Abstract

In today’s inter-and transdisciplinary context, speech therapy claims its double state of the art and science of language education, in its many forms of manifestations. Speech therapist’s concerns converge to vocal register, the support element of speech, song, cry, crying or laughing. On this scale, the speech therapy specialist is interested in understanding the physiological mechanism of anatomical phonation in deciphering voice ethiopathology, of its therapy and equally, of the patient knowledge through “voice print”.

The value of psychopathological voice semiology, in speech therapy activity, was addressed through a relational hexadic systemic model that in an X-ray structural approach to speech therapy voice disorders, led to the identification of sixteen actionable ways of the psychopathological semiology assessment of phonation.

Keywords: speech therapy – the art and science of language education, systemic approach, hexadic relational speech therapy, psychological significance of voice, pathological significance of voice, voice print.

1. SEVERAL DIFFERENT HEADINGS FOR THE CONCEPT OF SPEECH

The language, a phenomenon of great complexity, admits a variety of ways dependent to pluri- and multidisciplinary approaches; linguistics and psycholinguistics, psychology, semiotics, logic and rhetoric, drama and musical art, phonology or speech therapy approaches or works sequentially – in an interdisciplinary effort – to deciphering the mysteries of language in terms of production, forms, functions, its development or disturbance.

Among the already invoked disciplines, speech therapy claims its status of science and art (Figure 1) which deals with education.
(paidea) speech (logos – word). The field of study is represented by the dysfunctional language (deviations which seriously undermines intra-linguistic communication). Dysfunctions dealing with speech therapy are fixed and resistant language disorders. They affect communication (as trainers and content), relationship and cognition.

1. Speech therapy: hypostases and interconnections

More specifically, speech therapy has carefully been studying the language, its disorders prevention, correction and it has ensured favorable conditions to social integration of people with visual language disorders. “Speech therapy – Emil Verza notes – is a science, on the one hand, a theoretical pedagogical discipline, stemming from the need to solve the complex problems of language, with a special role in mental life and in shaping the personality of each individual, and on the other hand, a discipline with a strong applicative language aimed at educating speech disorders, optimizing communication, and restoring the specific human relations” (Figure 2).

2. Speech therapy as interpreted by Professor Emil Verza

From a hexadic-relational systemic perspective (shown in Figure 3) the speech therapy activity could be defined as a set in action deliberately designed and structured with components and interactions that work in an integrated way against its achieved objectives: language pathology study; primary and secondary prevention; speech disorders therapy.

3. The hexagonal generic type of speech therapy intervention

In the broad spectrum of language pathology (denominated as a reference of speech in addressing systemic-hexagonal action – “R”) the following types are included: spelling
disorder (dislalia, rinolalia, dysarthria) arrhythmia and fluent speech (stuttering, logo-neurosis, tahilalia, aftongia, bradilalia, Korea based disorders); voice disorders³ (aphonia, dysphonia, fonostenia, pathological mutation) reading-written language disorders (dyslexia-alexia and dysgraphia – agraphia) neurological substrate disorders (aphasia and alalia) language development disorders (elective, voluntary, retard psychogenic mutism, or delay in the overall development of speech, verbal dysfunction in infantile autism of Kanner type, from the intellect disability syndromes etc.). language- disorders based on mental dysfunction that profoundly affects, usually irreversibly, the language (dislogia, ecolalia, jargonphasia, bradiphasia and so on).

2. THE PSYCHOLOGICAL AND PATHOLOGICAL VOICE SIGNIFICANCE

In general, voice – in support of speech, song, cry, laugh or weep – serves, on the one hand, to interpersonal communication, on the other hand, to the psychological and biological being. The normal pathologic size, the doctor or speech therapist, endowed with a psychological sense, finds in the subtle voice of the caller a valuable and subtle psychological diagnostic tool for the voice – through all its features (timbre, intensity, length, tone, color) – can provide information:

- on some biological aspects of the speaker (sex or certain sexual deviations and, in general, its vital tone level);
- on the characteristic features of character and temperament, feelings or moods of your soul’s moment;
- on the presence of a wide range of disorders, carried out on the axis from simple to complex.

From a psychological point of view, through corroborating modulations, timbre or sonority, the issuer’s voice displays multiple semiological meanings. In this sense, the doctor Aurel Păunescu-Podeanu⁴ points out that the voice may betray: shyness or confidence, self-confidence; audacity, boldness, courage sincerity or hypocrisy emphasis or simplicity; affection, coldness or indifference; rudeness or politeness, kindness firmness or indecision; gentleness, goodness or, conversely, toughness, maliciousness; silence, thanksgiving or fear, unrest, bitterness force, energy or fatigue, apathy; admiration or contempt.

Under pathological report, certain features may indicate different noise disturbance from the easy forms to the serious ones, with organic, functional or psychiatric etiology. We present some benchmarks of various disorders of voice symptoms, described in detail by the university professor Emil Verza in Volume II of his treatise on speech⁵: phonastenia characterized by an unpleasant stamp, irregular verbal inflections, low intensity; micro-phonie, respectively macrophonia expressed by a very low or strong exceedingly voice intensity; stridency voice also called “head voice” the sounds are emitted in a high register; hoarseness voice seen as a rough, unclear, incomplete and “broken” voice inspired/blown voice sounds hard to be deciphered; nasal
voice, monotone, guttural, arrhythmia pathological mutation of the voice appears uncertain, oscillating with variable frequency high and serious tones disodias (sung voice disorders) customized by stretching low voice, a sudden transition from one register to another, a deleted voice, loss of the sung voice aesthetic qualities.

3. THE VALUE OF PSYCHOPATHOLOGICAL SEMIOLOGY VOICE IN SPEECH THERAPY ACTIVITIES

To address the psycho-pathological meaning semiology voice in the speech therapy enterprise it may be used to customize the generic hexagonal type model of speech therapy intervention (Figure 3). We use it because it allows:

a) X-ray structure for multiple appearances of speech therapy approach to voice disorders, represented in figure 4;

b) Highlighting different ways of connecting the dyad “VR” (the value of the speech therapy action and speech disorders).

4. THE HEXAGONAL TYPE MODEL OF SPEECH THERAPY INTERVENTION IN SPEECH DISORDERS

Actionable sub-methods resulted from the reading of the systemic-hexagonal scheme “AMRVBS” corresponding to speech therapy, as follows:

a) the binary relationship itself (“VR”) displays a first actionable sub-method – the evaluation of speech disorders semiology as an activity in itself, independent of the agent (speech therapist), a method of speech therapy intervention, beneficiary or working methods;

b) four actionable triadic schemes: “ARV”, “MRV” “RVB”, “S VR” in which the dyad “VR” goes hand in hand with one of the other determinants of speech activity, (depending on the engaged variable – agent / actionable modality / beneficiary / methods) specific customizations of the generic rating action of semiology phonetic distortions evaluation, for example, the triangle “ARV” emphasizes subjectivity / orientation that requires a specific agent. At the limit, we find as many evaluations of speech disorders as many “singers” initiate this process.

c) six tetrad methods “AMRV”, “ARVB”, “ARV S”, “MRVB”; “MRV S”, “RVBS”, the psycho-pathological evaluation materializes the semiology according to dyadic relationships which conjugates with (agent and beneficiary, agent and patient, speech therapist and methods, actionable method and patient, actionable method and adopted strategy or beneficiary and strategy); for the scheme “ARVB”, for example, we speak of psychological evaluations or pathological distortions of a person’s voice, spontaneously, intuitively, which takes place at the first contact with the speech therapist, depending on the
ability to interpret them without articulating a specific investigative approach and without resorting to other diagnoses means (history or the orthophonic examination results);

d) four pentagonal schemes “BRVAM”, “PMRVS”, “ARVBS”, “MRVBS” more concrete actionable methods of proper speech therapy practice because, in these cases, only one variable is ignored. For the “ARVBS” model the relevance of the psycho-pathological semiology of an individual patient’s voice will be dependent to the knowledge/experience of the speech therapist and selected for relevance means to identify the disorder.

e) For the hexadic model itself (Combination “AMRVBS”) resulted from the simultaneously-convergent of the engaging six parameters; the relationship “RV” is in conjunction with the other four determinants proper to any speech therapy practice, giving account of the value of psycho-pathological voice semiology for the infinite effectively variety of actionable forms.

Starting from the premise that voice, through its specific features (timbre, intensity, tone, color), as well as the “fingerprint”, is strictly individual, such effective action, the speech therapist, as well as the doctor or psychologist, can also use the “voice print” to know the patient, regardless of his therapy target: dilexo-disgraphia correction, the recovery of the language pronunciation delay, pronunciation therapy or that of the specific noise disorders.

**Endnotes**

2. Configuration obtained by customizing the hexadic situation acted as a paradigm in the analysis of “cosmoidals” presented by its author, the logician Petru Ioan in *Education and Creative Logic Perspective “Situational”*, Didactic and Pedagogical Publishing House, Bucharest, 1995, p. 11.