

They used the material to show how object relationships develop and to illustrate the occurrence of motility, fantasy, and intellectualization in addition to anxiety. They show how, depending on the content, the form of the relationship to the object is transformed and used as a defense mechanism to maintain a certain distance from the subject to the object and how these are integrated into other defense mechanisms.

An analysis of the content of the material follows the presentation of the analytic session and after that the authors examine the form of expression; that is, the form of the relationship to each object and each movement, the nature of the object (internal or external) and the relationship between the form of the relationship and the nature of the object. The authors then underline the essential, characteristic, and specific levels at which the patient builds her object relationship according to the material and the content. On the one hand the motor activity is examined and on the other the anxieties, fantasies, and intellectualizations—that is, mechanisms of object relationships which are more and more distant from primary motility. In the final section of this paper dealing with theoretical concepts, the author explains the genesis of the mechanisms of internalization of object relationships by dealing extensively with object relationships in the oral-anal stage of development.

FRANCIS DE MARNEFFE

Graphologie et Physiologie de l'Écriture

H. Callewaert, M.D.

Louvain, Belgium, E. Nauwelaerts, 1954,
168 pp., 31 plates.

In the preface Cossa explains the purpose of this book by stating that handwriting has been little studied from the standpoint of being a neuromuscular mechanism adapted to the fulfillment of a goal, and that instead research has been mostly concerned with using handwriting to study character traits and tendencies. This book is designed to correct this deficiency.

The first hundred pages deal with the physiology of handwriting.

After a historical survey of the stages the letters of the alphabet have passed through and a discussion of the physiological differences between writing on a blackboard and on paper, the author gives a detailed description of the

part played by the nervous system in the act of writing, the centers in the brain, the pathways of the brain and spinal cord, and the nerves of arms and hands.

He divides the mechanical process of writing into two main movements; an "inscribing" one, the writing of individual letters, which depends on the position of the phalanges and on the way the pen is held, and a "coursing movement" (progression of the pen along the paper), which depends on the muscles and joints of the hand and arm.

With the assistance of photographs (his research was done with the aid of films) the author shows that rational handwriting depends on the harmonious coordination of these two movements and states that handwriting differs from person to person because of the degree to which these two movements are coordinated. He describes several cases of defective writing and correlates them with the way the pen is held and the coordination of the inscribing and coursing movements. In passing, he mentions writer's cramp and shows how this is due to a failure of coordination of the movements of the hand. Having established his contention, with which it would be difficult to disagree—that the shape of the letters depend on the movement of the hand—the author devotes the second part of the book to graphology proper.

He compares writing to speech, to the detriment of writing as a means of establishing psychological traits.

He quotes extensively from *The Laws of Handwriting* of Pellat and finds their validity practically nil. Unfortunately all too frequently exclamation marks replace reasoned arguments against them. In view of the fact that the apparent purpose of the book is to discredit the idea that psychological factors are operating in the process of writing, it is a little surprising to read on page 138 that the unconscious may be affecting the handwriting. This reader had to conclude that either the author was excluding the unconscious in his concept of the psychological factors which, according to him, were *not* affecting handwriting or that while unconscious factors are influencing handwriting they are not doing it in a way which is apparent in the study of handwriting.

The first part of the book, where the author is dealing with the physiology of handwriting, seems to be on firm ground. The part dealing with graphology is less convincing. The value of

the book for reference would have been increased by a more complete bibliography and an index.

FRANCIS DE MARNEFFE

Cerebral Vascular Diseases (Transactions of a conference held under the auspices of the American Heart Association)

I. S. Wright and E. H. Luckey (Eds.)

New York, Grune & Stratton, Inc., 1955,
167 pp. \$5.50.

For those interested in psychosomatic medicine this is an important book. The reciprocal control of brain over general blood circulation and of general blood pressure over cerebral circulation is probably the most important homeostatic mechanism in the body. Three excellent chapters cover the anatomy, pathology, and physiology of the cerebral circulation; these are by Magoun, Adams, and Kety, respectively. They bring this complex subject up to date in brief and authoritative expositions with much new material. The old question as to whether or not "spasm" occurs in arteries of the brain is discussed from several points of view and the final decision seems to be to let the question remain unsettled. It seems to be proved by Kety and his associates that "cerebral vascular resistance" changes greatly under various physiological, pharmacological, and pathological conditions. Prolonged states of increased resistance are reversible by drugs or a fall in general blood pressure. This is excellent evidence that states of prolonged vasoconstriction do occur in the brain and that they are of great functional significance. Whether or not the term "spasm"

is to be applied to these is a matter of semantics.

Wright gives an opening chapter on the "Sociologic, Economic and Personal Significances of Cerebral Vascular Disease." This is from the point of view of a wise internist. Weiss and Saul take up the emotional problems. Weiss' contribution is remarkably full of meat; for example, he says:

"Vascular 'accidents' in the brain as well as in the heart may be precipitated by emotional stress—they are not so accidental after all. . . . Even more important to our health and economy is the question of the mental changes due to cerebral vascular disease. Psychosis associated with arteriosclerosis is one of the leading problems in psychiatry. . . . There can be little question that the emotions affect the circulation to the brain. In vasodepressor syncope the obvious psychological factors and the striking clinical manifestations offer conclusive evidence that the two are related. . . . The question of whether emotional factors are related to cerebral vascular disease depends to a certain extent upon the question of whether cerebral vascular spasm occurs. . . . Migraine of course, is a topic that comes to mind in this connection and a recent report by Engel and associates is interesting in this regard."

Saul takes up the more dynamic approach, saying: "By dynamic psychiatry I mean that branch, or aspect, or division of psychiatry which deals with motivations and their effects—their effects on people's perception, on the way they think, on their feelings, upon their behavior and upon their physiological functioning."

These remarks and quotations indicate that all of us should read this book.

S. C.