THE EVIDENCE OF BELIEF

The question of belief is very closely connected with that of evidence. There is no smooth way to decide 'the' evidence of belief. Controversy crops up as to whether verbal expression or non-verbal behaviour or both serve the purpose. It is better to start with certain questions and to see whether answers to them throw light on this issue.

It is necessary first of all to distinguish between the two questions:
(i) What are the factors necessarily and sufficiently responsible for belief-generation?
(ii) Does belief have only cognitive element as its constituent? Or, Does it have any connection with the affective and volitional elements?

Somebody may suggest that answer to the first question, in a sense, determines the answer to the second question.
To some extent it may be true that the factors prominent in causing a belief remain prominent in the produced belief. But there may be other factors found in the belief which were not present in its cause. The relation between the two questions, however, can be connected in a way if we pose a third question in this way:

(iii) Which element is the necessary and sufficient factor of a belief

We shall try to show that the answer to the question (i) has a definite impact on that of question (iii). It is a fact that the necessary and sufficient factor is producing belief is the necessary and sufficient element of belief.

5.1 FACTORS RESPONSIBLE FOR BELIEF-GENERATION

Hume says that it is the sense-perception of customary conjunction of any two things that gives rise to belief as an additional strength for supporting a belief. A belief based on the association of ideas may turn false. For example, the geo-centric theory was believed by so many people but it turned out to be false afterwards. So if the association of ideas is at par with the present condition of the physical universe then it is possible to accept the particular association of ideas as relevant for producing a particular belief. Human intellect needs the presence of such a whole system of ideas and only then a belief is pro-
duced. This activeness of human intellect is surely a mark of cognitive element in generating a belief.

Hume himself however refers to the affective element also. Belief is generated by an affective element in the sense that to believe that p is to have a pre-feeling towards p. This feeling may be a feeling of confidence, e.g., a belief may be a belief in somebody specially when we have a particular belief on the basis of verbal testimony. The importance of emotional element in belief becomes clear if we consider Bain's suggestion that Jeremy Taylor's saying that 'Believe and you shall love' should be read as 'Love and you shall believe'. In fact, in various spheres of study, it is the love of truth that leads to the way of searching the truth. It is a fact that a belief becomes intensified when it is attached with an emotional mood. But it is also true that absence of such an emotional mood does not hinder a particular case from being a case of belief.

There is also a volitional factor in producing a belief, because there is a part of our will in creating the belief. Professor Braithwait and Professor Bain are of the opinion that conative element is very important in producing belief. Professor Bain, says that though there are cognitive and affective factors, they act as subordinate to the volitional factor which is the governing factor. So, in Bain's philosophy,

2. A. Bain, Emotions and Will, p. 371 H.
"action is an empirical test of belief." But it is difficult to agree with Professor Bain when he reduces activity to forms of bodily movement. The importance of volitional aspect is found in pragmatic line of thinking also. In the field of various needs - physical, logical, religious, etc., when the will finds the means of its adequate fulfilment, i.e., it finds the way to act successfully in certain way, then there comes belief. Then when we will to believe, we have belief. The will is not however a reckless will.

But there are some difficulties. It is a fact that we have to choose the way, and in this sense our will is to some extent guided by our choice of route. In this process, if a great amount of emotion is involved, we may take recourse to hasty ways of action dogmatically without considering pros and cons of that way of action. Besides, so much importance on the will to produce a belief may result in reducing proper belief-state into mere make-believe.

It will not sound bad if we refer to Prof. Price in this context. He refers to the two-fold element of belief - entertaining and assenting. This assenting is determined cognitively and also emotionally and volitionally. Knowing of evidence (cognitive element) is important, but there is also the question of our interest (emotional element) in the propositions among which the evidence is to be decided. But it

is at the same time true that the latter element is not the sole determinant of assent.

What emerges from the discussion is that it is the cognitive factor which is necessary for belief-generation. Needless to say that this is true in the context of rational belief. Let us now turn to the question (ii) about the elements of produced belief.

5.2 CONSTITUENT ELEMENTS OF GENERATED BELIEF

Beliefs have cognitive element. This element is responsible for explaining why our beliefs are expressed in propositional form. In having a belief, we entertain a proposition and assent to it. These are the marks of cognitive element. Entertaining means understanding of the meaning of a whole proposition, i.e., meaning of its constituent parts, and assenting means accepting it as true. In this sense, belief is distinguished from supposition. In the case where the act of assenting is based on evidence, belief is similar to knowledge. There is no question of difference between firm and feeble belief. In fact, in many cases of weak belief, the feebleness of belief is due to the fact that the believer does not have the courage of conviction in spite of enough evidence for it. Belief, however, cannot reach the certainty of knowledge.

That belief has affective element is found in Hume's distinction between fiction or imagination and belief.
Belief lies in some sentiment or feeling, which is absent in fiction. To quote Hume, "An idea assented to feels different from a fictitious idea that the fancy alone presents to us; and this different feeling I endeavour to explain by calling it a superior force or vivacity or solidity or firmness or steadiness." 5

Belief also has a volitional element. It is clear from the fact that in many cases of believing something, we have a disposition to act accordingly. The presence of conative element is found more explicitly in moral beliefs and implicit in other factual beliefs. Here also, the dispositional attitude sharply distinguishes belief from imagination. To believe is to assert something and to assert is to have a disposition or tendency to act accordingly. This act does not mean mere behaviour, it may be speech-act also. For example, when I believe that there will be rain in the afternoon, then I try to perform my scheduled afternoon outdoor duties in the morning and also advice others to follow me.

So it is obvious that all the three elements are more or less present in a particular belief. But now the question is: Do all these elements taken together constitute the necessary and sufficient condition of belief? Researches have been made and it is found that the cognitive element is the necessary and sufficient condition of belief. It is a fact that the affective element plays a vital role in belief, still, in no way, it is a necessary factor of belief. Let us see, how the redundancy of the other two elements can be shown.

Attempts have been made to show that the affective element may be absent in a belief-situation. For example, in a laboratory, the scientist starts with certain hypotheses. He does not have any affection towards the objects of experimentation, except towards his aim. But he definitely has a feeling of expectation of such and such results.

In fact, redundancy of the affective element can be shown by referring to factual belief where the subject is a non-human agency having no mind. There may be some principles which help us to understand the nature of such an agency. What we can do is to anticipate some of its behaviour, but the feeling cannot be brought into the picture. Moreover, expectation about such behaviour is purely cognitive. In considering this example, we should be careful about the possibility of belief-ascription. In this example, it is postulated that beliefs can be meaningfully ascribed to non-human agencies.

Prof. Braithwait however does not bring into it the non-human agencies. He is of the opinion that feeling of conviction 'may be' associated with belief, but there is no necessary connection between the two. I may have a particular belief that the Sun will rise tomorrow without having a feeling of conviction. Again, I can have a feeling of conviction regarding a proposition without believing it. Braithwait admits that the feeling of conviction may however be reasonably used as a criterion of belief.
I also refer to Prof. Griffiths' valuable comment. He says that there is a connection between belief and truth. To quote Griffiths, "It follows that any qualitative characteristics that one may associate with belief cannot be essential for its identification; it is for this reason that we cannot say that belief is necessarily a feeling. On the other hand it is a mode of consciousness." 6

In the same way, conative element can be shown to be unnecessary in a belief-context. It is obvious that to believe something is not to have a disposition to act, for example, in theoretical belief where only a particular situation is described. But this does not mean that it is correct to say, 'It is good to do this although I do not have the disposition to do it'. If this utterance is possible, it is possible either because the speaker does not have the courage of conviction or because this belief is not firm, it is rather feeble and weak. What we can say in this: to say that Mr. X has a belief is virtually to expect Mr. X to act in such-and-such a way according to the demands of the situation. By speaking of expectation, we make room for free will.

We thus see that neither affective nor conative element, but only the cognitive element is necessary for belief. But it will not sound bad if we speak of the affective element as also an important element for belief. The extreme form of absence of affective element is found in a case where we

6. A.P. Griffiths, Knowledge and Belief, p. 142.
believe something only on the basis of verbal testimony. Here we may not have any affection towards the object concerned, but here also we have some mental preparation to accept that particular belief. To be specific, we rather have faith or good impression or trust on the authenticity of either the person or book. So affection, in some form or other, is there.

We conclude, thus that only the cognitive element is necessary and sufficient for belief. Surely this belief is rational. But in the context of belief in general, viz., beliefs that are religious or superstitious, the affective element plays an important part. The other two elements, even if not necessary, add some extra-strength to belief. It is a fact that we can ascribe belief to a person more easily if beside his truth-claim, he expresses his emotional involvement in what he says and certain tendencies to act accordingly.

What the whole discussion reveals is that belief shares the presence of cognitive element with knowledge. It is the necessity of this element that distinguishes belief from other notions in the scale of probability and forms a tie between the two epistemic notions - knowledge and belief.
Now the presence of cognitive element in belief provokes us to reiterate Kant's view that knowledge is judgmental. Accordingly, belief, being an epistemic notion like knowledge, is also judgmental. On the other hand, we cannot also rule out the possibility that non-verbal behaviour is also the evidence of belief. But to accept behaviour as the evidence of belief is to indulge in discussion of belief as an act, or a multi-track disposition so to speak. These possibilities have been already rejected. In fact, ascription of belief that \( p \) is easier when the believer, irrespective of his acting according to \( p \), asserts that \( p \). So verbal expression seems to possess a better possibility to be treated as evidence of belief.

Prof. Armstrong observes that evidence of belief is determined on the manifestation or expression of belief. 'Expression' may be a narrower term to mean manifestation caused by the believer's will. These expressions of belief may be linguistic or non-linguistic. In recent times, linguistic expression has been considered as the logically primary manifestation of belief. But Armstrong denies it. Before going into the details, it is necessary to consider the relation between thought (belief really involves thought) and language.
Relation Between Thought and Language:

"Give thy thoughts no tongue" - was Polonius' prudent advice in Hamlet. Usually we entertain the possibility of both tongueless thoughts (mute meditations) and thoughtless tongue (babble). But the most important philosophical questions that crop up in this context are: Is it possible to have thoughts without (i.e. either prior to, or independently of or both) having any language? Is thinking nothing but being able to or about to speak in a particular way? To ask them systematically we must investigate the relation between thinking and speaking, having concepts and having words for them, having beliefs and being able to utter or understand sentences expressing such beliefs.

The relation between contemplation and conversation has been conceived in three alternative ways. The first view gives priority to thought. Language, according to it, is merely the "contingent manifestation of thought, required only for the communication of thoughts to others." The claim of the second view, which is just opposite to the first one, is that language is prior to thought, and thoughts or meanings are nothing but roles assigned to linguistic units by virtue of their rules of use. Language is therefore the necessary vehicle of thought. The third view rejects both the

8. Colin McGinn has used this expression in his book The Character of Mind, p. 59
first and the second view. According to it, neither thought, nor language enjoys any priority. Though this claim is clearly made by Prof. Davidson, it gets some sort of support from Prof. Ryle also. 

I. According to the first and popular view, the necessity of language lies in our wish to convey our own private thoughts to others. If we could transmit thoughts from person to person directly, then, language would be superfluous. This fact is well expressed in the words of Prof. Dummett: "We need language, on this view, only because we happen to lack the faculty of telepathy, that is, of the direct transmission of thoughts." It is therefore, heuristically (methodologically) convenient to attend to the linguistic embodiment of concepts in investigating their contents. 

The relation between thought and language, on this view, is like the relation between one language and another, or like that between a vernacular and a Morse-code. We can explain it in this way. I first have thoughts (without the help of any words) and then I translate or code them into the language which is publicly audible, shared and understood; my hearer hears the sounds, translates them back or decodes them into his own thoughts, and thus gets my message. It means that every man who uses language is an interpreter either of his own utterance or of anyone else's utterance, as expressions of thought.

This view that thoughts are private entities is labelled as the "inner saying" theory by Colin McGinn. According to him, "to judge inwardly that snow is white is to be internally related to a sentence endowed with that meaning." This theory gets support in the words of Socrates when he says that thinking is speaking to oneself.

The thesis that language is a code makes it clear that thought is "something which we grasp, independently of the use of language, by a faculty of intellectual intuition, learning the use of words is merely learning to associate them with senses so grasped." The positive implication of this thesis is that language is a medium of communication of thought just as telephone is a medium to communicate with a person who is far from us. There are at least three vital presuppositions of this thesis:

(a) We can have thoughts independently of and prior to having or using language.

(b) Our command over our mother-tongue is basically like our command over a second language, because the mother-tongue is always used as some symbol system into which I translate my original thoughts in order to make them publicly available.

11. Dummett, op. cit., p. 156.
(c) What I think, i.e. the contents of my thinking themselves are private. I do not convey or transmit thoughts themselves but only translation thereof. Meanings are essentially private mental contents of which words are but loosely hanging garments. In communication we only present these garments to our listeners and they fit their own private meanings to them.

This one-way dependence of language on thought is put to severe criticism. Prof. Davidson says that sometimes we may be unable to find an appropriate word for a thought, but it is not a proof for the independent status of thought. It rather proves that the person who cannot find the right word cannot have a clear idea of the content of his thought.

Frege's revolutionary idea was that the third presupposition of the first thesis must be mistaken. Thoughts, unlike mental images, themselves must be communicable, and meanings cannot be essentially private. When a person understands me, there are no two sets of thoughts or meanings - his and mine, but one. The very same contents which he puts into the words I grasp from hearing them understandingly. A theory of meaning need not concern itself with the private psychological episodes of the minds of the speaker and the hearer. In order to lay the formation of such an unpsychologistic theory of meaning it would be necessary to reject the code-conception of language. Michael Dummett has shown how we can demonstrate
the weakness of this code-conception by pointing out the vulnerability of first, presupposition (a) and, the more importantly, presupposition (b).

In the first place, an essential mark of grasping a thought is manifestability. Ascription of this grasping of a thought in the case of a particular person is possible only on the basis of the manifestation of his grasping. It may mean that this manifestation is nothing but a non-linguistic behaviour. But with the doubtful exception of some extremely primitive inarticulate ideas, most concepts (e.g., numerical or class-concepts) are such that without the use of some words of some language (and a sign-language is also a language) it is not possible for anyone to be in a position to ascribe to another person any formed thought or articulate concept. Many different alternative concepts may be associated with the same behavioural mark; for quite a few types of concepts we don't know what behavioural marks to associate with them. Thus, only the use of language is the kind of outer behaviour by which one can manifest one's grasp over specific concepts. A pre-linguistic or non-linguistic state of thought is therefore un-manifestable, hence unascribable to others. And Dummett thinks that if I do not know how to ascribe a kind of thought to others - then such thought is not thought properly so-called.

Prof. Dummett makes the point clear in an example. A dog may notice a difference between being chased by one dog
and being chased by several dogs. But it is not sufficient to ascribe the grasping of the notions of 'one' and 'many' to the dog, because its consciousness of the difference between those two stages mentioned before is prompted by his observed behaviour, viz. in the latter case its tension is increased. A similar example can be taken from Wittgenstein. A dog can expect his master to come home, but he cannot expect his master to come home next week. The reason is, without linguistic capacity the concept of 'next week' cannot be ascribed to that animal.

To this, a likely objection may take the form that though linguistic capacity is needed for 'ascription' of thought to others, it is not necessary for ascription of thought to oneself. A possible reply to this objection can be made with reference to Prof. Strawson's view about ascription of mental predicates (P-predicates). He shows that mental predicates are self-ascribable only when they are ascribable to others. There is no sense in the idea of ascribing states of consciousness to oneself unless the ascriber already knows how to ascribe at least some states of consciousness to others. Similarly it can be said that capacity to manifest the grasping of a concept is essential for having that concept. Just as brittleness is in the chalk even when the chalk is not actually broken, the capacity to manifest the grasping of a concept is also in our grasping it, even when we do not actually manifest it.
We can say more precisely: unless we have language, we cannot manifest our grasp over concepts, and unless we manifest our grasp over concepts, we cannot 'have' concepts. Therefore, unless we have language, we cannot 'have' concepts.

Prof. Dummett considers this criticism as weaker because it seeks a support from Strawson. This criticism only shows that linguistic capacity is a necessary condition for ascription of thought. But whether it is also a sufficient condition remains to be proved. Dummett therefore supplements this criticism by a second one which is urged against the second presupposition.

In any translational account of understanding a (foreign) language, there are essentially two steps. First of all, we must know which word in the new language corresponds with which word of the language we already know. Secondly, we must understand the basic language. The second step is important, because the ability to translate does not presuppose the ability to understand. If we know simply one-to-one correspondence between two sets of symbols, we can translate one by the other without knowing the meaning of either. In fact, this is the reason why a translational account is not a circular one, because in translating a second language from our mother-tongue, we have a prior knowledge of our mother-tongue.

In the case of the knowledge of a second language, the translational account creates no trouble. But to conceive of
even our mother tongue as a code is to confuse the two steps involved in any scheme of translation. If we explain our understanding of the basic language also in terms of translating that back into the language of thought, so to speak, then short of entering into a vicious regress we do not know how to explain our command over the language of thought itself. Regarding the first step in a translational account, it is important to note that in the case of basic language, it is the concept that is translated into word. Concepts cannot have any intermediate step between themselves and words. If, for the sake of argument, we say that there is something which mediates between the concept and the word, the question crops up as to what makes that something a mediator. We cannot even say that concepts come to our mind, and then translated, because in that case translation will vary from person to person corresponding to the variation of concepts from one person to another.

It follows therefore that our grasping of a concept viz. that of 'red' is our ability to discriminate the red objects referred to by the concept from other objects which are not red. The surest way of applying this method of discrimination is to apply the word 'red' to red objects, which incidentally proves that we have to appeal to our linguistic capacity. Dummett says that even if a prior grasp of a concept is possible, it is of no use to explain the relation between a
concept and a word, because a pre-linguistic grasp of a concept will be never manifestable in observable behaviour.

II. The failure of this first view may tilt us totally to the other extreme view that language is prior to thought. This view is shared by Wittgenstein and Quine. This view claims that there is no separating thought from language, that language is not a dispensable medium but the essential vehicle of thought. According to Wittgenstein, thinking or understanding is not a mental process at all. He says, "when I think in language, there aren't 'meanings' going through my mind in addition to the verbal expressions; the language is itself the vehicle of thought." 12

The essence of Wittgenstein's remark is captured in the language of Prof. Dummett: "This is the view which Wittgenstein expresses by his comparison between the sense of a word and the power of a chess piece; to grasp a sense otherwise than as the sense of an actual or possible symbol would be as impossible as to know the powers of the Rook without having any notion of what a chess-board or chess-piece is. The word 'has' a sense, and is not, as on the first view, a code for it, just as the Rook 'has' certain powers of movement, and is not a code for them." 13

Prof. Quine is also an anti-mentalist. Though he does not adhere to what he calls 'the muscular theory of meditatt-

tion; viz. that we actually speak inaudibly when we carry out silent thinking, he would also emphasize the fact that linguistic capacities and other behavioural patterns are all that we can legitimately speak of when we speak of meanings meant or beliefs expressed etc.

This reductionist view depends mainly on the fact that there are instances of 'loud thinking'. But without taking into account other instances of silent thought, they come to a generalization that thinking need not be some process distinct from the use of words. The attempt to get rid of psychological terms altogether in an account of thinking cannot therefore be unquestioningly accepted.

III. There is the third view which gives conceptual priority neither to thought nor to language. Thoughts are not private entities, otherwise thought contained in the Pythagorean theorem for example is accessible only to a particular person, viz. Pythagoras. A thought of something, then, can be conceived as the common meaning conveyed to and by every user of an actual or possible expression. Thus the only faculty for grasping a thought is the capacity for learning to use and interpret the sentences used to express it.

Prof. Davidson gives a lucid account of this view. His chief thesis is "a creature cannot have thoughts unless it is an interpreter of the speech of another". 14

The reason behind the thesis is that without the expressive power of language, we cannot make the fine distinctions between thoughts of different articulate structure and without such distinctions we cannot justify the teleological explanations which we so confidently supply for observable human conduct. To quote Prof. Davidson, "unless there is behaviour that can be interpreted as speech, the evidence will not be adequate to justify the fine distinctions we are used to making in the attribution of thoughts". To cite his own example, a dog which knows that its master is home, cannot know that Mr. Smith is home, though Mr. Smith is his master. The reason is, to know the latter is to be able to use the words 'Mr. Smith'.

This implies that if a creature is to have belief, then he must be a member of a speech community. Now a thought is defined by a system of beliefs.

What this discussion yields is that contemplation is the prerogative only of conversing creatures. It implies that verbal expression is the necessary-sufficient condition and most preliminary expression of belief. This view is rejected by Prof. Armstrong and his line of thought gives an alternative account of evidence of belief.

15. ibid., p.16.
5.4 NON-VERBAL BEHAVIOUR AS EVIDENCE OF BELIEF

The main reason against the view just mentioned is that beliefs can be attributed to mute animals and very small children having no capacity to use language. For example, when the dog rushes to the door on hearing his master's voice, he is attributed the belief that his master is at the door. It is obvious enough that the dog cannot have this belief either in the sense of having concepts like 'one's master' 'the door' etc., or in the sense of believing 'something'. The point is that, the exact content of the dog's belief cannot be known. The question is, whether knowledge of exact content is essential for having belief.

The question can be put in a different form: Is the attribution of belief to a dog a real attribution? In this context, we may refer to the distinction between 'referentially opaque' and 'referentially transparent' propositions about belief as shown by Quine.

The difference between 'referentially opaque' and 'referentially transparent' belief-sentences is that, belief is specified in the former. Its truth-condition is determined by the specification. Here quantification across the belief-context is not possible. On the other hand, in referentially transparent sentences, there is no specification of the belief-context. We can take an example as mentioned by Quine.

by Prof. Armstrong:

Smith believes that the chap over there is the villain of the piece.

In this case, when the whole sentence is uttered by any man after pointing to a particular man across the room, it is not clear, whether the referent of the expression 'the chap over there' is really identical with the man across the room. So the truth-value of the sentence cannot be determined.

But in the transparent context, there is a pronoun in the belief-context and there is a noun outside the belief-context which is identified with the pronoun. It determines the truth-value of the belief-sentence irrespective of the specification of belief-context. An example of referentially transparent sentence is this:

The owner came in and John believes that he was the victim.

Here the pronoun in the belief-context can be identified with the noun across the belief-context. If they are identical then the sentence is true which shows that it is necessary to go beyond the belief context to specify it.

We can now return to the example of the dog that, after hearing a human voice, believes that he is at the door. In this case the dog may not be said to have belief if the sentence is understood to be referentially opaque. But it may have belief in referentially transparent way of talking where the content is not actually specified. The relaxation
that the exact content need not be known, is justified by the fact that in human context also, beliefs are sometimes attributed in referentially transparent way.

But it is after all the question of attribution only. The question whether linguistic capacity is necessary for belief is rather to be settled only by showing that the animal really possesses belief. We therefore proceed a step further to differentiate the concept of 'having belief' from that of the 'attribution of belief'. What we have said so far is all about whether and how do we attribute belief to animals. But there is always a possibility of mis-attribution on the basis of their incidental behaviour.

Now, there is a close link between perception and having belief. Animals are said to have perception. The sensory perceptions may be deceptive, but it still involves knowledge and belief, though the process is somewhat complex. Armstrong says that when I perceive p, then it implies that I know or I believe that p. So is the case with lower animals. The possibility of having perception, in case of animals, points to the possibility of having belief. Thus the example of a dog is an example of having belief without having linguistic capacity.

There is an attempt to qualify the 'having belief' in the context of lower animals as a 'logically secondary' sense of 'having belief'. Prof. Armstrong refers to three alternative meanings of this phrase.
The first meaning is this. There is a class of things $X$ and a sub-class of $X$: the class of thing $Y$. Now to quote Armstrong, "$Y$'s are then logically secondary instances of $X$ if, and only if, (i) it is logically possible that there should be no $Y$'s and yet there still be $X$'s; but (ii) it is logically impossible that $Y$'s should be the only $X$'s which exist." For example, a distant relative is a member of a family only in logically secondary sense. It means that a family can have a distant relative only if there are members of the inner family circle. But the existence of inner family member does not necessarily entail the existence of the distant relative.

This analogy is not appropriate in case of animals. It is the relationship to the members of the inner family circle that makes a relative distant, but what the dog believes has nothing to do with human beings and their speech; it is rather something that belongs to the dog alone. So the first sense is not acceptable.

Armstrong says, "$Y$'s may be said to be logically secondary cases of $X$'s without it being entailed that other $X$'s of a logically primary sort, exist. It is necessary only that the description 'X' makes essential reference to (possible) $X$'s which are not $Y$'s, but that, in applying to $X$'s which are not $Y$'s, the description 'X' makes no essential reference.

17. ibid., p. 28.
to X's which are Y's. The example is that of brittleness of glass. It is ordinarily found that a glass shatters when it is struck. But if the circumstance is such that it provides protective material to the glass, it may not shatter even if it is struck. Now, if we conceive that all cases of striking a glass are cases when the glass has full protection, then the concept of brittleness cannot be formed. But this does not mean that there is no brittle glass. We can therefore differentiate the two cases of brittleness:

1. logically primary cases, when the circumstance is normal such that a glass shatters when it is struck.
2. logically secondary cases, when the circumstance protects the glass from being shattered when struck.

In the situation mentioned before (i.e., when all circumstances provide protection to the glass), there are only logically secondary cases of brittleness. The question is: Are the animals' beliefs secondary to verbally expressible beliefs?

Armstrong points out that this sense only offers a logical primacy to expressible beliefs, i.e., certain beliefs may be such that they can be expressed only linguistically. It only says that non-conversing animals 'can have' such beliefs only in the secondary sense. But it cannot prove that animals' beliefs are logically secondary in this sense.

The third meaning is applicable to a situation that involves a scale of some quantity or complexity. Armstrong says, "In such cases the term 'X' may have clear application to ins-
stances at one end of the scale, may clearly lack application to instances at the other end, but may be said to apply to instances falling into a twilight zone between in a logically secondary way only. It is assumed that at the two ends of the scale there are those having the linguistic capacity and those lacking it. At the extreme end of creatures like amoeba we find no belief, and at the other extreme, we have creatures like human beings who have belief. So all the intermediate cases are logically secondary cases of belief.

Armstrong does not accept this conclusion. He says that it is like saying that the case of a man whose head has little hair is the logically secondary case of a man with a head full of hair. Similarly, it is difficult to categorise animals in the border-line zone. The only reason to characterise animals like apes, dogs, lizards, etc. as border-line cases is the absence of linguistic capacity in them. But it is begging the question.

In fact, it is beyond proof whether lower animals have belief in the logically secondary sense. Whether they really have beliefs may be decided on further psychological or scientific proofs. The point is that, it is not their incapacity of linguistic usage that hinders them from having beliefs.

This does not settle the issue in question. There are some thinkers who distinguish between animal-beliefs as

19. ibid., p.30.
unsophisticated and human beliefs as sophisticated. It implies that unsophisticated beliefs are possible without linguistic capacity while sophisticated beliefs are not. But it is like dissolving, rather than solving the question whether linguistic expression is the only manifestation of belief.

We can try to answer the question otherwise. There are two different questions and answers to them may throw some light on the original question. They are:

1. Are there beliefs which are expressed only linguistically?
2. If the answer is positive, is it possible for a creature having no linguistic capacity to have such belief?

Armstrong points to certain beliefs which are expressed only linguistically, viz., unrestricted existentially quantified beliefs about contingent existences. There are two objections to it. First of all, sometimes non-linguistic expressions, i.e., behaviour may replace linguistic expressions of a belief. For example, if a dog is accustomed to be left by its master for a full day, then the dog appears alert for its master's return the very next day. This simple belief can be behaviourally expressed and sometimes the belief may be complex. In that case the process of such replacement may also be complex, but not impossible. But for the sake of argument, it may be admitted that some beliefs can be expressed only linguistically.

Secondly, the linguistic expression always contains the possibility of being vague. We are not always perfect in
selecting words to express the belief. Thus we cannot rule out the possibility of a gap between having a belief and knowing how to express it linguistically. The implication is that there is no necessary connection between having sophisticated belief and having linguistic capacity to express them.

The defect of this second argument lies in the fact that inability to select appropriate words to express belief is not the same as inability of linguistic capacity as a whole. Armstrong says "I can indicate in words the general area with which my belief is concerned." So there is no radical distinction between having sophisticated belief and having linguistic capacity. So there is a logical relation, however, loose it may be in case of complexity, between belief and its linguistic expression.

Thus we have got the positive answer to the first question. Now according to Armstrong a positive answer to the second question is attempted by citing a famous case reported by William James. Mr. Ballard, a deaf-mute lost his hearing in childhood. He however says that besides non-verbally conveying his thoughts of daily routine to his fellow-men, he also possesses certain complex beliefs about the creation of man, the fate of the world, etc., i.e., certain sophisticated and abstract beliefs. So inability to express linguistically his thought does not hinder him from having beliefs.

20. ibid., p. 33.
21. ibid.
Wittgenstein, when he is concerned with the possibility of wordless thought rather than wordless belief, suggests that what Ballard reports as his beliefs may be a 'queer memory phenomenon'.

Armstrong remarks that such suggestion is very much influenced by the conviction that there is a close relation between belief or thought on the one hand and linguistic competence on the other, while the suggestion itself is trying to reject the denial of such relation. So it is like putting the cart before the horse.

In case of mute animals, it may be suggested that a belief cannot stand by itself. It is rather a member of a whole set of beliefs. And in order to have belief, the dog should have a set of beliefs.

This also does not settle the issue of having belief without having linguistic ability.

Armstrong, therefore concludes that there may be deep psychological reasons behind the idea that sophisticated linguistic capacity is needed for having abstract belief. But there is no logical link between these two. We can only qualify it by saying that in cases of beliefs without linguistic capability, we 'may' use the phrase 'logically secondary' in a rather weak sense of it.