

SIMULTANEOUS INTERPRETATION QUALITY UNDER STRESS

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Abstract. This article is dedicated to the influence of stress during the simultaneous interpretation process. It shows major parameters of the psycholinguistic experiment undertaken by the author. It aimed at establishing the extent to which the state of linguistic consciousness of a simultaneous interpreter is altered due to the increased stress load. In the article, the author provides the results of the experiment, draws conclusions and makes an assumption that during the simultaneous interpretation the state of an individual's linguistic consciousness is altered. This fact should be taken into consideration when training future experts in simultaneous interpretation as well as by practicing interpreters when preparing to carry out their professional duties.

Keywords: Simultaneous interpretation, stress, altered states of consciousness, cognitive modules, cognitive load

1. Introduction

Many researchers of stress (Kurz, I., 2003; Tart, C., 1986) occurring in certain types of activities assume that stress is a negative physical and emotional response that manifests itself in the conditions when the requirements for the activity do not meet the capabilities, resources or needs of the actor.

In the case of simultaneous interpretation, considerable number of scientists believes that as perception, comprehension, transcoding and verbalization in simultaneous interpretation go almost in parallel and under acute time pressure, such an interpretation task must create substantial psychological and physical burden to the individual (Tommola, J., Hyönä, J., 1990: 180). Besides, they think that an interpreter has to be capable of operating under stress for quite some time (Longley, P., 1989: 241), to retain cold head under heavy pressure of the situation (Roland, R.A., 1982: 13), to have been set for success working in adverse

conditions (Coughlin, J., 1988: 359). Therefore, the combination of objective and subjective factors accompanying the simultaneous interpretation affects the quality of the activity, as the state of the linguistic consciousness of an interpreter is altered (for more detailed information about altered states of linguistic consciousness, see (Spivak, D.L., 2000).

Regardless of the difficulty of the interpretation situation (objective factors), the subjective assessment of it by the individual as stressful remains an important factor affecting the interpreter. Experienced simultaneous interpreters work out immunity to negative effects of the simultaneous interpretation and control their psychoemotional and physiological parameters during the interpretation task. Some of them do not even react to higher stress load.

This research was embarked on for the first time in the psycholinguistic science and dealt with the altered state of the linguistic consciousness during simultaneous interpretation. The outcomes will be incorporated in the process of training simultaneous interpreters focusing especially on the psychological calibration and preparation of individuals, which has never been done before.

2. Objectives

For a more detailed and comprehensive outlook of the cognitive processes dynamics in the simultaneous interpretation under stress load, we have embarked on the attempt to arrange a psycholinguistic experiment. The outcomes of the experiment will also help explore the change in the quality of the interpretation with a more stress load and attempt to provide for the options to offset the influence of stress.

The aim of the experiment was *to examine the alterations of the state of linguistic consciousness with a more stress load and to subsequently develop, on its basis, the methodology to prepare the interpreter for further activity and optimize the work of cognitive modules of his/her linguistic consciousness.*

3. Methodology

Before the experiment, the participants had to answer a questionnaire that determined their proficiency level in terms of simultaneous and other types of interpretation. The topic of the speaker to be interpreted was made familiar to the participants in the experiment the day before so that they could get prepared for the simultaneous interpretation. Immediately prior to the active phase of the experiment, an ECG check was done to control the condition of the interpreters.

The task placed in front of the interpreters was to interpret the audio recording of the speaker (UN Secretary General Ban Ki-moon at the OSCE Permanent Council in 2010) from English (foreign) into Russian (mother tongue). The duration of the speech was 21 minutes and 45 seconds, which is a standard temporal interval for the work of interpreters in the booth. Amplitude modulation was applied to the volume of the speech, and the interpreters were not allowed to adjust the volume for a more comfortable perception through the auditory analyzer.

We used the peculiarities of auditory analyzer functioning to put a higher stress load on the simultaneous interpreters.

Immediately after the active phase of the experiment, an ECG monitoring was made for all the participants to control their post-experimental state.

During the simultaneous interpretation, ECG was continuously applied to monitor the state of the interpreters, their activity was recorded not only on the audio-recorder, but also by the video camera for further analysis of non-verbalized expressions.

The following groups of individuals were involved in the experiment: a) 5-year students of a linguistic educational establishment, who had started their simultaneous interpretation studies but had not yet had practical experience, however, having good consecutive interpretation skills (non-professionals); b) lecturers of the English department of the linguistic educational establishment, who had simultaneous interpretation skills and some practical experience, however, working on the irregular ba-

sis (semi-professionals); and c) simultaneous interpreters who had graduated from a linguistic educational establishment and worked with simultaneous interpretation on the regular basis (professionals).

None of the participants in the experiment had been familiar with the topic before, therefore the topic itself manifested a considerable difficulty for them. Also, the stress load was aggravated with the pronunciation of the speaker (UN Secretary General is a citizen of the Republic of Korea). The speech was delivered at a moderate rate, thus, not applying extra difficulties on the interpreters' operation.

Hardware support

In order to play the speech and record the interpretation, we used a PC with Windows 95 operating system and Windows Media Player and Sony Sound Forge applications. The work of the simultaneous interpreters was also recorded on a video camera.

For ECG monitoring of the state of the interpreters, a Bio-Mouse hardware system was used. It was developed by NeuroLab Russian-based company together with relevant software to interpret the results gathered.

4. Result/Findings

When processing the results of the experiment, we took the following showings into considerations:

- lexical mistakes (interpretation options of an individual that, while not changing the core meaning of the phrase, went beyond the co-occurrence with other words),
- semantic mistakes (distortion of the meaning of the phrase that led to misunderstanding of the source text),
- compensation (a strategy aimed at bridging an interpretation gap and finding a proper place in the text for the previously uninterpreted chunk),
- incomplete syntactic constructions (an incomplete phrase in the target language related to the lack of time or knowledge the interpreter had),

– omissions (instances when the interpretation of a chunk was missing due to certain reasons based on the interpreter's assumption that it was impossible or inappropriate to produce his/her own interpretation option),

– heart rate.

Following are the stagewise results of the experiment.

Stage 1 (4 minutes) – the volume unchanged

Stage 1 was characterized with the absence of additional stress load. The interpreters are under the influence of ordinary cognitive load related to the simultaneous interpretation.

Having analyzed the results gained at Stage 1, we calculated the number of the mistakes (the total number of lexical and semantic mistakes varies from 3 till 7) and omissions (from 1.4 till 7.7), as well as incomplete syntactic constructions (0-3). The heart rate of the professional interpreters increased only slightly, which shows that they were able to cope with the initial stress load originating from the need to simultaneously carry out several cognitive tasks.

As a result of the high-quality simultaneous interpretation, the professional interpreters showed his/her ability to smartly allocate cognitive efforts at simultaneously involving several cognitive modules as well as his/her emotional resilience to natural stress load. Such abilities and resilience are achieved by regular training, both linguistic (preparation for the specific translation situation) and psychological (a set of exercises on psychological calibration).

In the case of the semiprofessionals, these quantitative figures were similar to the ones of the professional simultaneous interpreters. This peculiarity must be explained by the fact that well-trained and mastered consecutive interpretation skills formed the basis of the transfer to a new, more complicated level of interpretation. The heart rate of this category of the subjects underwent only slight changes. All semiprofessional interpreters as well as professional ones were able to demonstrate adequate simultaneous interpretation at Stage 1.

The 3 showings of the non-professional interpreters appeared far lower in comparison with the professionals and semi-professionals. We witnessed the rise in the mistakes they made, the amount of the omissions sharply increased (7.9-15.3), there were numerous incomplete syntactic constructions (from 1 till 6). Considerable parts of the speaker's text were left uninterpreted. The heart rate of the non-professionals fluctuated somewhat more in comparison with other groups of the interpreters.

Stage 2 (4 minutes) – with -30 dB modulation

Stage 2 was marked by an additional stress load by introducing the speaker's oral intervention with -30 dB volume modulation. In this situation, the interpreters' cognitive modules are additionally affected, which could lead to the altered state of linguistic consciousness.

Professional simultaneous interpreters, when put under excessive stress, preferred to generalize the information. Despite the additional load, they managed to properly shape their target language phrases, in general, avoiding incomplete syntactic construction (0-1). The range of the heart rate fluctuations of the professional interpreters was wider than at Stage 1.

Semiprofessionals found themselves in more complicated conditions. Not having the abilities to properly allocate the cognitive efforts, they failed to successfully cope with the interpretation task at Stage 2. The number of their mistakes (from 7 till 18), together with the omissions (13.0-18.9) and incomplete syntactic constructions made (2-7), supports the fact that the linguistic consciousness of the interpreters was changed at this Stage.

The interpretation of the non-professional simultaneous interpreters sharply decreased at Stage 2. Uninterpreted were left entire super-phrasal unities. In places that were especially difficult for the interpreters to understand, they chose to leave the phrases unfinished. In general, the non-professionals were unable to properly allocate the attention between the cognitive modules at Stage 2, which led to the chaotic choice of the source text portions to interpret. Sometimes, they guessed the interpretation op-

tions on the basis of separate words or expressions. The heart rate of both semiprofessional and non-professional interpreters was considerably above normal.

Stage 3 (4 minutes) – the volume unchanged

Stage 3 was characterized with lifting additional stress load. The interpreters are influenced with only ordinary cognitive load related to the simultaneous interpretation itself. Adaptation or restoration of unaltered state of consciousness is expected to occur.

In our view, general improvement of the results of all the interpreters is obvious.

After lifting the additional stress load, the professional interpreters somewhat reduced the number of the mistakes they made.

The professional interpreters allowed themselves to use omissions far less frequent. Even in case the interpreters had to omit a source-language lexical unit, they tried to compensate it in the target language or to mitigate the loss of important information. In our opinion, such showings, obviously, demonstrate the ability of the above-mentioned interpreters to control, more effectively, their psychoemotional state under the changed stress load during simultaneous interpretation. They are able to properly allocate, in a timely fashion, their efforts between the cognitive modules.

In the case of the semiprofessional interpreters, we also witnessed considerable improvement of the interpretation quality. The number of the mistakes they made decreased. Far less frequent, the interpreters omitted the information they perceived from the speaker's intervention. The amount of the incomplete syntactic construction, that was previously the case at Stage 2, reduced considerably. In our view, it is related to the fact that lifting additional stress load enabled the semiprofessional interpreters to switch their efforts between the cognitive modules much better, which made their interpretation better, in general. However, despite the improved showings at Stage 3, the semiprofession-

als failed to fully achieve the level of interpretation they demonstrated at Stage 1.

Watching the non-professional interpreters working, we found that, in general, they managed, to some extent, to reduce the amount of the mistakes and omissions they made. Far more seldom, they used incomplete syntactic constructions, though they remained quite numerous. The quality of their interpretation was still rather low.

The heart rate of all the interpreters restored, to some extent, and came close to normality.

Stage 4 (4 minutes) – with +30 dB volume modulation

Stage 4 featured additional stress load, with +30 dB volume modulation during the speaker's intervention. We expected to witness the interpreters' linguistic consciousness altered again.

At Stage 4, when additional stress load was introduced, the interpreters showed different quantitative results.

In the case of the professional interpreters, who made, in general, fewer mistakes, only the P2 subject showed the rise in omissions. The rest of the subjects more seldom tended to omit the source-text information. This fact must show different resilience of the nerve system of the professional interpreters to additional stress factor.

The semiprofessional interpreters, unlike the professionals, demonstrated more homogenous results. We witnessed general decrease in the number of the mistakes and omissions of the information. The quality of their interpretation kept on gradually improving.

Quite different were the results showed by the non-professional interpreters. So, the NP1 subject showed virtually zero dynamics on the number of mistakes (9), omissions (from 15.9 till 15.1) and incomplete syntactic constructions (1). We deem it probable that there was a leveling of the additional stress load influence with the potential the subject gained at the adaptation phase at Stage 3.

The heart rate showings of all the groups of the interpreters as well as their interpretation quality are somewhat different. It must happen due to the general fatigue and accumulated stress.

Stage 5 (6 minutes) – the volume unchanged

Stage 5 was characterized with lifting additional stress load. The interpreters are affected by ordinary cognitive load related to the simultaneous interpretation. We expected the restoration of the normal state of the linguistic consciousness.

The professional simultaneous interpreters showed different results. So, the P1 and P2 subjects demonstrated general decrease of the information omitted (4.0 and 3.2 respectively), with the number of the mistakes increased (+3 and +6). The subjects must have tried at this Stage to most fully retain the original phrases of the speaker. However, the subjects not always managed to produce adequate interpretation options. Nevertheless, we need to note that this fact also points out to the absence of any altered state of the linguistic consciousness of the above-mentioned subjects and to the higher quality of their interpretation.

Another trend was demonstrated by the P3 and P4 subjects. Their quantitative showings point out to the rise in the number of both mistakes (+1 and +3 respectively) and omissions (5.3 and 7.2) during the simultaneous interpretation at Stage 5. These results testify to a certain alteration of the linguistic consciousness of the interpreters and to the lower quality interpretation quality. We opine that this is the result of the fatigue accumulated during the interpretation process and of the lower resilience of the nerve system to the need to carry out simultaneous interpretation for a long period of time.

Most of the semiprofessional simultaneous interpreters demonstrated the same trend as the P3 and P4 subjects did. So, the SP1 and SP3 interpreters showed the rise in the mistakes (the SP3 only: +2) and the omitted information (13.7 and 13.5) during the simultaneous interpretation at this Stage. We think that this phenomenon is caused by the accumulated fatigue and inability

of the interpreters to tune their nerve system for prolonged periods of work as simultaneous interpreters.

Special attention was paid to the showings demonstrated by the SP2 subject. He managed, at the same time, to decrease the number of the mistakes (-2) and omissions while interpreting the speaker (6.0). This fact shows that the interpreter succeeded, being under additional stress, to properly allocate the cognitive efforts and to improve the interpretation quality. Furthermore, it points out to the restored state of linguistic consciousness of the interpreter.

In the case of the non-professional interpreters, we noted the general increase in the mistakes (NP2: +5, NP5: +3, NP6: +3) and the omissions of the original information (23.2; 24.1; 25.3 respectively). Such trend shows general fatigue of the interpreters that was caused by the durability of the simultaneous interpretation itself even without additional stress load.

The heart rate showings were above normal as, in our view, despite the absence of additional stress factors at this Stage, general fatigue and accumulated stress affected the functioning of the interpreters.

5. Discussion

Making our analysis, it is noteworthy that the initial hypothesis that we made before the start of the experiment has been confirmed only partly.

The first assumption that different groups of the interpreters would respond differently to the interpretation task has been confirmed by the results of the experiment. We clearly showed that the simultaneous interpretation experience, the integral major part of which is the acquired ability of an interpreter to properly allocate, in a timely fashion, the efforts between the cognitive modules of the linguistic consciousness, plays a key part in the successful accomplishment of the simultaneous interpretation task.

Our assumption that the increased stress load at Stages 2 and 4 would lead to the altered state of the linguistic conscious-

ness of the interpreters has got only a partly confirmation. It is noteworthy here that, indeed, we witnessed lower interpretation quality of all the interpreters at Stage 2 and an altered state of consciousness that were caused by increased stress factor. However, at Stage 4, we see that there are some exceptions from this assumptions related to the adaptation phase achieved by some of the interpreters and to their acquired immunity to stress.

In the absence of the additional stress (Stage 1) and after lifting it (Stages 3 and 5), we witnessed different trends in the state of the interpreters' linguistic consciousness.

At Stage 1, as we have mentioned above, due to the different experience in simultaneous interpreting, we noted different states of the linguistic consciousness of the interpreters. The professional and semiprofessional interpreters had it unaltered whereas the non-professionals' consciousness underwent certain alteration.

Despite the lift of the additional stress load at Stage 3 and some improvement of the interpreters' showings, only the professional interpreters managed to adapt to the situation of the simultaneous interpretation. The semiprofessionals, though demonstrating considerably better quality of the interpretation, failed to fully restore the state of their linguistic consciousness. As far as the non-professionals are concerned, we noted certain improvement of their showings that, however, did not enable them to increase the interpretation quality, which points out to the fact that their state of linguistic consciousness remained altered and they failed to achieve the adaptation phase.

Stage 5 featured accumulated fatigue of most of the interpreters that was caused by the necessity to interpret simultaneously for quite a long period of time. This fatigue resulted in the inability of the subjects to show the improved results and, in the case of the non-professionals, we continued to witness the altered state of the linguistic consciousness.

Based on the analysis of the changes in the functional state of the interpreters, we claim that *during the simultaneous inter-*

pretation, the qualitative change occurs in the functioning of cognitive modules of the linguistic consciousness, which points out to the alteration of the state of consciousness of the simultaneous interpreter.

Currently, we are exploring a number of options provided in the works of some researchers (Beznosyuk, E.V., Smirnov, I.S., Zhuravlev, A.L., 1995; Medvedev, V.I., 1982; Tarasov, E.F., 1988) to restore the normal state of consciousness of the simultaneous interpreter and to improve the quality of the interpretation using the linguistic approaches, psychophysical and psychological stimulation of the consciousness and subconsciousness.

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DIGITAL BRANDING: GLOBAL AND CROSS-CULTURAL IMPERATIVES

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Abstract. The article explores the contemporary state of the new communications technology of digital branding and the conditions of its development in Russia and in the world. The author links the main directions of digital branding to the characteristics of the audience and the new status of consumer in interactive communications as well as with new forms of creative content determined by such features of the Internet medium as multi-mediazation and multi-channelization. Professional account of national and multicultural features optimizes growth, and efficient combining of standardization and adaptation tools remains an important branding task, both on- and offline.

Keywords: digital branding, Internet advertising, promotion, content, intercultural communication

1. Introduction

Development of informational technologies and communicating information is an inalienable part of progress in the modern society. Total computerization in the business sphere brought