phorical. By combination with other factors, hunger can assume the most varied forms. Originally simple, it can appear transformed into pure greed, or into many aspects of boundless desire or insatiability, as for example, the lust for gain or inordinate ambition.

"Hunger, as the characteristic expression of the urge of self-preservation, is without doubt one of the primary and most powerful factors influencing behavior," declared Prof. Jung. "In fact, the lives of primitives are more affected by it and more powerfully, than by sexuality. At this level of existence, hunger means the alpha and omega—existence itself."

Sexuality, like hunger, undergoes a radical "psychification" Prof. Jung said. This makes it possible for the primary purely instinctive energy to be diverted into new channels.

Third among the instinctive factors controlling human behavior is the drive to activity. Under this grouping comes restlessness, love of change, wanderlust, and the play-instinct.

The urge for reflection was listed fourth among these instinctive groups by Prof. Jung. This means an interruption by mental processes to the otherwise automatic impulse-to-action circle. Thus, in place of the compulsive act, there appears a certain amount of freedom, and in place of the predictability a relative unpredictability as to the effect of the impulse, Prof. Jung explained.

Creative Urge

Finally, among these instinctive control groups, Prof. Jung places the creative urge, which is not precisely an instinct but closely allied with them.

"Like instinct it is compulsive, but it is not common, and it is not a fixed and invariably inherited organization. Therefore I prefer to designate the creative impulse as a psychic factor similar in nature to instinct, having indeed a very close relationship to the instincts, but without being identical with any one of them. Its connections with sexuality are a much discussed problem, and, furthermore, it has much in common with the activity-urge as well as with the reflection-urge. Still it can repress all of these instincts, or make them serve it to the point of the self-destruction of the individual. Creation is as much destruction as construction.'

Besides these dynamic factors, human behavior is influenced by "modalities" including the age, sex, and hereditary disposition of the individual, which are semi-physiological but not, by any means, wholly so. Then there are three others which are entirely psychological. First among these is the degree to which a person functions consciously or the extent to which he is dominated by compulsive instinctive processes. Next is the extent to which the individual is an extravert or introvert; the extent to which his life is directed outward toward other persons or material things or the extent to which it is turned inward toward his own feelings and experiences. Prof. Jung is the author of this extraversion-introversion conception.

"The third modality points, to use a metaphor, upward and downward, because it has to do with spirit and matter," Prof. Jung thus described the last of the "modalities." "From the existence of these two categories, ethical, esthetic, intellectual, social and religious systems of values eventuate, which on occasion determine how the dynamic factors in the psyche are to be finally used.

"Perhaps it would not be too much

to say, that the most crucial problems of the individual and of society turn upon the way the psyche functions towards spirit and matter."

Science News Letter, September 12, 1936

PSYCHOLOGY

Prof. Jean Piaget— A Moving Picture World

GLIMPSE into the mental world of the baby and small child was afforded the scientists at the Harvard Tercentenary Celebration when Prof. Jean Piaget, professor of the history of scientific thought at the University of Geneva, described a child's way of thinking.

The little baby lives in a sort of moving picture world, Prof. Piaget's report indicated. He sees his surroundings as a series of pictures that have no permanence, no reality when they pass out of his sight. Almost to the end of his first

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MEASURES FLOW

This object is neither a model seaplane nor a midget torpedo. It is the newest stream flow gaging apparatus on exhibit at the Third World Power Conference in Washington this week. J. G. Bloise, Puerto Rican expert of the Division of Water Utilization, Dept. of Interior, at Guayama, P. R., records the electrical clicks in his earphones as the ring of cups makes one revolution. The torpedoshaped heavy base of the equipment points in the direction of current flow when placed in the water, while the whirling cups above measure the speed of the stream's flow. The small derrick on wheels rolls along a bridge, in actual use. To fix accurately the stream flow, scientists must not only know the contour of the bottom but also the speed of the current flow at many points so that the "volume" of water can be calculated.