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Psychological Effects on Interpreter's Performance: An Overview of Related Theories and Studies

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Abstract: Interpreters' psychological quality is an inseparable component of the study on interpretation. This paper attempts to deal with the influence of the psychological impact on interpreters, aimed at giving an outline of the relations between interpreter's individual temperament and their performances, for the purpose of raising the awareness of the improvement of interpreters' psychological quality and therefore perfecting interpretation. The author analysed some problems and proposed some tactics to deal with them. Hopefully readers might draw referential experience from the provided tactics and learn something to their advantage.

Keywords: interpreting, temperament, psychology.

1. Introduction

With the quickening pace of globalization, the world becomes a global village and the communication between people from different countries becomes more and more frequent and essential than ever. Especially after joining the WTO and holding the 2008 Beijing Olympics, China has found itself more and more connected to the international arena, hence the sky-rocketing demand for high-quality interpreters who play an indispensable role in various fields, ranging from business negotiation interpreting, court interpreting, press conference interpreting to healthcare services interpreting for immigrants, to name only a few. In this context, interpreting courses are included in college curriculum for English majors; besides, interpreting certification exams are held regularly at major cities such as Beijing and Shanghai, which are quite popular among would-be professional interpreters.

Since the novel coronavirus epidemic broke out in 2020, the world has witnessed a sharp decline in international exhibitions and conferences, hence the decreasing need for interpreters in these fields. However, the demand for remote interpreting services has surged, with interpreters' workplace switching from offline to online, in the hope of maintaining the vitality of cross-national trade as much as possible. In particular, after China claimed victory over the coronavirus that much of the world is still struggling to contain, it is of great importance for China to share its experiences in combating the epidemic with the world, including China's technology, culture and very effective government coordination in conquering this massive risk and challenge. China has held many video conferences with other countries to discuss and share best practices and challenges in the containment of COVID-19.

No matter where the interpreters work, offline or online, interpretation is probably one of the most mysterious jobs in the world which involves overwhelming pressure, tremendous challenges and great excitement. Therefore, how to improve interpreting skills in an effective way possesses a sharp challenge for interpreters. Correspondingly, experts and scholars have explored a variety of factors that exert an influence on interpreter's performance, among which the study on psychological effects on interpreter's performance has been given more and more attention. In 1995, Daniel Gile's put forward the effort model which stated that the efforts interpreters put into listening, production and memory could not exceed interpreter's capacity, i.e. $(L+P+M) < C$. If the required information processing capacity exceeds the interpreter's capacity, then the interpreter will be working under great pressure, just like "walking the wire" (Daniel, G. 1995). Pochhacker analyzed the relationship between contextual factors and cognitive factors and emphasized process-orientation in interpreting studies (Pochhacker 2005). This paper mainly applies interdisciplinary research to the study of interpretation, i.e. the study of the process of interpretation, and some personal introspection and suggestions, in the hope that more and more research findings in light of multi-discipline come forth gradually, so as to help interpreters improve their performance.

2. An Overview of Interpretation Studies in China

China has a late start in the field of interpretation studies. Scholars and researchers in China began to explore this recondite art in the early 1980s. Compared with its status in the west, the study of interpretation is a new discipline in China. It did not break away from its stagnant period until the 1980s when the first articles on interpretation were published, among which most were based on interpreters' professional experience, introspection and so on (Cai Xiaohong 2001). As China's domestic economy develops and the external exchanges increase rapidly, people have begun to show interest in interpretation studies. Remarkable changes have taken place as for the quantity, content, and method of interpretation research, which is undoubtedly quite beneficial for the transition of China's interpretation studies. The approach of China's interpretation studies, as well, is going through the transition from single-disciplinary to inter-disciplinary (Zhao Ting 2007).

3. Psychological effect on interpreter's performance

3.1. Introduction

As the interpretation studies develop over the past decades, the advantages of interdisciplinary approach gradually unfold. Among all these disciplines which enlighten the study of interpretation, psychology is the first one to draw people's attention since the result of interpretation is closely related to interpreters' psychological activities. After the Second World War, linguists and psychologists endeavored to obtain a coordinate development of both linguistics and psychology, i.e. psycholinguistics. Scholars have made tentative investigations on the influence of interpreters' psychological status on their performance by relating the activity of cerebral cortex and nervous type theory with interpreters' psychological status.

Despite the fact that both translation and interpretation require accuracy, interpretation imposes a much higher demand on efficiency. Translation products can be refined and polished several times afterwards while the truthfulness of interpretation will be verified as soon as the interpreter utters the target language. Given that interpreters always perform under great pressure, their psychological quality, though invisible, has a direct impact on the language outcome. The most important characteristic of human psychological quality is the temperament. Temperament is the unseen force underlying human action. If we consider the reaction of various persons to the same experience, we will find that it is quite different and varied in every one of them; it may be quick and lasting, or slow but lasting; or it may be quick but of short duration, or slow and of short duration. This manner of reaction, or the different degrees of excitability, is what we call "temperament". Temperament determines the way a person reacts to emotional stimulation and the intensity and speed of the particular reaction (Bates & Wachs, 1994; Buss & Plomin, 1984). Allport defines temperament as "the characteristic phenomena of an individual's nature, including his susceptibility, his customary strength and speed of response, the quality of his prevailing mood, and all the peculiarities of fluctuation and intensity of mood, these being phenomena regarded as dependent on constitutional make-up, and therefore largely hereditary in origin" (Allport, 1970).

Over the past decades, psychiatrists, philosophers and psychologists have developed various kinds of typologies to classify people based on difference standards, such as their attitudes, modes of feeling and perceiving, social behavior and even bodily physique since it may have something to do with temperament. Temperament theories have developed over the years as thoughts and discoveries of temperament have been systematically formulated. The Four Temperaments is among the most influential characterizations; therefore, the Four Temperaments will now be discussed for the sake of better understanding.

3.2. Figures, Tables and Schemes

One of the most reliable ways to know oneself is through studying temperaments. If a man has a full understanding of his own temperament, then he will be able to control himself in an easy way. If he can discern the temperament of others around him, he will be able to understand them and help them. Understanding the temperaments is essential to successful guidance and discipline. In order to ascertain the possible role of temperament and temperament traits in the development of stress reactions, it is necessary to have a clear understanding of the construct of the Four Temperaments and its roots which are historically of a biological nature. The Four temperaments is a theory about personality from the psychological perspective. After all, the Four Temperaments has greatly shaped our modern theories of temperament.

3.2.1. Formatting of Mathematical Components

As one of the most widely used psychological explanations for individual differences in behavior, the Four Temperaments originated from the Four Humors proposed by Hippocrates (circa 460-377 BC). Labeled as the father of medicine, Hippocrates maintained that the universe was created from four elements: earth, fire, air and water. He then applied this elemental approach to the creation of humans and stated that they are also made from these four elements. These elements were connected with the four

humors in the body. The earth was associated with black bile, air with yellow bile, fire with blood and water with phlegm. These four humors were essentially used to determine whether a person was healthy or ill. (Hergenhahn, 1997).

Galen (ca. 130-200 AD) developed the first classification of temperament out of the four humors. Galen divided nine temperaments into two categories namely primary (ordinary) and secondary (derivative) temperaments. The four primary temperaments depend directly on the dominance of warmth, cold, moisture and dryness while the secondary temperaments were identified as warmth-dryness, warmth-moisture, cold-dryness and cold-moisture. The ninth temperament was seen as the ideal temperament which consisted of a mixture of temperament types (Strelau, 1998). The four primary types of temperament were known as sanguine, choleric, melancholic and phlegmatic. And their respective traits are as follows:

A phlegmatic is a kind, quiet and peaceful person. Though they may appear to be shy, they enjoy giving and receiving affection. They can be content to go along with situations as they are, rather than try to change the situations. They may be lazy, relaxed and not energetic.

A sanguine person is encouraging, friendly, cheerful, talkative, and creative. They like getting attention from others. They enjoy having fun. However, they tend to forget things that they are supposed to do which may result in being late for appointments. If they don't feel appreciated, they may fall into depression. When it comes to a new hobby, they tend to lose interest in it once they don't find it fascinating and fun anymore.

A choleric person is critical, ambitious and bossy. They have the ambition to be great leaders, but they tend to feel down in the dumps if they fail to gain power over others. Besides, when they work with people of other types of temperaments, they can be dominating and bossy.

A melancholy person likes to spend a lot of time thinking deeply and strive for perfection. They prefer to be alone on purpose instead of being involved in social events. They like to stick to their schedules. When things don't go quite as planned, they tend to suffer from disappointment and frustration but they will remain silent and not complain. A melancholy person is independent and can fulfill tasks by himself.

The four temperaments are easily understandable and applicable, offering simplistic explanations for the complex differences among individuals and proposing simplistic solutions.

3.2.2 Pavlovian Typology -- The Biological Basis of the Four Temperaments

In the 1890s and 1900s, Russian physiologist, psychologist, and physician Ivan P. Pavlov's carried out the famous "conditional reflexes" experiment with dogs. His study of brain-behavior relationships inspired him to propose that in dogs it is possible to distinguish the four classical temperaments which were described in the first place by Hippocrates and later by Galen. The sanguine and choleric temperaments are extraverted, and the phlegmatic and melancholic temperaments are introverted.

Through observing the behavior of dogs during conditioning experiments, Pavlov and his students came to the conclusion that there exist strongly expressed individual differences in the speed and accuracy with which both positive and negative (inhibitory) conditioned reflexes are elaborated; in their efficiency, strength, and durability, in the ease with which they may be changed and, in the manner in which animals behave in the experimental chamber (Pavlov, 1960).

In light of the concept of "nervism", Pavlov claimed that any behavior is regulated and governed by the central nervous system (CNS). Furthermore, he formed a hypothesis that certain properties of the nervous processes exist which are responsible for the observed individual differences in conditioning and the dog's behavior. By these properties, Pavlov refers to the strength of the nervous processes of excitation and inhibition and the equilibrium between the strength of both of these processes. According to Pavlov, the configurations of the basic properties of the nervous processes constitute the so-called types of nervous system (Pavlov, 1960).

In terms of nervous system processes, the two basic types are "weak types" and "strong types". Dogs who displayed weakly developed arousal and inhibition processes were classified as "weak types". "Strong types" are categorized into three separate types:

First there is the "strong, unbalanced excitable type." Dogs of this type display very strongly developed arousal (excitement) processes with weakly developed inhibition processes. They often get out of control. Despite the fact that they show quick response to commands and hand signals, they don't deliver satisfactory performances when it comes to accuracy because inhibition (blocking) processes are weakly developed and arousal processes dominate them. That is to say, they can't tell the differences among tasks. Dogs of this type are easily angered and their stimulus thresholds are low.

The second type is known as the "strong, balanced, mobile type." The word "balanced" refers to a balance between strong arousal (excitement) and strong inhibition (blocking) processes. Dogs of this type can complete every task in a timely and accurate manner. They learn very quickly and seldom make mistakes. If they are assigned to perform protection work, they, with the right attributes, will deliver satisfactory service. Generally speaking, they have medium stimulation thresholds.

Last but not least is the "strong, balanced sluggish type". Dogs of this type have strongly developed arousal (excitement) processes and strongly developed inhibition (blocking) processes and a good balance between the two. The description "sluggish" refers to a slow mobility between the two processes. Generally described as calm, these dogs work consistently but slowly. To stay motivated when performing tasks, these dogs need strong stimulation and repeated stimuli. Their performance potential is limited due to the slow mobility. They have high stimulus thresholds. (Armin Winkler, 2001)

In order to further clarify the distinction, the relations among these four types of nervous system are illustrated in Figure 1.

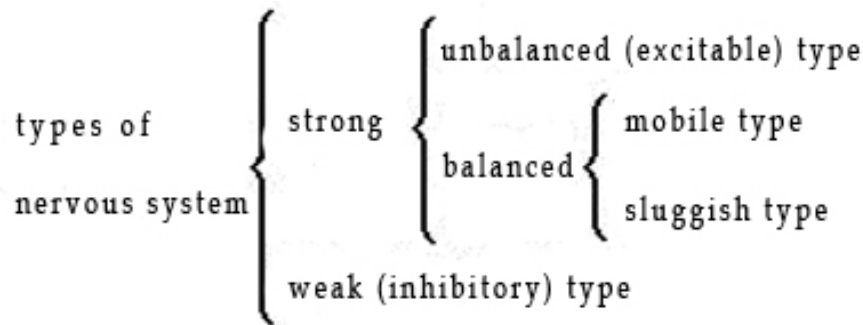


Figure 1. Types of Nervous System

As it turns out, Pavlov’s four types of nervous system coincides with the ancient typology—the Four Temperaments. Pavlov extended the definitions of the four temperament types under study at the time. He conceived the nervous system as a physiological basis of temperament. Pavlov’s four types of nervous system are the first well-described and empirically supported characterization of temperament. Temperament theory finds its root in biological science. The corresponding relations between these two typologies are shown in Table 1.

Table 1. Correlations between Four Types of Nervous System and Four Temperaments

Four Types of Nervous System	Four Temperaments
Excitable type	Choleric
Mobile type	Sanguine
Sluggish type	Phlegmatic
Inhibitory type	Melancholic

3.3. Enlightenment of the Four Temperaments on Interpreters’ Performance

According to Pavlov’s nervous system theory, the three basic properties of the nervous system, i.e. strength (including strength of excitation and strength of inhibition), mobility and equilibrium of nervous processes, play a role of varying importance in people’s ability.

The strength of the nervous system is the most important property of the nervous system as stated by Pavlov, because the environment conveys unusual, extraordinary events or, in other words, stimuli of great intensity that affect the strength of the excitatory process. The strength of excitation refers to the ability of cortical cells to work, or their working capacity. Therefore, strength reacts on the degree and durability of people’s concentration at a particular moment and consequently relates to people’s learning capability.

Mobility refers to “the ability to give way according to external conditions-to give priority to one impulse before the other, excitation before inhibition and conversely” (Pavlov, 1960; Strelau, 1983). Mobility of the nervous system works on the span of perception.

Equilibrium is the relationship between the strength of excitation in the cortex and strength of excitation in the subcortex. Equilibrium operates on the allocation of attention.

3.3.1 Performance of Interpreters of Different Temperaments

Pavlov argued that the configurations of the basic properties of the nervous processes constitute different types of nervous system, hence separate temperaments. Each temperament has its positive and negative characteristics, known as “strength” and “weakness”. Having some knowledge of their own strengths and weaknesses is beneficial for interpreters to strengthen their advantages and triumph over their weaknesses.

Interpreters of the choleric type, which is the excitable, strong, immoderate, and unbalanced type with domination of excitation in the subcortical centers, are identified with quick response, extroversion, agility, moodiness and impetuosity. During interpretation, they can deliver the target language in a prompt way but sometimes they react so quickly that wording and phrasing may be ill-considered.

The sanguine type is characterized by optimal excitation, with harmonious co-operation of all parts of the brain. Interpreters of this type display keen awareness, expressivity, extensive interests, extroversion, and adaptation to new environment. They are capable of sentence structure conversion and paraphrase. However, unstable state of emotion may result in a slip of the tongue.

The third type, the phlegmatic, is the strong type, with optimal excitation, balanced and slow. Interpreters of this type tend to show a balance between extroversion and introversion. With good control of their mood, they are level-headed in face of incidents while at the same time their relatively slow response may result in delay-time during simultaneous interpretation which requires intense concentration.

Last but not least, the melancholic type, known as the weak type, is identified with low excitation of both cortical and subcortical centers and lack of balance between excitation and inhibition. Having a quality of obvious introversion, interpreters of this type are fond of loneliness, hence a keen sense of details. They do not respond as strongly and quickly as interpreters of other types. Due to scrupulousness, their performance is often lack of consistency and inspiration.

Temperaments exert a great influence on interpreter’s abilities in language coding, grammatical perception and language conversion. Confidence, preciseness and perseverance make tremendous influence throughout interpretation and directly determine which strategy interpreters will adopt, positive or negative (Wang Xiangling et al. 2013).

Thus, it is of significance that interpreters understand their temperament types. Various instruments have been designed to measure broad characteristics of the central nervous system. The author suggests that Interpreters take temperament questionnaires; for example, STI -- the Strelau Temperament Inventory, one of the universally accepted psychometric tools, has been verified to have potential uses for the classification of temperament characteristics in individuals. Having an understanding of their temperament types, interpreters can improve their psychological quality and enhance learning.

3.3.2 Possible Problems and Suggested Tactics

Although most temperament researchers agree that temperament is to a given extent biologically determined, or inherited (Angleitner & Strelau, 1991), which confirms the saying that interpreters are born, not to be made, there are still some ways to better interpreters’ performance. This section will elucidate some possible problems that may occur during interpretation; suggested tactics will also be provided in the hope of improving interpreters’ psychological quality.

Being self-confident is of primary importance and should be given top priority. Lack of self-confidence may result in poor performance at the academic level as well as the professional level. The sense of self-confidence is necessarily derived from comprehensive practical exercises, the major part of which depends on self-training. Under the precondition that interpreters have to have a “sufficient” level of proficiency in L2 and L3 and a mastery of certain interpreting skills, they improve their abilities after one-by-one exercises. In return, these exercises make interpreters experience the sense of success, the continual accumulation of which forms the habit of being self-confident and gradually becomes a second nature. Ultimately, interpreters build up their self-confidence.

Besides, remember that interpreters have no control over who is going to say what, or how articulate the speaker will sound. Therefore, interpreters should also be skilled at keeping aplomb in face of chaos. Interpreting is a rather stressful activity because it involves days of scrupulous preparation before the actual interpretation and, what’s more, the performance of a series of complex cognitive and psychomotor operations in public or at least for the public. Interpreters tend to experience high levels of stress when their job is to interpret in front of people, resulting in anxiety. Public speaking is generally considered to be a stressful social situation that may have negative consequences leading to poor professional or academic outcomes (Greer, 1965). Research has established that anxiety felt just in delivering a speech in public is an emotion linked to lack of competence in public speaking (Behnke & Sawyer, 1999; Westenberg, 1999). Therefore, to combat this obstacle, interpreters should learn to control anxiety and command public speaking skills, which are basically the main components of the interpreting process. In addition to the capacity to express thoughts clearly and concisely in both languages, interpreters should also have the capability to control stress, which has traditionally

been considered one of the requisites for interpreting (Cooper, Davies & Tung 1982) and a predictor for interpreting competence (Alexieva, 1997). Although the number of empirical studies about the influence of stress in interpreting performance is scarce, there is a wide consensus that stress is intrinsic to interpreting – both in the consecutive and simultaneous mode – even though its impact is not clearly defined (Brisau, Godijns & Meuleman 1994). Under such circumstances, an outstanding psychological quality contributes to excellent and consistent professional performance. Interpreters may apply autosuggestion in order to relax themselves and relieve their fears and anxiety. Anxiety is not fearful, unless one is terrified by it. Anxiety will be contingent on the situation if the individual considers it to be threatening; however, the subject can also interpret the situation as a challenge or as irrelevant (Lazarus & Folkman, 1986). In addition, if time permitted, interpreters can find a quiet place to have a break and take a breath.

Also, interpreters should develop a positive view of errors. Errors are inevitable but anxiety can be avoidable. Interpreting is usually done in public or for the public. They often perform to thousands of people, and in very intimidating settings. When an individual is asked to give a public presentation, he or she will come under scrutiny. The public will judge the individual's performance. Sometimes the public may show negative emotions which can affect the individual's behavior. Professional interpreters must overcome such negative emotions because it could exert an unfavorable influence on their interpreting performance. When errors occur, interpreters should do their best to stay calm and focus on the incoming information. If there is a chance to amend the error, they can seize the opportunity to make corrections. For example, they may add "I mean/or rather" to make the misinterpreted message right.

Last but not least, when it comes to interpreters' training, interpreters can undertake based on their own temperament characteristics and make up for deficiency, such as lack of logic, lack of attention to detail, too many set phrases, etc. Interpreters can also work with interpreters of complementary temperaments so as to identify their partner's way of thinking and therefore learn from each other (Zhu Wen 2015).

4. Conclusions

This paper is aimed at giving an outline of the relations between interpreter's individual temperament and their performances, for the purpose of raising the awareness of the improvement of interpreters' psychological quality. Interpreters' psychological quality is an inseparable component of dynamic study of interpretation. Though invisible, a dissatisfactory psychological quality might lead to poor professional or academic outcomes. Failure in interpretation is caused not only by poor vocabulary or disorganized sentences, but also by disappointing psychological status. If interpreters lack sound psychological quality, then a minor error may result in disorder and confusion. Interpreters' psychological quality is worth studying. Neglecting the importance of interpreters' psychological quality, especially in interpreters' training, would probably be giving them fish, instead of teaching them how to fish. Hopefully readers might draw referential experience from the provided tactics and learn something to their advantage.

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