Phonosemantics: Ongoing Issues and Modern Perspectives

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Abstract. This paper deals with the most burning issues of phonosemantics, iconicity, and sound symbolism. The problem of iconic nature of a linguistic sign is capturing the attention of more and more linguists. Widening the perspectives of phonosemantics and studying it not only as phoneme semantics but as prosodic semantics as well, could open new challenges for the linguists in the future. As a matter of fact, segmental phonology has already gathered a vast majority of works dedicated to sound symbolism, whereas suprasegmental phonology lacks thorough investigations of the iconic nature of all the prosodic features.
Keywords: phonosemantics, iconicity, sound symbolism, mimetics, semantics of prosody.

Introduction. During the last decades, a central *Saussurean* hypothesis about the arbitrariness of a linguistic sign [34] was reinterpreted by a number of scholars due to rising amount of crucial cross-linguistic experiments in the field of semiotics, phonology, phonetics, and semantics. They have produced evidence for the fact that the linkage between the signifier and the signified can be arbitrary as well as natural [2; 6; 12; 15; 21; 22; 28; 30]. What is more, these two principles harmoniously intermingle and work well in any language and their both roles in this system are immense. This has produced a great number of works worldwide connected with iconicity which has also provoked various views on its theoretical foundations. That is why, **the aim of this paper** is to connect different traditions concerning the fundamental issues of phonosemantics and in connections with this to highlight its main perspectives fur the future studies.

Methods of research include general scientific methods such as induction, deduction, analysis, synthesis, analogy and comparing. This has provided a solid ground for studying the current stage of the progress of phonosemantics, comparing its approaches, analysing them and suggesting the perspective directions for the development.

Review of publications on the subject. Empirical studies and experimental data accumulated till now show the great scientific potential of iconicity i.e., a natural resemblance of a meaning and a form in a language. Besides, some linguists argue that this is not just a marginal peculiarity but a fundamental feature of a language [15; 30] and it undoubtedly contributes to the general theory of a language origin [16].

It is commonly accepted that the terms *sound symbolism* and *mimetics* also refer to iconicity being used as synonyms and showing "properties of the external world" [8, p. 443], for example, onomatopoeia or synaesthesia. Talking about ideophones, they are considered as sound-symbolic units of mainly Sub Saharan African, East Asian, and Native American languages [35]. According to Voeltz and Hatz [38], ideophones, as a universal category, feign events, emotions, and perceptions by means of language but usually in oral speech and together with gestures.

Within the frame of this article, I would like to consider some theoretical issues concerning iconicity, sound symbolism, and phonosemantics. Indeed, West European and American linguistic traditions typically stick to the already well-developed term "sound symbolism" as a blanket notion for a motivated nature of a linguistic sign [30], while East European linguistics has already established a new cross-linguistic study called Phonosemantics, which does not seem to be fully acknowledged by other scientists from Western Europe and the USA. This discipline combines the results of phonetics as well as semantics, lexicology, and stylistics [2] and studies sound iconic system of a language explaining the peculiarities of how sounds can express inherent meaning [13]. In his fundamental work, Voronin [2] outlines main theoretical bases including aim, subject, principles, and methods of phonosemantics. He also gives a sophisticated classification of sound imitative and sound symbolic subsystems of a language. Following Voronin's scientific inheritance, a lot of linguists also treat phonosemantics as phoneme semantics [22; 13]. Furthermore, by now most of the phonosemantic works were dedicated to generally phonological means of segmental level i.e., phonemes or phonaesthemes and only a few [1; 3; 4] mentioned that suprasegmentals can also be studied within the phonosemantic theory.

Discussion. Referring to the great semantic potential of all prosodic features, I am completely sure that it's high time to widen the horizons of phonosemantics and to investigate it not only as phoneme semantics but as prosodic semantics as well. Undoubtedly this would open up new perspectives in studying symbolic features of suprasegmental units and also contribute much to the general linguistics itself. Furthermore, all these features will only benefit from investigating them all together and forming a so-called phonosemantic complex.

The rich miming potential of suprasegmentals drew the attention of some American and West European scientists though. They argue that under certain conditions intonation or any other unit of prosodic phonology (tempo, speech melody, rhythm, pausation [33] can also exhibit some sound symbolic features [7; 27; 36]. It is really important to understand that symbolic potential of intonation lies in very close connection with lexical meaning, because the meaning of intonation actually superimposes on lexical meaning by either altering it or making it more vivid. Under the circumstances of close isomorphism of lexical meaning with prosodic meaning (and thus its formal representation), the iconicity of intonation becomes well-established. In other words, symbolic intonation expresses main meaning of a sentence directly through prosodic means. It makes an utterance also sound more natural. Hence, a linguistic sign becomes phonetically motivated if its lexical meaning directly correlates with its prosodic feature as well as a relation of signified and signifier.

Additionally it must be mentioned that isomorphism of a meaning and a form should not be searched in every word in a sentence, for it's essential to find a key word or words that are crucial for understanding of the whole utterance. Their semantics can correlate with some (usually not one) prosodic features which by means of their formal representation highlight a main gist of the utterance, making it sound more figurative, expressive and emotional.

Supporting the sound symbolic conception, in his serious research Perlman et al., [28; 29] shed light upon iconic features of **tempo** in speech. In particular, the linguists posit that speech rate as an iconic gesture can vary in accordance with the speed of actions and events they are depicting. It turns out that in spontaneous speech people intuitively tend to speak faster talking about quick events and to speak more slowly talking about slow and passive events, respectively. The inherent relation of semantics and tempo can be fully manifested in speech which describes the speed of events, actions etc. It accounts for the fact that together with asemantic, tempo can function as semantic characteristics of a syntagm, because of its rich potential to serve as an indicator of the meaning [5, p.136-137].

Significant results were gained by Nygaard, Harold and Namy [24] revealing that **speech melody** can intensify and disambiguate the meaning. According to their acoustic analysis, words produced in IDS (infant-directed speech) possessed consistent prosodic cues congruent to the meaning, for example, the usage of high fundamental frequencies, their greater variability, and high amplitude was characteristic of the positive meanings, while negative ones were expressed with lower fundamental frequencies, lower variability, and correspondingly lower amplitude. Thus, Nygaard et al., state that prosodic markers in speech work as signals that help to discern the meanings. With this connection, it's not surprising that most of declarative sentences possess falling intonation whereas for interrogative sentences it is usually rising. The explanation of it can be found in symbolic connection of rising intonation with rising of the eyebrows while asking. Falling tone can be attributed to the movement downward with a fist [39, p.12].

Similar conclusions about the association of **pitch** with vertical space were made by Clark, Perlman, and Falck [7]. They also make an attempt to explain why people tend to naturally link verbal gestures with particular ideas or concepts. And the reason for it may lie in the human's ability to perceive the world through conceptual metaphors that are connected with vertical space in particular [19]. Talking about the concept of size Perlman et al., [29] validate that it can also transmit iconicity in view of the fact that particular classes of speech sounds can build regular associations with the expressions of size. As an example, people usually correlate high pitch with smallness and low pitch with largeness [22; 26; 27]. Considering this from an ethological viewpoint, Ohala asserts that this phenomenon has got a connection with the animals' behaviour and namely, when an animal pretends to be or is really threatening, it uses low-pitched vocalizations, whereas submissive and not aggressive animals usually produce high-pitched vocalizations. Moreover, animals can use all the possible means of looking bigger (by hair or feather erection, raising the back, tail etc.) to threaten their rivals and to show dominance. Contrary to this, if an animal wants to show submission, it will try to look smaller than he even can be (by hiding a tail, wings, ears and all other prominent parts of a body) [26].

Regarding a pause as a prosodic boundary [23], I assume that **pausation** can also bear non-arbitrary meaning. From this point of view, a pause becomes iconic in case of a zero signifier and a particular signified which meaning is close to the concept of SILENCE, for example. A well-developed theory of iconic pause is presented in the study of Ephratt [10; 11] calling it *eloquent silence*. In her research, Ephratt provides examples from Shakespeare's works and reveals that eloquent silence can express more than any words. It can usually stand for the meaning of joy, sorrow or other emotions and attitudes, the choice of the speaker to fall silent and even can possess the meaning of death. In dialogues, eloquent silence can display its iconic and pragmatic nature in the most effective way. Supporting this conception, the researcher strictly distinguishes among eloquent silence, stillness and pause. Ephratt [10] states that stillness must be regarded as the absence of sound, opposite to noise [18] and pauses are "defined not by their content or referents but by their sequential nature: arrests between specific actions" [10, p.1911]. In addition, pauses can be non-communicative if they are used for breathing and for psycholinguistic cultural purposes. On the contrary, eloquent silence is understood as "an active means chosen by the speaker to communicate his or her message" [ibid, p. 1913]. In my opinion, such distinction of above-mentioned terms (eloquent silence, pause, and stillness) is dictated by the mainly pragmatic point of view. Actually, pause in phonetics and phonology is not only restricted to drawing attention between actions or taking time to breathe. If we assume that prosody can have iconic nature than why pause cannot be iconic as well. Understanding eloquent silence as an iconic pause being a prosodic feature could allow us to add eloquent silence to the phonosemantic means of a suprasegmental level.

As far as **rhythm** is concerned, it is an inseparable part of the utterance and can also manifest its iconic nature in complex with the appropriate pitch movement, tempo or speech rate, pauses and syllable lengthening [31]. Prsir argues that all abovementioned units contribute much to the rhythmic organization and, as a result, can reflect ideas expressed by the speaker. He claims that iconic interpretation of rhythm can be studied not only solely at a local (word or phrase) and a global (utterance or a series of utterances) level but also in combination of both of them as well. All the variations of prosody affect the way how one will interpret the meaning of the utterance. By engaging prosodic iconicity the speaker makes his discourse more attractive and memorable.

The iconic nature of **sentence stress** can be connected with the Effort Code of Gussenhoven [14]. It is supposed that a person puts more energy to those words in an utterance that he believes are important and bear informational meaning. In addition to this, I suppose that the natural resemblance between the form and the meaning can reveal itself in the cases when a key word in a sentence is connected with semantics, for example, close to the meaning of "stress" or "attack". In this way, it will cause a correlation of acoustic characteristics of a word with its

semantic side [1, p. 53] which will create all necessary conditions for the form to mime the meaning.

Undoubtedly, the investigation of a semantic side of sentence stress is hardly possible without taking into consideration the pitch span, pitch register, and also **loudness**. Its functioning in complex with other prosodic features can also show motivated linkage. The foundation for studying the iconicity of loudness can be built on the Ohala's theory of the Frequency Code [14; 27] which has got an outlook for future investigations. Close connection of sentence stress with loudness in creating prosodic symbolism is also corroborated by the fact that they both fulfill the same function of highlighting the most essential part of the intonation group. By functioning together they can also create an acoustic unity which will be isomorphic for its formal representation.

Finally, voice timbre or as it is called by most of English-speaking linguists **voice quality** is perhaps the most versatile prosodic feature. It reflects the emotional state of the speaker varying "from soft and gentle to harsh and unpleasant" [33, p. 35]. Though rich miming potential of voice quality is not properly investigated so far, it is clear that speakers rather frequently tend to subjugate their voice to the meaning of an utterance. This process involves active work of vocal organs where phonation (the use of laryngeal system) occupies the most vital part [20, p.184-200], for its different types can mime different semantic filling of an utterance. It is worth mentioning, the semantic potential of voice timbre can establish itself in a complex investigation of other prosodic characteristics. Being very dependent on the emotional side, any person can change his or her voice quality according to the message he or she is transmitting.

Unfortunately, special studies of iconic features of such suprasegmentals as loudness, voice timbre, and sentence stress are practically not presented till this day, but there is a strong belief that they all possess enormous potential to iconicity. I suppose that their thorough investigation could fully shed the light on the iconic potential (perspectives). Hypothetically, under certain conditions, all of them can show motivation and direct connection to the meaning. It will be expressed in a way that their formal features will mime the meaning i.e., the signified will influence the signifier by making him looking alike. This opens new perspectives for the future of linguistics and forms new directions in the study.

Conclusion. The rising interest of some linguists to the semantic aspect of prosody has entailed new studies in the sphere of iconicity. The linguistic approaches to some issues in works of East Europe differ from these of America and West Europe which tells upon theoretical grounds of iconicity and creates some kind of ambiguity in the iconic terms. Although there are dozens of works dedicated to the problem of a natural resemblance of a meaning and a form, there is no general sophisticated theory that would include all the above-mentioned contributions into one. I strongly believe that introducing worldwide the discipline of phonosemantics which studies iconicity on both segmental and suprasegmental levels could help create one general theoretical basis for the linguists all over the world. In this paper, I have made an attempt to organize some linguistic researches into a unified theoretical plane and to build a bridge between Eastern and Western theory of iconicity. This could result in prolific cooperation and more works on the iconicity of suprasegmentals. In addition to this, the issue of building up a complex methodology of studying phonosemantic units still remains open to investigation and could also capture scientific attention in the future. In this article, I have argued that phonosemantic (iconic, sound symbolic) meaning emerges on the assumption of isomorphism of sound form and content. On the phonological level it may not necessarily involve only phonemes or phonaesthemes since non-segmentals also possess a high potential to non-arbitrary iconic realisation. That is why they must be considered as phonosemantically relevant. Including suprasegmentals to the objects of phonosemantics could highly extend the possibilities of this study. Though the number of researches in suprasegmental phonosemantics is extremely low, it doesn't diminish its topicality. I made an attempt to show that speech melody, tempo, pausation, and rhythm can express the meanings through the unity of the signifier and the signified bearing natural resemblance. Although other prosodic features (loudness, voice timbre and sentence stress) haven't got the separate in-depth development of their iconic nature, it is only the matter of time to start investigating them which can also be the aim of future studies.

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