CHAPTER 7

# PSYCHOLOGY IN RELATION TO ENVIRONMENT

It has been a frequently reiterated theme in earlier sections of this monograph that the mentality of individuals and peoples is inseparable from their environment and cannot be studied in isolation from their history.

Moreover, the classical analysis of personality into intelligence, temperament, and character is, from the point of view of a study of this sort, no longer even a convenience; and it is becoming ever clearer that all these are merely aspects of one basic organization. No psychologist would claim today that any "intelligence test" succeeds in testing intellectual faculties entirely divorced from traits of character. No matter how "intellectual" the test, curiosity, perseverance, and self-confidence (to name a few such traits) affect achievement, and are themselves dependent on motives and emotions. In European testing one might assume that attitudes to testing were much the same in all and so could be ignored. This assumption becomes grossly faulty when applied to people from grossly different cultures. Indeed, the present writer, in conducting orthodox performance tests on Africans, has often seen that their performance shed far more light on traits of character than on reason.

So it is proposed, in the paragraphs that follow, to attempt a synthesis of the chronological development of African mentality in relation to environmental factors; and, in this synthesis, no sharp distinctions will be made between these aspects of the mind. In the first instance, mental development will be related to the cultural factors, and, in the second, to malnutrition and disease. Other environmental factors will receive further mention in the final chapter of this monograph.

## Mental Development in Relation to Cultural Factors

*The infant prior to weaning*

The salient cultural factors in Africa, briefly recapitulated, are: the mother is devoted to her baby, carries him wherever she goes in close contact with herself, handles him with confidence, panders to all his whims, and feeds him on demand. He lives in a smooth, warm, rhythmic

world, soothed by her voice and crooned to sleep in her arms. He is indulged to a fault, and his excretory activities are unconstrained.

Bowlby [23] has said, "What is believed to be essential for mental health is that the infant and young child should experience a warm, intimate and continuous relationship with his mother (or permanent mother substitute) in which both find satisfaction and enjoyment." Ribble [150] points out that much of the cohesiveness of a child's personality depends on emotional attachment to the mother and that three types of sensory experience—tactile, kinaesthetic, and auditory—contribute primarily to its formation.

In these respects, therefore, the African infant's experience seems to be ideal. His needs are better catered for than usually obtains in western Europe, and it would seem that there is much to be said for adopting African practice in dealing with babies for the first few months of life. There is the rub, however, and this leads to a consideration of the other side of the picture.

Gesell & Ilg [76] have said, "Self demands and cultural demands must somehow be brought into mutual accordance." The lengthy period of breast-feeding prolongs in high degree the comfort of prenatal life and fails in many ways to introduce the child to the frustrations of reality; and, in psycho-analytic language, the illusion of omnipotence persists till after self-consciousness is established and ambivalence is consolidated. Ritchie [152] has drawn attention to the fact that European children, fed at regular intervals, must develop a sense of time, an ability to contain themselves in waiting periods, and a moderation in the pleasure of feeding since they must come to know that this also has an end. Thus some foresight and emotional balance may be achieved in very early life.

It is possible to exaggerate the importance of time-schedules, since these are probably a recent innovation and by no means universal even now in western Europe; but it is not possible to exaggerate the importance of the lengthy period of indulgence which is so characteristic of African childhood; and it is doubtless true that this must interfere, and at a critical age, with the normal human tendency to progress from unselfconscious identity with the world to objective separation. Kidd [107] gives a good example of the survival of this identity to an age when it can be recalled in later life. He says: "One of the most intelligent Kafirs I know told me that he could quite well remember his first headache during childhood. He said he was conscious that something was wrong somewhere, but did not dream that the pain was within his head. The pain might just as well have been in the roof of his hut as in the roof of his head; and it was only when his mother told him that his head was aching that this fact dawned upon him."

*The weaning period*

Weaning is abrupt, the more so in that there was previously no constraint in feeding. The mother's emotional interest is transferred to her husband and to her next pregnancy, and the child suffers a considerable emotional neglect.

The shock to a child of two or three years old must be very great. Just at the time when, in European cultures, he is organizing his perceptual and behaviour patterns in the worlds of things (visual shapes, etc.) and people (Bowlby [24]), on the basis of a sense of emotional security in his parents, the ground is cut from under him.

The present writer is not in full accord with Ritchie when the latter maintains that the mother's affection is transferred abruptly to the father at the time of weaning, since some sexual intercourse has often been indulged in for some time before, and it seems in general that the mother's interest is now directed to her pregnancy and thereafter to her next baby. Moreover, the Oedipus situation in general, as maintained by Fairbairn,[63] may well be essentially a sociological one and be psychologically superficial. With this reservation, however, Ritchie's observations are unquestionably true. He says: " The weaned African infant ... cannot look critically at himself and the world and see that neither the goodness nor the badness is absolute, and accept himself and the world for the mixture of potential good and potential bad that everyone and everything really is. No, his experiences of the world and of himself and his impulses have convinced him that everything was wholly good and is wholly bad, and he must somehow contrive to get rid of the badness and recover the goodness—or persuade himself that he has done so." Elsewhere he says:

" Because of the long period of unbroken indulgence as a nursling, ended by an unbearably sudden and severe weaning, the African has two diametrically opposite convictions about himself, reflected in an equivalent unbalanced attitude to the world. At one level of his mind he is omnipotent, at another he feels absolutely impotent, while the world is divided into two forces—a benevolent power which would give him everything for nothing, and a malevolent which would deprive him of even life itself. As the world of reality denies his omnipotence, he is thrown back on the opposite conviction and remains helpless and psychically dependent on parents and parent surrogates all his days. His own individual personality, with all its latent powers, is never liberated and brought under conscious rational control, and self-realization is thus unknown to him."

Ritchie,[152] from his psycho-analytic viewpoint, has perhaps attributed too much to infantile experience alone. The latter is no doubt of fundamental importance, but it seems that, though this experience sounds a very poor keynote for the tune that follows, all later African education cripples the hands which might yet play a melody of sorts in other cultures.

*Childhood*

The cultural factors, briefly recapitulated, are as follows. Education is entirely informal, and the child falls under the influence of various relations and playmates whose particular roles are yet all parts of one relatively static and familiar pattern. Instruction by the older generations is verbal and dramatic, and is largely concerned with the traditions of the group, details of relationships, and modes of behaviour in particular social contexts. Games are organized by the children themselves and are imitative of activities of the senior generation. Toys, such as crude dolls and huts, are made by the children; and the variety of building blocks and mechanical toys seen elsewhere are here conspicuous by their absence. Sex play is common enough and not prohibited in the setting of the play-group. In neither the social nor the impersonal worlds is instruction ever directed towards organization of knowledge by general logical principles or towards a morality based on laws which are not attached to particular people in particular places. The only general principles, inasmuch as magic and animism can be called so, are too facile, obviate the need for further questioning and, in effect, frustrate the human tendency to search for really significant connexions and governing principles. Creative outlets are confined to song and dance and make-believe. Behaviour patterns are enforced in concrete situations by punishment by various relations. Quite early the child is cognizant of most of the culture of his group and has responsibilities to family life that differ in little but degree from those borne by his seniors.

Before proceeding to the study of the psychology of the African child, it is worth while to digress somewhat and to consider the mentality of children in general, particularly as this has been observed in Europe.

Piaget [142] has much of value to say on this subject, and it should be mentioned that the relevance of Piaget's work for African psychology was recognized by Dougall [57] in a most illuminating article twenty years ago. Piaget recognizes three broad stages in childish development. Prior to two or three years old there is little self-consciousness; the world in general is largely identified with oneself, and distinctions between subjective and objective aspects are not made. Though the features of this stage are largely speculative, they are reasonably inferred from the later developments and from other evidence.

After this age, with the acquisition of language, childish thinking is amenable to scrutiny and, from then till seven or eight years old, shows certain characteristics. The period is heralded by the appearance of the question " why ? ". In brief, childish explanations are marked by a high degree of subjectivity: events occur to help or to defeat oneself; they occur by reason of motives which are like one's own; and causal con-

nexion is implied, not only by contiguity in space or time, but by obvious similarities even without such contiguity. In general, such thinking is " magical " and later " animistic ": universal principles are not considered; everything is possible and miracles the rule ; and the world is governed both in material and social matters by " personal wills ".

From seven or eight years onwards, these modes of thinking are increasingly replaced by others which bridge the gap between the former egocentric or " prelogical " (Levy-Bruhl [113]) period and the age of eleven or twelve years, when thinking becomes substantially mature. The key-note of this period is the conscious recognition of the need to ask the question " how ? ". In the conception of causality, the need is seen for continuity and contact, for things to derive from other things, for the birth of new events by reassortment of parts or qualities and, at last, for explanation by spatial and temporal relations and for logical deduction. It is during this period that generality of principle first appears and necessity becomes not only moral but physically deterministic ; and, finally, by twelve years old, generality is established, and physical determinism is accompanied by a logical necessity which takes the place of moral.

Of course, a child of twelve years old is not mature ; his attitude does not yet embrace the whole of his experience. Much that was previously learned, and docketed in archaic pigeon-holes, must be absorbed into the later system, or even learned anew. And whether a particular child will ever go all the way will much depend on the vigour of his urge to do so, and the extent of his encouragement. Nevertheless, he has reached the highroad, and the signpost clearly points the way.

How does this process come about ? How do we learn ?

The problem can be attacked from many angles, but it seems most appropriate to consider it here from such a neurophysiological point of view as that outlined by Hebb.[84] This writer, on the basis of experiments with rats, from a consideration of the learning process in persons who were born blind but had their sight restored, and from various other evidences, has constructed a theory of cerebral function which seems to fit the facts. In essence, entirely new learning, such as occurs in earliest life, is based on the laborious building-up of " cell-assemblies "—groups of cerebral neurones which tend to function in some degree as units and correspond in consciousness to images. When many of these units are developed, later learning is relatively easy, since all later experience (such as that of adults) is full of familiar elements. In terms of cerebral function, all that is then usually required is a slight increase of " facilitation " between the cell assemblies, thus resulting in larger and more complex units. How laborious must be the early learning is almost inconceivable

for us, and it is most difficult for an adult to appreciate that a triangle, for instance, was ever hard to perceive as such. Yet it takes months of laborious effort for the congenitally blind with sight restored to learn "triangularity".

The difficulty of early learning is mainly one of cerebral complexity, and it is the rule in all mammalian life for full mental stature to develop early in direct relation with cerebral simplicity. The rat, for instance, is fully competent to deal with his relevant environment within three months of birth, whereas the chimpanzee takes several years. Whenever the central nervous system is enlarged out of proportion to its sensory supply and has many alternative pathways and opportunities for choice, much time is taken in growing up. In Hebb's phraseology, where the association-sensory ratio is high, the learning must be slow, though the final ability to handle complex relations will be great. The long time taken in growing up in higher animals may be in part a question of maturation, but is mainly due to the need for learning to be piecemeal and unintegrated at first. This does not last, however; and, sooner or later, the animal makes the larger synthesis and becomes competent to cope at any moment with its total situation. Therefore, although their final cerebral complexity varies very greatly from species to species, all mammals achieve in adult life a total synthesis well suited to their needs. Fullness of integration in adult mammals is not a mark of high degree in the scale of evolution; we Westerners share this happy outcome with the rat.

To return to the African child, it is clear that his mental development shows no striking difference from that in Europeans up to the age of seven or eight years, but that thereafter his thinking does not develop along European lines. Piaget's [142] description of the second developmental stage accords closely with the thought modes of even adult rural Africans, and not one of the developments observed in his third stage is characteristically seen in them. African thought in later childhood, adolescence, and adult life does not advance beyond that point except for some elaboration of detail. In practice, however, as is well known to European observers, the African child from eight years old to adolescence is more mature than is his European counterpart, contributes his quite important quota to the life of the community, and holds his own in conversation and deportment with astonishing maturity. It has to be explained therefore (*a*) why his thought modes do not progress beyond the level of those seen in European children at the age of eight; and (*b*) why, in spite of this, his social behaviour in later childhood is so mature.

The facile answer might be because the African exhibits evolutional immaturity and so grows up more quickly. But here one smells a rat—both metaphorically and literally—for it has been clearly shown in rats

and men that this conception is, in respect of integration, meaningless. Whether or not the African brain is relatively simple, such simplicity by itself would not account for unintegrate thinking. To find the answer it is necessary once again to turn to European developments and try to discover what determines these.

The European child, by and large, is brought up in early years fairly directly by his parents. Grandparents, uncles and aunts, and play-groups count for relatively little. Parents vary, of course, in their intelligence and their mores, but in each family, in general, parental ideals conflict but little, parental teaching is mutually consistent and, if the mother cannot answer childish questions, she refers the questioner to his father. The emotional attitudes of parents to their children, though much more diverse in different households than those seen in Africa, are in each family much more consistent and sustained. In due course the child must come to know that parental attitudes, commands, punishments and explanations, and affection for himself, are based on continuing and comprehended principles.

Now the European child learns much that is, from his point of view, empirical in early life. There is little internal tendency at first to synthesize, and magical and animistic concepts are at first encouraged: Father Christmas fills the stockings and the gypsies steal the naughty boys away. But these conceptions are not consistently encouraged, nor for long, and the questions "why?" and "how?" are answered with a profundity dependent on the various intelligences and attitudes of parents.

From quite an early age the child is introduced to letters and to balls and building blocks and mechanical toys, and sees around him in the larger world a great variety of mechanical devices and machines. From practical experience he soon comes to know that the six sides of a cube have relations to each other which cannot be altered by rotation of the cube, and that square pegs cannot be fitted into round holes—items of knowledge which, oddly enough, are not a common part of the rural African's mental inventory. Remoteness of mechanical control draws his attention to chains of cause and effect, and he soon knows that pressing the button rings, through a wire, the distant bell, and that toy motor-cars are not impelled by "spirits" but must be wound. He thus becomes familiar from an early age with spatio-temporal relations and mechanical causation, and realizes that the material world works on general laws and that God helps only those who help themselves. In these achievements he is not discouraged by his seniors, and throughout his schooling—in mathematics, physics, chemistry, etc.—they form the basis of his formal education. The child is, in effect, encouraged to integrate his knowledge; and he comes to know that, in his approach to life, he must depend on

the appropriate application of general principles—largely of his own making—and, in face of the diversity of modern knowledge, he needs no reminding of his ignorance, or of the fact that he has far to go.

Above all, throughout his minority, his social contacts are diverse and not limited to family connexions. His social behaviour is not simplified for him by a host of discrete rules. In his dealings with other children, fellow students, masters, and station-masters he must, by a process (often bitter) of trial and error, discover some general codes. He is rather isolated and, in adolescence especially, often gets little help. Far from feeling socially confident, he is usually struggling with internal contradictions which he knows, with varying degrees of conscious insight, he himself must resolve; and, in so far as he does ultimately acquire a " social sense ", it is based largely on self-developed general principles.

It would seem, therefore, that, in general, the European acquires, by the nature of his experience in childhood, a wide understanding of his total situation, both material and social; that he is forced to make a comprehensive personal integration; and that his behaviour tends to be governed on this basis. Social outlets and restrictions are, ideally, effectively controlled in adult life on a personal basis, and the need for meticulous rules in concrete situations is diminished.

Now the African, as has been seen, starts his childhood (with weaning) at a disadvantage. Infantile ambivalence is accentuated and perpetuated by his treatment at that time. Moreover it seems, in Bateson's [8] words, that : " For the establishment of an organized and more or less personified super-ego, such as we are familiar with in Western cultures : (a) the inculcation of cultural norms must be predominantly reinforced by punishment (including threats of withheld affection under this term); (b) the punishing role must be played by some individual adult (a parent or parent substitute); and (c) the behaviour of this punishing parent must be such that some species of close affective tie is established between the child and the parent." If this is so, then in African life the two latter conditions are often not fulfilled. Therefore, a secure foundation for the sort of mental development that is the European ideal is never laid.

The child's life is governed by an interlacing network of rules and taboos, whose origins are prehistoric. It may be assumed that their original functions were always socially integrative and, in so far as they are retained, that they are so still. From this point of view, but from no other, they are mutually consistent. Their presentation to the child, however, is empirical; and, inasmuch as explanations are forthcoming, they are given on mythical, magical, and animistic lines. Natural curiosity as to causes is appeased too facilely and too effectively by invocation of the supernatural, and further speculation is baulked. Moreover, the formal rules

derive their force from diverse personal " wills ". Conformity to any particular rule is maintained and its infringement punished by the " will " of the relation, alive or dead, concerned in the affair. Problems arise, of course, for life is never quite amenable to rule of thumb, and frustrations and misfortunes call for thought. But, in such circumstances, thought must be governed by these " wills " and must take such forms as " Who has been offended ? " Each relation's peculiar temperament requires consideration for, alive or dead, he is a concrete image and as impulsive as the next man. Thus the potential tendency to simplify and synthesize is frustrated early and late, and such organization as exists in African life is social—never cerebral ; the individual is integrated in his society—not in himself. Attempts to redress this in later life can be only partially successful. The cerebral facilitations that should have occurred in childhood, and even at certain critical ages, cannot now be swiftly made.

In African culture there is little specialization ; each man is heir to the whole knowledge of his group. This knowledge in its essentials is passed on to the child at a comparatively early age. Moreover, the instruction is informal and, since it makes few demands on reason, is well suited to the abilities of little children. The later initiatory ceremonies add little in the way of instruction (as that word is understood by Europeans) to what he knows already, so that, by the time the child is 12 years old or so, he can hold his own with adults and has long since in make-believe played grown-up roles. In fact, the child, in his attitude to the world and in the absence of recorded history, must feel quite early that he stands at the same point as his parents—face to face with the unknowable. Although he stands in awe of this, he is socially confident and even apt, if not curbed, to step out of his proper status. His culture recognizes this ; and it seems likely, as Raum [149] has emphasized, that the chief aim of certain rituals is the suppression of this tendency.

African education, using the latter word in its widest sense, is verbal, musical, dramatic, and emotional ; and the African lives largely in the world of sound, in contrast to the European, who lives largely in the world of sight. Carothers [31] has emphasized the importance of this difference and has drawn attention to the fact that, whereas the world of sound is highly personal and emotional, vision introduces man to a world of irrelevance and continuity. He wrote :

" The combination of relative objectivity with a sense of inevitable continuity in space and time must deal a death blow to the world of ' personal will ' and pave the way for the development of a sense of the inherent nature of cause and effect. At first sight it might not seem important whether mankind is introduced more insistently to the world of sight or the world of sound, but on further consideration it seems that its importance can hardly be overstressed. An understanding of the world we live in, and the development of an objective attitude and of mature responsibility depend on a well-

developed sense of spatial, temporal and causal relationship and these in turn on a habit of visual, as opposed to auditory synthesis. In whatever degree the world of ' things in themselves ' is real, there seems little doubt that the visual qualities of these ' things ' form the most valuable part of our ' behavioural environment '. It is by no accident that the word ' foresight ' has a visual connotation, and by no accident that vision, unlike hearing, is dependent on cortical integrity, and it is clear that verbal and musical ability alone must fail to develop most of those faculties that make man pre-eminent," and " must leave him grossly dependent on aspects of the world which are of directly personal interest and emotional appeal."

Carothers might have added tangible to visual, since both sight and touch relate man to a similar world ; and, in view of the dearth of toys in African childhood, it seems appropriate to recall that the " emancipation of the fore-limbs " and manipulative skill preceded brain enlargement in primate evolution.

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Personality cannot nowadays be divided sharply into temperament, character, and intelligence. Intelligence, from a neurophysiological angle, seems to be a function of cerebral complexity and cerebral integration and, as such, includes both reason and emotion, its degree depending, in part, on a proper balance of these. Intelligence in human beings can, however, be divided into two aspects. There is, firstly, an impersonal aspect in which temperament and character play more remote parts and reason more direct, which is highly dependent for its development on modern formal and mechanical education, and which is amenable to testing at a table and has therefore come to be regarded as " intelligence " par excellence. There is also a social aspect, in which temperament and character play more direct parts and reason more remote, which depends on social education—largely informal and emotional— and which can really be assessed only in real-life situations and has proved recalcitrant to formal tests. This division not only is a convenience but also corresponds to a reality. Human beings are born into two distinct worlds in which general principles apply : the world of things, which are governed by principles of physical causation and which are impersonal and universal and subject entirely to logical necessity ; and the world of human relationships, which are governed by culturally determined ethical principles and which are local and arbitrary.

In regard to the latter, perhaps the most general and least arbitrary ethical principle conceived by man is " Therefore all things whatsoever ye would that men should do to you, do ye even so to them ". But even this is not a natural law. By and large, and in the long run, this particular principle is no doubt the most sophisticated form of egotism and, approached from

a standpoint of pure logic, requires a fairly high degree of cerebral integration. Doubtless also many folk achieve this attitude purely on a basis of sophistication and behave at most times as though they had a " social sense ". It is most doubtful, however, whether a real social sense and genuine altruism are ever achieved on a basis of pure reason. Although in its more complicated expressions it is never fully developed in children and requires, in fact, much later learning, basic " unselfishness " is a trait which, if it develops at all, shows evidence of its existence in quite young children. This trait therefore emerges at an age when true reason and logic have not yet appeared and, if not genetically determined, it must be based on environmental factors other than reason. These factors must occur in the first few years of life. That the healthy development of social intelligence is highly dependent on infantile experience, and that children who suffer emotional neglect in early years can probably never acquire a true social sense has been well shown by many writers, for example by Bovet [22] and by Bowlby.[23]

That the association between social and impersonal intelligence is not remote is suggested by Mead's [120] statement that: " Study of the Manus tribe of the Admiralty Islands suggests that a method of upbringing which sternly fixes individual responsibility for wrongdoing also establishes an attitude of mind to which the ways of engines, telephones, and other apparatus of the modern age are no longer strange."

In regard to impersonal intelligence, Piaget [142] has drawn attention to the fact that, although the world of things is subject to logical necessity, this logical necessity is not an obvious fact of individual experience ; and the world, from a subjective point of view, is full of miracles. It is true that, on the basis of a modern scientific education, the universality of physical determinism is sufficiently clear ; but this concept is, historically, a relatively new one. It is probably also true that, in all cerebral functioning and development, there is a tendency to simplify experience and unify phenomena as best one can. But, in the final analysis, the conception of ultimate universality in such phenomena is not based in individuals on reason : it is a faith. Once again, therefore, although in its more sophisticated developments it is highly dependent on later education, the foundations of impersonal intelligence are laid in early life. Here, however, the role of parental and other social factors is of less importance, and high achievement in this field is still possible for those who have suffered infantile neglect.

It seems, therefore, that, for the full development of both aspects of intelligence, both early infantile and later childhood experience must follow certain lines, and that neither of these lines is followed, early or late, in Africa.

*Adolescence*

The cultural factors particularly relevant to adolescence in Africa are as follows. Instruction does not differ in essentials from that given to the children and, if anything, is more emotional, mystical, and dramatic. There is a further insistence on tribal rules and taboos, and initiatory rituals act, as one of their chief functions, as a final firm reminder that development must be contained within the rigid social framework. Attention is frankly and explicitly directed to heterosexual functions, and sexual relations with many partners of the same age-group are encouraged.

The psychology of the African is essentially the psychology of the African child. The pattern of his mental development is defined by the time he reaches adolescence, and little new remains to be said. However, as Blanchard [19] writes, "The changes in the physiological organism that take place at puberty result in reinforcement of heterosexual drives and of strivings for independence and personal responsibility." This therefore seems to be the appropriate place for discussion of these developments in the African.

In regard to sexual function in the African, Ritchie [152] says: "Many pass all the way from the last stage of infancy, through childhood and youth, right into maturity without ever having experienced voluntary sexual abstinence." The observation is commonly made by Europeans that the African, after a bright and promising childhood, becomes hopelessly inadequate at, and after, puberty, and that this is due to his total absorption thenceforth in the pleasures of sex. This attitude has been well epitomized by Davidson [46] who, writing of a North Rhodesian tribe, said:

> "Up to puberty there is in my opinion very little difference in the intelligence and learning ability between Bemba and European children. After that a marked difference occurs, the European far out-stripping the African child. This, I think, is due to the early release and gratification of the genital sexual impulse in the average African child.... the pubescent African, unlike the European who is carefully taught to sublimate his sexual desires by education and sport, gratifies his erotic desires to the full. This considerably detracts in the establishment of a stable culture and stops the development of a scientific enquiring mind, which is in part dependent on the unsatisfied curiosity about sexual factors."

This explanation is, in the present writer's view, inadequate. Unfortunately for the sublimation theory, it is notorious that many of the most vital, capable, and otherwise worthy citizens of western Europe have never "experienced voluntary sexual abstinence"; and it has been shown by Taylor in America, as mentioned in Hunt's book,[92] that intellectual brilliance and high achievement are often associated with free sex indulgence. The trouble is much more deeply seated; and the whole-hearted concentration on sex which characterizes the African adolescent is, in the present

writer's view, merely one symptom of a general condition—one more example of the all-or-none attention which is part and parcel of the lack of personal integration which has now become the clearest feature of African mentality.

In regard to the " strivings for independence and personal responsibility " that characterize European adolescence, African culture recognizes this and firmly stamps it down. If any basic independence has survived the years of childhood, or if any faint resurgence of this occurs at adolescence, it is one aim of initiatory ritual and of circumcision to destroy its general expression and canalize it into sexual channels acceptably defined.

*The adult*

There is, under this heading of adult psychology, no need to recapitulate the cultural factors as a separate paragraph, for they are now part of African psychology itself. The individual has himself become one strut in the rigid social framework which constantly curtails the development of the child. Adult prestige is not based on any valuable reality. Its precariousness is clearly seen from the ease with which alien influences beguile the children's hearts away. This prestige must be jealously guarded by firm adherence to the rules, and by the sanctions of supernatural " will " and curse, so that conformity becomes an obligation to oneself.

In summary, by the nature of African experience in infancy and childhood, no firm foundation is laid for clear distinction of the subject and the object, or for a proper balance in regard to these of love and hate. Tendencies to later readjustment (especially in the field of impersonal intelligence) of this distorted state are consistently frustrated, so that in later life there is little approach to a total personal integration ; and, in dealing with any situation for which no pattern of behaviour is prescribed by local custom, such behaviour is impulsive and is marked by concentration on immediately presenting aspects of that situation, without regard for the sum of stored experience, of present perception, or of implications for the future. Rapaport,[146] referring to the development of consciousness in general, says, " The gradual development to thought as ' experimental action ' from thought as ' hallucinatory gratification ' reflects the gradual development from monoideic consciousness of the drive gratification to polyideic consciousness of the relation of perceived external reality, internal need, and memories of past experiences." African adult psychology might be described as " monoideic " and the attitude to life as " all or none ". The difference is not absolute ; logic is also used in the affairs of life, but this technique is never granted an exclusive, or even leading, role.

The peculiarities of African psychology are thus explained. There is no need to bore the reader with examples of its application. It can be seen from a perusal of the list of attributes described by various observers and summarized on an earlier page that these are all expressions of this principle. One does not really have to live for long in Africa to recognize its universal application. Faces do not convey so much as one could often wish, but they are expressive of this type of consciousness. If one scans the faces of the passers-by in any town in western Europe it is clear that most of the people observed are impelled by some continuing inner purpose and yet are also alert to the events around them. If one leaves the ship for a moment at any African port, it is equally clear that most of the faces observed express either exclusive interest in some immediate affair or complete apathy.

The implications are manifold, but the following would seem to be of major interest for this monograph.

The first is mental uniformity, a uniformity which is not the same as that implied by cultural uniformity. Local cultures vary, but they all have this in common—the abrogation of polyideic consciousness. The latter, unlike monoideic consciousness, is highly personal; and thinking, feeling, and behaviour in its presence are dependent on the individual's unique manipulation of his experience. It is true that, if one knows individuals of both groups well, one can predict the European's behaviour as an individual with greater certainty than one can the African's; but, in the absence of such knowledge, European behaviour is far less predictable. This, indeed, is the chief excuse for the writing of this monograph. The lack of personal uniqueness in the African must result, among many other things, in a lack of sustainment in personal relations, in attitudes towards marriage and wives, and in some of the repercussions on the child which have been described.

The second implication follows from this. Western polyideic consciousness is highly dependent on the dominant home influence. This permits of, and encourages, a progressive personal diversity in certain groups and families from generation to generation, whereas the monoideic consciousness that results from African culture tends to be highly static through the centuries. Moreover, the positive correlation of intelligence level that is seen in European married couples is unlikely to obtain in similar degree in Africa, thus still further limiting the possibilities of diversity and change.

The third implication concerns memory. The development of broad general concepts may often imply the relegation of the data on which these were based to the limbo of forgotten things. The process can be envisaged, on neurophysiological lines, in terms of a facilitation between

cell-assemblies which must tend to destroy the latter's separate existence, or, on psychoanalytic lines, as a lack of repression for which the chapter on psychiatry will show the evidence. One would therefore expect a relatively good rote memory in Africans. Indeed, few European estimates of African abilities have failed to concede this; and the earlier quotation from Kidd, concerning an African's first headache (page 96), seems to raise the possibility that memories of even infantile experience may not be rare in Africans.

Fourthly, the type of consciousness described (in which attention is undivided and concentrated on external stimuli—especially the spoken word) would seem to provide such an ideal medium for the action of suggestion as virtually to correspond to a prehypnotic state, with all that this implies for individual thought and group behaviour.

The fifth implication concerns educated Africans of the first generation. Some of these can rise above their background in a way that is beyond all praise. That many fail to do so can only be expected; for, as Biesheuvel [16] has said: " He acquires skills without a tradition of craftsmanship; technical knowledge without any experience of the industrial society to which it pertains and which is, therefore, easily forgotten or misapplied; higher learning without the historical and cultural background which gives it its full meaning; professional skills without much awareness of the public duty that their practice imposes."

The balance sheet is not all on the debit side, of course; and it might be argued that the development of foresight and reflection is always achieved at the expense of vividness of present interest. Few Africans would, like Isaac Newton, try to tell time by their egg and boil their watch; and it must be of some advantage in a race to have a one-track mind. Monoideic consciousness explains not only the ruderies listed earlier (page 87), but the attractive features too—the personal charm (from full attention), the quick sympathy, the swift forgetting of wrongs, and the ability to continue in dull routine tasks. The dangers of polyideic consciousness are best exemplified in psychiatry where, as will be shown, the advantage seems to lie very largely with the African.

Finally, it has been argued that all these remarks are true of Africans only as seen by Europeans and are not true of him within his natural environment. The previous quotation from Bateson (page 102) would exemplify this point of view, and it is implicit in Mead's [121] description of certain other preliterate societies that the individuals do achieve a circumscribed and inelastic personal integration and, in transition, must therefore " learn the new behaviour by rote—each item in isolation and without its total meaning ". This argument was, however, countered by Carothers,[31] as quoted earlier in this monograph (page 103). Human

behaviour, of course, is never wholly stereotyped, and the circumstances of life in rural Africa (as of life elsewhere) must always demand some power to adapt and improvise, which is never wholly lacking. But it is a main theme of this monograph that African culture has developed on such lines as to reduce the exigencies of living to a minimum, and that the integration which the rural African apparently achieves is founded on the continuing support afforded by his culture and has but little independent existence in himself. His stability within his culture is, in a sense, beside the point, for his weaknesses can hardly be exhibited in this environment. Nevertheless, the instability which the European sees, for instance, in the tale that is told to please the hearer and which must exist in a world whose order is ultimately founded on impulsive "wills", is also seen quite frequently in indigenous life in violence at beer-parties and in the developments described in the chapter on psychiatry.

No claim is made that the European approach to life is better; it is achieved at a cost, as will also become clear in the chapter on psychiatry. It may not even be more true; the universal validity of physical determinism is a human concept and is much more evident in arm-chairs than in jungles. But this approach has tremendously increased man's power to bend the world to patterns of his choosing and is achieved by peoples whose conscious thought is governed by such principles.

## Mental Development in Relation to Malnutrition and Disease

The peculiarities of African psychology can therefore be explained on cultural grounds alone. Does this imply that cultural factors alone account for them? It does not. Malnutrition and disease also probably play their part in African psychology and, as will be shown, can also by themselves account for much of its peculiarity.

If the reader has read as far as this he will doubtless now suspect that the writer is sitting on the fence. The latter can only plead for further patience and add that, when a fence separates two marshes, it may be the only place to sit. Moreover, if one wants to cross the marsh, it may be best to crawl along the fence-top in the hope that at its further end, and in a later chapter, one may be able to step off it on to solid ground. In the meantime, it is necessary to discuss the possible effects on mind of malnutrition and disease.

### *Disease*

Tropical diseases, in so far as they have anything in common with each other, result in states of chronic debility and anaemia which must, in many ways, be similar in effect to malnutrition. Indeed, as in the case

of infestation with various worms, of feverish illnesses, and of cirrhosis of the liver, their own effects are often malnutritional. In so far as their effects are peculiar to themselves and are not general, their study is more suitably deferred to the chapter on psychiatry.

*Malnutrition*

Malnutrition, in the obvious form of kwashiorkor, is seen most often between the ages of two and four. But there is little doubt that this disease is, like the rash of measles, merely a sign of something deeper and more widespread, and that for every case of this disease there are scores of children who are undernourished. Concerning kwashiorkor, Clark [34] said : " The mental changes found in kwashiorkor are the most consistent and probably some of the most important of all changes found in the disease. They are I think far more characteristic, constant and important than the skin changes about which so much has been written. A child with kwashiorkor is dull, apathetic and miserable. It rarely cries or screams, a low miserable whimper is the only vocal sign of its wretchedness... Children with kwashiorkor are so dull and apathetic that if put to sit in one place will remain sitting there till lifted up again. They never, as do so many other children, go wandering off down the ward to investigate matters for themselves." Trowell [173] has emphasized the significance of this inertia at this crucial age; and Davies [50] said : " A state of peevish apathy dominates the lives of many African children up to the age of five years—a period in which more favoured children are actively learning about the world around them, accommodating themselves to it, expanding and adjusting their personalities, and making their first social contacts. During this period, the African child is too often a whining, apathetic invalid, and this must be a great handicap to his development." The truth of these remarks cannot be questioned.

It is even possible that malnutrition may interfere with neurone formation in the foetus for, as Silvera & Jelliffe [162] have shown, it is not entirely confined to postnatal life. Since no new neurones can develop after birth, this may result at times in actual cortical deficiency and irremediable mental retardation. However this may be, an arrest of mental development at two to four years old is unlikely ever to be wholly remedied in later years. With apologies to Shakespeare, there is a tide in the affairs of children which omitted they pass their lives in shallows. Moreover, the malnutrition does not wholly cease in early childhood ; much of the population lives from hand to mouth and is either continuously or seasonally undernourished. Therefore, the retardation which must occur in many little children from this cause is likely to be permanent to some degree.

What of the effects of malnutrition in adults? Keys and his confederates,[106] in their experiment at Minnesota, have shown that prolonged semi-starvation of normal adults produces certain psychological effects. This experimental malnutrition was not fully comparable to African malnutrition since the former was essentially concerned with calorie lack and the latter is mainly one of protein deficiency. However, since calories are obtained from proteins (when not supplied from other sources) and since calorie lack is also not uncommon in Africa, especially at certain seasons, the relevance of this experiment is really quite considerable. Keys observed no significant objective deterioration of memory or logic; visual acuity and colour discrimination were not impaired; and auditory acuity was slightly, though definitely, increased. There was some impairment of neuromotor functions (strength, speed, and sustained power), but this may have been related to general bodily weakness and conservation of energy. The mental symptoms observed were largely interdependent, but can be grouped as follows:

(*a*) lassitude, with apathy, unsociability, and often depression;

(*b*) lack of sustained interest, with lack of drive and concentration; restriction of interest to food, and short-term egotism;

(*c*) emotional lability, with irritability, and lack of self-control and social inhibitions.

Now it is clear, as the present writer [31] has shown elsewhere (and as quoted on page 93), that, as regards the second and third items and, if and when the African is not constrained by his own local rules, the resemblance to rural African mentality is very close. As regards the first item, however, the African is highly responsive to his social environment. Though apathetic and probably rather mentally void when by himself, he delights in company and comes most vividly to life when with his cronies. This fact does not accord with the hypothesis that the peculiarities of African mentality are due to semi-starvation. However, Keys [106] says elsewhere: "Some spells of elation occurred. The men's spirits were markedly boosted by such things as good weather, anticipation of an outing, a stimulating 'bull session', and other variations in daily routine capable of arousing enough interest or enthusiasm to take them out of themselves.... These feelings of well-being and exhilaration lasted from a few hours to several days but were inevitably followed by 'low' periods." Though fundamentally apathetic and unsociable, their flagging spirits could be temporarily raised by cheerful circumstances, including social ones; but, in the absence of external stimulation, they sank into lethargy and gloom. The African is not quite like that. Nevertheless, the resemblance is in many ways a close one, and the chief remaining difference—a high degree of lethargy which must entail some difficulty in making social

effort—might be attributable to physical inertia in the European subjects of this rigorous experiment. It therefore seems that much of the peculiarity of African mentality could be explained on grounds of malnutrition.

Actual observation of mental differences among tribes of different diets are few and far between. Orr & Gilks's [135] observations on the Masai and the Kikuyu are not so valuable in this connexion since the Masai carry so much more Hamitic blood that racial factors might confuse the issue. Richards & Widdowson,[151] however, in a survey of two Northern Rhodesian tribes—the Bemba, who are mainly vegetable-eating, and the Bisa, who eat much fish—record of the Bisa that " in general the natives seemed smaller, stockier, more inclined to be fat, and were more energetic and better able to concentrate than those in the millet-eating villages with poor meat and food supply. Men and women seemed able to dance the extremely tiring round dances for five hours non-stop, a feat never seen in the Bemba villages. It is interesting to consider how far this greater energy is connected with the better quality of the diet."

It seems, therefore, that, in general, malnutrition may play a vital part in African psychology, at least in many areas.

*Feminization*

The question of whether feminization has any bearing on African psychology next arises. Some degree of physical feminization of the men is quite a frequent finding; and Davies [50] has said, " it would seem very probable that sex hormone imbalance exerts an influence over the mentality of Africans ".

A study of feminization in American college students, presumably White, has been described by Seltzer.[157] In this study a physical assessment was first made of 258 men and, by various criteria, it was decided that 27 of these showed clear evidence of " weakness of the masculine component ". The mental traits of all the men were then independently assessed, and it was found that, on the whole, those with a weak masculine component showed certain characters which are here summarized. They were less vital and hardy and less apt for sports; their personalities were less well integrated; they were more sensitive, ideational, creative, and intuitive, and less practical and with less ability for organizing or for leadership; they were more shy, asocial, self-conscious, and inhibited; they were relatively strong in verbal functions and tended to select art, letters, and philosophy in their choice of careers.

Two comments are called for on these findings. Firstly, a high prestige attaches in America (and in England, for that matter) to eminence in sport in boyhood—to being a " he-man ". Physical feminization is not conducive to success in manly sports, and compensations are therefore

sought in other and less physical fields. Most of the attributes described above are either directly due to physical feminization or to such compensatory techniques, and are therefore largely cultural. Secondly, although there are some similarities to the African, the picture as a whole is grossly divergent from that seen in him. It seems, indeed, that there is very little certainty in general as to what are the fundamental concomitants in the mental sphere of physical feminization in men or of feminity in women. Apart from certain obvious limitations due directly to physical factors, it is even uncertain whether there are any such concomitants ; and it seems that many of the traits that are often regarded as typical of girls and women are simply patterns of response to cultural demands, as shown by Mead.[123]

Moreover, it is very certain that the mental attributes of Africans are not those seen in European women. Far from being mentally unintegrate, the latter, on the whole, probably achieve a total integration earlier in life and more completely than is the rule in men. If mental effects of feminization do occur in African men, they are utterly obscured by other and more fundamental factors.

Finally, physical feminization is by no means universal in African men. Whichever part of the continent one visits, one sees men of all degrees of masculinity, and many who are " he-men " by any standard, yet the characteristic psychology of Africans (as previously described) is seen throughout the range of masculinity and is clearly independent of this factor.

For all these reasons it seems unprofitable to pursue this question further. Physical feminization does occur and is no doubt important, but its mental concomitants, if any such exist, are of no present relevance for African psychology.

* * *

In general, however, culture and malnutrition are highly relevant, and an attempt to disentangle the parts they really play is made in the final chapter of this monograph.

CHAPTER 8

# PSYCHOLOGY OF THE NEGRO IN THE USA

Students of African psychology are curious to know how the Negro shapes in other lands. Such knowledge could, in theory at least, explain how far peculiarities observed in Africa are, or are not, innate. African peoples, on their entry into the Americas, did not always shed forthwith their native ways; and here and there, as in parts of Brazil and Dutch Guiana, African cultural patterns persist with little change today. But, by and large, these patterns are now lost, and their place is taken by the way of living called " American ". Indeed, it has been a chief concern of many Negroes in the New World to achieve acceptance of themselves as good Americans, so that there one might find populations that could serve as fair controls for the studies on psychology in Africa.

Many have thought along these lines, and the psychology of American Negroes, for this and other reasons, was a popular field of research for many years; and the literary output has been very great. A critical survey of this work is not within the present writer's competence, nor fortunately is this necessary for, in a few outstanding books, the existing work, at least as far as this refers to Negroes in the USA, has been widely surveyed and the findings gauged according to their merits.

Now it may be said at once that, in terms of achievement at school, and by tests, American Negroes have, on the average, not risen to the standard of American Whites. The summated results of 45 separate intelligence-test studies collected by Klineberg [108] showed an overall median I.Q. of 102, with a median range from 85 to 108 in the 18 American White studies; on the other hand, in the 27 American Negro studies, there was an overall median I.Q. of 86, with a median range from 58 to 105. Myrdal [129] wrote: " Most studies of intelligence show that the average Negro in the sample, if judged by performance on the test, is inferior to the average white in the sample, and some studies show that the average Negro has certain specific personality differences from the white man." By 1944 many of the limitations of the test procedure were well comprehended, and it is essential to record without delay that both Klineberg and Myrdal present these studies with full appreciation of their non-significance for nature-nurture issues. But in earlier days the test results were thought to give clear indications of innate ability, and it was possible for such an authority as Oliver,[134] for instance, to say that " The difference between the average

negro intelligence and the average white intelligence is in fact approximately one-eighth of the entire range of white ability."

Anyone writing in 1932 might have made some such remark as that; but, unfortunately for the student, the position is less simple, and the issues are befogged by many factors. The Negro in America is now seldom of pure Negro blood; and, except in the case of a few recent immigrants, attempts to select pure Negroes are based on rather arbitrary criteria since the family trees are always rootless. Even so, and if this were the only pitfall, studies of American Negroes could still be very valuable since it might be assumed that such mixed populations were, with certain reservations, intermediate between the two ancestral populations; [a] so that, from comparative data of White and mixed White-Negro populations one could infer the status of the Negro element. But however far this argument holds good for human bodies, it is much less true of human minds. For colour, both by reason of past circumstance and present prejudice, is in general associated with inferiority of social and economic status and, as natural outcomes, with poverty of cultural and educational and sometimes of nutritional background. Yet all of these have large effects on test achievement; the "culture-free" test is now seen to be a chimera; and, in Klineberg's [109] words: "The history of the mental testing of ethnic or racial groups may almost be described as a progressive disillusionment with tests as measures of native ability, and a gradually increasing realization of the many complex environmental factors which enter into the result."

Appropriate selection solves some problems but poses others; and, on the whole, it seems unlikely that any quite conclusive answers can be found at present in the USA. In certain other parts of America where colour, as such, plays little part in social status, the difficulties may be less overwhelming; and studies such as those by Davenport & Steggerda [45] in Jamaica may be more fruitful. In the meantime, however, the results in the USA have not been wholly negative and are well worth setting down.

Pasamanick [137] compared 53 Negro infants with 99 White infants in regard to motor, adaptive, linguistic, and personal-social behaviour patterns during the first 18 months of life and found the average Negro development fully equal to that of the average White.

Perhaps the most valuable general finding has been that "as the environmental discrepancies are reduced, the differences in test results are reduced correspondingly" (Klineberg [109]). This writer elsewhere [108] has drawn attention to the wide range of average I.Q. scores exhibited by the 27 Negro groups referred to previously in this chapter and the relation of this range

[a] Most of the existing evidence supports the truth of this in regard to physical characters, as Herskovits [87] has shown; and Myrdal,[129] referring to the American Negro, says that anthropologists "find the changes in traits from those of the pure Negro type to be roughly proportional, on the whole, to the amount of admixture of white blood".

to the varying economic and educational opportunities which obtain for Negroes in diverse parts of America. Environmental factors of the types described have been proved capable, indeed, of affecting the I.Q. scores by even more than the differences that have been generally found.

In most I.Q. studies of Whites and Negroes, the distribution of the scores has shown a large overlap of each group with the other. St. Clair Price [144] says, " In the best of the Negro Colleges (best on the test) there were approximately 43 per cent of the students at or above the median score of the whites." Moreover, in one study by Jenkins [101] of superior Negro children who had attended schools in northern states, no less than 103 children were found with I.Q. ratings ranging between 120 and 200, and there was no tendency for the numbers of superior children to diminish in the upper age and grade levels. Referring to another article by Witty & Jenkins,[189] Klineberg [108] says : " Commenting on the I.Q. of 200 obtained by one girl, the authors note that this has been equalled or excelled by fewer than ten of the hundreds of thousands of children to whom the intelligence tests have been administered."

In regard to qualitative aspects of intelligence and traits of personality, the same lack of conclusive evidence of innate differences is seen. Evidence has been adduced that the Negro shows, on the whole, more extraversion, more suggestibility, and some superiority in responses involving rote memory ; but, even in regard to these, the differences are slight and not consistently observed in many studies. His musical ability has not been proved by tests to be superior, and his eminence in music and in sport has been convincingly ascribed to present circumstance.

In general, in Klineberg's [109] words : " The net result of all the research that has been conducted in this field is that there is no scientific proof of innate racial differences in intelligence ; that the obtained differences in test results are best explained in terms of factors in the social and educational environment ; that as the environmental opportunities of different racial or ethnic groups become more similar, the observed differences in test results also tend to disappear ... When tests of temperament or personality are used, the same considerations apply." The absence of innate differences has also not been proved and, to the best of the present writer's knowledge, no student of American Negro mentality excludes the possibility of such. But it seems that if such differences exist, they are likely to be slight and if slight are never likely to be demonstrated since for their demonstration the environments of White and Negro must be virtually identical ; and this can hardly happen until such time as these two populations have so completely merged that they are not distinguishable as racial groups. Then, and then only, will wholly fair comparison be possible ; but, unless the genes determining the mental trait are linked

with the genes determining a physical trait (e.g., skin colour), it will not then be profitable.

The net result of the American evidence from the point of view of this monograph is to emphasize once again the overwhelming importance of environmental factors; and it is becoming ever more apparent that the characteristic mentality of the African is mainly, if not wholly, due to these. Indeed, the interest of this research is clearly shifting from the question of "What are the fundamental racial differences?" to the question of "What can or cannot experience effect on human minds?"

CHAPTER 9

# PSYCHIATRY

## Etiology

Since this is not a textbook on psychiatry, there is no need for any lengthy discourse on the general principles of causation in this field; and it is assumed that the principles described in psychiatric textbooks apply in Africa as in Europe.

Causation can be discussed, as usual, in terms of hereditary and environmental factors; but since, in the absence of evidence to the contrary, it must be assumed that the hereditary aspects follow, on the whole, familiar patterns, and since the environmental ground has been already surveyed, this section can be brief. There do remain, however, certain points for mention.

### *Hereditary factors*

It is now well recognized that the development of human minds is dependent in large measure on environmental factors, including cultural ones. It is also recognized that the survival of species depends on the inheritance of variations which are of value in regard to diverse physical environments. It seems not to have been widely recognized that the cultural environment might influence genetics. This may occur in many ways, but the following seem most pertinent for the present study.

A relatively high degree of exogamy, as compared with that which obtains in rural Europe, is the rule in Africa. Since traits dependent on the expression of rare recessive genes are most likely to appear with parental consanguinity, it may be surmised that psychiatric conditions dependent on such genes (such as certain low-grade types of mental defect) would be uncommon on this continent.

For cultural reasons and by reason of the psychology that develops on the basis of this culture, it seems unlikely that the high positive correlation (about + 0.5) of inter-parental intelligence which has been demonstrated in England and America would obtain in Africa. This point was raised before, and it may well have repercussions on the distribution of

intelligence in Africans ; it might tend to limit dispersion, and reduce the standard deviation from the mean.

African culture has developed on lines which demand ability for memorizing detail and for behavioural conformity. Except in regard to certain arts —music and the dance—it frowns upon the expression of originality and of profundity of reason. Tredgold [171] records retentiveness of memory as the only mental faculty which does not differ greatly in most defectives from the normal ; it may at times be super-normal in defectives. African culture might, as one of its effects, enable some persons who would seem defective in modern Western cultures to pass muster in the community. It does not tend to eliminate the intelligent (by European standards) as such, and such elimination could only be envisaged if courage and an urge to self-expression went hand in hand with brilliance. But these traits of character are no doubt more dependent on environmental factors; and, even in parts of the world where these are virtues, there is little correlation with intelligence. Therefore, although the upper end of the I.Q. distribution-curve may remain at the same point, the mean might, over the centuries, tend to fall. Gordon [78] envisaged the possibility of this fall.

The most successful Africans were polygamous, and prestige attached to being the wife of a man with many wives. Although in African life there is little scope for the expression of brilliance, and although, in general, there is probably but little similarity of inter-parental intelligence, it does seem likely that the largest families would, on the whole, accrue to the most intelligent fathers and, in less degree, to the shrewdest mothers. In western Europe the poorest parents produce the largest families, and it has been held that this must tend to depress steadily the population's mean intelligence. In Africa, the reverse may be the case, and this factor by itself might operate continually to raise the level of the mean.

What would be the outcome of the combination of such factors ? Who can say ? Clearly there can be no facile answer ; the skein is far too tangled. One can only pose the question and hope that someone better qualified for the task may some day reap a richer harvest from this neglected field.

*Environmental factors*

As far as psychiatry is concerned, the relevance of the environment consists in the effects it produces on the body (by way of infections, malnutrition, drugs, etc.) and on the mind (by way of these and by the culture). Since, however, the cultural factors have already been absorbed into the study of African psychology, it seems most appropriate to devote the rest of this section to a discussion of the physical conditions that have peculiar interest for psychiatry and to relegate culture and psychology (as now virtually inseparable) to the next section of this chapter.

The part played by infections is a large one, as was shown in chapter 2. Whereas some of these, like trypanosomiasis, syphilis, and cerebral malaria, produce effects which are specific and determinable, others simply produce a background of ill health which must predispose to mental breakdown or aggravate it later. Of these more insidious infections, the most important are malaria, bilharziasis, ankylostomiasis, and amoebiasis; but the role they play is usually obscure. Tooth's [170] investigation of hookworm incidence in patients in mental hospitals and among other population-groups would seem to show that, at least in regard to this infection, it is slight.

These remarks also apply to the anaemias in general, which are often severe but which, apart from sicklaemia, show no characteristic patterns of reaction and, in any case, are usually themselves results of other conditions referred to in this section.

Malnutrition, apart from frank pellagra, probably plays a fundamental role which is as insidious as it has been little recognized. Malnutrition in prenatal life and infancy may interfere with neurone development and, in early childhood, may incapacitate the children at the very time when they should be most adventurous and curious; in either case, it is likely to result in a backwardness which cannot be readjusted later. In later life a state of chronic undernutrition and anaemia may predispose to the development of neuroses and psychoses and must leave the subject with so little margin that a short period of famine will precipitate pellagra. Finally, any mental condition which results in deficient food intake (as depression) or excessive energy output (as mania) is also quickly liable to result in the development of frank pellagra.

Alcohol is mainly consumed in the forms of millet beer and palm wine. Spirits are little drunk except in townships. Although the beers and wines are of a low alcoholic content, they are imbibed at parties in such amounts that intoxication is not rare, but with results that are more often criminal than psychiatric.

Finally, a variety of conditions which play an important part in other countries are of slight importance in Africa, and the psychoses and dementias associated with myxoedema and Graves' diseases, with cerebral arteriosclerosis and hypertension, and with intracranial tumours and senility are all relatively rare.

*Psychological factors*

Since institutions for mentally deficient Africans are as yet inadequate or even lacking, most defectives who survive remain at home or live precariously at large. It is notorious that such persons are easily, though often transitorily, precipitated into neuroses and psychoses; and the admissions

to mental hospitals and prisons in undeveloped countries are accordingly recruited in larger measure from this source than obtains in more sophisticated countries. Evidence for this will be adduced in later pages.

There is in all African mentation a high degree of unresolved ambivalence, and it is only too easy for the subject to see himself at times as faultless but wholly impotent and the world as wholly alarming and inimical. It has been a frequently reiterated theme of this monograph that man in Africa is buffered from reality by a cultural machinery which can cope with most exigencies. He need not clear his mind of ambivalence nor organize his thinking on personal lines and in relation to objective categories and can spend much of his life in dreams—living in the world, at second hand, through his culture and community. Untoward situations and misfortunes are not rare ; far from it, they are the order of the day. But they are seldom without precedent, and for each and all of these there are prescribed behaviour patterns.

The only sin is the breaking of a social rule, by action or inaction, and by which one must offend the " will " of someone, be that someone a relation, clansman, ancestor, or some remoter spirit. There are temptations, and the flesh is weak —wives are seduced, debts are not paid, advantages are taken of the weaker neighbour. So long as all goes well, one may believe that one is omnipotent and that the rules except oneself. But if misfortunes then befall (as illness, death of cattle), conscience begins to work and, at one remove as ever, it is then known that the wronged one is taking his revenge and will not fail to kill if unappeased. Misfortunes cannot be fortuitous ; and when they come, as come they will, they are known to be directed at oneself. Therefore, to the reasonable anxiety is always added the knowledge of bewitchment, though its source may not be known.

All is not lost, however, for there are local specialists in witchcraft ; and if one can consult the proper expert and if one can follow his prescriptions, one may avert one's doom. These " if's " may not be small ones : the prescription (sacrifices, etc.) may be without one's means ; and, if one has left one's country (for distant labour or for army service), there may be no one to consult. Then indeed the world is wholly bad, the dream becomes a nightmare, and reactions may be catastrophic.

These few words on psychological factors do not, of course, exhaust the subject and are inserted only with a view to underlining the strangeness of the background and thus to prepare the reader for strange psychiatric developments. More detailed discussion would be inappropriate here. African psychology in general was discussed in chapter 6 ; and those aspects of psychology that are pertinent for psychiatry will, it is hoped, become quite manifest in the following pages and will be discussed as they arise.

## Incidence

Figures can lie; so before one ventures into any jungle of statistics where one cannot see the forest for the trees, it seems advisable to view this jungle from a distance and meditate upon the forms the lies may take in Africa. The terrain is familiar to the present writer.

European administration in tropical Africa is a relatively recent thing and varies greatly in effectiveness from place to place today. Institutions for accommodating psychiatric patients arrived late upon the scene and still remain quite few and far between. Until the coming of the European, such patients were cared for at home—sometimes so neglectfully that they wandered off or died, sometimes with amazing care and all the skill that relations and witch-doctors could devise. It is assuredly the case that many are still so cared for and that, apart from special circumstances, only a minority are taken to the mental hospitals. The circumstances in which they are so taken vary with social developments in each area, but certain principles apply and call for thought.

Although in early days of European administration little cognizance was taken of psychiatry as such, order had to be kept and the violent arrested, and prisons soon appeared upon the scene. Yet violence is often a symptom of psychiatric conditions and, if search be made in prisons of very undeveloped countries, mentally deranged and defective persons will certainly be found. In a series of 100 homicides examined by the present writer in Kenya Colony, no less than 12 were feebleminded or psychotic. Indeed, the necessity for building mental hospitals arises first from the need to segregate such persons from the other prisoners. The population of these hospitals in early days therefore always contains a large proportion of the criminal insane. Thus, Shelley & Watson,[160] referring to the Central Lunatic Asylum in Zomba, say, "the data concerning actual patients were obtained by the examination of the inmates of the Central Lunatic Asylum, and these inmates are composed of criminal lunatics, homicidal lunatics and lunatics without a known domicile"; and Tooth,[170] referring to the Colonial Mental Hospital in Accra, says, "For many years now, the primary function of this Mental Hospital has been to protect the public from dangerous and criminal lunatics, and the inmates are therefore not representative of the mass of insane persons in the country."

European medicine is at first highly suspect; and, quite apart from psychiatric cases, it is generally true to say that sick persons who attend the hospitals in very unsophisticated areas are the failures of the witch-doctors. Gradually this attitude breaks down as the astonishing results of European medicine are recognized; but the possibility of European treatment of the mentally afflicted is late of recognition, partly because the mental hospitals are few and usually remote and problems of conveyance

seem at times insuperable. (This latter difficulty can, in fact, be overcome ; but assistance must be sought and some arrangements made.) So one defers the evil moment. Carothers [30] showed, for instance, that the period of time during which 27 patients had been looked after at home before certification varied from one day to two years, with an average of six and a half months.

It has been suggested that insane and mentally defective persons are deliberately destroyed on the grounds of their affliction. This can seldom be the case. Brelsford,[26] referring to a North Rhodesian tribe, said : " The insane among the Bemba were never deliberately killed in the past. It was believed that if a man killed a lunatic the same kind of madness would pass to the killer." In many areas the insane are regarded as possessed of special " power " ; and the murder of such persons would, in African belief, not destroy that power but might enhance it and would ensure that henceforth it would be used against the killer. Carothers [30] has also shown that, from a juridical angle, this was not a cause of murder in Kenya. It is, however, very certain that many psychotic and grossly defective subjects must die from lack of skilled attention.

The insane do not pass unnoticed in the community. Despite Gorer's [81] remark that " if we are sane all primitive negroes are raving mad ", the African has, in fact, no greater difficulty in recognizing the strangeness of psychotics than has the European layman. Indeed, as Brelsford [26] has shown among the Bemba, several reaction types have local names ! Mental defect, however, raises peculiar problems, which are best discussed under " total incidence ".

Thus, apart from the criminal insane, the chief criteria for sending patients to the mental hospitals are : knowledge that such places do exist and that some authority (the local administrative, police, or medical officer) will help to get the patient there ; serious intractability or violence at home ; long-continued failure to recover ; wandering at large ; propinquity to Europeans who insist on segregation (as with squatters on European farms) ; propinquity to the mental hospital itself ; insanity in townships or among labourers on estates with poor facilities for home care ; sophistication of relations ; insanity occurring, or first noticed, in general medical hospitals. By no means all the patients in a long-established mental hospital are sent on the basis of these criteria. Nevertheless, these criteria do operate, especially in the hospital's early days, and must produce a selected psychiatric population which, statistically, is far from representative of insanity in rural Africa. It is therefore profitable to consider which types of patient are likely and unlikely to arrive.

Since young adults are most unmanageable, and men are in general more violent than women, there is to be expected an excess of persons of

the third and fourth decades and an excess of males, as compared with European figures. There is in Europe a high mortality among children of the lower grades of defect, and this is doubtless still more true in Africa. Such children are not deliberately murdered; but, to survive, they do require much extra care at a time when the mother's full attention should be turned to her next baby. This extra care cannot be given, and so these lower grades are seldom likely to be seen. Defectives of higher grade are most likely to arrive if they are intractable, psychotic, or neglected and wandering at large. Psychopathic persons, if aggressive, tend to follow a triangular path which leads from community to prison and so to mental hospital and then perpetually to repeat this journey. Persons suffering from mental disturbance of organic type are most likely to be sent if the cases are chronic, or if acute reaction types have occurred in general hospitals. Epileptics arrive, as in Europe, if they are also defective, demented, psychotic, or intractable. Schizophrenic patients, if chronic and severe (as are many of those entitled hebephrenic, katatonic, and paranoid) are likely to be sent to the mental hospital, but many simple schizophrenics and some paraphrenics are less likely to be seen. Manic patients are likely to be brought if the condition is acute or lasts for longer than a week or two. Depressives are likely to arrive in certain circumstances and not in others, but this subject is worthy of an extended discussion at a later stage. Finally, neurotic patients are likely to be seen only if they are forwarded from other hospitals or if their behaviour has important social repercussions.

And so one turns to figures.

*Total incidence*

In 1938 approximately 4 persons per 1,000 of the total population of England and Wales were notified as insane and under care; and, according to the Report of the Mental Deficiency Committee, Part IV, 1929, there were at least 8 mental defectives per 1,000 of the total population of England and Wales; of these, 6 were feebleminded, and 2 were imbeciles or idiots. The figures for the institutionalized insane in Africa have been approximately 0.3 per 1,000 total population in the Gold Coast (Tooth[170]), 0.06 per 1,000 in Nyasaland (Shelley & Watson[160]), 0.1 per 1,000 in Kenya Colony (as known to the present writer), and 1.2 per 1,000 in South Africa (as calculated from the annual report of the Commissioner for Mental Hygiene[176]). There are no special institutions for mentally defective Africans, but the above figures include a few such cases.

In regard to new admissions, there was in England and Wales in 1938 a rate of roughly 57 per 100,000 total population. In the State of New York, in the years 1929 to 1931, there was a rate for Whites of 74 per 100,000 per annum (or 97 when standardized for age), and a rate for

Negroes of 151 (or 225 when standardized for age). In Kenya, for the five-year period 1939-43, there was a rate of 3.4 per 100,000 per annum (Carothers [30]); in the Gold Coast for the same period, there was a rate of 3.3 per 100,000 per annum (Tooth [170]); and in South Africa in 1950, there was a rate of 15.4 per 100,000 (as calculated from the Annual Report of the Commissioner for Mental Hygiene [176]).

However much the African figures may vary among themselves, they are clearly of a different order from those in England and America; and it is equally clear from the preamble to this section that any useful survey of the incidence of African insanity must include a census of the cases undergoing home care. Unfortunately, such censuses are few so far and mostly imperfect, and the results of those which have been undertaken are somewhat contradictory.

Cheneveau,[33] describing a medical survey in French Togoland, says: "In spite of the imperfection of the investigation the recorded insane are numerous in Togo. In Anécho alone (one of the six districts of the territory in 1933) which I have surveyed thoroughly enough, there is hardly a village which cannot show a degenerate or insane person. At Anécho town itself, in particular, I knew of a score of insane persons in a population of 5,000 inhabitants." Three comments are called for in regard to this rate of 4 per 1,000 population. Firstly, the population is too small to warrant any broad conclusions; secondly, it is not clear that defectives have been excluded from this census; thirdly, this is the heart of Sleeping Sickness Africa, and the rate in this area is likely therefore to be relatively high.

Carothers,[30] by enlisting the help of certain District Commissioners and Chiefs, obtained censuses of the insane and mentally deficient persons of three areas of Kenya having a total population of 616,000 persons. The figure for the insane was 205 and, by adding to this figure the number of insane in the mental hospital at that time who had been admitted from these areas, the grand total of insane became 228, or about 0.37 per 1,000 of the total population. As this study was concerned only with mental derangement, the figures of deficients were not quoted. These are, however, available to the present writer for two of the areas, with a total population of 571,000. There were 248 such persons and, by adding the number of defectives without psychosis from these areas in the mental hospital at that time, a grand total of 251 defectives was disclosed, or a rate of 0.4 per 1,000 total population. Carothers considered that there was no reason to doubt that all the persons known to be insane and mentally deficient in these areas at the time of the census were included and stated that, although "the figure as produced by the Chiefs is open to the obvious objection that it is based on the non-medical diagnosis of a medical condition", yet he had "found in practice that the native estimate of a patient's mental

condition is seldom entirely false". He admitted, however, that it was likely that a certain number of simple types of schizophrenia and mild paranoias and dementias had been missed; that the expectation of life of Africans in general was probably a low one—thus reducing the occurrence of later-life psychoses; and that the expectation of life of psychiatric patients in African reserves was also doubtless relatively low. Carothers concluded that, in spite of the several qualifications mentioned, the enormous gulf between the African figure (0.37 for 1,000) and the British figure (3.9 per 1,000) remained substantially unbridged and inferred that "the incidence of insanity in Kenya Africans (at least in those living at home in their reserves) is probably very much lower than that in Europe and America". One has to ask one major question. Is there any reason to believe that the figures recorded by the Chiefs were, apart from the provisos envisaged by Carothers, likely to be underestimates? So far as the insane are concerned, it seems that there is no good reason for assuming any gross underestimate. There might, indeed, be the reverse. The attitude of Africans, and especially of Chiefs, to European administration is largely governed by considerations of taxation. Each man is liable for a tax which he endeavours to evade if pretexts can be found. The infirm may be exempt and, although censuses in general are highly suspect and are regarded as a prelude to more efficient tax collection, a census of insane might well give rise to opportunities for tax reduction. So far as defectives are concerned, the problem is less simple; and, as was said before, it is likely that many high-grade defectives (as judged by European criteria) will pass muster in the life of rural Africa. But the only really useful definition of deficiency is a social one, as Tredgold [171] emphasizes; and it is most clear that there cannot be in different cultures one general standard of normality. Therefore, unless one insists on such an abstract standard, the ascertainment was not likely to be less efficient for the mentally defective than it was for the mentally deranged.

Tooth [170] conducted a survey in four areas of the northern Gold Coast. He not only personally examined many cases, but also obtained reports from Chiefs and census enumerators in these areas. In a total population of 166,269 persons, he saw 99 insane persons himself, and a further 61 were reported by the other enumerators. Tooth says that the rate calculated from those examined by himself (i.e., 0.60 per 1,000 population) may be regarded as a minimum figure, while that calculated from the total of those seen by himself and the enumerators (i.e., 0.96 per 1,000) is probably nearer the true rate.

The Mental Hospital Departmental Committee [177] produced a report on mental derangement in the Union of South Africa. This committee was struck by the disproportion between the incidence of mental derangement in Europeans and Africans. The committee found that Africans were

reluctant to send relatives to mental hospitals unless they were forced to do so by the violence of the patient or by economic pressure ; that urban Africans were seldom able to care for disordered relations, whereas rural Africans were better able to do so, though in increasingly less degree ; and that economic pressure did not operate so strongly in the case of the women. The committee made reference to a valuable census taken in South Africa of the mentally deranged and, since the present writer has unfortunately not been able to obtain a copy of this work and is ignorant of the circumstances of its production, he cannot do better than quote the committee's reference, which follows :

" The Committee was able to obtain some direct evidence on the incidence of mental disorder among a rural native population. Through the kindness of Dr. Park Ross, Senior Union Assistant, Health Officer in Natal ... the Committee was furnished with the result of a census, taken early this year, of a native population of nearly 389,000. In this population, resident in Zululand and Natal 315 persons were found to be mentally disordered and of these 84 were considered so gravely disordered as to require institutional care. It must be borne in mind that a certain number from this population are already under institutional care."

The committee considered that there was little doubt that this finding, which represents a rate of 0.8 per 1,000 (not counting some already housed in institutions), could be accepted as correct " because it was obtained by competent people and the sample is large enough to be significant ". Finally, the committee recorded that it had " no data or information on which to base advice as to what accommodation, if any, is required for feebleminded non-Europeans ".

From all these figures the present writer concludes that there is evidence of a disparity between the total incidence of mental derangement in rural Africa, on the one hand, and in western Europe and North America, on the other. Further evidence will be adduced in later sections of this chapter. In regard to mental deficiency, however, little can be said ; but here again some evidence will arise when the special types of defect are described.

*Sex incidence*

According to Henderson & Gillespie,[85] " the total incidence of mental disorder differs but slightly in the two sexes ".

The proportion of the sexes in mental hospitals in relatively undeveloped parts of Africa always shows a large preponderance of males. Thus the ratios of the inmates at Zomba in 1936, at Accra in 1950, and in Nigeria in 1937 were all 6 males to 1 female ; and in South Africa in 1950, it was 2.2 males to 1 female. For new admissions to the mental hospital at Nairobi from 1939 to 1943, the ratio was 1.9 males to 1 female ; and for new admissions in South Africa in 1950, it was 2.5 males to 1 female.

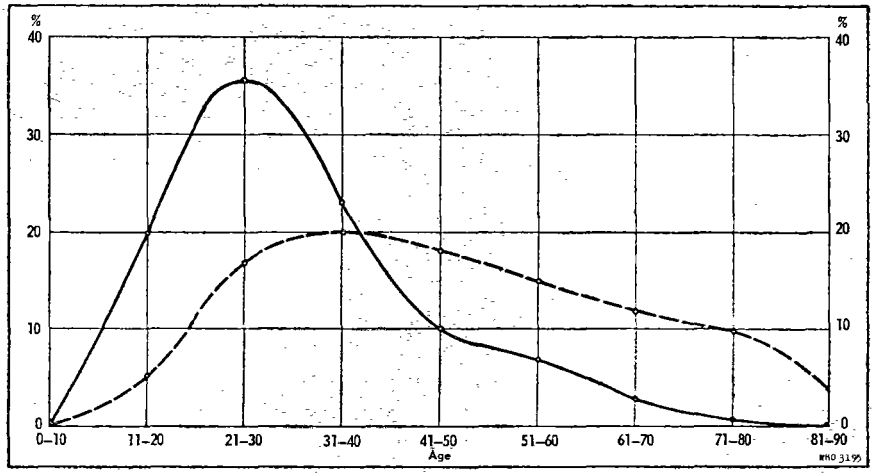
Part of this difference can be explained, as shown before, on the ground that women are more easily controlled at home. Moreover, many men are admitted to the mental hospitals from labour camps, army barracks, townships, etc. where there is a minority or lack of women and where facilities for care are slight or non-existent. These factors however, do not seem entirely to account for the discrepancy. Tooth,[170] in a rural survey in the Gold Coast, found a ratio of 1.7 males to 1 female; and, in the figures supplied by the Chiefs to Carothers (in the previously reported census), the ratio was 1.5 males to 1 female. It may well be, in Shelley & Watson's[160] words, "because the native women lead a circumscribed and protected life from birth until death".

Further light will be thrown on this when one studies the reaction types.

*Age incidence*

Shelley & Watson[160] found the average age on admission of the 84 inmates at Zomba to be 35.4 years. The 609 new admissions seen by Carothers[30] at Nairobi showed a mean age on admission of 33.3 years. Among 173 insane persons examined in the rural Gold Coast, Tooth[170] found a mean age at the time of examination of 34.2 years (S.D., 11.6) and a mean age at the onset of illness of 28.1 years (S.D., 10.3). From figures in the possession of the present writer, a graph (fig. 1) can be

**FIG. 1. COMPARISON OF AGE ON ADMISSION TO MENTAL HOSPITALS IN AFRICA AND IN THE USA**




——— Admissions to the mental hospital at Nairobi, Kenya

- - - - - Admissions to mental hospitals in the USA (Dayton[11])

constructed and which shows the ages of Africans on admission to the mental hospital at Nairobi and compares them with admission ages in the USA for all races as recorded by Dayton.[51] From this graph it can be seen that over 78% of the African inmates are admitted between the ages of 10 and 40 years, whereas in the USA only 42% are so admitted; and it seems that this experience in Kenya is the rule in Africa.

Several comments are called for. Firstly, the African seldom knows his age, and European assessments of African ages are usually gross underestimates. Most studies involving age in Africa have been vitiated by this principle. Nevertheless, the disparity in shape of the two recorded graphs is not entirely accounted for by this, and it is clear that there is an unduly high admission-rate in earlier decades and an unduly low one in later decades. Secondly, the age constitution of the general population is unknown, though it may be surmised that there are relatively fewer people in the higher age-groups. Finally, the bulk of persons living away from home in conditions where they cannot be cared for by relations belongs to lower age-groups.

*Incidence in relation to detribalization*

That detribalization might increase the tendency to mental breakdown has been a theme with several writers. None of these has expressed the theme with greater eloquence than Gallais & Planques,[74] and the present writer only hopes that the following translation does justice to the charming French. They say:

> "Western civilization has experienced an extension without precedent in history, reaching all peoples to the furthermost ends of bush, savannah and desert, thanks to the multiplicity of means of transport, to wireless and to the immense turmoil produced by the last world war. All this movement has brought together, on the one hand, social groups constrained by rules, customs and traditions which reach back to prehistory and, on the other hand, representatives of Western civilization who were too often not its best elements ... A veritable tide of political, social and religious ideas, entirely new, has swamped these countries, submerging the natives under an ocean of concepts for which nothing had prepared them, and in which they were incapable of discriminating good from bad. Already the frequency of mental states among uprooted natives (soldiers, sailors, dockers), with their frequent frenzies, bears witness to the influence on their mentation of a conditioning quite different from that of the environment to which they were adapted. Small wonder that, submitted to this buffeting ... the framework within which they had lived should have fallen to pieces, leaving them only too often to find themselves surrounded by the defunct and useless debris of the past."

The recorded studies that have aimed to discover whether detribalization in Africa is, in fact, a cause of mental breakdown have failed to throw much direct light on this problem.

Carothers,[30] on the basis of first admissions to the mental hospital of Kenya, observed a certification-rate of 2.3 per 100,000 of the rural population, of 2.5 per 100,000 among squatters (who live on European

estates and maintain their traditional manner of living in high degree, yet are likely to be institutionalized if they become insane), and of 13.3 per 100,000 among Africans employed or living away from home. These figures (and other evidence such as age and sex incidence referred to in the present monograph) led him to infer that " so long as an African remains at home he is very unlikely to be certified insane, but as soon as he leaves his home his chances of being so certified are much increased ". Referring to the rate of 13.3 per 100,000 observed in Africans living away from their original homes, he said that this rate was

" thus considerably higher than that of those living at home. But the yet more striking fact is that the figure still remains quite small compared to British and American figures and, as it is unlikely that employed natives would not be certified if insane, this figure is probably a fairly true measure of the incidence of insanity in these people. Furthermore, these 300,000 persons living away from home are not a representative cross-section of the population as a whole. They are mostly men, and the great majority lie within the age group of 15 to 45 years. The rate for this group in America is approximately 95 per 100,000 as opposed to approximately 80 per 100,000 for the population as a whole. So the discrepancy is seen to be even greater."

Tooth [170] discusses the relation of psychotic breakdown to Europeanization, and uses " literacy " as his criterion for the latter. He considers first the possibility that African groups " selected " on a basis of literacy might be predisposed to mental breakdown and says: " There is no reason to suppose that the expectation of mental instability, due to biological causes, would be higher for educated Africans than for the rest of the population. If then it can be shown that biological predisposition is equally distributed among literates and illiterates, a difference between them in the incidence of mental disorder is likely to be due to environmental factors." He also says:

" If, in this series, literacy and exposure to European influences were in themselves causes of mental illness, it would be reasonable to expect among the literates a higher proportion of reactive than endogenous psychosis. And, if it is conceded that an endogenous psychosis is more commonly associated with hereditary factors, as shown by the incidence of affected near-relatives, than a purely reactive disorder, then a lower incidence of hereditary factors might be expected among the literates in this series than among the illiterates. In fact, excluding organics, mental defectives and neurotics, it is found that 17 (34.0 per cent) of the 50 literates had affected near-relatives, as compared with 27 (40.9 per cent) of the 66 illiterates—an insignificant difference. But, although this analysis of a small sample suggests that endogenous factors are as common in the psychosis of literates as illiterates, it may still be true that the strains inherent in literacy play a part in precipitating a mental illness where there is a latent hereditary predisposition."

Tooth draws attention to the circumstances of the lives of literates which " combine to make the literate lunatic both prominent and socially unacceptable and, not unnaturally, suggest to the casual observer that literacy is itself a causal factor " and concludes that " this survey provides

no evidence in support of the hypothesis that psychosis is commoner in the Westernized group than in the rest of the population—a finding agreeing with Cunyngham Brown's impression from Nigeria". Tooth also says, however, that: "This survey, at best, could only go a small way towards answering this question. Confined, as it is, to the examination of psychotics, it takes no account of quite two-thirds of the psychiatric material which, by European standards, is judged to be of as great or greater social importance. It may be that among the neurotics and the minor forms of personality disorder, the exposure to Western culture has a more unsettling influence."

Three alternative, but not mutually exclusive, possibilities must be considered in regard to all such studies of detribalization:

(1) Apparent differences of psychiatric incidence as between rural and other populations may not be real but simply due to differing opportunities for care in the community. This alternative is undoubtedly and always operative in some degree.

(2) It is possible that mental derangement takes more amenable forms in rural life. This possibility was envisaged by Cheneveau [33] when he said that anti-social reactions among the insane (aliénés) are rare in the indigenous milieu, especially rural, and that the primitive forms of organization of African society facilitate the maintenance of adaptation of the mentally ill; and by Tooth,[170] when he said: "Contrasting these people living in their homes with those who have strayed to the large towns and those who have been confined to the asylum, one is struck by the dilapidation of the former and the restlessness and florid symptomatology of the latter." This possibility is doubtless operative in the case of the fundamentally defective in whom psychotic reactions are surely apt to arise in the face of unfamiliar circumstance. But the present writer is not at all convinced that it has much application to the mentally deranged. Home care in rural Africa is often most coercive, as shown by Brelsford,[26] and restraints used at home are sometimes of a type that would appal the staff of any mental hospital. It seems most likely that the difference observed by Tooth arises mainly from the fact that the intractable insane had been already transferred to the mental hospital, or had succumbed as a result of their "home care".

(3) There may indeed be a greater tendency to develop pathological reactions by reason of detribalization, but it seems that there is not sufficient evidence to justify any firm conclusions, one way or the other, on the basis of the purely African investigations. Carothers's [30] findings may be accounted for on other grounds, and Tooth's [170] approach is far too indirect to justify conclusions on the basis of so small a sample. What does appear, however, is that, in all circumstances the rate, by European and American standards, remains a low one; and, if one relates

this finding to the high rate for Negroes in America, there do seem to be grounds for thinking that psychotic incidence in Africans is related to deculturation.

## Psychiatric Categories

The differential diagnosis of the various mental reaction types encountered in Africans is confused by several factors. Good histories are often unobtainable: only too often the patients arrive at mental hospitals unaccompanied by those who know them and are themselves incapable or unwilling to give reliable accounts. Problems of interpretation are often serious; each tribe (there are at least 60 in Kenya Colony alone) has local variants of language, and the finer shades of meaning are not successfully translated. Africans have, in general, no genius for directed introspection and no ability or desire to describe subjective states; "feelings of unreality", for instance, could hardly be elicited. Diversity of cultural experience can also be a stultifying factor; and the recognition of, say, the "knight's move" of schizophrenic thinking must imply some familiarity with local culture: a "knight's move" for the psychiatrist might be a "rook's move" in a patient's culture, or even a "crow's flight"!

Such factors do not, however, account for all the differences from European psychiatric patterns; and, as Tooth [170] wisely says, one is "forced to the conclusion that there are real differences in the quality of the psychotic reactions of individuals with different racial and cultural backgrounds, differences which make it impossible to fit them into the accepted nosological framework".

As far as possible, therefore, reaction types will be discussed under familiar European titles; and, in a final section, further reference will be made to those cases which still remain unclassified and, in terms of European psychiatry, perhaps unclassifiable.

### *Mental deficiency*

All degrees of mental defect do occur; but, for reasons previously stated, idiots and imbeciles are seldom seen; and many feebleminded persons can live in the community unless, by reason of superadded epilepsy or psychosis, they are sent to mental hospitals or, by reason of vagrancy or crime, they come to prison.

Many patients in mental hospitals in Africa are basically feebleminded; but, since firm diagnosis must depend upon good history-taking (which is so seldom possible in Africa), since the basic defect is so often overlaid by concomitant psychosis, and since there are no widely recognized or well-standardized intelligence tests for rural Africans, the diagnosis has too often not been made. Of all the psychiatric patients in institutions in

South Africa on 31 December 1950, 8.9% were of defective mental development (with or without epilepsy); and, of all the first admissions to these institutions in 1950, 4.7% were of that category. Carothers [30] recorded 10.7% of all first admissions to the mental hospital of Kenya during 1939 to 1943 as being composed of mental deficients with mental disorder. This higher rate is doubtless due to the more recent development of Kenya and to the relatively little segregation so far of the defective population. Recovery of such patients from the psychotic complications is usually quite rapid after their hospitalization, but recurrence and readmission is the rule if they are discharged.

For the same reason as was given in the previous paragraph, it is also the case that many persons who fall foul of the law in recently developed parts of Africa are mentally deficient. Thus, genuine rape and sexual offences against children are, as Laubscher [111] has shown, usually indications of feeblemindedness in Africans. The present writer found in a series of 100 homicides in Kenya that 8 were mentally deficient; while, among the 57 psychiatric homicides in the mental hospital at Nairobi on 25 April 1949, no less than 14 (or 24.6%) were feebleminded persons. This latter figure can be compared with that given by Norwood East [60] of 16 mentally deficient subjects among 300 Broadmoor homicides (or 5.3%).

Of clinical varieties of amentia, several types have been recorded. They include microcephaly, cretinism, cerebral diplegia, congenital syphilis, and sensory deprivation. Of outstanding interest, however, is the absence of mongolism, a subject which deserves some more extended discussion.

Tredgold [171] estimates the proportion of mongols in England at about 5% of the total number of aments of all ages, and at about 25% of all children under 5 years of age who are diagnosed as mentally defective. Malzberg [118] found that mongols, at the time of his writing, constituted between 7% and 8% of all first admissions to the New York State schools for mental defectives, but that the rate for American Negroes was only about a third of that for Whites. He says: "This obviously low rate must be considered significant in view of the fact that Negro first admissions as a whole are greatly in excess of the rate for the general white population."

Now it seems from Malzberg's figures that 96% of mongols fall into the grades of imbecile and idiot, and it is clear from Tredgold's figures that many die in childhood. Moreover, the behaviour of mongols is not characterized by the aggressiveness seen in many other kinds of mental defect. On all these grounds, it is not to be expected that many cases would be brought to hospital. But the absence of all records of the occurrence of mongolism in Africans does not seem to be explained upon these grounds.

The present writer's experience of Africa is not confined to psychiatric aspects, for he was previously a general Medical Officer for several years and saw, at out-patient clinics and at dispensaries in the reserves, African patients of all ages, suffering from all the ills that man is heir to. Though not in those days versed especially in psychiatric syndromes, he believes that, if mongols had been brought for medical attention, he was no less likely to recognize this condition in Africans than are European practitioners in Whites. Yet, among all the many thousands of Africans he saw throughout the length and breadth of Kenya, he never saw one case of mongolism—nor did Tooth.[170] To the best of the present writer's other knowledge, based on the literature and on interviews with many experts throughout Africa—East, West, and South—no case has yet been diagnosed in Negroes.

The etiology of mongolism is obscure, and the only well-established fact is its relation to maternal age. Malzberg,[118] for instance, says: "It seems clear ... that there is some factor operating in the production of mongolism, as yet not clearly understood, which is related to the reproductive capacity of the mother, as the latter is affected by advancing age." Ingalls,[95] in an important study of this subject, said: "The anatomic structures characteristically defective have one common feature: derivation from tissues differentiating at approximately the eighth week of foetal life." Therefore, if mongolism is rare or absent in the African, and if the condition arises from some insult to the foetus about the eighth week of intra-uterine life, one is led to wonder what insults may occur in European women of late maternal age that do not occur in Africans. This is a fitting subject for research.

*Organic reaction types*

The infections and physical diseases of peculiar interest, either by reason of their frequency or rarity, for African psychiatry, have been described in chapters 2 and 3. Physical disease plays an important role in the etiology of mental disturbance in Africa. This role is sometimes direct and obvious, as when lobar pneumonia is complicated by delirium, but is often quite uncertain, as when malarial parasites and some fever are found in patients with a mixture of confusional and schizophrenic symptoms. Thus, of the 84 inmates of the mental hospital at Zomba, Shelley & Watson[160] found 19% with malarial parasites in the blood, 12% with *Schistosoma* ova in the urine, and 26% with hookworm ova in the faeces, to mention only three of their many investigations. Many patients have more than one infection; and which one of these is finally selected, if any are, as the major causal factor is sometimes little better than a guess. Nevertheless, the records have their value; and there follows

some discussion of the chief organic causes as described by various observers in several parts of Africa. (Epilepsy is not included here, being discussed separately.)

Shelley & Watson [160] found that 14 out of 84 (or 17%) of the mental hospital inmates in Nyasaland were suffering from mental disorder of organic origin, and of these 8 were due to neurospirochaetosis (a title used to cover syphilis and yaws), 3 to senility, and 3 to other causes. Cheneveau [33] lists, as chief causes in Togoland, trypanosomiasis, syphilis, intestinal infections, puerperal fever, malaria, yaws, and alcoholism. Aubin,[4] with reference to French West Africa, emphasized the importance of trypanosomiasis, neurosyphilis, meningo-encephalitis of indeterminate types, and various other infections (especially pulmonary); he considers that the African is particularly susceptible to the effects of alcohol, and describes some cases of mental disturbance associated with beri-beri. Dembovitz [54] states that trypanosomiasis was the cause of about 10% to 13% of the acute mental illnesses he saw in West African soldiers. Carothers [30] found among 609 new admissions to the mental hospital of Kenya that 191 (or 31.4%) were organic in origin; and, of these, the chief causes were infective-exhaustive (80), senility (45), syphilis (28), and encephalitis (10). Tooth,[170] in a total of 173 psychotics seen by him in the Gold Coast, found that 32 (or 18.5%) were organic in origin; and of these the great majority (24) were due to trypanosomiasis. The annual report of the Commissioner for Mental Hygiene in South Africa [176] showed that, among a total of 1,215 mentally disordered first admissions, 290 (or 23.9%) were organic in origin; and, of these, 106 were infective-exhaustive psychoses, 69 were alcoholic psychoses, 60 were due to cerebral syphilis (parenchymatous or interstitial), and 55 were senile and arteriosclerotic psychoses. It will be noticed that references to yaws do not appear in later records and that, in general, it is very clear that much depends on local circumstance.

So far as mental symptoms are concerned, there is little to be said. The syndromes of organic origin occur in Africans as in Europeans. Deliria, subdeliria, and dementia show, on the whole, no peculiar features; and, apart from certain points of interest already mentioned in the chapters on infections and on physical disease, they call for no special comment.

*Epilepsy*

Epilepsy seems to be common throughout Africa, and epileptics are conspicuous in medical work there by reason of the burns that these unfortunates incur by falling into the fires, which are situated, as a rule, in the middle of the hut floor. Such burns are often multiple and crippling, and burn scars are so characteristic of these subjects that their absence can often be regarded as good evidence that true epilepsy is not present —a point of some value at times in medico-legal work.

Mental hospital figures of epileptics are merely a measure of concomitant mental disorder or deficiency or of anti-social behaviour, and the great majority of epileptics seen up and down the countryside are not complicated by these features. Even so, the figures are not small. Shelley & Watson [160] recorded 11 patients with epileptic psychoses (13.1%) among the 84 inmates of the mental hospital at Zomba. Carothers [30] recorded 21 new admissions of persons with epilepsy and mental disturbance (3.4%) among 609 new admissions to the mental hospital at Nairobi. Tooth [170] saw 4 epileptics with mental derangement (2.3%) among 173 examples of mental illness and many other uncomplicated cases of epilepsy in the Gold Coast. The annual report of the Commissioner for Mental Hygiene [176] shows that, out of a total of 7,782 mentally disordered patients in hospital on 31 December 1950 in South Africa, 851 (or 10.9%) were suffering from epileptic psychoses ; and, out of a total of 1,215 first admissions of mentally disordered patients in 1950, there were 112 (or 9.2%) with epileptic psychoses.

Convulsions are often secondary to obvious organic factors of types seen in Europe. Cerebral syphilis and cerebral malaria are among the commoner causes in Africa. Sickle-cell disease accounts for certain cases, and it is possible that cerebral bilharziasis and ascariasis might account for others. Cerebral cysticercosis is not often seen. Aubin [4] thinks that intestinal parasites (*Taenia*, *Ascaris*, *Ancylostoma*, etc.) play an important role, and he has found in certain cases that cessation of the fits has followed appropriate treatment of these infestations and that recurrence of the fits has coincided with reappearance of the parasites.

However, in spite of the multiplicity of possible organic causes in Africa, it seems that a large majority of cases still falls into the class entitled "idiopathic"; and it is not improbable that functional elements may play a larger role in many cases than they do in Europe. Aubin [4] and Gallais & Planques [74] have emphasized the tendency in all African mental disturbance to develop "paroxysmal" manifestations—a subject which will be discussed at length in a later section of this chapter.

On the clinical side, epilepsy follows in Africans all the classical patterns seen in Europe. Major fits are typical, and petit mal and psychomotor equivalents have been reported. Confusional states, twilight states, and furors all occur ; and dementia, when this occurs, shows the usual features of this state elsewhere. That mental defectives are often epileptic is clearly seen from the figures in South Africa, where no less than 204 of the 691 mentally defective inmates on 31 December 1950 were also epileptic.

*Psychopathic states*

Henderson & Gillespie [85] include under this title " persons who have been from childhood or early youth habitually abnormal in their emotional reactions, but who do not reach, except episodically, a degree of abnormality amounting to certifiable insanity; they show no intellectual defect ... and they do not benefit under prison treatment. They constitute a rebellious, individualistic group who fail to conform to their social milieu, and whose emotional instability is largely determined by a state of psychological immaturity which prevents them from adapting to reality and profiting from experience. They lack judgment, foresight and ordinary prudence."

If cases of the type that Henderson & Gillespie call " predominantly aggressive " occur in relatively undeveloped countries, they are likely to become conspicuous in psychiatric work since, as was previously shown, aggressive and anti-social persons are just that section of the population which must first be dealt with by the new administration. This expectation is fulfilled, and psychopathic persons of this type, with mental symptoms quite similar to their European counterparts, figure high in institutional records. Shelley & Watson [160] recorded 7 patients with psychopathic constitution (8.3%) among the 84 inmates of the mental hospital at Zomba, and Carothers [30] diagnosed this condition in 17 (or 2.8%) of 609 new admissions to the mental hospital at Nairobi. Such persons become especially conspicuous in army life, and Dembovitz [54] has remarked upon the frequent need for repatriating on medical grounds West African soldiers of psychopathic personality.

Only the more aggressive types of case give rise to urgent problems, and it may be surmised that many who would fall into the class that Henderson & Gillespie [85] entitle " predominantly inadequate or passive " might occur but not be seen. This question, however, raises problems of another order, envisaged by Carothers [31] when he said that, if psychopathic persons can be defined as those " who live in a perpetual here-now and lack the desire or ability to control their passing emotions and so to subordinate immediate gratification to their own long-term interests " (and having regard to the common occurrence of " frenzied anxiety " among " persons who appear after the storm has passed, to be perfectly normal Africans ") then " the resemblance between the mentality of the normal primitive African and a certain type of aberrant European mentality commonly included under the title psychopathic is found to be very close".

There is no need to discuss Carothers' argument at any length. The reader who has read this monograph as far as this will know the present writer's views on African psychology. The title " psychopath ", in its only valuable usage, has social connotations; and the application of this term to folk who do in general conform to their social milieu, when

within that milieu, is clearly a misusage. Moreover, when psychopathy of classical aggressive type is seen in Africans (as is not rare), its subjects are just as clearly marked from the generality of the people as they are in Western cultures.

*Schizophrenia*

This section deals with all the standard forms of schizophrenia; paranoid, paraphrenic, and paranoiac types are included except when distinctions are explicit.

Schizophrenia is par excellence the chronic form of insanity in Africans as in Europeans—a fact reflected in all figures concerning inmates of African mental hospitals. Thus, Shelley & Watson [160] diagnosed this condition in 30 patients (35.7%) among the 84 inmates of the mental hospital at Zomba; and in South Africa on 31 December 1950, no less than 5,255 patients (67.5%) among the 7,782 mentally disordered in-patients were suffering from various forms of schizophrenia. First admissions likewise show a high proportion of these cases: Carothers [30] saw 185 (30.4%) among 609 total admissions in Kenya, and the comparable figure in South Africa for 1950 was 635 (52.3%) among 1,215 patients. Tooth [170] diagnosed 33 persons (19.1%) as schizophrenic among the 173 mentally disordered persons he saw in the Gold Coast.

Many points arise for discussion in regard to schizophrenia. Although schizophrenia in Africans does appear in the familiar European patterns—simple, hebephrenic, katatonic, paranoid—a large proportion of the cases are amorphous. Tooth [170] is well worth quoting at some length. He wrote:

"While it is likely that the clinical picture of schizophrenic reaction may also be modified by the environment and cultural background of the patient, all the varieties of schizophrenia commonly described in Europeans may also be seen in Africans. But, whereas in Europeans, the distinction between an affective state with schizophrenic features, and a depressive phase in a primarily schizophrenic psychosis, is a common stumbling block in differential diagnosis, in Africans, schizophrenia is more liable to be confused with one of the organic psychoses. Among the 'bush' peoples, a typically schizophrenic picture is most likely to be due to organic illness, while schizophrenia itself appears as an amorphous, endogenous psychosis. But the schizophrenic psychoses occurring in the urban, literate section of the population show more nearly the same forms as are found in Europeans."

Moreover, although Tooth diagnosed "schizophrenia" in only 33 persons (as shown above), he classed a further 38 persons as suffering from "delusional states"—a title which he used "to designate a group of psychotics in whom no causal factors could be found and who did not conform to any of the standard reaction types"—and it seems from his description of these latter cases that many were probably "schizophrenic" but of amorphous type.

Paranoia, paraphrenia, and even paranoid schizophrenia are relatively rare in Africans. Gordon [80] remarked on this, and Dr. M. Minde, of the Sterkfontein Mental Hospital, Johannesburg, informed the present writer that his experience was similar. Carothers [31] is worth quoting on this subject. He said :

" It was shown in the previous article that paranoia was relatively uncommon ... and that when it did occur it was almost invariably related to unusual environmental circumstances, namely prolonged sojourn in an alien and inimical environment. It was also shown that, of a total of 174 schizophrenics (not including paranoia) only 11 (or 6.3 per cent) were considered to be of the paranoid type. Subsequent experience has confirmed the former observation and also the general uncommonness of paranoid schizophrenia. A further fact has emerged in regard to paranoid types of schizophrenia in general. In the previous article it was concluded to be impossible to assess the degree of education of an African in any exact and scientific manner. This conclusion still holds but, as a rough and ready substitute, the African interpreter of the hospital was requested to prepare a list of all those in-patients on a certain date (5 January 1949) whom *he* considered to be fairly well educated on European lines. One has no reason to doubt that his assessment was as correct as such an assessment can be and it has the great advantage of being independent and unbiased. All patients diagnosed as schizophrenic or paranoiac and in the hospital on that day were then independently classified in two groups—(a) those with a tendency to chronic delusions (persecutory or grandiose) and usually a fairly good preservation of the personality and (b) those with no such tendency and usually a marked disintegration of the personality. Group (a) includes those cases that are commonly called paranoid schizophrenia, paraphrenia and paranoia, and group (b) those called simple, hebephrenic and katatonic schizophrenia. It was then found that among 119 non-educated cases only 15 (or 13 per cent) were paranoid in type, whereas among 30 educated cases there were also 15 paranoid patients (or 50 per cent). The difference is significant in a high degree, with a chi-square figure of 21, and there seems no reason to doubt that paranoid types of schizophrenia rarely occur in Africans unless they have received some European education " or " a type of sophistication that was its equivalent."

Although delusional systematization was not made the criterion in this study, it must have correlated highly with group (a), as Carothers showed elsewhere, and is clearly a fundamental factor. The lack of systematization in African psychiatry has been commented on especially by Aubin,[4] who says :

" Systematization is inexistent or very rudimentary, as a general rule, in primitives : one can only draw from the patient a confused succession of propositions of the same emotional colour and in which we do not always perceive the connexions, perhaps because these connexions are inspired infinitely less by principles of causality than by those of ' magical equivalence '. On the other hand, the more advanced African, the old non-commissioned officer, the literate soldier, the ' citizen ', have a well known propensity for embittered claims, sustained and vehement.... It is precisely the relatively more advanced subjects who have the most accentuated paranoiac tendencies."

Aubin [4] elsewhere draws attention to the fact that this principle also holds good for hallucinations and that these are only chronic in the more sophisticated. Laubscher [111] says that among African schizophrenics " the

picture of mental confusion stands out clearly above any other syndrome" and that he had "not found homosexual masking by means of rationalizations and projections among male native paranoids to reach the same degree of defence complexity as abounds among European paranoids".

Persecutory delusions are the rule. Delusions of grandeur are not common, at least among Africans from undeveloped areas, as has been shown by Carothers [30] and by Tooth.[170] It seems that grandiosity must imply a higher level of systematization than does persecution and can hardly develop unless a certain level of personal integration is attained.

The delusional content also differs greatly in relation to European influence. As far as the rural African is concerned, one cannot improve on the illuminating exposition of Gallais & Planques.[74] These writers say :

"What strikes one first and foremost in the psychoses of Africans and in the account of mental illness is the naive belief in the intervention of supernatural beings or of occult forces. In this regard the native lies in the class of what the sociologists call 'collective representations' of which one knows (psychology of the masses) the great emotional force and the feeble intellectual structure. These collective representations being limited in number in each primitive society, one can explain the uniformity of delusional themes and the small number of analytical arguments expressed by the patient in support of his beliefs. It is nearly always a question of bewitchment, of ill-wishing, of condemnation to death and, in brief, of a sense of attack on the instinct of self-preservation or of a menace to the instinct of social preservation as epitomized in the sexual sphere."

Tooth,[170] referring to schizophrenia in the Gold Coast, says : "Among the 'bush' peoples the delusional content was almost invariably concerned with the ramifications of the fetish system. The fact of lunacy means that an offence has been committed either against the nature spirits, who then trouble the offender in the form of dwarfs or fairies, or against the ancestral hierarchy who appear and influence the sufferer in person." Apart from other reasons for deficient rationalizing, there is thus no requirement for this process either by the patient or by his community. Literate and urban Africans, on the other hand, tend to develop delusions of European type—often religious, identification with Jesus Christ or God being not uncommon. If European ancestry is claimed, as is also frequent, some explanation of the dark skin is forthcoming; and evil influences are not left in the air but arrive by "electricity" or "wireless". In general, as Tooth observes, "Schizophrenia in literate Africans, was found to take very similar forms to those seen in Europeans."

Shelley & Watson,[160] referring to Nyasaland, say : "The most important features of the schizophrenic psychoses in this country are the high incidence of such disorders as compared with other types, their close relationship to Europeanization, as shown by tribal, district and educational distribution, the high incidence of the European type of delusions, and the high rate of sexual disturbances." Gordon,[80] in a study of the relation

of education to mental disturbance in a series of 87 male African patients at Nairobi, found that all the 19 schizophrenics (" adolescent psychoses ") had received a European education ; he believed that this reaction type was thus produced. It is here maintained, however, that both Shelley & Watson's and Gordon's findings were based on selective diagnosis due to the factors earlier described, and are only wholly true of schizophrenia in its classical forms. In other forms it does occur in the rural population, and not infrequently.

This leads inevitably to a point well made by Laubscher.[111] This writer stressed that schizophrenia is the common psychosis of the rural African and that it occurs in spite of the high degree of protection afforded by his culture. Laubscher inferred from this that constitutional factors play the major rule in this disease and that environmental factors have latterly been over-emphasized. Although the essential information—the rate in the rural population—is still lacking, one must admit there is support for Laubscher's argument.

Finally, Laubscher, speaking generally of psychiatric reaction types in Africans, says : " The cultural pattern to which the native belongs, determines the nature of his mental content, but does not affect the particular form of mental disorder, namely, its structure, to the extent of making it something different from that which occurs in European culture." The present writer cannot agree with this ; the structure too is altered. The lack of integrative elements seen in rural African schizophrenia is something more than " content " and may well have connotations for prognosis. Other reaction types show even stronger evidence of this, as will be seen.

*Affective disorders*

Dr. H. L. Gordon, an intrepid and creative pioneer of African psychiatry, left on record that only two among 120 consecutive male African admissions to the mental hospital at Nairobi were suffering from affective psychoses (both mania). He said : " There is a remarkable absence from our series of all this group except a trifle of the elated type. Why ? Answer is not possible ; we are too ignorant of normal native mind." [80]

The distinction between manic and depressive psychoses, on the one hand, and anxiety neuroses, on the other, is well-imbedded in European, or at least in British, psychiatry, and has valuable implications there for responsibility in patients and for their disposal. Its value for African psychiatry is far more questionable. However, with a view to following standard procedure as far as this is feasible, the various manic and depressive states will be discussed under the present heading (" affective disorders "), while the discussion of anxiety states will be deferred to the section on " neuroses ".

As regards the manic-depressive and melancholic psychoses as a whole, psychiatric experience subsequent to Gordon's has not entirely confirmed his findings, and other published figures show a fair number of such cases. Thus, Shelley & Watson [160] diagnosed 18 patients (21.4%) as suffering from affective psychoses among the 84 mentally disordered inmates of the mental hospital at Zomba ; Carothers [30] diagnosed 31 new admissions (5.1%) among the 609 total new admissions to the mental hospital at Nairobi as suffering from manic-depressive psychoses and involutional melancholia ; Tooth [170] saw 34 affective states (19.7%) among 173 mentally disordered persons in the Gold Coast ; and South African records show that 84 first admissions (6.9%) were manic-depressives among a total of 1,215 mentally disordered persons who were first admitted in 1950. Laubscher,[111] in South Africa, diagnosed only 22 patients as suffering from these psychoses among a total of 554 mental patients and said that " a true manic-depressive psychosis is indeed rare among the the Cape coloured and native races ". These figures vary among themselves in such degree as to suggest that this is partly due to differing criteria of diagnosis ; this, as will be shown, is not surprising. On the whole, the figures are low ; but the much more striking finding is that, wherever separate figures are given for manic and depressive forms, it seems that the majority are manias. As far as mania is concerned, there is little to be said ; but depression must be dealt with at much greater length.

All writers are agreed that mania, in all its standard forms, occurs not uncommonly in Africans. Aubin [4] says : " The manic syndrome can be so typical that it conveys its own diagnosis ; the vivacious mien, the loquaciousness, the expression illuminated by a broad smile, the patient delivers himself of all sorts of puerile facetiousness, attends to all the objects at hand, forgets military discipline ; if one opposes him in his games, he becomes furious and, unlike the manic patient of our country, can develop dangerous reactions. He adorns his limbs and hat with stripes or silver paper, advances himself to the rank of corporal or colonel ... makes a thousand grimaces, mutters, sings or cries noisily." Carothers,[31] while recognizing the existence of classical cases, remarks that many patients " though excited, restless, noisy and irritable, show little sustained elation, little tendency to develop grandiose schemes, and often show schizophrenic features especially bizarrely exaggerated movements and facial expressions " and indeed that " classical cases of mania ... most commonly occur in a basis of European education or sophistication ". Aubin [4] finds that a confusional form is especially frequent and that " demanding delusions " (" delire de revendication ") occur chiefly in more advanced (évolués) subjects. Cases of chronic mania seem to be relatively common, as shown by Carothers [30] and by Tooth ;[170] but this is likely to be related to the fact that, in the circumstances of psychiatric work in Africa, most of the short-lived cases are not seen.

In regard to the occurrence of depression, there is some divergence of opinion. Tooth [170] diagnosed only six patients among 34 "affective states" as depressive. He says:

"A comparison between the reactions of Africans and Europeans to the ups and downs of life leads to the problem of the rarity of depressive reactions in Africans. This fact has been noted by many observers and various theories have been suggested to explain it. In this survey no single example of a pure reactive depression was seen, though records were obtained of short depressive phases occurring in the course of other, usually organic, psychoses. The rarity of suicide has also been noted: among the patients examined four had attempted suicide, two of these were suffering from trypanosomiasis, and the other two from schizophrenia. It is, of course, possible that suicides occur in the bush and are never recorded, but if the tendency to suicide was anything like as strong in African psychotics as in Europeans, it would almost certainly be reflected in the asylum population. But, amongst 680 lunatics in the Accra mental hospital in 1947, there were only three cases of self-inflicted wounds and no successful suicide: this low figure is certainly not due to lack of opportunity.... The absence of depressed patients is most strikingly demonstrated by a casual visit to an African mental hospital where, under infinitely more depressing conditions, the atmosphere of tense unhappiness usually found in European mental hospitals is replaced by one of unrestrained and misdirected exuberance of spirits."

Carothers [31] found that among 1,508 patients admitted in a ten-year period (1939-48) for mental disturbance to the mental hospital at Nairobi, only 24 patients were suffering from a depressive psychosis of any sort. In a discussion of this finding, and particularly in regard to the separation of involutional melancholia from other types of depression, he said:

"Fairly typical retarded depressions have now been seen (though exceptionally), and the sharp distinction that was made in the previous article between involutional melancholia and other types of depression ... can no longer be upheld. Henderson and Gillespie believe that 'there is a group of cases which we can term involutional melancholia distinct from manic-depressive states' and in which the characteristic features are 'depression without retardation, anxiety, a feeling of unreality and hypochondriacal or nihilistic delusions'. They reserve the title for patients with such symptoms occurring at the involutional period and who have never previously suffered from any form of mental illness. In the 10-year period there have been seen only 24 cases definitely suffering from a depressive psychosis of any sort, or 1.6 per cent of the total admissions. Even allowing for the fact that other cases have doubtless been missed on account of their atypicality, the condition as a whole is relatively rare. None of the cases fulfilled all Henderson and Gillespie's requirements for involutional melancholia but, allowing for the facts that 'feelings of unreality' are difficult to elicit in Africans (who have little ability to analyse and express their feelings) and that persecutory delusions are a characteristic reaction in them, there were about 6 cases that might be classed as involutional melancholia—occurring at the involutional period, with agitation, and hypochondriacal or persecutory delusions. Of the remaining 18 cases, two were agitated depressions in persons aged 30 and 40 years, and 16 were retarded depressions occurring at all ages from 25 to 60 years, and again mostly exhibiting hypochondriacal or persecutory delusions. Admittedly there was a greater incidence of agitation at higher age levels, for the average age of retarded patients was 40 years and of agitated patients was 49 years but, since 5 of the retarded cases occurred about the involutional period and one of the agitated at

30 years, no sharp distinction could be made in this series, and henceforward in this article all depressive psychoses will be classed together.... There is no doubt that classical psychotic depression of any type is relatively rare in the African. Indeed if one confined the diagnosis to cases exhibiting the symptoms described in British text-books of psychiatry one would very seldom make the diagnosis. Yet among European patients admitted to the hospital in the 10-year period, to the number of 222 patients, no less than 22 per cent were depressives."

Laubscher [111] gives no separate figures for depressives but, speaking of the African patients of the Queenstown Mental Hospital, South Africa, he says that self-mutilation was extremely rare, and that, among the 1,700 admissions in 15 years, only seven subjects had attempted suicide before or after admission or committed suicide thereafter; and, of these, five were schizophrenics, one was an epileptic, and only one was a depressive.

Dembovitz,[54] in a short but fairly comprehensive study of mental illnesses among West African troops, makes only passing reference to depression and says that " suicide is very rare ".

Aubin,[4] on the other hand, although he provides no figures, holds contradictory views from those described above. Speaking of " depressive states ", he says: " These are much the most frequent manifestations and are those which attract the swiftest attention: they contrast, in effect, with the habitual carefree attitude of the African, his blustering gaiety, his optimism ... Reactive psychoses are numerous here: detribalization, ethnic isolation, disappointments (loss of stripes), emotional shocks (incomprehensible punishment, prolonged hospitalization, etc.) can be the only detectable causes of simple depressive syndromes, and also of neuropathic states or furious reactions of which we have already spoken." He then stresses the several organic factors which often underlie depressive syndromes but proceeds to say:

" Melancholia often demonstrates itself by the manic episode which follows or precedes it. The patient habitually presents the classical appearance, concentrated and sorrowful, or rather with a surly or hostile aspect which can swiftly change to a furious frenzy ... which one does not expect to find here. He prepares himself with a bad grace for physical examination, rolls his eyes furiously if one uncovers his genital organs: he refuses to eat or to reply: torpor, diminution of ideation are ordinarily more obvious than sadness and frequently go on to stupor with at times the signs of the katatonic series.... Delusions of unworthiness ... are not exceptional in this milieu, at least in more advanced subjects.... The reactions of African melancholics are particularly formidable: homicidal fury, self mutilation (cutting of genitals, of a finger), fugues (desertion), often terminated by attempts at suicide."

Here, then, is a dissentient voice, and Aubin's views cannot be disregarded. Is it possible to reconcile his findings with those of all the others? Aubin's subjects were mainly West Africans, but so were those of Dembovitz and Tooth; his subjects were military cases, but so were those of Dembovitz. Three comments are, however, called for. Firstly, none of the examples

he gives as causes of reactive depression are such as could occur in tribal life ; secondly, he includes in this category cases who are far from following the patterns of depressive psychoses as these syndromes are commonly observed in Europe ; and thirdly, the more classical cases, judging from his case histories and from his reference to delusions of unworthiness, seem to occur largely in non-commissioned officers (corporals and sergeants) and in Mohammedans. It seems most likely, therefore, that much of the divergency of Aubin's findings can be ascribed to different criteria of diagnosis, and that the stretching of the diagnosis of " depression " to include all the types of case included here by him would be regarded as unorthodox by many. This does not militate against the value of his observations, and their considerable significance for African psychiatry will appear when the " unclassified cases " are discussed.

In general, it seems, therefore, that classical depressive syndromes are seldom seen, at least in Africans untouched by alien influences ; and it behoves one to consider whether other cases do occur but are not disclosed.

The main criteria that govern the admission of patients to mental hospitals, as was shown, are chronicity or unmanageability at home. Depression in Europe, if untreated, is often very chronic ; but depressive patients, from a layman's point of view, are less unmanageable than are most other psychotics since the risks of suicide and homicide are not appreciated. These remarks apply especially to retarded cases and are much less true of agitated cases ; moreover, they have little application to cases that occur away from home, as in townships, prisons, and general hospitals. That genuinely depressive subjects might not be recognized as mentally abnormal is probably less true in Africa than in some part of Europe where, by African standards, the " normal " population seems depressed !

Depression does, however, masquerade at times in other forms in Europe, and the chief or sole complaint may be of " physical " or " neurasthenic " symptoms. It has been the present writer's experience that there do present themselves from time to time Africans who look most miserable but deny all misery and who complain of bodily symptoms in the absence of all obvious signs of physical disease. Africans with mania admit elation readily enough ; and Africans, in view of their predominantly superstitious attitude, might be expected to admit to misery more readily than to elation, if misery were felt ; yet such admissions are rare. Since the diagnosis of depression must, in the final analysis, depend on eliciting this symptom, such patients cannot be included under the heading of depressives. Moreover, Henderson & Gillespie,[85] referring to a closely similar group in England, say, " Such patients as these do not usually

enter the portals of a mental hospital". This group therefore has little bearing on the problem.

It is theoretically possible that suicide before certification might account for a rarity of cases. Suicide rates in rural areas of Africa are little known. Laubscher,[111] however, conducted a valuable inquiry into this aspect of the problem by circularizing the magistrates in certain native territories of South Africa. He says: "All cases of suicide are reported to the magistrates through the various channels, such as headmen, chiefs and police. In an area containing a population of 868,944, according to the last census returns, there were fourteen cases of suicide and four cases of attempted suicide during the last two years." There was thus a rate of approximately one per 100,000 per annum, whereas in the United Kingdom in 1950 there was, for suicide and self-inflicted injury (but not including attempted suicide), a rate of roughly 10 per 100,000; and in the USA (according to the Statistical Abstract of the United States, 1948), there was a rate, for suicides alone, of 11.5 per 100,000.

There is another possible, though highly indirect, approach to the problem of depressive incidence, namely, a study of murder from the psychiatric angle; for, since homicides are brought to justice in Africa as in Europe, some comparison of figures can be made. Carothers [31] considered this approach and wrote:

"Among a series of 300 Broadmoor homicides referred to by Norwood East, the commonest type of mental derangement found was melancholia, which accounted for over 20 per cent of the cases. In a comparable series of 57 Kenya homicides who had been found guilty but insane, only 7 per cent were depressives. Moreover, these figures take no account of the fact that in England roughly 38 per cent of suspected murderers commit suicide before arrest and it may be assumed that many of these are depressives. In Kenya, where an enquiry was instituted in 5 districts on this point for the year 1946, among 56 Africans suspected of murder *none* committed suicide before arrest. If depression in Africans were clinically similar to this illness in England and many cases occurred in the reserves, one would expect a larger number of depressive homicides and of suicides of persons suspected of homicide."

By and large, therefore, there seems to be no good reason to doubt that the recorded rarity of depression in standard forms in Africans corresponds to a reality. If the hypochondriac cases previously mentioned are fundamentally "depressive", then confusion takes the latter's place and one can only say that circumstances have so altered the expression of this illness in the African that it is not the same disease. Far from merely altering the content, it seems, in fact, that cultural factors have changed the structure of the mind and even the incidence of the disease.

It was previously observed that the low total figures of mental disorder in African women were probably partly based on a reality. In Europe and America, although there is little difference in the total incidence of mental disorder as between the sexes, there are far more depressive reactions in

women. Therefore, if true depression is rare in Africans, one would expect a lower total incidence in women.

Why is depression so rare? Sixteen years have passed since Gordon asked the question and, with characteristic genius, showed where the answer might be found. We are now less "ignorant of normal native mind", and it seems the solution is inherent in African culture and the psychology that derives from it.

The development of depression in standard forms is linked in high degree with personal integration, with a sense of personal continuity, and with a sense of responsibility for one's past and of a retribution that must follow for one's sins. Tooth [170] says: "One of the most characteristic elements in the depressions of European psychotics is self-reproach ... but it is certainly true that self-reproach is very rarely met with in the content of African psychotics." Personal responsibility in peoples is not an all-or-none phenomenon. As Whiting shows, in a hitherto unpublished paper, it varies on a scale in cultural groups from those, the fatalists, with next to none, to those who shoulder all the burden. Africans are not pure fatalists. As Tooth [170] says: "The powers that be ... can be influenced and it is essential to know how to counteract the effects of evil and promote success. But, having taken the necessary precautions and performed the appropriate rites, the outcome is in the hands of the Gods, the responsibility has been shifted and the main cause of anxiety, the personal factor, is removed. There can be little doubt that the greater the assumption of free-will, the greater the strain on the personality and the likelihood of breakdown. The corollary of this proposition is that where there is no choice there can be no conflict." Furthermore, the man is not the unit: misfortunes have social repercussions, grief is not borne in isolation, and the appropriate rites are publicly performed.

These, in brief, seem to be the salient factors. It remains to add that self-reproach and the delusional systems that arise from this are often regarded as secondary manifestations of a fundamental disorder of affect, but it seems that this affect is not sustained without this element and that psychotic depression in the familiar sense can hardly develop in its absence. In fact, organization seems, in mental as in other provinces, to be the determining factor in persistence.

*Psychoneuroses*

Here one is squarely faced with difficulty. Although some African patients exhibit patterns of reaction similar to those included in neurotic categories in Europe, diagnostic criteria applicable in Europe cannot be stretched to include many other patients who yet might well be called "neurotic". These latter cases are best discussed in the next section. Under the present heading there will be discussed only those cases which

are readily fitted into the familiar categories of anxiety states, hysteria, and obsessional neuroses.

In general, it can be said that, in the present relatively undeveloped state of pyschiatric services in Africa, psychoneurotic patients are seldom likely to be seen at mental hospitals. Mental hospital figures are therefore of little value, and one must turn for help to general medical experience, rural surveys, and military evidence.

(1) *Anxiety states*

Anxiety in rural Africans is most commonly expressed in forms which cannot be included here without a gross distortion of the title's usual connotations. Nevertheless, anxiety states closely similar to those seen in Europe do occur.

Anxiety is always felt to be an outcome of a bewitchment (and poisoning) which is threatening one's personal or procreative life. Therefore, phobias are always frankly related to some known or unknown source of witchcraft, and physical symptoms take predominantly the forms of gastric and cardiac neuroses and of impotence.

Anorexia nervosa, or something akin to this, occurs, as Gelfand [75] shows, from time to time and may be fatal. Fears that the food is poisoned may initiate the syndrome, but its continuance is governed by a feeling (a disguised depression) that the unequal struggle has been already lost and that the time has come to die.

Cardiac neuroses are probably the commonest form of anxiety states in Africans. Gelfand [75] refers to this condition and mentions palpitations, praecordial pain, and shortness of breath as being the main symptoms. Muwazi & Trowell [128] are well worth quoting at some length. They say:

"Every out-patient department contains a fair number of persons who complain of the chest and point to the praecordial region, but examination too often reveals almost nothing.... The questioning of many hundreds of patients, and the discussion of these cases with African medical students, has led us (one of whom is an African) to the following tentative explanation. Africans of the present day resemble Europeans of previous centuries in regarding the heart as the centre of life; the soul is also thought to reside in or near the heart. Africans consider that the heart is normally motionless; they have no knowledge of the circulation of the blood. The exact position of the heart is not understood clearly, but the whole of the front of the chest and of the upper abdomen is regarded as a dangerous area. Palpitations and any sensation which can be interpreted as a movement of the heart are considered to be specially dangerous, for the soul may be moving and may leave the body, and life may thus be in danger. In some patients fever is chiefly noticed and attributed to the cardiac palpitations which accompany it. Other patients become acutely aware of the palpitations which accompany slight exertion, especially if anaemia is present; and many Africans are anaemic. Many phobias centre in this region, and other signs of the effort syndrome, as seen in more advanced races, are common: thus tachycardia, praecordial discomfort, throbbings in the neck and limbs, exhaustion and dyspnoea easily occur ... the more these patients are examined and treated the more clearly does one realize that the majority are neurotic. In other

instances the hope of tax exemption plays an important part in the continuation of the neurosis. Other cases are liars, hoping to gain relief from taxation by feigning a heart complaint; some wish to secure a period of sick leave, and naturally complain of the heart, for this would appear to them the best illness to feign. It would never occur to them to feign a peptic ulcer or blindness, for diseases of the 'heart' or the 'soul' are in their opinion the most serious."

These remarks concerning Africans of Uganda have far more than local truth.

Finally, impotence is a not infrequent symptom of anxiety. Tooth,[170] in a rural survey in the Gold Coast, saw several such cases; and Dr. M. J. W. Jeffreys informed the present writer that this condition is so frequent among young husbands of the Cameroons that special stone sites exist in the compounds of certain Chiefs where rituals are performed for the cure of this affliction. Africans set much store by their sexual prowess, and it may be surmised that the standards of achievement required by local custom are commonly too high for many men, so that a relative incompetence gives rise to an anxiety which, in its turn, leads on to utter impotence.

(2) *Hysteria*

Hysterical symptoms are perhaps the commonest neurotic manifestations in Africans or, at least, they are so when the subject's circumstances are such that he has much to gain by illness, as in army life or prison. Such symptoms also often play a part in other neuroses and psychoses.

All writers concur in this, and physical syndromes commonly described include globus hystericus, aphonia, paraplegia, monoplegias, deafness, blindness, tremors, rigidity, and hyperventilation tetany. Predominantly mental syndromes include amnesias, fugues, fits, and stupors.

Military experience is of value here; but it has to be remembered that, although the study of African military material might throw much light in some dark psychiatric corners, the evidence, as far as hysteria is concerned, may well have little application outside army life. With this in mind, however, it is most profitable to hear what Dembovitz [54] has said. Referring to West African troops, he stated:

"Hysteria is the hall-mark of psychiatry in Africans. Cases of gross, low grade, hysterical deafness or paralysis are common and hysterical exaggeration and prolongation of symptoms are the rule rather than the exception. For this reason, African patients should be discharged from hospital as soon as possible, for a hospital provides a perfect compendium of symptoms from which the hysteric may choose his own. Hysterical twilight states, fugues, stupors, fits and excitements are seen in A.O.R.'s under arrest and the Ganser syndrome is no longer rare. One feels that the conscious element in all these hysterical conditions is a large one, and the response to psychotherapy, either with or without the use of pentothal hypnosis, is only moderate.... All other psychiatric conditions must be seen as medallions set upon the basic pattern of hysteria. The hysterical mechanism is so readily employed that conversion symptoms colour not only neurotic depressions and anxiety states but also true psychoses."

The present writer, who also had a wide experience of soldiers (and of prisoners) in Africa, can endorse the truth of Dembovitz's findings in regard to these. It is clear that many Africans can easily develop such reactions. But, by and large, in medical work in rural Africa, hysteria of these classic patterns is far from being as ubiquitous as might be thought from reading Dembovitz.

(3) *Obsessional neurosis*

Aubin [4] said, " One hardly meets with true obsessions except in the more advanced subjects " ; and, except that Tooth [170] saw three cases in the Gold Coast, all medical and psychiatric writers who refer to this neurosis in Africa admit its rarity or absence.

The resemblance between obsessional symptoms in Europeans and the rituals that characterize preliterate societies has often been remarked upon. Laubscher,[111] referring to natives of South Africa, says :

" The native's attitude and reactions towards witchcraft have some analogy to the thinking and acting of the compulsive neurotic patient. Both are struggling against the dynamic expressions of forbidden impulses. The obsessional neurotic is defending himself against the impulses from his own mind, while the native is defending himself against impulses from the world of mythical beings. We know that the obsessional neurotic is continually making compromises with his unconscious desires as well as sacrifices and ceremonials. A study of the various pagan customs and sacrifices shows this same factor of atonement towards the Izinyanya (ancestors), which, together with the mores in this culture, correspond to the superego or moral conscience of the obsessional neurotic patient."

Davidson,[46] referring to the Bemba of Northern Rhodesia, said: " The whole of this African tribe is suffering from a permanent obsessional neurosis. They are constantly obsessed by thoughts demanding the prompt performance of counter-ritual, and each person is thus saved from an individual neurosis."

The obsessional neurosis in pure culture is not a very common thing in European adults, and obsessional symptoms in the adult are often an expression of some underlying psychosis. But obsessional symptoms are ubiquitous and often quite disturbing in European children, and the parallel to African modes of thinking and of living is clearest in these children. It seems that rural Africans, children and adults, seldom or never develop such reactions on individual lines, since this behaviour is the normal pattern of their lives. Humanity in general, at least at certain ages, has much need for the support of rule of thumb. Modern Western culture, with its insistence on an individual self-sufficiency which implies the constant need for personal choice and personal decision—the application of general principles to particular situations—is quite a recent thing and dates only from the Protestant and the later Industrial Revolutions. It is far more

strange in human history than are the African cultural modes and carries many risks, and the children have to bear the brunt of an experiment which is not tempered to the childish mind.

*Unclassified cases*

All records of psychiatric material in Africa contain many cases that are not classifiable in standard European categories. Thus, Carothers [30] failed to classify 75 patients in a series of 609 first admissions to the mental hospital at Nairobi; and if he had included the 21 cases he termed "frenzied anxiety", no less than 15% of all his first admissions would not have been classified in European categories. Tooth [170] described seven persons as suffering from "unclassified psychoses" among 173 Africans he saw with mental illness in a rural survey in the Gold Coast; if he had added the 38 persons whom he described as suffering from "delusional states... in whom no causal factors could be found and who did not conform to any of the standard reaction types", his proportion of unclassified psychoses would have been 26%.

Part of this failure was explained in the preamble to this chapter; but, in fact, it does not arise entirely from confusion in the doctors. There is confusion in the patients; and these unclassified cases, far from being the slag-heap of the diagnostic mine, are perhaps this mine's most valuable product.

Several writers have made important observations which are of either direct or indirect relevance to this subject, and several have well-developed views. Moreover, it seems that each man's work was done in striking ignorance of that of every other. This must enhance the value of the work, but does not make for ease of summary. Therefore, in fairness to the writers and to the reader, it is proposed to describe the contributions chronologically and then to attempt a synthesis of these and of the loose ends from the other categories.

Shelley & Watson,[160] discussing murder by Africans of Nyasaland, said:

"Temporary insanity in the form of sudden and violent rages is well-recognized by the natives, and has been commented upon by certain medical men in this country. There is a recognizable 'touch' about murders committed by natives in this state. The killer will assault his victim with great ferocity, attacking him with a spear, axe, or some other implement, until the body of his supposed enemy is horribly mutilated. Immediately after committing such a crime, the murderer appears to be so greatly relieved that he neglects to take any precautions to cover up his guilt, and leaves his weapons exposed at the site of the crime, or takes them to his dwelling and places them in the usual situation. A little later, as the sense of relief passes, he 'returns to earth', and ideas of safety or of covering up his guilt occur to him, and he may now hide the weapons or run for the border."

Laubscher,[111] writing of natives of South Africa, says: "Acute hysterical attacks, resembling Charcot's grand hysteria, are sometimes observed, but the picture presented is typical of emotional abreaction and follows a dramatic frustration and thwarting of impulses and desires. Of course, this is attributed to some possessing power, and the abreaction is the recognized manner of working out the possessing power. This is more the recognized way of reacting to such disturbances than a spontaneous, unconscious discharge of libido in motor acts, without conscious plan or design." Elsewhere in his book, Laubscher draws attention to the high homicide-rate among South African natives, in whom, in 1935, it was 171 per 100,000 [b] of the native population, and says: "Races who are prone to the externalization of aggressive propensities in an impulsive manner, have a low rate of suicide. I am of opinion that this occurs because there is among such races less introjection of sadism." Referring to a tendency he has noticed, in the Cape Bantu, for fighting in play to develop into fighting in earnest, he says: "I came to the conclusion that once an emotional impulse is aroused and the stimulus continues to be present, the native just drifts along with the impulse and exercises little if any inhibitory power, unless this inhibition is brought about by the evocation of another impulse, opposite in aim to the first, such as the activation of the impulse of fear: nevertheless this fear must not be remote, such as a fear of consequences, but it must be a fear stimulated by something present at the moment. Resultingly, the intellectual mechanisms of foresight, judgment and self-control are readily submerged by the instinctive impulse."

Aubin,[4] speaking of military patients of French West Africa, says:

"When one frequents our Senegalese observation wards, one notices that apart from some major psychotics . . . the majority of the patients preserve their natural good humour, amuse themselves and converse among themselves interminably. They are impatient at times of their inactivity, their prolonged hospitalization, but remain habitually gentle, confiding and amenable. All these men appear normal; and one is on the point of questioning the authenticity of the troubles noted on the bed-tickets, in the officers' report, in the observations recorded in the course of their previous hospitalization when, all of a sudden, a crisis of noisy anxiety or fury, a delusional explosion, reveals to one that a psychological state of which an unforewarned observer would not have suspected the persistence, still merits our attention and our care. . . . Some days or even some hours later, on interrogating the patient, we are amazed to find him calmly and totally denying all his previous declarations, without heed for our precise contemporary notes, which recall exactly his own words, his gestures, his attitudes, and even when we show him the persisting traces (scars, bruises, damaged clothing, broken material, etc.). The proofs are flagrant, cross-examination discloses them, half-admissions show contradictions. He does not mind in the least and with the same assurance affirms he has said nothing, seen nothing, done nothing."

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[b] In England in 1926, the comparable figure was 7 per 100,000.

Aubin then comments that this " disavowal " is without useful motive, since most of these patients would be only too pleased to return to their homes and have an interest in recalling their abnormality.

The technique of quotation is inadequate for Aubin's contributions, which are as valuable as they are comprehensive. Therefore, a summary must be attempted ; but even this will not do justice to his work ; and the interested reader would be well advised to read some of this in the original. Apart from sundry previous references to Aubin's work, the following seem to be his major points.

In regard to psychoneurotic states in Africans, Aubin says that these are manifested mainly in the forms of psychosomatic disorders, hypochondria, and anxious frenzy, and that neuroses carry a different prognosis from that in Europe and are apt to be unleashed in grave anti-social reactions. Anxiety is expressed as a fearful hallucinosis (" onirisme terrifiant ") or as a more or less intense panophobia. In regard to mental disturbance in general, he stresses the importance of paroxysmal manifestations (motor and psychomotor, sensory and psychosensory, and ideo-affective) and the episodic nature of reactions which frequently take the form of states of fury (" fureur ") or terrifying hallucinosis ( "onirisme ") and which are apt to be most dangerous for the patient or for others, but are more or less transitory. After recovery from these states, or in intervals between them, the subject is relatively, or seemingly completely, normal.

Premonitory symptoms may occur in the form of odd, asocial, unaccountable behaviour out of keeping with the subject's normal, cheerful sociability. Such episodes in Europe might suggest an alcoholic basis, but in Africans they may occur in a great variety of backgrounds of psychosis, neurosis or physical disease, or may even be precipitated by nightmares or emo, tional shocks. The continuing basic abnormality, if such exists, can hardly be assessed except by study of the patient on recovery or in intermissions. In general, Aubin observes a predominance of the emotional life with a lack of regulation of behaviour by reason and logic ; and, to account for the peculiar psychiatric developments in Africans he very tentatively suggests that there may be a special ethnic lability of certain diencephalic centres, but that a variety of pathogenic physical factors (infections, toxaemias, etc.) also influences these centres, as do those sociological factors which tend to encourage aggression and lessen inhibition.

Chief among the cultural factors is the technique of " disavowal " ( " reniement "), of which Aubin,[5] in an important book, says : " Disavowal seems to be a form of activity which excludes from consciousness all situations seen as dangers, real or magical, and in particular all transgressions of the natural order of things or of the prohibitions of the group, the notion of danger being understood as that which concerns the

group as well as (or more than) the individual." Insanity is regarded by the African as a disastrous event—the work of malevolent gods or sorcerers, or a possession by the devil. He therefore feels it is of evil omen to speak of past insanity, dreads provoking the return of the evil forces which produced it, and responds to imprudent questioning by obstinate denial or by some compromise which he thinks will satisfy the questioner. The "disavowal" may be complete or modified in various ways; it vitiates all history-taking in African psychiatry, and in a measure explains the discontinuity and explosiveness of the reactions seen. If, with Janet, one holds that certain traumatic memories can cause neuroses and that the liquidation of these memories would cure the latter, then the primitive has discovered, in "disavowal", a technique for liquidation; and one can envy him this power.

Dembovitz,[54] describing mental illness in West African troops and referring to "running amok", says that this is

"a popularly known form of abnormal behaviour. The picture is one of a man quite suddenly seizing a matchet or a tommy-gun or a rifle and rushing around slaying all he meets. These cases usually have a rapid and fatal ending but occasionally one gets to hospital. It would appear that running amok is a symptom common to acute mania, katatonic schizophrenia, epilepsy, acute trypanosomiasis, psychopathic personality and possibly to other conditions such as cerebral malaria also. Pseudo running amok is seen in excited hysterics. They are always careful not to injure anybody and, when cornered, they go quietly, in sharp distinction to the true berserk who fights to the end."

Referring to "recurrent confusional state", he says that this is

"a special condition found in Africans. There is a history of restlessness, confusion, violence and wandering coming on in attacks of about one month's duration at a particular season for each case every year. In the villages the patient is tied to a tree by his friends until his attack is over and he is fit to go back to work. There is no mental deterioration of any sort between the attacks and no known pathology. The Africans know that certain of their comrades 'go crazy' each year in January, or at 'the time of the rains', or 'at the time of the dancing', or 'at the time we serve our Juju'. The attacks are probably best thought of as hysterical although they do not appear to benefit the patient in any way, and occur in men not otherwise more hysterical than their brothers. No treatment has yet been effective in cutting short these attacks but they cease spontaneously in their natural time. West African troops abroad tend to pass into a Ganser state at the conclusion of their attack."

Finally, referring to hallucinations in general, he says: "Hallucinations are of much less significance than in Europeans. Normal Africans see and speak to their dead parents. The presence of accusing voices, or terrifying dwarfs, does not necessarily imply a serious mental illness, for they occur in simple depressions and anxiety states and, of course, in hysteria."

Gelfand,[75] from the viewpoint of general medical experience of Rhodesian natives, says: "I have seen acute maniacal states in the African

which were transient, the individual being normal between the attacks. A person coming into contact with such an individual during an attack may be seriously injured."

Carothers,[30] referring to the 21 Kenya patients whom he described as suffering from " frenzied anxiety ", said :

" In this condition the onset is associated with some real source of anxiety (perhaps only real to an African), but the anxiety is not sustained and is soon replaced by a state of frenzy in which the patient is excited, noisy, incoherent, and perhaps filthy, aggressive, and dangerously violent. The violence often results in homicide but is apt to be ill-directed and generalized, and the supposed author of the patient's anxiety may or may not be among the victims. Recovery usually occurs in a few hours or days and is as complete as it is rapid but 4 of these cases on recovery from the frenzy developed hysterical symptoms—2 deaf-mutism, 1 deafness and 1 aphonia. The subject subsequently always denies all memory for the period of the frenzy. The precipitating cause is usually clear, and most of the patients on recovery are themselves cognizant of at least some of the factors that produced their mental breakdown. How far the condition is deliberately self-induced in some cases is a moot point, but once induced it becomes a very real type of insanity—the patient is temporarily quite without insight or self-control and may commit irreparable damage to his own interests and violence quite unrelated to the precipitating cause. Thus one patient had been physically ill, believed himself bewitched by a neighbour, and developed a hysterical frenzy in which he killed his wife and child. The chief precipitating causes were as follows : in 8 cases an urgent wish to leave work and return to the reserve was thwarted, in 3 cases the onset of unaccountable illness induced a fear of bewitchment, and in 4 cases the patient's wealth or ill-treatment of his wife also resulted in fear of bewitchment.... The causes tend, however, to overlap, temporary physical illness often plays a part, and the patient usually believes he has been bewitched by a particular person (often the object of his own guilty feelings, though hardly recognized as such), and will die."

Carothers suggested elsewhere in this article that a factor in the homicidal aspect of these cases (which was well illustrated in a case he described) was that the patient " believes in his heart of hearts that *any* death will appease the gods, and that his own life can only be saved in this way ".

In another article, Carothers[31] said :

" In general ... well developed and classical examples of the non-organic psychoses are relatively uncommon in the African ; and even when one has classified abortive forms of these disorders as exhaustively as possible there still remains a number of frankly undiagnosable cases. Such cases are commonly confused, excited, incoherent and emotionally labile and appear to coincide with the mental reaction types seen in European oligophrenics, of whom Tredgold says—' In many cases, indeed, it is impossible to place them in a definite text-book category ; one can only say that the patient is mad.' They might best be entitled ' primitive psychoses '. It is not, of course, here suggested that the normal Africans we meet are intrinsically deficient.... The African may well, for cultural reasons, exhibit a backwardness which is similar in effect.... It may well be that there is among primitive persons a basic generalized type of psychosis, possibly on the lines of organic confusional states as seen in Europeans."

Carothers' interest, in this second article, was largely centred on the neurological aspect of the problem, and he claimed to demonstrate that "except in so far as the African's ritual training mitigates some of the more socially flagrant symptoms (e.g., rudeness and tactlessness), and except that the African shows no lack of verbal ability or of phantasy, the resemblance of the leucotomized European patient to the primitive African is, in many cases, complete". His argument thereafter ran, in brief, as follows. The main function of the frontal lobes seems to be the integration of stimuli arriving from other parts of the brain (thalamus and cortex). It may well be that integrative functions are subserved by the whole cortex; but, even so, when integration is lacking, the frontal lobes would still be relatively idle since they alone subserve no other function. The African, with his lack of total synthesis, must therefore use his frontal lobes but little, and all the peculiarities of African psychiatry can be envisaged in terms of frontal idleness.

Tooth,[170] describing the "delusional states" he saw in the Gold Coast, said: "The clinical characteristics of this group were: the presence of more or less systematized delusions combined with hallucinosis but, on the whole, a paucity of content and a shallowness of affect; the lack of psychogenic precipitating factors and of gross dilapidation of habits." Several references have previously been made to Tooth's important work; and three other quotations from this work will now be made, both for their intrinsic interest and for shedding light on the problem of unclassified cases. He says:

"It might seem that conflict, in the psychological sense, would be an inevitable result of conversion to Christianity but, if this were so, it would be likely to show itself in a high incidence of breakdown among recent converts. As will be shown later there is no doubt that this group is exposed to peculiar strains but they appear to be more often material than spiritual. The ability to preserve a spiritual dichotomy may indeed be one of the most valuable attributes of the African personality.

"A characteristic feature of the African mental make-up is the ability to deal with factual events, so to speak, at second hand. Scarcely any notable public or private happening is analysed in relation to its temporal environment but is considered as a manifestation of the supernatural.

"Unlike more civilized peoples, he is governed more by emotion than intellect—indeed the exploitation of crude emotion is a prominent feature of his everyday life. The early manifestations of emotional instability, which in Europe would call for medical attention, in Africa open the way to a profession: the first signs of an hysteric personality are as well known to Africans as to Europeans, and those who show them are earmarked at an early age for training as fetish priests and priestesses.[c] In short, the cultural environment is such that short-circuit reactions, in which the more primitive type of mentation and behaviour are released from the inhibitions of the intellect, are not only tolerated but encouraged. It is therefore not surprising that these archaic reactions

[c] Training of this type is only characteristic of a few areas where magico-religious institutions are highly organized, but it is generally true that this type of personality is often accredited with special powers and that the witch-doctoring profession is largely recruited from this source.

should colour both the psychoses and the neuroses and that the facts of the psychogenesis should be buried in a mass of symbolic substitutes."

Gallais & Planques,[74] speaking generally of mental disturbance in Africans, say:

"Intellectual and affective factors are closely interwoven; but the latter dominate the scene and condition the evolution of psychosis and of the reaction types.... At the first anxious frenzy, he will be susceptible to violent anti-social reactions towards himself or his surroundings.... In effect, the emotional state tends much more quickly than in the European to be translated in a concrete manner. Magic is much less, in the primitive, a metaphysical conception than the art of fighting against supernatural forces and beings, of neutralizing them or rendering them favourable. Thus, psychopathological sources give way immediately to an active attitude. Instead of using endless interpretations, reasonings, incessant ruminations, they take the form of acts.... Their sorrow is habitually ill-contained, their anxiety ready to burst, their anger big with terrible menace. In the physiological sense, the same process makes their joys more lively ... and frees their moral griefs in a noisy brief explosion. One can also ask if the state of stupor does not correspond in them to an active attitude of the same order as the simulation of death among animals. Whether a voluntary attitude or an automatic generalized state of inhibition, one can see there a kind of defence reaction, at least in those cases which correspond to the anxious inarticulate delusional states of certain patients of our country (melancholics, katatonics). To express psychic troubles, the primitive habitually disposes of a mimicry so eloquent that analysis of his utterings can, strictly speaking, be dispensed with.... Discourse is symbolic, metaphorical, often enigmatic; one must not judge it disconnected and reticent. The African thinks that one interprets his talk as he does, that one discerns in it the magical undercurrents which are familiar to him. Primitive language is above all made up, as Kretschmer said, of a succession of 'concrete images in interminable films' or again 'related with difficulty by fragile logical bonds'. These bonds exist but develop less from rational logic than from emotional logic. The images help the primitive to express himself; his extremely sensory memory brings faithfully to him the material for his ideo-affective discourse. It is for us to relate them and interpret them. The ultimate incomprehension of the doctor produces a kind of peculiar reticence well studied by Aubin, which he has called 'disavowal'. Such a patient, hospitalized following a crisis of noisy anxiety, of a furious paroxysm, of a delusional explosion, will deny calmly and totally all his previous assertions. He does not bother with proofs or arguments. This 'disavowal' is often a spontaneous attitude.... These accounts of the mentality, normal and pathological, of the African ... seem to indicate that his activity is above all limited to senso-motor and sensory cortical functions and to the brainstem.... His brain is an organ as developed as ours, but everything happens as if he used only certain parts of it. It is as in the child, the feebleminded, and those primitive people who exist in the most civilized societies. One can thus better understand the peculiarities of the different types of mental disturbance which one meets particularly in the African."

These are the data of the cases that do not fit the European categories. They are culled from several parts of Africa—East, West, and South—and, on the whole, the writers had little or no knowledge of each other's work. Their essential similarity is therefore quite remarkable.

* * *

Before proceeding, however, to discuss the findings, it would pay one to mark time for a moment and discuss the writers. Their experience covered different fields. Aubin, Dembovitz, and Gallais & Planques were especially concerned with soldiers; and military psychiatry, as compared with civilian, has advantages and limitations. The populations are under supervision, mental disturbance can be studied from its onset, and transient episodes which would not otherwise be seen will come to light; but the population is selected, reaction types are in some degree determined by the military life itself, and chronic cases are apt to be transferred to civilian hospitals. Gelfand, and Muwazi & Trowell, with general hospital experience, were well placed to see psychosomatic, neurological, and neurotic cases of the standard types. Tooth's study was based mainly upon a rural survey and was therefore as unique as it was valuable; but reactions of an acute or episodic nature would seldom come his way. Carothers, Laubscher, and Shelley & Watson were attached to mental hospitals in which the circumstances of admission are governed by the factors comprehensively discussed in earlier pages of this monograph.

* * *

The African is evidently prone to develop a type of twilight or confusional state—sometimes brief (a matter of hours), sometimes more prolonged (a matter of weeks)—but always tending to spontaneous recovery within a limited time. These states occur on many backgrounds —of physical disease, underlying psychosis or neurosis, or even of apparent normality—and are precipitated by a variety of physical and mental traumata. It may be surmised that physical or psychotic factors play a larger part in the more lasting cases, and emotional factors a larger in the transient. Anxiety, with or without depression, precedes the onset of acuter cases but is not sustained for long. It is always related by the patient to bewitchment, and he is often fully cognizant of the latter's origin and object. Premonitory symptoms of a Ganser syndrome type, with childish unaccountable behaviour, may precede the onset of the major episode, as shown by several of the writers. The keynote of the episode itself is a confusion and a dominance of action by emotion. The emotional state is usually one of fear (which may be panic) or of hostility; and activity may reach the height of violence directed to the subject or, more often, those around him. Reality is distorted on lines that parallel the mood, and there may or may not be an hallucinosis. Recovery, when this occurs, is usually remarkably complete, though a Ganser syndrome or various hysterical symptoms may follow. Thereafter, amnesia for the episode appears to be the rule; care is cast aside; and, unless the cause of trouble continues in an active form or some new one arises, the subject may pass for normal once again and the episode may never be repeated.

" Disavowal ", in Aubin's usage, is clearly a valuable concept, not only for African psychiatry but for African psychology. The dishonesty remarked upon by Williams [188] and by many other people is doubtless often due to this. It appears in many forms, and Kidd's [106] discussion of " looking backwards " seems most relevant to the subject. He said: " It must have sorely puzzled the inquisitive minds of many European children why Lot's wife should have suffered such calamities for the apparently small sin of looking backwards. But the idea that evil consequences are certain to follow such an action under some conditions is widely spread amongst primitive peoples." As one example among several described by Kidd in Africans, one may quote the following:

" When a small child is ill, it is sometimes taken to an ant-heap and washed with water. The dirty water has to be placed in a hole in the ant-heap. When this is done, the hole has to be filled in with earth. It is thought that the ants cement up the hole, and thus prevent the sickness from escaping. But the child must help in the process. On no account must the child look back as it is being carried home. The little patient has its eyes smeared over thickly with grease or with lard, so that it may not be able to look back.... It seems clear that the Kafirs think that evil spirits or evil influences can see a person best when the person could see the spirit (if it became visible to human eyes)."

As regards psychiatry, it is of interest to note that the hysterical symptoms observed by Carothers [30] in frenzied patients after the storm had passed could all be regarded as expressions of " disavowal ". This mechanism is also one more factor which must be added to the list of those that stultify the taking of histories in psychiatric subjects. Cultural factors condition its occurrence, on the lines described by Aubin; and its neglect would be as shocking to society as it would be to the patient.

Bewitchment often takes the place in African life that conscience does in other cultures. The present writer has often been aware in frenzied cases (and in others) that the fear of sorcery was based far less on evidence of its occurrence than on an unadmitted knowledge in the patient of wrongs done by himself. If an African has cheated his neighbour of some land, been cruel to a wife, or dealt unfairly with a son, it needs only some minor incident (personal illness or family misfortune) to arouse this dormant fear, which then becomes the ruling passion of his life; and, especially if prevailing circumstances frustrate the possibility of following ordained procedures, or if these have failed, this emotion swells to bursting point. Moreover, within the frame of African ideology, the development, in certain circumstances, of these reactions conforms to local expectation; they are culturally conditioned, and the subject plays a role which does not surprise society and is expected by himself. It seems quite possible that insanity of this type is often to be regarded as an equivalent or substitute for death—an attitude which is not perhaps entirely alien

to that of many Europeans. Conscious or semi-conscious factors seem to play a larger role in Africa in the production of reaction types that would in Europe be regarded as psychotic, and probably organic. But, although conscious factors often play the major role in their production, be they of the type of frenzy, stupor, or some other syndrome, the full-fledged reaction is marked by clouded consciousness; and the details of behaviour have no regard for consequence and are not governed by the principle of gain.

The resemblance to hysteria is close, and hysterical symptoms often complicate the picture. But, as Dembovitz and Laubscher showed, massive hysterical mental reactions of European type also occur at times in Africans and are quite distinguishable. In true hysteria there is internal mental conflict, and its solution is achieved on personal lines and to the subject's detriment. This African reaction is not hysteria as we know it; but, if one insists on clinging to that title, then hysteria of this type in Africans must be envisaged as a social, not an individual, disease. It occurs when there is conflict between the individual and his society and is worked out on anti-social lines.

In general, it seems that the rather clear distinction that exists in Europeans between the "conscious" and "unconscious" elements of mind does not exist in rural Africans. The "censor's" place is taken by the sorcerer, and "splits" are vertical, not horizontal. Emotion easily dominates the entire mind; and, when it does, the latter's tenuous grip on the world of "things" is loosened, and frank confusion takes the place of misinterpretation. All the neuroses seen in European individuals are here, as a rule, resolved on social lines; and the structure of psychoses is so altered by the lack of conscious integration that these are apt to take amorphous or abortive forms.

As regards the neurophysiology that underlies this difference, several psychiatric writers have expressed their views. But there is little basic disagreement; and, whether one believes, with Arnot,[3] that the frontal lobes have only secondary persistence functions or, with Denny-Brown,[55] that "the frontal lobes are the chief executive organs of visually directed behaviour ... with a dominant factor of expectancy", it seems likely that "frontal idleness" accounts, at least in part, for the divergencies observed in Africa, and that a "fragility of higher psychic functions which contributes to a liberation of automatic psychomotor centres" (Gallais & Planques [74]) includes this part.

CHAPTER 10

## PSYCHIATRY OF THE NEGRO IN THE USA

It is not proposed to discuss this in any detail. It is not within the present writer's competence to do so. In view of the findings on psychology in Negroes in America, fundamental psychiatric differences are not to be expected. In accordance with this, and on the basis of a study of 4,630 White and 2,098 Negro neuropsychiatric cases seen in New Orleans, Wexberg [185] attributed such differences as were found to cultural factors (especially urbanization) and concluded that " no evidence could be found of the relevance of biological-racial determinants for the incidence of neuropsychiatric conditions in the two races ".

From a statistical point of view, Malzberg's [117] analysis of first admissions to the mental hospitals of the State of New York over a three-year period remains the classic work. It appeared from this that there was a total average annual admission-rate of 150.6 per 100,000 for the Negro population and of 73.7 per 100,000 for the White and that, when the rates were standardized for age, they became 224.7 and 97.4, respectively, with a ratio of 2.3 to 1.0. Important contrasts in the standardized rates as between the Whites and Negroes were observed in regard to general paresis (with a Negro rate 4.1 times higher than the White), alcoholic psychoses (3.4 times higher), cerebral arteriosclerosis (2.9 times higher), senile psychoses (1.9 times higher), dementia praecox (2.0 times higher) and manic-depressive psychoses (1.5 times higher). When allowances are made for urbanization and migration—factors which are known to be directly related to such rates—the discrepancies diminish. On the nature-nurture issue, Malzberg has nothing to say in regard to the senile and arteriosclerotic psychoses, but discusses the other four conditions from this point of view. Concerning general paresis and the alcoholic psychoses, he says : " It would appear that social factors are largely, even primarily, responsible for the relative excess among Negroes." In regard to dementia praecox and manic-depressive psychoses, he finds the interpretation less clear; but he points out that the economic status of the Negro in America is (through no fault of his own) a relatively low one, that high admission-rates in general correlate positively with low economic status, that most environmental factors of a deleterious nature are associated with low economic status, and concludes that " the lower economic status of the

Negro must contribute directly to his higher rate of mental disease". In his final summary, he says:

"We have shown that fundamental qualitative differences with respect to mental disease do not exist as between Negroes and whites. There is not a type of mental disorder among whites which is not to be found among Negroes. Contrariwise, Negroes suffer from no mental disorder that does not find its counterpart among whites. It is clear, however, that there is a fundamental difference with respect to the incidence of mental disease, which is much more frequent among Negroes. To what is this difference due? Is it the result of some 'racial' qualities which make the Negro more susceptible to a mental and nervous breakdown? Of this there is no evidence. . . . We turn therefore to a consideration of environmental factors and here we find ample explanation of the high rates of mental disease among Negroes. These rates are due to the direct and indirect influences of conditions of life over which the Negro has as yet little control."

Malzberg's records and interpretations are doubtless valid for the major categories, but official figures have their limitations, and differences within the major categories do not disclose themselves. Heyman,[88] working in Georgia, remarks on the Negro's inability for introspection and self-analysis and says that psychoneurotic Negroes use "the same patterns to express their neuroses as do white patients", but that "hardly a day passes but a patient is carried into the emergency clinic in an apparently semi-conscious state, with head lolling and arms and legs making jerky, convulsive movements". Rosenthal[153] says: "Most writers... agree on the fact that within the manic-depressive group, the Negro suffers chiefly from the manic form (the excited phase) and rarely from the depressive phase." Low suicide-rates in American Negroes seem to be the rule, as Myrdal[129] shows; but Prudhomme[145] maintains that this is mainly true of rural Negroes and that "as the environment approximates that of the majority, the suicide rate becomes higher".

It seems, in general, that reactions in the rural Negro in America are intermediate between those in rural Africans in Africa and those in Whites, and that the urban Negro in America suffers from reactions similar to those of the Whites, but, by reason of his relatively recent urbanization, is passing through a difficult phase with excessive liability to breakdown. As time passes and cultural experience converges, the contrasts progressively diminish.

# Part III

# DISCUSSION

CHAPTER 11

# EVOLUTION AND CULTURE

The reader who insists on close adherence to fact and well-established theory might be well advised to read no further, for this chapter is frankly speculative, and clear distinctions are not always made between the facts and the fancies. The writer hopes to be excused for this excursion since he suffers from the foible of dissatisfaction with loose ends and from an urge to tie them all together. The time is, perhaps, not quite ripe for this; but it may be ripe for trying to see which loose ends do require to be tied together, and by what sort of knots.

It was previously shown that African modes of thinking can be largely, if not entirely explained on cultural grounds; and one is led to speculate as to why African culture has developed on the lines it has. Many have argued that societies get the cultures they deserve, that Africans are fundamentally incapable of mature development, and that their culture has developed in a manner to allow for this. The evidence, however, is all the other way, as has, it is believed, become apparent from the data presented in earlier chapters. Moreover, the general features of their culture are not uniquely African; the peoples studied by Malinowski,[116] Porteus,[143] and others have developed something similar. Though varying much in detail, most preliterate groups insist on the observance of meticulous rules and stamp effectively on independent thought and personal initiative. It is likely that early Europeans experienced such restraints; and, even in the Europe of today, their relics are not hard to find. It seems, therefore, that cultural patterns of this type are frequent, if not constant, concomitants, of a certain stage in human social evolution; and it behoves one to seek its explanation.

Man, like many other animals, has developed a social way of living. Though superior in intellectual power to other animals, he is physically weak, and his strength lies in his number provided he can live in bands. This development, though found in many vertebrates, occurs with comparable efficiency only in certain insects. Its success in ants and bees, however, is based on structural diversity within the species, so that, for instance, sexual functions are limited to certain individuals, aggressive functions to others, and other functions to the rest. Where all are structurally similar, as obtains in man, the experiment of social living is a dangerous

one. Each individual develops on very similar lines with drives to sex, aggression, and acquisition whose free expression is not compatible with social life. These drives are never far below the surface. Man, as the psychoanalysts have shown, is controlled by his emotions ; and most of his activities are really based on selfish drives, though these are rationalized. Few even of the best of us are really social animals, like bees ; and few indeed, judging from the histories of kings, remain so when their powers are not curtailed. These drives must be stamped on from an early age if societies are to survive. The value of preliterate cultures lies in this, and it may well be that the main features of these cultures are a necessary concomitant of a certain stage of human social evolution, and that their peculiarities need in some ways less explaining than do the peculiarities of other cultures.

Living in groups gives rise to problems in the mental field, as has been shown ; but it also raises problems in the physical. Until the end of the Mesolithic period of prehistory, men were " food-gatherers " and lived, it may be surmised, much as Australian aborigines do now—in sparsely scattered groups, hunting over large tracts of tribal land. With the coming of the Neolithic period of about 10,000 years ago, however, agriculture and (probably later) pastoralism developed. These were great advances, increased and stabilized the food supplies, and enabled many to live who would otherwise have died or not been born. But they carried dangers of their own : they pinned man far more closely to areas of land, increased the population to a point where problems of survival shifted from the danger of attack by other mammals (including other groups of men) and of starvation to the battle with infection.

Variety of parasitism is most likely to occur in hosts whose population is both large and aggregated, and this is especially true where the parasite's life-history is complex. Where, for instance, the parasite depends for its survival on transmission from water snails to man and back again, and this transmission is itself a chancy one, success (from a parasitic point of view) is much dependent on the commonness of both its hosts. Stabilization of populations in limited areas of land also assists this process—a fact familiar to health officers, and especially true in regard to those infections that depend on fly transmission from excreta. It may therefore be surmised that, in the early days of agriculture, one after another of the plagues that man is heir to took advantage of this ideal situation and took a heavy toll in human life.

With the passage of time, however, the parasite-host relationships evolved. Mackey's [115] contribution on this theme, in Africa, is a most illuminating one, and the rest of this paragraph is mainly inspired by this writer. As Mackey points out, it is by no means of advantage to most

parasites for the host to die, and of still less advantage to the host; it is not even of advantage to the parasite, except in the case of a few diseases (such as gonorrhoea), for morbid symptoms to develop in the host. Although man's evolution is relatively slow, the evolution of a parasitic species is apt to be as rapid as its members' lives are brief. And so commensalism arises, chiefly by evolution in the parasite, but also by evolution in the host. Mackey considers that, by a selective process, man in Africa has developed a greater capacity for hypertrophy of the reticulo-endothelial system and for an insensitivity to certain parasitic antigens, and that these capacities are therefore now ingrained in his genetic constitution. He considers that certain parasites (especially some species of *Plasmodium*, *Necator*, *Schistosoma*, and *Ascaris*) have achieved a degree of commensalism in East Africans which is not seen in Europeans, and that these parasites are now pathogenic in the former only when malnutrition complicates the picture. Certain other African parasites (such as *Trypanosoma* and *Onchocerca*) have not yet achieved commensalism in man because their invasion of the human host is only recent. Mackey infers that, where the commensalism has been successful, the main stages of the process must have occurred in earlier times when protein lack was not a problem. Finally, he believes that the various peculiar pathological states in Africans that Davies [50] attributes to an oestrinization basically malnutritional are based on genetic differences, and that "the hormonal make-up of the East African is genetic and has been brought about, at least to some extent, by a process of selective survival in hyper-endemic parasitic areas of those best able to tolerate their parasitic infections".

This makes good sense, but the picture is not yet complete. The coming of agriculture was doubtless not an unmixed blessing; and the great increase of population that accrued from it gave rise, no doubt, to onslaughts by infection which must, in early days, have at times checked the population's increase, as trypanosomes do now in certain areas. It is not to be believed, however, that all the infections known to us impinged on man at once; and it may be surmised that, at any one time, there was usually one major scourge, and that the other present-day human parasites had either reached commensalism or not yet arrived upon the human scene. Moreover, in 10,000 years it is likely that in many times and places there were periods of relative freedom from any serious infection in which, this check on human increase being lacking, the only limiting factor was the food supply. (That the population was kept in check receives support from Pearl's [139] conclusion that its number increased only very gradually and with minor fluctuations until about 300 years ago, since which time it has increased five times.)

Trowell & Davies [175] draw attention to the fact that kwashiorkor, or something very like it, has been described in many tropical and sub-tropical

lands in Asia and America (as well as Africa) and has even been observed in the children of certain European towns. Davies,[50] discussing the relation of "Mehlnährschaden" in Budapest to kwashiorkor in Africa, says: "If the diseases are identical, then a very interesting conclusion emerges. The disease is no stranger to Europe and may have been common in the past." However this may be, it seems most likely that we have latterly been witnessing a severe selective stage in the nutritional life of Africa, and that those children that survived were often those who were better able to do with little protein. Whether or not protein lack has always been the major nutritional problem of agricultural societies, it is very certain that such societies have not been strangers to malnutrition of one sort or another (at least by modern European standards), especially at those times when their increase was not checked by noxious parasites. It is surely most unlikely that evolutionary processes would not apply to nutritional factors as to others, and it would seem just as legitimate to apply the whole of Mackey's argument to malnutrition as to apply it to infection. One might reasonably believe, therefore, that the genetic "hormonal make-up" is also based to some extent on a process of selective survival in malnutritional areas, and is, on these grounds also, unlikely to be identical with that in Europeans.

If this is so, one might expect that morbid conditions which accrue in other countries from excess of certain food factors would occur in Africans (adapted to a relative deficiency of such factors) with greater frequency or severity than occurs in the people of those countries when the former are introduced to the diet of the latter. Is there evidence for this? Keys [105] suggests, as was shown in chapter 3 of this monograph, that arteriosclerosis is related to excess of certain food constituents. These constituents are in short supply in Africa, and arteriosclerosis is uncommon in tropical regions of that continent. But, in the USA, arteriosclerosis is nearly as common in Negroes as in Whites; and Malzberg,[118] dealing with the predominantly urban population of New York State, shows that cerebral arteriosclerosis is about three times as common in Negroes as it is in Whites.

So far as climatic factors are concerned, doubtless here, also, selection must have played its usual role. Biesheuvel [16] says: "It has been estimated that a high level of efficiency cannot be indefinitely maintained beyond the indoor temperature range of 60°F.-76°F., with a relative-humidity range from 40 to 70 per cent. By this standard, the climate in most African territories must be considered a serious handicap to efficiency." But this standard was based on the study of Whites, and there is reason to believe it is not true of Africans. The Kingdom of Benin in its heyday reached a level of achievement which in many ways surpassed the best that the Europe of that day could show. Yet Benin is in the hottest and most humid part of Africa. It may well be surmised that, when there occurs some

freedom from malnutrition and infection, and when other circumstances are propitious, African society can rise to splendid heights, and that Africans themselves are basically well adapted to their climate.

Finally, cultural modes are likely to affect genetics. This subject was, however, discussed in chapter 9, and does not require an elaboration here.

Climatic, nutritional, infective, and cultural factors are thus all likely to have played their part in forming the constitution of humanity in Africa, and the effects of each of these are not likely to have been the same as their effects in Europe.

These remarks have applied to bodies; but, perhaps surprisingly, there is no evidence that they have applied to minds. Certainly all these factors may, and often do, affect the mind directly, but there is a striking lack of evidence that adaptation to them has influenced the genetic basis of mentation.

The direct effects, however, have an interest for this discussion in their own right. It was observed before that chronic infections (whose effects are often partly malnutritional) and malnutrition itself may often act to decrease self-control and increase direct egotism. Yet infections and malnutrition, either together or alternately, have probably been almost regular concomitants of preliterate social life. It therefore seems that the stern repression of individual expression and the rigid canalizing of incentives of preliterate cultures have often been doubly necessary; it is even possible that it is only when man is freed from physical afflictions such as infection and malnutrition that he becomes capable of personal restraint and social altruism, and of a loosening of the cultural bonds.

Preliterate cultures of repressive type have an inertia of their own, however, and tend to persist in circumstances where the need for them is lessened. Neither gross malnutrition nor incapacitating infections are universal in Africa, and it seems in general that the predominant features of psychology and psychiatry in Africa are not confined to areas where these prevail. These features coincide essentially with the cultural distribution and vary (as shown, for example, in Nadel's [130] study) with the cultural variance. It seems that, by and large, the mental attributes of Africans are the direct outcome of their culture.

This conclusion in no way undermines the psychological importance of the malnutritional factor. Expert studies of the psychology of groups of different nutritional status have not been undertaken and might well be profitable, but it is doubtless true (as Richards & Widdowson [151] have indicated) that vitality and drive, at least, are lacking over large areas of Africa where malnutrition prevails. It is as certain that endeavours to procure cultural development will be largely stultified unless the nutritional problem is solved first.

It was previously argued that the peculiar features of European mentality derived from a total personal integration which the African does not achieve. Yet, in another sense, the latter uses his *whole* brain *more* effectively than does the former; he uses phantasy *and* reason. European integration is essentially a conscious one and depends on a cleavage between conscious and unconscious elements of mind which is far less sharp in Africans. Advantage does not lie wholly with the former. The European technique depends on the denial, in adult conscious life, of desires and phantasies which are thus relegated to a world of darkness and of dreams, but which emerge, only too often, to determine patterns of thinking and behaviour which are incomprehensible or even incapacitating from the subject's conscious point of view. There is internal conflict, and a sacrifice of personal to social peace and happiness, as was shown in the chapter on psychiatry. There may be other sacrifices.

Fromm [70] says: "Dreams can be the expression both of the lowest and most irrational *and* of the highest and most valuable functions of our minds." The African is not asleep, but he does seem to live in that strange no-man's land 'twixt sleep and wakening where fact and fancy meet on equal terms. If the hypnotic state is one in which awareness is heightened though restricted, then monoideic consciousness is a pre-hypnotic state; and it may be that certain mental powers of a social type—intuition, hypnosis, and telepathy—are seldom fully realized except by those who spend their lives in that ill-surveyed land. This is a fitting subject for research in Africa.

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