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A study of the medicine man may profitably be approached from three main points of view, the historical, the sociological, and the psychological, though no claim can be made that these are mutually exclusive aspects.

On the historical side we have a glimpse of origins in reading that a very primitive people like the Tasmanians had no medicine men or priests, though some people more than others practised magic. There are likely to have been in prehistoric societies a few persons who above all others were gifted with quick and accurate powers of observation with regard to local weather conditions, especially as these affected food supply. Judging from prehistoric cave paintings in Europe and South Africa there may have been magical rites connected with food supply in very remote times. Some of the South African cave paintings show masked human beings in dancing postures, while in seventeen caves there is a picture of a horned snake whose symbolism has not been interpreted. The mantis, a creature associated with grass and water by Bushmen and Hottentots, is a recurrent figure in these early paintings; moreover, the creature is a present-day element in folklore stories of past heroes.

Landtmann would have us believe that priesthood, broadly speaking, owes its origin to the universal need felt by mankind for superhuman assistance in the struggle for life. True as this may be in a general way, the statement hardly does justice to an immeasurably

1 Ling-Roth, Aborigines of Tasmania, Halifax, 1899, p. 65.
long period of what was probably spontaneous and unpremeditated development. Historically it is known that in early dynastic times in Egypt there were co-existing systems; the one religious with well defined ideas of life beyond death, standards of conduct and deities; while the other was a code of formulae for dealing with sickness, the evil eye and repulsion of demons. In spite of the claims which have been made for Egypt as the original home of magic and religion; it is perhaps nearer the truth to say, that in Egypt the historian sees for the first time, how the magical rites and vague religious ideas of prehistoric man, could be welded into a dynamic system.

A problem no less important to the historian than to the sociologist is the possible relationship in time and function of a hierarchy of gods, kings, priests, priestesses, leaders of secret societies and medicine men of graded prestige. Isolation, hardships, instruction, taboos, change of name and reintroduction into society are fundamental points. This statement is not, however, intended to imply that the hierarchy is found in any one social unit, and the question of chronological and spatial relationships of types of initiation is at present undetermined. If the historical method is found too tedious there is an alternative.

The investigator may assume that the stratification of human minds, likewise the exigencies of growing societies, are such as to lead to the adoption of one or more factors of the hierarchy. It is also a labour saving device to postulate that the common sense of those societies which adopt one or more forms of initiation will choose the constantly recurring factors of isolation, hardships, taboos, acquisition of power, renaming and ceremonial rebirth, as the best means of launching out into a new career as chief, priest, member of a secret society or ordinary tribal member.

The title of this paper involves the preliminary difficulty of defining the term medicine man. Although a definition which shall meet the requirements of logic is difficult to formulate, there is, in the consideration of a definite geographical area, some facility in drawing lines of demarcation between the offices of priest, a chief officiating as priest, and a medicine man.

In the Bamun area of the central region of Cameroon, the chief periodically officiates as high priest in a ceremony known as "Feeding the ghost" of a deceased chief. When using the fetish horn,
and while twirling his staff in a ceremonial dance, also when addressing the ghost, the chief is for the moment acting as a medicine man, but the change of office is temporary, and therefore gives rise to no confusion of classification. Similar rites are carried out in Ashanti, where the reigning chief pours the blood of goats over the carved wooden stools of his ancestors.5 The Dahomeyans6 had a priesthood connected with the worship of pythons, and similar cults with their attendant priests exist in Nigeria today.7 These offices are distinct from those of medicine men. When, on the contrary, consideration is given to the function of chief, rainmaker, and medicine man among the Nilotic Negroes, as for example Dinkas and Shilluks,8 distinctions of office are made with less facility. Apparently a chief in this area is always a rain maker, while after death tribal tradition tends to ascribe to him supernatural power. With regard to North America, Whissler9 says that among Pawnee, Ojibwa, Navajo, and Apache, there is a fairly clear distinction between priests and medicine men; but with the Shoshoni the line of cleavage is less clearly defined, and in central California the disparity vanishes.

The call to the profession of medicine man, also the acquisition and use of power are of special interest in relation to the modern study of morbid mental conditions. The chief points of interest are epilepsy, healing by suggestion, local anaesthesia, dual personality, and color symbolism. The last named point bears on unsolved problems relating to the excitation of the retina by colors and the resultant emotional states.

A psychological phenomenon which relates exclusively to the inception of medicine men is the "call" to the profession. The call occurs usually at puberty when the emotions are unstable, and this inward and sometimes unwelcome invitation, is experienced only by novices of a particular physical constitution, wherein nervous excitability is prominent. The hereditary nature of the medicine man's office is perhaps due, not so much to a conscious arrangement for preserving social distinction, as to an unconscious appreciation of the fact, that the attributes of memory, observational power,

5 Rattray R. S., Ashanti, Oxford, 1925, p. 94.
dominating personality, hysteria, and epilepsy are of an hereditary nature.

Evidence respecting shamanists of Siberia illustrates the importance of the call. Jochelson\textsuperscript{10} makes clear that the novice is hidden by an inner voice to enter the profession. A young Yakut stated that for nine years he struggled with himself during which time he could see and hear things that were not recognized by ordinary people. Many traditions relate to the vengeance of spirits whose call had not been obeyed. Among Tungus a dead shaman appears in the dream of a novice commanding the boy to become his successor.\textsuperscript{11} Altains believe that no one becomes a shaman of his own free will; it is said that the ancestor spirit leaps upon him, issues commands, and strangles him in case of resistance.\textsuperscript{12} Bogoras\textsuperscript{13} states that some young men so fear the call that they prefer death to resistance. A youth of the Gilyak tribe fell into a trance in which a bird spirit said: “Make yourself a drum and all that pertains to a shaman.”\textsuperscript{14} Sternberg gives a further account of a boy Koinit, twelve years of age, who fell into a deep sleep in which the spirits said: “We used to play with your father, let us play with you also.”\textsuperscript{15}

The subject of arctic hysteria and shamanising is in some of its aspects incomparable with similar practices in other parts of the world. But instances of a call are to be found in regions unaffected by the phenomena described.

The Akikuyu say that the medicine man becomes such in response to a direct call. This is frequently given in the form of an illness during which the boy sees and hears things that indicate his latent power as a witch doctor. The call may take the form of a dream in which the novice sees people bringing a goat to him for sacrifice.\textsuperscript{16} The Akikuyu say, “God chooses but the father must train the novice.” The Ba Thonga of Portuguese East Africa believe that a man must be induced by his heart to enter the profession

\textsuperscript{11} Czaplicka M. A., Aboriginal Siberia, Oxford, 1914.
\textsuperscript{12} Wierbicki L., The Natives of the Altai, 1893, p. 44.
\textsuperscript{14} Sternberg L., The Gilyak, Moscow, 1893, p. 72-4.
\textsuperscript{15} Ibid, p. 72.
of medicine man.\textsuperscript{17} Kingsley\textsuperscript{18} states that the call of a boy to the
witch doctor's profession takes the form of seeing spirits during in-
itation to a secret society. The Wiradjuri boy said that he could see
things his mother could not see, after some training by his father.
"It was after that I used to see things my mother could not see—she
used to say child there is nothing; these were the ghosts I began to
see."

Occurrence of epilepsy among medicine men is of interest be-
cause the disease is today little understood in modern therapy.
Medical men classify epilepsy among the explosive diseases. Lam-
inal, a synthetic drug, and bromine, are used as palliatives. Brains
of epileptics show no anatomical differences when compared with
the brains of normal people. Epilepsy is not necessarily accom-
panied by any other mental defect, though later in life dementia is
likely to set in. The disease is probably due to a disturbed meta-
bolism, and a vigorous outdoor life is beneficial.

The shamans agree that violent dancing improves their condi-
tion, and Tremearne,\textsuperscript{19} in \textit{The Ban of the Bori}, describes a Nigerian
curative system of dancing for improving the condition of epileptics.
This therapeutic dancing is not, however, connected with the pre-
paration of men for the office of medicine men.

Czaplicka\textsuperscript{20} has well summarised the evidence respecting epilepsy
and shamanism in arctic regions. Kingsley\textsuperscript{21} states, for parts of
West Africa she visited, that if the novice can acquire a showy way
of having imitation epileptic fits so much the better his qualifica-
tions for the office of witch doctor." Among the Arunta\textsuperscript{22} the
novice should be silent, reserved, and of neurotic temperament,
Bogoras\textsuperscript{23} in describing the appearance of a shaman has given an
account which is probably applicable to a great number of medi-
cine men, irrespective of geographical area. "The typical medicine
man is silent, reserved, even morose: he has peculiar restless eyes
in which the glint of madness is discernable, and at all times he
is a sensitive man, that is he appreciates quickly any change in the
psychic atmosphere."

\textsuperscript{19} Tremearne A. J. N., \textit{The Ban of the Bori}, London, 1914, and \textit{Tailed
\textsuperscript{20} Czaplicka M., \textit{Aboriginal Siberia}, Oxford, 1914.
\textsuperscript{21} Ref.: 18.
\textsuperscript{23} Bogoros W., \textit{The Chukchi}, p. 417.
From the observations of Im Thurn in 1883, and Whiffen in 1915, epilepsy is a recommendation for the office of medicine man among some tribes of the North West Amazon region. For this region it is stated that the medicine man may take the form of a puma for short periods during his life, while after death he may be reincarnated in that animal. On this account hairy boys are preferred for the office of medicine man.24

Although the peculiar neurotic condition of the novice and the nature of the call present a difficult problem, there is evidence to warrant the inclusion of the medicine man with those psycho-neurotic cases that have formed a subject of discussion for Rivers,25 Coriat,26 Freud,27 Crichton-Miller,28 Binet,29 and Morton Prince.30 Constant striving and inhibition create a complex which Hart describes as an "emotionally toned system of ideas," to which Rivers attributes a definite pathological implication, for he says "The complex is not only the result of suppression but is a product of the independent activity of the suppressed content." Freud has stressed the importance of sex instincts and their repression in relation to a neurotic condition. The novice becomes ill about the time of puberty when strong incipient sex instincts are no doubt in conflict with denials demanded by the call, with its attendant solitudes and privations. Although it is clear that a rigid system of taboos is likely to affect adversely the condition of an abnormal boy, there is no doubt that the existence of a fear neurosis, such as Rivers explains in describing the effects of war strain, in his book *Instinct and the Unconscious*, is largely responsible for the novice's neurotic condition.

The hysteria and anaesthesia of the shaman are explicable in the light of a fear neurosis, for Rivers states, after examination of many invalided soldiers, that hysteria may be regarded as a solution of the conflict between instinctive tendencies and controlling forces. Anaesthesia is one of the most frequent accompaniments of suppression and is often found in conjunction with hysteria which is primarily due to conflict between a danger instinct and discipline.

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Under aggravating conditions which include fear of the spirits who issue the call, together with repressions and privations of various kinds, the condition is evidently favourable for the formation of a dual personality by a process known to psychologists as “splitting of the stream of consciousness.” There is evidence to show that the medicine man may have this twofold aspect of his psychic life.

The following instances of a transfer of power show some analogy among the usages relating to the offices of medicine men, priests, and kings.

Hocart\textsuperscript{31} has summarised facts relating to the installation of chiefs in Fiji. The new chief is nursed during four nights in the lap of the elders who do not allow his feet to touch the ground. The nursing ceremony is typical of death and rebirth, during which the chief acquires a peculiar power. W. Ellis\textsuperscript{32} records instances of the transfer of power from gods to inanimate objects which were kept inside them before being distributed to the worshippers, while new gods were placed in contact with old so that the necessary transfer of power might take place. Codrington\textsuperscript{33} observes that at Saa the son of a chief had to undergo an initiation of more than ordinary severity, the ceremonies being extended until the boy acquired a power known as Saka. Wallace Budge\textsuperscript{34} explains that kings of Egypt on account of their divine descent had a peculiar power described by the words “Sa-en-ankh” obtained from Ra before birth. Each day the king brought himself into physical contact with an image of Ra, so justifying his kingly title “Endowed with life like Ra for ever.” Transfer of power might in Egypt take place by ceremonial cannibalism for the text reads—“He has taken the heart of the gods, he has swallowed the knowledge of every god, their charms are in his belly.”

A novice of the Veddas of Ceylon acquires his power when an elderly medicine man introduces him to the Yaku or spirits; to these an apology is made saying—“Take no offence I am bringing a pupil of the mind.”\textsuperscript{35}

Arunta men are graded in power according to the degree and type of initiation experienced. Novices of class one the \textit{Irunterinia}

\begin{itemize}
\item \textsuperscript{31} Hocart H. M., \textit{Ceylon Journal of Science}, July, 1924, p. 27.
\item \textsuperscript{33} Codrington R. H., \textit{The Melanesians}, Oxford, 1891, p. 233.
\item \textsuperscript{35} Seligman C. G., \textit{The Veddas of Ceylon}, Cambridge, 1911, p. 129.
\end{itemize}
sleep in caves inhabited by these spirits who communicate their power by launching darts into the bodies of the candidates. The hole in the medicine man's tongue is also the work of spirits. Among many instances of body marks symbolising the acquisition of power is the mediaeval use of tattooed designs by witches who called these "the devil's marks." An instance of the transfer of power in ordinary tribal initiation is provided by Australian aborigines near the Upper Finke River. The instructors project crystals into the boys from a distance, and the novices, while some distance from their tutors go through the movements of hauling in a rope. The arctic tutors transfer power by blowing onto the eyes of the novice or stabbing him with a knife with which they previously stabbed themselves.

The question of conscious charlatanism of the medicine man has often been raised. In general the power is seriously regarded. Spencer and Gillen record that a wizard when demonstrating, thought that the pointing stick had entered his own head and became seriously ill. Another practitioner lost his power after drinking hot tea because hot drinks were taboo to him. Any medicine man who loses the power of bringing up crystals retires from the profession. The annual Ba Thonga festival for the renewal of the power of drugs further illustrates belief in the dependance of the healing art on non-material power. The Ba Thonga have a system of grading their medicine men according to power. Medicine men who treat leprosy belong to the highest grade of their profession, while those who specialize in purification ceremonies after twin births are likewise of importance. Only within recent times has the value of suggestion in therapy been discussed and used. Hypnosis has been used in treatment of mental cases, also in place of anaesthetics in surgical operations. Healing by suggestion is fundamental to the art of one primitive practitioner.

During the period 1914-1919 a number of experiments were made in relation to the effect of color in relieving cases of dis-

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36 Murray M., Man, 1918, No. 81.
37 Ref.: 22, p. 337.
38 DO and Howitt W., Native Tribes of South East Australia, London, 1904, p. 535.
39 Byclaywski I., A Journey to the Glacial Sea, Moscow, 1883, p. 113.
41 Ibid, p. 336.
ordered mentality. For an unknown time the medicine man has anticipated these modern experiments by associating colors with mental states. A. R. Brown, influenced no doubt by his observations in the Andaman Islands, where color symbolism is elaborate, thinks that painting, though now tending to mere formality, has had a genuine psychological function in keeping alive ideas and sentiments. Karsten is similarly impressed with regard to certain tribes of South America.

Mocking shamans whose function is anti-social wear black coats, while the well-minded shamans have a distinctive red coat. The wind maker of Torres Strait, in order to invite a breeze which shall take the canoes seaward for fishing, smears himself with red ochre and beckons the wind toward him. If payment is deemed insufficient he changes his red covering for black, and so prepared drives the wind in a direction unfavorable for the fishermen. Among North American Indians color symbolism has been well elaborated. Apart from a very wide association of red with symbols of life and magical power, and a frequent use of black to symbolise anti-social practices, there does not appear to be any very extensive association of a particular color with a definite emotional state.

In connection with the psychology of the medicine man the following points are of primary interest:

(1) The possible historical and topographical connection between initiation of medicine men and other forms of inception.
(2) The nature of the "call" in terms of modern psycho-therapy.
(3) The transfer of power.
(5) The relative importance of medicine men and medicine women. McClintock describes the importance of the medicine woman who helps her husband in the Blackfeet tribe, Whiffen has a good illustration of a medicine man and his wife, both of whom are ceremonially attired, among Indians of Guiana.

Ref.: 11, p. 192.
Ref. : 24, Whiffen, p. and Im Thurn, p. 337.
The witch woman is important in Africa, so also are priestesses.

(6) Bogoras\(^{49}\) mentions among the Chukchi a transformed shaman, a man of simpering appearance who attaches himself to a male shaman. These transformed shamans are credited with a power transcending that of the ordinary male shaman. This observation raises the question of homosexuality among shamans.

\(^{49}\) Ref.: 13.