

**‘WHERE DOES SPEECH COME FROM?’
A HISTORICAL LINGUISTIC ANSWER**

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Abstract. After an introduction of the state and method of research regarding speech we will focus on the question “Where does speech come from?” from a comparative historical linguistic perspective. Here we will look at the origins of speech in the Indo-European languages and the origins of speech in the other language families. Our guiding question for the review of our material is the question “Is speech a genuine concept or not?” and this approach actually determines our methodological approach of the analysis of speech, considering ‘speech’ as a concept and trying to find out if the concept is genuine or if it can be traced back to other concepts. In the latter case, we must assume that speech is not genuine and the etymological background would tell us something about the history of speech. In case there are no etymological roots, we must assume that speech is genuine. What we know about speech derived from our observations from material taken from different roots of language families. We argue that language as speech, the first and communicative form of language, developed from a permanent replacement of one element of speech in one language by another element of speech in another language. The historical process of the development of speech is thus a process that can be reconstructed in the comparative studies of different languages. We assume that the dominance of meanings in a language is not only a linguistic feature, but results from the social and cultural developments of the area of languages in speeches. The concept of speech is universal, but its linguistic history of meanings indicates that changes in the genuine understanding of speech occur.

Keywords: historical linguistics, meanings of speech, comparative studies, language families, cultural comparisons, etymology, development of speech

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1. Introduction: *status quo*, method and theory of research, and the question “Where does speech come from?”

1.1. *Status quo* of research about the origin of speech

Speaking from a generalizing perspective, the question ‘Where does speech come from?’ is probably one of the oldest questions asked by humans, since there was an awareness of speech. Actually, we find answers to this question in scholarly writings, in the arts, and in spiritual dogmatic writings. Speech in cultures without writing can hardly be preserved and so, besides the oral tradition, documentations about speech as an object and tool prior to the time of written recordings do not exist. Through oral tradition we have a documentation of speech from prior times. An example for such documentations is *A Thousand and One Nights*. Also many religions construct a relation between speech and their god(s). So e.g. the *New Testament* (John 1:1) is written:

Ἐν ἀρχῇ ἦν ὁ λόγος, καὶ ὁ λόγος ἦν πρὸς τὸν θεόν, καὶ θεὸς ἦν ὁ λόγος.
(*Greek New Testament*. Tischendorf (8th ed. with diacritics))

We will translate this here as follows:

In the beginning was the word, and the word was with the god, and god was the word.

The most surprising aspect here is that the sentence, directed against speakers, uses pseudo-logical syllogism for the identification of god and the word. But we must be aware of the change of meanings of speech, even within one language: The Greek word *λόγος* originally meant ‘word’, but was also used for a concrete speech in the cultural context of the art of rhetoric. This is just one example for the identification of speech with a god. We have also a goddesses of speech Vac and Saraswati in Hinduism and in Old Egypt the god Thot, religious doctrines that instruct their followers how to speak in Christianity, in Islam, in Confucianism, and specific religious forms of speech (prayer, chanting). Speech is of course a structural element of literature and linguistic products and besides the scholarly writings many persons with the ability to write wrote about speech.

Plato, Aristotle, and the rhetoricians established the meaning ‘speech’ of the word *logos* (Liddell, Scott). With Plato we reach a perspective on speech (*logos*), which implements speech into a discursive philosophy. The dialogue *Theaetetus* used the word *logos* in the phrase μετὰ λόγου ἀληθῆ δόξαν ἐπιστήμην which Fowler translates as ‘true opinion accompanied by reason’:

[201ξ]
Θεαίτητος
Ὁ γε ἐγώ, ὦ Σώκρατες, εἰπόντος τοῦ ἀκούσας ἐπελελήσμη, νῦν δ’ ἐννοῶ: ἔφη δὲ τὴν μὲν μετὰ λόγου [201δ] ἀληθῆ δόξαν ἐπιστήμην εἶναι, τὴν δὲ ἄλογον ἐκτὸς ἐπιστήμης: καὶ ὧν μὲν μὴ ἐστὶ λόγος, οὐκ ἐπιστητὰ εἶναι, οὕτως καὶ ὀνομάζων, ἃ δ’ ἔχει, ἐπιστητά.
(Plato. *Platonis Opera*)

Fowler translates this as follows:

[201c]

Theaetetus

Oh yes, I remember now, Socrates, having heard someone make the distinction, but I had forgotten it. He said that knowledge was true opinion accompanied by reason, [201d] but that unreasoning true opinion was outside of the sphere of knowledge; and matters of which there is not a rational explanation are unknowable – yes, that is what he called them – and those of which there is are knowable.

(Plato. Plato in Twelve Volumes)

The *Merriam Webster Dictionary* (2010) provides us with the following definitions of speech that are placed across all areas of communication, human speaking, utterance, rhetoric, language, and speech style:

- 1a: the communication or expression of thoughts in spoken words
 - 1b: exchange of spoken words: conversation
 - 2a: something that is spoken: utterance
 - 2b: a usually public discourse: address
 - 3a: language, dialect
 - 3b: an individual manner or style of speaking
 - 4: the power of expressing or communicating thoughts by speaking
- (*Merriam Webster Dictionary*)

The *Merriam Webster Dictionary* traces the origin of speech back to Middle English ‘speche’, from Old English ‘spræc’ and ‘spæc’; akin to Old English ‘sprecan’ to ‘speak’. The first known use of the English word ‘speech’ was before the 12th century (*Merriam-Webster*). Taking the definitions of speech in the contemporary dictionary *Merriam Webster Dictionary* (2010) as *status quo* of average knowledge about speech in the community of Western English speakers, a *desideratum* inquiring the concept of speech is an alternative to the ambivalent definitions that indicate the simplified use of this term among contemporary speakers. According to Margolis and Laurence in the *Stanford Encyclopedia of Philosophy*, “concepts, pre-theoretically, are the constituents of thoughts. But the pre-theoretic notion only goes so far as an entry point into philosophical theories of concepts” (Margolis, Laurence). Campbell wrote in *Past, Space, and Self. Representation and Mind* about a network of interconnected concepts: “There is a whole network of interconnected concepts that we use to specify the destinations of our actions. This network of concepts is, as it were, theoretically interconnected. There is no one movement or set of movements appropriate to lifting a heavy weight; everything depends on whether it is also large or small, with the weight evenly or unevenly distributed throughout its mass. What is distinctive about this network of concepts is that the whole theory has its meaning through its role in the direction of action” (Campbell 1995: 123). Someren wrote in *Learning With Multiple Representations*: “Logical discussions, focused as they are on the logical vocabulary and its associated transformations systems, love to use the plausibly sortable cases of concepts as examples (what have been called the middle-sized white goods of the universe) because it has problems enough, and

conceptual acquisition and testing is not the problem it focuses on. To know a concept we have to have at least some mental representation of it, and its conceptual nexus. These mental representations may not be sufficient for conceptual deployment without a supporting environment, so we should remember that the exact distribution of representation between mind and environment is an important issue” (Someren 1998:326).

The majority of research regarding the question of the origin of speech is done from various different perspectives and fields of science. Rosenstock-Huessy wrote in *The Origin of Speech* that in the process of exerting power through speech people invariably create both the past and the future. Rosenstock-Huessy mentioned that informal and abstract mentality of modernity is the sources of a ‘grammatically healthy’ non-corrupt community (Rosenstock-Huessy 1981). MacNeilage’s *The Origin of Speech* is based on research in linguistics, cognitive science, evolutionary biology, and animal behavior in a neo-Darwinian approach to speech as a process of descent in which ancestral vocal capabilities were modified due to natural selection in order to improve communication (MacNeilage 2008). Holden in *The Origin of Speech* asked ‘How did the remarkable ability to communicate in words first evolve?’ (Holden 2004) G. F. Stout in his *A Manual of Psychology* (1899) described the theories of the origin of speech around 1900 (§ 8. Certain Other Theories of the Origin of Speech). Edward Sapir (1884–1939) in *Language: An Introduction to the Study of Speech* (1921) wrote about the elements of speech:

II The Elements of Speech

We have more than once referred to the “elements of speech,” by which we understood, roughly speaking, what are ordinarily called “words.” We must now look more closely at these elements and acquaint ourselves with the stuff of language. The very simplest element of speech—and by “speech” we shall henceforth mean the auditory system of speech symbolism, the flow of spoken words—is the individual sound, though, as we shall see later on, the sound is not itself a simple structure but the resultant of a series of independent, yet closely correlated, adjustments in the organs of speech (Sapir).

Sapir wrote about the concept:

In other words, the speech element “house” is the symbol, first and foremost, not of a single perception, nor even of the notion of a particular object, but of a “concept,” in other words, of a convenient capsule of thought that embraces thousands of distinct experiences and that is ready to take in thousands more. If the single significant elements of speech are the symbols of concepts, the actual flow of speech may be interpreted as a record of the setting of these concepts into mutual relations (Sapir).

1.2. The method of our research

Speech is the oldest form of human communication. Communication via speech (speech communication) is actually not only the act of communication

between humans in a speech. Speech is always implemented in a medium. The most common media of speech communication are spoken speech and written speech. In other words: We must distinguish between the speech as a medium and speech as a communicated object. For example a speech held in a public place in front of an audience is the speech as a communicated object. Speech presented in order to convey information is a medium. Speech as a communicated object is concrete, while speech as a medium is abstract.

Speech as a Communicated Object

Speech as a Medium of Communication

Speech as an Object and as a Medium

Speech as a communicated object can be presented in a written or spoken form and implemented in any medium. Such a speech is a close and definite unit. The art of rhetoric is the discipline, which describes the principles of speech as an object. Speech as a medium of communication is, as mentioned previously, abstract, indefinite, and serves as a tool of communication. For example speech as a way to conduct an interview would describe such a speech as communication. Both speech as a communicated object or speech as a medium of communication can be implemented in media. The media we can classify as follows: Necessary media for the speech (speech or writing) and framing media for the speech, e.g. a tape-recording of a voice holding a speech, a book containing a speech in written form, a drama dialogue containing the conversation of two persons, or a soap opera with a monologue of one actor.

Necessary Media for Speech

Framing Media for Speech

Implementing Media of Speech

We are interested in the concept of speech, the abstract idea of speech in Platonic words, as preserved in the meanings of related terms in several languages. The meanings of the words and the words in each language we consider here as representations of a concept. The shift of a meaning within one etymological track indicates a potential change of concept. So the track of concepts in one etymological track shows the development of concepts. We will use the following markers to indicate the change of meanings:

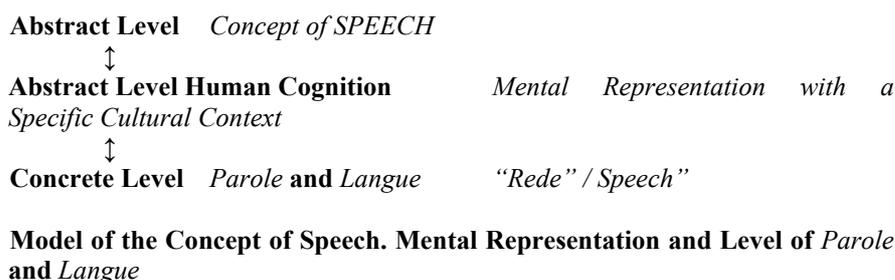
MEANING 1 > MEANING 2 > MEANING 3 > MEANING 4 > MEANING 5

Change of Meanings as Indicators of Concept Change

The meanings or associated concepts can be used as indicators for the relationship between concepts existing in different languages. This way we are interested to find out, if and how our idea of speech developed historically. It is also of general interest to try and describe how concepts, the abstract ideas in a pre-theoretical setting, are realized.

1.3. The theory of our research

The question ‘Where does speech come from?’ will here be approached based upon a theoretical framework of cognitive linguistics. Our approach to the question “Where does speech come from?” is linguistically, which means that we analyze linguistic material in order to get access to the constitution of typical thoughts in different languages and cultures. In cognitive linguistics, a conceptual metaphor or cognitive metaphor is a document of a mental state of mind. The semiotic field the concept of speech builds up in a specific language is part of our study. The cognitive function and content, which characterizes the specific knowledge of the group of speakers sharing this concept by the linguistic contents, will be considered as related to the concept. We can compare this semiotic field of human cognition with cognitive metaphors that can be built 'ad hoc' by a single person, but they can also be shared among people with the same language and are part of the cultural heritage of a homogeneous culture and get a fixed and established place in the thesaurus of a language. We will look at a proper word, speech, and show the conceptual semiotic framework built around it in languages of several cultures. We suggest the following model of a concept:



The concept itself is comparable to Plato’s idea of a unit. The concept cannot be divided. The mental representation is the cognitively stored knowledge about the concept. Due to the specific linguistic condition of the concept in the mode *parole* and its semiotic field, the concept is here a specific characterization and form of the concept. In contrast, in the mode of *langue* the specific semantic connotation of a word changes. A semiotic shift occurs, when the whole semiotic structure between a word in two languages is different and the word in a language is a representation of a unique cultural meaning. Here the word contributes to the code of the culture, which cannot derive from the linguistic setting of its etymology, its phonetic disposition, and morphology.

1.4. What is speech? The qualities of speech in postmodern perspective

We assume that concepts exist and that they are universalia as we have described them in a first form by Plato, who mentioned the ideas as contents of the mind. Language has its place in the real world (reality), but is also bound to the mind as a result of cognitive actions and the area of meanings, which here is called semiotics.

Concept
SPEECH



Reality Semiotics
“Speech” ‘Speech’

Speech. Trinity of its Concept, Reality, and Semiotics

We assume that entities above the level of concepts that are self-referencing units, entities in the linguistic area have three functions:

The Communicative Function	Carrier of Communication
The Discursive Function	Carrier of Structure
The Semiotic Function	Carrier of Meaning

The Functions of Language

The communicative function is the function by which language is used as a carrier of communication. The discursive function is the function by which language is used as a carrier of structure. The semiotic function is the function by which language is used as a carrier of meaning. *Langue, parole, and speech* are linguistic entities that derive from language. So we can conclude:

Communication is a Function of *langue, parole, and speech*

Discourse is a Function of *langue, parole, and speech*

Meaning is a Function of *langue, parole, and speech*

The Functions of *Langue, Parole, and Speech*

The meanings and functions of concepts are explored in mainstream cognitive science, metaphysics, and philosophy of mind. Peacocke in *A Study of Concepts* presented what philosophers like Hume, Kant, and Wittgenstein said about concepts (Peacocke 1995). Latin *conceptus* has the meanings collecting, gathering, collection, conflux, taking, catching, conceiving, and pregnancy. As a trope the term is used for a conceiving in the mind, a thought, or purpose of the mind (*animi*) (Lewis, Charles). The term *διάνοια* has the meanings thought, intention, purpose, notion, process of thinking, thinking faculty, intelligence, understanding, expressed thought, meaning of a word or passage, and intellectual capacity revealed in speech or action by the characters in drama (Liddell; Scott). A concept is considered abstract. The *American Heritage Dictionary of the English Language* (2000) lists as meanings for the ‘concept’ a general idea derived or inferred from specific instances or occurrences, something formed in the mind, a thought or notion, a scheme, and a plan. *Collins English Dictionary* (1991, 1994, 1998, 2000, 2003) mentions as definitions for a concept an idea, a general idea or notion that corresponds to some class of entities and that consists of the characteristic or essential features of the class, the conjunction of all the characteristic features of something, a theoretical construct within some theory, a directly intuited object of

thought, and the meaning of a predicate. In Engineering and Automotive Engineering it is used for an exercise to demonstrate the technical skills and imagination of the designers, and not intended for mass production or sale (*The Free Dictionary*).

Ayn Rand wrote about the meaning of concepts in *Introduction to Objectivist Epistemology*. 40:

“A word has no meaning other than that of the concept it symbolizes, and the meaning of a concept consists of its units.” (Rand)

Rand wrote in *Introduction to Objectivist Epistemology*. 26–27:

“A widespread error, in this context, holds that the wider the concept, the less its cognitive content – on the ground that its distinguishing characteristic is more generalized than the distinguishing characteristic of its constituent concepts. The error lies in assuming that a concept consists of nothing but its distinguishing characteristic. But the fact is that in the process of abstracting from abstractions, one cannot know what is a distinguishing characteristic unless one has observed other characteristics of the units involved and of the existents from which they are differentiated.” (Rand)

Rand wrote in Leonard Peikoff “The Analytic-Synthetic Dichotomy”. *Introduction to Objectivist Epistemology*. 98:

“Since a word is a symbol for a concept, it has no meaning apart from the content of the concept it symbolizes. And since a concept is an integration of units, it has no content or meaning apart from its units.

The meaning of a concept consists of the units – the existents – which it integrates, including all the characteristics of these units. Observe that concepts mean existents, not arbitrarily selected portions of existents. There is no basis whatever – neither metaphysical nor epistemological, neither in the nature of reality nor of a conceptual consciousness – for a division of the characteristics of a concept’s units into two groups, one of which is excluded from the concept’s meaning.” (Rand)

In the *Oxford Dictionary* (2010) of the English language the following definitions of concept were listed:

An abstract idea: structuralism is a difficult concept, the concept of justice

A plan or intention: the centre has kept firmly to its original concept

An idea or invention to help sell or publicize a commodity: a new concept in corporate hospitality

[as modifier] (of a car or other vehicle) produced as an experimental model to test the viability of innovative design features: a concept car for next month's Geneva motor show

Philosophy is an idea or mental image which corresponds to SOME distinct entity or class of entities, or to its essential features, or determines the application of a term (especially a predicate), and thus plays a part in the use of reason or language.

(*Oxford Dictionary*)

The *Oxford Dictionary* (2010) traced the origin of the English word ‘concept’ back to the middle of the 16th century; it was used with the sense ‘thought’ and ‘imagination’) and derived from Latin *conceptum* (‘something conceived’) (*Oxford Dictionary*). Communication is the function, which enables language and its derivations to communicate an entity. Discourse is the function, which enables language to structuralize an entity. Meaning is the function, which enables language to carry value beyond the level of a concept.

Langue

Parole

Language as a Linguistic System *Speech*

Definite Speech as Object

Indefinite Speech as Tool

Language as Application

Spoken Language



Language

Common Features of *Langue*, *Parole*, and *Speech*

1.5. Language, speech, and etymology

Langue, language as a linguistic system, it communicates at least itself (and so the linguistic features of language), while applications of language like parole and speech communicate in the first case (parole) something in the spoken mode as application and in the second case (speech) the object speech is applied language for communication and the tool or medium speech is applied language. We have to make a distinction between speech and language. Language as langue is communicative besides other features (documentation). Language as parole is communicative. Speech is a communicative action of a speaker. Rhetoric is the art of good speaking in the classical Roman understanding of this art. Speech is traditionally considered to be orally communicated, but we also find speech in media other than spoken language. Elements of speech as well as a whole speech as an object or speech as medium can be bound in written language. Here also the etymological history of speech as an English word derived from the tree of the Germanic languages supports this basic definition of speech with language. Speech requires the linguistic features of language (langue) in order to be successfully applied. The question ‘Where does speech come from?’ leads to the question of the evolution of language and the qualities of language and speech. Speech as the capacity of humans to speak and exchange communicatively the contents of speech exists in all societies of humans and its existence is independent from any qualities of existing natural or artificial languages, as long as the functions and qualities exist. In other words: Speech is a universal. But speech also depends on a language as the tool of communication; simplified we could say: “We use the words of a language to communicate speech in a speech”. The

existence of language as a universal without the functions of speech is possible. A language without speech can communicate information without using the tool speech or the object speech. This could be classified as ‘langue’. The evolution of language is discussed in linguistics with two major theories: One party favors the mono-genetic origin of all languages, while another party assumes that languages developed at different places independent from other languages. The etymological range of words in different languages that refer to the concept of SPEECH comes from all language families available in the database Tower of Babel. It allows us to compare similar roots we can consider related to each other with high affinity with each other, but distinguishable as roots of different languages, language families, or family trees. We favor the main thesis that language in words in form of speech expands with changes of the linguistics structure (lexical, phonetic, and morphological structure) and the semantic/semiotic disposition. The change of meaning of one etymological track indicates that the concept of SPEECH itself is stable in the language in which it occurs, while the meaning is related to other concepts and meanings we can see as the origin of speech based upon the material here presented.

2. The origins of speech in the Indo-European languages

2.1. *The material*

In this section we will examine the concept of speech as presented in the Indo-European languages. The material gives us evidence that the origin of speech is related to emotions, utterance, but also thinking and cognitive activities. The material of our analysis comes from the etymological database *Tower of Babel*, which was initiated by Sergei Starostin. The specific theory of Starostin is the reconstruction of a hypothetical Borean language family implementing many language families. The hypothetical Borean roots have either one meaning ‘to speak’ or the meaning ‘to speak’ with another meaning.

2.2. *Roots for speech in the Borean language group*

Related to this Borean language family are Eurasiatic, Afroasiatic, Sino-Caucasian, Austric, and Amerind roots that form the basic languages of the Borean language family. The etymological roots of language families and the Borean super family are united as the representatives of the concept, in our case the concept of SPEECH. In some cases the hypothetical root has the meaning ‘to say’, while the roots of the language families have meanings of specific speech activities or meanings of different concepts other than the concept of SPEECH. There are cases of the words of the activity of saying, which developed from a former word in an older language representing another concrete activity (SHOW to SAY). Borean *WVTV* has the meaning ‘to speak’. Related are Eurasiatic **watV* and Afroasiatic **wat-*. Borean *KVLV* has the meanings ‘tongue’ and ‘to speak’. Related are Eurasiatic **Kä[lH]ä* and Afroasiatic **ka(wa)l-*. Sino-Caucasian

*=alg[w]Añ means ‘to speak’. Borean CVVV has the two meanings ‘to speak’ and ‘to shout’. Related is Semitic *çwy for ‘to order’ and ‘to command’. Borean HVVV means ‘to speak’. Related are Eurasianic *hVwV (?), Afroasiatic *hay-, Sino-Caucasian *=iʎwV, Amerind *yauʔ for ‘mouth’ and ‘to say’ and *ya for ‘name’. Semitic *hwy means ‘to speak’. Borean HVPV has the meaning ‘mouth’ and ‘to speak’. Related are Eurasianic *ʎpV and Afroasiatic *ʎap-. Austric *bVʔ means ‘mouth’ and Amerind *pai means ‘to call’. Obviously to the Borean (hypothetical) root JVVV belong the Euroasiatic roots with the meaning ‘say’ and the Sino-Caucasian and Amerind *wuni for ‘to cry’. Borean JVNV (WVNV) has the meanings ‘to speak’, ‘to say’, and ‘to sound’. Eurasianic *jVnV and Afroasiatic *yVn- have the meaning ‘to say’. Related are Sino-Caucasian *ʎwēnʔ and Amerind *wuni for ‘to cry’. Borean HVLV has the meanings ‘to say’ and ‘to speak’. Related are Sino-Caucasian *HíLV and Austric *IVw. Borean MVHRV has the meanings ‘to speak’ and ‘to sound’. Related are Eurasianic *muʎV, Afroasiatic Semitic *ʎmr and *ʎmr, and Sino-Caucasian *mVrHV. Borean WVKV has the meanings ‘to say’ and ‘to call’. Related are Eurasianic *wVkv, Afroasiatic Semitic *wVkh- for ‘clamour’ and ‘boast’, and Sino-Caucasian *=VxqV, and Amerind *koʔe with the meaning ‘to say’. Borean JVVV (WVNV) has the meanings ‘to speak’, ‘to say’, and ‘to sound’. Related are Eurasianic *jVnV, Afroasiatic *yVn- ‘to say’ and Sino-Caucasian *ʎwēnʔ and Amerind *wuni for ‘to cry’. Borean HVNV has the meaning ‘to say’. Related are Sino-Caucasian *=VŋV, Austric *beŋa for ‘to say’ and ‘to tell’. Borean CVVV has the meanings ‘to say’ and ‘to sound’. Related are Eurasianic *čVwV and Afroasiatic *cVway/H-. Among the roots of the Borean language group we find etymologically related, but semiotically and semantically different roots of languages. Borean MVLV has the meanings ‘to say’ and ‘to pray’. Related are Eurasianic *mVIV, Afroasiatic *mVI- with the meaning ‘to think’ in the Cushitic and Semitic languages, and Amerind *mali for ‘to talk’. Borean TVHV has the meaning ‘to say’. Related are Eurasianic *tVHV, Afroasiatic *taʔ-, and Amerind *ti for ‘to say’. Borean HVLV has the meaning ‘to say’ and ‘to speak’. Related language families are the Sino-Caucasian with the root *HíLV and Austric with *IVw. Eurasianic *tVHV has the meaning ‘to say’. Related are Indo-European *dē-, Altaic *tē, Kartvelian *txow-, and Dravidian *Tev- for ‘to beg’.

2.3. Speech in Indo-European languages

2.3.1. The Eurasianic roots for speech

The Eurasianic root *tVIV has the meanings ‘to say’ and ‘to tell’. Related are Indo-European *tAlk- and Altaic *tēluŋu for ‘narrating’ and ‘tale’. Kartvelian Svan has -tūl- with the meanings ‘to call’, ‘to say’, and ‘to shout’. Eurasianic *wVkv has the meanings ‘to say’ and ‘to call’. Related are Indo-European *wek^w-, Altaic *oki, Uralic *wakV for ‘to call’ and Eskimo-Aleut *uqa-. Eurasianic *watV has the meaning ‘to speak’. Related are Indo-European *wed-, Altaic *ót`e, Uralic *wa[t]V for ‘word’, and att3 for ‘to say’ as well as Dravidian *vadar_- and Eskimo-Aleut *atəʃ and *atRiʃ-. Related to the Eurasianic root *Kä[IH]ä with the

meanings ‘tongue’ and ‘to speak’ are Indo-European **kel-* for ‘to call’ and ‘to shout’, Altaic **k`i`ali*, Uralic **kele* (*kēle*), Kartvelian Georgian *kel-* for ‘to start screaming’, Dravidian **kil-*, and Eskimo-Aleut **qilaɣa-*. Eurasiatic **sorwV* has the meaning ‘to speak’. Related are Indo-European **s(w)er-*, Altaic **siure*, and Chukchee-Kamchatkan **c`rv#*. Eurasiatic **sVjwV* has the meanings ‘to speak’ and ‘to shout’. Related are Indo-European **suei*, Altaic **sa[jb]o*, Uralic **soje*, and Kartvelian **cw-*. Eurasiatic **hVwV* has the meaning ‘to speak’. Related are Indo-European **Heu-* and Chukchee-Kamchatkan **iv-*.

2.3.2. *Speech as sound in Eurasiatic languages*

Sound is a concept attributed to the Eurasiatic root **jVnV*. Eurasiatic **jVnV* has the meanings ‘to speak’ and ‘to sound’. Related are Altaic **ij`nula*, Uralic **āne*, and Dravidian **jan-*. Eurasiatic **tVrV* has the meanings ‘to speak’, ‘to curse’, and ‘to fight’. Related are Indo-European **ter-*, Altaic **t`i`a`ru*, Uralic **torV*, and Dravidian **tor-*. Another Eurasiatic root, **ʒVpV*, has the meanings ‘mouth’ and ‘to speak’. Altaic **ip`I*, Uralic **apta-* ('bark'), and Dravidian **ēv-* are related to this root. Eurasiatic **čVwV* has the meanings ‘to say’ and ‘to sound’. Related are Indo-European **stewə*, Altaic **č`ābu*, and Kartvelian **caw-*.

2.3.3. *Verbs for speech derived from other verbs of activity*

In the following case the older word in Greek refers to the activity of showing, while later languages represent the activity of saying. Proto-Indo-European **deik'e-* has the meaning ‘to show’. Hittite *tekkussai-* has the meaning ‘to show’ and ‘to present’. Related are Old Indian *dīdeṣti* for ‘to point out’ and ‘to show’, Avestan *daēs-* ‘to show’ and ‘to distribute something to someone’. Old Greek *déiknūmi* means ‘to show’, Baltic **teig-*, Germanic **tīx-a-* with its derivation ‘to talk’ in English, Latin *dicere* for ‘to say’ and *dictare* for ‘to say repetitively’, *index* for ‘indicator’, and *iudex* for ‘judge’. Special types of speaking derive from special roots. Proto-Germanic **tīxan-* has the meaning ‘to show’. Gothic **ga-tīhan* has the meanings ‘to announce’ and ‘to tell’. Old Norse *tjā* has the meanings ‘to show’ and ‘to inform’. *Teikn* means ‘sign’. Derivations are the German word ‘Zeichen’ and English word ‘sign’. Related are the Norwegian verb *te* and the noun *teikn*, the Swedish verb *te* and the noun *tecken*, the Danish verb *te* and the noun *tegn*, Old English *tiht* for ‘to accuse’, *tēon* for ‘to indicate’ and ‘to announce’, *tācan* for ‘to teach’, and *tāc(e)n* for ‘sign’, ‘wonder’, and ‘proof’. Related are also English ‘to teach’ and ‘token’, Old Frisian *tīgia* and *tēken*, Old Saxon *af-tīhan* for ‘to be unable to do something’, Middle Dutch *tien* for ‘to show someone’, ‘to ascribe’, and ‘to accuse’. In Dutch *betichten* and *teken* exist. Other derivations are Old Franconian *teikin* and *teican*, Middle Low German *tīen* and *tēken*, Old High German *in-ziht* and *bi-ziht* for ‘accusation’, *zīhan* for ‘to accuse’, *zeihhan* for ‘symbol’, ‘marking’, ‘astrological sign’, ‘wonder’ and ‘omen’, and Middle High German *zīhen* for ‘to make a statement’, ‘to show’, and ‘to accuse’.

2.3.4. Various Proto-Indo-European roots for speech

The Proto-Indo-European root **were-* and **wrē-* has the meanings ‘to tell’ and ‘to speak’. Hittite *werija-* has the meanings ‘to call’, ‘to name’, and ‘to mention’. Tokharian A *wram* and B *wreme* is an object. Old Greek *éirō* has the meaning ‘to say’. *Rhētó-* means ‘appointed’, ‘designed’, ‘destined’, and ‘speakable’. The *rhētēr* is a speaker and *rhētōr* is a master in speaking. *Rhēma* is ‘utterance’, ‘word’, and ‘narration’. *Rhēsis* means ‘elocution’ and ‘speech’. Related are Slavic **vrāti*, **vrō*, **vrāčь*, **vrākā*, and **vorь*, Germanic **wrō-x-i-*, Celtic Middle Irish *fordat* for ‘they say’. Proto-Baltic **teig-* has the meaning ‘to tell’ and ‘to say’. Related are Old Lithuanian *tieg* for ‘he/she said’ and Lithuanian *teigti* for ‘to narrate’, ‘to say’, ‘to claim’, ‘to confirm’, and ‘to attempt to influence’. Proto-Indo-European **bhā-* is the hypothetic basis for specific words of activities and speaking that exist in Indo-European languages. Proto-Indo-European **bhā-* has the meaning ‘to say’. Old Indian *sa-bhā* has the meanings ‘assembly’ and ‘congregation’. Armenian *ban* has the meanings ‘word’, ‘speech’, ‘reason’, ‘judgement’, and ‘thing’. Old Greek *phāmi* means ‘to say’. Related are also Slavic **bājāti*, Germanic **bō-n-ī(n-)*, Latin *fārī* for ‘to speak’, *fācundus* for ‘experienced in speaking’, and *fātum* for ‘spell of destiny’, Proto-Indo-European **wod-* has the meanings ‘to speak’, ‘to sing’, and ‘to scold’. Hittite *uttar* is used for ‘word’. Tokharian A *wātk-* and B *watk-* means ‘to order’. Old Indian *vādati* has the meanings ‘to speak’, ‘to say’, ‘to utter’, and ‘to tell’. Vāditra- is used for a musical instrument and music. *Vāda-* means ‘speaking of or about’, the noun is used for ‘discourse’ and ‘talk’. *Vādati* means ‘to praise’, ‘to laud’, and ‘to extol’. Old Greek *hūdeō* means ‘to glorify’. Related are Slavic **vādā* and **vāditi* and Baltic **wad-in-*. Proto-Baltic **wad-in-* means ‘call’. Lithuanian *vadinti* has the meanings ‘to call’ and ‘to invite’. Proto-Indo-European **bhā-* has the meaning ‘to say’. Old Indian *sa-bhā* means ‘assembly’ and ‘congregation’. Armenian *ban* means ‘word’, ‘speech’, ‘reason’, ‘judgement’, ‘thing’. Old Greek *phāmi* means ‘I say’. *Phāmā* means ‘utterance’, ‘announcement’, ‘rumour’, ‘reputation’, ‘speech’. Related are Slavic **bājāti*, Germanic **bō-n-ī(n-)*, and **ba-nn-a*, Latin *fārī* means ‘to speak’, *fācundus* is ‘experienced in speaking’, *fātum* means ‘spell of destiny’, ‘oracle’, and ‘destiny’. In the Indo-European etymology from Proto-Indo-European **ēg-* with the meanings ‘to say’ and ‘to tell’ derived Tokharian A and B *āks-* ‘to announce’, ‘to proclaim’, ‘to instruct’, and ‘to recite’. Related are Armenian *asem* for ‘to say’, Old Greek **ēg-* for ‘he spoke’, and Latin *aiō* for ‘to affirm’, ‘to say yes’, and ‘to say’, and *adagiō* for ‘proverb’. In the Indo-European etymology from Proto-Indo-European **wek^w* with the meanings ‘to say’ and ‘to tell’ derived Tokharian A *wak* and B *wek* for ‘voice’ and ‘noise’. Other derivations are Old Indian *vakti* for ‘to speak’, ‘to say’, and ‘to tell’. Vācas- means ‘speech’, ‘voice’, and ‘word’. *Vāc-* means ‘speech’, ‘voice’, and ‘word’. Avestan *vačah* means ‘speech’ and ‘word’. *Vāx-s* means ‘voice’, ‘speech’, and ‘word’. Armenian *gočem* means ‘to scream’, ‘to call’, and ‘to invite’. Old Greek *ēpos* means ‘word’, ‘song’, and ‘epic poem’. *Enopā* means ‘screaming’, ‘battle yell’, and ‘voice’. Related are Slavic **vetjь*, Germanic **wax-n-ia-*, Latin *vōx*, and Celtic Middle Irish *fūaimm* for

‘noise’. In the Indo-European etymology from Proto-Indo-European **tar-* with the meanings ‘to say’ and ‘to shout’ derived Hittite *tar-* for ‘to say’ and ‘to name’, *darija-* for ‘to invoke’ and ‘to call’. Tokharian B *tār-* means ‘plead’ and ‘implore’. Old Indian *tārā-* means ‘high’, ‘loud’, and ‘shrill’. Armenian *thrthrak* means ‘good speaker’. Old Greek *toró-* means ‘loud’, ‘shouting’, and ‘clear’. Related are Slavic **tortorītī*, Baltic **tar̃-*, and Celtic Middle Irish *tairm* for ‘noise’.

2.3.5. *Indo-European roots for speech only including ‘to say’*

In the Indo-European etymology from Proto-Indo-European **g^wet-* with the meaning ‘to say’ derived Armenian *kočhem* ‘to call’, ‘to name’, and ‘to invite’. Related is Germanic **kwiθ-a-*. In the Indo-European etymology from Proto-Indo-European **d(h)ē-* with the meaning ‘to say’ derived Hittite *te-* for ‘to say’, Slavic **dētī* for ‘to say’, and Baltic **dē-w-ē*. Proto-Indo-European **sek^we-* and **sk^we-* has the meanings ‘to tell’ and ‘to talk’. Old Greek *en-epō* has the meanings ‘to announce’, ‘to narrate’, and ‘to declare’. Related are Baltic **sek-*, Germanic **sag-ē-*, Latin *inquam* ‘I say’, *inseque* and *insece* for the imperative ‘say’, Celtic **sek^w-* and Old Irish *aithesc* for ‘answer’ and ‘speech’. Proto-Baltic **sek-* has the meanings ‘to say’ and ‘to tell’. In the Indo-European etymology exist derivations like Lithuanian *sekti* for ‘to narrate’ and the iterative verb *sakūti* for ‘to say’, ‘to narrate’, ‘to hold a speech’, *sėkmė* for ‘narration’, ‘fable’, and ‘fairy tale’. Lettish *sacīt* means ‘to say’ and *saka* is an expression for the narrative form *saga*.

2.3.6. *A case of various changes of meanings in a long etymological range*

Proto-Germanic **waxnian-* has the meanings ‘to shout’, ‘to say’, and ‘thing’. Related are Gothic *wēht-s* for ‘thing’ and ‘matter’, Old Norse *vātt-r* for testimony; *ōmun* for ‘voice’ and ‘sound’. *Vātr* is used for a living being or thing. Norwegian *ōm* is an echo. Swedish *ōm* is a strong sound. *Vätte* is an earth spirit. In Danish *vette* are ghosts. Old English *wōm* is ‘noise’ and ‘tumultus’, *wēman* means ‘to sound’ and ‘to seduce’. A *wiht* is a daimon. English used the word *wight*. Middle Low German has the word *gewāgen* for ‘to announce’; *wicht* or *wucht* is a thing. Old High German *gi-wahan* means ‘to mention’ and ‘to think about’. *Giwaht* means ‘mentioning’, ‘memory’, and ‘opinion’. *Wiht* is a being, a daimon, or a thing. Middle High German *gewāhenen* means ‘to say’ and ‘to report’.

2.3.7. *Special forms of speech*

Speaking in a foreign language and special speech styles

In the Indo-European etymology from Proto-Indo-European **barbar-* with the meanings ‘speaking another language’ and ‘stranger’ derived Old Indian *barbara-* for ‘stammering’, Old Greek *barbaro-s* is used for a foreigner, ‘foreign’, a non-Greek person, or something non-Greek. Latin *baburrus* means ‘stupid’. One of the

few Proto-Indo-European roots depiction a specific style of speech is the root **k'ens-*. Proto-Indo-European **k'ens-* has the meaning 'to speak in a florid, solemn style'. Old Indian *śamsāyati* has the meanings 'to cause to recite', 'to predict', and 'to foretell'; *śamsāti* means 'to recite' and 'to repeat'. *Sasti-* means 'praise' and 'invocation'. Avestan *sah-* means 'to announce', and *sasti-* is 'word' and 'prescription'. Latin *cēnseō* means 'to mean', 'to estimate', and 'to vote'. Proto-Germanic **θul(x)a-z*, **θul(x)ōn*, and **θulxia-z* have the meanings poet and jester. Related are Old Norse *θul-r* for a cult speaker and poet. In Old English a *θyle* is a fun maker. Proto-Germanic **maudian-* has the meaning 'to remind'. Gothic **maudjan* has the meaning 'to remind', *ga-maudjan* means 'to call to mind' and 'to remind', **ga-maudī* means 'cognizance'.

2.3.8. Proto-Indo-European roots of negative forms of speech

Proto-Indo-European **res-* has a meaning besides 'to speak'. Proto-Indo-European **res-* has the meanings 'to shout' and 'to speak'. Old Indian *rasati* means 'to roar', 'to yell', 'to howl', and 'to cry'. Proto-Indo-European **swer-* has the meanings 'to speak', 'to swear', and 'to curse'. Tokharian A *šurm*, B *šarm* have the meanings 'motive', 'cause', and 'origin'. Old Greek *hermāneuō* mean 'to interpret', 'to translate', and 'to explain'. Related are also Slavic **svārīti*, Germanic **swar-a-*, Latin *sermō* for a mutual speech, conversation, talk, lecture, expression, and gossip. Proto-Indo-European **(s)ker-* has the meanings 'to scold' and 'to mock'. Related are Tokharian B *kārr-* for 'to scold', *skār-* for 'to speak hostilely', 'to threaten', and 'to reproach'. Related is also Germanic **skir-ō-*. Proto-Germanic **wrōxi-z* and **wrōgá-* have the meanings 'to tell', 'to speak', and 'to shout'. Gothic *wrōh-s* means 'complaint' and 'accusation'. Old Norse *rōgja* means 'to accuse' and 'to defame', *rōg* is 'defamation' and 'dispute'. Related are Norwegian *rōgja* ('to accuse', 'to gossip'), Swedish *rōja* 'to tell as secret', Old Danish *rōghā*, Old English *wrēgan* and *wrōht*, English *bewray*, Dutch *wroegen* and Middle Low German *wrōge* and *wrōch* for 'legal accusation', 'punishment', and 'fine'. *Wrōgen* and *wrügen* means 'to accuse' and 'to punish'. Old High German *ruogen* used in the 8th century meant 'to accuse' and 'to announce'. Middle High German *rüege* is a legal accusation and punishment. The verbs *rüegen* and *ruogen* mean 'to report', 'to announce', 'to say', and 'to express'. In contemporary German verb and noun *rüegen* and *Rüge* exist. Proto-Germanic **bōnī-*, **bannan-*, and **banna-z* has the meanings 'to curse', 'to damn', 'prayer', and 'request'. Related are Old Norse *bōn* for 'request' and 'prayer'; *banna* means 'to not allow to do something' and 'to ban'. *Bann* means 'ban' and 'prohibition'. Related verbs and nouns exist in Norwegian, Swedish, Danish, Old English, Old Frisian, Old Saxon, Middle Dutch, Dutch, Old High German, Middle High German, and German. Proto-Baltic **tar̃-* has the meanings 'to say' and 'to tell'. Related in the Indo-European etymology are Lithuanian *tarti* with the meanings 'to say' and 'to speak out' and Lettish *tarmasa* for 'to gossip'. Old Prussian *tārin* means 'voice'.

2.3.9. *Speech as interpretation*

Proto-Indo-European **tAlk* has the meaning ‘to interpret’. Old Indian *tarkayati* ‘to conjecture’, ‘to guess’, ‘to infer’, and *tarka-* has the meanings ‘conjecture’ and ‘reasoning’. Related are Slavic **tьlkъ* and **tьlkovāti* and Germanic **θul(x)-a-*.

2.3.10. *Speech as mythos in Indo-European languages*

Speech in form of talk and thinking are related Proto-Indo-European meanings of the root **mūdh-*. *maune*, a word considered to be part of the extinct language Tokharian B, has the meanings ‘avarice’ and ‘avidity’. Old Greek *mūthos* comprises the meanings ‘word’, ‘speech’, ‘conversation’, ‘consideration’, ‘narration’, ‘tale’, and ‘myth’. Related are Slavic **mъslъ*, Baltic **maũd-*, Germanic **maud-ia-*, and Celtic Old Irish *smūainim* for ‘to think’. Proto-Baltic **maũd-* has the meaning ‘ache’ and ‘worry’. Related is Lithuanian *maũsti* for ‘to ache’, ‘to desire’, and ‘to be angry’.

2.3.11. *Speech as narration in Indo-European languages*

Proto-Indo-European **sek^we-* and **sk^wē-* have the meanings ‘to tell’ and ‘to talk’. Old Greek *en-épō* has the meanings ‘to announce’, ‘to tell’, and ‘to declare’. Related are Baltic **sek-*, Germanic **sag-ē-*, and Latin *inquam* ‘I say’ and ‘I speak’. Related are Celtic **sek^w-* and Old Irish *aithesc* for ‘answer’. Proto-Germanic **sagēn-* has the meaning ‘to say’. Old Norse *segja* has the meanings ‘to say’, ‘to report’, ‘narration’, and ‘report’. Related are Norwegian *segja*, Old Swedish *sagha*, Swedish *sāga*, and Danish *sige* for ‘to say’. Old English *secgan* means ‘to say’, *sagu* means ‘report’ and ‘narration’, **sagian* means ‘speech’ and ‘narration’. English employs ‘to say’. Related are Old Frisian *sedsa*, Old Saxon *seggian*, Middle Dutch *segghen*, *sāghen*, *saghe*, Dutch *zeggen*, Middle Low German *seggen* and *sāge*, Old High German *sagēn*, *saga* for ‘statement’, ‘speech’, ‘narration’, and ‘rumor’. Middle High German *sagen* means ‘saying’, ‘speech’, ‘language’, ‘speech’, ‘narration’, ‘rumour’, and ‘report’. German *sagen* and *Sage* exist.

3. The origins of speech in Afroasiatic languages and Sino-Caucasian languages

In this section we will examine the concept of speech as presented in the tree of Altaic languages and other trees.

3.1. *Speech in Afro-Asiatic languages: Afroasiatic words for speech and related meanings*

In the Afroasiatic etymology the root **kaw/ʔ/ʕ* is the basis for speech, crying, and shouting. Proto-Afro-Asiatic **kaw/ʔ/ʕ* - has the meanings ‘to say’ and ‘to

shout'. Egyptian $k\bar{\square}$ means 'to say', Western Chadic $*kuw-$ means 'to cry' and 'to shout'. Central Chadic $*kaH-$ means 'to say', 'to call', and 'to cry'. East Chadic $*kaH/w-$ means 'to say' and 'to speak'. Central Cushitic (Agaw) $*kuy-$ means 'to emit sounds', South Cushitic $*kaw-$ means 'to tell', and Dahalo (Sanye) $kaa\bar{\zeta}$ means 'to shout'. Proto-Afro-Asiatic $*gay(H)-$ has the meaning 'to say'. Semitic $*gV\bar{\zeta}/\bar{\zeta}Vy-$ has the meanings 'to roar' and 'to scream'. Egyptian d_wy means 'to call', and Western Chadic $*gay$ means 'to tell' and 'to say'. Also related is Central Chadic $*gay-$ ('call'), East Chadic Kwan $\bar{\zeta}'oge'$, Sumray $\bar{\zeta}'og\bar{\zeta}$, Tumak $w\bar{\zeta}g$, Sokoro $y\bar{\zeta}g-$ for 'to call'. Proto-Afro-Asiatic $*kVnVy-$ has the meanings 'to say' and 'to call'. Related are Semitic $*kVnVy-$ for 'to call', Egyptian kny for 'to call', Western Chadic $*kwa/un-$ for 'to say' and 'to tell', and Central Chadic $*kawun-$ for 'speech'. Reconstructed Proto-Afro-Asiatic $*way-$ has the meaning 'to say'. Central Chadic $*way-$ means 'to answer' and 'to yell out'. East Chadic $*\bar{\zeta}away-$ has the meaning 'to say', 'discussion', 'to greet', and 'answer'. Omotic $*way-$ means 'to say'. Reconstructed Proto-Afro-Asiatic $*wVc\bar{\zeta}VP-$ has the meaning 'to say'. Related are Semitic $*wVs\bar{\zeta}p-$ for 'to swear' and Middle Egyptian $w\bar{s}b$ for 'to answer'. Proto-Afro-Asiatic $*tVm-tVm$ has the meaning 'to speak indistinctly'. Related are Semitic $*tVm-tVm-$ for 'to stammer' and 'to grumble' and Berber $*tVm-tVm-$ for 'to whisper'. Proto-Afro-Asiatic $*tVwak-$ has the meanings 'to speak' and 'to ask'. Related are Berber $*tVkk-$ for 'to inquire', Western Chadic $*twak-$ for 'to ask', 'to announce', and 'to proclaim'. Central Chadic $*tVkk-$ is used for 'to ask' and 'to sing'. Proto-Afro-Asiatic $*tal-$ has the meaning 'to speak'. Semitic $*tul-$ has the meanings 'to pronounce distinctly' and 'to recite'. Related are Berber $*tVltVl-$ for 'to chat', Egyptian ty for 'to shout (of pain)', Western Chadic $*tilal-$ for 'to shout' and 'to ask', and East Chadic $*tulul-$ for 'to cry'. Proto-Afro-Asiatic $*mud-$ has the meaning 'to speak'. Related are Berber $*mVwVd-$ for 'to ask' and 'to pray', Egyptian mdw for 'to speak', Western Chadic $*mud-$ for 'to answer', Central Chadic $*mawud-$ for 'to speak', East Chadic $*ma[w]Vd-$ for 'to ask' and 'to call'.

3.2. Speech as shouting in Afro-Asiatic languages

Proto-Afro-Asiatic $*cad$ has the meanings 'to shout' and 'to speak'. Related are Semitic $*sad-$ and Western Chadic $*cad-$. Proto-Afro-Asiatic $*cer-$ has the meanings 'to speak' and 'to shout'. Semitic $*sir-$ means 'to shout' and Western Chadic $*cyaru-$ means 'to speak'. Proto-Afro-Asiatic $*mVt$ is used for 'to shout' and 'to speak'. Egyptian $mtmt$ and Western Chadic $*mat-$ are used for 'to speak'. East Chadic $*myatmyat-$ is used for 'to shout'. Proto-Afro-Asiatic $*rV\bar{\zeta}$ and $*rVw-$ have the meaning 'to speak'. Related are Semitic $*rVwVy-$ for 'to render other person's words', Egyptian r for 'mouth', 'sentence', 'speech', 'language', Western Chadic $*ruru-$ for 'to shout', and Central Chadic $*ray-$ for 'to speak'. Proto-Afro-Asiatic $*hay-$ has the meaning 'to speak'. Related are Egyptian $\bar{I}hy$ for 'to shout', Central Chadic $*Hay-$ for 'voice', East Chadic $*\bar{\zeta}way-$ for 'to answer' and 'to greet'. Bedauye (Beja) $hay-$ is used for 'to say', Low East Cushitic $*hay-$ is

used for ‘to say’, and High East Cushitic **hay-* and **hiy-* is used for ‘to say’, and Dahalo (Sanye) *hwayu* is used for ‘voice’, ‘sound’, and ‘noise’. Omotic **hiʔ-* is used for ‘to say’. Proto-Afro-Asiatic **čabVh-* has the meanings ‘to shout’ and ‘to speak’. Related are Egyptian *sbh* for ‘to shout’, Western Chadic **čab-* for ‘to speak’ and Central Chadic **čab-* for ‘to ask’. Proto-Afro-Asiatic **naç-* has the meanings ‘to speak’ and ‘to call’. Related are Semitic **nVʕ-* for ‘to dictate a letter’ and East Chadic **naZ-* for ‘to chat’. Proto-Afro-Asiatic **lam-* has the meanings ‘to speak’ and ‘to shout’. Egyptian *nmy* has the meanings ‘to shout’ and ‘to cry’. Western Chadic **lyam-* and Central Chadic **lam-* have the meaning ‘to say’. **Reconstructed** Proto-Afro-Asiatic **bit-* has the meaning ‘to speak’. Related are Semitic **bVt-* is used for ‘to chat’. Western Chadic **bat-* and **bayat-* are used for ‘speaking’ and ‘to speak’. Central Chadic **mV-biɖ-* means ‘to answer’ and ‘to speak’.

3.3. Speech as calling in Afro-Asiatic languages

Proto-Afro-Asiatic **tVn-* has the meanings ‘to call’ and ‘to speak’. Related are Semitic **tin-* for ‘to call’, ‘to buzz’, and ‘to tinkle’. Western Chadic **twan-* is used for ‘to say’ and ‘to answer’. Proto-Afro-Asiatic **diʕ-* and **duʕ-* have the meanings ‘to speak’ and ‘to call’. Related are Semitic **duʕ-* for ‘to call’ and ‘to be called’, Western Chadic **dwaH-* for ‘noise’, ‘voice’, and ‘to shout’. Central Chadic **diʕya-* is used for ‘to call’ and ‘to say’. East Chadic **diy-* and **daw-* is used for ‘to say’ and ‘to cry for help’. Bedaue (Beja) *di* is used for ‘to speak’ and ‘to call’. Saho-Afar **daʕ-* is used for ‘to call’. Proto-Afro-Asiatic **nVdah-* has the meanings ‘to speak’ and ‘to call’. Semitic **nVdah-* is used for ‘to call’. Western Chadic **nVd-* has the meanings ‘to speak’ and ‘to say’. Central Chadic **nVdah-* is used for ‘to ask’ and ‘to say’. Proto-Afro-Asiatic **mVl-* has the meaning ‘to speak’ and ‘to call’. Related are Semitic **mVl-* for ‘to speak’ and Berber **mVl-* for ‘to say’, ‘to indicate’, ‘to shout’, and ‘to call’. Central Chadic **myal-* means ‘to call’. Proto-Afro-Asiatic **čir-* has the meanings ‘to speak’ and ‘to shout’. Related are Semitic **t_Vrt_Vr-* for ‘to chat’, Egyptian *šsr* for ‘to speak out’, Western Chadic **čyar-* for ‘to cry out’ and ‘to explain’, Central Chadic **čir-* for ‘to shout’, East Chadic **čyačyar-* for a cry of a guinea-fowl. Proto-Afro-Asiatic **sim-* has the meanings ‘to call’ and ‘to speak’. Related are Semitic **šVmVy/w-* for ‘to call’ and ‘to give name’. Related are Berber **sVm-* ‘to call’ and ‘to name’ and Egyptian *smy* for ‘to inform’ and ‘to report’. East Chadic **sim-sim-* means ‘to whisper’. Low East Cushitic **sim-* means ‘to welcome’. Proto-Afro-Asiatic **ya-* and **yi-* have the meanings ‘to call’ and ‘to speak’. Related are Egyptian *Īy* for ‘saying’, Western Chadic **yV-* for ‘to call’, Central Chadic **ya-* for ‘to call’ and ‘to say’. Related are East Chadic **yV-* with the meanings ‘to call’ and ‘to say’, Central Cushitic (Agaw) **yV-*, which means ‘to say’, Saho-Afar **ya-* and **yi-* with the meaning ‘to say’, and Low East Cushitic **ya-* for ‘to say’ and ‘to shout’. High East Cushitic **yV-* means ‘to say’, South Cushitic **yV-* means ‘to say’ and Omotic **yV-* means ‘to say’.

3.4. Speech in Proto-Sino-Caucasian languages

Proto-Sino-Caucasian $*=\bar{e}mc\check{U}$ has the meanings ‘to say’ and ‘to tell’. Related are roots in North Caucasian ($*=[\bar{i}]mc\check{U}$), Sino-Tibetan ($*cho$), Yenisseian ($*\check{z}as-$, $*\check{z}es-$), Burushaski ($*\acute{s}-$, $*sen-$), and Basque ($*\acute{u}se-n$). Proto-Sino-Caucasian $*HiL\check{V}$ has the meaning ‘to say’. Related are North Caucasian $*HiL_V$, Sino-Tibetan $*l\check{a}$, Yenisseian $*\check{V}(\check{z})\acute{l}$, and Burushaski $*lte-$. Proto-Sino-Caucasian means $*h[\acute{c}]w\bar{a}l\bar{o}L$ has the meanings ‘to speak’ and ‘to sound’. Related are North Caucasian $*h\acute{c}w\bar{a}l\bar{o}$ and Sino-Tibetan $*\acute{c}(h)er$. Proto-Sino-Caucasian $*[p]VrV$ has the meanings ‘to speak’ and ‘to pray’. Related are Sino-Tibetan $*p(r)\check{w}H$, Yenisseian $*bar-$, Burushaski $*bar$. Proto-Sino-Caucasian $*Har\check{X}\check{U}$ has the meanings ‘to speak’ and ‘to shout’. Related are North Caucasian $*Har\check{X}U$, Sino-Tibetan $*\check{X}^wV$, Yenisseian $*huxV-$, Burushaski $*ha-n-$, and Basque $*er\bar{a}n$. Proto-Sino-Caucasian $*=V\eta V$ has the meaning ‘to speak’. Sino-Tibetan $*\eta a\check{H}$ / $*\eta a\check{k}$ and Yenisseian $*b-$ / $*-\eta-$ for ‘to speak’ are related. Proto-Austriac $*rV\eta$? has the meaning ‘to say’. Related are Proto-Austroasiatic $rV\eta$, Austroasiatic has the meanings ‘to tell’ and ‘to say’, Proto-Thai ron is used for ‘to pronounce’. Proto-Austriac $*lVw$ has the meanings ‘to speak’ and ‘to tell’. Proto-Austroasiatic $*law$ has the meaning ‘to tell.’ Proto-Thai $klaw$ means ‘to speak’. Proto-Khoisan $*\eta||a$ has the meanings ‘to say’ and ‘to tell’. Related are Proto-Bushman $*\eta||ah$ and Proto-Khoe $*\eta||a$. Proto-Khoisan $*kxU-$ has the meaning ‘to speak’. Related are Proto-Bushman $*kxU-$ and Proto-Khoe $*kxui$. Proto-Khoisan $*\neq[h]V-$ has the meanings ‘to speak’, ‘to converse’, and ‘to gossip’. Related are Proto-Bushman $*\neq\check{a}$ and Proto-Khoe $*|h\acute{o}-$.

4. Is speech a genuine concept or not?

4.1. Changes of meanings and concepts

We consider a concept genuine if it has no previous concept from which it derived. This is a generic feature of a concept for the determination of both the concept as a research object and the condition of any research. Concepts are absolute and not separable into different other concepts due to their nature of being the pre-theoretical idea of something. As we have seen in the case of the concept speech and related concepts, concepts represented by meanings of words can be related to other concepts. This relation is a semiotic-semantic relation.

We can generalize and distinguish between three cases of changes of meaning:

Case 1: Change of Meaning without a Change of Concept

Case 2: Change of Meaning with a Change of Concept Implemented in Meaning

Case 2: Change of Meaning with a Change of Concept Not Implemented in Meaning

4.2. SPEECH as a meta-concept or speech as a concept besides other concepts

First we have to discuss if it is possible to consider speech as a meta-concept. We assume that concepts are absolute and universal entities. So it would not be possible to divide them into other concepts that are actually identical in structure and function. But when we look at the etymological development in language families, or within a group of related families, we see changes from one concept to another representative of a concept. One example is the Borean Proto-root *WVKV*, which has the meanings 'to say' and 'to call'. Related are the Eurasiatic root **wV̥kV*, the Afroasiatic Semitic root **wV̥kH-* for 'clamor' and 'boast', and Sino-Caucasian root **=V̥xqV*, and the Amerind root **koʔe* with the meaning 'to say'. The Borean Proto-root *WVKV* represents the concepts of SAY ('to say') and CALL ('to call'). Related are the Eurasiatic root **wV̥kV*, the Afroasiatic Semitic root **wV̥kH-* for the concepts of CLAMOUR ('to clamor') and BOAST ('to boast'). The Sino-Caucasian root **=V̥xqV* and the Amerind root **koʔe* with the meaning 'to say' represent the concept of SAY. Assuming that SAY, CALL, CLAMOUR, and BOAST represent autonomous concepts, the meanings of the roots of the words in the different language trees are linguistic and semiotic representatives of the concepts. Considering SPEECH as a meta-concept, we can say that this meta-concept is represented in the sub-concepts of SAY, CALL, CLAMOUR, and BOAST.

SPEECH

SAY CALL CLAMOUR BOAST

SPEECH as a Meta-Concept and Sub-Concepts of SAY, CALL, CLAMOUR, and BOAST

Our preferred model is that concept exist without a hierachy. So we represent the concepts here as follows:

SPEECH SAY CALL CLAMOUR
BOAST

SPEECH and Other Concepts with Similar Meanings / Semiotic Fields

MEANING 1 SAY / CALL > MEANING 2 CLAMOUR and BOAST > MEANING 3 SAY

Change of Meanings as Indicators of Concept Change

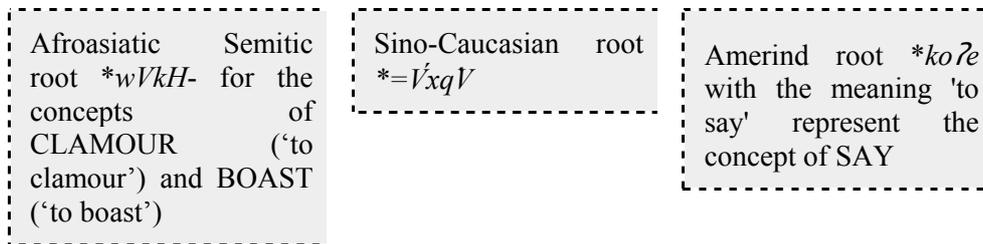
In this case we have to assume that a first Borean Proto-root *WVKV* exist representing the concepts of SAY ('to say') and CALL ('to call'). From this root derived the Afroasiatic Semitic root **wV̥kH-* for the concepts of CLAMOUR ('to clamor') and BOAST ('to boast'). From this derives the Sino-Caucasian root **=V̥xqV* and the Amerind root **koʔe* with the meaning 'to say' represent the

concept of SAY. This assumption can only be justified in the case that we had evidence for the successive development of these family trees.

We favor the assumption that the hypothetical Borean Proto-root *WVKV* is the hypothetical processor of the roots of the different language trees.

Borean Proto-root *WVKV*

Representing the concepts of SAY ('to say') and CALL ('to call')



Hypothetical Borean Proto-root *WVKV* as the Hypothetical Processor of the Roots of the Different Language Trees

We can distinguish between the following associations of meanings of the concept of *SPEECH*:

- Speech as Thinking
- Speech as Sound
- Speech as Action

SPEECH as Human Value

- Speech as Interpretation
- Speech as Mutual Conversation
- Speech as Stylistic Form
- Speech as Monologue
- Speech as Mythos
- Speech as Narration

SPEECH as Communicative Value

Associations of the Concept of *SPEECH*

4.3. Conclusions

Considering the fact that in some cases the concept of speech as represented by words is etymologically related to other concepts / meanings that are independent, e.g. the concepts / meanings 'think', 'say', 'call', and 'shout', we can assume that the concept of speech is represented by a related semantic framework of meanings at the documentary linguistic level, which enables us to interpret the concepts from a theoretical semiotic perspective. The question 'Where does speech come from?' can as a general question be answered at the semantic level as unanswerable, since a concept requires *per se* no previous legitimation as a close and autonomous unit. From a historical linguistic perspective we have evidence to assume that a genetic development from more primitive forms of articulation to speech and developments from speech to higher and more specific forms of articulation exist. We assume that language as speech, the first and communicative form of language, developed from a permanent replacement of one element of speech in one language by another element of speech in another language. This element could have been a word or a meaning. The historical process of the development of speech to a language is thus a process we find can be reconstructed in the comparative studies of different languages. We assume that the dominance of meanings in a language is not only a linguistic feature, but results from the social and cultural development of the area where languages in form of speech, spoken language, exist. The concept of speech is universal, but its linguistic history of meanings indicates that changes in the genuine understanding of speech occur.

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