The Origin of the Chewing Method.

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Frequently I have been asked by friends and former assistants for the "story" of how I discovered the chewing method. Whenever this occurs, I find myself in a predicament. For only a few of the details are clear to me.

I had always been distressed to note that the art of singing and the art of speaking were taught by all kinds of synthetic methods. By "synthetic" methods I mean those that attempt to achieve a harmonious functioning in several steps. The functions which "constitute" voice and speech are first separated from each other, as far as that is possible, and then connected with each other. In almost every handbook of physiology or pathology of speech and voice, voice and speech are considered as compounds, consisting of breathing, phonation, and articulation. Of course, this way of analyzing functions is neither a mistake nor a special hobby of the writers of these books. Analysis is indeed one of the fundamental ways of thinking, especially of scientific thinking.

Although, when looked upon from a philosophic viewpoint, the whole world is a unity, our mind divides that unity into parts. And although each part is in itself a unity, the mind divides the part into further parts, and so on. There is another procedure, synthesis, which somehow strives at restoring the unities which have been broken into parts by the analytic mind. This procedure puts together the analytically found parts. Yet, a sum of parts is still only a sum of parts, while a unity is a unity, and not a sum. We, as human beings, have the ability to understand that a sum of parts is not a unity, but an apposition of one part to another. On the other hand, we are capable of feeling what a real unity is, perhaps because we feel ourselves as a unity, despite our knowledge that we consist of separate organs or parts—legs, arms, head, heart, etc. This two-fold aspect of everything encountered in life, namely as a unity and also as

a sum of parts, makes it understandable that we can learn, for
example, how to write fluently by first learning letters; that we can learn to dance rhythmically, harmoniously, as though our bodies were in constant unified flux, although we learn single steps one at a time.

One may then ask, why was I opposed to teaching voice and speech by first training the partial functions separately, and then joining them into a unity? There are two reasons for that opposition. First, not every person reacts as well to a synthetic as to a "wholistic" method. For example, in the case of dancing, much depends upon whether a person is taught single steps or is taken by the teacher immediately into the rhythm of dancing. There are those who learn better in the analytic-synthetic way; others who learn more easily by being offered the whole. It may even be that a person belongs to one group in learning one subject, and to the other, in learning another. Some children learn reading best when they are first taught the single letters, and later their combination into syllables and words. Other children profit more if they are first taught to read words, and then to analyze them into letters. If we call the one type the analytic-synthetic, and the other the "wholistic" type, we are justified in looking for a non synthetic-analytic method for the latter.

Undeniably such "wholistic" methods had existed for training singing as well as speech. If nevertheless I was looking for a new way, something about these methods must have seemed wrong to me. And, indeed, there were several faults: First of all, there was no way available for judging the congenital natural voice of an individual. Whether a singer or speaker was a tenor or baritone could not be determined reliably. The length of the vocal cords is not an absolute indication, chiefly because in some borderline cases not only the range but the natural resonance ("timbre of the voice") are the decisive factors, and furthermore, because two pairs of cords of equal length may be stretched by different muscles of different strength. With certain methods a baritone can be changed into a tenor and vice versa—in many cases not without detrimental consequences for the voice. Sometimes a singer or speaker has used his hitherto untrained voice in an unnatural way, thus changing the natural but unknown timbre into an unnatural one. Nobody could tell, at
least not without a long period of training, whether or not the range used and the accompanying timbre were in accordance with the congenital qualities of the voice or were the result of the replacement of those natural qualities by others. True, the diagnosis of hyperfunctions present could arouse the suspicion of such a replacement, but they could surely not establish more than a suspicion.

What was searched for, therefore, was a wholistic method that could at the very beginning remove all the debris that habit and training had put upon the natural function.

Furthermore, despite the analytic-synthetic type mentioned above, all kinds of artistic creations appear above all so much as indivisible unities, that it seemed questionable to me whether a synthetic method can possibly be as successful for the student as a wholistic one. Indeed we still lack psychological proof that the analytic-synthetic type is as gifted in artistic creativity as the wholistic type.

The discovery of the chewing method was certainly not achieved by any kind of step-by-step approach. Suddenly the every-day fact attracted my attention that we are able to talk and to chew at the same time. At that very moment, I knew that the looked-for unity method was at hand. It is clear that from the anatomic viewpoint, we have only one set of muscles and nerves at our disposal for both functions. In fact only one single center (in the anterior central convolution of the brain) dominates the movements of chewing and talking. It stands to reason that two different functions cannot be performed at the same time by one single part of the body. From this we can conclude that, as far as the movements of the mouth are concerned, what has been considered two functions, namely talking and chewing, must be one and the same.

Sometimes practical inventions precede corresponding scientific discoveries. The whole enormous chewing gum business is based upon the insight that these so-called two functions do not hinder each other. If one had to stop chewing gum in order to speak, or to stop speaking to chew, the chewing gum business
could hardly exist.

With this insight into the identity of talking and chewing I thought I may have found the origin of human speech, although it is a fact that civilized man speaks aloud but chews silently.

Travel tales had taught me, when I was still a boy, that some primitive people still chew aloud. My surmise that a famous African traveller and Egyptologist, Professor Czermak, might be able to confirm or deny such observations, prompted me to consult him. According to the information I got from him, some North African Fellahs, even though they live close to a more advanced culture, still chew so loud that one does not know when one approaches one of their huts, whether they are talking or eating. Professor Czermak also showed me an Egyptian hieroglyphic of a kneeling man pointing with one finger toward his mouth. This hieroglyphic means eating or speaking, and although it is connected with a so-called determinative, Czermak explained to me that hieroglyphics do not point to the place of common functions but to the common function itself. It would seem then as if the Egyptians were still aware of the identity of the so-called two functions. To come down to more recent times, a friend presented me with a copy of the book, "Kahlaona" (1). On page 94, describing present-day Esquimaux, it reads: "The three men attacked that meat with the rumblings and growlings of animals warning their kind away from their private prey."

There is another way to support a folk-psychologic theory, which the chewing-origin of human speech is. It consists in looking, in cases of degeneration, for certain phenomena which are supposed to have existed physiologically in a more primitive state of development. Such cases may be regarded as falling back into a lower and earlier stage of development. One example from Maxence Van der Meerds. In his "Bodies and Souls", one reads: "He spent the evening with Henri, the idiot son ... The idiot was incapable of ever understanding anything. At eleven o'clock Miss Dorothy, the nurse, came to get Henri, to put him to bed. She gave him his chocolate as usual, and the idiot chewed it with mumbling sounds of delight." De Jong (2) found that in the psychic equivalent of epileptic attacks the patient frequently is
seen to mutter to himself or to make chewing movement. Other examples in pathologic cases can be found in "The Origin of Human Speech" (3).

These few contributions (besides many previously published)

1 A verb with different end syllables, according to whether it has one or the other meaning.

In support of the theory of the origin of human speech in chewing, may show that to me the importance lies not so much in the question of how the method was found, but how the fundamental idea can be strengthened by ever more facts.

In my opinion no better proof can be found than the efficiency of the chewing method, as has been attested by the cure of many groups of disturbances of the voice and of speech. The almost instantaneous clearing up of a "lost" voice or of a broken voice (during or after the pubertal change of voice) and the favorable influence on many other troubles when they are treated with the chewing method, are most convincing experiences. These sudden advantageous changes could hardly be achieved if the method were artificial. One gets the conviction that the therapist is merely appealing to an inborn function which can still be activated easily.

References.

1. De Poncius, Guntram, in collaboration with Galantière, Lewis.
