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# Language and Thought Control in Selected Literary Works

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Zásady pro vypracování:

Cílem diplomové práce je prostudovat vztah mezi jazykem a jeho vlivem na myšlení a následně zmapovat způsoby zneužití jazyka pro manipulaci s lidskou myslí. K prostudování této problematiky se studentka ve své práci zaměří na vybraná literární díla, která s tímto tématem souvisí, a to 1984 (G. Orwell), Gulf (R. A. Heinlein), Babel-17 (S. R. Delany), Anthem (A. Rand) a Languages of Pao (J. Vance). V první části práce studentka nejprve představí koncept lingvistické relativity a porovná různé přístupy k této teorii. Dále popíše vliv jazyka na lidské chování z hlediska psycholingvistiky. Na základě získaných teoretických poznatků provede analýzu jazyka ve vybraných literárních dílech s cílem zmapovat vliv analyzovaných jazykových prostředků na chování postav. Závěrem autorka porovná způsoby zneužití jazyka v jednotlivých dílech a objasní, do jaké míry mohou analyzované jazykové prostředky ovlivňovat lidské myšlení.

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## Annotation

This master thesis focuses on the idea of linguistic relativity. Specifically, it examines the extent to which language influences thought. With the aid of relevant sources, the main concepts concerning the linguistic relativity are described in the first part of the thesis. On the basis of this theoretical framework, the analysis of five literary works (Orwell's *1984*, Rand's *The Anthem*, Delany's *Babel-17*, Heinlein's *Gulf*, and Vance's *Languages of Pao*) is conducted. The use of language in those works is observed and potential means of thought manipulation through language are described.

## Keywords

linguistic relativity, linguistic determinism, Sapir-Whorf hypothesis, language, thought, reality, discourse

## Anotace

Tato diplomová práce se zaměřuje na koncept lingvistické relativity. Konkrétně zkoumá, do jaké míry je myšlení člověka ovlivněno jazykem. S využitím relevantních zdrojů jsou v první části práce popsány jazykové koncepty, které se týkají lingvistické relativity. Na základě tohoto teoretického rámce je provedena analýza pěti literárních děl: *1984* od G. Orwella, *The Anthem* od A. Randové, *Babel-17* od S. R. Delanyho, *Gulf* od R. A. Heinleina a *Languages of Pao* od J. Vance. Předmětem zkoumání je především použití jazyka v těchto dílech a následně jeho možné zneužití k myšlenkové manipulaci.

## Klíčová slova

lingvistická relativita, lingvistický determinismus, Sapir-Whorfova hypotéza, jazyk, myšlení, realita, diskurz

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## List of Abbreviations

C1 – Criterion 1

C2 – Criterion 2

C3 – Criterion 3

C4 – Criterion 4

C5 – Criterion 5

LD – Linguistic Determinism

LR – Linguistic Relativity/Relativism

SAE – Standard Average European

SWH – Sapir-Whorf Hypothesis

UG – Universal Grammar

# 0 INTRODUCTION

This master thesis focuses on the relation between language and thinking. The aim of the paper is to monitor the relation between speakers' language habits and their experience of the world, and consequently analyze the possible ways of thought manipulation. In order to do so, the following five works of fiction have been chosen: *1984* (G. Orwell), *Anthem* (A. Rand), *Babel-17* (S. R. Delany), *Gulf* (R. A. Heinlein), and *Languages of Pao* (J. Vance).

The central focus of this paper is the concept of *linguistic relativity* (LR). This theory proposes that there is a direct relationship between language and thinking, and that one's mental processes are influenced and shaped by the language one speaks. LR shall not be confused with *linguistic determinism* (LD), which refers to the belief that thought is determined, rather than only shaped by language. There is also an umbrella term for both linguistic determinism and linguistic relativity – *the Sapir-Whorf hypothesis* (SWH). Some authors use the terms Sapir-Whorf hypothesis and linguistic relativity interchangeably. However, this paper makes distinction between both theories, stating that the SWH bears certain features of LD as well. Therefore, it cannot be substituted by the term LR. This distinction is discussed in greater detail in Chapter 3.

First of all, it is necessary to clarify what is meant by the term "language". For that reason, some definitions of various linguists and philosophers are provided at the beginning of Chapter 1. The differences between them are discussed and compared. The Saussurean concept of language is explained and described, together with Saussure's dichotomies of *langue* and *parole*, and *signifier* and *signified*. Before examining the nuances of the SWH, various perspectives of Sapir's and Whorf's predecessors regarding the topic of LR need to be discussed. This is dealt with in Chapter 2. The historical perspective takes into account the viewpoints from Plato and Aristotle to Humboldt. The historical development is described, and gradual steps which originated the idea of LR are thus introduced.

Chapter 3 shows the theory of linguistic relativism in great detail. First of all, the concept of the SWH is described, and the distinction between the SWH and LR is made. Secondly, specific examples regarding the SWH application are illustrated. Specifically, the *habitual thought* conception, and experiments with the Hopi speakers are taken into account. Thirdly, obstacles in the research regarding SWH are addressed and identified. After that, alternative views and empirical research is compared to the theoretical background provided earlier.

Chapter 4, the final section of the theoretical part of the thesis, is devoted to psycholinguistics and experiments conducted in cognitive science. Its most part consists of tests and research conducted by Boroditsky (2001, 2010, and 2017). Finally, the relation between language and the manipulation of mental processes is described.

The practical part of this paper focuses on the analysis of the following five pieces of literary work: Orwell's *1984*, Heinlein's *Gulf*, Delany's *Babel-17*, Rand's *The Anthem* and Vance's *Languages of Pao*. Specifically, the language used in those books is studied. Its influence on thought and mentality of characters in those books is discussed with the aim to illustrate possible ways of manipulation of human mind through language.

# 1 WHAT IS LANGUAGE?

Language is the core of human communication. It has been the main focus of many disciplines, such as linguistics, philology, translation studies and even literature. Linguists, psychologists and philosophers generally agree that it is the use of language that distinguishes humans from animals. For the sake of further analyses, it is necessary to define what exactly is referred to when the label *language* is used in this paper.

As it is a very broad concept, various definitions of this term exist. It would be naive to think that the scope of language can be summarized in few sentences. By asking such question ("What is language?"), one presupposes that all of the distinctive systems of communication around the world have some features in common. The following definitions are taken from the works of respected linguists. Compiled from those sources, they form a comprehensive theoretical framework which provides a sufficient basis for further analyses.

## 1.1 Definitions of Language

Sapir (1921) defines language as "a purely human and non-instinctive method of communicating ideas, emotions and desires by means of voluntarily produced symbols." He clearly describes language as a tool for transferring information. (Sapir 1921, 8) According to Lyons (1981), this definition is imprecise in a few aspects. Most importantly, Lyons points out that "there are many systems of voluntarily produced symbols that we only count as languages in what we feel to be an extended or metaphorical sense of the word 'language'." He states gestures, posture and facial expressions as examples of such system, nowadays referred to as body language. He says that the question whether this is "purely human" and "non-instinctive" is open for discussion.

Moulton in his attempt to describe language narrows the definition to two terms. He says that "language makes use of *sound*, and sound is used to convey *meaning*" (quoted in Hill 1969, 4). However, he does not imply that language consists merely of those two concepts. Further in the chapter, he proceeds to investigate the connection between them. Ultimately, he summarizes by saying that "sound and meaning are not language, but only the external, observable aspects of language." Consequently, he draws a conclusion from this statement, claiming that "language itself, in the narrower sense, is neither of these observable things but rather the connection between them – which can be observed only indirectly, by inference." (Hill 1969, 5) At the end of the chapter, he analyzes this link

through semantic and grammatical encoding in great detail. However, his initial definition is sufficient for the aim of this paper.

Bloch and Trager (1942) describe language as "a system of arbitrary vocal symbols by means of which a social group co-operates" (Bloch and Trager 1942, 5). Here the social function of language is highlighted. In contrast to Sapir's viewpoint, it does not take into account the communicative function of language. By using the term *vocal symbols*, authors obviously restrict language only to its spoken form. Another notable aspect about their definition is the feature of *arbitrariness*. Lyons (1981) explains that the label arbitrary in connection with language refers to something "inexplicable in terms of some more general principle." Furthermore, he illustrates that the most significant example of arbitrariness is the relation between form and meaning. He admits that in case of onomatopoeic words (such as 'woof' or 'crash'), the link between form and meaning is non-arbitrary. He emphasizes, however, that vast majority of words in all languages are non-onomatopoeic. Such expressions are arbitrary in the following aspect: "given the form, it is impossible to predict the meaning and, given the meaning, it is impossible to predict the form." (Lyons 1981, 19)

The idea of arbitrariness is also employed in the definition provided by Hall (1968). Quoting from his essay, language is "the institution whereby humans communicate and interact with each other by means of habitually used oral-auditory arbitrary symbols" (Hall 1968, 158). Compared to the previous definition by Bloch and Trager (1942), Hall uses the term *interaction*. It seems to be a more suitable term compared to *co-operation*, as it takes into account both the speaker as well as the hearer of the message. Moreover, this reference is even stronger due to the usage of the term *oral-auditory*. Wallwork (1971) adds that one of the functions of language is to establish social relationships (phatic language). Lyons (1981) draws an analogy between Hall's and Sapir's viewpoint when he mentions that both linguists consider language a purely human institution, adding that "language that is used by a particular society is part of that society's culture." (Lyons 1981, 5)

Similarly, Moulton (quoted in Hill 1969) treats language as something bound to a particular culture. He advocates that:

> In the case of language, it is only the ability to talk and understand that we inherit genetically; the particular language or languages that we speak are passed on to us not by genetic transmission but by cultural transmission. That is to say, a language is something we learn and are taught, not something that we know by instinct. (Hill 1969, 4)

Interestingly, Moulton stresses the idea that a simple culture does not necessarily make use of simple language. Some cultures in the Amazon jungle are referred to as primitive, while their language is equally advanced and complex compared to the "advanced cultures" in Europe. (Hill 1969, 4)

Another explanation concerning the language characteristics can be found in Chomsky's work (1957). He asserts: "From now on I will consider a language to be a set (finite or infinite) of sentences, each finite in length and constructed out of a finite set of elements." He adds that this is applicable to all *natural languages* regardless of their form (spoken or written), as each natural language has "a finite number of phonemes (or letters in its alphabet)" and each sentence is "representable as a finite sequence of these phonemes." (Chomsky 1957, 13) In contrast to the above mentioned definitions, this explanation describes language from a strictly mathematical viewpoint. Chomsky (1957) obviously does not comment on the communicative function of language introduced in previous definitions. He does not mention arbitrariness or symbolic nature of language. Therefore, his description provides a unique interpretation, presenting language from the viewpoint of structure.

Chomsky's definition introduces a new term: *natural language*. In order to fully understand his point, it is necessary to explain this distinction between *natural* and *artificial* languages. *Natural language* is the main concern of every linguist. It is primarily connected to humans and their communication. Examples of such language can be English or Chinese. *Artificial language*, on the other hand, is a system of communication created artificially by humans for particular purposes. Systems constructed by logicians, mathematicians or computer scientists belong here.

To conclude, it has been illustrated that linguists take into account various features when trying to define language. They comment on its arbitrariness and structure, as well as its vocalic nature. Moreover, they take into consideration the communicative and social function of language. The focus of this thesis is put on natural languages as the systems on communication, since the analytical part is mainly concerned with the works of fiction describing people and their behavior influenced by language. In order to thoroughly understand the mental aspect of speaking and using language, a structuralist approach is discussed in the following subchapter.

## 1.2 Langue-Parole Dichotomy

Saussure, a famous Swiss linguist and semiotician, sees language as "a system of signs which express ideas" (Saussure 1961). Signs play an important role in Saussure's work. He is

considered to be one of the first scholars claiming that language does not reflect reality. He is famous for his definition of sign as a conception consisting of two parts: *signified* and *signifier*. In other words, these terms may be referred to as "concept" and "sound-image" respectively. To Saussure, *signified* is the association, the referent which emerges in mind upon hearing *signifier*. In contrast, *signifier* is the specific sound-image which designates and points at *signified*. The relation between both is arbitrary. Through interpretation of the *signifier*, meaning is created. (Saussure 1961, 65-68)

Furthermore, signs are historically and culturally specific. Therefore, their interpretation does not depend exclusively on expressions which are used, but also on the interpreter's experience, cultural and social background, etc. For example, a mental concept of the word "dog" might be similar for many people. The "signifieds" in their mind might differ in size, color or breed. Nevertheless, they will probably have some characteristics in common – an animal, four paws, a tail, fur, barking. However, the problem arises with words which do not refer to physical objects, but rather point at abstract concepts. For example the word "freedom" does not refer to any definable concept but rather a collection of frames and images. Those are so called "floating (or empty) signifiers", which refer to expressions with vague or no agreed upon meaning (Mehlman 1972).

This theory of signs is connected to another, equally important dichotomy concerning the philosophy of language introduced by Saussure. He distinguishes between *langue* and *parole*. Correspondingly, these two French terms are referred to as language-system (langue) and language-behavior (parole). According to Saussure (1961), langue is a form. It is a structure and it represents the "work of a collective intelligence". Langue is simply "the corporate behavior, linguistically speaking of all speakers who are mutually comprehensible" (Wallwork 1971, 117). In other words, langue refers to the system of a language. Parole, on the other hand, is the term for a particular usage of language within that system. It refers to the language-behavior. Saussure defines the language-system as "a social phenomenon, which is itself purely abstract and has no physical existence." This system is "actualized on particular occasions in the language-behavior of individual members of the language-community." (Lyons 1981, 10) To conclude, langue makes speech possible, while parole is the individual action of speaking.

Lyons (1981) reacts on this Saussurean dichotomy by asserting the following interpretation:

> (…) a language-system is a structure that can be abstracted, not only from the historical forces that have brought it into being, but also from the social matrix

> in which it operates and the psychological process by which it is acquired and made available for use in language-behavior. (Lyons 1981, 220-221)

This statement implies that the structure of language can be described independently of its historical and social context. This is in accordance with later Saussure's works when he illustrates structural independence of language on those contexts.

Additionally, there is a similar conception described by Chomsky as *linguistic competence* and *linguistic performance*. However, it cannot be said that linguistic competence corresponds fully to the Saussurean concept of language-system. Chomsky (1965) identifies linguistic competence not with the language-system, but rather with "the typical speaker's knowledge of the language-system." In contrast, linguistic performance refers to "the speaker's actual use of language in concrete situations." Therefore, competence is "an underlying generative process which will find ever more possible acts of performance." (Chomsky 1957; Wallwork 1971, 123)

Chomsky (1957) provides another explanation for this dichotomy. He states that if one says about a person that he speaks English, it means one of the following options:

> Either a) that he, habitually or occasionally, engages in a particular kind of behavior,
> Or b) that he has the ability (whether he/she exercises it or not) to engage in this particular kind of behavior. (Lyons 1981, 9)

The former could be interpreted as performance, while the latter as competence. Following this connection, it might be assumed that "performance presupposes competence, whereas competence does not presuppose performance" (Lyons 1981). However, it is not only linguistic competence that influences particular language-behavior in a given situation, Chomsky adds. There are, naturally, other factors which shape the actual usage of language in a particular occasion (such factors include e.g. physical health of the speakers, or their emotions).

Given these points mentioned above, it is obvious that there are various viewpoints concerning language, its nature, and all its peculiarities. In this thesis, primarily the Sapir's definition of language is adopted, as he is a key figure in defining linguistic relativity, which is crucial for conducting analyses of literary works in this paper. Therefore, the term "language" is interpreted as a means of communication and interaction between the members of the society.

# 2 LANGUAGE AND THOUGHT – HISTORICAL PERSPECTIVE

As has been discussed in the previous chapter, there are many various definitions of language. Undoubtedly, language is in all its forms the essence of sharing and communicating meaning. Is it also the tool for creating the meaning? Does the *linguistic competence* of a speaker, i. e. his inner knowledge of his language (Chomsky, 1965) influence his experience of the real world? More importantly, what is the extent of such influence?

## 2.1 From Plato to Locke

Such questions, which are still open to discussion, have been the subject of study especially since the past century. However, the interest in the relation between language and thought could be traced already in ancient times according to some researchers. For instance, Penn (1972) claims that it was Plato who first defined thought as a concept influenced by language. Her interpretation of Plato's *Cratylus* reads as follows: "thought processes are, according to Plato, prior to and at least to some extent, independent of language." (Penn 1972, 41)

Additionally, she argues that Aristotle further developed Plato's idea in his work *On Interpretation*, when he describes "mental impressions" to be "the same for all men, as are the objects they represent" regardless the language used. For Aristotle, speech differs from culture to culture, implying that ideas and thoughts coded into a particular language are unavoidably distorted by such coding. Supposing this belief was true, there would be an implication that a perfect translation from one language to another is precluded. In other words, if verbal expressions differ across cultures while thought units remain the same, it is impossible for a person of a particular culture to communicate exactly the same thoughts to a member of a different culture. Penn further adds that the theory of linguistic relativity, i. e. the idea that language influences thought, is only implicit in Aristotle's work. Therefore, he cannot be considered one of the first proponents of this hypothesis (Penn 1972, 42).

Contrary to Penn's understanding of Platonic and Aristotelian works, Elffers (1996) claims that those ancient philosophers cannot be linked with the idea of LR. Elffers criticizes Penn's statements by calling them blunt and untrue. She says that Penn wrongly interprets Plato's words as "the way we think is influenced by the language we speak" (Elffers 1996, 75). Furthermore, she argues that such interpretation is evidently a mere speculation. She admits that Plato formed substantial base for studying language and meaning.

However, she clearly states that none of Plato's passages cited in Penn's work mention a "correlation between language differences and thought differences."

In her attempt to trace the roots of LR, Penn (1972) mentions other prominent names. Right after concluding chapter about ancient philosophers, she draws focus on Francis Bacon and John Locke as other proponents of the hypothesis. Thus, she claims that there are traces of the LR theory already in the 16th and 17th century. According to Penn, Bacon describes language as a thing "which is characteristic of a people" and he also compares and contrasts the cultures of Greeks, Romans and Jews and their respective languages. As an example, he states that "the Greeks leaned more toward art and science than did the Romans, who were more practical-minded" (Penn 1972, 42). The question is whether these brief remarks about cultural differences without further analysis count as roots of relativist theory. However, Penn (1972) advocates the idea that Bacon describes influence of language on the collective non-linguistic behavior of people (Penn 1972, 43). On the other hand, she provides no citation or evidence by Bacon to support her claim.

Similarly, Penn (1972) believes that John Locke is also important to mention while talking about LR. Locke comments on words as units which can be abused in order to manipulate and distort one's thoughts. He claims that:

> Another abuse of language is an affected obscurity, by either applying old words to new and unusual significations, or introducing new and ambiguous terms, without defining either; or else putting them so together, as may confound their ordinary meaning. (Locke 1824, book III, chapter X, section 8)

This statement clearly comments on the connection between language and mental process, and thus might be considered as related to the idea of LR. In his essay, Locke also claims that "words…by constant and familiar use they charm men into notions far remote from the truth of things" (Locke, chapter X, section 16). It is, therefore, even more apparent that Locke describes the link between language and reality. As Penn (1972) states, he does not suggest that it is language that leads us astray. He explicitly claims that "it is its use that can deceive us." (Penn 1972)

Similarly to Penn, Christmann (1966; quoted in Elffers 1996) regards both Bacon and Locke as proponents of the LR hypothesis. To support his viewpoint, he uses the following quotation: "Men imagine that their minds have command of language: but it often happens that language bears rule over their minds" (Christmann 1966; quoted in Elffers 1996). However, he does not provide any further explanation of the quotation.

This idea presented by Penn and Christmann (i.e. Bacon and Locke are proponents of linguistic relativism) has been again challenged by Elffers (1996). She claims that the idea of LR was not introduced earlier than 1750. Moreover, Elffers claims that the alleged LR views before 18th century are only "pseudo-discoveries of relativism based upon mistaken interpretations of the views at issue" (Elffers 1996, 74). What are the arguments which Elffers uses to counter?

First of all, Elffers (1996) points out that those correlations between Greek, Roman and Jewish cultures, which Penn mentions as the evidence, describe only collective non-linguistic behavior of people. Therefore, they do not concern individual thought. Penn (1972) concedes that Bacon does not provide any evidence for the influence of language on the thought of an individual. Therefore, it can be assumed that he does not advocate the LR theory in its entirety (Penn 1972, 43). This is what Elffers (1996) comments upon as well. She states that correlations between various languages count as "non-cognitive characteristics of people speaking them." Therefore, those parallels cannot be considered as signifying LR, since supporters of the LR theory claim that there is a direct relation between a language and the cognitive characteristics of all its individual users (Elffers 1992, 76).

Secondly, Elffers (1992) claims that linguistic relativism is mutually exclusive with universalistic views of concepts and grammar (such as Platonism or General Grammar introduced in the 17th century). As Bacon adopts universalism and he also holds the view presented by Eco (1995) that it is possible to develop an ideal language in order to reflect reality in an unambiguous way, it is apparent that "the very basis of linguistic relativism is thus absent from his general view of language" (Elffers 1996, 76). Furthermore, Elffers emphasizes the viewpoint that is often overlooked, i.e. the belief that language guides cognition is applicable to particular features as well as to universal ones. Some scholars and philosophers, however, seem to ignore this point. Consequently, they arrive at wrong conclusions and LR is assumed "wherever language is recognized as an active thought-structuring factor" (Elffers 1996, 76). Elffers (1996) criticizes both Penn and Christmann for including Bacon and Locke in the LR theory, claiming that both (Penn and Christmann) present evidence which is connected to universalism, and therefore, it precludes linguistic relativity. She further calls the LR attributions of both scholars unjustified and factually untrue. (Elffers 1996)

Thirdly, Elffers claims that the idea of linguistic relativism could not arise before the mid-18th century due to "general trends in linguistic thought of earlier centuries." She says that the idea of LR is based on conceptual variability, which is related to both grammatical

and lexical variability. According to Elffers, it was around 1750 when "correspondences between languages and the cognition of their individual speakers were assumed for the first time" with the French thinkers such as Condillac. This assumption excludes all previous philosophers as proponents of the LR theory.

Beek (2006) in his paper published by *Semantic Scholar* also does not include Locke among the LR thinkers. However, he speaks about Locke's significance concerning the relationship between language and thought. According to Beek (2006), Locke ascribes the invention of language to humans. This was quite a revolutionary idea at that time, since it was in sharp contrast with the viewpoint presented by the Catholic Church, i. e. "language was invented by God and given to man" (Beek 2006, 6). Similarly to Elffers (1998), Beek also holds the view that Locke and his ideas did not give rise to the linguistic relativism.

## 2.2 The 18th Century – Kant, Hamann and Herder

As has been already mentioned above, there are different opinions on the belief that the LR theory has its roots in ancient times. Considering these disputes, it cannot be assumed with certainty that the hypothesis had been known before the 18th century. In the attempt to map the roots of the hypothesis, the primary focus, therefore, should be put on the era upon which all above mentioned authors agree.

Such period begins around 1750, when universalistic views start to be gradually rejected. One of the most prominent philosophers of that time is undoubtedly Immanuel Kant. He is known for many revolutionary ideas, and in the large number of essays, he reflects on the language-meaning relationship as well. As Priest (2002) describes in his *Beyond the Limits of Thought*, Kant believes that language is but one of the tools which are used by humans to experience the world. Additionally, Butts presents Kant's quotation: "Thinking is speaking to ourselves" (1798; quoted in Butts 1988, 278). The connection between Kant's philosophy and LR is further discussed in Chapter 3, where it is contrasted with Sapir's and Whorf's ideas.

Several authors, such as Beek (2006), Elffers (1998) and McAfee (2004) agree that one of the earliest philosophers who provide basis for the LR hypothesis were Johann Georg Hamann and Johann Gottfried von Herder. Hamann's beliefs were in a sharp contrast with the ideas on language which were held in the period of Enlightenment. Although Hamann's ideas overlap in many aspects with those of Whorf, there is still a significant difference between them concerning the origins of language. According to McAfee (2004), Hamann is the first German philosopher who addresses the issue of relationship between

language and thought, and he believes the nature of language to be divine. She proves it by quoting Hamann from Miller:

> "In the beginning, when God called the world into being through the divine Logos, so man too, having been taught this miracle recreates his own spiritual reality by means of human language." (Miller 1968, 14)

Apparently, Hamann's viewpoint differs from Whorf's, who never discusses the origin of language in his works. Beek (2006) adds another aspect of LR which can be traced in Hamann's essays. He points out Hamann's concern with comparing and contrasting various languages. Hamann discovers that "differences between languages parallel differences in thought". This was a revolutionary idea at that time. Furthermore, Hamann says that "language did not originate from thought, but its origin had been prior to thought, for thought presupposes a language in which it might manifest itself" (Beek 2006, 7). Considering those statement, it can be said that Hamann could, indeed, be the first one to present such a relativistic viewpoint.

Additionally, Penn (1972) comments on Whorf's inexplicitness concerning the origin of language. However, she says that there seems to be the assumption "that language is a manifestation of the soul of man apart from his body and hence not the creation of his neurological organization" (Penn 1972, 28). Miller (1968) adds that to Hamann, "language occurs simultaneously to thought in the spontaneous communicative process." More importantly, Hamann believes that "language entered into the very structure of cognition and was a constitutive factor in its development." (Miller 1968, 15) This belief precludes the universal faculty of reason that is identical for all humans. Miller says that reason "had to be considered relative to the particular language spoken by a people" (Miller, 1968, 17). Hamann calls this natural mentality and he believes that every nationality or group has their own separate natural mentality, which is also reflected in their laws and customs. (Miller, 1968, 18)

Another philosopher who is connected to the early LR theory is Johann Gottfried von Herder, a Hamann's student. He was strongly influenced by his teacher and he published number of essays. He contributes to the discussion over the issue concerning the origin of language. As suggested above, the question is whether language is of human/rational or divine origin. According to Beek (2006), however, Herder does not perceive either of these options to be true. Moreover, he rebuts both variants, and consequently produces his own (Beek 2006, 7).

Herder believes that language is connected to one's emotional side. Similarly to animals, a human soul immediately expresses all painful or strong body sensations and passions by means of language (such as shouts and inarticulate tones), Herder says. This assumption excludes the belief that thought is primary to language. However, as Beek (2006) points out, it brings other options about the language origin, such as "language precedes thought" or "language and thought originate at the same time." Consequently, it opens the discussion about language reflecting spontaneity and individuality rather than universality of reason. (Beek 2006, 8)

Similarly, Miller (1968) claims that Herder presents language as primary to reason by saying "we cannot think without thoughts, and we learn to think through words, then language gives to the whole of human knowledge, its limits and contours" (Miller, 1968, 20). As McAfee (2004) adds, Herder claims that every language is a reflection of the national mentality, as it has its special features and idiosyncrasies (McAfee 2004, 28). Miller further explains that "external features of a particular language could provide clues as to its inner character" (Miller 1968, 24). Supposing that one's mentality is shaped by the special features of their language, it might be assumed that language is of equal importance as thought. Herder confirms this by saying that "thought itself is internalized language" (Beek 2006, 8). By this statement, Herder develops the belief presented in the work of his teacher (J. G. Hamann), who advocated the idea that "language is the necessary medium for thought to be exercised" (Beek 2006, 8). Both philosophers significantly influenced the work of a prominent German linguist Wilhelm von Humboldt. In this paper, he is referred to only by his last name. However, he shall not be confused with his brother Alexander von Humboldt, a famous German geographer and naturalist.

## 2.3 The 19th Century – Humboldt and His Influence

Wilhelm von Humboldt is believed to be one of the key figures in the philosophy of language. He is recognized especially for introducing the idea that human language is not a mere collection of phrases and words paired with meanings, rather it is a rule-governed system (Lyons 1981, 304).

According to Beek (2006), Humboldt's viewpoint is closer to the belief which would later to be called the strong version of linguistic relativism (i.e. language determines thought). However, Humboldt himself never advocated this variant explicitly (Beek 2006, 8). As Lyons (1981) asserts, Humboldt advocates both "the diversity of language-structure" and "the influence of language-structure upon the categorization of thought

and experience" (Lyons 1981, 239). This point clearly implies that people of different linguistic backgrounds have dissimilar experience and perception of the world. Similarly, a French scholar Levy-Bruhl presents different mindsets (primitive and modern), arguing that "the mind of so-called savage operates differently from that of a civilized man" (Lyons 1981, 239). These assumptions were a significant turning point in the context of the 19th century. As Elffers (1996) emphasizes, "with Humboldt began the heyday of 19th-century linguistic relativism" (Elffers 1996, 77).

What are the main characteristics of Humboldt's viewpoint? Considering the historical context of Humboldt's work, it is important to note that it is the era of exploring new cultures and civilizations. This is also reflected in the work of linguistic scholars of that time, Humboldt included. He distinguishes between languages based on "the degree of primitiveness or civilization," with Western European languages being on the top of the hierarchy (Elffers 1996, 80). Humboldt considers inflectional languages to be of superior value above others. This hierarchical distinction is later rejected by both Sapir and Whorf (Lucy 1997, 294).

Another feature of Humboldt's work is its inconsistency. According to Brown (1967), there are some aspects of Humboldt's viewpoints which seem to be contradictory. To support this claim, Brown presents several examples. On the one hand, Humboldt holds a universalistic approach, advocating that various languages are at their basis connected by a similar, universal grammar. On the other hand, he interprets languages to be the reflection of national mentality. Therefore, with significant differences between nations, considerable differences between languages can be found accordingly, says Brown. (1967; quoted in Beek 2006, 9) The same idea is expressed by Penn (1972), when she quotes Humboldt: "The internal structure of a language is a reflection of the national spirit and influences the consciousness of a people" (Penn 1972, 19). Another example of contradictions Brown expresses as follows:

> Humboldt held the belief of the individual as being able to shape language as to express his or her personal feelings. This belief should be situated in the Romantic literary tradition of the individual genius of the artist. Contrary to this view is the conception of the individual as being constrained by the language he or she uses, in such a way as that the language entirely determines the thought of the individual.
>
> (Brown 1967; quoted in Beek 2006, 9)

The reason for such a contrast in Humboldt's propositions Brown explains by drawing a distinction between his earlier and later work. However, not all discrepancies can be solved

this way. Other authors (e.g. Elffers 1996; Beek 2006; Lucy 1997) agree that despite some inconsistency, Humboldt generally inclines toward the strong version of linguistic relativity, i.e. language determines the thought completely. He says that "the difference between languages is not one of sounds, and signs, but a diversity of world perspectives" (Miller 1968, 29). McAfee (2004) adds that Humboldt believes in each culture having its own separate world-view.

An interesting point which can explain the discrepancies in Humboldt's works is presented by Trabant (2000) in Pütz's *Explorations in Linguistic Relativity.* He says that to Humboldt, languages have a lot in common. All of them have one task in common – to form thoughts. In this sense, they are universal since they serve the same purpose. Humboldt suggests that there are universal categories of thought and language. For instance, he presents "verbs" or "personal pronouns" to be universal categories. He adds the categories to those presented by Kant, who believes that there are certain laws of thinking which are identical for mankind. (Pütz 2000)

In contrast to that, there are certain peculiarities in every language that distinguish them from each other. Despite the universal grammatical categories, Humboldt claims that the mental part of language differs from language to language and is not universal. It can be, therefore, assumed that there are mental concepts which are dissimilar throughout certain languages. Humboldt gives an example of such concept when he mentions the perception of time. (Pütz 2000, 32) In this aspect, his viewpoint overlaps with that of Whorf, who also believes that various cultures designate time differently. This is discussed in Chapter 3 together with examples from the Hopi culture. In conclusion, it would be wrong to call the work of Humboldt either strictly universalistic or relativistic. It is necessary to make distinctions between his understanding of grammatical part of language and the mental concept associated with it.

Additionally, Humboldt provides comments on lexicon of a language and how it influences the worldview of its speakers. He says that "each language approaches the world differently", and the knowledge of the objective world can be understood only subjectively, in accordance with own ways of perceiving and feeling in that particular language (Humboldt 1997, 18). Trabant contributes to the discussion by claiming that Humboldt distinguishes between naming material and immaterial objects.

> Humboldt thinks that the designation of the outside world, of things, animals, of plants etc., of things you can point at, differs less from language to language than the designation of immaterial objects. The designation of material objects is more or less the same in all languages; the signification is the material object itself, the reference.
>
> (Pütz 2000, 35–36)

On the other hand, the words for immaterial objects are creations of that language, according to Humboldt. Therefore, when observing conceptual differences between languages, it is more likely to find them in abstract concepts (such as thoughts, feelings, evaluations), rather than specific tangible things.

Moreover, the differences across languages are apparent especially when one tries to learn a foreign language. Hall (1968) illustrates this by distinguishing between children and adults trying to acquire a new language. When a child learns a native language, his mind creates and learns new concepts. In contrast, an adult trying to learn a foreign language already has those concepts in his mind and he only translates them into a different language (Hall 1968, 187–188). A problem may appear when a native language lacks a corresponding mental concept which exists in a foreign language, both on grammatical and lexical level. Consequently, people might have difficulties with understanding and acquiring that part of a language, since there is no appropriate match in their mind. This issue has been of considerable concern to psycholinguists in recent years.

Finally, there is one more crucial feature which distinguishes Humboldt from other linguistic viewpoints of that time. This aspect concerns the usage of language in literature. Humboldt is not interested in the mere lexicon and grammar of any language; rather he focuses on discourse, speech and texts of a particular language. He calls grammar and lexicon "a dead skeleton of language". In order to be able to analyze the worldview of speakers, Humboldt studies the application and usage of language in a rich production of texts available in that language, especially poetry (Pütz 2000, 33). He is aware that mere structural description of language cannot provide sufficient insight into the speakers' worldview. This attitude is a unique feature of Humboldt's work, in comparison with the viewpoints of his predecessors. At the beginning of the 20$^{th}$ century, scholars like Boas and Sapir continued to study the relationship between language and thought.

# 3 LINGUISTIC RELATIVITY

As has been illustrated in the previous chapter, the idea of the relation between language and thinking has its roots in ancient times. The assumption that the language influences the speaker's cognition could be traced in the works of Plato, Kant, Hamann, Herder, Humboldt, etc. Following these scholars, it is Edward Sapir who further discusses the relation between language and culture. He defines culture as "*what* society does and thinks" while language is for him "a particular *how* of thought." (Sapir 1921, 233)

## 3.1 Sapir-Whorf Hypothesis

Sapir (1929) presents various ideas regarding the relation between language and a real-world experience. He believes that the 'real world' is "unconsciously built up on the language habits of the group" (Sapir 1929, 209). Provided that various languages reflect the reality differently, it can be assumed that speakers of a language A will never perceive the world in the same way as speakers of a language B. Similarly, Sapir (1929) claims that "no two languages are ever sufficiently similar to be considered as representing the same social reality" (Sapir 1929, 209).

Sapir's ideas were a great source of inspiration for his student, Benjamin Lee Whorf. He develops the theories even further. According to Chase (1955), Whorf produces two major hypotheses:

1. All higher levels of thinking are dependent on language.
2. The structure of the language that is habitually used by speakers has an impact on the manner in which those speakers understand their environment. (Chase 1955, vi)

Similarly, Kay and Kempton (1984) interpret Whorf's work in terms of two main claims:

1. There is a parallel between non-linguistic cognitive differences and structural differences in language systems.
2. An individual's worldview is influenced by his or her native language. (Kay and Kempton 1984, 2)

These hypotheses present the assumption that language and thought are directly related. They are commonly referred to as the *Sapir-Whorf Theory or Sapir-Whorf Hypothesis* (SWH), although those two scholars never co-authored any work. Nevertheless, many authors prefer

the label *Whorfian Hypothesis*. However, these ideas shall not be assigned exclusively to Whorf. According to Penn (1972), Whorf only develops the theory of linguistic relativity presented by earlier scholars. Penn claims that "the idea is easily traced from Hamann to Whorf." (Penn 1972, 54) Since the theory is popularized under the name Sapir-Whorf hypothesis (rather than only Whorfian hypothesis), the same label is adopted also in this thesis.

### 3.1.1 Linguistic Determinism vs. Linguistic Relativity

To further analyze the Whorf viewpoint, it has to be first understood what is really meant by the SWH. Penn (1972) introduces a following problem which can occur when interpreting Whorf's idea. Does the hypothesis say that "language determines thought" or rather that "language influences thought"? Penn (1972) further states that Whorf's writing does not contain any such statement that would clarify which assertion he intended to be making (Penn 1972, 13). Lyons (1992) contributes by saying that the SWH combines both linguistic determinism as well as linguistic relativity.

After examining Whorf's essays, it can be assumed that Penn (1972) is right. One of the most specific statements that describes Whorf's viewpoint can be found in his *Language, Thought and Reality*, where Whorf explicitly says:

> The background linguistic system (in other words, the grammar) of each language is not merely a reproducing instrument for voicing ideas but rather is itself the shaper of ideas, the program and guide for the individual's mental activity, for his analysis of impressions, for his synthesis of his mental stock in trade. (Whorf 1956, 212)

As the example above illustrates, Whorf uses the word "shaper" in order to describe language. The question is whether by "shaping" Whorf means "determining and limiting" or rather "influencing" the mental processes. Penn (1972) considers the former interpretation to be the "strong" version of the hypothesis (linguistic determinism), while the latter is seen as the "weaker" version (linguistic relativity). Several critics including Lenneberg (1953), and Pinker (1994) claim that Whorf's point of view belong to the strong linguistic determinism, while Lucy (1997), and Levinson (2001) see Whorfian theories to be an explicit rejection of determinism. Hill and Mannheim (1992) argue that this distinction is a rather new concept, since Whorf never describes such dichotomy in his works.

Thus, it cannot be stated with certainty which of the two versions Whorf has in mind. However, Sapir's work can be also taken into account to assist with the interpretation, since Whorf draws inspiration from him. Sapir explicitly states that "it would be naïve to imagine

that any analysis of experience is dependent on pattern expressed in language" (Sapir 1946, 107). Thus, it is obvious that he rejects the "strong" version of linguistic determinism. Therefore, the Sapir's conception that was taken up by Whorf probably has to do with the linguistic relativity, i.e. the "weak" version. Nevertheless, there are some features in the works of Sapir and Whorf which can be ascribed to the "strong" version. In conclusion, this thesis treats the SWH as a combination of both LR and LD. Therefore, the terms SWH and LR are not used interchangeably in this paper, since the scope of the SWH is broader and slightly more general than that of LR.

Whorf himself uses the term *linguistic relativity principle* to describe his hypothesis. He further explains what is meant by that: "users of markedly different grammars are pointed by their grammars toward different types of observations and evaluations … and hence are not equivalent as observers but must arrive at somewhat different views of the world" (Whorf 1956, 221). In other words, the interpretations of the users differ, since they evaluate similar acts in dissimilar ways.

### 3.1.2 The Conception of Habitual Thought

Whorf is known for his specialization in Uto-Aztecan languages. Particularly, he focused on the Hopi language, the mother tongue of Native Americans living in Arizona, USA. In his analysis, Whorf (1941) illustrates the conceptualization of time produced by Hopi speakers, and he describes the way they speak of temporal relations. Based on the Hopi view of time, he explained certain patterns of behavior.

He uses the term *habitual thought* to describe the "linguistic patterns" which are the tool of perception. He further explains that "this 'thought world' is the microcosm that each man carries about within himself, by which he measures and understands what he can of the macrocosm" (i.e. the objective world) (Whorf 1941). According to Rossi-Landi (1973), Whorf provides focus on the "practical mechanics" of a given language such as the parts of speech, the formation of gender, tense and case, and discusses "conceptual and cultural effects of these features" (Rossi-Landi 1973, 32).

According to Penn (1972), the accuracy of the Whorf's analysis of Hopi is questionable. Moreover, it has been criticized by many scholars (Penn, 1972, 30). Especially with Chomsky's theories about universal grammar, the importance of Whorf's hypothesis starts to decline. However, the late 1980s give rise to his theory with gradual development of cognitive linguistics. (Leavitt 2011)

In order to better understand Whorf's viewpoint, it is vital to focus on the examples he provides in his works. Such examples are presented and further discussed in the following subchapter.

### 3.1.3 The SWH in Hopi Language

In order to analyze the shaping power of language, Whorf compares Standard Average European (SAE) languages (which refer to the modern Indo-European languages) to Hopi, which belongs among Uto-Aztecan languages. In particular, he focuses on the speakers' perception of time and space. (McAfee 2004, 5)

Whorf (1956) gives a detailed comparison concerning temporal forms of verbs. While SAE languages rely on the three-tense system (containing the concepts of past, present and future), the language of Hopi makes no such distinction regarding the case of verb forms. Whorf (1956) claims that the three-tense system "colours all our thinking about time", since the present is a time unit which can be placed between the two remaining ones – past and future. By doing this, the subjective experience of time is objectified. In contrast, verbs in Hopi are not marked by tenses. They possess *validity forms*, *aspects* and *modes*. The *validity forms* "denote that the speaker (not the subject) reports the situation (answering to our past and present) or that he expects it (answering to our future)." *Aspects* denote "different degrees of duration." Finally, *modes* denote "relations between the clauses, including relations of later to earlier and of simultaneity." (Whorf 1956, 144–145) In conclusion, the notions of the three-tense system and the objectified "time" are distributed among various verb categories in SAE languages, whereas "there is no basis for an objectified time in Hopi verbs" (Whorf 1956, 145).

Referring back to Chapter Two, some correlations between Kant and Whorf may be found. In his work, Kant (2001) presents language as one of the tools for understanding the world. He further advocates that "time and space are *a priori* forms of intuition and they are mind-dependent". Furthermore, he believes that "time is a means for structuring the data that we perceive in the world" (Kant; quoted in Zirkle, 2001). Zirkle adds that "time helps us to process the world that surrounds us, but it is subjective" (Zirkle, accessed March 2019, 5–6). Applying these principles on the example concerning Hopi tense system, it can be assumed that Whorf would argue that language is the means of processing, and therefore, "it is only though language that we are able to perceive the world." In other words, language shapes the way people (including the Hopi speakers) think about their surrounding world. In contrast, it should be noted that Kant does not say that time is the only tool for structuring

thoughts and perceptions. Kant's viewpoint suggests that there is a common human experience and "we are all essentially the same in the manner in which we understand time". Zirkle's conclusion is that language is not the tool shaping the thought but "it controls how we label and communicate our thoughts" (Zirkle, accessed March 2019).

Another example is Hopi perception of numbers. In case of SAE languages, speakers apply cardinal numbers either to "real plurals (perceptible spatial aggregates)" or "imaginary plurals (metaphorical aggregates)". Whorf (1941) gives the following example to explain those terms: when SAE speakers utter "ten men" and "ten days", they perceive the numeral differently. While "ten men" can be seen objectively as one group (e.g. ten men on a street corner), "ten days", on the other hand, cannot be objectively experienced. Whorf claims that: "We experience only one day, to-day; the other nine (or even all ten) are something conjured up from memory or imagination. If 'ten days' be regarded as a group it must be as an 'imaginary,' mentally constructed group" (Whorf 1941, 201). In contrast to that, he asserts that in Hopi, "plurals and cardinals are used only for entities that form or can form an objective group", as in the case of "ten men" in SAE languages. Imaginary plurals do not exist for Hopi speakers. Instead, they use ordinals combined with singulars. Whorf (1941) exemplifies that in the following statement:

> Such an expression as "ten days" is not used. The equivalent statement is an operation one that reaches one day by a suitable count. "They stayed ten days" becomes "they stayed until the eleventh day" or "they left after the tenth day." (…) Our "length of time" is not regarded as a length but as a relation between two events in lateness.
>
> (Whorf 1941, 201–202)

This implies that the mental pattern of time is different between those two groups of speakers. Based on the SWH, the missing pattern may be the consequence of different cultural backgrounds and habits which distinguish both groups. However, a sufficient evidence to prove that point seems to be absent.

### 3.1.4 Constraints Regarding the SWH

Whorf thoroughly studies several issues in order to verify the LR principles. However, there are certain aspects which constitute an obstacle in conducting objective research.

In order to observe the differences in mental patterns between linguistically dissimilar speakers, Whorf analyzes the language from the viewpoint of grammatical patterns. However, it is enormously difficult, if not impossible, to conduct objective research due to the linguistic background of any researcher. An objective study should be provided by means of freeing ourselves from own language. In this thesis as well as in the sources used here, all

explanations related to linguistic habits of various cultures have been provided in English. Thus, mental concepts characteristic of English speakers have been used to describe mental concepts of non-English speakers. Does this fact mean that all descriptions provided are imprecise or biased? Whorf (1956) seems to realize this problem as well, when he says the following:

> (…) the difficulty of appraisal is great (…) because of the difficulty of standing from our own language, which is a habit and a cultural *non est disputandum*, and scrutinizing it objectively. (…) We tend to think in our own language in order to examine the exotic language.
>
> (Whorf 1956, 137-138)

Hence, it is a seemingly impossible task to conduct any research on LR objectively. However, Whorf (1956) offers a solution, claiming that "the best approach is through an exotic language, for in its study we are at long last pushed willy-nilly out of our ruts. Then we find that the exotic language is a mirror held up to our own" (Whorf 1956, 138). Therefore, the more dissimilar the languages are, the more objective approach to an analysis is possible.

This point is connected to another problem which arises in Whorf's studies. It has much to do with characteristics of SAE languages. As has been previously mentioned, this category is comprised of modern Indo-European languages of Europe. For instance, English, German, Dutch, Italian, or French are prototypical members of this group. The complication addressed by Whorf (1956) here is a similar structure of those languages. By observing those similarities, linguists might be biased towards drawing conclusions about those shared principles. There is a danger of considering those shared features as universal across languages, while in fact they are only characteristic for the SAE language group.

To summarize, there are few aspects which need to be considered before drawing a conclusion about the SWH validity. The assumptions introduced by Whorf are still subject to discussion nowadays. There have been numerous sources and authors trying to confirm or disprove this hypothesis. Some of the critical remarks are addressed in the following section.

## 3.2 Contrasting Views and Empirical Research

In order to approach the LR hypothesis thoroughly, it is necessary to take into account related hypotheses and research. As has been discussed before, LR theory involves the belief that dissimilar languages influence worldview of their speakers differently.

One of the contrasting views is introduced by Chomsky, who is known for his universal grammar theory (UG). Similarly to Whorf, Chomsky (1955) also addresses the interdependence of language and thought. The UG theory advocates common structure among languages all around the world, and also the assumption that such structural principle are innate to human brain and therefore, independent of their sensory experience. Chomsky adopts a stance on language and thought relation similar to his predecessors. As Lyons (1981) explains it:

> Chomsky takes the view that language serves for the expression of thought; that human beings are innately (= genetically) endowed with the capacity to form some concepts rather than others; and that concept-formation is a precondition of one's acquisition of the meaning of words. (Lyons 1981, 245)

What distinguishes Chomsky from Whorf, however, is his viewpoint on the sequence in which language and thought occur. While Whorf (1956) advocates that language is prior to thought and shapes the mental processing of real-world stimuli, Chomsky (1972) claims that "language serves for the expression of pre-existing, full articulate thought." Lyons (1981) contrasts this theory with other scholars (such as Condillac and Herder) who adopt the view that language and thought evolved together. Furthermore, they believe that their national languages (French and German), differing in vocabulary and grammatical structure, both determine and reflect national patterns of thought (Lyons 1981, 261). This assumption is in concordance with SWH introduced two centuries later.

The Sapir-Whorf hypothesis is often a subject to criticism for being too vague and non-specific. Various experiments have been conducted over past few decades in an attempt to revisit the theory. One of the most famous examples advocating the validity of the SWH concerns the Eskimo language group. As Lyons (1981) states, it is generally believed that Eskimo vocabulary does not include a single word for "snow"; rather there are many different expressions for different kinds of snow. This implies that they perceive the reality differently, based on their linguistic competence. This idea is generally attributed to Franz Boas, a famous American anthropologist. However, Pullum (1991), Pinker (1994) and Beek (2004) call this Eskimo topic a hoax. Pinker disproves the theory as follows:

> The Eskimos do not have four hundred words for snow, as it has been claimed in print, or two hundred, or one hundred, or forty-eight, or even nine. One dictionary puts the figure at two. (Pinker 1994, 64)

What is problematic about Pinker's statement is that he does not provide any reference to the dictionary. Therefore, it is quite problematic to verify the actual number of expressions.

Later in the chapter, he only quotes Pullum (1991) and identifies himself with Pullum's viewpoint. Apart from the Eskimo issue, Lyons (1981) tries to support the SWH by the example of Australian languages. He claims that there are several words denoting various kinds of sand, while there is no word meaning "sand". There is, however, no evidence whether it is true, or whether it is another example of a hoax.

According to Slobin (1971), there were other experiments conducted in 1950s and 1960s in order to verify the LR hypothesis. As a result, the "weak" version of the hypothesis was confirmed. However, no research has been conducted which would prove the "stronger" version about LD to be true. (quoted in Lyons 1981) Similarly, Hunt & Agnoli (1991), and Regier & Kay (2009) also rejected the strong version of the SWH completely. Hunt & Agnoli arrived to the conclusion that "cultural variations can influence the speaker's perception and thought with respect to the lexical, syntactic, semantic, and pragmatic aspects of language" (Hunt & Agnoli, 1991).

In conclusion, several studies confirm that LR to a certain degree exists, as many linguists claim that people's world view is conditioned by their mother tongue (Gumperz and Levinson, 1996). Wallwork (1971) arrives to the same conclusion, stating that "to some extent, we are controlled in our thoughts and actions by the language we know" (Wallwork 1971, 10). Possible ways of influencing and manipulating thought from the viewpoint of psycholinguistics are addressed in the following chapter.

# 4 PSYCHOLINGUISTICS AND EMPIRICAL RESEARCH

The relation between language and thought has been a subject of study to many psychologists. This chapter focuses on human cognition and the psychology of language. The scope of psycholinguistics generally ranges from children language acquisition, second language acquisition, language comprehension to language production. The particular focus in this chapter is put on the language comprehension, i.e. the way in which people understand the language. Additionally, it is discussed how this process can be manipulated in order to achieve a certain objective. First of all, several experiments concerning psycholinguistics are described.

## 4.1 Boroditsky's View on Language and Thinking

As has been previously discussed, many philosophers and researchers agree on a thought-shaping power of language. Indisputably, it is a difficult to provide sufficient evidence supporting or rejecting linguistic relativity. Boroditsky, a professor focussing on human cognition, has conducted several experiments in order to observe mental representation and the effects of language on cognition.

As Boroditsky (2017) emphasizes, languages differ in innumerable ways from obvious distinctive features found in vocabulary and pronunciation to more subtle differences in grammar. Comparably to Whorf's observations of the Hopi speakers, Boroditsky also conducts research on topics of time, space, and objects.

First of all, Boroditsky (2001) advocates that private mental representations of speakers "appear to be based in space." In their study on time perception of Pormpuraawans, an Australian Aboriginal community, Boroditsky and Gaby (2010) report on striking differences in time frames across cultures. The reason is assumed to be their perception of space, which is also dissimilar to the speakers of English. Boroditsky and Gaby (2010) claim that Pormpuraawans do not distinguish space and directions in terms of "left" and "right." Instead, they use absolute specific terms ("north", "south", "east" and "west"). In terms of those labels, the speakers of this community perceive world and everyday situations. Therefore, they utter sentences like "the boy standing to the south of Mary is my brother" and "move your cup over to the north-northwest a little bit" (Boroditsky and Gaby 2010, 2). Therefore, there is an implication that they need to stay oriented at all times. The question, however, is: How does this relate to the perception of time?

Being aware of different perception of space, Boroditsky and Gaby (2010) arranged an experiment involving a group of American English speakers and fourteen Pormpuraawans in order to observe the differences in time conceptualization. During the experiment, participants were given a set of cards depicting a man at different ages. Consequently, they were asked to arrange the cards in a chronological order. As a result, English speakers ordered the photos from left to right. In contrast to that, Pormpuraawans arranged them in various directions. There were differences not only between the Aboriginal tribe and English speakers, but also within the tribe. It has been observed that the direction of arrangement performed by Pormpuraawans is dependent on the direction in which they are facing. Specifically, speakers facing north ordered the cards from right to left, while people facing east laid out the cards vertically from top to bottom. Therefore, the direction of arranging things, or in more general terms, of perceiving time line, is geographically dependent for this community. For them, the time is aligned from east to west. Boroditsky (2017) draws a conclusion from this experiment, saying:

> There is one way of describing these data, which is: 'They are doing it differently, based on which way they are facing.' Another way of describing the data is to say: 'They are always doing it the same way. It is me who make time chase us around (…) which is a very egocentric view.' (Boroditsky 2017)

As Boroditsky (2017) summarizes, the perception of time is dependent on the conceptualization of space in human brain. As has been observed, both tested language communities differ significantly in their interpretation of both space and time. Boroditsky and Gaby (2010) believe that this is due to differences in linguistic competence of the groups.

Interestingly, the influence of language is apparent also in the way people perceive objects. Another experiment conducted by Boroditsky et al. is related to grammatical categories in languages. Unlike English, many languages have a grammatical gender system "whereby all nouns are assigned a gender", and studies show that the genders assigned to objects by language do indeed influence people's mental representations of objects. (Boroditsky et al., in press)

In order to illustrate this, Spanish and German speakers were asked to describe given objects. Generally, German and Spanish speakers ascribed more feminine or more masculine properties to object depending on their grammatical gender. For example, the participants were asked to describe "a bridge". This word is feminine in German, while masculine in Spanish. German speakers used labels such as "beautiful, elegant, fragile, peaceful, pretty and slender", in other words adjectives which are typically more common to describing

females. Spanish speakers, in contrast, said “big, dangerous, long, strong, sturdy, and towering.” (Boroditsky et al., in press) Another word chosen for description was “a key.” This time, the word “key” was masculine in German and feminine in Spanish. While Germans said “hard, heavy jagged, metal, serrated and useful”, Spanish speakers assigned to the object labels like “golden, intricate, little, lovely, shiny, and tiny”. These descriptions were completely based on visuals, as they involved only photos without any language material. Many other expressions were tested during that experiment. It has been found out that there are prevailing tendencies across different language groups to ascribe features to objects based on their grammatical gender. As Boroditsky (2001) concludes, “linguistic processes are pervasive in most fundamental domains of thought,” even though speakers may not be aware of that. She further claims that “what we normally call ‘thinking’ is in fact a complex set of collaborations between linguistic and non-linguistic processes (Boroditsky 2001).

## 4.2 Manipulation through Language

Considering all above mentioned examples, it can be assumed that there definitely is a connection between one’s language competence and his behavior. Keeping this in mind, the following question emerges: Is it possible to manipulate someone into behaving in a particular way by means of language?

As Wallwork (1971) states, one of the purpose of language is influencing or controlling people (Wallwork 1971, 12). According to Krauss and Chiu (1998), language is the main tool to access one’s mind, as it is “the principle vehicle for the transmission of cultural knowledge and pervades social life.” Language itself can be influenced, resulting in the possibility of being used for a particular purpose. According to Maillat and Oswald (2011), “external contextual settings of the particular communicative event” (such as social relationship between speaker and audience, their respective roles the status of their respective knowledge, or the purpose of the event) contribute to making a discourse manipulative. Krauss & Chiu further add that:

> Language is implicated in most of the phenomena that lie at the core of social psychology: attitude change, social perception, personal identity, social interaction, intergroup bias and stereotyping, attribution and so on. (Krauss & Chiu, 1998)

Given that language influences all those aspects of human lives, it is indisputable that it can be misused for manipulation. As has been discussed earlier in this thesis, language is realized through concepts in mind. Consequently, those concepts directly determine the way in which

humans act. As a result, by making a change in language, a change in behavior might occur simultaneously. If those concepts in mind are limited, people are unable to express themselves properly, or even think about those concepts which they cannot designate. As Wittgenstein remarks, there is a tight language-reality connection. This is apparent from his statement: "The limits of my language are the limits of my world" (Wittgenstein 1922).

In order to observe the manipulation in discourse, it is necessary to define when it might occur. As Van Dijk (2006) puts it:

> (…) if manipulation is a form of domination or power abuse, it needs to be defined in terms of social groups, institutions or organizations, and not at the individual level of personal interaction. This means that it only makes sense to speak of manipulation, as defined, when speakers or writers are manipulating others in their role as a member of a dominant collectivity. (Van Dijk 2006, 364)

This aspect is, together with other points mentioned in this chapter, further discussed in the analytical part of this paper, specifically in the part devoted to Orwell's *1984*. Van Dijk (2006) further introduces mental models, which define human understanding of discourse and the whole communicative event. Subsequently, he adds that:

> If manipulators are aiming for recipients to understand a discourse as *they* see it, it is crucial that the recipients form the mental models the manipulators want them to form, thus restricting their freedom of interpretation or at least the probability that they will understand the discourse against the best interests of the manipulators.
>
> (Van Dijk 2006, 367)

As is apparent from his description, Van Dijk (2006) believes that understanding may be manipulated by limiting the range of meaning of particular words and phrases. This point is also a subject to analysis in the second part of this paper.

To conclude, it has been illustrated that cognition and understanding might be influenced in manipulative ways. Van Dijk (2006) understands this notion of manipulation as one of the crucial aspects of discourse. The usual forms of ideological discourse, such as the limitation of interpretation, are used for distorting the hearer's worldview. In order to illustrate some of the specific examples of thought manipulation through language, five literary works are analyzed and discussed in the next chapter.

# 5 ANALYSIS

As has been discussed in the previous chapters, there is a certain link between a language and one's mental processes. However, whether the human thinking is only "influenced" or whether it is directly "determined and limited" by the way of speaking remains debatable. The aim of the analysis is to monitor the relation between speakers' language habits and their experience of the world, and consequently analyze the possible ways of thought manipulation. In order to do so, the following five works of fiction have been chosen: *1984* (G. Orwell), *The Anthem* (A. Rand), *Babel-17* (S. R. Delany), *Gulf* (R. A. Heinlein), and *Languages of Pao* (J. Vance). Since the relationship between language used in the book and behavior of the characters is studied, a brief description of the plot is provided at the beginning of every subchapter in the analysis.

## 5.1 Corpus Characteristics

For the purpose of the analysis, a corpus of selected passages from above mentioned books has been composed (see Appendix 1). In order to avoid extensive and confusing passages, the examples in the text of the analysis are not longer than four lines. The full context of every example necessary for understanding is provided in the corpus. Moreover, the crucial passages which are the subject to the analysis within each example are underlined in the corpus. Every example in the analysis is marked with a number in chronological order, while corresponding corpus numbers are provided in brackets.

The corpus is divided into five parts, corresponding to the titles of the books which are studied. Every part includes further categorization of the examples, based on their connection with the analysis. Therefore, the corpus is composed of the following categories:

- *Descriptive* = Passages within this category have been chosen because they include information about the language characteristics, or about the part of the plot/situation in the book which is crucial for analysis.
- *LR Related* = This category includes passages which are connected to the idea of linguistic relativity, and/or based on which the relation between language and thinking can be discussed.
- *Manipulation Related* = Passages in this category are also partly descriptive, as they comment on the situation in the book. However, they also illustrate the features of manipulation with the characters. Therefore, they are categorized separately.

Apart from these labels, there is another system of categorization used in the corpus. Specifically, this concerns Rand's *The Anthem*. The reason for choosing a different system of categorization is the structure of the book. *The Anthem* is written merely by using language with specific features. These features are subsequently taken into account when forming specific categories. All other remaining books (*1984, Babel-17, Gulf,* and *Languages of Pao*) include only several comments on the existence of a specific language. Therefore, they cannot be analyzed using the same method as in *The Anthem*. Examples from this book have been chosen based on five criteria, which are marked by labels ranging from C1 to C5:

C1: The sentence contains a substitution for the word "I" and its meaning is linked to the individuality/collectivism.

C2: The sentence contains the word "I" and its meaning is linked to the realization of one's individuality.

C3: The sentence contains the word "we" but is combined with a noun in singular.

C4: The sentence illustrates/comments on the relation between thought and language.

C5: The sentence describes the way in which the characters are oppressed or manipulated.

Each example meets at least one of the above mentioned conditions. Some cases, however, are a combination of two or more criteria. The examples in the corpus are in chronological order as they appear in the book. The number that indicates a criterion which a specific example meets (C1 – C5) is stated in brackets at the end of every example in the corpus. In case of the passages taken from Rand's *The Anthem,* there is no need to underline the crucial parts within each example, since the whole passage is important to discuss in the analysis.

All examples are discussed on the basis of the theoretical framework provided before. Special focus is put on the relationship between language and thought. The influence of those two concepts on each other is determined based on the plot and changes in characters' behavior. The number of examples in the corpus is high, therefore only the most prominent and representative ones within each category are analyzed. The examples are transcribed verbatim; therefore some inconsistencies might occur, such as missing quotation marks indicating a dialogue, or no capital letters at the beginning of the utterances in dialogues (such as in 4.2.9 in Appendix 1).

## 5.2 *Newspeak* in Orwell's *1984*

First of all, a brief plot description necessary for understanding the analysis is provided. Secondly, distinctive characteristics of *Newspeak* from a grammatical and lexical point

of view are presented. Subsequently, the analysis of *1984* with regard to linguistic relativity is conducted. The corpus has been composed from examples which contain a *Newspeak* word, demonstrate the LR theory, or show the manipulation with characters for ideological reasons.

*Newspeak* is a fictional language of the "superstate" named Oceania, which serves as a setting in G. Orwell's *1984*. The aim of *Newspeak* is to provide the ground for expressing the thoughts which are ideologically appropriate. Moreover, its purpose is to eliminate all other modes of thinking which are incompatible with the ideology of Oceania. Optimally, *Newspeak* should make all such inappropriate ideas impossible. By its means, the Party and the society's leader, Big Brother, make sure that there are no instances of *thoughtcrime*, the ideas which endanger the current regime and which represent concepts such as personal identity, self-expression and the freedom of thought.

In contrast, the working class citizens (*Proles*) still use the original language for communication (*Oldspeak*). The main protagonist, Winston Smith works in the Ministry of Truth and his job is to rewrite document mapping history of Oceania, in accordance with the current political situation. He falls in love with Julia and they secretly have an affair (since the relationships are forbidden). Both characters rebel against the regime but eventually, they are subdued and forced to separate. In the end, they are both indifferent to the fate of the other one. The only thing they love is Big Brother.

### 5.2.1 Grammatical Features of *Newspeak*

This subchapter deals with grammar modifications of *Newspeak* which consequently result in limitation of the meaning of individual words. Orwell's fictional language is based on English. However, its grammar is altered to a great extent, making *Newspeak* incomprehensible for English speakers who are not familiar with its principles.

One of the most prominent features of *Newspeak* concerns parts of speech. Any word in the language can serve interchangeably either as noun, verb, adjective or adverb. Nouns and verbs exist in their 'root form', while adjectives and adverbs are formed by means of suffixes *–ful* and *–wise* respectively. These forms can be illustrated in the following passage:

> Example 1:
> Items one comma five comma seven approved *fullwise* stop suggestion contained item six *doubleplus* ridiculous verging crimethink cancel stop unproceed *constructionwise ante-getting plusful* estimates machinery overheads stop end message.
> (see Appendix 1, Example 1.1.1)

As can be seen in Example (1), adverbs in *Newspeak* take the suffix –*wise*. "Fullwise" is used instead of "fully", while "constructionwise" means "in construction". However, the meaning of the remaining words has to be revealed in order to understand the whole sentence. Example (1) also illustrates another instance of affixation in *Newspeak*. Negative constructions are formed by adding the prefix *un-*. For strengthening the meaning of the word, the prefix *plus-* is added. For even greater emphasis, *doubleplus-* is used. *Newspeak* includes also prepositional affixes, such as *ante-*, *post-*, *up-*, *down-*, etc. The Example (1) contains such expressions as well.

Another important grammatical feature of *Newspeak* is the presence of regular patterns. All verbs form the preterite and the past participle using –*ed*. Thus, the preterite of *think* is *thinked, for* give there is *gived, speak* becomes *speaked,* etc. Those revolutionary modifications make words like *thought, gave,* or *spoke* redundant. Similarly, all adjectives are compared using –*er* and –est, completely substituting all irregular forms using *more* and *most* for comparison.

Although Orwell does not provide his translation, the meaning of the statement in Example (1) can now be decoded based on the knowledge of the above mentioned principles. One possible interpretation reads as follows:

> "Items 1, 5, 7 are approved completely. A suggestion contained in item 6 was extremely ridiculous and it was verging on a thought crime, so cancel it. Do not proceed in construction before getting more estimates about the overheads machinery."

More occurrences of *Newspeak* forms can be found in Example (2).

Example 2:

times 17.3.84 bb speech malreported africa rectify
times 19.12.83 forecasts 3 yp 4th quarter 83 misprints verify current issue
times 14.2.84 miniplenty malquoted chocolate rectify
times 3.12.83 reporting bb dayorder doubleplusungood refs unpersons rewrite fullwise upsub antefilling

(see Appendix 1, Example 1.1.3)

Here in Example (2), the message says that the predictions made by Big Brother has not been correct and therefore must be rewritten in order to fit the thing that actually happened. It can be noted that *Newspeak* does not use expressions as "Big Brother was wrong" or "Big Brother was not right". Such words as wrong or not right directly express that the discrepancy is Big Brother's fault. However, the Party cannot afford to produce words which could undermine the authority of Big Brother or the regime. It is crucial to make sure that no words in *Newspeak* give space to *crimethink,* i.e. subversive thoughts.

Therefore, *malreported* is used instead to indicate the failure in reporting the speech, not in the original statement.

Similarly, the following lines in (2) use verbs like *misprints* and *malquote* in order to express the fault. The motivation behind this is comparable to the first message in (2), i.e. portraying the authority as a flawless entity. The last line of (2) illustrates the form of an adjective *doubleplusungood*, meaning extremely unsatisfactory. It also contains an adverbial form *fullwise* and a prepositional affix in *antefilling*.

By using affixation, the Party is able to dispose of all shades of meaning of one word, keeping only the basic one. Moreover, many words are suppressed or they diminish completely due to this process. For example forming an antonym for good can be dealt with by using solely the affix. Therefore, the word *ungood* is created and there is no need for the word *bad*. As a result of those grammatical alterations, the vocabulary of *Newspeak* was very limited and reduced, in comparison to *Oldspeak*, the original language of communication.

### 5.2.2 Vocabulary Characteristics of *Newspeak*

Following the illustration of grammatical features, it is also important to discuss the vocabulary of *Newspeak*. Orwell divides it into three categories: A, B, and C. Although those categories exist separately, they are complementary to each other.

The A vocabulary consists of words that already exist in the English-speaking environment. Those expressions are used for the purposes of everyday situations. They include words like *dog*, *tree*, *run*, etc. (Orwell 2009, 247). Their meanings, however, are far more limited than those in the *Oldspeak* vocabulary. The A expressions could be hardly used for the purposes of philosophical discussions or political debates, as they represent exclusively one concept, which is useful only for simple thoughts describing specific objects or actions.

The B vocabulary, in comparison, includes words created for political purposes. Its aim is not only to express but also impose the desirable mental activity which is in accordance with the state ideology. The entire B vocabulary is comprised of compound words. For instance, terms like *speakwrite* in Example (1) or *goodthink* belong to the B vocabulary. The B expressions consist of two or more words, or parts of words, which are joined together in the way that makes them easily pronounceable. For the sake of euphony, the order of words within a compound is not strictly determined. In other words, the first part of a compound is not considered more important than the second, for their order is based

on the easier pronunciation of the compound as a whole. The meaning of a compound cannot be easily decoded solely on the basis of the meanings of the individual compound parts. One has to be familiar with the ideology of *Ingsoc* (English Socialism) that these compounds represent in order to correctly interpret their meaning. For instance, *bellyfeel* implies a blind, enthusiastic acceptance, which is typical for a model Oceania citizen.

Finally, the C category consists of terms that are used in the scientific and technical field. It is a supplementary vocabulary to the A and B categories, as it supplements their linguistic functions. An interesting thing is that the word science itself in *Newspeak* does not exist. Instead, there are expressions which are typical for specific fields.

### 5.2.3 Thought Manipulation through *Newspeak*

This subchapter focuses on the possible effects of above mentioned grammar constructions and vocabulary on human thinking. As has been illustrated above, the language of Oceania has undergone some modifications. As Syme, a Party *Newspeak* specialist puts it: "We're destroying words – scores of them, hundreds of them, every day." (Orwell 2009, 45). The purpose of the previously described grammatical changes is to reduce the number of words to the necessary minimum. Furthermore, *Newspeak* is also designed to deprive every word of any shades of possible multiple meanings and retain only one that is very specific and can be used only in very particular context. Consequently, the aim of such reduction is to make any ideological dissent impossible.

As has been described in 3.1.1, the linguistic relativity principle manifests influence of language on thought. The idea behind *Newspeak* is therefore a manifestation of the *linguistic relativity principle* – a person who does not know a specific expression for naming his or her thoughts is not only unable to describe his thoughts. He or she is even unable to have such thoughts. Therefore, *Newspeak* is rather a representation of linguistic determinism. Based on Boroditsky's studies described in 4.1, it can be assumed that abstract mental conceptions are not only difficult to describe but also impossible to imagine, if such conceptions do not exist in a particular language. Similarly, Whorf's studies of Hopi speakers in 3.1.3 also manifest high dependence of the time concepts in mind on the expressions used to describe the time.

Therefore, by abolishing words such as *freedom*, *equality*, *democracy*, *justice* et cetera, the Party make sure the concepts of being free and equal cease to exist in the minds of citizens. Removing words that are able to express those concepts directly results in the chaos in people's minds and consequently, prevents all unorthodox thinking.

In other words, they do not know a word for it; therefore, they are unable to think of it. The specific examples of thought process influenced by language are discussed in the following section.

As has been illustrated in (1) and (2) above, the structure of *Newspeak* is very economical. The reason behind this is reducing its conceptual meaning to the minimum, which results in the loss of those concepts from vocabulary. As Whorf claims in 3.1.1, language is the shaper of ideas and it guides mental activities of an individual. Considering the main objective of the Party, the main purpose of *Newspeak* is to eliminate ideologically inappropriate ideas. According to Locke in 2.1, this can be achieved through alternating existing words and making them vague. By adding new and ambiguous expressions into the vocabulary, the ordinary meaning of words is confounded. Such vague expression with multiple meanings is seen in (3):

Example 3:

> "I don't know whether you know it: *duckspeak*, to quack like a duck. It is one of those interesting words that have two contradictory meanings. Applied to an opponent, it is abuse; applied to someone you agree with, it is praise."

(see Appendix 1, Example 1.1.9)

One of the examples of a vague expression is *duckspeak.* The speaker in (3) clearly states that it is such an ambiguous word that it can be applied in two contradictory contexts. Therefore, speakers of *Newspeak* cannot create positive or negative associations to this word, as it can be used differently. As a result, their mental concepts are chaotic and confusing. This is similar to the phenomenon which is in *Newspeak* called *doublethink*. The principle of *doublethink* is described in (4):

Example 4:

> To know and not to know, to be conscious of complete truthfulness while telling carefully constructed lies, to hold simultaneously two opinions, knowing them to be contradictory and believing in both of them, to use logic against logic. (…) Even to understand the word "doublethink" involved the use of doublethink.

(see Appendix 1, Example 1.2.1)

Similarly to (3), the situation described in Example (4) also causes a chaos in one's mind. Therefore, he is unable to organize his ideas and express them properly. When the abstraction of meaning in words is added, the person is able to express himself only in very abstract and general terms. This problem has been already addressed in 1.2, the problem is with floating signifiers which do not refer to any agreed upon meaning. In *1984*, words like

freedom, democracy or truth are not abolished. Rather their concepts are forbidden. They refer to something so abstract that it is difficult to imagine it. The primary reason is that things which people usually associate with e.g. democracy (free speech, elections, independent press) do not exist in the society of *1984*. Therefore, people are not able to imagine those things under the label "democracy", as they do not have experience with specific examples of democracy. Example (5) demonstrates this problem as well:

> Example 5:
>
> "How could you have a slogan like 'freedom is slavery' when the concept of freedom has been abolished? The whole climate of thought will be different. In fact there will be no thought, as we understand it now."
>
> (see Appendix 1, Example 1.2.4)

It refers to the fact that the vocabulary of *Newspeak* is constantly changing. Gradually, there will be no words to express the idea of freedom. The speaker links this issue to "the climate of thought", i.e. drawing a direct link between thought process formed by language. Example (5) is, therefore, another instance of linguistic determinism. The source of conflict in (5) is equating two opposing concepts, freedom with slavery. Although in the mind of an English speaker, this statement does not make much sense, for the speakers of *Newspeak*, this could be an absolutely meaningful sentence. It is connected with Hamann's proposition in 2.2, referring to the differences between languages which parallel the differences in thought.

In order to further demonstrate the conception of LD in *1984*, the following examples should be considered:

> Example 6:
> "Don't you see that the whole aim of *Newspeak* is to narrow the range of thought? In the end we shall make *thoughtcrime* literally impossible, because there will be no words in which to express it. Every concept that can ever be needed will be expressed by exactly one word, with its meaning rigidly defined and all its subsidiary meanings rubbed out and forgotten.
>
> Example 7:
> Talking to her, he realized how easy it was to present an appearance of orthodoxy while having no grasp whatever of what orthodoxy meant. In a way, the world-view of the Party imposed itself most successfully on people incapable of understanding it.
>
> Example 8:
> Given, for instance, the word *good*, there was no need for such word as *bad*, since the required meaning was equally well – indeed, better – expressed by *ungood*.
>
> (see Appendix 1, Examples 1.2.3; 1.3.5; 1.1.4)

Example (6) directly addresses the strong version of SWH, i.e. linguistic determinism. It states that eliminating all dangerous and potentially inappropriate expressions, there will be no way to commit *thoughtcrime*. The absence of linguistic competence will, therefore, result

in the absence of the mental concept related to *thoughtcrime*. Similarly, the idea described in (7) reflects the fact that the lack of words prevents understanding of reality. Example (8) includes the reflection of linguistic relativism. The word "bad" has been removed from the vocabulary, since its meaning could be to some extent covered using its antonym with a negative prefix. However, even those subtle changes may result in the obliteration of the negative connotation over time, and thus, distort the meaning.

Apart from the demonstrations of linguistic relativity in *1984*, the ways of manipulation with citizens should be discussed, in order to observe the full scope of oppression.

> Example 9:
> It was assumed that when he was not working, eating, or sleeping he would be taking part in some kind of communal recreations; to do anything that suggested a taste for solitude, even to go for a walk by yourself, was always slightly dangerous. There was a word for it in *Newspeak*: *ownlife*, it was called, meaning individualism and eccentricity.
>
> Example 10:
>
> The children, on the other hand, were systematically turned against their parents and taught to spy on them and report their deviations. The family had become in effect an extension of the Thought Police. It was a device by means of which everyone could be surrounded night and day by informers who knew him intimately
>
> (see Appendix 1, Examples 1.3.3; 1.3.4)

As Example (9) indicates, the citizens of Oceania are expected to be a part of community. Any signs of individualism are not welcomed. Moreover, such behaviour is punishable, as it poses a threat to the system. An individual is often capable of independent thinking, which is always dangerous to any totalitarian ideology. Thus, the communal lifestyle is supported, so that Party could manipulate the Oceania citizens easily. This is also connected to the use of limited vocabulary in *Newspeak*. As Maillat & Oswald demonstrate in 4.2, discourse can be made manipulative by external factors, such as one's social status or social relations. Therefore, by recognizing the Party as the absolute authority, the influence of the language used by the Party will have significantly stronger impact on the thought processes of the citizens. The language control is ensured by another precaution (as seen in Example 10) which involves little children spying on their parents and reporting any suspicious behavior, including using ideologically inappropriate language. The reflection of LD and manipulation in *1984* is further discussed in 5.7 through comparison with the LD concepts in other literary works.

## 5.3 Rand's *The Anthem*

The novella describes a society in an unspecified future. The main protagonist's name is Equality 7-2521 and he falls in love with Liberty 5-3000. Names of the people in the society are made of a word denoting an abstract concept (such as Equality, Liberty, Union, International) in combination with a several-digit number. This is a constant reminded that those characters lack individuality and they are part of a larger system. Moreover, the pronoun "I" and other possessive pronouns or adjectives which indicate singularity (my, me, mine…) do not exist in the vocabulary of the system. Anyone who is caught using those expressions indicating individualism is sentenced to death. Children are raised in collective homes away from parents and at certain age, they are assigned with a particular job position, which is chosen by the authorities. Despite the system based on collectivity, Equality 7-2521 is able to think for himself and therefore feels cursed. Eventually, he rebels against the system, and he even discovers the word "I" in old books. He realizes its meaning and at the end tries to restore the concept of individualism.

First of all, it is important to observe how the word "I" is omitted and substituted in the language of *The Anthem,* and subsequently analyse the change in the characters' perception of reality caused by such omission. Therefore, C1 and C3 are observed first.

> Example 11:
> We wished to be a Scholar.
>
> Example 12:
> It is only we, Equality 7-2521, we alone who were born with a curse. For we are not like our brothers.
>
> Example 13:
> We alone, of the thousands who walk this earth, we alone in this hour are doing a work which has no purpose save that we wish to do it.
>
> (see Appendix 1, Examples 2.8; 2.3; 2.11 respectively)

Considering the Examples (11), (12) and (13), it is obvious that subject is singular, although the pronoun "we" is used. In the Example (11), the singularity is indicated by the noun "a Scholar". The following Example (12) uses "we" in combination with "Equality 7-2521, a name for a singular subject. In order to emphasize it even more, the adverb "alone" is used. Similarly, the word "alone" provides a substitution for expressing individuality in Example (13), which would be otherwise expressed in Standard English by using "I". Therefore, Rand is able to make the reference to a single person by either grammatical or lexical means.

The author therefore makes sure the readers understand the story, although the usage of "we" might be confusing for them at first. Now how does this "I" omission affect the characters?

As has been discussed in 3.1.1 and 3.1.2, there are links between language and thinking according to Sapir and Whorf. Based on Boroditsky's studies described in 4.1, it can be assumed that abstract mental conceptions are not only difficult to describe but also impossible to imagine, if such conceptions do not exist in a particular language. Applied to *The Anthem*, this hypothesis might mean that the characters are not capable of perceiving themselves as individuals, but rather as a part of a larger group. In order to prove that, more examples found in the book should be analysed:

Example (14):
We exist through, by and for our brothers who are the State.

Example (15):
We strive to be like all our brother men, for all men must be alike.
(see Appendix 1, Examples 2.4 and 2.1)

In Example (14), the protagonist clearly identifies himself as a part of "the State". This group identity is explicitly stated by the word "exist". It is apparent that the character perceives his existence solely through the existence of the other citizens, who he calls "brothers." He clearly lacks the ability to see himself as an individual, who could be different from others and have individual needs and desires. This is confirmed also in the Example (15) when he explicitly states the principle on which their society operates. Obviously, the Example (15) describes a rule which the citizens are taught since they are born. Moreover, it seems as if he does not only retell the principle that all men must be alike, but he even accepts it to such an extent that he believes to be the reality. His perception of reality is therefore directly influenced by the lack of the word "I".

Later in the book, the protagonist meets a female citizen. Due to his lack of vocabulary, however, he does not refer to that person as "he" or "she" but he has to use "they" instead. This also shapes his perception of the reality, as he is forced to see her at first only as another ordinary citizen. The reason is that he has been thought there is no place for emotions. It is apparent, that "the State" manipulates not only the language of the citizens but also attempts to oppress their feelings, since emotions are also considered to be an expression of someone's individuality. It is, therefore, not only the lack of the word "I" that causes the loss of "the sense of self". However, language plays a major role in this matter, as can be illustrated in the following excerpt:

Example 16:

"We love you." But they frowned and shook their head and looked at us helplessly. "No," they whispered, "that is not what we wished to say." (…) "We are one… alone… and only… and we love you who are one… alone… and only."

(see Appendix 1, Example 2.34)

Here it is obvious the protagonists struggle to express themselves as individuals. Eventually, they find certain affection to each other but they are unable to describe it due to their lack of vocabulary. There is no word by which the man could express his love for the female protagonist on behalf of himself. When he tries to describe an emotion, he ends up using words describing the whole group every time. Moreover, he eventually perceives her as an individual and tries to express it by saying "you who are one", in order to exclude everyone else in the group. Interestingly, the Example (16) shows that he realizes the lack of vocabulary. He perceives there is a gap in the language, even though he is unable to articulate it. Despite the chaos in his head, he is aware that something is missing.

Considering this observation, it might be assumed that the concept of linguistic determinism is partially not true in this case. Example (16) is rather a case of linguistic relativity, i.e. language only influences the thought, but does not determine it entirely. If the behavior of the characters in *The Anthem* corresponded with the notion of linguistic determinism, the protagonist would not be able to realize that there is a gap in his vocabulary. He would continue acting and speaking on behalf of the whole group but without ever questioning it. The fact that he eventually discovers his individual self is the proof that Rand meant her story to be a manifestation of the linguistic relativity, rather than determinism.

In order to clearly demonstrate the language influence and the thought manipulation through language, especially examples meeting C4 and C5 have to be analyzed.

Example (17):

(…) It is forbidden, not to be happy. For, as it has been explained to us, men are free and the earth belongs to them; and all things on earth belong to all men; and the will of all men together is good for all; and so all men must be happy.

Example (18):

Fear walks through the City, fear without name, without shape. All men feel it and none dare to speak.

Example (19):

And as we all undress at night, in the dim light of the candles, our brothers are silent, for they dare not speak the thoughts of their minds. For all must agree with all, and they cannot know if their thoughts are the thoughts of all, and so they fear to speak.

(see Appendix 1, Examples 2.17; 2.18; 2.19)

Example (17) clearly indicates that one of the State's principles is to make them believe that they are satisfied with the system of current affairs. Therefore, they do not feel the need

to rebel or strive for a change. Another example of manipulation can be seen in (18), which explicitly emphasizes the omnipresent fear, which prevents people from expressing their thoughts openly. The issue of intimidation is addressed in (19) as well. Additionally, (19) reflects the relationship between language and thought (C4). The protagonist realizes that he is different, and he is not sure whether the idea of individuality exists also in the mind of others, since there is not word to express it.

> Example (20):
> "You are not one of our brothers, Equality 7-2521, for we do not wish you to be." We cannot say what they meant, for there are no words for their meaning, but we know it without words and we knew it then.
>
> (see Appendix 1, Example 2.16)

In (20), there is another example of C4. The protagonist clearly shows his awareness of the existence of emotion and love, even though there is not the expression which would help him label it. This is an interesting illustration of Zirkle's idea in 3.1.3, (i.e. language does not determine human thought's, it only controls how they are labeled) and. Chomsky's idea in 3.2 (i.e. language serves for the expression of pre-existing, full-articulate thought). Those two conceptions explain why the protagonist is able to form a concept in his mind despite the lack of expressions. This is in accordance with the conclusion that was derived from Example (16) – the book does not employ linguistic determinism.

> Example (21):
> We have much to speak of to ourselves, and we hope we shall find the words for it in the days to come. Now, we cannot speak, for we cannot understand.
>
> Example (22):
> There is some error, one frightful error, in the thinking of men. What is that error? We do not know, but the knowledge struggles within us, struggles to be born.
>
> Example (23):
> And we felt torn, torn for some word we could not find.
>
> (see Appendix 1; Examples 2.31; 2.33; 2.35)

Examples (21), (22), and (1¨33) share the same feature – the desire for more words in order to express thoughts and emotions better. This desire is the consequence of the fact that the protagonist lacks the linguistic competence, but possesses the mental concepts. Therefore, he is able to think about something which he cannot label or designate. Apart from banning words indicating concepts of individuality, there is another example of manipulation used in the book. It is illustrated by (24):

Example 24:

It was easy to escape from the Palace of Corrective Detention. (…) There is no reason to have guards, for men have never defied the Councils so far as to escape from whatever place they were ordered to be.

(see Appendix 1, Example 2.27)

The Example (24) employs a euphemism which serves as a disguise to hide the true purpose of this institute. In fact, it refers to prison. However, the label "corrective" implies it is a rightful thing to arrest someone and escort him there. Moreover, the elevated expression "palace" contributes to the positive reception by citizens. Example (24) therefore illustrates another type of thought manipulation through language. Additionally, (24) demonstrates the blind obedience of the citizens to the system. Cells are not locked and there are no guards because no one even thinks about escape or an act of disobedience. This indicates how brainwashed and manipulated the members of the society are.

Last criterion that has not yet been discussed is C2. It marks the passages towards the end of the book, reflecting the situation when the protagonist realizes his individuality by learning the word "I" and related pronouns.

Example (25):

I am. I think. I will. (…) These are the words. This is the answer. (…) I wished to know the meaning of things. I am the meaning.

Example (26):

Many words have been granted me, and some are wise, and some are false, but only three are holy: "I will it!"

Example (27):

And here, over the portals of my fort, I shall cut in the stone the word which is to be my beacon and my banner. (…) The sacred word: EGO.

(see Appendix 1, Examples 2.40; 2.42; 2.50)

Obviously, the protagonist feels relieved when he finally acquires the ability to express himself. In (25) and (27), it is apparent that he perceives individuality as the answer to everything that troubled him before. He identifies with the pronoun, showing that he understands its meaning. Additionally, (26) contains the information about wise and false words, which demonstrates the protagonist's awareness that not all of the expressions granted to him by society are true.

To conclude, it has been illustrated that the *Anthem* contains features of thought manipulation through language. The main language feature is the obliteration of the pronoun "I", which results in total removal of individualism from the society. Although the members lack the linguistic competence necessary for expressing it, towards the end of the book a few characters grasps the concept of individualism. This proves that there are certain concepts

present in their mind even with the absence of a sufficient lexicon. It is apparent in the behavior of the protagonist, as his desire to discover the concept of individualism makes him move beyond the limits imposed by society.

## 5.4 Delany's *Babel-17*

There is an interstellar war between Invaders and Alliance. Invaders develop an artificial means of communication called *Babel-17*. Its decoding has been entrusted to the linguistic expert and poet, Rydra Wong. She finds out it is not a code, but it has features of an independent language. One of its features is a complete non-existence of pronouns "I" and "you." Therefore, its speakers develop a different concept of thinking. The language is used as a weapon, since it changes the thinking patterns of those who master it, and consequently makes them betray their own kind, the Alliance. Rydra herself realizes she is becoming a traitor, as she understands the language more and more. At the end she is saved by her crew when they make her realize the danger of *Babel-17*.

Before analyzing the examples in the corpus from the viewpoint of linguistic relativity, the structure of *Babel-17* should be taken into account.

> Example 28:
> "First of all, General," she was saying, "Babel-17 is not a code." (…) "You mean we've just been trying to decipher a lot of nonsense?" "It's not a code," she repeated. "It's a language."
>
> Example 29:
> "General, I have to know everything know about Babel-17 where you got it, when, under what circumstances, anything that might give me a clue to the subject matter."
>
> (see Appendix 1, Examples 3.1.1; 3.1.3)

In (28), Rydra Wong realizes for the first time that *Babel-17* is not a mere code, rather there are certain characteristics of language ascribed to it. She further describes the difference between language and code. Wong claims that *Babel-17* is a language, as it has own internal logic and grammatical patterns. Most importantly, it is a unique organization of thoughts (for full description, see Appendix 1, Example 3.2.1). By using the word "nonsense", General manifests his lack of understanding. Apparently, he does not see any logical system in the structure of *Babel-17*. The Example (29) shows that more information, especially a set of external factors, is required in order to successfully decipher the system and its purpose. This confirms the language definitions provided in 1.1 by Wallwork (1971), and Lyons (1981), who both emphasize the social aspect of language and its cultural reflection.

Example 30:
"You may not have noticed, but, in the copy Cryptography gave me, there was no distinction as to which voice was which. In short, what I'm working with now is a transcription of a highly technical exchange run together without punctuation, or even word breaks."

Example 31:
"But you see the problem a 'foreigner' has transcribing a language he doesn't speak; he may come out with too many distinctions of sound, or not enough." "How do you propose to do it?" "By what I know about the sound systems of a lot of other languages and by feel."

(see Appendix 1, Examples 3.1.4; 3.1.5)

As is apparent from (30) and (31), Wong tries to decode the language by finding similarities. She relies strongly on her knowledge of other languages and the assumption that there are similar structures across languages. Wong tries to observe patterns and correlations between *Babel-17* and the languages she has already mastered. This method refers back to the description by Hall (1968) in 2.3, when he claims that adults learn foreign language by means of translating his mental concepts into the new system of communication. This is also the case of Wong when she tries to apply her existing linguistic competence to a new language. She presupposes that *Babel-17* has to use punctuation and word breaks, and the only reason they are absent at the moment is the imperfect technical transcription provided by computer. What could be the reason for the chaotic transcription?

Example 32:
"Babel-17. It's been automatically transcribed so I can study it later. Anyway, here goes nothing. (…) I don't know it well, yet. I know it a little, but not enough. I feel like someone at a performance of Shakespeare shouting catcalls in pidgin English."

(see Appendix 1, Example 3.2.8)

The passage (32) states, that *Babel-17* has been transcribed automatically. This means that computer has been used for this purpose. The imperfect transcription might be the result of insufficient capacity of the machine. The computer had been probably provided with a certain input of phonemes and syntactic structures based on other languages. However, it failed to provide a good transcription of the language, let alone the actual process of decoding. Therefore, the input provided must have been incomplete or it differed significantly from *Babel-17*. Therefore, similar patterns could not been observed and understood.

In order to manifest linguistic relativism in *Babel-17*, the following examples have been chosen:

Example 33:
Well, most textbooks say language is a mechanism for expressing thought, Mocky. But language is thought. Thought is information given form. The form is language…" (…) "Mocky, when you learn another tongue, you learn the way another people see the world, the universe."

Example 34:
"I'm familiar with a half-dozen languages of the Invaders. Babel-17 isn't one of them. It isn't a language of the Alliance. I want to find out who speaks this language– because I want to find out who, or what, in the Universe thinks that way."

Example 35:
"And Babel-17, the real reason for this letter. Told you I had deciphered it enough to know where the next attack will be. (…) Talk and talk and talk: what sort of mind can talk like that language talks? And why?"

(see Appendix 1, Examples 3.2.1; 3.2.2; 3.2.3)

Example (33) is a clear description of linguistic determinism defined in 3.1.1 in connection with Whorf. The protagonist draws a direct link between language and thought, stating that by learning a new system of communication, people also learn a new way of reality perception. This is one of the most important passages in the book, as it clearly demonstrates the connection between one's linguistic competence and mental concepts.

Additional comments on this connection are provided in (34) and (35). Wong expresses her curiosity about the identity of the speakers of *Babel-17* and their possible intention. By asking such questions she suggests that the mental concepts of the speakers are different from those of her and her companions who are also members of the Alliance. Again, by asking "Who thinks that way?" and "What sort of mind talks like that?" she implies that there is a direct connection between language and thought. Apparently, these passages are about the concept of LD, rather than LR. This assumption could be also supported by other examples (see Appendix 1, Examples 3.2.9; 3.2.17; 3.2.25). Especially the Example (3.2.9 in corpus) demonstrates what has been discussed above in the theoretical part (Boroditsky, 4.1).

Example 36:
Amazement undercut her initial disbelief. It was an amazement she would have felt before when he responded so unquestioningly to her plan to destroy the Invader's defense, had not Babel-17 precluded such feelings.

(see Appendix 1, Example 3.2.15)

Example (36) indicates that some (if not all) feelings are impossible in *Babel-17*. Wong realizes her perception gradually changes, as she gradually understands *Babel-17* more and more (see Appendix 1, Examples 3.2.11; 3.2.14; 3.2.18; 3.2.20). This is also an example of LD, since some mental concepts are absent due to the lexical gap in the language.

Probably the most prominent example of linguistic determinism can be found in (Appendix 1, Example 3.2.17) when Wong finds out that the Butcher, one of the characters, is unable to refer to himself. She consequently realizes that he does not know the pronoun "I" and therefore, his mental concepts do not include the one for individuality.

> Example 37:
> But the Butcher made a fist; "Knowing what ships to destroy, and ships are destroyed." He banged his fist against his chest. "Now to go down the Dragon's Tongue, Tarik go down the Dragon's Tongue." He banged his chest again.
> (see Appendix 1, Example 3.2.16)

Apparently, the Butcher is able to communicate with Wong in an alternative way. Even though he does not know the concept of "self", he uses verbs and non-verbal language (such as pointing) if needed in order to express his ideas, as illustrated in (37). This mirrors the definition provided in 2.2 by Hamann, stating that differences between languages parallel differences in thought.

As the story proceeds, Wong tries to explain the concept of individuality to the Butcher. She addresses the importance of naming concepts which one has in mind. (see Appendix 1, Examples 3.2.25; 3.2.26). Eventually, the Butcher learns the concept of individuality based on explanations provided by Wong and her practical usage of pronouns, which creates a mental pattern for the Butcher to adopt.

Finally, the issue of manipulation is addressed. This concerns especially an alteration of vocabulary and grammatical structures. Also, missing pronoun "I" obliterates the concept of individuality completely, and therefore the speakers do not strive to act independently. The thought manipulation through language is illustrated in the final examples in the corpus (Appendix 1, Examples 3.3.1; 3.3.2; 3.3.3).

## 5.5 *Speedtalk* in Heinlein's *Gulf*

The center of the plot is a "superweapon" which is called the "nova effect" and can be used to destroy entire planets and galaxies. The antagonist Mrs. Keithley tries to obtain a secret microfilm containing crucial information about nova effect, so that she could blackmail humanity and seize the power in the Solar System. Special agent Joe protects the microfilm. He meets Gail, another agent, falls in love with her, and she helps him to master *Speedtalk*. It is an artificial language with limited lexicon and wide range of phonology. There is a group of humans called *homo novis* with superior intelligence who form a certain "ruling class." Joe aspires to become a part of that group, but he has to master *Speedtalk* in order to become

one of the supermen. Their main feature is the ability to think faster, as they are linguistically better equipped than the rest of the characters.

The corpus is composed of all examples found in the book that are connected to the idea of linguistic relativity or linguistic determinism. Additionally, passages containing description of the nature of *Speedtalk* are included. The main purpose of *Speedtalk* is to make communication more economical and consequently, help characters to think faster. Its aim is not the manipulation of thinking and a distortion of the real-world perception. Therefore, there is no category labeled *Manipulation Related* in the *Gulf's* corpus of examples (see Appendix 1, section 4). The primary focus is put on the reflection of linguistic relativity or determinism in the selected passages. However, the following paragraphs first observe the form of *Speedtalk*.

The structure of this invented language may be exemplified in (38) and (39). Those passages contain the words in *Speedtalk*, Heinlein, however, does not further explain their meaning. He provides readers merely with the form:

> Example 38:
> (…) Male: "tsamaeq?" Female: "ntSt" Male: "zutntst." Female: "tpbit" New Jersey." These are not precisely the sounds that Gilead heard, first because of the limitations of phonetic symbols, and second because his ears were not used to the sounds
>
> Example 39:
> "You're the doctor, Joe. In that case-" A speaker on Baldwin's desk uttered: "cenie B hdg rylp." Baldwin answered, "nu," and sauntered quickly to the fireplace.
>
> (see Appendix 1, Examples 4.1.1; 4.1.2)

It seems impossible to try to decipher the meaning of *Speedtalk* words mentioned in (38) and (39) with such a low number of examples, provided that there is almost no context or description of the situation in which those expressions are uttered. Solely by observing the structure, it can be said that this language differs significantly from English. Apparently, vowels are not always necessary to form a word. Morphemes are not identifiable. In fact, it is even hard to determine, whether those consonant clusters refer to specific concepts such as words in English, or whether they express some abstract ideas which would have to be covered by long sentences and paragraphs when expressed in English. This corresponds to the passage in the book that compares the structure of *Speedtalk* to "normal human languages" (see Appendix 1, Example 4.1.6). One of the main features of *Speedtalk* that is emphasized in *Gulf* is its economical nature, as noted in several passages. (see Appendix 1, Examples 4.1.7; 4.1.8)

What was the actual reason for inventing such language? The answer can be found in several excerpts, most importantly in (40) and (41):

Example 40:
"What is the one thing he can do better than animals which is so strong a survival factor that it outweighs all the things that animals of one sort or another can do much better than he can?" "He can think," (…) "What is the necessary direction of evolution to the next dominant species?" (…) "To be able to think better."

Example 41:
Rarest of all is the man who can and does reason at all times, quickly, accurately, inclusively, despite hope or fear or bodily distress, without egocentric bias or thalmic disturbance, with correct memory, with clear distinction between fact, assumption, and non-fact.

(see Appendix 1, Examples 4.1.3; 4.1.4)

Example (40) addresses the main purpose of *Speedtalk*. In combination with (41), these passages present the ideal result which the creators of *Speedtalk* hope to achieve, i.e. creating a man capable of better thinking. As explained in (41), "better" here refers to effectiveness, clear identification of distorted information, and processing and interpreting facts in an unbiased way.

Such a result is hoped to be achieved through the economy of *Speedtalk*. Heinlein in his *Gulf* indicates that English is not sufficient for this purpose, as seen in Example (42). He employs the idea of linguistic relativity, or rather linguistic determinism, especially in the following passages:

Example 42:
"First we must teach you to see and to hear, then to remember, then to speak, and then to think." Joe looked at her. "What's this I'm doing with my mouth at this moment?" „It's not talking, it's a sort of grunting. Furthermore English is not structurally suited to thinking."

Example 43:
(…) Normal" languages, having their roots in days of superstition and ignorance, have in them inherently and unescapably wrong structures of mistaken ideas about the universe. One can think logically in English only by extreme effort so bad it is as a mental tool." (…)

Example 44:
A symbolic structure, invented instead of accepted without question, can be made similar in structure to the real world to which it refers. The structure of *Speedtalk* did not contain the hidden errors of English; it was structured as much like the real world as the New Men could make it. (…)

(see Appendix 1, Example 4.2.1; 4.2.3; 4.2.4)

The chosen extracts in (42), (43) and (44) clearly employ the linguistic relativism theory. In (42), the speaker indicates that structure of English language is not fitting for purposes of effective thinking. He probably refers to the fact that English often contains complex structures, especially in comparison with *Speedtalk*. Mentioning these aspects, the speaker

draws a direct link between language and thought, as he implies that it is the language structure that shapes the thinking process.

Even stronger connection is presented in (43). By calling the structures of normal languages "wrong" and "(containing) mistaken ideas about the universe", the speaker implies that there is no such language that reflects reality perfectly. Rather he suggests that improper structures may result in distorting ideas about the real world and seriously affect human perception. Interestingly, the speaker proposes a solution, which is adopting *Speedtalk*, as expressed in (44). He makes a strong statement by saying that a language which mirrors the reality completely could be created.

What is problematic about this claim is the lack of objectivity presented in 3.1.4. How can an objective analysis of a certain language be conducted when every person conducting the research employs his own mindset and mental concepts? Even if the analysis was conducted by a machine, the interpretations and conclusions would be based on a certain input provided to those machines (usually based on patterns of other languages). It is, therefore, questionable, whether creating a perfect language mirroring reality is at all possible. Even the very fact of calling something "real" or declaring something to be "true" is in its essence subjective, as it requires making own judgments. What one person evaluates as true and real might be untrue for a different person. This is the core of the LR theory.

The following examples demonstrate how a person processes a language and some advantages and drawbacks the knowledge of a new language might have:

> Example 45:
> Hearing is a function of the brain, not of the ear; his brain, sophisticated as it was, nevertheless insisted on forcing the sounds that reached his ears into familiar pockets rather than stop to create new ones.
>
> Example 46:
> And his mental processes, always fast, had become faster than he knew. (…) *Speedtalk* did not merely speed up communication-by its structures it made thought more logical; by its economy it made thought processes enormously faster, since it takes almost as long to think a word as it does to speak it.
>
> Example 47:
> He shifted to English to swear. "Damn it, Joe, face up to it." (…)
>
> (see Appendix 1, Examples 4.2.5; 4.2.7; 4.2.11)

As Example (45) confirms, people tend to perceive new words and language structures in terms of their existing mental concepts, as has been discussed in 2.3 by Hall (1968). The issue of the influence of a newly acquired language is addressed in (46). Apparently, the mental processes of the protagonist became faster due to his ability to master

an economical language free of “vague” and “unnecessary” concepts. In contrast to that, Example (47) shows that this economical nature of a language is not always beneficial. When the speaker needs to use swear words, he prefers speaking English to the brief structure of *Speedtalk*. This might be the manifestation a language which is too economical and brief might fail to retain certain concepts. As a consequence, speakers have to shift to another language which includes these concepts in order to be able to express their thoughts. This is strongly related to the idea of LD. Another example of linguistic determinism is presented in the passage which equates thought with speech, i.e. verbal manifestation of linguistic performance (see Appendix 1, Example 4.2.9).

## 5.6 Vance’s *Languages of Pao*

The planet of Pao loses its Panarch (a ruler) and his young son Beran is forced to escape in order to survive and avenge the death of his father. He is brought up at the planet Breakness by Palafox. The planet Pao is under oppression of its enemies and Bustamonte (who is the current Panarch of Pao, Beran’s uncle and a murderer of his own brother, Beran’s father) tries to seek help from Palafox. Bustamonte’s problem is that Paonese people are by their nature non-violent and therefore, they cannot defend their planet. Palafox agrees to help Bustamonte and offers to teach Paonese citizens new languages in order to alter their mindset and make them more aggressive to be able to face the enemy. In the meantime, Beran plans to overthrow Bustamonte and teach Paonese citizens Pastiche, which is a mixture of languages with different attributes. Beran’s aim is to make out of every Paonese a person who is skilled in agriculture, fighting, technology and trade. This is to be achieved by means of Pastiche, as it creates mindsets containing all these features.

First of all, it is necessary to characterize personalities of the citizens at both planets (Pao and Breakness) with regard to the languages spoken there. In order to demonstrate the connection between language and behavior of Paonese, the following examples have been chosen:

> Example 48:
> (…) The typical Paonese saw himself as a cork on a sea (…) if he thought of himself as a discrete personality at all. He held his ruler in awe, gave unquestioning obedience, and asked in return only dynastic continuity, for on Pao nothing must vary, nothing must change.

> Example 49:
> A person born to the Paonese tradition inherited insensitivity toward human suffering --not so much callousness as an intuition of fate. Pao was a world of vast numbers and cataclysm automatically affected great masses of people.

Example 50:

In subdued voices the apprentices recalled scenes of anguish: the absolute passive obduracy of the population, even in the face of starvation; the reprisals, effected with true Paonese disregard for the individual life.

(see Appendix 1, Examples 5.1.1; 5.1.5; 5.1.6)

Based on Example (48), it is obvious that there is a strong sense of collectivism in the Paonese society. In other words, a citizen does not perceive himself as an individual with his particular needs and objective. His long term goals are defined in the context of the whole society. A typical Paonese is obedient and does not question authorities. Considering the detailed context provided in the example (Appendix 1, Example 5.1.1), it can be assumed that the lack of comparative expressions and adjectives in general results in a loss of the natural sense of competition. A citizen does not feel the need to be better, richer, more successful than his neighbour, since Paonese generally perceive all members of the society as a unified whole. Moreover, Paonese are conservative and they have a lasting respect for tradition.

Additionally, examples (49) and (50) suggest that the concept of the individual life does not exist in Paonese mind. There is also a certain degree of indifference to suffering of others, as Paonese have developed a strong sense of fate. This is probably linked also to the lack of verbs and sufficient vocabulary for expressing thoughts. The point based on this idea has been discussed in 1.1 when quoting Lyons (1981): “language that is used by a particular society is part of that society’s culture.” To make a comparison of characters between the citizens of Pao and Breakness, examples (51) and (52) are provided:

Example 51:

(…) The language of Breakness was basically "isolative," but unique in that it derived entirely from the speaker: that is to say, the speaker was the frame of reference upon which the syntax depended, a system which made for both logical elegance and simplicity. Since Self was the implicit basis of expression, the pronoun "I" was unnecessary. (…)

Example 52:

"You are Paonese; you do not understand us of Breakness. We are total individuals--each has is private goal. The Paonese word 'cooperation' has no counterpart on Breakness. (…)

(see Appendix 1, Examples 5.1.4; 5.2.9)

In comparison to collectivist mindset of Paonese illustrated in (48), the examples (51) and (52) describe the unquestionable individualistic approach adopted by Breakness citizens. Their mental concepts are concentrated around their ego, since their language presents the speaker as the frame of reference. Therefore, there is no need for the pronoun “I.” It does not mean, however, that the concept of individualism does not exist in the mind of Breakness.

Quite the opposite – the individualism is omnipresent and therefore the indicator of individuality (the "I" pronoun) is redundant. This is in sharp contrast with *the Anthem* and *Babel-17* where the absence of this pronoun results in non-existence of individuality in the mindsets of the characters. Further comparison of observations will be made in the following subchapter.

Since the sharp contrast in the character of both nationalities has been described, it is now possible to focus on the concept of LR reflected in the book.

> Example 53:
> (…) Each language is a special tool, with a particular capability. It is more than a means of communication; it is a system of thought. (…) Language controls the mechanism of your mind. When people speak different languages, their minds work differently and they act differently. (…)
>
> Example 54:
> "Lord Palafox apparently intends that you should identify with Breakness and so feel sympathetic to his goals."

(see Appendix 1, Examples 5.2.2; 5.2.1)

As Example (53) clearly declares, the language one speaks directly shapes his mind and takes control over it. This is another example of linguistic determinism. Similarly, example (54) indicates that once the protagonist learns the language of Breakness, there will be a change in his mental concepts or perception of reality. It is also related to the idea related to parallels in thoughts discussed in 2.2 by Hamann. Examples (55) and (56) address another issue related to the LR theory:

> Example 55:
> (…) There are so many truths--how can anyone make up his mind? (…)
>
> Example 56:
> (…) "Language determines the pattern of thought, the sequence in which various types of reactions follow acts. "No language is neutral." (…) "In an even wider frame of reference, we note that every language imposes a certain world-view upon the mind. What is the 'true' world-picture? Is there a language to express this `true' world-picture?"

(see Appendix 1, Example 5.2.6; 5.2.8)

It might happen that the difference between languages, and therefore the mental concepts, is so significant that it is confusing for the speakers. In (56), it is obvious that Heinlein uses the theory of linguistic determinism in order to describe the world-view of people. The characters in both (55) and (56) question the objectivity of their perception, struggling to find the truth. The main issue here is that it is almost impossible to determine what the truth is. This mirrors the famous quote of Wittgenstein (1922) presented in 4.2, saying that "the limits of my language are the limits of my world."

Example 57:
(…) Be that as it may, the Paonese concepts of 'trust,' 'loyalty,' 'good faith' are not a part of my mental equipment. We dominie of Breakness Institute are individuals, each his own personal citadel. (…)

Example 58:
"We must alter the mental framework of the Paonese people--a certain proportion of them, at least--which is most easily achieved by altering the language." (…). "Words are tools. Language is a pattern, and defines the way the word-tools are used." (…)

(see Appendix 1, Examples 5.2.11; 5.2.4)

Moreover, Examples (57) and (58) address the mental concepts which language creates. As seen in (57), the speaker defines himself through individualistic features which are, as discussed in connection to Examples (51) and (52), typical for the Breakness citizens. Again, the idea of altering one's language and causing a change in his thought process is presented. Especially example (58) employs the statement made in 4.2 by Krauss and Chiu (1998) calling language the main tool to access one's mind. The speaker in (58) is well aware of this method and therefore, he tries to implement it, expecting to alter the perception of Paonese people. This idea is further developed in (59), when Palafox intends to implement specific features into language (such as contrasts and tension), in order to trigger mental concepts such as competition, and conflict:

Example 59:
Paonese is a passive, dispassionate language. It presents the world in two dimensions, without tension or contrast. (…) The new language will be based on the contrast and comparison of strength, with a grammar simple and direct.

Example 60:
In twenty years, everyone will speak Pastiche. It will fertilize the old minds, shape the new minds. What kind of world will Pao be then?

(see Appendix 1, Examples 5.2.5; 5.2.15)

At the same time, the author raises question in (60) by speculating and thinking about the consequences of altered language. Apparently, he is completely aware that there will be differences in the mindset of the present and the future citizens.

Finally, there is the issue of manipulation addressed in the book. Few examples in the corpus describe in which way language has been altered in order to serve a particular purpose (assistance of citizens in civil service, teaching citizens how to fight, and zero resistance). For more details refer to Appendix 1, Examples 5.3.3; 5.3.4; and 5.3.1 respectively.

Since the examples from all five books have been analyzed and discussed, the next subchapter focuses on the comparison of various reflections of LR described above. Alternatively, the comparison of language misuse used for manipulation in the literary works is provided.

## 5.7 Comparison of Individual Works

Since the aim of the thesis is mapping the manifestation of LR in selected literary works, it is important to conclude the analysis by comparing the above mentioned findings. First of all, the differences in language usage in all five books are described. Secondly, various manifestations of LR in concrete situations are illustrated. Finally, the manipulation through language is addressed. Before making the comparison, it should be noted that all findings and observations have been made based on the work of fiction. Therefore, the manifestation of LR mentioned in the analytical part of this paper shall be interpreted neither as confirmation, nor as disproval of the SWH.

As has been illustrated above, the selected literary works apply a variety of linguistic changes in order to achieve a certain change in human cognition. In case of Orwell's *1984*, *Newspeak* takes advantage of both grammatical and lexical changes in order to distort the conceptual meaning of propositions. Various affixes are added in order to achieve an ideologically appropriate structure of the language. In contrast to that, the protagonists of Rand's *the Anthem* are exposed to the language which lacks the pronoun "I". The similar situation occurs in Delany's *Babel-17* and Vance's *Languages of Pao*, where only some characters are not familiar with this pronoun. The omission of such word results in the absence of individualism. Additionally, the vocabulary full of contrasts and tension is provided in *Languages of* Pao. Heinlein's *Gulf* does not suffer from the lack of individualism. However, the limitation of the language called *Speedtalk* consists in using short condensed expressions in order to make thinking as fast as possible.

The selected literary works demonstrate a wide diversity of ways on applying the LR principle. In some cases, even manifestations of LD can be found. In *1984*, the thought manipulation is realized through abstraction of the conceptual meaning of expressions. Orwell implies that some thoughts are impossible due to *Newspeak* (which is classified as LD), and certain mental concepts are only limited (which indicates LR). *The Anthem* shows a complete absence of individuality which is caused by missing pronouns. Therefore, an insufficient linguistic competence is the obstacle. Compared to that, *Babel-17* also presents a character who does not know the concept of individuality. The difference between the two characters is in the final act of the realization of "self". While the Butcher in *Babel-17* learns the concept behind "I" on the basis of the explanation provided by another person, the protagonist in *the Anthem* carries the notion in himself from the beginning of the story. He feels the inner compulsion to discover it, despite his vocabulary gap.

In contrast to both *the Anthem* and *Babel-17,* an opposite reason for "I" omission occurs in *Languages of Pao*. Its absence is not motivated by the effort to hide the mental concept of individuality from the citizens. The reason for not using the pronoun "I" is its redundancy. The individualism is so strong in the mind of Breakness speakers that it is implied in every utterance. However, LR is demonstrated on the Paonese, whose behavior changes throughout the book based on their changing linguistic abilities. Moreover, sometimes they struggle to determine what is true, and what is false. *Gulf* presents two types of people, one of which is able to think faster and more effectively due to the economical structure of the language. Additionally, it addresses the issue that due to the high economy, some concepts disappeared from the language and English expressions are used instead (such as swear words).

Finally, the manipulation reflected in the works is discussed. In *1984,* people's lives are manipulated not only through language but also other oppressive means (communal activities, installation of spying systems etc.). It can be therefore assumed that language control is only part of the whole system, but other precautions are also needed in order to maintain stability. Manipulation in *the Anthem*, *Babel-17*, and *Languages of Pao* relies mainly on the linguistic influence, through which certain mental concepts are formed. *Gulf* does not demonstrate any misuse of language, rather it shows a alteration of language which can be (to some extent) understood positively.

# 6 Conclusion

The relationship between language and thinking has been of scientific interest for a long time. One of the theories describing the nature of the relation is the Sapir-Whorf hypothesis, which is frequently used interchangeably with the term linguistic relativity.

There are different approaches to the definitions of language, which forms the very essence of the hypothesis. Some authors agree on its arbitrariness, others emphasize its function within the social and cultural context. One of the most important conceptions is the Saussurean idea of signifier and signified, which is employed during the analysis.

The aim of the paper was to observe different approaches to the theory of linguistic relativity and, based on the theoretical framework, monitor the manifestations of the LR hypothesis in the selected literary works.

Various approaches to the language-thought relation have been introduced and placed into a historical perspective. It has been observed how the idea of thinking influenced by language gradually developed. After discussing conceptions ranging from antiquity to the beginning of 20$^{th}$ century, the Sapir's and Whorf's understanding of language has been presented. As it has been revealed, there are different interpretations of the work of those scholars. Whereas some linguists see the SWH as a demonstration of linguistic determinism, other authors interpret their essays and finding as linguistic relativity manifestation.

In order to illustrate the influence of language on the thinking process, a diversity of examples from empirical research has been provided. Mental conceptions have been compared and contrasted between English speakers and the members of Hopi, Aboriginal and Eskimo cultures. Moreover, psycholinguistic approach to the language-thought relationship has been introduced and a possible power abuse and form of domination through language has been discussed.

The practical part of the thesis has been focused on the linguistic relativism and its distinctness in the following works: Orwell's *1984*, Rand's *Anthem*, Delany's *Babel-17*, Heinlein's *Gulf*, and Vance's *Languages of Pao*. As has been found out, the linguistic relativism may be applied through grammatical (using affixation) and lexical (euphemisms) adaptations of language. By abolishing some expressions, certain mental concepts might disappear parallel to that. When this aspect is misused, human mind can be partially manipulated into erroneous judgement and false perception of reality. However, those findings and conclusions are only hypothetical, as they are based on the analysis of fictional works.

# 7 Resumé

Tato diplomová práce se zabývá vztahem mezi jazykem a jeho vlivem na lidskou mysl. Jejím cílem je s využitím relevantních zdrojů zmapovat způsoby, jakým může být jazyka zneužito pro účely manipulace myšlenek. K prostudování této problematiky byla vybrána literární díla, na kterých bude ilustrováno, do jaké míry mohou jazykové prostředky ovlivňovat a utvářet myšlenkové koncepty. Jedná se o následující literární díla: *1984* (G. Orwell), *Anthem* (A. Randová), *Babel-17* (S. R. Delany), *Gulf* (R. A. Heinlein) a *Languages of Pao* (J. Vance).

Tato práce je rozdělena na teoretickou a praktickou část. Teoretický rámec je pokryt ve čtyřech kapitolách, zatímco kapitola pátá je věnována praktické analýze. Jelikož je ústředním tématem práce vztah mezi jazykem a myšlením, jsou v úvodní části první kapitoly porovnávány různé definice jazyka a jeho funkcí. V potaz jsou brány nejen stanoviska známých lingvistů, ale také filozofů. Dále je představena Saussurova koncepce jazyka jakožto systému znaků, kterými jsou myšlenky vyjadřovány. Právě Saussure je považován za jednoho z prvních, kdo zastával názor, že jazyk není odrazem reality. V souvislosti s teorií znaků představil ve svém díle také rozlišení dvojice jazyka (*langue*) a mluvy (*parole*). Zatímco jazyk (*langue*) Saussure popisuje jako abstraktní a vnitřně organizovaný systém, který je vymezen vztahy mezi jednotlivými jazykovými strukturami, mluva (*parole*) je chápána jako konkretizace tohoto jazyka a jeho použití ve specifické situaci. Na tuto interpretaci jazyka navazuje dichotomie lingvistické kompetence a performance, kterou jako první představil Chomsky.

Druhá kapitola je věnována historickému vývoji konceptu lingvistické relativity a jejích představitelů. Teorie lingvistické relativity se zabývá myšlenkou, že lidské myšlení je jazykem ovlivňováno, ne-li přímo utvářeno. S touto hypotézou je nejčastěji spojován Sapir a jeho následovník Whorf, avšak spojitost mezi jazykem a myšlením byla předmětem diskuze již v dobách antiky. Historický vývoj popsaný v druhé kapitole začíná Platónovým úhlem pohledu, který je následně porovnáván s Aristotelem. V průběhu kapitoly je popsáno mnoho dalších lingvistů a filozofů, kteří se vztahem mezi jazykem a myšlenkou zabývali. Vedou se však spory o to, kdo byl ve skutečnosti prvním průkopníkem myšlenky, která později vstoupila ve známost jako Sapir-Whorfova hypotéza. Přestože se názory autorů liší, většina z nich se shoduje na tom, že počáteční lingvistická relativita byla představena v 19. století německým filozofem Wilhelmem von Humboldtem. Právě na jeho myšlenky navázal Sapir a později i Whorf.

Kapitola třetí je věnována hypotéze o lingvistické relativitě. Je v ní představen rozdíl mezi lingvistickou relativitou a lingvistickým determinismem, přičemž první termín označuje teorii, dle níž je lidské myšlení jazykem pouze ovlivněno, zatímco v případě determinismu je jím přímo utvářeno. V této kapitole je také polemizováno, zda Sapir a Whorf měli na mysli silnější, deterministickou variantu, když představovali svou hypotézu, nebo zda si ji vykládali v její slabší, relativistické podobě. Názory lingvistů na tuto skutečnost se různí, obecně však lze v Sapirově i Whorfově díle spatřit znaky relativismu i determinismu. Z tohoto důvodu je v diplomové práci užíváno termínu „Sapir-Whorfova hypotéza" jako souhrnného pojmu pro oba koncepty. Nelze ji tedy zaměnit s pojmem „lingvistická relativita", jako tomu je v případě několika odborných publikací.

Hlavní Sapirovou myšlenkou je tvrzení, že realita je vybudována nevědomky na skupinových jazykových návycích. Pakliže tedy různé jazyky odráží realitu odlišně, lze vyvodit, že mluvčí jazyka A vnímá realitu jinak než mluvčí jazyka B. Toto přesvědčení Sapir vyjadřuje tvrzením, že žádné dva jazyky si nejsou dostatečně podobné do té míry, aby byly schopny představovat realitu stejným způsobem. Tato myšlenka byla dále rozvinuta Whorfem, který vyvozuje dvě klíčové hypotézy. První z nich tvrdí, že všechny myšlenky na vyšší úrovni jsou závislé na jazyce. Druhá hypotéza říká, že jazyková struktura, která je zpravidla a obvykle užívána mluvčími určitého jazyka, má přímý dopad na to, jak tito mluvčí vnímají a chápou své okolí. Další studie vykládají Sapir-Whorfovu hypotézu jako tvrzení, že jedinec si utváří pohled na svět a realitu na základě svého rodného jazyka.

Na základě této hypotézy je dále v kapitole představena koncepce habituálního myšlení, tedy ustálených vzorců v lidské mysli, které je dáno jazykovou vybaveností a návyky určité skupiny mluvčích. Tyto vzorce jsou ovlivněny také kulturními zvyklostmi této skupiny. Tuto myšlenku Whorf ilustruje na příkladu indiánského kmene Hopi, který obývá území na jihozápadě USA. Mentální koncepce tohoto kmene jsou natolik odlišné od rodilých anglických mluvčích, že se tito obyvatelé stali předmětem Whorfova výzkumu. Whorf tvrdí, že jejich interpretace skutečnosti je závislá na gramatice Hopi jazyka. Jako příklad uvádí jejich odlišné chápání času, které je dáno tím, že příslušníci kmene Hopi nerozlišují u svých sloves minulý, přítomný a budoucí čas.

Kapitola třetí také představuje komplikace, které mohou nastat, pokud se badatelé snaží provádět výzkum k ověření Sapir-Whorfovy hypotézy. Jeden z klíčových problémů je fakt, že každý badatel zaznamenává a interpretuje pozorování jiných kultur na základě svého rodného jazyka. Tedy v případě amerických učenců se jedná o studie, které jsou prezentované z hlediska rodilého anglického mluvčího. Vědomě či nevědomě tak dochází k výkladu

získaných poznatků na základě srovnání s mentálními vzorci v mozku mluvčích angličtiny. Whorf tvrdí, že je velice těžké se z tohoto habituálního myšlení vymanit a provést tak výzkum objektivně. Nabízí však částečné řešení, a sice výzkum jazyka natolik odlišného a exotického, které donutí výzkumníky vybočit z rutinního přemýšlení jejich vlastního rodného jazyka. Nedojde sice k úplnému oproštění se od těchto mentálních vzorců, nicméně vyvozené závěry budou do určité míry objektivnější.

Závěr třetí kapitoly je věnován porovnání Sapir-Whorfovy hypotézy s teorií univerzální gramatiky, která byla představena Chomskym. Jde o tvrzení, že základní jazyková struktura je mluvčím vrozená a je totožná napříč všemi jazyky. Dále je uváděn známý příklad s Eskymáky, kteří údajně mají několik desítek až stovek výrazů pro sníh. Toto tvrzení je vyvraceno v mnoha publikacích, avšak tyto publikace nepředkládají přesvědčivé důkazy.

Poslední kapitola teoretické části předkládá konkrétní příklady empirického výzkumu. Nejprve však představuje vztah mezi myšlením a jazykem z hlediska psycholingvistiky. Příklady výzkumu jsou převzaty z četných studií, které provedla expertka v oblasti kognitivní vědy Lera Boroditsky. Vztah mezi jazykem a myšlením je ilustrován na příkladech z kultury Aboriginců, kteří vnímají čas i prostor odlišně od anglických mluvčích, jelikož se jejich jazyková vybavenost značně odlišuje. V jejich jazyce například neexistuje překlad pro výraz „vlevo“ a „vpravo“, tudíž dochází k tomu, že ani tyto koncepty nelze v jejich mysli najít. Namísto toho označují směr na základě světových stran. Boroditsky dále uvádí, že toto odlišné vnímání prostoru úzce souvisí i s jejich vnímáním času. To ilustruje na příkladu, kdy příslušníci aboriginské kultury měli za úkol seřadit fotografie stárnoucího muže chronologicky po sobě. Na rozdíl od anglických mluvčích, kteří vytvářeli chronologickou sekvenci vždy zleva doprava, Aboriginci řadili fotografie různě, v závislosti na světové straně, ke které zrovna stáli čelem.

Posledním teoretickým poznatkem jsou způsoby, jakými lze pozměnit jazyk a následně tak zmanipulovat lidské myšlení. Z hlediska psycholingvistiky jsou představeny různé vztahy mezi jazykem a mocí, vztah lidského chápání a jazyka v závislosti na kultuře a ideologii a podobně. Konkrétní příklady tohoto zneužití jsou poté ilustrovány v analytické části práce, která se věnuje rozboru výše uvedených literárních děl.

Analytická část práce se zabývá rozborem pěti klíčových děl anglo-americké literatury. Nejdříve je stručně charakterizován korpus, který obsahuje všechny analyzované příklady. Tyto výňatky jsou v korpusu kategorizovány podle toho, zda obsahují pasáž spojenou s popisem podoby jazyka, lingvistickou relativitou, nebo zda odkazují na přímé či nepřímé praktiky manipulace. Výjimku tvoří korpus příkladů převzatých z díla *the Anthem*,

pro jejichž klasifikaci byla zvolena kategorizace založená na struktuře jazyka. Následně je stručně představena zápletka každého díla nezbytná k pochopení analýzy. Jako první je analyzován smyšlený jazyk *Newspeak* v díle George Orwella *1984*. Jsou charakterizovány hlavní znaky po stránce gramatické i lexikální. Dále je nastíněno, jakým způsobem tato pozměněná struktura jazyka může manipulovat s lidským myšlením. Na podporu těchto závěrů jsou použity příklady z knihy, které s manipulací mysli přímo souvisí.

Jako druhé dílo je analyzováno *The Anthem* od Ayn Randové. Klíčovým znakem jazyka tohoto díla je absence osobního zájmena „já“. Na jejím základě vzniká v myšlení protagonistů konceptuální mezera v myšlení, kvůli které si nejsou schopni uvědomit vlastní individualitu. Na podobnou problematiku je upozorněno také v dílech *Babel-17* od S. R. Delanyho a *Languages of Pao* od J. Vance. Oba jazyky (*Babel-17* i jazyk vyučovaný mezi Paonézany) způsobuje svou lexikální vybaveností a strukturou fatální změny v chování a vnímání postav. Posledním analyzovaným dílem je *Gulf* od R. A. Heinleina, který představuje jazyk zvaný *Speedtalk*. Tento jazyk je vysoce úsporný a umožňuje tak jeho mluvčím rychlé a efektivní vyjadřování myšlenek.

Ve výše uvedených dílech je také stručně okomentována problematika manipulace s lidskou myslí prostřednictvím jazyka. Dochází k ní právě následkem zneužití jazykových prostředků a jejich pozměnění v takové míře, že se v lidské mysli utvoří chaos a neschopnost své myšlenky vyjádřit. Celá tato analýza a poznatkyz ní plynoucí jsou však založeny na díle literární fikce, nelze je proto považovat za závěry, které by skutečnou Sapir-Whorfovu hypotézu vyvracely, či potvrzovaly.

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# 9 APPENDICES

## 9.1 Appendix 1 – Corpus

# 1 George Orwell's 1984

### 1.1 *Descriptive*

1.1.1 Then he pulled the speakwrite toward him and rapped out a message in the hybrid jargon of the Ministries: Items one comma five comma seven approved fullwise stop suggestion contained item six doubleplus ridiculous verging crimethink cancel stop unproceed constructionwise ante-getting plusful estimates machinery overheads stop end message.

1.1.2 From where Winston stood it was just possible to read, picked out on its white face in elegant lettering, the three slogans of the Party:
WAR IS PEACE
FREEDOM IS SLAVERY
IGNORANCE IS STRENGTH

1.1.3 Winston examined the four slips of paper which had unrolled. Each contained a message of only one or two lines, in the abbreviated jargon – not actually Newspeak, but consisting largely of Newspeak words – which was used in the Ministry for internal purposes. They ran:
times 17.3.84 bb speech malreported africa rectify
times 19.12.83 forecasts 3 yp 4th quarter 83 misprints verify current issue
times 14.2.84 miniplenty malquoted chocolate rectify
times 3.12.83 reporting bb dayorder doubleplusungood refs unpersons rewrite fullwise upsub antefilling

1.1.4 Given, for instance, the word *good*, there was no need for such word as *bad*, since the required meaning was equally well – indeed, better – expressed by *ungood*.

1.1.5 Your name was removed from the registers, every record of everything you had ever done was wiped out, your one-time existence was denied and then forgotten. You were abolished, annihilated: *vaporized* was the usual word.

1.1.6 He had committed – would still have committed, even if he had never set pen to paper – the essential crime that contained all others in itself. Thoughtcrime, they called it. Thoughtcrime was not a thing that could be concealed forever.

1.1.7 There was even a whole subsection – Pornosec, it was called in Newspeak – engaged in producing the lowest kind of pornography, which was sent out in sealed packets and which no Party member, other than those who worked on it, was permitted to look at.

1.1.8 On occasion he had even been entrusted with the rectification of 'The Times' leading articles, which were written entirely in Newspeak. He unrolled the message that he had set aside earlier. It ran:
times 3.12.83 reporting bb dayorder doubleplusungood refs unpersons rewrite fullwise upsub antefiling
In Oldspeak (or standard English) this might be rendered: The reporting of Big Brother's Order for the Day in 'The Times' of December 3rd 1983 is extremely unsatisfactory and makes references to non-existent persons. Rewrite it in full and submit your draft to higher authority before filing.

1.1.9 "I don't know whether you know it: *duckspeak*, to quack like a duck. It is one of those interesting words that have two contradictory meanings. Applied to an opponent, it is abuse; applied to someone you agree with, it is praise."

1.1.10 In any case, to wear an improper expression on your face (to look incredulous when a victory was announced, for example) was itself a punishable offense. There was even a word for it in Newspeak: *facecrime*, it was called.

1.1.11 In Oceania at the present day, Science, in the old sense, has almost ceased to exist. In Newspeak there is no word for 'Science'. The empirical method of thought, on which all the scientific achievements of the past were founded, is opposed to the most fundamental principles of Ingsoc. And even technological progress only happens when its products can in some way be used for the diminution of human liberty.

## 1.2 *LR Related*

1.2.1 His mind slid away into the labyrinthine world of doublethink. To know and not to know, to be conscious of complete truthfulness while telling carefully constructed lies, to hold simultaneously two opinions, knowing them to be contradictory and believing in both of them, to use logic against logic. (…) Even to understand the word "doublethink" involved the use of doublethink.

1.2.2 He did not believe he had ever heard the word *Ingsoc* before 1960, but it was possible that in its Oldspeak form – "English Socialism," that is to say – it had been current earlier. Everything melted into mist. Sometimes, indeed, you could put your finger on a definite lie. But you could prove nothing. There was never any evidence.

1.2.3 "Don't you see that the whole aim of Newspeak is to narrow the range of thought? In the end we shall make thoughtcrime literally impossible, because there will be no words in which to express it. Every concept that can ever be needed will be expressed by exactly one word, with its meaning rigidly defined and all its subsidiary meanings rubbed out and forgotten. Every year fewer and fewer words and the range of consciousness always a little smaller. (…) By the year 2050, at the very latest, not a single human being will be alive who could understand such a conversation as we are having now."

1.2.4 "How could you have a slogan like 'freedom is slavery' when the concept of freedom has been abolished? The whole climate of thought will be different. In fact there will be no thought, as we understand it now."

1.2.5 Down in the street the wind flapped the torn poster to and fro, and the word *Ingsoc* fitfully appeared and vanished. Ingsoc. The sacred principles of Ingsoc. Newspeak, doublethink, the mutability of the past. He felt as though he were wandering in the forests of the sea bottom, lost in a monstrous world where he himself was the monster. He was alone. The past was dead, the future was unimaginable.

1.2.6 'What was she like, your wife?' said Julia. 'She was-do you know the Newspeak word *goodthinkful*? Meaning naturally orthodox, incapable of thinking a bad thought?' 'No, I didn't know the word, but I know the kind of person, right enough.'

1.2.7 A Party member is required to have not only the right opinions, but the right instincts. Many of the beliefs and attitudes demanded of him are never plainly stated, and could not be stated without laying bare the contradictions inherent in Ingsoc. If he is a person naturally orthodox (in Newspeak a *goodthinker*), he will in all circumstances know, without taking thought, what is the true belief or the desirable emotion. But in any case an elaborate mental training, undergone in childhood and grouping itself round the Newspeak words *crimestop*, *blackwhite*, and *doublethink*, makes him unwilling and unable to think too deeply on any subject whatever.

1.2.8 The first and simplest stage in the discipline, which can be taught even to young children, is called, in Newspeak, *crimestop*. *Crimestop* means the faculty of stopping short, as though by instinct, at the threshold of any dangerous thought. It includes the power of not grasping analogies, of failing to perceive logical errors, of misunderstanding the simplest arguments if they are inimical to Ingsoc, and of being bored or repelled by any train of thought which is capable of leading in a heretical direction. *Crimestop*, in short, means protective stupidity. But stupidity is not enough. On the contrary, orthodoxy in the full sense demands a control over

one's own mental processes as complete as that of a contortionist over his body. Oceanic society rests ultimately on the belief that Big Brother is omnipotent and that the Party is infallible. But since in reality Big Brother is not omnipotent and the party is not infallible, there is need for an unwearying, moment-to-moment flexibility in the treatment of facts. The keyword here is *blackwhite*. Like so many Newspeak words, this word has two mutually contradictory meanings. Applied to an opponent, it means the habit of impudently claiming that black is white, in contradiction of the plain facts. Applied to a Party member, it means a loyal willingness to say that black is white when Party discipline demands this. But it means also the ability to *believe* that black is white, and more, to *know* that black is white, and to forget that one has ever believed the contrary. This demands a continuous alteration of the past, made possible by the system of thought which really embraces all the rest, and which is known in Newspeak as *doublethink*.

**1.3** ***Manipulation Related***

1.3.1 He was abusing Big Brother, he was denouncing the dictatorship of the Party, he was demanding the immediate conclusion of peace with Eurasia, he was advocating freedom of speech, freedom of the Press, freedom of assembly, freedom of thought, he was crying hysterically that the revolution had been betrayed-and all this in rapid polysyllabic speech which was a sort of parody of the habitual style of the orators of the Party, and even contained Newspeak words: more Newspeak words, indeed, than any Party member would normally use in real life.

1.3.2 'Who controls the past,' ran the Party slogan, 'controls the future: who controls the present controls the past.' And yet the past, though of its nature alterable, never had been altered. Whatever was true now was true from everlasting to everlasting. It was quite simple. All that was needed was an unending series of victories over your own memory. '*Reality control*', they called it: in Newspeak, '*doublethink'.*

1.3.3 It was assumed that when he was not working, eating, or sleeping he would be taking part in some kind of communal recreations; to do anything that suggested a taste for solitude, even to go for a walk by yourself, was always slightly dangerous. There was a word for it in Newspeak: *ownlife*, it was called, meaning individualism and eccentricity.

1.3.4 The children, on the other hand, were systematically turned against their parents and taught to spy on them and report their deviations. The family had become in effect an extension of the Thought Police. It was a device by means of which everyone could be surrounded night and day by informers who knew him intimately.

1.3.5 Talking to her, he realized how easy it was to present an appearance of orthodoxy while having no grasp whatever of what orthodoxy meant. In a way, the world-view of the Party imposed itself most successfully on people incapable of understanding it. They could be made to accept the most flagrant violations of reality, because they never fully grasped the enormity of what was demanded of them, and were not sufficiently interested in public events to notice what was happening. By lack of understanding they remained sane.

# 2 Ayn Rand's Anthem

2.1 We strive to be like all our brother men, for all men must be alike. (C1, C5)

2.2 We are one in all and all in one. There are no men but only the great WE, one, indivisible and forever. (C1, C5)

2.3 It is only we, Equality 7-2521, we alone who were born with a curse. For we are not like our brothers. (C1, C3)

2.4 We exist through, by and for our brothers who are the State. (C1, C5)

2.5 If we went to the Home of the Scholars, we could learn from these also. We could ask questions of these, for they do not forbid questions. (C1, C5)

2.6 Questions give us no rest. We know not why our curse makes us seek we know not what, ever and ever. It whispers to us that there are great things on this earth of ours, and that we can know them if we try, and that we must know them. We ask, why must we know, but it has no answer to give us. We must know that we may know. (C1, C4, C5)

2.7 They called the Students' names, and when the Students stepped before them, one after another, the Council said: "Carpenter" or "Doctor" or "Cook" or "Leader." Then each Student raised their right arm and said: "The will of our brothers be done." (C1, C3)

2.8 We wished to be a Scholar. (C1, C3)

2.9 We Street Sweepers work in brigades of three, and we were with Union 5-3992, they of the half-brain, and with International 4-8818. Now Union 5-3992 are a sickly lad and sometimes they are stricken with convulsions, when their mouth froths and their eyes turn white. But International 4-8818 are different. They are a tall, strong youth and their eyes are like fireflies, for there is laughter in their eyes. (C1, C3)

2.10 International 4-8818 and we are friends. This is an evil thing to say, for it is a transgression, the great Transgression of Preference, to love any among men better than the others, since we must love all men and all men are our friends. (C1, C5)

2.11 We alone, of the thousands who walk this earth, we alone in this hour are doing a work which has no purpose save that we wish to do it. (C1)

2.12 We say to ourselves that we are a wretch and a traitor. But we feel no burden upon our spirit and no fear in our heart. (C1, C3)

2.13 Then we heard a voice from the others call their name: "Liberty 5-3000," and they turned and walked back. Thus we learned their name, and we stood watching them go, till their white tunic was lost in the blue mist. (C1, C3)

2.14 We do not think of them as Liberty 5-3000 any longer. We have given them a name in our thoughts. We call them the Golden One. (C1, C3)

2.15 But it is a sin to give men names which distinguish them from other men. Yet we call them the Golden One, for they are not like the others. (C1, C5)

2.16 "You are not one of our brothers, Equality 7-2521, for we do not wish you to be." We cannot say what they meant, for there are no words for their meaning, but we know it without words and we knew it then. (C1, C4)

2.17 "We are singing because we are happy," we answered the one of the Home Council who reprimanded us. "Indeed you are happy," they answered. "How else can men be when they live for their brothers?" And now, sitting here in our tunnel, we wonder about these words. It is forbidden, not to be happy. For, as it has been explained to us, men are free and the earth belongs to them; and all things on earth belong to all men; and the will of all men together is good for all; and so all men must be happy. (C1, C5)

2.18 Fear walks through the City, fear without name, without shape. All men feel it and none dare to speak. (C5)

2.19 And as we all undress at night, in the dim light of the candles, our brothers are silent, for they dare not speak the thoughts of their minds. For all must agree with all, and they cannot know if their thoughts are the thoughts of all, and so they fear to speak. (C1, C4, C5)

2.20 The words of the Evil Ones . . . The words of the Unmentionable Times . . . What are the words which we have lost? May the Council have mercy upon us! We had no wish to write such a question, and we knew not what we were doing till we had written it. We shall not ask this question and we shall not think it. We shall not call death upon our head. (C1, C4, C5)

2.21 And yet . . . And yet . . . There is some word, one single word which is not in the language of men, but which had been. And this is the Unspeakable Word, which no men may speak nor hear. But sometimes, and it is rare, sometimes, somewhere, one among men find that word.

They find it upon scraps of old manuscripts or cut into the fragments of ancient stones. But when they speak it they are put to death. There is no crime punished by death in this world, save this one crime of speaking the Unspeakable Word. (C4, C5)

2.22 And it seemed as if these eyes were trying to tell us something through the flames, to send into our eyes some word without sound. And it seemed as if these eyes were begging us to gather that word and not to let it go from us and from the earth. But the flames rose and we could not guess the word. . . . What--even if we have to burn for it like the Saint of the Pyre--what is the Unspeakable Word? (C5)

2.23 We, Equality 7-2521, have discovered a new power of nature. And we have discovered it alone, and we alone are to know it. (C1)

2.24 No single one can possess greater wisdom than the many Scholars who are elected by all men for their wisdom. (C5)

2.25 Then we said: "Our dearest one, do not obey us." They stepped back, and their eyes were wide and still. (C1)

2.26 And a strange thought comes to us: we wonder, for the first time in our life, what we look like. Men never see their own faces and never ask their brothers about it, for it is evil to have concern for their own faces or bodies. But tonight, for a reason we cannot fathom, we wish it were possible to us to know the likeness of our own person. (C1, C5)

2.27 It was easy to escape from the Palace of Corrective Detention. The locks are old on the doors and there are no guards about. There is no reason to have guards, for men have never defied the Councils so far as to escape from whatever place they were ordered to be. (C4, C5)

2.28 "How dared you, gutter cleaner," spoke Fraternity 9-3452, "to hold yourself as one alone and with the thoughts of the one and not of the many?" (C5)

2.29 "So you think that you have found a new power," said Collective 0-0009. "Do all your brothers think that?" "No," we answered. "What is not thought by all men cannot be true," said Collective 0-0009. "Many men in the Homes of the Scholars have had strange new ideas in the past," said Solidarity 8-1164, "but when the majority of their brother Scholars voted against them, they abandoned their ideas, as all men must." (C5)

2.30 We knelt by the stream and we bent down to drink. And then we stopped. For, upon the blue of the sky below us, we saw our own face for the first time. Our face was not like the faces of our brothers, for we felt not pity when looking upon it. Our body was not like the bodies of our brothers, for our limbs were straight and thin and hard and strong. (C1)

2.31 We have much to speak of to ourselves, and we hope we shall find the words for it in the days to come. Now, we cannot speak, for we cannot understand. (C1, C4)

2.32 There is no joy for men, save the joy shared with all their brothers. But the only things which taught us joy were the power we created in our wires, and the Golden One. And both these joys belong to us alone, they come from us alone, they bear no relation to all our brothers, and they do not concern our brothers in any way. Thus do we wonder. (C1, C5)

2.33 There is some error, one frightful error, in the thinking of men. What is that error? We do not know, but the knowledge struggles within us, struggles to be born. (C1, C5)

2.34 "We love you." But they frowned and shook their head and looked at us helplessly. "No," they whispered, "that is not what we wished to say." They were silent, then they spoke slowly, and their words were halting, like the words of a child learning to speak for the first time: "We are one . . . alone . . . and only . . . and we love you who are one . . . alone . . . and only." (C1)

2.35 And we felt torn, torn for some word we could not find. (C1, C4)

2.36 We glanced through the pages, and we saw that they were written in our language, but we found many words which we could not understand. Tomorrow, we shall begin to read these scripts. (C1, C4)

2.37 And now we look upon the earth and sky. This spread of naked rock and peaks and moonlight is like a world ready to be born, a world that waits. It seems to us it asks a sign from us, a spark, a first commandment. We cannot know what word we are to give, nor what great deed this earth expects to witness. We know it waits. It seems to say it has great gifts to lay before us, but it wishes a greater gift for us. We are to speak. We are to give its goal, its highest meaning to all this glowing space of rock and sky. (C1, C4)

2.38 We look ahead, we beg our heart for guidance in answering this call no voice has spoken, yet we have heard. (C1, C4)

2.39 May knowledge come to us! What is the secret our heart has understood and yet will not reveal to us, although it seems to beat as if it were endeavouring to tell it? (C1, C4)

2.40 I am. I think. I will. My hands . . . My spirit . . . My sky . . . My forest . . . This earth of mine. . . . What must I say besides? These are the words. This is the answer. I stand here on the summit of the mountain. I lift my head and I spread my arms. This, my body and spirit, this is the end of the quest. I wished to know the meaning of things. I am the meaning. (C2)

2.41 It is my mind which thinks, and the judgement of my mind is the only searchlight that can find the truth. It is my will which chooses, and the choice of my will is the only edict I must respect. (C2)

2.42 Many words have been granted me, and some are wise, and some are false, but only three are holy: "I will it!" (C2)

2.43 For the word "We" must never be spoken, save by one's choice and as a second thought. This word must never be placed first within man's soul, else it becomes a monster, the root of all the evils on earth, the root of man's torture by men, and of an unspeakable lie. (C5)

2.44 The word "We" is as lime poured over men, which sets and hardens to stone, and crushes all beneath it, and that which is white and that which is black are lost equally in the grey of it. It is the word by which the depraved steal the virtue of the good, by which the weak steal the might of the strong, by which the fools steal the wisdom of the sages. (C5)

2.45 And now I see the face of god, and I raise this god over the earth, this god whom men have sought since men came into being, this god who will grant them joy and peace and pride. This god, this one word: "I." (C2)

2.46 It was when I read the first of the books I found in my house that I saw the word "I." And when I understood this word, the book fell from my hands, and I wept, I who had never known tears. (C2)

2.47 Our son will be raised as a man. He will be taught to say "I" and to bear the pride of it. He will be taught to walk straight and on his own feet. He will be taught reverence for his own spirit. (C2)

2.48 What disaster took their reason away from men? What whip lashed them to their knees in shame and submission? The worship of the word "We." (C4, C5)

2.49 I wonder, for it is hard for me to conceive how men who knew the word "I" could give it up and not know what they lost. But such has been the story, for I have lived in the City of the damned, and I know what horror men permitted to be brought upon them. (C2)

2.50 And here, over the portals of my fort, I shall cut in the stone the word which is to be my beacon and my banner. The word which will not die, should we all perish in battle. The word which can never die on this earth, for it is the heart of it and the meaning and the glory. The sacred word: EGO (C2)

# 3 Babel-17

## 3.1 *Descriptive*

3.1.1 “First of all, General,” she was saying, “Babel-17 is not a code.” (…) “You mean we’ve just been trying to decipher a lot of nonsense?” “It’s not a code,” she repeated. “It’s a language.”

3.1.2 “There are two types of codes. In the first, letters, or symbols that stand for letters, are shuffled and juggled according to a pattern. In the second, letters, words, or groups of words are replaced by other letters, symbols, or words. A code can be one type or the other, or a combination. But both have this in common: once you find the key, you just plug it in and out come logical sentences. A language, however, has its own internal logic, its own grammar, its own way of putting thoughts together with words that span various spectra of meaning. There is no key you can plug in to unlock the exact meaning. At best you can get a close approximation."

3.1.3 “General, I have to know everything know about Babel-17 where you got it, when, under what circumstances, anything that might give me a clue to the subject matter.”

3.1.4 “You may not have noticed, but, in the copy Cryptography gave me, there was no distinction as to which voice was which. In short, what I’m working with now is a transcription of a highly technical exchange run together without punctuation, or even word breaks.”

3.1.5 “But you see the problem a 'foreigner' has transcribing a language he doesn't speak; he may come out with too many distinctions of sound, or not enough." "How do you propose to do it?" "By what I know about the sound systems of a lot of other languages and by feel."

## 3.2 *LR Related*

3.2.1 “Well, most textbooks say language is a mechanism for expressing thought, Mocky. But language is thought. Thought is information given form. The form is language. The form of this language is…amazing.” “What amazes you?” “Mocky, when you learn another tongue, you learn the way another people see the world, the universe.”

3.2.2 “I’m familiar with a half-dozen languages of the Invaders. Babel-17 isn’t one of them. It isn’t a language of the Alliance. I want to find out who speaks this language–because I want to find out who, or what, in the Universe thinks that way.”

3.2.3 “And Babel-17, the real reason for this letter. Told you I had deciphered it enough to know where the next attack will be. The Alliance War Yards at Armsedge. Wanted to let you know that's where I'm going, just in case. Talk and talk and talk: what sort of mind can talk like that language talks? And why?”

3.2.4 The re-transcribed material passed on the sorting screen. By the computer console laid the four pages of definitions she had amassed and a cuaderno full of grammatical speculations. Chewing her lower lip, she ran through the frequency tabulation of depressed diphthongs. On the wall she had tacked three charts labeled:

3.2.5 Possible Phonemic Structure . . .

3.2.6 Probable Phonetic Structure . . .

3.2.7 Siotic, Semantic, and Syntactic Ambiguities . . .

3.2.8 The last contained the problems to be solved. The questions, formulated and answered, were transferred as certainties of the first two.

3.2.9 “We have to go to another language in order to think about the problem clearly without going through all sorts of roundabout paths for the proper aspects of what we want to deal with." "What language is this?" asked Calli. "I don't know its real name. For now it's called Babel-17. From what little I know about it already, most of its words carry more information about things they refer to than any four or five languages I know put together, and in less space."

3.2.10 Ask him what's in that room over there, she said to herself, and would have dismissed the passing curiosity, but she was thinking in Basque: it was a message from her discorporate bodyguard, invisible beside her.

3.2.11 They're having barbecued lamb for dinner and you'll go to hell for lying, she commented to herself—in Basque.

3.2.12 “Babel-17. It’s been automatically transcribed so I can study it later. Anyway, here goes nothing. (…) I don’t know it well, yet. I know it a little, but not enough. I feel like someone at a performance of Shakespeare shouting catcalls in pidgin English.”

3.2.13 Abstract thoughts in a blue room; Nominative, genitive, etative, accusative one, accusative two, ablative, partitive, illative, instructive, abessive, adessive, inessive, essive, allative, translative, comitative. Sixteen cases of the Finnish noun. Odd, some languages get by with only singular and plural. The American Indian languages even failed to distinguish number. Except Sioux, in which there was a plural only for animate objects. The blue room was round and warm and smooth. No way to say warm in French. There was only hot and tepid. If there's no word for it, how do you think about it? And, if there isn't the proper form, you don't have the how even if you have the words. Imagine, in Spanish having to assign a sex to every object: dog, table, tree, can-opener. Imagine, in Hungarian, not being able to assign a sex to anything: he, she, it all the same word.

3.2.14 Words are names for things. In Plato's time things were names for ideas—what better description of the Platonic Ideal? But were words names for things, or was that just a bit of semantic confusion? Words were symbols for whole categories of things, where a name was put to a single object: a name on something that requires a symbol jars, making humor. A symbol on something that takes a name jars, too: a memory that contained a torn window shade, his liquored breath, her outrage, and crumpled clothing wedged behind a chipped, cheap night table.

3.2.15 Where had she been? Anticipation, excitement, fear! She pulled her mind back into English. Thinking in Babel-17 was like suddenly seeing the water at the bottom of a well that a moment ago you thought had only gone down a few feet. She reeled with vertigo.

3.2.16 Rydra waited for them to speak. A word would release identification; Alliance or Invader. Her mind was ready to spring on whatever tongue they spoke, to extract what she knew of its thinking habits, tendencies toward logical ambiguities, absence or presence of verbal rigor, in whatever areas she might take advantage of—

3.2.17 The second man moved back and she saw the third who still stood at the rear.

3.2.18 Babel-17. They defined a concept of exactingly necessary expedient curiosity that became in any other language a clumsy string of polysyllables. "I've never watched a stellar skirmish," she said.

3.2.19 She tried to speak, but it came out a grunt. She staggered against his arm. The Slug had turned now. "You feel well?" he asked. "Sssssss," and realized that she didn't know how to say it in Babel-17. Her mouth bit into the shape and feel of English. "Sick," she said. "Jesus, I feel sick."

3.2.20 Amazement undercut her initial disbelief. It was an amazement she would have felt before when he responded so unquestioningly to her plan to destroy the Invader's defense, had not Babel-17 precluded such feelings.

3.2.21 But the Butcher made a fist; "Knowing what ships to destroy, and ships are destroyed." He banged his fist against his chest. "Now to go down the Dragon's Tongue, Tarik go down the Dragon's Tongue." He banged his chest again. She wanted to question, but looked at the dead fetus turning in dark liquid behind him and said instead, "Thank you, Butcher." As she stepped through the iris door, she mulled over what he had said to her, trying to frame some explanation of his actions. Even the rough way in which his words fell— His words! It struck her at once, and she hurried down the corridor.

3.2.22 Brass, he can't say 'I'!" She leaned across the table, surprised curiosity impelling her excitement. The pilot locked his claws around his drinking horn. The wooden tables across the commons were being set up for the evening meal. "Me, my, mine, myself. I don't think he can say any of those either. Or think them. I wonder where the hell he's from." "You know any language where there's no word for - I'?" "I can think of a couple where it isn't used often, but no one that doesn't even have the concept, if only hanging around in a verb ending." "Which all means what"?" "A strange man with a strange way of thinking. I don't know why, but he's aligned himself with me, sort of my ally on this trip and a go-between with Jebel, I'd like to understand, so I won't hurt him."

3.2.23 She wondered what would happen if she translated her perceptions of people's movement and muscle tics into Babel-17. It was not only a language, she understood now, but a flexible matrix of analytical possibilities where the same 'word' defined the stresses in a webbing of medical bandage, or a defensive grid of spaceships. What would it do with the tensions and yearnings in a human face? Perhaps the flicker of eyelids and fingers would become mathematics, without meaning. Or perhaps— While she thought, her mind changed gears into the headlong compactness of Babel-17. And she swept her eyes around the — voices.

3.2.24 The scream snapped something – She had been thinking in Babel-17 and choosing her English words with it. But now she was thinking in English again.

3.2.25 Then why was she sick? She recalled how time slowed when her mind worked under Babel-17, how her mental processes speeded up. If there was a corresponding increase in her physiological functions, her body might not be up to the strain.

3.2.26 The Butcher's egoless brutality, hammered linear by what she could not know, less than primitive, was for all its horror, still human. Though bloody handed, he was safer than the precision of the world linguistically corrected. What could you say to a man who could not say I? What could he say to her? Jebel's cruelties, kindnesses, existed in the articulate limits of civilization. But this red bestiality —fascinated her!

3.2.27 "How far do we go?" she asked, having decided to walk with him, thinking as she spoke: If he doesn't know the word for I, how can he understand 'we'? Understanding or not he answered, "Soon."

3.2.28 "This hand"—he held up his left—"kill four people in three days. This hand"—he raised the other—"kill seven. Blow up four buildings with thermite. The foot"—he slapped his left leg—"kicked in the head of the guard at the Telechron Bank."

3.2.29 "Look, you and I are going to talk to each other. But first I have to teach"—she stopped—"the brain something." "What?" "About you and I. You must hear the words a hundred times a day. Don't you ever wonder what they mean?" "Why? Most things make sense without them." "Hey, speak in whatever language you grew up with." "No." "Why not? I want to see if it's one I know anything about." "The doctors say there's something wrong with the brain."

3.2.30 You don't know what language you spoke before you lost your memory? Well, your speech patterns now must be based on your old language or you would have learned about I and you just from picking up new words." "Why must these sounds mean something?" "Because you asked a question just now that I can't answer if you don't understand them." "No." Discomfort shadowed his voice. "No. There is an answer. The words of the answer must be simpler, that's all." "Butcher, there are certain ideas which have words for them. If you don't know the words, you can't know the ideas- And if you don't have the idea, you don't have the answer."

3.2.31 "Don't you see, sometimes you want to say things, and you're missing an idea to make them with, and missing a word to make the idea with. In the beginning was the word. That's how somebody tried to explain it once. Until something is named, it doesn't exist. And it's something the brain needs to have exist, otherwise you wouldn't have to beat your chest, or strike your fist on your palm. The brain wants it to exist; let me teach it the word."

3.2.32 There is a huge solar-energy conversion plant that supplies all the electrical energy for the Court. The heat amplifying and reducing components take up an area a little bigger than Tarik. One Yiribian can slither through that plant and then go describe it to another Yiribian who never saw it before so that the-second can build an exact duplicate, even to the color the walls are painted—and this actually happened, because they thought we'd done something ingenious with one of the circuits and wanted to try it themselves—where each piece is located, how big it is, in short completely describe the whole business, in nine words. Nine very small words, too," The Butcher shook his head. "No. A solar-heat conversion system is too complicated. These hands dismantle one, not too long ago. Too big. Not—" "Yep, Butcher, nine words. In English it would take a couple of books full of schematics and electrical and architectural specifications. They have the proper nine words- We don't." "Impossible." "So's that." She pointed toward the Yiribian ship. "But it's there and flying." She watched the brain, both intelligent and injured, thinking. "If you have the right words," she said, "it saves a lot of time and makes things easier."

3.2.33 After a while he asked, "What is I?" She grinned. "First of all it's very important. A good deal more important than anything else. The brain will let any number of things go to pot as long as 'I' stay alive. That's because the brain is part of I. A book is, a ship is, Jebel is, the universe is, but, as you must have noticed, I am." The Butcher nodded. "Yes. But I am what?" Fog closed over the view-port, misting stars and the Yiribian ship. "That's a question only you can answer."

3.2.34 “You escaped from Titin?" He nodded. "I will probably be caught again, because that's what happens to criminals in this universe. And maybe I will escape once more." He shrugged. "Maybe I will not be caught again, though." He looked at her, surprised not at her but at something in himself. "I was no I before, but now there is a reason to stay free. I will not be caught again. There is a reason." "What is it, Butcher?" "Because I am," he said softly, "and you are."

### 3.3 *Manipulation Related*

3.3.1 “With a mind that doesn't know the word 'I', or hasn't known it for long, fear tactics won't work." (…) “None of those computer languages have the word for 'I' either. This prevents such statements, as 'I can't solve the problem.' Or, I'm really not interested.' Or 'I've got better things to waste my time with.'”

3.3.2 You can program a computer to make mistakes, and you do it not by crossing wires, but by manipulating the language you teach it to 'think' in. The lack of an 'I' precludes any self-critical process. In fact it cuts out any awareness of the symbolic process at all—which is the way we distinguish between reality and our expression of reality."

3.3.3 "Babel-17 as a language contains a pre-set program for the Butcher to become a criminal and saboteur. If you turn somebody with no memory loose in a foreign country with only the words for tools and machine parts, don't be surprised if he ends up a mechanic. By manipulating his vocabulary properly you could just as easily make him a sailor, or an artist. Also, Babel-17 is such an exact analytical language; it almost assures you technical mastery of any situation you look at. And the lack of an I blinds you to the fact that though it's a highly useful way to look at things, it's the only way."

# 4 Gulf

### 4.1 *Descriptive*

4.1.1 There were hurrying footsteps moving past his bedroom door. There were two voices, one male, one female, outside the door; the female was Thalia Wagner, the man he could not place.

Male: "tsamaeq?"

Female: "ntSt"

Male: "zutntst."

Female: "tpbit" New Jersey."

These are not precisely the sounds that Gilead heard, first because of the limitations of phonetic symbols, and second because his ears were not used to the sounds.

4.1.2 "You're the doctor, Joe. In that case-" A speaker on Baldwin's desk uttered: "cenie B hdg rylp." Baldwin answered, "nu," and sauntered quickly to the fireplace.

4.1.3 You show disturbing symptoms of being homo novis, Joe, in a sloppy, ignorant, untrained fashion. Not likely, but you just might be one of the breed. Now-what is man? What is the one thing he can do better than animals which is so strong a survival factor that it outweighs all the things that animals of one sort or another can do much better than he can?" "He can think," (…) What is the necessary direction of evolution to the next dominant species?" (…) "To be able to think better," Gilead answered almost instantly. "Hand the man a cigar Supermen are superthinkers; anything else is a side issue."

4.1.4 "Here and there among ordinary men is a rare individual who really thinks, can and does use logic in at least one field-he's often as stupid as the rest outside his study or laboratory-but he can think, if he's not disturbed or sick or frightened. This rare individual is responsible for all the progress made by the race; the others reluctantly adopt his results. (…) Still rarer is the man who thinks habitually, who applies reason, rather than habit pattern, to all his activity. (…) Rarest of all is the man who can and does reason at all times, quickly, accurately, inclusively, despite hope or fear or bodily distress, without egocentric bias or thalmic disturbance, with correct memory, with clear distinction between fact, assumption, and non-fact.

4.1.5 Since much of it is dangerous and since very few indeed outside our organization are capable of real original thinking, basic science has been almost at a public standstill.

4.1.6 "Try again, Joe." Speedtalk was a structurally different speech from any the race had ever used. Long before, Ogden and Richards had shown that eight hundred and fifty words were sufficient vocabulary to express anything that could be expressed by "normal" human vocabularies, with the aid of a handful of special words-a hundred odd-for each special field, such as horse racing or ballistics. About the same time phoneticians had analyzed all human tongues into about a hundred-odd sounds, represented by the letters of a general phonetic alphabet. On these two propositions Speedtalk was based.

4.1.7 To be sure, the phonetic alphabet was much less in number than the words in Basic English. But the letters representing sound in the phonetic alphabet were each capable of variation several different ways- length, stress, pitch, rising, falling. The more trained an ear was the larger the number of possible variations; there was no limit to variations, but, without much refinement of accepted phonetic practice, it was possible to establish a one-to-one relationship with Basic English so that one phonetic symbol was equivalent to an entire word in a "normal" language, one Speedtalk word was equal to an entire sentence. The language consequently was learned by letter units rather than by word units-but each word was spoken and listened to as a single structured gestalt.

4.1.8 Most of them could be pronounced as one syllable. These had not the stark simplicity of basic Speedtalk; nevertheless words such as "ichthyophagous" and "constitutionality" were thus compressed to monosyllables. Such shortcuts can best be appreciated by anyone who has heard a long speech in Cantonese translated into a short speech in English. Yet English is not the most terse of "normal" languages-and expanded Speedtalk is many times more economical than the briefest of "normal" tongues.

## 4.2 *LR Related*

4.2.1 "First we must teach you to see and to hear, then to remember, then to speak, and then to think." Joe looked at her. "What's this I'm doing with my mouth at this moment?" „It's not talking, it's a sort of grunting. Furthermore English is not structurally suited to thinking."

4.2.2 Gail started teaching him to hear by speaking to him single words from the odd language, requiring him to repeat them back. (…) "Confound it, if you would tell me what the words mean instead of treating me the way Milton treated his daughters about Latin, I could remember them easier." She shrugged. "I can't, Joe. You must learn to hear and to speak first. Speedtalk is a flexible language; the same word is not likely to recur. This practice word means: The far horizons draw no nearer.' That's not much help, is it?" The definition seemed improbable, but he was learning not to doubt her.

4.2.3 But Speedtalk was not "shorthand" Basic English. "Normal" languages, having their roots in days of superstition and ignorance, have in them inherently and unescapably wrong structures of mistaken ideas about the universe. One can think logically in English only by extreme effort so bad it is as a mental tool. For example, the verb "to be" in English has twenty- one distinct meanings, every single one of which is false-to-fact.

4.2.4 A symbolic structure, invented instead of accepted without question, can be made similar in structure to the real world to which it refers. The structure of Speedtalk did not contain the hidden errors of English; it was structured as much like the real world as the New Men could make it. For example, it did not contain the unreal distinction between nouns and verbs found in most other languages. The world- the continuum known to science and including all human activity-does not contain "noun things" and "verb things"; it contains space-time events and relationships between them. The advantage for achieving truth, or something more nearly like truth, was similar to the advantage of keeping account books in Arabic numerals rather than Roman. All other languages made scientific, multi-valued logic almost impossible to achieve; in Speedtalk it was as difficult not to be logical. Compare die pellucid Boolean logic with the obscurities of the Aristotelean logic it supplanted. Paradoxes are verbal, do not exist in the real world-and Speedtalk did not have such built into it.

4.2.5 Hearing is a function of the brain, not of the ear; his brain, sophisticated as it was, nevertheless insisted on forcing the sounds that reached his ears into familiar pockets rather than stop to create new ones.

4.2.6 An economical language cannot be limited to a thousand words; although almost every idea can be expressed somehow in a short vocabulary, higher orders of abstraction are convenient. For technical words Speedtalk employed an open expansion of sixty of the thousand-odd phonetic letters. They were the letters ordinarily used as numerals; by preceding a number with a letter used for no other purpose, the symbol was designated as having a word value.

4.2.7 And his mental processes, always fast, had become faster than he knew. The ability to learn Speedtalk at all is proof of supernormal intelligence; the use of it by such intelligence renders that mind efficient. (…) Speedtalk did not merely speed up communication-by its structures it made thought more logical; by its economy it made thought processes enormously faster, since it takes almost as long to think a word as it does to speak it.

4.2.8 Living time is not calendar time; a man's life is the thought that flows through his brain. Any man capable of learning Speedtalk had an association time at least three times as fast as an ordinary man. Speedtalk itself enabled him to manipulate symbols approximately seven times as fast as English symbols could be manipulated. Seven times three is twenty-one; a new man had an effective life time of at least sixteen hundred years, reckoned in flow of ideas.

4.2.9 More highly structured communication seemed quite beyond him, until one day without apparent cause but during an attempt to call the cards by telepathy, he found himself hooked in with Weems for all of ten seconds-time enough for a thousand words by Speedtalk standards.
- it comes out as speech!
- why not? thought is speech.
- how do we do it?
- if we knew it would not be so unreliable, as it is, some can do it by volition, some by accident, and some never seem to be able to do it. We do know this: while thought may not be of the physical world in any fashion we can now define and manipulate, it is similar to events in continuum in its quantal nature. You are now studying the extension of the quantum concept to all features of the continuum, you know the chronon, the mensum, and the viton, as quanta, as well as the action units of quanta such as the photon. The continuum has not only structure but texture in all its features. The least unit of thought we term the psychon.
- define it. put salt on its tail.
- some day, some day. I can tell you this; the fastest possible rate of thought is one psychon per chronon; this is a basic, universal constant.

4.2.10 "Psychons are as yet beyond our comprehension in many respects. Theory indicates that they may not be destroyed, that thought, like action, is persistent. Whether or not such theory, if true, means that personal identity is also persistent must remain an open question. See the daily papers-a few hundred years from now-or a few hundred thousand." He stood up.

4.2.11 He shifted to English to swear. "Damn it, Joe, face up to it. This world is run the way my great aunt Susie flies a 'copter. Speedtalk or no Speedtalk, common man can't learn to cope with modern problems. No use to talk about the unused potential of his brain, he has not got the will to learn what he would have to know.

# 5 Languages of Pao

## 5.1 *Descriptive*

5.1.1 The language of Pao was derived from Waydalic, but molded into peculiar forms. The Paonese sentence did not so much describe an act as it presented a picture of a situation. There were no verbs, no adjectives; no formal word comparison such as good, better, best. The typical Paonese saw himself as a cork on a sea of a million waves, lofted, lowered, thrust aside by incomprehensible forces--if he thought of himself as a discrete personality at all. He held his ruler in awe, gave unquestioning obedience, and asked in return only dynastic continuity, for on Pao nothing must vary, nothing must change.

5.1.2 The Paonese and Mercantil languages were as disparate as the two ways of living. The Panarch, making the statement, "There are two matters I wish to discuss with you," used words which, accurately rendered, would read: "Statement-of-importance (a single word in Paonese)--in a state of readiness-- two; ear--of Mercantil--in a state of readiness; mouth--of this person here--in a state of volition." The italicized words represent suffixes of condition. The necessary paraphrasing makes the way of speaking seem cumbersome. But the Paonese sentence, "Rhomel-en-shrai bogal-Mereantil-nli-en moun-esnli-ro." requires only three more phonemes than, "There are two matters I wish to discuss with you." The Mercantil express themselves in neat quanta of precise information. "I am at your orders, sir." Literally translated this is: "I--Ambassador--here—now gladly-obey the just spoken--orders of--you--Supreme Royalty--here--now heard and understood."

5.1.3 Until he was assured of Beran's death he could not properly enjoy the perquisites of the Panarch's office. Likewise, the doubt had infected the vast Paonese masses. Daily their

recalcitrance increased; Bustamonte's informers reported that everywhere he was known as Bustamonte Bereglo. "Bereglo" was a word typically Paonese, applied to an unskilful slaughter-house worker, or a creature which worries and gnaws its victim.

5.1.4 The first two years Beran lived in the house of Palafox, and much of his energy was given to learning the language. His natural preconceptions regarding the function of speech were useless, for the language of Breakness was different from Paonese in many significant respects. Paonese was of that type known as "polysynthetic," with root words taking on prefixes, affixes and postpositions to extend their meaning. The language of Breakness was basically "isolative," but unique in that it derived entirely from the speaker: that is to say, the speaker was the frame of reference upon which the syntax depended, a system which made for both logical elegance and simplicity. Since Self was the implicit basis of expression, the pronoun "I" was unnecessary. Other personal pronouns were likewise non-existent, except for third person constructions--although these actually were contractions of noun phrases. The language included no negativity; instead there were numerous polarities such as "go" and "stay." There was no passive voice--every verbal idea was selfcontained: "to strike," "to receive-impact." The language was rich in words for intellectual manipulation, but almost totally deficient in descriptives of various emotional states. Even if a Breakness dominie chose to break his solipsistic shell and reveal his mood, he would be forced to the use of clumsy circumlocution. Such common Paonese concepts as "anger," "joy," "love," "grief," were absent from the Breakness vocabulary. On the other hand, there were words to define a hundred different types of ratiocination, subtleties unknown to the Paonese--distinctions which baffled Beran so completely that at times his entire stasis, the solidity of his ego, seemed threatened. Week after week Fanchiel explained, illustrated, paraphrased; little by little Beran assimilated the unfamiliar mode of thought--and, simultaneously, the Breakness approach to existence.

5.1.5 A person born to the Paonese tradition inherited insensitivity toward human suffering--not so much callousness as an intuition of fate. Pao was a world of vast numbers and cataclysm automatically affected great masses of people.

5.1.6 In subdued voices the apprentices recalled scenes of anguish: the absolute passive obduracy of the population, even in the face of starvation; the reprisals, effected with true Paonese disregard for the individual life.

5.1.7 In a jocular moment the students contrived a bastard mish-mash of a language, assembled from scraps of Paonese, Cogitant, Valiant, Technicant, Mercantil and Batch, with a syncretic syntax and heterogeneous vocabulary. This patchwork tongue was known as Pastiche. The students vied in fluency and used it to the disapproval of the instructors, who felt that the effort might better be spent in their studies. The students, referring to the Valiants, the Technicants and the Cogitants, argued that in all logic and consistency the Interpreters should likewise speak a characteristic tongue--so why not Pastiche?

## 5.2 *LR Related*

5.2.1 Beran's reason and native willingness to oblige struggled with the obstinacy of his race. "Why must I go to the Institute?" Fanchiel replied with ingenuous candor. "Lord Palafox apparently intends that you should identify with Breakness and so feel sympathetic to his goals." Beran could not grasp this; however, he was impressed by Fanchiel's manner. "What will I learn at the Institute?" "A thousand things--more than I can describe to you. In the College of Comparative Culture--where Lord Palafox is Dominie--you will study the races of the universe, their similarities and differences, their languages and basic urges, the specific symbols by which you can influence them. "In the College of Mathematics you learn the

manipulation of abstract ideas, various systems of rationality--likewise you are trained to make quick mental calculations."

5.2.2 With the prospect of modification removed to the far future, Beran's obstinacy returned. "Why can't we speak Paonese?" Fanchiel explained patiently. "You will be required to learn a great deal that you could not understand if I taught in Paonese." "I understand you now," muttered Beran. "Because we are discussing the most general ideas. Each language is a special tool, with a particular capability. It is more than a means of communication; it is a system of thought. Do you understand what I mean?" Fanchiel found his answer in Beran's expression. "Think of a language as the contour of a watershed, stopping flow in certain directions, channeling it into others. Language controls the mechanism of your mind. When people speak different languages, their minds work differently and they act differently. For instance: you know of the planet Vale?" "Yes. The world where all the people are insane." "Better to say, their actions give the impression of insanity. Actually they are complete anarchists. Now if we examine the speech of Vale we find, if not a reason for the behavior, at least a parallelism. Language on Vale is personal improvisation, with the fewest possible conventions. Each individual selects a speech, as you or I might choose the color of our garments."

5.2.3 All of us change as we learn, but you can never become a true man of Breakness. Long ago you were shaped into the Paonese style. But speaking our language, you will understand us--and if you can think as another man thinks, you cannot dislike him. Now, if you are ready, we commence."

5.2.4 "We must alter the mental framework of the Paonese people--a certain proportion of them, at least--which is most easily achieved by altering the language." Bustamonte shook his head. "This process sounds indirect and precarious. I had hoped..." Palafox interrupted incisively. "Words are tools. Language is a pattern, and defines the way the word-tools are used." Bustamonte was eyeing Palafox sidelong.

5.2.5 The people of this area will be persuaded to the use of a new language. That is the extent of the effort. Presently they will produce warriors in profusion." Bustamonte frowned skeptically. "Why not undertake a program of education and training in arms? To change the language is going far afield." You have not grasped the essential point," said Palafox. "Paonese is a passive, dispassionate language. It presents the world in two dimensions, without tension or contrast. A people speaking Paonese, theoretically, ought to be docile, passive, without strong personality development--in fact, exactly as the Paonese people are. The new language will be based on the contrast and comparison of strength, with a grammar simple and direct. To illustrate, consider the sentence, 'The farmer chops down a tree'. (Literally rendered from the Paonese in which the two men spoke, the sentence was: "Farmer in state of exertion; axe agency; tree in state of subjection to attack.") "In the new language the sentence becomes: `The farmer overcomes the inertia of the axe; the axe breaks asunder the resistance of tree.' Or perhaps: 'The farmer vanquishes the tree, using the weapon-instrument of the axe'."

5.2.6 Beran shook his head, feeling a thousand years old. "I meant no harm, that is true...But so is everything else you said...There are so many truths--how can anyone make up his mind?" "I know nothing of these many truths," said the girl. "I know only how I feel, and I know that if I were able I would kill Bustamonte the Tyrant!"

5.2.7 Bustamonte dispatched half the neutraloids to forage for food, but they never returned. The ministers openly made plans to return to a more hospitable environment. Bustamonte argued and promised, but the Paonese mind was not easily amenable to any sort of persuasion.

5.2.8 "It is necessary that many Paonese learn many languages swiftly. Training here on Breakness may be a means to this end. "Perhaps in some of your minds is confusion. Why, you ask, must

we learn three new languages? "In your case, the answer is simple: you will be an elite managerial corps—you will coordinate, you will expedite, you will instruct. "But this does not completely answer your question. Why, you ask, must anyone learn a new language? The response to this question is found in the science of dynamic linguistics. Here are the basic precepts, which I will enunciate without proof or argument, and which, for the time being at least, you must accept arbitrarily. "Language determines the pattern of thought, the sequence in which various types of reactions follow acts. "No language is neutral. All languages contribute impulse to the mass mind, some more vigorously than others. I repeat, we know of no 'neutral' language-- and there is no `best' or `optimum' language, although Language A may be more suitable for Context X than Language B. "In an even wider frame of reference, we note that every language imposes a certain world-view upon the mind. What is the 'true' world-picture? Is there a language to express this `true' world-picture? First, there is no reason to believe that a `true' world-picture, if it existed, would be a valuable or advantageous tool. Second, there is no standard to define the 'true' world-picture. `Truth' is contained in the preconceptions of him who seeks to define it. Any organization of ideas whatever presupposes a judgment on the world."

5.2.9 "You are Paonese; you do not understand us of Breakness. We are total individuals--each has his private goal. The Paonese word 'cooperation' has no counterpart on Breakness. How would I advance myself by monitoring your case to Sire Palafox? Such an act is irreversible. I commit myself without perceptible advantage. If I say nothing, I have alternate channels always open."

5.2.10 Hate, an element hitherto foreign to his nature, began to find a place in his mind. (…) Looking around the faces of his fellows, he thought, I am changed. Palafox did his worst upon me. I love Pao, but I am no longer Paonese. I am tainted with the flavor of Breakness; I can never be truly and wholly a part of this world again--or of any other world. I am dispossessed, eclectic; I am Pastiche.

5.2.11 "A person who fails one commitment is not often entrusted with a second." "'Trust'? What is that? The interdependence of the hive; a mutual parasitism of the weak and incomplete." "It is likewise a weakness," retorted Beran in fury, "to take advantage of trust in another--to accept loyalty, then fail to return it." Palafox laughed in real amusement. "Be that as it may, the Paonese concepts of 'trust,' 'loyalty,' 'good faith' are not a part of my mental equipment. We dominie of Breakness Institute are individuals, each his own personal citadel. We expect no sentimental services derived from clan loyalty or group dependence; nor do we render any. You would do well to remember this."

5.2.12 "I want no second Breakness on Pao. There is scope for a thousand institutes of learning--but they must be established among the Paonese people. They must teach Paonese topics in the Paonese language."

5.2.13 Beran said, "I have no alternative. Under protest I pay you your tribute. I will say also that you would profit more as a friend to us than as an overlord." In the Batch tongue the word "friend" could only be interpreted as "companion-in-arms." Upon receiving Beran's reply, Eban Buzbek laughed. "Paonese as companions-at-arms? They who turned up their rumps for a kicking when so ordered? Better warriors are the Dinghals of Fire Planet, who march behind a shield of their grandmothers. No--we Brumbos have no need of such an alliance." Retranslated into Paonese, the words became what seemed a series of gratuitous insults. Beran swallowed his wrath. "Your money shall be transmitted to you." He bowed stiffly, turned, strode from the room.

5.2.14 Leave the city, and presently the Myrmidons will tire of the novelty and return to their games." "No," said Beran. "Bustamonte fled. The Brumbos pursued him, ran him to the ground. I will no longer flee anyone. I will wait here with my dignity, and if they kill me, so shall it be."

5.2.15 He rose to his feet; he and Finisterle walked across the hall, looked out over the roofs of Eiljanre. "Pastiche--composite of Breakness, Technicant, Valiant, Paonese. Pastiche--the language of service. In twenty years, everyone will speak Pastiche. It will fertilize the old minds, shape the new minds. What kind of world will Pao be then?" They looked out into the night, across the lights of Eiljanre, and wondered.

**5.3** ***Manipulation Related***

5.3.1 Eban Buzbek took his ten thousand men to Donaspara, first city of Shraimand; and there was no one to dispute him. Six days after he landed on Pao he entered Eiljanre. The populace watched him and is glory-flushed army with sullen eyes; none made any resistance, even when their property was taken and their women violated. Warfare--even hit-and-run guerilla tactics--was not in the Paonese character.

5.3.2 “Another area might be set aside for the inculcation of another language," said Palafox offhandedly. "In this instance, the grammar will be extravagantly complicated but altogether consistent and logical. The vocables would be discrete but joined and fitted by elaborate rules of accordance. What is the result? When a group of people, impregnated with these stimuli, are presented with supplies and facilities, industrial development is inevitable. "And should you plan to seek ex-planetary markets, a corps of salesmen and traders might be advisable. Theirs would be a symmetrical language with emphatic number-parsing, elaborate honorifics to teach hypocrisy, a vocabulary rich in homophones to facilitate ambiguity, a syntax of reflection, reinforcement and alternation to emphasize the analogous interchange of human affairs. "All these languages will make use of semantic assistance. To the military segment, a 'successful man' will be synonymous with 'winner of a fierce contest.' To the industrialists, it will mean `efficient fabricator.' To the traders, it equates with 'a person irresistibly persuasive.' Such influences will pervade each of the languages. Naturally they will not act with equal force upon each individual, but the mass action must be decisive."

5.3.3 "You understand that I merely talk at random--I formulate ideas, so to speak. Truly massive planning must be accomplished: the various languages must be synthesized, their vocabularies formulated. Instructors to teach the languages must be recruited. I can rely on my own sons. Another group must be organized, or perhaps derived from the first group: an elite corps of coordinators trained to fluency in each of the languages. This corps will ultimately become a managerial corporation, to assist your present civil service."

5.3.4 A new group, trained to military ideals and speaking a new language, has taken their place. On Vidamand, Bustamonte is using similar means to create an industrial complex, in order to make Pao independent of Mercantil."

5.3.5 With dawn came throngs more: families gravely gay, in the Paonese fashion. The small children wore clean white smocks, the adolescent school uniforms with various blazons on the shoulders, the adults in the styles and colors befitting their place in society.

5.3.6 You are the conquerors. But you will rule best by disturbing the least. And until all Pao shares a single language, such as Pastiche, you cannot rule without great disturbance." "Then all Pao must speak one language!" cried Carbone. "That is a simple enough remedy! What is language but a set of words? This is my first command: every man, woman and child on the planet must learn Pastiche."