Analysis of Cognitive Linguistics Phenomena and Associated Learning Capability in Smartphone Class for the Elderly

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Abstract: This research is based on writer’s experience of teaching about 30 elders in smartphone classes over the course of 6 months at a community in Shanghai. Cognitive linguistic phenomena in the teaching process are discussed. The elders’ lack the lexicon and context of this internet age leads to low learning efficiency and inability of self-studying. The use of referential language accommodation, a specific kind of language simplification, by the teachers, poses potential psychological harm of to the elders. This research concludes that starting classes by “lexicon and context” as the basis for subsequent classes can solve both problems. The phenomenon and causes of elders’ unconscious “egocentricity” are also discussed. Teachers should present understanding as tolerance may alleviate elder egocentricity.

Keywords: The Elderly, Linguistic phenomena, Cognitive Linguistics, Smartphone Class

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1 Introduction
From the end of last year to the beginning of this year, the author and friends, as volunteers, opened two seasons of “Smart Life Class for the Elderly” in the community centre of a street in Xuhui District, Shanghai. The class is aimed at seniors between the ages of 65 and 80. It teaches popular smartphone applications and hopes to open a window into the modern online life for the elderly in the community.

During the teaching process, the three language phenomena of the elderly and volunteers caught the attention of the author. First of all, the elderly do not have the vocabulary base related to smartphones, so the speed and mastery of the new concept are slow. Secondly, the “only my consciousness” gradually appeared in the language of the elderly, which added certain difficulty to the teaching. In addition, volunteers often use simplified language in class, although the current situation may help the elderly understand, in the long run, it will lead to a decline in learning efficiency and lack of confidence in the elderly.

2 The role of “vocabulary and contextual teaching” on cognitive speed

2.1 Reaction speed is delayed in the class schedule
In the first quarter of the “Smart Life Class for the Elderly”, the author lacks experience in getting along with the elderly and mastering the cognitive system of the elderly. So, he skips those introduction in this paper such as teaching the common features of “smart devices”, the introduction of functions, ideas, etc., and directly get into teaching from specific software (such as WeChat). However, when older people are exposed to newer concepts such as “smartphones,” such teaching methods often make them unintelligible or difficult to remember.

For example, when a smartphone user says “How to delete this software,” the elderly often say, “How do I get rid of this thing?” In this sentence, the elderly do not understand the two words “delete” and “software”. It is more difficult to understand the specific meaning and related information of words, and the relationship between “smart life” situations and words.
This problem can be explained by the Node Structure Theory\textsuperscript{11} of cognitive linguistics.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{node_structure_diagram.png}
\caption{Schematic diagram of the node model of the word “delete”}
\end{figure}

As shown in Figure 1, the upper part of the figure is the semantic node area, and the lower part is the voice node area. Each dot in the upper half represents the meaning of the vocabulary, while the lower half represents the sound information received by the brain. The commonly used language understanding path is the path through which “sound information” activates “semantic information” through the connection line. As the brain ages, the transmission efficiency of the language understanding pathway slows down, and the ability to understand unfamiliar vocabulary declines. Therefore, older people usually do not spontaneously use these words to express themselves, and when they receive verbal language information: “Please delete this software”, or when you see the written language information “delete” button, they are not easy to quick to associate with relevant semantic information, which slows down the pace of learning and operation. Therefore, the problem caused by the words “delete” and “software” is that when a large number of such words accumulate in the classroom, the elderly are likely to show a “disjointed” state of disengagement from the situation – the reaction speed is delayed in the classroom schedule. And can’t fully understand the classroom content.

2.2 Vocabulary and contextual teaching is very conducive to the independent understanding of the elderly after leaving the classroom

Summarizing the teaching experience of the first season, the author believes that the speed of intelligent life teaching in the elderly is not fast enough. Before teaching a specific software and its usage methods, volunteers can conduct basic teaching based on “common vocabulary of intelligent life” and related information to bring the elderly into the situation, thus effectively solving the problem. The content to be covered includes but is not limited to: ‘New’ is usually clicked on the apostrophe, ‘Delete’ is usually clicked on the three-point symbol in the upper right corner, ‘Back to main menu’ means going back to the original icon page”, etc. When the elderly was repeatedly taught in the classroom and master the basic vocabulary and common operations, the connection paths between the nodes are repeatedly activated and strengthened. Therefore, in the follow-up teaching, the elderly can respond quickly to related words in the context of “smart life” and thereby learning more efficiently. More importantly, vocabulary and contextual teaching are very beneficial to the self-understanding and self-learning process of the elderly after leaving the classroom.

3 On the “simplification of language” phenomenon in the process of teacher-student exchange

3.1 Language simplification in the elderly classroom

On looking back the half-year time of participating in the “Smart Life Class for the Elderly” classroom teaching, the author felt that himself and other volunteers have used the simplified language frequently during the process of communication with the elderly, the degree is even more than the children’s English class that the author participated during the same period. The habit of subliminally simplifying the language here is called referential speech accommodations to older adults in the study of S. Kemper (1998)\textsuperscript{2}, which can be translated into the old language. Its main features include, but are not limited to, straightforward tone, slower speech, enhanced pauses, and grammatical simplification.

3.2 Positive and negative impacts of older people’s linguistics

In the classroom, the author entirely appreciates the convenience and efficiency brought by the elderly. For example, every time the author says: “You click on the circle at the bottom left. Then you rush to the box below. It’s much simpler than saying “click on the bottom left to switch to the voice, then press and hold
down the talk.” The study confirms that the elderly do need some help in order to understand the content of the sentence more comprehensively. Kemper et al. (1995) and Kemper et al. (1996) have experimentally pointed out that the elderly are accurately making specified operations when they hear the directional speech. Significantly redundant situations where accurate operations are performed during normal communication. The reason behind this is that because of the aging of the brain, the working memory ability of the elderly is reduced, and the simplified vocabulary and grammar greatly reduce the demand for working memory capacity in the “processing language” step.

However, although the “older language” has some help in classroom efficiency, its side effects cannot be ignored. As a product of youth and middle-aged people who subconsciously change their language habits, it is very easy for older people to realize their differences. Some elderly people feel that they are being taken care of, being accommodated, or even treated as a vulnerable group. Their psychological assessment also gets affected. Inevitably, they are also subconsciously aware that their level of cognition is low and they cannot learn and understand the knowledge about smartphones. Therefore, “older linguistics” may have the negative impact of hurting the elderly’s self-esteem and cooling their enthusiasm for active integration into modern life.

3.3 Analysis of elderly sensitive people

O’Connor and Rigby (1996) from written experiments, the older people think that “older linguistics” is lower in warmth and higher in superiority than normal sentences. The study also pointed out that community-dwelling older adults are more sensitive to older people’s linguistics than nursing home residents. The reason is that the average condition of the body and cognition of the elderly in the nursing home is lower than that of the elderly in the community. Therefore, the demand for old people’s linguistics is higher and more accustomed. The elderly in the “smart life classroom” must be able to acquire knowledge about the “Internet Age” lifestyle under the premise of physical conditions and cognitive levels. It can be speculated that they expect higher levels of cognition and hope to be respected, so they are more sensitive to older people’s linguistics. Therefore, the author believes that the “vocabulary and contextual teaching” mentioned in the first part of the study can effectively help volunteers reduce the need for the use of directional words by the elderly, and help volunteers reduce the “simplified vocabulary” and “enhanced pauses”. Let the elderly in the smart life classroom feel greater respect.

4 The self-centered consciousness of the language of the elderly and the role of the “talker” in conversation

4.1 Self-centered awareness of the language of the elderly

Dennis W and Malingre B (1949) pointed out that in the study of how psychological changes affect the language ability of the elderly as the age increases, the “self-centered consciousness” in the speech of the elderly grows, so that it is characterized by “only”. appear. With the increase of age, the elderly will become more and more self-centered. In speech communication, there is a linguistic form of “only”. The questions asked by the elderly are more “self-willing. For example, “What is the need for the other party to agree, I can’t chat when I add him.

The “self-centered phenomenon” may be due to the lack of security of the elderly due to the decline in physical fitness and less companionship. For the purpose of self-protection and self-care, the subconscious has exaggerated the details related to himself. What volunteers can do is to understand the phenomenon, give understanding, and patiently give the right guidance.

4.2 The role of the “talker” in the conversation of the elderly

When expressing discourses of the same meaning, young people prefer to use fewer words and sentences to express central ideas, while older people prefer to use more words to form sentences to express central ideas, or to add some modifiers to words and sentences. To express your will or mood, to show the role of “talker”. In the classroom, several seniors asked the author: “I don’t know anyone in this group, but I think it’s very interesting to look at this group when I’m bored, but I don’t want them to see that I feel uncomfortable in this group. I want to know people in the group. All sorts of things, I just don’t want them to know that I am here, do I have any way, how can I get it?” And young people usually say “I want to be anonymous in this group.”

The cause of the “talker phenomenon” is that on the one hand, the ability of the elderly to reduce the processing of language information is relatively difficult to express semantics efficiently. On the other hand, the cause of “self-centered consciousness” is common,
that is, the elderly want their own wishes to be fully expressed, thus magnifying the details and lengthening the short sentences. Volunteers should give them a full understanding and patiently guide them to learn. Long-term understanding and care can give the elderly a certain sense of security, and alleviate the phenomenon of "self-centered consciousness" and "talking role" from the root.

5 Conclusion

The author believes that in the "smart life classroom for the elderly", "vocabulary and contextual teaching" can strengthen the transmission path between speech and semantics in the node model, helping the elderly to improve the cognitive speed and the self-learning ability in the classroom. At the same time, this teaching method can effectively reduce the need to use the old people's speech in the classroom, avoid hurting the self-esteem of the elderly, reduce self-confidence, and consume the enthusiasm for learning. It is undeniable that the directional language is effective. In the classroom, volunteers can slow down the speech and avoid the burden of the elderly's hearing and information processing ability. However, vocabulary, grammar and other aspects should be minimized. Let the elderly feel that being respected is not only the ability to improve classroom efficiency, but also a major purpose in the service of the elderly. For the "self-centered consciousness" and "talking role" of the elderly, the author believes that volunteers should understand the reasons for the existence of this linguistic phenomenon and give sufficient tolerance and positive guidance to the self-care psychology of the elderly.

References


