

drop. Partial castration, beyond a critical range, delays the maturation of sexuality.

There is a group of activity patterns which cluster around and intercorrelate with primary sexual activity; these patterns have been termed "secondary sex behaviour". Partial castration to some extent, and complete castration to a greater degree, tend to dissociate temporarily the concomitance of the two forms of activity. There is a compensatory aggressiveness of the females associated with some partial and all completely castrated males. It is suggested that the cyclic character of the reproductive activities of the male pigeon is largely determined by the changing behaviour of his female mate.

Histologically, there is evidence that reorganization and growth may occur after partial abolition of the male primary sex-organ. M. HAMBLIN SMITH.

The Responses of Horses to the Situation of a Closed Feed-box. (*Journ. Comp. Psychol.*, vol. xv, p. 445, June, 1933.) Gardner, L. P.

The problem which confronted the horses was to open a covered feed-box containing grain. Sixty-eight subjects of various ages and breeds were used. The rate of learning was very rapid; three or four trials perfected the opening technique. Retention of this learning lasted, in some cases, for six to twelve months. Younger horses were somewhat slower than older subjects. Sex differences were not great. In first trials draft horses and farm horses opened the boxes more quickly than did military horses. M. HAMBLIN SMITH.

Delayed Reactions in Primates in Horizontal and Vertical Planes. (*Journ. Comp. Psychol.*, vol. xvi, p. 143, Aug., 1933.) Yudin, H. C., and Harlow, H. F.

It is more than conceivable that differences in rate of acquisition of horizontal as opposed to vertical spatial orientation might influence mnemonic ability of these fields. If such tendency exists, it should be exaggerated in the monkey as compared with the child, for the monkey is a vertically-minded creature as contrasted with the horizontally-minded infant. Four monkeys were tested. No evidence was obtained to indicate that monkeys show superior ability in making delayed reactions to containers placed in vertical planes than to those in horizontal planes. M. HAMBLIN SMITH.

Social Behaviour of Primates. I: Social Facilities of Feeding in the Monkey and Its Relation to Attitudes of Ascendance and Submission. (*Journ. Comp. Psychol.*, vol. xvi, p. 171, Oct., 1933.) Harlow, H. F., and Yudin, H. C.

Social behaviour arises out of simpler individual functions, of which it is probable that the most important are the primary drives of sex, hunger, thirst, etc. These primary drives set up a condition of excited and emotional behaviour which is not specific to the particular tension, thus predisposing response to factors in the environment. Social factors, acting through imitation, tend to increase this non-specific behaviour; this condition is described as social facilitation. Such facilitation may be demonstrated experimentally in the monkey. The degree of facilitation depends upon many factors, of which active competition is probably the most important. Feeding behaviour leads to the formation of many important forms of social behaviour, such as attitudes of ascendance-submission, and to emotional behaviour, which may be described, anthropomorphically, as greed, envy and fury. It is suggested that social facilitation of feeding responses may play an important part in the formation of more complicated social attitudes. M. HAMBLIN SMITH.

Comparative Behaviour of Primates. VI: Food Preferences. (*Journ. Comp. Psychol.*, vol. xvi, p. 187, Oct., 1933.) Maslow, A. H.

Ten primates were tested for food preferences, as regards bananas, oranges, apples, carrots and bread. The preferences varied from day to day, in the same

animal; and they varied from animal to animal, even in the same species. The order of preference was, roughly, as set out above. But the preferential series for each animal showed a "serial principle"; that is, if food A is preferred to food B, which in turn is preferred to food C, then food C is never preferred to food A.

M. HAMBLIN SMITH.

A Preliminary Experiment on Abstraction in a Monkey. (*Journ. Comp. Psychol.*, vol. xvi, p. 321, Oct., 1933.) Robinson, E. W.

The term "abstraction" may be used to cover situations in which an individual learns to respond to some specific stimuli to the exclusion of others. An experimental situation was devised in which the subject could respond correctly only by observing the whole set-up, and choosing on the basis of the relation which the correct element bore to the whole. A *Macacus* monkey learned to respond by choosing the one box of three which was different to the others. The experiment is, at present, only preliminary.

M. HAMBLIN SMITH.

3. Psychiatry.

Social and Moral Factors in Psychiatry. (*Brit. Journ. Med. Psych.*, vol. xiii, Oct., 1933.) Davies, Arthur Ernest.

The author suggests that some aspects of psychiatric practice would be considerably improved if it supplemented the structural method by the genetic method of the social and moral sciences. An inquiry is made into the nature of social facts and into the relations of the individual to society. From this it is concluded that a healthy social life for the community as for its constituent members involves relations of two types: the "personal", which are those relations which are determined by the organic structure of a society, and which are fundamental to its being and remaining what it is; and the "individual", which are those which are or appear to be in contravention of the conventional requirements embodied in social tradition. There is nothing in these relations themselves that justifies anyone subordinating the one to the other.

The nature of moral facts is inquired into dialectically. The general objection of the artificiality of the moral problem is disposed of. The development of the conception of morals out of tradition is traced, morality being defined as that aspect of the actual which fulfils a human purpose. If morality is understood in the sense of sociality, the psychiatrist's attempt to deal with the moral aspects of disease issues practically in the denial to his patient of the rights of a moral individual. Society is the medium in which tradition develops. Social organizations of every kind have, for those who belong to them, an instrumental value, and are therefore moral institutions. Socialization is effected by imitation. Custom keeps in being the machinery of the moral life, but the moral purposes of particular communities require new modes of behaviour for their fuller expression.

The psychiatric theory of mental life is examined to ascertain if it affords the basis of an adequate psychological explanation of social and moral facts. The intentional character of the affective-conative tendencies is emphasized. The cognitive factor in instinct is discussed, and it is premised that, excepting the reflexes, there are no purely anoetic experiences. Empathy is shown to be the outcome of gregariousness, and imitation the link between the latter and sociality. Personality is not a datum, but an achievement; disturbances of personality involve the moral life. Altruism, sympathy and the moral ideal are briefly discussed. Sympathy is not the cause, but the universal accompaniment of moral behaviour.