

## THE FIRST STEPS OF EXPERIMENTAL PSYCHOLOGY IN HUNGARY

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The coercive power of experience has its bearings everywhere on the development of sciences while in the Middle Eastern Region of Europe it is a determinative factor; thus, for instance, the philosophy of Bacon and Descartes was turned into theory of pedagogics through the life-work of the Czecho-Slovakian Comenius and the Hungarian Apécvai. If take the psychological experiments of Fechner and Wundt or the observations of Preyer, in Hungary they have only become everyday expedients of medical and teaching practice but also contributed to forming new psychological theories based in experience. Also in Hungary, the first achievements of experimental psychology are characteristically practice-oriented, sensitive to application.

The founder of Hungarian experimental psychology, its first notable researcher was the psychiatrist, PAL RANSCHBURG (1870-1945). By him was founded in 1899 the first psychological laboratory in the mental clinic, which in the 1902 on continued its functioning in the training college for teachers of the handicapped children. Today as the Psychological Institute of the Hungarian Academy of Sciences is one of the basic institutions of the Psychological research.

Ranschburg had put to memory-test both mental cases in the hospital and healthy persons in his laboratory using a mnemometer. In the illustration the two various excerpts from the record give a clear idea of the difference. The reading of two remote figures caused less possibility of error, while in case of homogeneous figures or row of figures there occurred a good many errors and misreadings. In other experiments specially aimed at looking into this phenomenon, Ranschburg arrived at the same result; on its basis then he formulated the law of homogeneous inhibition. The phenomenon or inhibition named after him Ranschburg Phenomenon or Ranschburg Inhibition reads as follows : the more consecutive physical sensations are heterogeneous the less they disturb each other, while the more homogeneous they are- bthe more these sensations merge into one element.

This finding of Ranschburg is well known by general psychology. Its importance was recognized as early as the beginning of this century. Maybe its no mere chance that H. MUNSTERBERG, professor of the Harvard

University in Boston, took notice of these investigations and their interpretation. In "The Psychology of Industrial Efficiency" one of the chapters is devoted to the problems of monotony. Developing of Ranschburg's experiments Mfnsterberg investigated homonotonous work or that of altering stimulation affects productivity. The law of homogeneous inhibition -one can positively state- has inspired the starting of the research of monotony.

Ranschburg's nearly five decades research work had been connected first of all with the education of the backward children, helping their treatment and adjustment to life by teaching, for example, reading those cursed with dyslexia.

Besides starting the domestic research work in psychology, Pçl Ranschburg has played a decisive role in getting psychology acknowledged. Thus, it is easy to understand that he had become the first president of the Hungarian Psychological Society founded in 1928.

Another outstanding personality of Hungarian experimental psychology was GEZA REVESZ (1878-1955). Though he had studied law at the Budapest University of Arts and Sciences, his thesis already dealt with psychology. In 1902 he went to Gfttingen where he became the pupil of Georg Elias MULLER. Besides Mfller he was attending the lectures of such illustrious masters of psychology as STUMPF, BRENTANO, and LIPPS. He was the first Hungarian researcher who obtained a doctor's degree in psychology. It was only reasonable to invite him in 1908 to the Budapest University as a honorary lecturer of experimental psychology.

In 1908 he was appointed to a professorship at the Budapest University of Arts and Sciences, and at the same time named the director of the Psychological Institute of the University. From 1921 until his death ha was living in Holland where he had come to valuable scientific achievements as professor of psychology at the Amsterdam University.

His research work in Hungary had been related mainly to talent-spotting which formed the basis of summarizing his life-work published in 1952 under the title "Talent and Genius". In 1916 was published in Leipzig his study bearing the title "Erwin Nyiregyhçzi - Psychoanalysis of a child with distinguished musical talent", which completely breaks with the psychophysical-psychological approach in survey.

"Modern psychology has overpassed long ago its program set originally, transgressed the bounds of Fechner notions and hopes. Ways of research became more sophisticated, new fields opened and occurred such problems which seemed to be inaccessible for the exact research....we no more confine ourselves to general laws, but follow up the personalities development with regard to its individual abilities".

This is how REVESZ approaches talent-spotting. Though in his paper on "Early recognition of talent" he emphasized the role of intelligence, even taking it for precondition of talent, he considers this condition much too complicated. On Binet's test starting to spread that time, he made the following comment: "The basic idea of Binet's intelligence test is sound as such, its implementing, however useful, is not quite a success....". Namely, this test



"states the degree of general mental development with the regard to the age of the examined person and not to that of intelligence" -says REVESZ. However, by what means can talent be recognized when its trend is still undifferentiated: The reply of REVESZ given in 1918 and becoming an evidence for today's psychologists, reads as follows: "The intuitive power and spontaneousness in the way of thinking and acting, the moral behavior and will-power as well as the intelligence-quotient of the child are those attributes forming together the measure of talent".

The recognition of talent and a thorough acquainting with the child is generally the task of the pedagogues, first of all that of the school teachers. Therefore, the teacher must have a thorough psychological grounding. The propagator of how to get this grounding through studying children, was LASZLO NAGY (1857-1931). He was teaching in a specialized High School, where primary school teachers were educated. On his suggestion, in these high schools the teaching of psychology was notably reformed between 1908-1914. As a consequence, teacher trainees have been taught instead of abstract psychological definitions, psychic phenomena and methods of how to get to know the children, and also experimental results. Hungarian teachers training colleges - secondary schooling institutes at the time- were equipped with psychological laboratories and devices of experimental psychology, such as Nechaiev's tachystoscope or the colourwheel of Nagy for color mixing. The novelty of the latter was its applicability not only for color-mixing but also for measuring the threshold of sensation.

Trainees of psychology were attending a number of lectures weekly. Trying experiments they got acquainted with psychical phenomena and their possibilities of application in educational work.

A considerable number of laboratories came into being with a special small-shop established for their fitting up.

Training schools attached to the teachers training college provided the possibility to make the trial with the pupils on what they have learned (Observation of children, of their range of attention in different ages, etc....)

This type of teaching was curious because at that time the number of lectures delivered at Hungarian universities on psychology, was minimal. Psychology had not even had a department at the time. Thus, László Nagy has taught not only trainees but also lecturers of the teachers training college.

Experimental psychology in Hungary, as it can be proved by certain data, is mostly experience-oriented -even its theorems are based on practice.

Coming to the end of this paper let me point to one of the documents of America-Hungarian relationship in the field of psychology, which is not widely known. I mean the quadrylingual Dictionary of Terms and Expressions of Industrial Psychology (German-English-French-Hungarian), published in 1939 in New York, which I have found in the course of my investigations.

One of the authors, ERDELYI, was the first to systematize industrial psychology in Hungary. Certain chapters of his book entitled "Fundamental Issues of Psychotechnique" can still be helpful for psychologists. Erdelyi immigrated to the U.S.A. in 1938 where he has

published several articles and from 1941 on he has worked as professor of psychology at the University of Virginia. The dictionary edited by him reflects the practice-oriented character of Hungarian psychology not only in the choice of the subject -industrial psychology -but also in compiling the dictionary. Well, such a work could have been of great help to young generations of psychologists of different nationalities in getting acquainted with each other's professional terminology. It was no fault of the authors that their efforts had been miscarried.

This is, in a few words, a cursory view of the the first attempts of experimental psychology in Hungary.

## RESUMEN

El interés práctico y aplicado domina los comienzos de la psicología experimental en Hungría. El trabajo presenta una valoración global de las aportaciones de P. Ranschburg, G. Revesz y L. Nagy en el proceso de institucionalización de la psicología científica en Hungría.

## SUMMARY

The beginnings of Hungarian experimental psychology were determined by practical interests. The article offers a general evaluation of the works of P. Ranschburg, G. Revesz and L. Nagy in the process of institutionalization of scientific psychology in Hungary.