THE IMPORTANCE OF MEMORY TRAINING IN INTERPRETATION

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Abstract: Among the many things an interpreter should learn in order to perform simultaneous or consecutive interpretation, memory is an important element that needs training. In the present paper, my aim is to discuss some techniques of improving one's memory, the characteristics of short and long term memory, and the way in which they influence the interpreter's performances.

Keywords: interpretation, short-term and long-term memory, simultaneous interpretation, consecutive interpretation, mnemonics.

1. Introduction

Everyone knows that *interpreting* denotes facilitating communication from one language into another language. The conference interpreter translates the message orally, which is quite different from written translation. In order to perform the task professionally an interpreter has to master the foreign language/s he/she is working upon, and to undergo special training as the job requires not only to perform this task correctly, but also to perform it in real time, which means fast.

Whether it is about a simultaneous or a consecutive interpretation, the person performing it has to do the translation quickly and not to leave blank spaces in what he/she is about to say. This may prove sometimes difficult, especially if the interlocutor speaks too fast or uses too long sentences and no pause. In the case of simultaneous interpretation, things are even more complicated as the translator is isolated in a sound-proof booth and speaks in the microphone while the speaker does not stop. Consecutive interpretation is divided in two: *short CI* and *long CI*. Short CI uses fragments that the interpreter has to memorize and render orally, while in the other case, the interpreter takes notes.

This article will discuss some techniques of training memory, the most important tool for a conference interpreter. My experience as interpreter shows that retaining the information that needs to be conveyed into the target language is crucial. If you do not have a memory trained to remember that, the target language proficiency proves insufficient. Apart from the vocabulary or linguistic structures of a language, together with the subject matter knowledge, the interpreter should be at ease with the general framework of the conference, which will help him/her understand the information and place it into context. Memory can be split in two types: short and long-term memory. Short-term memory is important for the interpreter to retain what he/she has just heard, while a good long-term memory helps genuine understanding and an accurate conveying of the message.

2. Short and long-term memory

Psychological studies of human memory agree that it can be of two types: short-term memory (STM) and long-term memory (LTM). Carolyn Hopper draws our attention to the name of LTM, which is only long-term, never permanent. (Hopper 2010: 102). According to its name, STM is able to retain and recall the information for just a brief period of time because it does not create the neural mechanisms that would be needed for a subsequent storage. On the contrary, LTM occurs once you have created the neural pathways for storing, so the information that you hear can be stored from minutes to months or even years' span. We have, though, to make a deliberate attempt to encode the information in the way we intend to recall it later. "In actuality long-term memory is the neural pathways and synaptic connections that have stabilized through repeated use" (Hopper 2010: 102). This actually means that some things become part of our memory through rehearsal, and they belong to the LTM, while the sentences that we hear only once do not get encoded into our memory, being part of the STM. This short-term memory is extremely important in an interpreter's task, as he/she has to quickly convey the message from the source language into the target language. It only lasts up to thirty seconds, then it gets erased from one's memory, which means that in the case of an interpreter, he/she translates the message, and when the conference is over, he moves on to another task, maybe entirely different. That is why this STM is extremely useful to interpreters and they have to learn how to take advantage of it.

3. Effort Models

Daniel Gile (1992) talks about the difficulties and efforts "involved in interpreting tasks and strategies needed to overcome them" (Gile 1992: 191), observing that many failures occur in the absence of any visible difficulty. He then proposes his *Effort Models* for interpreting. He says that "*The Effort Models* are designed to help them [interpreters] understand these difficulties [of interpreting] and select appropriate strategies and tactics. They are based on the concept of Processing Capacity and on the fact that some mental operations in interpreting require much Processing Capacity" (Gile 1992:191).

The *Effort Models* suggested by Gile are meant to help interpreters perform their task at a superior level. They are constructed upon four types of efforts, namely: the Listening and Analysis Effort, the Memory Effort, the Production Effort, plus the Coordination one. The Listening Effort consists of all "comprehension-oriented operations, from the subconscious analysis of the sound waves carrying the source-language speech which reach the interpreter's ears through the identification of words to the final decisions about the 'meaning' of the utterance"(Gile 1995: 160). The listening and analysis efforts recall the presence of understanding, besides the simple hearing of words, that is, the brain has to use its capacity of conveying the sounds into a rational message. The Memory Effort is viewed as more of a storage mechanism

where information is temporarily kept before further processing takes place. Production is being performed on speech segments, while Coordination Effort has a crucial task. It was compared to "the air-traffic controller for the interpreting that takes place, allowing the interpreter to manage her focus of attention between the listening and analysis task and the ongoing self-monitoring that occurs during performance" (Leeson 2005: 57). When coordination is reached, interpreters attain the optimal state in order to perform their task. At this point, there is synchronization between their skill level and the task they have to perform. The art of smooth interpretation is based on the art of smooth coordination. Even if sometimes these Efforts overlap, coordination actually finds the balance between all the factors.

3.1. Effort Model of Simultaneous Interpretation

Gile's effort model of simultaneous interpreting comprises the above mentioned four elements, and he codes the model as follows:

SI = L + P + M + C,

where, L is the Listening and Analysis Effort, P is the Production Effort, M stands for Memory, and C for Coordination. Simultaneous interpretation is a total of all these efforts, and it actually depends on their complete and smooth running, namely the particular comprehension, short-term memory, or production operations being performed on speech segments. "Due to the high variability of requirements depending on the incoming speech segments, processing capacity requirements of individual Efforts can vary rapidly over time, in seconds or fractions of seconds" (Gile 1995: 169).

3.2. Effort Model for Consecutive Interpretation

Gile also believes that Consecutive Interpretation consists of two phases: a listening and a reformulation phase, and then, a reconstruction phase:

CI = L + M + N, where N is the note-taking process followed by phase two:

CI = Rem + Read + P, where interpreters retrieve messages from their short-term memory and reconstruct the speech (Rem), read the notes (N), and produce the Target Language Speech (P). As we can see, this formula proposed by Gile is only applicable in the case of long CI, where the interpreter takes notes to render orally the message at the end of the conference.

I would like to suggest another way of seeing CI, short CI this time, where the interpreter undergoes exclusively the oral task of rendering the information to the other part. Short CI is very close to SI, but I may add that the pace of the whole process is slower, which increases the interpreter's capacity of understanding and analyzing the information. Due to this, the interpreter only uses his/her short term-memory and produces the language speech, without neglecting coordination. The formula stays the same as in the case of SI, but mimics and the mutual perception of the speaker with the interpreter ease the latter's task:

short CI = L + M + P + C

4. Short-term memory: acoustic, visual and semantic coding

It is believed that information enters STM as a result of attention to a stimulus, in our case, the attention to the speaker. Studies show that the encoding of information is mainly done through three modalities: acoustic, visual and semantic.

The acoustic coding relates closely to what we hear (words, sentences, sounds), without placing the emphasis on the meaning of sentences/words. A source of evidence "for separating long and short-term memory comes from experiments which suggest that material in our short-term memory is processed largely in terms of speech sounds, whereas our long-term memory depends primarily on meaning" (Baddeley 1999:36).

Alan Baddeley states that STM depends mainly on acoustic coding (1966). "If participants recalled words from short-term memory, they didn't confuse words having the same meaning, like (e.g "big" and "large"), but they often confused words that sounded similar (e.g. remembering "cat" instead of "cap")" (Eysenck 2005: 48). This means that the interpreter relies a lot on what he hears, while he tries to carry the task properly. During the rapid translation process, the interpreter does not have enough time to thoroughly analyze the meaning of information; therefore, he/she sometimes translates automatically according to the words heard without filtering the actual meaning. The message is rendered appropriately if the words are heard, but also placed in context. In this case, LTM acts better, and is based mainly on the interpreter's good knowledge of the area the translation is being performed.

The visual coding of a message is linked to the pictures or images we mentally create when we hear a discourse. In a conference, it may be either a Power Point presentation, some diagrams and charts, or it may come under the form of visual representations a person creates in his/her own mind. For some people it is called *photographic memory*, as they immortalize an image, while in others, it is less functional.

Semantic coding talks about the actual meaning of words. Studies made by psychologists (Kellogg 2003: 135) were quite surprising. Kellogg found out that semantic codes are powerful in STM, and that people were aware of the actual meaning of triads or pairs of words given.

5. Training short-term memory

STM has to be constantly trained, so that the interpreter achieves a better understanding of the source language and its message. Consequently, the level of interpretation will improve, and very probably, the results will be highly satisfactory. But how can someone train his/her memory for better memorizing performance?

Psychologists have filled thousands of pages about the human brain and the fact that the average people never use it to the full. They have also created together with linguists lots of practical exercises that should be performed by the students aiming to become interpreters.

5.1. Mnemonics

One important tool in memorizing is mnemonics. The Concise Oxford English Dictionary (Soanes, Stevenson, Hawker, 2006: 477) states that a mnemonic device is any learning technique that helps memory. When learning a foreign language, a student may associate words in the new language with various meanings in his own language, or may use sentences created especially in order to help. So, mnemonics aims at remembering something that seems difficult in a form that you remember much easier. In interpretation, the mnemonic tool may prove helpful, but unfortunately, if the information is totally new, we do not have the necessary time to find an easy alternative to remember.

Memory, though, can be trained and improved. Specialists declare that just like you can train your body, or work out your muscles, you can achieve better performances with your memory. Vivid and colourful images are well received by your brain, so any time you hear something, try to turn it into a pleasant image for the brain. One secret for the conference interpreter is to try to convey rapidly the spoken word into a vivid image, so it remains, even if for short, in your memory.

In order to make your mnemonics more memorable, you should use positive, pleasant images. Your brain often blocks out unpleasant ones. You should also use vivid, colorful, sense-laden images – these are easier to remember than drab ones. Humour is always a good means of easily remembering things or aspects, while symbols, like road signs, or red traffic lights can code quite complex messages quickly and effectively.

5.2. The link method

In order to improve your consecutive interpretation in a conference, when you hear in a row a large number of things or objects with no apparent link to you (especially if the domain of translation is not your cup of tea), you should train your memory. Memory has very little to do with intelligence, but a lot to do with practice and technique. As we have already mentioned, images that you create are one of your best partner during a workshop. So, do not be afraid to experiment. The more ridiculous the images you create in your mind, the better chances of remembering them you will have. Take a short example.

If you have to remember the following: *bus, glass, belt, moisturizer,* four words with absolute no connection, a good exercise is to take them step by step, and picture them in your head in an unfamiliar way. If the images your mind creates are too common, your STM will not be able to recall them. So, imagine a *bus,* an actual bus, like the one which takes you to work daily, or a bus in your favourite colour: whether pink or bright turquoise. Then, a *glass* should not be just a glass that you drink from, it would be too ordinary. Instead, try to link the *glass* to the *bus* in a ridiculous way. You can see a bus that tries to have a drink, is actually sipping from a glass. Try to close your eyes for a short fraction and visualize the bus drinking from a glass. Next, we have *belt.* We have to connect it with the *glass*, so imagine a belt made of glasses,

quite original. The final item is *moisturizer,* so a ludicrous image could be a belt that uses moisturizer. In the following lines, you have some rules that you may find helpful:

1. Picture items out of proportion, that is gigantic or of memorable size
2. Picture your items in action whenever possible. Besides, we unfortunately tend to remember negative things or feelings that we had to face. So, violent or shocking images in action make the whole scene more memorable.
3. Exaggerate the number of items. You can easily imagine "thousands" or "millions" belts using moisturizer, just as "hundreds" of buses sipping tea from a glass.

The link method boils down to strange associations that you make in your head. The more ridiculous and illogical the associations are, the better your chances to remember the items are. It is essential that you actually *see* the pictures in your mind's eye. "If you have trouble recalling the first item then associate it with the friend testing your skills, if you have trouble recalling other items then the link was not illogical enough" (Lorayne 1958: 42).

Even if the link method seems unnecessary in the case of an interpreter, where logic should be an important element, this is a good exercise of training your memory and increases its capacity to remember many things in a short time. It can help interpreters increase the pace of the task they perform.

5.3. Note-taking

Another simple method that will relieve the strain on your STM is by taking notes. This thing is possible, even if the speaker has a rapid pace. All the interpreter has to do is to be used to some abbreviations. In his book, *Note-taking for Consecutive Interpreting,* Andrew Gillies (Gillies 2005: 48) explains that if you hear a list in order: 1,2,3, you may still note 1, 3, 2. This is because if you write down quickly 1 and 3, they will not be burdening your memory any more, you will only have to remember 2 for a couple of seconds.

Concretely, if you interpret at a conference, and the speaker talks about positive/negative aspects, you can quickly picture a big red tick and a big red X, that will subsequently help you deliver the information not only correctly, but also in an organized way, as you utter from memory the two columns with red letters on them. If you develop your mnemonic colourful tool in interpretation, it will be less likely to make mistakes, as your mind learns to be better organized.

5.4. Imagination, association and location

Imagination, association and location are the three most important aids in developing your mnemonic. Imagination talks about the power with which you create an image so that it will come to you later. Association links certain things with others, sometimes sounds or even smells. Location gives you two things: a coherent context into which you can place information so that it hangs together, and a way of separating

one mnemonic from another. By setting one mnemonic in a particular town, we can separate it from a similar mnemonic set in a city. For example, by setting one in Timisoara and another similar mnemonic with images of Sibiu, we can separate them without being afraid of a possible confusion. In order to strengthen the feeling of location, we can also build the flavors and atmosphere of these places.

5.5. Telling a story in the source language

Another exercise designed for memory improvement in interpreting is retelling a story in the source language. The task of the teacher is to tell or play a recording once to his trainees and they will have to reproduce the text with the same words. They are not allowed to take notes. Zhong suggests four types of tactics: "*Categorization*: Grouping items of the same properties; *Generalization*: Drawing general conclusions from particular examples or message from the provided text; *Comparison*: Noticing the differences and similarities between different things, facts and events; *Description*: Describing a scene, a shape, or size of an object, etc. Trainees are encouraged to describe, summarize, and abstract the original to a large extent in their own words" (Zhong 2003).

5.6. General exercise

Physical exercise is a good memory stimulator. Our memories grow old together with us, and once we start losing from their fit capacities, we can stimulate them by a walk in the open air. A healthy lifestyle is also an ally for you in improving memory. You should eat right, and give your brain the substances it needs especially sunflower seeds, nuts, hazelnuts, spinach, kiwi, omega 3 which is to be found in fish, blueberries, or lean beef.

The ability to remember increases when you nurture your brain with a good diet, and enough sleep. It is known that people who sleep 8 hours per night can take better advantage of their brain. Social relations also boost the capacity of your brain, but we should also be able to keep stress in check, as it is one of the brain's worst enemies.

6. Conclusion

Interpretation is a complex task that requires the association of many factors. No matter whether simultaneous or consecutive interpretation is performed, the role of the memory is extremely important. Short-term memory is based especially on the actual hearing of sounds, without always filtering the information, that is why the interpreter has to be careful with the message he/she conveys further. Due to the fact that long-term memory involves neural pathways and synaptic connections, it is better established in the interpreter's brain. So, long-term memory has the advantage that the interpreter is better acquainted with the field to which the translation belongs;

consequently, the interpretation happens very precisely, due to the correct placement in context.

As conference interpreter, I make good use of both types of memory, as their training has proved important for the quality of subject message rendering. In this article, the aim was to discuss techniques for memory improvement, as mastering the languages and the general background of the conference are not sufficient. Therefore we have to encourage memory training through all of its aspects - acoustic, visual, or semantic, which together with the other tools is crucial in the interpreter's work.

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