COMMUNICATION VIA SPEECH CONTACTS: THE CASE OF THE 'RHETORIC'. CONTRASTIVE STUDIES IN SEMITIC AND INDO-EUROPEAN CONCEPTUAL CONTINUITY AND DIVERGENCE OF A TYPE OF SPEECH AS CRITERIA FOR GENUINE RELATIONSHIPS OF RELATED LANGUAGES

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Abstract: In this article we apply a method of proof for conceptual consistency in a long historical range taking the example of rhetoric and persuasion. We analyze the evidentially present linguistic features of this concept within three linguistic areas: the Indo-European languages, the Semitic languages, and the Afro-Asiatic languages. We have chosen the case of the concept 'rhetoric' / 'persuasion' as paradigm for this study. With the phenomenon of 'linguistic dispersion' we can explain the development of language as undirected, but with linguistic consistency across the borders of language families. We proof that the Semitic and Indo-European languages are related. As a consequence, the strict differentiation between the Semitic and the Indo-European language families is outdated following the research positions of Starostin. In contrast to this, we propose a theory of cultural exchange between the two language families.

Keywords: *features, concept, area, language, rhetoric, persuasion, linguistic dispersion.*

1. Introduction: The Concepts 'Rhetoric' and 'Persuasion'

Persuasion is the process of convincing someone regarding one's own position or standpoint. Traditionally, persuasion is housed within the area of rhetoric in the Western culture. Its history we can trace to the ancient Greek rhetoric. But of course, persuasion has always and in all cultures been used for the aim of making sure that someone adopts the standpoint of someone who intends to do so. While rhetoric is the artificial way of persuasion, also ad hoc built and never codified ways of persuasion exist. Persuasion can be applied to all issues. The term 'ubiquity of rhetoric' expresses this statement and the omnipresence of rhetoric. The state it arises from is the option to choose deliberately. Persuasion is assumed to be practiced using the spoken or written word, but this is just the most commonly associated way of persuasion; the image and the media and actually all demonstrating processes aiming at taking over a standpoint existing with tools of persuasion. Persuasion is a ubiquitous phenomenon for rhetoricians. The main aim of this discipline is the use of the human faculty to teach; but also a natural, unlearned faculty of the use of persuasion is inherent in the human species. The 'art of rhetoric' has developed in Greek antiquity a

nomenclature for the description of rhetorical phenomena and areas of reach; its general approach is that rhetoric is ubiquitous. So it also transcends the medium of the human voice and can be found in media and image. We are interested in the concept rhetoric/persuasion and its linguistic representations. A concept is the carrier of knowledge in a representative form for the inherent meaning. This knowledge will never be released as a real issue or object. It stays as an imaginative representation in the sphere of the mind and is applicable to the issues of the real world. Quintilian described this mental function in his Institutio Oratoria [21]. The conceptualization as the state of mind of the rhetorical proof by the artificial proof of the epicheirema is recognized by classic rhetoric. Quintilian in his Institutio Oratoria describes the artificial proof by the conceived argument, which is identical with the res as epicheirema. Quintilian writes: "Celsus autem iudicat, non nostrum administrationem, sed ipsam rem, quam aggredimur, id est, argumentum, quo aliquid probaturi, sumus, etiamsi nondum explanatum, iam tamen mente conceptum, epicherema dici" [ibidem]. For example we can add and detract items or count them using the rules of mathematical concepts. Concepts can be 'created', they can be traced via means that serve as their applications, and they can be learned through the applications. We can also say that concepts are applied unconsciously or consciously. Also the awareness of a concept within a society or the nonexistence of a concept depends on the state of the awareness regarding the concept. The concept 'concept' is present in scholarly writings and its existence was in the early sciences like rhetoric used. Here we are in the area of questioning the relation between knowledge and the awareness of knowledge. Relying on Quintilian's discourse on the concept and its 'unreal' appearance in the human mind, we should mention that the concept as a mental state is to be classified as an unconsciousness state of the mind; we can be aware or cannot be aware that a concept is 'working' in the background, when we perform certain actions, which are the linguistic applications of the concept or actions resulting from them.

2. State of Research

2.1. Introduction: 'Language Contacts' and 'Speech Contacts'

G. E. Mendenhall discussed the problematic differentiations of the Semitic languages in the research and the 19th century theory of a common Semitic or *Ursemitisch* delivered in waves from Arabia to other areas [19, p. 17]. Standard theories see Arabic as one of the South Semitic languages; G. E. Mendenhall here appeals to critically re-consider alternatives. L. Zack made recently a contribution to the states of Arabic as diachronic and synchronic linguistic phenomenon [31]. Afro-Asiatic languages are contemporary Berber languages, Chadic languages, Cushitic languages, and Semitic

languages. E. Vernet wrote in Semitic Root Incompatibilities and Historical Linguistics regarding root incompatibilities in Proto-Semitic for historical root reconstruction that "these rules can only be applied to verbal roots, not to derivative forms and affixed forms [28]. The importance of these structural incompatibilities consists, then, in the fact that they reduce the possible number of combinations of the triconsonantal bases. Excluding onomatopoeic roots and loan words, these laws of incompatibility are fully regular in the verbal roots (but not in the nominal ones) and, therefore, do not have exceptions, as in all phonological laws. The structure of the Semitic verbal roots is, then, absolutely conditioned by these restrictions of incompatibility. These rules are universal in character and apply also to the different families of the Afro-Asiatic and Indo-European languages. The restrictions of incompatibility are a tool of great importance in the historical reconstruction of the roots (especially, of the verbal roots in Semitic)" [ibidem]. N. Agmon wrote in Materials and Language: Pre-Semitic Root Structure Change. Concomitant with Transition to Agriculture: "Materials and language have evolved together. Thus the archaeological dating of materials possibly also dates the words which name them. Analysis of Proto-Semitic (PS) material terms reveals that materials discovered during the Neolithic are uniquely triconsonantal (3c) whereas biconsonantal (2c) names were utilized for materials of the Old Stone-Age. This establishes a major transition in pre-Semitic language structure, concomitant with the transition to agriculture. Associations of material names with other words in the PS lexicon reveal the original context of material utilization. In particular, monosyllabic 2c names are associated with a pre-Natufian cultural background, more than 16,500 years ago. Various augments introduced during the Natufian, and perhaps even more intensively during the Early Neolithic, were absorbed into the roots, tilting the equilibrium from 2c toward 3c roots, and culminating in an agricultural society with strictly triconsonantal language morphology" [1]. When we look at the ancient Egyptian language, we can say that it is extensively build upon words with two radicals. C. L. Hallen wrote in A Description of the Afro-Asiatic (Hamito-Semitic) Language Family: "In contrast to the Indo-European Language Family, about which much researches has been done over the past two centuries, relatively little is known about the former Hamito-Semitic Language Family, now known as the Afro-Asiatic Family. (While much researches has been accomplished with the Semitic Languages because of Arabic and Hebraic religious ties, little has been done with the Afro-Asiatic family as a whole)" [8]. Proto-Semitic is the hypothetical proto-language for historical Semitic languages of the Middle East. Potential locations are Mesopotamia, the Arabian Peninsula, and the Levant. Proto-Sinaitic is an existing script from the Middle Bronze Age attested in rock inscriptions at

Serabit el-Khadim in the Sinai with syllabic representations of signs for an alphabet assumed to be the origin of the north-western Semitic alphabets with 22 signs, which was developed around 1700 BC. The ancient Egyptian language is de facto among the Afro-Asiatic languages an early and a recorded language. It shows that - at least partly - is contains linguistic elements, which are similar to the Semitic languages. Also here a differentiation is hard to be held upright, if not considering the Semitic languages as a part of the Afro-Asiatic languages and thus extending the area of the Afro-Asiatic language family. The Proto-Indo-European language is the reconstructed common ancestor of the Indo-European languages. The reconstruction of this language is an ongoing field of research. According to the most popular assumption about its origin is the Kurgan hypothesis to be mentioned claiming the origin in the Pontic-Caspian steppe of Eastern Europe and Western Asia. Mainstream linguistic estimates of the time between Proto-Indo-European and the earliest attested texts, the Kültepe Texts from 1900 BC in contemporary Turkey range around 1500 to 2500 years. These texts contain Hittite loanwords and names in an Assyrian document.

2.2. The Theory of Migration Around 3700 BC

The synchronic approach to comparative linguistics of different languages we can trace back to the discipline of 'comparative grammar' in the 19th century. At the level of word semantics, similarities between the Arabic and the Afro-Asiatic languages were known. The state of research in the diachronic perspective must be described from a cultural perspective taking into account the language contact situations within a long historical perspective. The diachronic approach starts actually in the prehistoric time; its speculative character is best expressed in the assumption of Proto-Semitic and Proto-Indo-European languages. During the Chalcolithic (Copper Age) around 3700 BC cuneiform writing appears in Sumer. Mesopotamian writing was a tool was for recording and independently from the spoken language used. Also the Egyptian hieroglyphs developed around that time. In Mesopotamia as center of development the *Uruk Period* (ca. 4400–3100 BC), the Jemdet Nasr Period (ca. 3100-2900 BC), and as Early Bronze Age civilizations the Early Dynastic Period (ca. 2900-2350 BC), the Akkadian Empire (ca. 2350-2100 BC), Ur III Period (2112-2004 BC), and the Early Assyrian Kingdom (from the 24th to the 18th century BC) dominated the area. Mesopotamia as part of the Fertile Crescent might have had a strong influence on migration and communication. Archaeological findings in Mesopotamia, Bahrain, and Oman of products with an origin in the Indus Valley civilization are known and trade was done in ports of the in Persian Gulf. E. O. James wrote in Prehistoric Religion. A Study in Prehistoric

Archaeology: "Although the transition from food/gathering food/production was a very gradual process localized in certain regions, notably in the Fertile Crescent in the Ancient Middle East, where it became an accomplished fact it had a marked effect upon the disposal of the dead in more elaborate tombs and with a more complex mortuary ritual" [10]. The main question for the comparison of Semitic and Indo-European roots is, if an influence between the Indo-European languages and the Semitic languages exists and if the answer is 'yes', another question opens: 'At which time was an exchange between them happening?' The Indian languages, categorized as parts of the Indo-Germanic languages, e.g. Sanskrit, have according to today's knowledge no influence on the Semitic languages at an earlier state and time of languages exchange. So we have no indication that the Semitic languages might have been influenced the Indo-European languages on the Indian subcontinent at an earlier state during the time of proto-language configuration and existence of the languages now considered to be part of the Indo-European languages. It is a speculative approach to assume that a linguistic exchange between the languages of the territory now related to the Semitic languages and the languages of India and the mainland of Europe existed, in which the Semitic territories of the Arabian Peninsula and the Levante was touched and contacted by the linguistic material of the Indo-European languages. But this would be an explination why the lexical and semantic material of both language families is so similar as we can see from the following analysis of the concept 'rhetoric/persuasion'.

2.3. The Problems of the Theory of 'Language Contacts' and its Assumptions and History of Research of Contrastive Linguistics

G. Sankoff states in *Linguistic Outcomes of Language Contact* that "language contacts have, historically, taken place in large part under conditions of social inequality resulting from wars, conquests, colonialism, slavery, and migrations – forced and otherwise" [24]. This researcher mentions that "this schema neatly brings together the macro level of the language and the micro level of the individual speaker. Its tacit assumptions are that (a) individual speakers can be characterized in terms of native and second languages, and (b) that groups or communities, as collectivities of such individual speakers, are relatively homogeneous in this regard – or at least, that one can abstract away from differences internal to the speech community" [*ibidem*]. While we can speak about the phenomenon of language contacts in clearly distinguishable settings of languages, we have no testimony of the earliest languages in this regard with the exception of the Egyptian language. Theoretically, semantically, and morphologically similar elements of the thesaurus of three languages can be shared between the three languages,

which have different grammars and are distinguishable as three independent languages. But is such an assumption applicable to the scenario of the third millenium BC? Is the distinction between languages as separate units at that point the suitable assumption? We doubt its suitability. But we know that the ancient Egyptian language, which considered itself as the 'speech of the country Egypt' without any mentioning of the concept language, possessed words to distinct the Egyptian language from other foreign contemporary languages; it was a pejorative expression similar to the connotation of other non-Greek languages as 'barbarian'. But even when the awareness for the 'otherness' of speakers of other languages existed, we cannot conclude that it was *de facto* another language in the contemporary definition as a ruled separable linguistic macro-unit.

The assumption of language exchange between the Indo-European languages and the Semitic languages is here discussed in order to find an implementing solution to the question and phenomenon in research, which shows that Indo-European and Semitic languages are related. This kind of research we find in the Western research since the second half of the 19th century; this kind of research is argumentatively and evidentially backed up using the comparative method of 'comparative grammar', which later was continued within the field of 'comparative linguistics'. L. Brunner published Gemeinsamen Wurzeln des semitischen und indogermanischen Wortschatzes. Versuch einer Etymologie as a etymological claim of the relationship between Indo-Germanic and Semitic languages [3]. J. Fellman discussed Semitic and Indo-European languages approaching them with a comparative and historical grammar [7, p. 51-53]. A. Dundes compared Indo-European and Semitic worldviews [54, p. 257-312]. D. Daube made a contrastive linguistic study of the word-formation in Indo-European and Semitic [4, p. 15-17]. Bomhard discussed in Indo-European and the Nostratic Hypothesis the idea of the Nostratic language family [apud 4]. S. Levin contributed in The Indo-European and Semitic Languages [18], Studies in Comparative Grammar: III. "Snow" [16], Studies in Comparative Grammar: II. The Prehistory of the Indo-European Thematic Declension, in View of the Semitic Cognates [15, p. 111-144], and Semitic Evidence on Some Problems of Indo-European Prehistory [14, p. 249-265] to the contrastive linguistic studies on the Indo-Germanic and the Semitic languages. Fr. Rundgren published Semitic and Indoeuropean: A Linguistic Study in Comparative Aspectology [22]. T. Vennemann's claims in Europa Vasconica, Europa Semitica were refuted by the scholarly community [27]. The hypothesis of the pre-historical Semitic influence on the Indo-European language is connected to the distribution of Semitic vocabulary into the languages of the Indo-European language family. This hypothesis is not accepted as standard assumption in linguistics. T. Vennemann argued that in Europe after the Ice Ages 'Semitidic' and 'Atlantic' people had settled

that imported the Semitic heritage to Europe [27]. This Vasconic hypothesis has been refused by the absolute majority of linguists, historians, and archaeologists. On the other hand, we have evidence that at least one Semitic language in Europe existed, which is now extinct. So also Indo-European languages could have entered the territory of the traditional Semitic languages. Also the proto-language reconstruction is a hypothetical construct of one language per language family. This research conception still relies on the assumption that languages and not speech is the macro-unit of the linguistic exchange at that time. For the time of the prehistoric ages within cultures until the beginning of the historic time no criteria of evidence for the existence of languages in the modern/postmodern sense exist. For example in ancient Egypt the concept 'language' did not exist, 'speech' was used as the concept for linguistic communication. The dispersion, a phenomenon we describe later below, between the contemporarily assumed Indo-European and the Semitic languages or their ancestors, should not be considered as an event, when 'one language meets another language'. Speech contact was besides upcoming images as means of documentation the only communication tool. Speech contact was not recorded and not literally fixed; it developed as 'word of mouth' from one generation to another more or less equally shared among the participating persons.

2.4. The Theory of the 'Urheimat' of the Indo-Europeans vs. 'Dispersion for Equity'

K. Elst states in Linguistic Aspects of the Indo-European Urheimat Question that "when evidence from archaeology and Sanskrit text studies seems to contradict the theory of the entry of the Indo-Aryan branch of the Indo-European (IE) language family in India through the so-called 'Aryan Invasion' (Aryan Invasion Theory, AIT), we are usually reassured that "there is of course the linguistic evidence" for this invasion, or at least for the non-Indian origin of the IE family" [6]. In his book the researcher menions that "in the 18th century, when comparative IE linguistics started, the majority opinion was that the original homeland (or Urheimat) of the IE language family had to be India. This had an ideological reason, viz. that Enlightenment philosophers such as Voltaire were eager to replace Biblical tradition with a more distant Oriental source of inspiration for European culture. China was a popular candidate, but India had the advantage of being linguistically and even racially more akin to Europe; making it the homeland of the European languages or even of the European peoples, would be helpful in the dethronement of Biblical authority, but by no means far-fetched" [ibidem]. Recently, the Black Sea Area was considered to be the 'Urheimat' of the Proto-Indo-European language. The linguist states that

"the contact between Tokharic and Chinese adds little to our knowledge of the Urheimat but merely confirms that the Tokharic people lived that far east. The adoption of almost the whole range of domesticated cattle-names from Tokharic into Chinese also emphasizes a fact insufficiently realized, viz. how innovative the cattle-breeding culture of the early IE tribes really was. They ranked as powerful and capable, and their prestige helped them to assimilate large populations culturally and linguistically. But for Urheimat-related trails, we must look elsewhere" [ibidem]. For us, the question of the Urheimat is not so important, since the framing question of our study is how the speech contacts between the speakers of languages that were related to the languages we classify as the Semitic languages and the speakers of the languages now classified as Indo-European languages existed. The borders between Semitic Afro-Asiatic languages and the Indo-European languages is a construct. We can replace this construct arguing that the speech units existing in this area of the now as Semitic and Indo-European languages described languages stood in permanent exchange with each other. At the time our below discussed examples come from the linguistic material was not distinguishable as part of a language family. In our proposed theory of 'dispersion for equity' with the use of linguistic tools in order to share their speech and make communication possible among participating entities the aim of linguistic communication via speech was to communicate. Grammatical features of distinct languages are a linguistic feature, which came up with the existence of power and centralized domination of territories. Grammatical features are a criterion of the macro unit 'language', which is a linguistic macro unit coming up later after the macro unit 'speech'.

2.5. Research of Language Contacts of the Prehistoric Past

Contemporary Hindu and Urdu are languages that show the difference between an Indo-European language and a Semitically highly influenced language through Arabic. A. Sahala mentions in *On the Sumero-Indo-European Language Contacts*: "Albeit the genetic affinity of the Sumerian language is still lacking consensus, some vocabulary related to Sumerian may be found from various language families including Indo-European, Kartvelian, Semitic, Dravidian and Uralic. Where the Semitic contacts are well attested, contacts to other families have often regarded controversial" [23]. According to this reseacher, the "Sumerian language was spoken in ancient Mesopotamia from the 4th millennium BC to the Old Babylonian period (1900 BC) during which the Sumerians gradually assimilated into Akkadian speaking Babylonians. By the end of the 17th century BC Sumerian was no longer spoken as a first language but it was still studied by Akkadian scholars as a classical language and its literary tradition continued for almost two millennia" [ibidem]. So the Sumerian language might have been stood in

contact with the old Indo-European language on the Indian subcontinent and territories of Central Asia northwards. But as A. Sahala stated, "regardless of numerous attempts to connect Sumerian with Caucasian, Semitic, Ural-Altaic, (Elamo-) Dravidian, Basque and Indo-European languages, by the vast majority of scholars it is still regarded as a language isolate with no known relatives" [ibidem]. The linguist mentioned that "where the Proto-Indo-European sound system is completely based on reconstruction and thus reflects the pronunciation on an abstract level, also the exact quality of the Sumerian phonemic inventory is uncertain" [ibidem]. Studying the Proto-languages for the Semitic and the Indo-Germanic language branches, we can soon conclude that similarities of the branches representing the concept 'speech' exist. Nevertheless, they will be here presented as a case study of the material available for the Proto-Semitic and the Proto-(Indo-)Germanic language in the research database Tower of Babel initiated by Starostin. S. Levin mentions several examples for etymological relationships between Indo-European and Semitic languages [17]. The linguist mentions that "long prehistoric experience, in IE and in Semitic, must likewise have weeded out many erstwhile collocations of consonants, and left either language group (or its individual languages) with certain patterns that were readily compatible with the verb-inflections" [idem, p. 167]. He states that in the Indo-European family Greek χρά/ή is related to Semitic Hebrew gar for 'call'. Semitic Arabic isman is related to Indo-European Slavic *im* for 'name' and Avestan *nām* for 'name'. Indo-European (-)λε/0γ- refers to Semitic Hebrew -leg- for 'lie' [ibidem]. Etymological relations exist; examples are musara 'inscription' related to Indo-Iranian *mudra for 'seal' and igi 'eye' related to Proto-Indo-European *h3ekw- for 'eye' [23]. Gr. Jagodziński mentioned in Indo-European and Semitic Languages several equivalent forms within the etymology of the Indo-European and the Semitic languages [9]. Arabic lisān 'tongue' and 'language' is related to laḥwasa 'lick', Hebrew lāšōn 'tongue' and 'language', lāqaq 'lick', English tongue, Gothic tungo, Latin lingua, Old Latin dingua, Sanskrit juhū-, jihvā-, Avestan hizū, hizvā, Polish język, Prussian insuwis, Lithuanian liežùvis, Greek glõtta, glõssa, glátta, and maybe also Latin gingīva 'gum of a tooth', Greek gamphēlaí 'muzzle' and 'mouth'; Polish lizać 'lick', Lithuanian liæ žti, Greek leíkhō, Latin lingō, and English lick. Arabic qāla 'speak', English call from Nordic kalla, Briton galw, Polish głos 'voice' are related [ibidem]. Gr. Jagodziński states that language exchange, better expressed speech exchange, and not a common ancestor language, is the origin of the similarities between the Indo-European and the Semitic languages. The researcher states in Indo-European and Semitic Languages: "There was time in the science when it was thought quite seriously that the first proto-language - or the language from which all the others originated - was Hebrew. A

specific reminiscence of that view is the opinion that a special close genetic relation exists between Indo-European (IE) and Semitic languages. Such a view can still be found in some works. Newer investigations suggest very strongly that that view is not correct and that those previously demonstrated similarities of both language families are the result of the connections between them during over thousands of years rather than of their common origin. Nevertheless those similarities are odd, and the circumstances of their development are not clear in all respects" [ibidem]. The circumstances of the development of the similarities between the Semitic and the Indo-European languages, which according to Gr. Jagodziński are not clear in research, can be exemplified with our examples. The examples taken demonstrate that at the time of the prehistoric age in the third millennium BC the semantic and lexical configurations of words from one concept were extreme similar; the configurations were so similar that we must discuss the form of the macro-unit of the linguistic representation. Based upon our examples, we can state the lexical, morphological, and semantic similarities. But we cannot make statements about syntactical features of grammatical descriptions of linguistic rules.

2.6. Research of the Theory of the Common Ancestor of the Indo-European and Semitic Languages and the Question of its Chronology Description of the Speech Contact Situation of the Proto-Language State

We are still evaluating the relations between the Semitic Afro-Asiatic and the Indo-European languages. Gr. Jagodziński mentions in Indo-European and Semitic Languages that "if the Indo-European and Semitic languages had a common ancestor, it was only in the very distant past. The IE protolanguage surely existed ca. 4,000 BC. It is supposed that the Nostratic commonwealth must have existed 11,000-15,000 BP. At the same time, the common ancestor of, among others, the Indo-European and Semitic languages, should have existed ca. 25,000 BP. It is no strange that traces which have remained of that distant ancestor until today are very scarce, and the prevailing part of the similarities of both groups should be explained with the parallel development and mutual interactions" [ibidem]. The linguist mentioned that "it is interesting that in the Semitic languages we can find not only almost all counterparts of the IE ablaut, but also the function of particular alternations seems to be similar in some cases. Qualitative alternations (originally in the shape a : i : u) and quantitative alternations (reduction and lengthening) are so frequent in this group of languages that only consonantal skeleton of words is considered to be the root (it consists of 3 consonants as a rule)" [ibidem]. S. J. Armitage, S. A. Jasim, A. E. Marks, A. G. Parker, V. I. Usik, and H.-P. Uerpmann state in Pre-historic Arabia Crossroads for Early Humans (and Neanderthal Hybrids?). The Southern Route "Out of Africa": Evidence for an Early Expansion of Modern Humans into

Arabia: "The timing of the dispersal of anatomically modern humans (AMH) out of Africa is a fundamental question in human evolutionary studies. Existing data suggest a rapid coastal exodus via the Indian Ocean rim around 60,000 years ago" [2, p. 454]. These researchers mentioned that "Arabia and its fierce deserts have long been seen more as obstacles than conduits to human migration, and most archaeology here has focused on historical times. Recent studies, however, show wetter periods such as one that began around 130,000 years ago" [idem, p. 455]. We must not forget that the oral language was the tool to communicate in a spoken way in prehistoric time; the faculty of speech was not recorded, but shared and communicated from person to person; language(s) was/were not fixed or coded; the language had to serve as a tool to communicate. Language as the faculty to speak extended at any point and to any person in prehistoric time. So it is amazing that it stayed stable within a time continuum. The grammatical aspects as structural elements of language could only arise at a point, when this structural changing of a material, the world, which refers to a concept, was applicable to a set of words in a language as a linguistic macro-unit. The language dispersion at that time was different from contemporary language contact situations. In Europe Maltese is the only contemporary Semitic language spoken. It has been assumed [26] that Reatic is a Semitic language now extinct, which had been spoken in Central Europe. No Semitic languages are known on the Indian subcontinent. The Nostratic family tree is a recently built family tree, which consists of the family tree of the Indo-European languages, the Semitic languages, and the Afro-Asiatic languages. The Sanskrit language is an old Indo-European language, which had speech contact situations in contacts with both the Arabic peninsula and the continental area reaching up to northern Europe. Both the maritime route to the Arabian peninsula and the continental route to Europe were open for language contacts, which blur the line of strict separation between the Semitic Arabic language and the Indo-European languages. An impact of the lexicon of Sanskrit on the Semitic languages exists for language states of the prehistoric time.

3. Research Methodology

In this article we discuss the concept 'rhetoric/persuasion' based upon the scientific history of the comparative and contrastive studies between the Indo-European languages, the Afro-Asiatic languages, and the Semitic languages and in the specific case of the earliest language levels. We will argue that besides the separation of the language families also an exchange between these language families existed. While this study discusses topics that fall in the field of 'historical linguistics' and 'language contact studies', we argue that the correct terms for such studies should be linguistic communication studies in speech contacts; the impact of one language on

another can only be studies within speech situations. We focus on the semantic aspect and the historical linguistic perspective of the comparison of the languages. The contact study of Indo-European, Afro-Asiatic, and Semitic languages will be conducted with the comparison of the Protolanguage levels and ancient Egyptian as recorded language of the 3rd millennium BC. While we can clearly state that the modern Indo-European and the Afro-Asiatic languages belong to different language families, this article will focus on the examples of semantic and lexical similarities, which allow us to have a discourse about the linguistic communication and language contact situation(s) between the earliest states of these now differentiated language branches. We can use the term 'concept' in a common way as the mental representation of knowledge in a unit and also in a very specified way. We suggest the use of the term 'concept' as a linguistic term in a linguistic context for the description of the basic unit of a word in order to describe its meaning. For example, we find that the root B(/BH)-L-Q as the synthesis between the Indo-European root and the Semitic root has the meanings or concepts reach, get, arrive, come etc. from the Semitic side (see below) plus the meanings from the Indo-European side as its complete meaning-bearing and thus knowledge-bearing unit representing the concept implemented. In the long etymological range, all the entries under one word in an etymological wordbook can also serve as the realizations of a concept. The difference of the approaches to linguistically concepts representing units is that in the research area concerned with the Indo-European languages the differentiation between the ten forms of the verb finds its equivalent in the Indo-European roots, but any approaches to systematize the forms are lacking in research. For example, J. Pokorny offers in his list of etyma roots that show similarities to be grouped [20]. How the concept as a 'macro-unit' and the concept as the 'linguistically represented unit' refer to each other, is the topic of the research. It is placed in the framework of material related to the concept 'rhetoric'/'persuasion' from the prehistoric time.

4. The Concept *Rhetoric* in Indo-European, Semitic, and Asian-Sino-Asiatic Languages

4.1. Case 1: The Linguistic Concept Linguistically Represented in L-U(/O)-GH(Q)

This concept we can also find in the Afro-Asiatic language Ancient Egyptian represented in the verb *rui* for the 'to go out' and 'to depart' [29, p. 420]. *L* and *r* are identical in ancient Egyptian. The relationship between this verb and later Semitic forms needs further investigation. The Arabic Proto-Semitic root find a linguistic representation in contemporary Arabic noun *lugha* for 'language'. The term *loqui* for 'to say' is the root for the term *eloquentia* ('eloquence'). The etymological history is in the Indo-European

languages dubious. Latin *loqui* comprises 'to speak', 'to say', 'to name' and is traced back to the Indo-European root *tolku- for 'to say' (J. Pokorny etymon 1088). This derivation is doubtful [12]. J. Pokorny's etymon 1088 tolku- has the meaning 'to speak'. In the Semitic Proto-Semitic * $lV\gamma$ - within the Afroasiatic etymology has the meanings 'to stammer', 'to speak incoherently', 'to speak', 'to chat', 'to chatter', and 'to speak briskly'. Related are Hebrew $l\gamma\gamma$, Arabic $l\gamma w$, and Tigre $la\gamma le\gamma \ddot{a}$. The noun has the semantic field of 'language', 'tongue', 'speech', and 'talk'. Also السان for 'tongue' and 'language' exists.

4.2. Case 2: The Linguistic Concept Linguistically Represented in R-A(E)-I

J. Pokorny's etymon 859-60 of the Indo-European Proto-language rei-, $r\bar{e}(i)$ - with the Indo-European root reibh - has the meanings 'to cry', 'to scream', 'to bellow' and related expressions. G. Koebler lists the Indo-Germanic root * $r\bar{e}$ - for 'to calculate' and 'to count' with reference to the J. Pokorny's etymon 853 rē-, rə-, extended rē-dh for 'to count', 'to compute' [11, p. 926]. J. Pokorny's etymon 860 rēi- and rī- has the meanings 'to count' and 'to arrange'. The root *rēi with the meanings 'to fit', 'to count', 'to arrange' refers to Pokorny's etymon 860 and has in its linguistic applications also meanings like 'to narrate'. The Arabic root r-a-I is used for 'to say'. Its basic meanings are 'to see', 'to behold', 'to descry', 'to perceive', 'to notice', 'to think', 'to have the opinion', and 'to express one's opinion'. The noun rai is used for 'opinion', 'view', 'idea', 'notion', 'concept', 'conception', 'advice', 'suggestion', and 'proposal'. The noun رأي comprises today in Arabic the meanings 'opinion', 'view', 'to say', 'judgment', and 'persuasion'. In Hebrew ראַה (raʔah) means 'to see', 'to look', 'to inspect', 'to consider', and 'to perceive'. The Arabic root رأي refers also to the concept 'to see' with the semantic meanings 'to see', 'to look', 'to cast gaze on', 'to perceive', and 'to comprehend' [33]. This concept we can also find in the Afro-Asiatic language Ancient Egyptian represented in the noun ra for the 'sun' and 'day'. and re has the meaning 'mouth' [29, p. 417].

4.3. Case 3: The Linguistic Concept of 'Rhetoric'/'Persuasion' Linguistically Represented in B(/BH)-L-Q

Ancient Egyptian *per* means 'to go outside', 'to proceed', 'to grow up (plants), 'to pass a limit', and 'to arise' [29, p. 218]. The sign for the sounds 'l' and 'r' was identical. The root *b-l-q* (غنه) in Arabic refers 'to reach', 'to get', 'to arrive', 'to come', 'to come to age', and 'to reach a high degree' in the first form I, the form III stands for 'to exaggerate', the form IV *ab-l-q* is used for 'to report'. The noun *balagh* means 'communication', *balagha* (غلاف) means 'eloquence', and rhetoric is the *ilm al-balagha* [30, p. 73-74]. Pokorny's etymon 125-26 *bhelĝh*- has the meanings 'to swell', 'to bulge', 'to billow'. The etymon 155 *bhlegu*- has the meanings 'to swell' and 'to become bloated'. The etymon

123-24 bhel- has the meanings 'to speak', 'to bell', 'to bellow', and 'to resound'. The etymon 124 bh(e)lag- means 'weak', 'silly', and 'ridiculous'. The etymon 122-23 bhel-, bhelag-, bhela-n-g-, bheleg-, and bhlk- means 'to balk', 'to beam', and 'to rafter'. The root *bha has the meaning 'to speak' and refers to Pokorny's etymon 105 [11, p. 94]. The root *bhel- has the meanings 'to blow up' and 'to swell' and refers to Pokorny's etymon 120 [idem, p. 115]. The root *bhel- has the meanings 'to bloom' and 'to grow' and is identified as Pokorny'a etymon 122 (200/33) [ibidem]. The root *bhel- refers to Pokorny's etymon 122 (201/34). The root *bhelegh- refers also to Pokorny's etymon 122. The root *bhelgh- refers to Pokorny's etymon 125 (207/40) [ibidem]. Pokorny's root 120-22 bhel-, bhlē- refers to 'to grow', 'to spread', 'to swell', and 'to inflate'. Pokorny's root 122 bhel-, bhlē-, bhlō-, and bhlə- refers to 'leaf', 'foil', 'blade', and 'bloom'. Pokorny's root 122-23 bhel-, chiefly with suffixes as bheləg-, bhelə-n-g-, bheleg-, and bhlk- refers to the meanings 'to balk', 'to beam', and 'to rafter'. Pokorny's root 123-24 bhel- refers to the meanings 'to speak', 'to bell', 'to bellow', and 'to resound'.

4.4. Case 4: The Linguistic Concept of 'Rhetoric'/'Persuasion' Linguistically Represented in S-U-A-D

The basic meaning of the Proto-Indo-European root suād- is 'sweet'. J. Pokorny lists under the etymon 1039-40 suād- the meanings 'sweet' and 'to enjoy something'. The root *suadys referring to Pokorny's etymon 1039 has the meaning 'sweet' [11, p. 1221]. The Tower of Babel lists under its entry of the Indo-European root *swād-, which is related to Greek hw-, the meanings 'sweet' and 'to persuade'. Related are Tokharian A swār and B swāre for 'sweet'. Old Indian svādui - has the meanings 'sweet', 'pleasant', and 'agreeable'; svá date and svá dati mean 'to taste well', 'to enjoy', and 'to like'. Avestan $x^w \bar{a} sta$ - means 'made ready by cooking'; $x^w and a$ -kara- is 'plesant', and Pashto xwand is a 'nice taste' and 'pleasure'. Related are also Old Greek hādiű - and wadü-s for 'sweet' and 'good tasting', 'pleasant', and 'delightful'. $H\ddot{a}domai$ means 'to enjoy' and 'to delight'. Related are Baltic * $s\hat{u}d-\hat{i}-$, Germanic *swōt-u-, *swōt-i-, and *sut-i-, Latin suāvis for 'sweet', 'delightful', and suādeō, suāsī, suāsum, suādēre for 'to give advice'. In the Altaic language family Altaic *čiátu has the meaning 'sweet'. Related is also Kartvelian *catx-[25]. The Greek form hw- with the meanings 'sweet' and 'to persuade' is the form that links the Indo-European languages and the Semitic languages. Proto-Semitic *hVlaw- and *hVlaw- in the Afroasiatic etymology have the meaning 'to be sweet'. Related is Arabic hlw [-a-], which is based on the biconsonantal *hal-. Proto-Afro-Asiatic *hal- has the meaning 'be sweet'. Related at Egyptian haire, Semitic *hVlaw- and *hVlaw- for 'to be sweet'. Western Chadic *hall- means 'sweet juice sucked from the abdomen of a ملو hornet' and Central Chadic *hal- means 'sweet'. Contemporary Arabic حلو

means 'sweet'. Ancient Egyptian is covered as an early Afro-Asiatic language in this concept.

4.5. Case 5: The Linguistic Concept of 'Rhetoric'/'Persuasion' Linguistically Represented in *B-H-TH*

The Proto-Indo-European root *bheidh- has the meanings 'to persuade' and 'to agree'. The root *bheidh refers to Pokorny's root 117 (194/27) with the meanings 'to force', 'to advise', 'to confide', 'to encourage' [11, p. 106]. Related are Old Greek pé ithomai for 'to trust', 'to be persuaded', and 'to obey'; piistis means 'trust' and peisma is 'persuasion' and 'confidence'. Related are Slavic *po-bēdītī and *ū-bēdītī and Germanic *bīd-a-. Latin fīdō means 'trust. Related is Albanian bint for 'to persuade' and 'to agree'. Arabic bahatha (بحث) means 'to search', 'to investigate' in form I. In form VI is means 'to discuss'. The noun bahth (بحث) means 'discussion'. The nouns مناقشة for 'discussion', 'debate', 'talk', 'dispute', 'argumentation', عدث for 'search', 'consideration', 'discussion', 'study', 'seeking', and 'investigation', حوار for 'dialogue', 'discussion', and and 'interlocutor', محادثة for 'conversation', 'talk', 'dialogue', 'discussion', 'discourse', and 'parley', and مناظرة for 'debate', 'discussion', 'controversy', 'dispute', and 'disputation'. Ancient Egyptian peht has the meanings 'strenghth', 'might', 'power', 'bravery', and 'renown' [29, p. 218]. The sound 'p' is the equivalent to 'bh'.

5. The Analysis of the Concepts

5.1. Theoretical Framework and Knowledge

As we could see in other studies about the extension of linguistic contents, the extension of a concept in its linguistic application through dispersion goes across the traditional separation of language families as established in the Christian tradition; Semitic and Indo-European linguistic material is partly identical as shown by S. Levin [17]; this identity concerns structural, morphological and semantic parallels. So the process we call 'dispersion' must have happened in a prehistoric time. Its extension can only be considered as subject of studies as far as the linguistic documentation is evident. But we have reason to assume that (at least for a part of the-linguistic thesaurus) the Indo-European and the Semitic words with similarities derived from a common ancestor language, since the linguistic root was equally in both languages modified ('Common Ancestor Theory') or both had a common language between them, which is now not known ('Blank Language Theory') or served as dialects of one undifferentiated language ('Theory of one Language – Many Dialects').

5.2. Discussion of Findings, Contemporary Theories of Language Families Based on Proto-Language States and Development of Language, and the Speech/Language Distinction

The Nostratic family is proposed to be a superfamily with Eurasian Indo-European, Uralic and Altaic and Kartvelian languages and the Afro-Asiatic languages of North Africa, the Horn of Africa, the Arabian Peninsula and the Near East, plus the Dravidian languages of the Indian Subcontinent. Starostin divides Borean languages into the Nostratic and Dene-Daic families. This theory is supported by our findings, even though just for two language families. The *Proto-Human Language Theory* assumes that a common languages shared among all humans existed. Thus, no language was independent and originated on its own. The term 'language contact studies' is the field most recent used for contacts between languages. But this term implies some problematic assumptions. It implies that languages have contact with each other; but the term 'languages' is irritating: it implies that languages always existed; it excluded other forms of communicative networks building linguistic systems and it ignores that the concept 'language' wasn't known consciously or practiced. On the contrary, speech as the human ability to communicate orally in established and repetitively and redundantly performed speech contents must have existed.

N. Chomsky is a representative proponent of the 'Discontinuity theory' of the human language claiming that language developed ex nihilo without any previous steps or forms of development. We would agree, since the stability of the linguistic material for the concept 'rhetoric' supports the reconfiguration of contents of speech at any time. The meaning-bearing units of speech itself show, taking our example, continuity from the assumed time of around 3600 BC to contemporary use that can be an argument for the 'self-establishment' of speech. The issue linguists investigate in, the lexical thesaurus, the syntax, the morphology, and the semantics, refer to languages as macro-systematic units for speech performance at specific synchronic and topological positions. But speech as the faculty of oral performance is an expression of the human and as such a faculty similar to hearing, walking, etc. Languages as we find them as linguistic 'macro-units' in our scholarly studies are 'conditionized frameworks' for the performance of human speech. They are learned and the human individual is supposed to enter these 'conditionalized frameworks' of speech. Speech is thus form and contents at the same time in our differentiation, while language is the established framework of ruled applications of speech. But since our linguistic material is much earlier than the beginnings of speech/language of humans are supposed to be, we are not discussing origins here. Our material indicates that at a specific time in the history of humans the phonetic similarity of speech/human language spoken in Northern Africa, the Arabic peninsula, and Europe was so high, that we can consider them to have a common linguistic 'macro-unit', which was spoken. Why it is problemantic to speak about language/languages in this regard, we discuss below. Similar to Chomsky's assumption stating that language is an innate faculty of the human, we assume that not language, but the faculty of speech is the innate faculty of the humans and all human linguistic communication and other tools of communication as well as the formation of languages as macro units of human linguistic communication.

The strongly irritating theoretical frame on science is that always languages existed; and this setting brings the association that always closed, against each other framed and bordered territories of languages existed. Even historical linguists speak about Proto-languages. But it would be wiser to consider other forms of 'macro-units' matching the speech character of the early performances of human communication better; of course we know with Saussure that language is also a human faculty; but at early states of the human development it was not a stable one. For example sound shifting and the non-connotation of vowels as flexible elements in spoken languages we find in the ancient Egyptian language. We know the phenomenon of sound-shifting also in the Indo-European languages. Also in this language family the change of vowels was used as an indicator for grammatical changes like in the Semitic and the Afro-Asiatic languages.

We can be sure that language was in pre-historic time not experienced as a social phenomenon with diverse languages. Language was experienced as binding and connecting as well as given by birth. The option of recording it was not taken into account; at least we have not documents for the prehistoric time. So the concept 'language' is in its contemporary sophistication hardly employable to the human communication via speech at that time. Taking the Ancient Egyptian language, we can see that the documentation of words entailed symbols and images. The ancient Egyptians used for their own language the expressions *metu m r n Kemet* [29, p. 335] and r n Kemet [idem, p. 416], which means 'words in the mouth of Egypt' and 'speech of Egypt'; thus, the concept 'language' was lacking here, and instead the concept 'speech' was used for the action of the land itself in a cognitive metaphorical setting. Language can here only defined as the human individual's ability to speak. Also in the Proto-languages we have no evidence for the concept 'language' as represented in roots. Grammatical and modern/postmodern linguistic features of the speech contents of the linguistic 'macro-unit' might have been quite different at the time this material was taken from as linguistic representative material. But it is useless to ask about the separation of features and characteristics of a language in the modern/postmodern sense for the 'macro-unit' at that time. We can demonstrate the coherence of the smallest units of language, words, in a wide topographical area, but we cannot derive the conclusion that a language/languages existed.

Our material demonstrates that the morphological structure of the roots for the concept 'rhetoric/rhetoric' are in the authentically documented ancient Egyptian language and the two hypothetical Proto-languages Proto-Semitic and Proto-Indo-European are similar. The meanings of the examined

roots are identical or prototypical and generalized meanings from which the concept in later languages arose. Derived words in later arising languages preserved the concept. Since both the hypothetical languages and the ancient Egyptian fall in the same timeframe of development around 3600 BC plus/minus 1000 years, we conclude that the synchronic identity of these languages supposed to be spoken in Egypt, the Arabian peninsula, and Europe are actually with the same lexical inventory equipped, when we generalize our findings of the concept 'rhetoric'. We cannot determinate if this was one or many languages, dialects, or other linguistic forms, but we can assume that the linguistic lexical inventory was similar. In terms of language contract, actually better said, speech contact, we conclude that between Europe, Arabia, Africa, and the Indian subcontinent speech contact existed with a linguistic inventory of morphologically and semantically slightly different inventory. As mentioned above, we cannot say anything about the linguistic configuration (language or dialects), but at the level of the smallest sense-carrying unit, the word, the unity and similarity of the linguistic material is obvious

5.3. 'Dispersion' of Physical Communication and Exchange Process of Languages and Mental Concepts

The dispersion of the linguistic carriers of concepts in concrete languages is undirected. We cannot predict how a concept in form of the linguistic applications develops or is realized. E.g., a language will spread locally. But we can say that concepts spread across linguistic barriers like different languages; languages permanently stand in exchange with each other. In the cases we look at, the similarities between the Proto-Indo-European and the Semitic language Arabic show that the differentiation between Semitic and Indo-European languages is not needed and purely the result of induction of the former hypothetical approach of the distinction between language families, since - at least in the case of the concept 'rhetoric'- this concept finds in both traditional language branches similar linguistic representations with equal meanings. The historical linguistic studies investigate into this issue with case e studies like this one. For sure physical exchange (e.g. movements of humans, trade) enforces dispersion. Dispersion means that a linguistic unit with a conceptual meaning (e.g. a word with semantic representational meaning) extends by any means through reduplication. But language is a conservative means; it rather prefers to modify the old than creating the new. We can assume that a relation between physical movements of words and movements of mental conceptions exist. A concept can be carried in the form of applications across barriers of time and space. Even though dispersion is undirected for us as observing researchers and can only punctually be followed in all of the cases, when an actually existing linguistic representative form is available, it concerns only grammatical

features of a language. Backed up by our findings of the two traditional language families, we can say that similarity between them exists at conceptual level ignoring grammatical configurations within languages. Limitations are established through linguistic barriers like dialects, languages, and features like synchronic and diachronic change. The dispersion of realized entities in languages containing still the concepts is undirected. Persuasion in a historical linguistic perspective is a concept we can use to demonstrate that traditional assumptions about the linguistic barriers of languages cannot be hold upright. We can demonstrate that barriers for concepts of rhetoric were in their linguistic representations already commonly ready and identical within the Indo-European and the Semitic language family. Examples for this phenomenon we have taken linguistic representations from the concept 'rhetoric' in the Arabic and the Indo-European language family.

References

- 1. Agmon N. Materials and Language: Pre-Semitic Root Structure Change. Concomitant with Transition to Agriculture. In: Brill's Annual of Afroasiatic Languages and Linguistics, vol. 2, 2010, p. 23–79.
- 2. Armitage S. J., Jasim S. A., Marks A. E., Parker A. G., Usik V. I., Uerpmann H.-P. Pre-historic Arabia Crossroads for Early Humans (and Neanderthal Hybrids?). The Southern Route "Out of Africa": Evidence for an Early Expansion of Modern Humans into Arabia. In: Science, January 28, 2011, p. 453-456.
- 3. Brunner L. Gemeinsamen Wurzeln des semitischen und indogermanischen Wortschatzes. Versuch einer Etymologie. Bern, München: Francke, 1969.
- 4. Daube D. Word-formation in Indo-European and Semitic. In: Lex et Romanitas: Essays for Alan Watson. Berkeley, Calif.: The Robbins Collection, 2000, p. 15–17.
- 5. Dundes A. Wet and Dry, the Evil Eye: An Essay in Indo-European and Semitic Worldview. In: Dundes A. The Evil Eye: A Casebook. Madison: University of Wisconsin Presses, 1992, p. 257-312.
- 6. Elst K. Linguistic Aspects of the Indo-European Urheimat Question. http://koenraadelst.bharatvani.org/articles/aid/urheimat.html.
- 7. Fellman J. Semitic Linguistics and Indo-European Comparative and Historical Grammar. In: Linguistics, 1978, vol. 206, p. 51-53.
- 8. Hallen C. L. A Description of the Afro-Asiatic (Hamito-Semitic) Language Family. Brigham Young University. http://linguistics.byu.edu/classes/ling450ch/reports/afro-asiatic.html.

- 9. Jagodziński Gr. Indo-European and Semitic Languages. http://grzegorj.w.interia.pl/lingwen/iesem1.html.
- 10. James E.O. Prehistoric Religion. A Study in Prehistoric Archaeology. New York: Barnea and Noble, 1962.
- 11. Köbler G. Indogermanisches Wörterbuch. 3rd ed., 2006. http://www.koebler.gerhard.de/idgwbhin.html.
- 12. Köbler G. Lateinisches Abkunfts und Wirkungswörterbuch, 2005. http://www.koeblergerhard.de/Latein/LateinischesWB.pdf.
- 13. Koninklijke B., 2010. http://www.fh.huji.ac.il/~agmon/Fullpaper/AALL_002_online_23-79.pdf.
- 14. Levin S. Semitic Evidence on Some Problems of Indo-European Prehistory. In: Word, 1992, vol. 43.2, p. 249-265.
- 15. Levin S. Studies in Comparative Grammar: II. The Prehistory of the Indo-European Thematic Declension, in View of the Semitic Cognates. In: General Linguistics, 1992, vol. 32.2-3, p. 111-144.
- Levin S. Studies in Comparative Grammar: III. "Snow". An Early Indo-European Loan-word in Semitic. In: General Linguistics, 1994, vol. 34.2, p. 77-84.
- 17. Levin S. Semitic and Indo-European. Its Principal Etymologies. With Observations on Afro-Asiatic. Amsterdam and Philadelphia: John Benjamins, 1995.
- 18. Levin S. The Indo-European and Semitic Languages. Albany: State University of New York Press, 1971.
- 19. Mendenhall G. E. Arabic in Semitic Linguistic History. In: Journal of the American Oriental Society, 2006, vol. 126. 1, p. 17-26. http://www.jstor.org/stable/20064451.
- Pokorny J. Indo-European Lexicon. Pokorny Master PIE Etyma. Linguistics Research Center of the University of Texas at Austin. University of Texas at Austin. http://www.utexas.edu/cola/centers/lrc/ielex/PokornyMaster-X.html.
- 21. Quintilian M. F. Institutio Oratoria. The Latin Library.
- 22. Rundgren Fr. Semitic and Indoeuropean: A Linguistic Study in Comparative Aspectology. In: Semitic and Assyriological Studies presented to Pelio Fronzaroli by Pupils and Colleagues. Wiesbaden: Harrassowitz, 2003, p. 585-599.
- 23. Sahala A. On the Sumero-Indo-European Language Contacts. http://www.ling.helsinki.fi/~asahala/asahala_sumerian_and_pie.pdf.

- 25. The Tower of Babel Project. http://starling.rinet.ru/cgi-in/main.cgi?flags = eygtnnl.
- 26. Toth Al., Brunner L. Raetic. An extinct Semitic Language in Central Europe. The Hague, Holland: Mikes International, 2007. http://www.federatio.org/mi_bibl/Toth_Brunner_Raetic.pdf.
- 27. Vennemann T. Europa Vasconica, Europa Semitica. Berlin: Mouton de Gruyter, 2003.
- 28. Vernet E. Semitic Root Incompatibilities and Historical Linguistics. In: Journal of Semitic Studies, 2011, vol. 56.1, p. 1-18.
- 29. Wallis B., Ernst Al. Egyptian Hieroglyphic Dictionary. London: Murray, 1920.
- 30. Wehr H. A Dictionary of Written Arabic. Ithaka, New York: Spoken Languages Services, 1976, p. 73-74.
- 31. Zack L. Middle Arabic and Mixed Arabic: Diachrony and Synchrony. Leiden: Brill, 2012.
- 32. http://www.ling.upenn.edu/~gillian/Interlang.doc.pdf.
- 33. http://www.semiticroots.net/index.php?r=word/view&id=232.
- 34. http://www30.us.archive.org/stream/prehistoricrelig00jame/prehistoricre lig00jame_djvu.txt.