ALBERT PAUL WEISS

Albert Paul Weiss was born September 15th, 1879, and died April 3d, 1931. These dates will be recorded, it is safe to say, near the beginning of a not unimportant chapter in the history of science: the study of man.

Weiss was not a student of language, but he was probably the first man to see its significance. He saw that language supplied the key to those phenomena of human conduct and achievement which hitherto had been attributed to non-physical forces. There had always been students who refused to believe in the spectres of our tribal animism (*mind*, *consciousness*, *will*, and the like) but these students had never given a clear-cut and satisfactory explanation for the super-biological actions of man—the actions which transcend the possibilities of the animal world. In our time these students are the behaviorists,—an ugly name, said Weiss, but accepted it for want of better. Weiss was a devoted pupil of Max Meyer; the latter's system, most thorough in eliminating animism and finalism, formed the basis of Weiss's work. The pupil's enormous advance was due to his evaluation of language.

In addition to 'handling' responses, man has developed a system of vocal responses, language. These vocal responses serve as stimuli to the speaker's fellows: the members of a speech-community co-operate, by means of language, in spite of the discontinuity of their individual nervous systems. The effects of this mediation between the nervous systems of separate individuals are so far-reaching that anyone who tries to explain human behavior and leaves language out of account, is sure to lapse into popular animistic pseudo-explanations, or else to give an incomplete picture. Our animistic terms (*mind*, *consciousness*, *sensation*, *perception*, *emotion*, *volition*, and so on) were produced, among the folk or by philosophers, in pre-scientific times, when language was taken for granted. Sequences of events in which human beings participate, can be understood only when one knows that the members of a speech-community have been trained to produce conventional speech-sounds in certain types of situations and to behave accordingly in response to

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these sounds. Viewed without its antecedents and consequences, *biophysically*, the speech-sound is a slight displacement of matter; it is effective *biosocially*, as a trigger-mechanism, thanks to the training (structural modification) of the speakers' nervous systems. By virtue of this common attunement the members of a speech-community co-operate; the space between their nervous systems is bridged, from moment to moment, by the sound-waves which they utter and hear. Beyond the other types of organization—atomic, molecular, crystalline, protoplasmic-unicellular, multicellular—language brings into the universe the *compound multicellular* or *social* type of organization.

'From a mere consideration of man's position in the scale of *biological* development, his libraries, museums, telephones, cinema, microscopes, telescopes, and sky-scrapers seem incomprehensible.'

'The great gap between the achievements of the modern man and the anthropoid apes or some of the highly socialized bees, wasps, ants, can best be understood as due to the absence of language in the animals.'

'Human achievement, as compared with animal achievement, differentiates itself particularly through its greater variety and through its coöperative character. The essential condition for producing these effects is a high degree of sensorimotor interchangeability between individuals . . . Specific types of external stimuli, in addition to releasing specific manual responses, also release verbal responses, and these become, for other individuals, substitute stimuli for the original stimuli. . . . In the evolutionary development of language we approach, as a limit, a condition in which a greater and greater number of the objects and events in the universe (past, present, and future) are represented by substitute language stimuli and their more permanent substitutes, exhibiting a wider range of interrelationships than the original objects and events themselves. In this sense language as a form of behavior is the reduction of all the objects and processes of the universe to library dimensions.'

'The language mechanism forms the characteristic factor in human behavior.'[1]

[1] 'Linguistics and Psychology,' LANGUAGE 1.52 (1925); the last sentence is from 'One Set of Postulates for a Behavioristic Psychology,' Psychological Review 32. 83 (1925); cf. Theoretical Basis[2] 425 ff. (see below).

Of special interest to the linguist are:

'The Relation between Structural and Behavior Psychology,' Psychological Review 24. 301 (1917);

'The Relation between Functional and Behavior Psychology,' ibid. 353;

'The Mind and the Man-Within', ibid. 26. 327 (1919);

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It is significant that, having found this key, Weiss devoted his last years to phenomena such as the esthetic and ethical, which until now had been least accessible to materialistic interpretation.

Weiss's style is direct. He says big things so simply that the reader, unforewarned, fails sometimes to grasp the full import. His plainness of speech sometimes goes beyond the conventional; a rhetorician would blue-pencil more than one of his sentences. Unhampered by ornament or mannerism, this Spartan style speaks powerfully and at times with great beauty.[2]

In word and deed, as in his writings, Weiss was completely the man of science. He was an excellent mathematician: in everyday converse he spoke accurately and without prejudgment, so that his hearers sometimes found depth or wit in what for him was only straightforward speech. He was an inventive and skilful technician: in daily life his helpful competence, his utter divorcement from the simian and the rapacious traits of our species, led one to see a high grace or a saintly unselfishness in what for him must have been merely plain, sensible conduct. He attributed importance to no person, least of all to himself. As he had been in good fortune, with the prospect of unbounded ventures, so he remained through years of sickness, when for long periods he was denied even the slightest activity. The transition was sudden, an afternoon of outdoor play broken off by the apparition of heart-disease. He had been a leader of his time, as a scientist may, guiding into the unknown a band of younger bold explorers; now he depended, no less manfully, upon the devotion of his wife. What the world owes to her cannot be measured; the debt includes all Weiss's work of these last years.

Every step in the advance of human knowledge meets with a resistance which has grown feebler as the centuries have passed. The time may be near when Albert Paul Weiss will be counted a heroic figure in the progress of science.

LEONARD BLOOMFIELD

'Conscious Behavior', Journal of Philosophy, Psychology and Scientific Methods 15. 631 (1918);

'The Relation between Physiological Psychology and Behavior Psychology,' ibid. 16. 626 (1919);

and, above all, A Theoretical Basis of Human Behavior, Columbus (R. G. Adams & Co.) 1925; second edition, revised (and much enlarged), 1929.

[2] See, for an instance, the closing pages of the Theoretical Basis, in the second edition.

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