To explore the origin of our customs and superstitions is a great adventure and it records a galaxy of fascinating information. Everyone likes to know its origin. The life of many, being coloured by the influence of these unfounded beliefs, it is only curious for us to know its origin, belief and extent.

Superstitions have been with men from his earliest days and even in the scientific age of today the most enlightened of us are often tempted to keep them, as there might be some truth in them. These beliefs may have some reason, a background and perhaps a self-styled explanation. From earliest times men assumed the existence of powers which could influence their lives for better or worse. To placate the anger of these forces or to buy their goodwill became almost an obsession and superstitions, which had been responsible for many habits and customs that are actuated only observed even now.

**CHAPTER IV**
To explore the origin of our customs and superstitions is a great adventure and its record a goldmine of fascinating information. Everyone likes to know its origin. The life of many, being coloured by the influence of these unfounded beliefs, it is only curious for us to know its origin, nature and extent.

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(There is very little or practically no field that escapes from the influence of superstitions. There are a large number of superstitious beliefs relating to omens, animals, evil-eye, snake-worship, vows, offerings, charms, human sacrifice, magic and human life, magicians, fortune telling, agricultural ceremonies, rain-making ceremonies, astrology, numerology, manners, customs, money, necromancy, occult, palmistry, voodoo, vampire, witchcraft, witches, ghosts, evil-spirits, names and words, medical practices, amulet, augur, birth-stone, blarney-stone, etc. The whole social and religious life of a man is encircled by a fencing made up of irrational beliefs.)

The origins of our superstitions are lost in time and those beliefs which have survived are often relics of ancient cultures and long vanished ways of life. However, they remain outward expressions of the tensions and anxieties that rend humanity as it struggles down the corridor of life from birth to death, buffeted by the alien winds of chance. Life, now as in the past, remains an impenetrable mystery with incomprehensible rules, and the vast majority of individuals implicitly accept the existence of an external power which in some mysterious way influences their lives and which, it is believed, can sometimes in an equally inexplicable manner be influenced by the human will. Such a power has been

given a variety of names, including good and evil and even white and even black magic. To most, however, it is summed up by the single word 'luck'. Luck is the unknown goddess, perhaps the first deity ever to have been conceived by primitive man. It is around this inexplicable term luck that all our superstitions revolve, in attempts to capture its mysterious powers and convert it temporarily to human use. Unlike fate, however, luck, if all the sages of the ages are to be believed, is capricious and fickle and must be wooed in order to be won. The techniques mankind employs to lure the elusive creature into the human net have descended to us from the ages of magic under the name superstition. 1

At the root of most of the surviving superstition lies an implicit acceptance of magic as a rule of life, which in effect means the possibility of control by man over his destiny by the exercise of key-actions (rituals) to which the forces governing the external world have no option but to submit. It would therefore appear that the superstitious individual basically regards the animating forces behind nature as possessing quasi-human qualities, despite the fact that they belong to a different order or creation. Like the scientist the magician of the old sought to force the submission of nature to the human will; unlike the former, however, he believed matter to embody elemental spirits and not elements,

1. Ibid., p.9.
and these he wooed, coerced and commanded by the use of special words or by specific actions, like the waving of a wand. The world of the magician is a domain of conflicting forces represented by hostile and friendly spirits, and to win the favour of the latter without antagonising the former is his primary task. Eric Maple says that today people, like the magician of the old, constantly seek to come to terms with these forces of good and evil which expressed in day to day terms, are called good and bad luck. To win over the good spirits and keep at bay the bad, however, far more is needed than will power alone. In its struggle to maintain self-confidence in face of the hostile winds of disaster, mankind has preserved only what has been absolutely essential to its survival. Included in the precious heritage are the superstitions, those ritual acts of faith which were specifically designed to offset the destructive influence of fear to provide for man an imaginary control over the environment which gives the race confidence to struggle onwards towards destiny.  

Superstition as Error

One cannot divide the peoples of the world into the superstitious and the enlightened, but only into those by and large more or less superstitious. A backward glance into

1. Ibid., p.11.
history teaches us the same lesson. The dominant intellectual temper of nineteenth century Europe was rationalistic. It is epitomised in Comte's and Mill's serene confidence in the capacity of the human mind to bring about orderly progress, as well as in Darwin's shattering demonstration that the human species fits harmoniously into a vast order of nature. However, it must not be forgotten that there was another side; the same period saw the spectacular rise of occultism, by no means confined to the vulgar and ignorant. Alfred Russel Wallace, who independently hit upon the concept of natural selection, was also an ardent believer in the 'miracles' performed by mediums, and wrote a book on the subject.¹

Lehmann was among the few psychologists intensely interested in superstition and magic, publishing a volume with the title 'Superstition and Magic'.² Over half of the book is devoted to a mainly historical account of magical and superstitious beliefs but the aim of the last part is to offer a psychological analysis of what Lehmann called 'magical states of mind'. Lehmann also considered a variety of psychological aspects of superstition. Lehmann's basic position was that superstition is a form of error. This is clearly expressed in his summing up: "All the superstitious beliefs, whose

natural context we tried to demonstrate here, was at the 
beginning only false interpretation of phenomena more or less 
inadequately observed. But this theory has its own limita-
tions. It also happens that people, when challenged, will 
readily acknowledge that a particular action of theirs is a 
superstition without any rational basis, yet they will continue 
to perform it. This indicates that a large proportion of 
superstitions are not of the individual kind, but are socially 
transmitted. They are accepted readymade, without any inter-
vening observation subject to error; and this aspect must also 
be accounted for.

There are thus, under certain conditions, tremendous 
pressures on an individual to fall into line with the remainder 
of his fellows; and these are likely to be even more potent 
when the stimulus is not straight forward one like the length 
of lines, but the weird performances of cult-priest or 
magician. Moreover, in the latter cases there is usually a 
will to believe. Strong expectations are aroused that certain 
extra-ordinary things are going to happen, and under such 
circumstances slight perceptual cues are readily interpreted 
in accordance with such expectation.

If superstitions were merely the result of error, 
be it of perception, memory or judgement, it ought to be

1. Ibid., p.725.
relatively easy to correct. In fact, people hardly ever abandon such beliefs as a result of rational argument. In spite of the many objections that can be raised against the view of superstition as error, it continues to be widely held.

**Superstition as group suggestion**

The argument that superstition is mainly due to group pressure and suggestion has many supporters. There is also experimental evidence to prove that individuals generally display a stronger tendency to accept a belief or statement when the majority of people support it. The suggestive effect of a belief becomes all the more compelling when it comes from prestige figures or authority figures like parents, teachers and and leaders of society. But this theory is also subject to criticism. If superstitions were merely determined by social pressures, their removal ought to dispel superstition; this is sometimes true, but not invariably; there are people who cling tenaciously to their superstitions. It looks as though they had strong roots within the personality of the individual.

**Superstition and the Unconscious**

Freud says that one of his patients once related to him what she thought had been a prophetic dream.\(^1\) It was

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about meeting the former family doctor in front of a certain store. When she went to town the following day, she did actually come across him at precisely the spot that had appeared in the dream. Freud had examined her story carefully and it turned out that she had no recollection of the dream prior to the encounter with the physician. He therefore concluded that it was probably in the course of the meeting that she gained the conviction of having had the dream. Now one might say that here is an example of someone getting superstitious notions because her memory had played her a trick. However, Freud was not content to leave it at that. In his view such lapses of memory, errors of speech or writing and so on are not merely accidental occurrences, but can be demonstrated to be subject to a law if one acquires sufficient information about the psychological processes of the person concerned. His work on the "Psycho-Pathology of Everyday Life", from which this example is drawn, surveys a large array of cases of this kind.¹

Freud's first formulation, in 'Psychopathology of Everyday Life', places most emphasis on thoughts, fears and wishes which are present in a person's unconscious; owing to the fact they are unacceptable to the ordinary everyday self - they cannot gain access to full sunlit consciousness. Nonetheless, these elements being actively present within

¹. *Ibid.*, Vol.VI.
the psyche, they are as it were clamouring to be allowed some outlet. According to Freud, one way in which their threat is dealt with is by attributing them to the outside world; this is called the mechanism of projection. There in a person's unconscious there may be a cruel thought, even a death wish, directed against someone else, after a consciously loved person. This may then become translated into a premonition of death of the loved one, or, following an even more circuitous path, the guilt of punishment, and this in turn would manifest itself in a superstitious notion of misfortune threatening oneself.

Most of us from time to time harbour unkind thoughts about our fellowmen, and some of them will after a shorter or longer interval succumb to disease or death. Freud, in Totem and Taboo, traces this back to the sexual development of early childhood, when part of the libido attaches itself to the emerging ego. In this narcissitic stage the efficacy of one's own psychic processes in affecting the outer world is vastly overestimated.\(^1\) Whilst in normal people this stage is largely, though not entirely, outgrown, it persists strongly in certain neurotics and leads them to ascribe external effects to their own thoughts and wishes. Freud believed that this persistence of narcissism is also characteristic of savages and accounts for their magical beliefs.

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Several of Freud's followers have also written about superstition. In so far as they wrote about particular forms of it, and seemed unaware of the work of their colleagues, one can assess the extent to which their interpretations are in agreement. Thus both Fliess and Marmor published papers dealing mainly with the superstitious practice of knocking on wood.¹ ² Fliess³ treats it as a prototype of magical ritual and gives a description of the action. One of the widespread magical activities practised in the modern world is 'knocking on wood'. Classically, the gesture is performed three times with the knuckle of the bent index finger, preferably on a table, window-sill, or the like, with an approach from below. The very persons who most loudly proclaim their freedom from superstition are most devout in observing this ritual. The sheepishness with which people are apt to perform such magical rituals can be shrewdly observed, and it is evident that there is a very real problem here: why do sensible well educated people behave like this in the twentieth century.⁴

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The answer given by Marmor is that the fear arises from a persistence of feelings experienced towards parents during childhood. He cites a connected superstition which emerged from a study of pregnant women, many of whom apparently refrain from buying a layette before the seventh or eighth month, for fears that something might happen. Odier also like several others traces the relationship between superstition and fear. In his discussion Odier\(^1\) claims that neurotics develop a defence against the felt threats by simply endowing various objects and gestures with magical powers. Like the small child who cannot bear going to sleep without his pet toy, so the anxiety neurotic of this type relies on mascots, amulets or such gestures as 'touching wood'. Actually from the examples given by Odier it is clear that as Often as not the person merely adopts a superstition prevalent in his social environment, but makes it his own in a manner highly charged with emotion.

In some type of more severe mental illness, like acute schizophrenia, the rational element may be almost entirely in abeyance, patients living the whole of their mental life in an atmosphere of unrelieved magic. They may believe either in fantastic threats from the outside or that they themselves enjoy vast magical powers, or a combination of both. Roheim, who was both an anthropologist

\[1. \text{Ibid.}\]
and a psycho-analyst, made this point very strongly. ¹
"Schizophrenics frequently affirm that they are being beaten
or burnt, that their legs are being made shorter, and their
eyes are being pulled out . . . ." All these sounds exactly
like primitive magic. These are the things that he believes
a sorcerer can do to him. From quite a different non-Freudian
standpoint Field has put forward the view that original
schizophrenic fantasies have historically been the source of
magical ideas. ² She suggests that people whose illness was
not recognised as such in their culture were responsible for
propagating them. Thus, starting from the similarities that
so impressed Roheim, she reaches a rather different conclusion,
whose weakness is that it fails to account for the surprising
acceptance of such fantastic notions by normal people.

There are indications that important relationships
exist between individual symbolism and that of social rituals,
but its nature remains obscure. Leach, an anthropologist, has
discussed the problem in an illuminating essay. ³ Leach demon-
strates that individual symbolism is consistent with social
ritual, much of which is magical in character, and he argues
that the ritual is effective because it evokes unconscious
symbols in the participants. What remains to be shown is

1. Geza Roheim, Magic and Schizophrenia. New York:
3. E.R. Leach, "Magical Hair", Journal of the Royal
   Anthropological Institute, 1958, 88: 147-164.
that the symbolism is in fact universal, and if so how the
remarkable fit between personal symbolism and social ritual
came to develop.

The other great depth psychologist, Jung, was so
impressed by the similarity of symbolism in different parts
of the world that he used this as the basis for inferring
that there exists a collective unconscious in which all human
beings share. At any rate, he refused to acknowledge any
sharp dichotomy between true and false beliefs, taking the
view that superstitions fulfill certain functions in human
life. He says that our religious and political ideologies
are methods of salvation and propitiation which can be compared
with primitive ideas of magic, and when such 'collective
representations' are lacking their place is immediately taken
by all sorts of private idiocies and idiosyncrasies, manias,
phobias and daemonisms whose primitivity leaves nothing to be
desired, not to speak of psychic epidemics of our time before
which the witch-hunts of the sixteenth century pale by
comparison.¹

In any case he treats superstition as a fundamental
attribute of the human psyche and few of his massive volume
of writings fail at least to touch upon it. Jung² begins by

² Ibid.
starting that, in spite of the rationalism of the last century and a half, beliefs in spirits and similar manifestations remain widespread among people at large. It has been a constant theme in Jung's writings that people now-a-days are excessively rationalistic, and thus deny an outlet to an important part of their nature, which thus may find sudden violent expression.

In spite of sharp divergence between the positions of Freud and Jung in this sphere, they do have several things in common. Both agree that superstitious beliefs and practices are deeply rooted in man's unconscious mental processes, both held that superstition is not a thing of the past, or confined to the less educated. In fact it is regarded as part and parcel of everybody's mental make-up, liable to come to surface under certain circumstances.

Superstition as a Conditioned Response

The approaches of the school of Psycho-analysis and Behaviourism are in sharp contrast; the former is founded largely on inferences from the verbal utterances of the mentally ill, the latter rests mainly on the behaviour of animals in experimental situation. Extremists in both the camps accuse each other by saying that psycho-analysis is a
mythology and believers in it as almost superstitious. Freudians in turn are apt to maintain that behaviourists are completely blind to the most fundamental problems of life. In fact several excellent studies have been based on an eclectic marriage of psycho-analysis and behaviour theory. While Freud held that certain childhood experiences resulted in unconscious mental processes of which superstition is one particular eternal manifestation. Behaviour theorists treat such beliefs and practices as the outcome of learning, in much the same way as they account for all other forms of behaviour; except that in superstition the learning has in a sense gone wrong.

Skinner,¹ while building on the insights of Pavlov, introduced a radically new idea. This was a linkage between reinforcement and a response as opposed to a stimulus. Skinner approaches his theme in connection with Pavlov’s conditioned reflexes, where he points out their evolutionary value in so far as they assist an organism’s adaptation to change in its environment. Thus conditioned fear to the sight of boiling kettle is of permanent value to a child who burnt its fingers. On the other hand there are numerous cases when the pairing of stimuli is temporary or accidental, and these according to Skinner may produce superstition. He does not in fact give

any example of this kind of superstition, but merely illustrates irrational behaviour arising from this; a child frightened by a dog may fear all dogs, including friendly and harmless ones. Skinner's earliest systematic exposition is to be found in a paper whose title sounds like a jest though it is perfectly serious,¹ Superstition and the Pigeon. He says: "There is ... no absolute distinction between a superstition and a non-superstitious response .... the tendency to behave superstitiously necessarily increases as the individual comes to be more sensitively affected by single contingencies. Between the contingency which is observed only once in the life of the individual and the contingency which is inevitably observed there is a continuum which we cannot divide sharply at any point to distinguish between 'superstition' and fact". His thought has probably little to contribute towards our understanding of socially shared superstition. On the other hand, he does provide an important key to the genesis of private superstitions. The catching of a good fish reinforces not only the tendency to go back to the same place, but one is apt for a while to put on the same cap and pocket the same pipe one had on that happy occasion, all rationally irrelevant features. Gamblers often have elaborate private rituals that probably derive from whatever actually happened to be reinforced.

by a particular stroke of good luck. The investigator recently came across a spontaneous individual development of superstition in a highly educated person. Whenever he used to write his pay bill he used to borrow his neighbour's pen. He believes that writing with his pen is bad omen and he will not get his pay in time if he does so. Once or twice it so happened that he committed some silly mistake while writing the bill and he had written with his own pen during those occasions. The associative link between the pen and the delay developed into this individual pen superstition. There are several instances, where children spontaneously develop several superstitious beliefs. Wearing of a particular cloth if followed by punishment or unpleasant experiences can easily lead to cloth superstition and the consequent avoidance of that particular cloth on important occasions. Sometimes these superstitious associations may not be fully conscious, but may manifest itself as uneasiness or vague anxiety. In general Skinner's interpretations do help towards an understanding of at least one limited though important fact of superstition. The main weakness of his theory is the absence of any systematic empirical work.

The study of Whitings is one of the very few attempts to trace in detail the process whereby superstitious beliefs and practices are transmitted from one generation to the next.
Subsequently he pioneered an entirely fresh approach to the study of the origins of superstition which, while still retaining in its theoretical rationale the language of conditioning, departed from it considerably in practice. One work dealt with the childhood antecedents of the fear of witchcraft and sorcery, but one of his more recent writings will serve to illustrate the method. The particular problem to be singled out for discussion is the fear of ghosts at funeral ceremonies. He thinks that rewards are insufficient to ensure regular good behaviour, and the inhibitions set by punishment will usually become rapidly extinct. Other more subtle mechanisms are required; one of the major ones being the fear of supernatural sanctions; there cannot always be an actual policeman present, but the fear of evil acts being punished by ghosts transcends this limitation. It appears that child rearing conditions tend to produce particular kinds of beliefs.

Superstition as a Mode of Thinking

All of us pass in infancy and childhood through a period of mental development characterized by many features of magic and animism. Children in all societies, at whatever


level of technology, have certain stages in common. There is now a great deal of evidence to support such a view, due mainly to the epoch-making studies of the Swiss Psychologist. Jean Piaget, who will probably rank with Freud and Pavlov as one of the giants. For, nearly half a century he, together with an increasing number of followers, charted the development of thinking in the child. He showed that until about the age of ten or eleven, children's concepts of such basic categories as space, matter, time and causality differ fundamentally from those of normal adults. He discovered this by means of a large number of highly ingenious though often basically simple experiments.1

In some of his earlier studies, which relied more on verbal questioning than experiment, Piaget2 took a considerable interest in the magical and animistic aspects of children's thinking. He started from this position, reached on the basis of prior research, that the young child is incapable of distinguishing clearly between his self and the outside world; moreover the child at that early stage cannot differentiate between psychological and physical phenomena. It follows


that the child is totally ego-centric, not of course in the sense of 'selfish', but in the sense that he is quite incapable of ever conceiving of perspective differing from his own. The child's thoughts, feelings and wishes are mixed up with what we would call the external reality to which they relate. Thus psychological processes are objectified, and things endowed with psychological attributes. Dreams seem to come from the outside, words are indissolubly linked with the objects to which they refer, and speaking is felt to be a way of acting upon things. Conversely, the physical world is not sharply divided off and material and inanimate, but on the contrary regarded as though it were possessed of life, consciousness and will.

Piaget\(^1\) collected a good deal of information about childhood magic; though since this is almost impossible to elicit in practice without prolonged observation, most of his material is derived from recollections of adults. They included numerous rituals to ensure success and ward off danger, or magic due to mystic participation between objects.

After reviewing various forms of child magic Piaget offers a penetrating discussion of their origin, relating his own views to those of Frazer and Freud. He shows that Frazer's account remains descriptive rather than explanatory, whilst

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1. Ibid.
the Freudian account is more adequate but seems to endow the infant with the intellectual capacities of an adult. Piaget's own theory focusses on the diffuse nature of the cognitive relationship between a child and his environment. In support of his interpretation Piaget further suggests that there are certain situations in adult waking life where the boundary between the person and his environment temporarily loses its sharpness and under such conditions a recurrence of childish magic is to be expected. Among such conditions are intense anxiety, and an exclusive pre-occupation with a particular desire. Piaget thus relates a number of examples, such as that of the nervous lecturer who feels compelled to walk to a particular spot in order that the lecture should be a success, or the man impatiently waiting for his wife to finish her cigarette before going out, who caught himself sucking furiously at his pipe to make her finish more quickly. Here it should be pointed out that Piaget was not concerned with the rich store of socially transmitted superstition which form part of the tradition of childhood. Many of these have been recorded in the delightful book by the Opies.  

Piaget also deals with animism, i.e., the attribution of consciousness to things. This set of notions is capable of being fairly readily elicted by systematic questioning and

Piaget presents a wealth of material. Piaget, according to his usual practice distinguishes four stages of animism: (1) all things are conscious, at least potentially; (2) things that can move conscious; (3) things that can move of their own accord are conscious; (4) consciousness is restricted to animals. Children tend to be in the first stage up to about six or seven, and reach the fourth roughly by eleven or twelve; there are however very wide individual variation. Animism has been studied with children in various parts of the world and the broad sequence has been generally found to hold.¹

Although the systematic evidence for childhood magic is a good deal weaker, this is probably largely due to the difficulties in securing it. What we do know appears consistent with Piaget's view that following the initial undifferentiated phase of thinking in the child, magic and animism are complementary while the self is not yet fully detached from the external world. The child, for instance, may be under the impression that the sun and moon follow him when he is walking, and this may be either a magical (I make this move) or animistic (they follow me) phenomenon, or both may co-exist. Piaget² further argues that during the next stage, while the self has become separate from things, thinly eliminating purely magical thinking, these still persist for a while a confusion between

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2. Piaget, op. cit.
subjective and objective, resulting in animism lingering on for a time. Piaget has then demonstrated that children pass through stages of magical and animistic thinking, and research in different cultures shows that this is likely to be a universal process.

The advent of scientific revolution in the West gradually destroyed harmonious and satisfying modes of thinking, widening the separation between self and the world which Piaget traced in childhood. While scientific modes of thinking are properly distinguished from the older magical world view, it is important to remind ourselves that ultimately both share the conception of order and uniformity in nature, as was already recognised by Frazer; and this in turn is rooted in the fundamental characteristics of human thinking.

In our own society in the past, and traditional sections of some societies at present, gaps were not even allowed to occur and every phenomenon found its place in a meaningful whole. This served to reduce uncertainty and doubt and its relationship to superstition shall be interesting to note.

But it would be rash to conclude that men strive after a state of complex certainty with full information and control. Man as a biological organism is equipped to cope with variability in his environment. The idea that the rigid
following of set rules would ensure success would be intolerable burden which man could not endure. Some experimental studies have also demonstrated variation in the emotional concomitants of uncertainty. New and highly threatening situations are apt to arouse anxiety, and the less known about the probable outcome, the more intense the anxiety. In such circumstances there tends to be strong desire for both information and some means of control. Superstition thus may serve the function of reducing anxiety; and as intense anxiety is liable to inhibit effective action in dangerous situations, there is distinct possibility that superstition may have positive survival value in certain circumstances. Nonetheless, it is seen that superstition is a relative concept, dependent on the state of scientific knowledge at a particular point of view.

Conclusion

It is found that the highly prejudiced were more prone to superstition, and this fits in with the type of home background which, according to the clinical interviews, was characteristic of them. It was one with a relatively harsh and threatening discipline, where parents exercised a rigid control which was not permitted to be questioned, although it was experienced as arbitrary.
This seems consistent with the development of a belief that one’s fate is in the hands of unknown external powers, governed by forces over which one has no control. Naturally one has to guard against drawing excessively sweeping conclusion from such findings, but it does look as though a tyrannical and arbitrary home background is likely to produce a predisposition towards acceptance of superstition. A complicating element here is the fact that a majority of the highly prejudiced were relatively low in social class, educational level and intelligence. This is proved by a study\(^1\) on this line.

There are people who see in superstition an example of the short-comings of human mental processes which must be overcome. Still others hold that superstition is nothing but a manifestation of human gullibility and folly; a monster which we must slay to ensure progress or even survival; and the weapon most frequently advocated to combat and ultimately defeat it is education.\(^2\)

But the opinions of the above type are themselves irrational in nature. They are not the outcome of a dispassionate analysis of the phenomenon, but little more than

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in reflective response to the pejorative flavour of the label. Superstition is thereby identified with error, or lack of information. The short-comings of such a view and the fallacy of castigating the ideas and beliefs of another era are considered as superstition. The forerunners of the scientific revolution from Roger Bacon to Kepler, until well into the seventeenth century, retained magical and esoteric beliefs while heralding a new approach to the physical universe. Surely it would be absurd to reproach them with imbecility merely because in some respects they were children of their time. "A striking example of the coexistence of two apparently quite disparate modes of thinking within the same skull was the brilliant German mathematician Michael Stifler, who improved the algebraic symbolism, was one of the invention of Pascal's triangle, and adumbrated the notion of logarithm. This man was converted by Luther and became a fanatical adherent, predicting the end of the world".  

Some writers used to maintain that magic was the source from which both religion and science sprang simultaneously, others supporting a sequence from magic via religion to science. All such schemes involve a recognition of common elements between magic and science, in the sense of postulating some scheme of order and regularity in the world.

Certain primitive aspects of thinking, a remnant of the earlier childish developmental stage as described by Piaget, persist at least as a peripheral feature of the thinking of the creative scientist.

The major difference between scientific thought and other kinds which shade imperceptibly into superstition is not in the initial weaving of patterns, but in the obligation imposed by the scientific ethos to verify the products of thinking by well-established methods linking it to empirical phenomena.

In situations of acute danger or distress, usually involving excessive uncertainty superstition is particularly likely to come to the fore. This may represent in some degree a regression to more infantile attitudes as described by Freud. On the other hand, superstition may at the same time serve the positive function of giving the person at least the feeling of having some control; although illusory, this may well help to preserve the integrity of the personality. One of the vicissitudes of human life which has all the ingredients conducive to superstition is disease; it often strikes suddenly without warning, was little understood in the past, and often involves emotional stress. Hence it is surprising that everywhere superstitious beliefs and products are particularly prevalent in the sphere; this applies even to modern industrial societies
in relation to disorders not readily amenable to orthodox
treatment. Given the appropriate circumstances, probably
most of the people, however much they pride themselves on
their rationality are liable to succumb.

Thus superstition, far from being odd and abnormal
as it is often thought to be, is in fact intimately bound up
with our fundamental modes of thinking, feeling and generally
responding to our environment. The current enlightened
attitude to superstition which purports to discern its
imminent demise, aided by education, has its roots in the
intellectual optimism of the nineteenth century. This gave
rise to the expectation that in due course the advancement
of science would conquer the twin evils of illness and super-
stition, leading to a race of fit and rational superman.
Today we realise that perfect health is an unattainable ideal,
because the very genetic variability which ensures our biolo-
gical adaptation entails continued vulnerability to attack by
micro-organism. Similarly the advances of science have been
accompanied by growth of new kinds of superstitions. The
inherent limitation in our powers to combat disease are now
well understood, but many people continue to cherish the
illusion that superstition is gradually fading away. All
this of course does not imply that we must resign ourselves
to passivity. First as doctors are not deterred from the
fight against disease by the knowledge that there can be no ultimate victory, so educators need not be discouraged from their efforts to wean men away from harmful or even useless superstition.