitive change, affective change will be thoroughly interwoven.

Second, the gerontological research that has focused specifically on communication between caregivers and the cared-for person, has tended to focus on the language of the caregiver, not the language of the cared-for person. This body of research has revealed the prevalence of a particular form of patronizing talk that caregivers use with elderly persons. This form of talk is known in the literature as *elderspeak* (Kemper, 1994; Williams, Kemper & Ryan, 2003). It is characterized by a slowed pace, simplified syntax and vocabulary, exaggerated intonation, elevated pitch and volume, and use of diminutives and collective pronouns. Ryan, Giles, Bartolucci and Henwood (1986) have pointed out that elderspeak has a negative effect on elders' self-esteem and contributes to cognitive decline. Perhaps these effects of lowered self-esteem and cognitive decline result in part from inhibiting the languaging of the person to whom elderspeak is being addressed?

Third, much of the gerontological research concerning communication views language as a means of communication, as a carrier of already worked-out thoughts; it does not consider language as a cognitive tool. Understanding that language mediates cognitive/affective processes provides new and significant reasons for encouraging the participation of older people in languaging. To date and to my knowledge, there has been no research that examines the relationship between the languaging of residents in a long-term care facility and the restoration, maintenance or increase in cognitive functioning.

Of the five residents selected by Magnolia Place staff, three best fit our two criteria of demonstrating mild cognitive impairment, and not having regular visitors. They are Agnes, Mike and Alise (pseudonyms).

Agnes, who was 94 at the time of data collection, grew up in the Canadian prairie province of Saskatchewan during the Depression. She had to leave home and work for her room and board in her early teens. Eventually she moved to Toronto to find work. She married, but divorced shortly after giving birth to her son, and never remarried. Her son, who was her only child, had passed away some years before. As she mentioned in one of the sessions,

'I'm the only one alive.' Agnes had some health problems, and her eyesight and hearing were declining, which at times made communication and her participation in the sessions challenging. Nevertheless, during the time the researcher, R1, and Agnes interacted, Agnes participated in cognitively challenging activities with R1. As we will see, a comparison of the first, middle and last sessions revealed improvement in Agnes' cognition and affect.

Mike, who was age 71 at the time data collection started, had been in Magnolia place for two years. Mike was a musician and a great lover of music. In his youth he studied and played the flute and other wind instruments. The radio in his room was always tuned to Canada's national broadcasting network where news and music abound. Mike had worked as a social worker for many years and had been a director of a community legal clinic.

Mike had five children with his first wife. They and his grandchildren lived some distance away and only one daughter visited him once or twice a year. His second wife visited regularly, but staff reported that "they never talked." His wife told the researcher, R2, "Y'know those couples you see sitting in a restaurant and they have nothing to say to each other? Well, that's Mike and me."

Mike had been a politically minded individual and a community activist; in fact, he had lobbied against the construction of the very facility in which he was residing. After he moved to Magnolia Place, Mike became involved in the Residents' Council which represents the interests of the residents to the administration. But he had lost interest in participating quite some time before the languaging sessions began. After the sessions, some of the staff commented on Mike's affective and cognitive improvement, including his re-involvement in the Resident's Council.

Alise, who was 75 at the time data collection started, had been residing in Magnolia Place for three years. I was the researcher (R3) who interacted with Alise. My first impression of Alise was of an attractive, well-cared for person with a sense of humour and curiosity. Every available surface in Alise's room was covered with books and, without fail, there was an open book on the tray of her wheel chair. Alise had suffered from multiple sclerosis for about 20 years and was confined to a wheelchair. Some of her symptoms were severe: she had difficulty moving her fingers and as a result she was not capable of performing a number of daily routines, for example, cutting her food, feeding herself, dialing a phone, or co-ordinating her movements in order to write legibly.

Alise was born in Latvia and immigrated to the US, and then Canada, at about age 17. In Canada, she married and had 4 children, two of whom died of HIV/AIDS. Of her two remaining children, she was estranged from her daughter and rarely saw her son. Various care staff dropped by to give her pills, snacks, clean clothes, and so on. She told me she would prefer not to talk to them because they already thought she was "nuts," and she did not want to give them any chance to have their conclusions verified (Lenchuk & Swain, 2010).

Alise had not made friends with other residents because, she said, “I don’t like people.” In some ways I never understood her saying that she did not like people, because we got along famously. But I think what she really meant is that she did not like to talk to people in the long-term care facility because they had her incorrectly pegged as “nuts,” “confused,” “stubborn” and “incompetent.” In Lenchuk and Swain (2010), we wrote about Alise’s perception that others at Magnolia Place had a negative image of her, and how her interactions with me counteracted this negative picture of herself.

We have used discourse and microgenetic analyses to help us understand our data (see, for example, Gutiérrez, 2008). The goal of microgenetic analysis is to understand an outcome by examining the process that led to it. Wertsch and Hickman (1987, p. 252) described microgenesis in a Vygotskian framework as “the study of the dynamic process of developmental change”. By means of examples involving the interaction of a parent and child doing a complex puzzle, they demonstrated problem-solving in progress, where the child moved from other-regulation to self-regulation. In the microgenetic analyses of Mike’s and Alise’s languaging excerpts, their languaging makes evident the process of cognitive/affective change over time. In the case of Agnes, we drew upon Dijkstra and his colleagues’ discourse analysis framework (Dijkstra, Bourgeois, Allen & Burgio, 2004).

Because most of the work in the gerontological field that has researched social interaction in long-term care facilities has focused on the relationship between social interaction and affective change, I will instead begin by addressing the relationship between social interaction and cognitive change. I will examine Agnes, Alise and Mike from that perspective, but as we will see, cognition cannot be separated from affect.

Amongst Agnes, Mike and Alise, Agnes’ cognitive decline had been the greatest (she measured 15 on the MMSE¹ at the start of the study). As noted above, we used Dijkstra et al.’s (2004) discourse analysis framework to examine changes in her cognitive functioning. Dijkstra et al. (2004) argued that discourse impairments and discourse builders are indicative of aspects of cognitive functioning such as semantic memory and working memory capacity. Discourse builders include local coherence (number of utterances connected to preceding utterance), elaboration (utterances that provide greater detail about a topic than was previously discussed) and number of unique words (number of new words in an utterance). An example of local coherence (LC) that occurred in session 5 is illustrated in excerpt 1 below.

Excerpt 1:

R1: Oh it looks like you’ve been reading the paper here.

Agnes: No no, I’m not gonna read the paper. [LC] I’m going to cancel my whole paper. [LC]

R1: Oh, why’s that?

Agnes: 'Cuz I don't get a chance to read it. [LC]

R1: Oh really?

Agnes: Because...for one thing, a lot of times I'm not in the room to read it. [LC]

R1: Oh right. So where are you during the day then, when you're not in the room, where do you go, during the day?

Agnes: I don't know where I went. [LC] I forget. ...[6 secs] [LC] Well I'm not in the room to read it. [LC]

Discourse impairments include aborted phrases (incomplete phrases not continued within the next two utterances), disruptive topic shifts (abrupt shift in topic) and unclear phrases (utterances that have unclear meaning). An example of a disruptive topic shift that occurred in session 9 is illustrated in excerpt 2 below.

Excerpt 2:

R1: Mmm. You've remembered a lot of names today.

Agnes: Did I?

R1: Yes, yes. You never mentioned these names before.

Agnes: Yeah, well I guess it's just because...my ears are...aren't very good today.

In the Dijkstra et al. study, older adults with cognitive impairment were compared to those whose cognitive functioning was normal. They found that their participants who were cognitively impaired had a lower frequency of discourse builders and a higher frequency of discourse impairments compared to those whose cognitive functioning was normal, supporting their hypothesis that discourse is indicative of cognitive functioning.

In the Dijkstra study, 5 minute speech samples of 60 older adults were analyzed. In our study, we used Dijkstra's discourse analysis framework to look at one individual, Agnes, across a period of two months. From the 10 recorded sessions, we analyzed 60 minutes of Agnes' discourse from each of the first, middle and penultimate session. Our hypothesis was that over time there would be an increase in frequency of discourse builders and a decrease in frequency of discourse impairments. Here is what we found.

For Agnes, all three measures of discourse builders, namely, local coherence, elaboration, and number of unique words per utterance, showed an increase over the two-month period. Furthermore, discourse impairments, namely, aborted phrases, disruptive topic shifts, and unclear phrases showed a decrease over the same time (for details, see Swain, Lapkin & Deters, 2013.)

As I have pointed out above, Dijkstra and his colleagues argue that cognitive functioning is signaled in the discourse of its users. These results, thus, suggest that Agnes' cognitive functioning improved over the two months that she engaged in languaging activities with R1. Additionally, these findings are also evidence of a move from other-to self-regulation.

The results from Alise support a similar conclusion. In Alise's case, we chose to use microgenetic analysis. Spread across the 2 ½ months that I interacted with Alise, she occasionally talked about her brother as part of a larger story of how she ended up in Canada. These fragments of her story about her brother appeared 5 times – in sessions 1, 2, 4, 6 and 10. For details, see Swain and Lapkin (2011). In excerpts 3 and 4, two aspects of development that occurred over time are illustrated: a movement from other-regulation to self-regulation, and an increase in story coherence and lexical specificity. In excerpt 3 (session 1), Alice is other-regulated; whereas in excerpt 4 (session 10), she is self-regulated.

Excerpt 3:

Alise: Yeah, but my brother had been in the army. It was no big deal you know. They called up teenagers [laughs] and that was it.

R3: In the German army?

Alise: Yeah.

R3: Mm hmm.

Excerpt 4:

Alise: And what happened, my brother **had been** in the German army, but not *because* he wanted to be. He was [there] *because* the Germans had mobilized everybody.

R3: Mm hmm.

Alise: *So* my brother, it was on his record that he was in the German army.

R3: Mm hmm.

Alise: *So* he couldn't get to the States.

The temporal marker [bolded] and the logical markers [italicized] ensure its coherence. The use of "mobilized" and "record" [underlined] replaced earlier vague phrasing. Furthermore, I was not needed except as a listener; Alise was totally self-regulated in her telling of this narrative episode.

The recalling of past events in a coherent manner with rich details, may be a cognitive struggle for an older adult, particularly one, who like Alise, had had little opportunity to talk about her

past because of her social isolation. In this sense, narrating constitutes languaging (Lenchuk & Swain, 2010). Remember, languaging is the use of language to mediate attention, memory, and knowledge creation. These data suggest that, over time, as Alise retold aspects of her life history, languaging focused her attention and mediated the re-creation of her story such that she was able to tell it more coherently, and with greater lexical richness, than in earlier tellings. This increased coherence and lexical specificity is indicative of Alise's cognitive improvement; also, so is her shift from other-regulation to self-regulation.

It is useful to think of cognitive development as the enactment of a Zone of Proximal Development (ZPD). According to Vygotsky, the ZPD is the movement from being able to do something with the help of others to being able to do it on one's own. In other words, it is the movement from other- to self-regulation, as exhibited by both Agnes and Alise. The ZPD is actively created by two or more individuals engaged in a learning/teaching process in which a more knowledgeable person assists a less knowledgeable person through questions, prompts, and hints. This is the process through which knowledge is co-created, internalized and made available for transfer to new contexts.

Below, I illustrate an enacted ZPD with data from Mike and R2. In their eighth session, R2 engaged Mike in poetry-writing activities. Of course, the purpose of doing this was to engage Mike in a cognitively challenging task, that is, writing a poem. The first poetry-writing activity involved writing a poem that looks like a diamond on the page. She gave him this poem:

Winter
Rainy, cold
Skiing, skating, sledding
Mountains, wind, breeze, ocean
Swimming, surfing, scuba diving
Sunny, hot
Summer

Writing such a diamond poem involves knowledge of the thematic content (winter and summer as in this poem), implicit or explicit knowledge of parts of speech (nouns, adjectives, verbs) and of the structure of the poem (number of words in each line). R2 and Mike went through this poem, discussing these various elements. Immediately following this, Mike, with R2's support attempted to apply what he had learned by writing a new diamond poem. The outcome is the following poem about Music:

Music

Playing, leading

Tonguing, conducting, blowing

Woodwinds, brass, strings, percussion

Conducting, leading, cleaning the instruments

Classical, instrumental

Quartet

The process of producing this poem took 217 turns. Below are excerpts 5 and 6, taken from the interactions between Mike and R2, which illustrate the process (see Lapkin, Swain, & Psyllakis (2010) for more details).

To set the scene, Mike was in bed, and had the original, enlarged “winter” diamond poem in front of him. As they co-constructed the new poem, R2 printed the text they were creating on a blank sheet of paper.

The activity began with R2 suggesting that they write a diamond poem on the topic of music, one of their shared interests. In excerpt 5, R2 challenged Mike to find nouns for the fourth line of their new poem on music that would parallel the model poem.

Excerpt 5:

R2: What kinds of words are those: mountains, wind, breeze, and ocean?

Mike: Verb.

R2: Um...

Mike: Sometimes they're verbs. Uh, adjectives. Descriptive adjectives.

R2: I think they're nouns: mountains, wind, breeze, ocean.

Mike: Right, you're right. Yeah, yeah.

R2 tried to elicit the part of speech needed to fulfil the requirements of the fourth line of a diamond poem, asking Mike to name the category of words needed. He tried “verbs” and then “adjectives.” She then provided explicit help “I think they're nouns.” and Mike agreed.

Excerpt 6, which occurred about 150 turns after the interaction in Excerpt 5, there is evidence of Mike's cognitive/affective change.

Excerpt 6:

R2: The only thing we're missing now is a final...what kind of word is that? [pointing to 'summer' in the original diamond poem]

Mike: Descriptive.

R2: Well, it's not an adjective, is it?

Mike: No, it's a noun.

R2: It's a noun. So we need a final noun. We started with 'music', but we can think of another noun that's in the same domain, right?

Mike: Right.

R2: What do you think?

Mike: No, what do you think?

R2: Oh, I'm not supposed to think.

Mike: [chuckles]

R2: [laughs] You're supposed to think. We're in the general domain of music.

Mike: Right.

R2: So there are many nouns that fall into the domain of music. For example, what kind of piece is this? [referring to the music playing on the radio]

Mike: Baroque.

R2: Yeah, but can we think of a noun?

Mike: Un quartet.

R2: Yes! That's exactly what I was thinking. Either a quartet or a symphony or a concerto, right?

Mike: Yeah. That's very obviously a quartet.

R2: Yeah, exactly!

Excerpt 6 begins with the search for a final noun for the 'music' diamond poem. When R2 rejected Mike's label of 'descriptive' for the word 'summer' in the original poem, she provided what Aljaafreh and Lantolf (1994) term 'graduated and contingent' assistance, saying 'well, it's not an adjective, is it?' Mike agreed, stating that it was a noun. This happened about 150 turns after R2 had first used the label 'noun'. But, here, Mike generates

the term rather than, as before, R2 provided it for him. In the intervening turns, R2 moved from pointing out which words were nouns, adjectives, and verbs to asking for their labels, or asking him to produce a noun, verb or adjective as the task required.

When R2 asked Mike what kind of music was playing on his radio, he responded by accurately describing it as baroque. But she insisted on a noun, and Mike used his scaffolded understanding of what a 'noun' was to provide 'quartet'. We consider this as evidence that during the co-creation of this prolonged ZPD, R2 helped Mike to understand the task requirements, a contextualized meaning of 'noun', and provided the basis for future self-regulation where he would be able to write a diamond poem on his own. Even though R2 did not ask him to do that, we can see, in the difference between the first and second excerpt, Mike's growing confidence with the task, along with gentle teasing of each other which allowed both the opportunity to acknowledge that the task was not easy. Importantly, they drew on Mike's expertise in music, making it possible to accomplish this cognitively complex task successfully. Accomplishments such as this one, found throughout the transcripts, provided Mike with a growing sense of pride and pleasure in himself.

Changes in Mike's self-esteem were evident not only to R2, through Mike's increasing engagement and enthusiasm, but were also confirmed by a staff member who mentioned that Mike had begun attending the Residents' Council meetings that he had given up before our intervention had begun. One of the front-line staff members at Magnolia Place said she would have characterized Mike as depressed when the languaging intervention began but as "happy" as R2's visits continued. Mike's wife said to R2: "there's a big change [in him] and I think part of it is due to talking to you and making him feel a little bit more valid. Valid as a person." One observes here how completely intertwined Mike's cognitive improvement is with his affective changes.

This affective shift in self-esteem was evident in each of Agnes, Alise and Mike. In Agnes's case, we observed changes across the sessions in her self-concept and her social engagement, that is, her interest in activities and in other people in her surroundings. For example, in the first session, Agnes made several comments which reflected a lack of self-worth and a lack of interest in the activities that R1 suggested to her. Agnes viewed herself as an old, uninteresting woman. For example, when R1 asked her about her life at Magnolia Place, Agnes said, "Well you know we're all **old** people." In fact, Agnes referred to herself as an "old bag" and said that she was not as smart as she once was. When R1 asked Agnes questions about her life history, Agnes said, "You wouldn't be interested in ... ancient history." Agnes did not express much interest in any particular activity at Magnolia Place, nor did she talk much about any interest of hers.

By session 9, however, Agnes' engagement in the ongoing languaging activity became apparent in several ways. Agnes and R1 were often interrupted by a staff member bringing

tea or laundry, or completing some kind of health check. This usually happened without comment, but in session 9, Agnes was annoyed at the distraction as seen in the extract shown in excerpt 7.

Excerpt 7:

Agnes: (...) Somebody's always interrupting me, honest to god. ... You see how many people come in?

R1: Mm hmm.

Agnes: And you're talkin', and all of a sudden you...they're gone, and you don't know what the hell they're, what they **want**. ... I mean I can't go on like this forever.

Excerpt 7 suggests that Agnes was quite interested and engaged in the conversation they were having. This comment also reflects a change in her self-concept as someone with something important to say, who did not wish to be interrupted. Agnes' sense of self-worth did not increase just because she had some social contact, but because she saw herself as someone who had important things to say.

Throughout session 9, Agnes showed her enthusiasm and interest about different topics. For example, at one point, they were talking about the movie "The way we were." R1 mentioned that Robert Redford was in that movie, and as shown in excerpt 8, Agnes demonstrated outright enthusiasm.

Excerpt 8:

Agnes: Now, there's a guy, I'd like to...

R1: Yeah, he's nice huh? [laughs softly]

(...)

R1: Yep. He's a ... a good actor. And very handsome, don't you think?

Agnes: Yes, **very** handsome. He's my type.

These hardly seem like the words of a person, who 7 weeks before, had referred to herself as an "old bag"!

In session 9, Agnes expressed her interest and enthusiasm about an activity at Magnolia Place. During excerpt 9, Agnes encourages R1 to take a look at the song book that the residents had sung from together.

Excerpt 9:

Agnes: You know there's a book downstairs, with ... with ... old songs in it.

R1: Oh right.

Agnes: Why don't you get a hold of- ...and see how many songs **you** know, in that book. (...) If I see it, I'll get you, I'll let you read it.

What is so interesting in excerpt 9 is that Agnes offers to let R1 read the book, should she get a copy. In contrast to her expressed feelings of worthlessness in the earlier sessions, here, Agnes presents herself as a person who had aspirations, who has opinions and interest, and who has something to contribute to others.

Alise followed much the same pattern as Agnes and Mike. When I first suggested Alise tell me about herself, she responded with "There's nothing." But over time, she told me much about her life, how she came first to the US and then Canada from Latvia, how she hated war, what she thought about her children. We discussed God and the Bible. She had me doing research on everything from the Tower of Babel to the life of the actor Richard Burton. She adored Richard Burton, was an expert on his life and she taught me a lot about him. We watched some of his movies together. As I have mentioned she said she did not like people, but about mid-way during our sessions together, when I offered to rent the movie "The Robe," Alise astounded me by saying that we should get other residents together and we could all watch the movie together in the TV room. This was the first time, to my knowledge, that Alise reached out to others in the long-term care facility. Like Mike who rejoined the Residents' Council, and Agnes who offered to give R1 a song book, Alise's reaching out to others is intimately connected with her renewed sense of self as a cognitively capable individual.

To sum up, I would like to restate what I think this exploratory study has shown. I think it has shown that languaging is one of the mechanisms or processes or actions which mediates thinking. As such, its use is responsible for, for example, focusing attention, problem-solving and internalizing concepts as we saw with Mike; re-constructing details and sequencing of events as we saw with Alise; and generally speaking, restoring cognitive functioning as we saw with Agnes. All three of these older, isolated residents shifted from other- to self-regulation. Furthermore, the study has strongly suggested that cognition and affect are closely interwoven.

I am not claiming that languaging is solely responsible, but rather that it may provide one route to improving that cognitive/affective bundle which is at the heart of quality of life issues. I am certain that applied linguists and gerontologists working together within a Vygotskian sociocultural theory of mind would find some worthwhile projects to work on together.

Finally, I would like to mention what we intend to do next. Our view, and that of others, is that implementing languaging activities may be difficult and it is certainly labour-intensive.

Staff in long-term care facilities are already overworked. And although we intend to give a few workshops for Magnolia Place staff, they are not who we see as our primary audience for what we have found. Instead, the audience we think we could be most helpful to are *volunteers* in long-term care facilities. Thus, we intend to write a short handbook for volunteers, the goal being to help the volunteers understand the value of languaging *by the resident*, and to provide volunteers with ways to encourage languaging by the residents they assist. In this way volunteers can help the older, cognitively impaired, isolated adults that they visit, to forestall or restore cognitive and emotional deterioration, and rebuild self-esteem and a sense of control, thus overall enhancing their quality of life.

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ENDNOTES

- 1 The MMSE, Mini-Mental State Exam, is used in many institutions to measure the cognitive abilities of an individual. Scores range from 30 to 0. A score below 26 indicates mild cognitive decline (see Folstein, Folstein & McHugh, 1975).