CLINICAL EVALUATION OF MODERN AUDIOLOGY *)

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In this short paper I propose 1) to assess the relation, as I see it, between the clinic including clinical otology and between the modern audiology. 2) To present some of my observations and to point out some shortcomings — from the clinical point of view — in the most frequently accepted approach to recommending and fitting hearing-aids, with a view to suggesting a change in the proceeding, and 3) to suggest, for a selected group of the hard of hearing, a course of rehabilitation without or before offering a hearing-aid.

Thé clinic — and clinical otology in particular — is concerned primarily with the sick or handicapped personality as a whole, with all his immanent potentialities — no matter at which specified spot — as in our case, at the organ of hearing — the illness or defect be located. Audiology, on the other hand, is — without necessarily overlooking the personality — a primarily topical and emphatically technical specialty, notwithstanding the admittedly high standard it has reached. These two facts are, or should be, fundamental in assessing a sound relation between both, the clinic being supreme, the audiology subordinate, in its activities, to clinical viewpoints.

Kenneth O. Johnson, Ph. D. and audiologist, says: "It is doubtful if there would have developed an integrated field of audiology without initiative and support of otolaryngologists and otolaryngology". (Arch. Otol. 73, p. 38, April 1961). In worldwide practice, however, audiometry acts in most instances independently of the clinic, of clinical otology, and even of the perfectly designed "Audiologic Centers", if available. One observes all over the world that an abundant offer of hearing-aids occurs in a short-cut route from the hard of hearing — young and old — and/or from his relatives, right away to the numerous, widely commercially publicized workshops, richly stocked with hearing-aids of all sorts and types — through the medium of the audiologist, who performs the audiometric test and makes the recommendation of the most suitable hearing-aid and earpiece. Not seldom, in local practice, even the audiologist as such is omitted and the shop takes over entirely. This phenomenon is not an isolated one. It has its analogy in other medical branches, such as Orthopėdy, Optometry, etc. I do not voice any objection to this short-cut way as long as no harm is done to the deaf by it. But this obviating the clinical analysis is, in fact, frequently detrimental to the hard of hearing and therefore this proceeding is, when looked at from the vantage ground of social hygiene, not acceptable. Counteracting it has become a not negligible

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medio-social problem. I take this opportunity of asking the honorable chairman of this meeting to kindly logde before the Organizing Committee of this Congress my suggestion that this committee might contemplate organizing an international symposium, programmed to discuss the ways and means of counteracting this anomaly.

I pass to the last point of my paper: One of the most brilliant attainments of modern audiology is the progressive hearing-aid armed with the transistor. For all that there is no denying that, in spite of the growing popularity of this fixture, there exist cases — for instance, a young girl or boy at the start of their career — where resorting to a hearing-aid entails irrevocably some social degradation and will be met with a degree of uneasiness or even repulsion by the hard of hearing and/or by his relatives. It may, therefore, appear not to be unwarranted to ask if, by stressing some physiological and biological aspects and potentialities, we could not, at least in some instances, find out means of rehabilitation of the deaf without resorting — by following the line of least resistance — to the hearing-aid.

That, in some cases, surgery comes into play goes without saying and is indisputable, but what about some conservative measures, where surgery is out of the question? I propose to touch here only lightly, within the short time at my disposal, on this question. As a starting point, I turn to some analogy. We otologists had, once upon a time, become puzzled by observation of, anatomically as well as physiologically, amazingly perfect results attained by nature through a spontaneous healing process after cholesteatoma. We have learned from this act of nature, to some extent, how to proceed in surgery of chronic otitis media and in functional plastic surgery of the middle ear. In the same way, we ought to feel tempted to take advice from those well known cases of an admirable degree of acoustic efficiency attained by intelligent and highly receptive hard of hearing individuals, without their resorting to hearing-aids. By what means do such results come into effect? In order to answer this question we ought to realize that, important as it might be, the area whose reduced efficiency the hearing-aid is designed to amplify — an area which ends at the level of the labyrinthine fenestrae — is very limited indeed as compared with the very complex total acoustic area comprising a long chain of ganglions (nuclei) and neurons beginning at the spiral ganglion near the cochlea, passing through the brain-stem and ending far away in the central cortical and subcortical brain stations. It is reasonable to conjecture that the unabated, persistent stimulation of this wide area by stimuli reaching it, on all its neuronal cross roads collaterally — that is, outside the middle ear — are the paramount factor enhancing the general acoustic — or let me say, para-acoustic efficiency of these handicapped individuals. It appeared to me admissible to conclude tentatively that we might be able to attain results similar to those mentioned above — with some less spontaneously receptive types of the hard of hearing — by a course of our intentionally undertaken systematic series of stimulations of the said wide acoustic area. The trigger points of those stimuli lie, of course, in the broad realm of many sided sensitivity encompassing the whole gamut of vital attraction to which the hard of hearing individual is prone to react. Therefore the method of work cannot be stereotyped and must necessarily be highly individual. There is no

time here to go into details. The main thing I wish to state is that, in general, my experience confirms the theoretical premise and that the results are encouraging.

May I add that sometimes, if only rarely, I had still, after such a course, to resort to a hearing-aid at the end. But, even then, the position appeared to be more satisfactory than it would have been without the course. Besides, we should not overlook the fact that the deaf in question belong, in their large majority, to the group of nerve loss where the effect of a hearing-aid is very poor in any event.

VALEUR DE L'AUDIOLOGIE MODERNE EN CLINIQUE

1) Il faut souligner les relations entre l'otologie et l'audiologie moderne. Malgré ses progrès brillants et son dévelopement considérable l'audiologie reste un produit de l'otologie. Les points de vue de l'audiologie sont basés sur la technique. L'otologie considère la surdité du point de vue individuel.

2) Dans la vie, les sourds s'orientent vers l'usine pour pouvoir obtenir au plus vite un appareil. L'audiologie est le moyen; le sourd ne consulte pas d'ordinaire la clinique. L'auteur propose un symposium pour éviter ces anomalies.

3) L'auteur propose une méthode de réhabilitation acoustique aux jeunes dont la surdité est de base nerveuse, pour éviter, ou au moins de retarder l'utilisation d'un appareil. Ses expériences sont encourageantes, bien que au début. On ne peut pas donner de détails dans ce petit article. L'auteur recommande cette méthode aux otologues.

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