

Iconographic Alphabet Remain the Best Form of Expression and Comprehension of Speech. How the Language Characteristics and Writing System Affects Brain Processing of Speech?

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Abstract

Albanian language idiom represent one of the oldest surviving member of the Paleo-Balkan or Illyricum, so called Indo-European family languages.

Classified as one of oldest language alive Albanian idiom it has been written in different alphabets during her existence, at least 10 alphabet have been used to expressed the written Albanian language [1].

Ancient form of inscriptions such as hieroglyph and iconographic expression of written speech have been tried to be translated with Albanian language [1,2].

Iconographic is a part of hieroglyph alphabet, the earliest known writing dates to shortly before 3000 BC and is attributed to the Sumerians of Mesopotamia.

Believed ancient form of Albanian language are words that have a correlation of phenomena of action and sound knowing as phonosymbolisem or phonosemantic, richness in sound or Vowels, short words using one vowel words and abilities for forming new lexeme.

After hodotopical and dynamic model of speech processing studies the forms of speech that correlate picture, sound and meaning are the best form of speech acquisition and brain processing.

In this view the iconographic inscription is the best form of written speech to express Albanian language.

Keywords: *Albanian Language; Speech Processing; Phonosymbolisem; Phonosemantics; Neuroscience; Neurocomputational Speech Processing; Albanology; Linguistics; Iconographic Writing*

Introduction

Human speech is a well-learned, sensorimotor, and ecological behavior ideal for the study of neural processes and brain-behavior relations.

Using modern neuroimaging as functional magnetic resonance imaging (fMRI), Computational Neuroscience model and DES (Direct electrical stimulation) in awake patients undergoing brain surgery, the potential for investigating neural mechanisms of speech has increased [3].

Studying Albanian language has a particular importance since it represent one of the oldest surviving members of the "Balkan" and Paleo-Balkan languages have each been proposed as the ancestor of modern Albanian as proto-Indo-European model which is widely accepted.

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Figure: Feston Minoan Crete 1860 – 1600 B.C.

This ancient form of iconographic writing represent 53 letters it is been compare with Albanian alphabet of “Dhaskal Todhit” or alphabet of Elbasan (XVIII-XIX) [1,2].

Certain characteristics of Albanian language such as particular words that represent a correlation of phenomena of action and sound are particular old and believed to be ancestors of proto- Albanian.

Other characteristics of Albanian language are richness in vowel small words and the capability to form compound word or new lexeme.

It is been noticed that many words in Albanian correlate with melody or sounds of a particular phenomena... instance ‘shi’ (rain) with the sound of falling rain, ‘bubullimë’ (thunderclap) with that sound, ‘ha’ (eat), ‘lumë’ (river), ‘kap’ (capture), ‘shtyp’ (press), ‘lidh’ (connect), ‘ujë’ (water) and so on...recognized in terminology as phonosemantics and phonosymbolism.

Another phenomena are compounds words, in linguistic a compound is a lexeme that consist of more than one stem. Compounding or Word -compounding refers to the faculty and device of language to form new words by combining or putting together old words.

In the case of compound words demonstrates the dynamic and flexible mechanisms supporting lexical processing in the brain.

Expression of speech with this characteristics with figures or hieroglyphs might be the best form of written expression and comprehension.

The language affects an ethnic group particular thinking, brain processing of speech, plasticity and capabilities of further learning.

Method

Neurocomputational speech processing and computer simulation of speech production and perception using artificial neuronal network models or neuronal pathway is another approach to understanding how speech and in particular phonosemantics and lexeme are better absorbed or networked since the speech perception is multimodal, which means that it involves information from more than one sensory modality.

Quantitative neurocomputational modeling of speech processing are DIVA model and the ACT model- a improved and recent version of the traditional first.

The ACT quantitative neurocomputational model organized in neuronal maps which are in essence an assembly of model neurons i.e. a phonemic, phonetic, motor plan, or sensory state. These maps are located in specific cortical regions [4].

Using axonal DES (Direct electrical stimulation) in awake patients undergoing brain surgery is proposed a hodotopical (delocalized) and dynamic model in processing the language ; this model contradict the traditional modular and serial view [5].

In this networking model brain processing is not conceived as the sum of several subfunctions, but results from the integration and potentiation of parallel-though partially overlapping-subnetworks.

This hodotopical account improves our understanding of neuroplasticity [6].

Result

According to hodotopical model, following the visual input, the language network is organized in parallel, segregated (even if interconnected) large-scale cortico-subcortical sub-networks underlying semantic, phonological and syntactic processing [5]. Words with expressed as picture, a sound and meaning is correlated as input. While In the case of meaningful small words making other compound words are compatible with this dynamic model.

Following an input that correlates pictures or iconographic inscription, sound and meaning or an lexeme composed of small meaningful words the most important neurofunctional principle the Hebbian learning, i.e. a synaptic link between two model neurons is strengthened if both or more neurons are activated during the same time interval is fulfilled.

As resent study has concluded using functional MRI, Brain tend to learn words as picture.

Discussion and Conclusion

Hieroglyph writing associated with Phonosymbolism, small words and forming compound lexemes characteristics of Albanian language makes the model compatible with modern view of hodotopical dynamic speech processing as best expression of speech.

Taking in consideration the tree of languages and Albanian as proto Indoeuropean although is considered as language branch unrelated to the other is incorrect and studies are undertaken to prove its fundamental role in other languages "sprachbund".

A critical view is made of Indo-European model of languages which did not take sufficient account of Albanian, the only living testimony of Pelasgic and the view of Albanians and Albanian language as the descendant of the most ancient population of Europe, the Pelasgians.

The ancient Iconographic writing express the oldest form of expression of Pelasgians speech, with modern Neuroscience brain processing techniques prove to be the best form of written language.

The language characteristics and the writing system affects the ethnic group thinking process and ability of brain processing, including the ability for further learning [7-11].

Bibliography

1. Robert Elsie. "Albanian Alphabets: Borrowed and Invented" (2017)
2. Niko Stylos. "Albanian Poem at least 3600 years old". Albanian Newspaper "Shqip" (2012).
3. Gracco VL., *et al.* "Imaging speech production using fMRI". *Neuroimage* 26.1 (2005): 294-301.
4. Bernd J Kröger., *et al.* "Associative learning and self-organization as basic principles for simulating speech acquisition, speech production, and speech perception". *EPJ Nonlinear Biomedical Physics* 2 (2014): 2.

5. Duffau H., *et al.* "A re-examination of neural basis of language processing: Proposal of a dynamic hodotopical model from data provided by brain stimulation mapping during picture naming". *Brain and Language* 131 (2013): 1-10.
6. Hugues Duffau. "Stimulation mapping of white matter tracts to study brain functional connectivity". *Nature Reviews Neurology* 11.5 (2015): 255-265.
7. Rozycki W. "Phonosymbolism and the Verb cop". *Journal of English Linguistics* 25.3 (1997): 202-206.
8. Millaku Sh. "The Compound Noun Science Academy of Albania" (2015).
9. Hoti A. "The word formation in the works of Ëngjëll Radoja and Pashko". University of Shkodra "Luigj Gurakuqi" Faculty of Social Science, Department of Albanian language (2014).
10. Gilles De Rapper. "Pelagic Encounters in the Greek-Albanian Borderland. Border Dynamics and Reversion to Ancient Past in Southern Albania". *Anthropological Journal of European Cultures* 18.1 (2009): 50-56.
11. Fjalori i gjuhës së sotme Shqipe (The Dictionary of Albanian language).

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