6.1 THE ORIGIN OF THE CONCEPT OF RATIONALITY

The Greek noun 'logos' is derived from the verb 'lego', i.e., 'I say'. This word has various standard meanings, such as speech, argument, explanation, doctrine, numerical computation, principle, reason (human or divine reason).¹

Heraclitus, for the first time, used the term 'logos' for the rational governing principle of the universe. 'Logos' thus is the source of rationality in the universe. It is an immanent principle which is not conscious or intelligent in the sense that it is not involved in the activity of thinking. In later years Anaxagoras spoke of the principle, not completely immanent, and it was 'nous'.

Gradually, rationality is viewed from various different perspectives. Sometimes rationality is understood not as a power that resides in an isolated individual. Rationality means the capacity to harmonise one’s will with the ends of the various social groups of a civilised society.

Sometimes rationality is said to be revealed in the play of what we call 'insight'. It is not easy to define the term except by saying that the quality referred to by the term is possessed by human beings as distinct from other lower animals. Psychologists like Köhler and Koffka belonging to the school of Gestalt Psychology however oppose such attempt because they claim the discovery of this quality which is not rare in case of chimpanzees, the border-line case between human beings and lower animals. Experiments have been done on chimpanzees that show insight in solving particular problems. But it is a fact, that mere capacity of solving a problem cannot credit an animal as having insight. Prof. Bennett is of the opinion that to have a real insight, the animal should have the power of generalization of prior experience of certain stimulus-response relations. But it is not available in case of lower animals. It is therefore better to consider their capacity to solve a problem as a lucky guess.

In human context, however, 'insight' may mean a capacity mediated by different intellectual processes of theorising.

2. Bennett says, "'insight' ... positively entails 'adaptive reorganization of previous experience'". J. Bennett, Rationality, p.109.
But Prof. Bennett agrees with Ryle and Wittgenstein in denying that there is a private theatre inside the physical body, the theatre which is the store-house and which causally explains the intellectual status of our outward performances. But we cannot dispense with the concept of rationality. The question therefore remains - What is rationality?

6.2 BEHAVIOUR IS THE CRITERION OF RATIONALITY

By rationality, Bennett means "whatever it is that humans possess which marks them off, in respect of intellectual capacity, sharply and importantly from all other known species." It is true that human beings are on a certain intellectual eminence which is not found in other creatures and this eminence is essentially connected with human linguistic ability. The definition of rationality, just given, yields the conclusion that humans are the only rational creatures. It is in conformity with the philosophers' hunch that linguistic ability is crucial to rationality. Prof. Bennett cites an example of a kind of animal-behaviour which is not rational.

The example is taken from Karl von Frisch's *Bees: Their Vision, Chemical Senses and Language*. The example is that of a honey-bee that finds a source of sugar, imbibes some of it, returns to the hive where it performs a dance. Observing the dance, other bees, unaccompanied by that particular bee, fly straight to the source of food without any mistake. The

problem is: Is there a rational connection among the nature of food, the dance of the honey-bee and independent move to the right direction by other bees?

The apiologists have found rules correlating certain aspects of each dance with (a) the distance between the place of food and the bee-hive, (b) the direction from the hive towards the place of food and (c) the concentration of sugar. The question is: Can we say that honey-bees have a language? Are they rationally communicating with each other? As we have already seen, linguistic capacity is supposed to be the mark of rationality, the next question is: Can the honey-bees be called rational?

There is a tendency to say that the dance of the honey-bee or the apian dance is like the language used by human beings, if not like a sign-language in the case we try to restrict the word 'language' to human beings only. It is however difficult to consider bees as decision-making agencies, but it does not affect the comparison between their dance and human language. The reason is, in many contexts of human talks, the element of decision is lacking.

Prof. Bennett's reflection is two-fold:
(1) honey-bees cannot be rational, i.e., they cannot be said to adopt consciously some rules of significance attached to their dances, and
(2) the apian dances are, in no ways, same as human language capable of expressing thoughts.
Bennett says that behaviour is the criterion of rationality, and apian behaviour is quite unlike the behaviour that manifests rationality. In fact, by saying that behaviour manifests rationality, he is not following the line of Descartes to say that behaviour is the outward manifestation of an inward process of reasoning. That is, he is not making any positive assertion regarding the private mental states though he is not denying them also. He remains non-committal regarding the existence of inward mental states. He is rather concerned with the criterion that underlies our ordinary belief that human beings indulge in reasoning process and this is lacking in case of a honey-bee. Bennett's reflection on the question of the said criterion is expressed thus: "Even when the notion of privacy seems least problematical, namely in the case of oneself, one's claim to be rational or to have thought-processes is in the last resort answerable to behavioural criterion." 4

Let us first see the reason why bees can be said to be rational. There are, as it is suggested sometimes, certain features common to both apian dance and human language. First of all, communication is the purpose of human language. So there are rules determining the connection between the words of a language and the facts of the empirical world. This relationship is the important thing that matters. In this respect, apian dances resemble language, because there

4. ibid., p.11.
is also the relationship between different features of the
dance and the distance of the place of food, direction to
that place etc. as we have already seen.

Secondly, to have a common language is to understand
one another's utterances. This implies that there is a prior
pattern of relationship between the utterances and the subse­
quent behaviour of the utterer, and also that all the people
are aware of this relationship. In like manner, honey-bees
also are supposed to share a common pattern because their
behaviours speak of some rules predicting their course of
action from the observation of dances.

In the third place, the apian dances share certain kind
of complexity and richness with human language. Each connec­
ting link, viz., that between the dance and the place of food
(i.e. the empirical fact) may be assumed to constitute a
sentence and in this way, the bees 'have' many kinds of
'sentences' so to speak, the three rules of distance, direc­
tion and concentration interact in a single sentence in
various ways and bees are supposed to possess linguistic
capacity.

Some people speak of a further similarity which is not
totally accepted by Bennett. According to them, in case of
human language, there is a possibility of deriving empirical
information from languages. So, language is symbolic in charac­
ter. The case is similar with the observation of apian
behaviour which behaviour also imparts information. Bennett
however shows that in symbolism, there is a conventional link or association between the symbols and what are symbolised, and this is essentially linked with the idea of reasons. If apian dances 'are' symbols, then they should be credited as involving reasons.

Bennett is of the opinion that from these points of similarity, we cannot say that apian behaviour of dancing is, the same as human language. The latter are rule-guided, but we cannot say that so also are the former. To be rule-guided, is to be rational. Bennett shows that the dancing behaviour is regular, but there is no chance of conscious rule-guidance. If something is rule-guided, then it should also have the capacity to break the rule. In human-context, exception proves the rule and in animal-context, absence of such exception proves that the rule cannot consciously guide the animal-behaviour.

The whole discussion can be summarised as follows. There may be similarities between human talk and the language of the bees. Still the latter cannot be rational, because there is nothing as evidence present in the latter case. There may however be a causal explanation for the correlation between apian dance-features and evidence. The bees may show behaviour that manifests rationality, but this rationality is far away from the notion of rationality in human context.

So ability to give reason is conditioned by linguistic ability. But the question is not about the ability to give
rewards for belief, but of having reasons. Here the solution is, the behaviour of creatures lacking linguistic capacity may be appropriate or inappropriate in some context. But there is no non-linguistic way of manifesting knowledge about some past events. So even for having belief, language is essential. Hence lower animals cannot be rational in any sense.

6.3 RATIONALITY OF BELIEF - ITS DIFFERENT MEANINGS

We may turn to modify our original question in belief context. The question is: What is rationality of belief? Our previous discussion provoked us not to talk of lower animals in the context of rationality. Let us admit in a Kantian manner that the notion of rationality is a notion of judgement-making capacity.

Now rationality is said ordinarily to be the pre-condition for responsible action. It means that the doer must be able to give justification for the action. We shall come to the question of justification later on. At present our interest is to see what is meant by saying that rationality is a judgement-making capacity. To be rational, it is sometimes demanded, is not to be involved in self-contradiction. To be specific, rationality may be identified with absence of inconsistency. Belief in an inconsistent proposition is, in this sense, an offence against the criterion of rationality. Before entering into the discussion of inconsistency, let us
have a glimpse of another attempt.

It is been said that rationality of belief implies impossibility to doubt. There are four senses of incorrigibility of belief. The first sense is psychological, i.e., when a man 'cannot' indulge in the suspension of a judgement believed by him. This inability to doubt is totally personal in nature. The second is the logical sense where 'doubt' means 'suppose false'. This is the strict rationalist view that accepts only necessary truths that cannot be supposed false, without inconsistency. A third sense takes certainty as incorrigibility. When the truth of a belief is guaranteed by the fact that it is believed, then that belief cannot be doubted. The examples of such incorrigible beliefs are reports of immediate experience, viz., 'I have a headache'. In the fourth place, incorrigible belief means it cannot reasonably be doubted. This is the sense of incorrigibility we employ in our common sense speech. Here many beliefs based on perception, memory etc. are objectively certain.

The weakness of this attempt can be shown in this way. Firstly, doubt is a pre-condition of many beliefs and secondly the identity of rationality and incorrigibility certainly is open to question.

It is time to consider the notion of inconsistency. Ordinarily, the term 'inconsistent' is applied to a set of propositions or a system of thought in which a contradiction

5. Some rationalists also identify certainty of belief with impossibility to doubt.
can be derived. Inconsistency has various sources. It is not invalidity. In our common speech, we call a man to be inconsistent in his thought, if he denies a principle which he has previously adopted. In the philosophical discussion of inconsistency, I shall refer to Prof. Hintikka, who considers it to be the criterion of rationality of belief. His reflection shows that irrational belief is not impossible, but it is indefensible, because we cannot have such irrational belief in the logic of belief. There is another attempt to show the possibility of irrational belief, but it agrees with Hintikka regarding the criterion of rationality. But there are thinkers who hold that the concept of rationality is not a fixed or static concept and accordingly there is no single criterion of rationality. We shall come to all these views one after another. The first task is to discuss Prof. Hintikka's view.

6.4 RATIONALITY OF BELIEF IN HINTIKKA'S THEORY

We have already seen in the first chapter what is meant by inconsistency in Hintikka's philosophy. Because of some difficulties mentioned there, we have also come across the term 'indefensibility' in place of 'inconsistency'. What is said there can be summarised as follows:

1. The indefensibility of a sentence is not due to some objective fact. It is rather due to the failure of the utterer
or maker of the sentence who is ignorant of the far-reaching effects of what he knows. So indefensible sentence is never a product of conscious mind.

2. An epistemically or doxastically indefensible sentence is not as much self-defeating as logical self-contradiction. The former can very well serve our purpose of communication if we are concerned with a mere possibility. In fact, Prof. Hintikka speaks of construction of possible worlds in knowledge and belief-contexts. We shall see now how he develops his line of thought.

In Hintikka's theory, indefensibility of a set of sentences can be explained in this way. A set of sentences can be shown to be indefensible by means of the rules (A.\neg), (A.k), (A.v), (A.\neg\neg), (A.\neg k) and (A.\neg v) ... if and only if it cannot be imbedded in a set \mu of sentences which satisfies the following (C) conditions:

(C.\neg) If p\in\mu, then not \neg p \in \mu.
(C.&) If "p& q"\in\mu then p\in\mu and q\in\mu.
(C.v) If "p\lor q"\in\mu then p\in\mu or q\in\mu (or both).
(C.\neg\lor) If \neg p\in\mu, then p\notin\mu.
(C.\neg& ) If \neg(p&q)\in\mu, then \neg p\in\mu or \neg q\in\mu (or both).
(C.\neg v) If \neg(p\lor q)\in\mu, then \neg p\in\mu and \neg q\in\mu.

Sets of sentences that satisfy these conditions are called model sets of propositional logic. It means that if and only if there exists a possible state of affairs in
which all the members/sentences of $\lambda$ are true, then $\lambda$ is consistent.

In the context of knowledge and belief, it is necessary to introduce model sets and model system to explain indefensibility.⁶

We may conceive of a specific state of affairs whose description is $\mu$. 'Pap' is a sentence which means it is possible, for all that the person referred to by the term 'a' knows, that p. The truth of the sentence must depend on its content. Hintikka remarks that the content of this sentence cannot be adequately expressed by speaking only of one state-of-affair. The truth of the statement depends on the condition that there is a possible state-of-affair in which the sentence would be true. The state of affair in which the sentence is made need not be identical with this possible state-of-affair, whose description is $\mu^*$. $\mu^*$ is therefore an alternative to $\mu$ with respect to the person a. According to Hintikka, the relation of alternativeness which is a dyadic relation holds between $\mu$ and $\mu^*$. So whenever the notions of knowledge and belief are included, we have to impose a condition on a model set $\mu$.

If 'Pap$\epsilon\mu$, then there is at least one alternative $\mu^*$ to $\mu$ (with respect to a) such that $P\mu^*$.

It is therefore not a question of a single model set, but of a set of model sets. Such set can be called model system.

⁶ J. Hintikka, Knowledge and Belief, pp. 40-59.
Hence the truth-condition of the sentence 'Pap' is to be ascertained when the following condition is fulfilled:

\[(C\cdot p)\]: If "Pap" belongs to a model system \(\mathcal{M}\), then there is in \(\mathcal{M}\) at least one alternative \(\mu^*\) to \(\mu\) (with respect to a) such that \(p\in\mu^*\).

Hintikka proceeds to extend the application of this rule in knowledge-context. 'Kap' means it is possible, for all that the person referred to by the term 'a' knows, that p. The sentences known in \(\mu\) should also be known in \(\mu^*\) i.e.,

\[(C\cdot KK)\]: If "Kaq" belongs to \(\mu^*\) if \(\mu^*\) is an alternative to \(\mu\) (with respect to a) in some model system, then "Ka" belongs to \(\mu^*\).

There is also another obvious condition:

\[(C\cdot K)\]: If "Kap" belongs to \(\mu\), then \(p\in\mu\).

Now corresponding to the rules \((A\cdot \sim K)\) and \((A\cdot \sim P)\) we have come across in the first chapter, there are also two rules:

\[(C\cdot \sim K)\]: If "\(\sim Kap\)" belongs to \(\mu\), then "\(P a\sim P\)" belongs to \(\mu\).

\[(C\cdot \sim P)\]: If "\(\sim Pap\)" belongs to \(\mu\), then "Ka\sim p" belongs to \(\mu\).

\[(C\cdot \sim K)\] says that in \(\mu\), if a does not know that \(p\), then it is possible, for all that a knows, that \(p\) fails to be the case. But this claim appears to be indefensible, because it may happen that \(p\) is true, yet it is a's failure to see \(p\) as true that prompts a to say "\(\sim Kap\)".
This problem may be tackled in the same way as the problem involved in \((A. \sim K)\) and \((A. \sim P)\). We may therefore take the advantage of omitting the discussion only by saying that the same line of thought holds good here. In this way, by applying all the \((C)\) conditions, together with the rules \((C.P^*), (C.K), (C.KK^*), (C. \sim K)\) and \((C. \sim P)\), the defensibility of a set of sentences, in respect of the properties of knowledge and belief, is to be shown.

Hintikka suggests that there is a set of conditions alternative to what is mentioned before. It is said that if we accept a condition \((C.K^* )\), then the condition \((C.K)\) can be easily replaced by \((C. \text{refl})\):

\((C.K^*): \) If \(\text{"Kap"} \in \mu^*\), and if \(\mu^*\) is an alternative to \(\mu\) (with respect to \(a\)) in some model system, then \(p \in \mu^*\).

\((C.\text{refl}): \) The relation of alternativeness is reflective. \((C.\text{refl})\) implies the rule \((C.\text{min})\); and \((C.\text{min})\) together with \((C.K^*)\) yields the condition \((C.K^*)\).

\((C.\text{min}): \) In every model system each model set has at least one alternative.

\((C.K^*): \) If \(\text{"Kap"} \in \mu^*\), and if \(\mu^*\) belongs to a model system \(\Omega\), then there is in \(\Omega\) at least one alternative \(\mu^*\) to \(\nu^*\) (with respect to \(a\)) such that \(p \in \mu^*\).

Though the relation is reflexive and transitive, it is not symmetric. To explain, we can say that if the relation is symmetric, then nothing in \(\mu^2\) which is an alternative to \(\mu^1\)
is incompatible with what is in $\mu_1$. But the person called 'a' may come to have some knowledge additional to what he knows before. This additional knowledge may be incompatible with what is still possible. But the relation of alternativeness is transitive (C. trans):

(C.trans): If $\mu_2$ is an alternative to $\mu_1$ and $\mu_3$ to $\mu_2$, both with respect to one and the same a, then $\mu_3$ is an alternative to $\mu_1$, with respect to a.

But this (C. trans) is not essential for definability and hence can be dispensed with.

The importance of (C. trans) is that it can replace (C.KK*). There is a model system $\Omega$ that satisfies all the conditions including (C. trans), excepting (C.KK*). This model $\Omega$ is to be modified in this way:

"To each member $\mu$ of $\Omega$ we adjoin all the formulas "Kap" such that "Kap$^e$" for some member $\lambda$ of $\Omega$ to which $\mu$ is an alternative with respect to a."

It is clear that (C.KK*) is satisfied in this context. So it means that (C. trans) and (C.KK*) are equivalent in the context of definability.

So Hintikka shows the list of conditions in knowledge-context. The rules (C.P*), (C.$\sim$K), (C.$\sim$P) are necessary and all the following sets are alternative to each other:

- $(C.K) \& (C.KK*)$,
- $(C.K), (C.K*) \& (C. trans)$,
- $(C. refl), (C.K*) \& (C. trans)$,
- $(C. refl), (C.K*) \& (C.K.K*)$.
Hintikka favours the first two sets which exclude \( \text{C} \cdot \text{refl} \).

It is now time to connect the concept of belief. The only restriction is that we should replace 'K' by 'B' and 'P' by 'C'. So \((\text{C} \cdot \text{P}^*)\) becomes \((\text{C} \cdot \text{C}^*)\) and \((\text{C} \cdot \text{KK}^*)\) becomes \((\text{C} \cdot \text{BB}^*)\) etc.

The only exception is the rule of \((\text{C} \cdot \text{K})\) which has no doxastic counterpart. In fact, \((\text{C} \cdot \text{K})\) says that what is known has to be true. But this condition of being true is not so closely related with the concept of belief. As \((\text{C} \cdot \text{K})\) has similar function with \((\text{C} \cdot \text{refl})\), the latter has also no doxastic counterpart. Only the weaker condition \((\text{C} \cdot \text{k}^*)\) has a doxastic counterpart, viz. \((\text{C} \cdot \text{B}^*)\). As in the case of knowledge the corresponding rules \((\text{C} \cdot \text{BB}^*)\) and \((\text{C} \cdot \text{trans})\) are equivalent in belief-context. So instead of four alternative conditions, which are called epistemic alternatives in knowledge context, there are two such doxastic alternative conditions in belief-context. The essential rules are the corresponding essential rules of knowledge.

The essential rules are \((\text{C} \cdot \text{C}^*)\), \((\text{C} \cdot \sim \text{B})\) and \((\text{C} \cdot \sim \text{C})\). The alternatives are:

\[(\text{C} \cdot \text{B}^*), (\text{C} \cdot \text{B}^*), \text{and} (\text{C} \cdot \text{BB}^*);\]
\[(\text{C} \cdot \text{B}^*), (\text{C} \cdot \text{B}^*) \text{and} (\text{C} \cdot \text{trans}).\]

Between these two alternatives, some epistemic alternatives are inapplicable in belief-context, viz., the rule \((\text{C} \cdot \text{refl})\).

Now, we shall see that epistemic conditions can be applicable in cases of doxastic alternatives, though no doxastic

7. We have been familiar with what is meant by 'doxastic'.
condition is applicable in epistemic alternatives. Hintikka refers to four conditions here:

(C.KK* dox): If "Kaμ" and if μ* is a doxastic alternative to μ (with respect to a) in some model system, then "Kaμ"eμ*.

(C.K* dox): If "Kaμ"eμ, and if μ* is a doxastic alternative to μ (with respect to a) in some model system, then ϕμ*.

(C.BB* ep): If "Baμ"eμ, and if μ* is an epistemic alternative to μ (with respect to a) in some model system, then "Baμ"eμ*.

(C.B* ep): If "Baμ"eμ and if μ* is an epistemic alternative to μ (with respect to a) in some model system, then ϕμ*.

To make the fourth condition admissible, we should accept μ* as epistemic alternative to μ. All a knows in μ are to be known in μ* also. But it does not imply that what a believes in μ are also known in μ*.

The condition (C.K* dox) is a consequence of the first condition. So it will suffice to consider the first condition (C.KK* dox). If we try to apply (C.KK*) in doxastic alternative, then there is an equivalent condition (C.KB):
(C. KB): If "Kaq"εμ, then "BaKaq"εμ.

It is easy to understand that though there may be controversy about one's knowing what one knows, still it is reasonable to assume that one believes what one knows. But the justification of (C. KB) can be sought not merely in the fact that any logical implication of what one knows is a part of logical implication of what one believes. The justification is rather dependent on the fact that it is 'eminently unreasonable' or indefensible for a to say that he does not believe that p if p logically follows from what a knows.

What the discussion yields is that the conditions (C.P*) and (C.K*) hold good irrespective of any relation between doxastic and epistemic alternatives. We have also seen that (C.KK*) holds good if doxastic alternatives are epistemic in nature. Hintikka therefore suggests a reformulation of (C.KK* dox) which is the same as (C. KB):

(C. dox) Every doxastic alternative is also an epistemic alternative (with respect to the same free individual symbol).

What the condition says is that if "Baq"εμ, then it is possible that "Kaq"εμ.

In the context of defensibility, the condition (C.BB* ep) is the same as (C. BK),

(C. BK): If "Baq"εμ, then "KaBaq"εμ.

It means, whenever a is said to believe something, it is defensible for the speaker to say 'and a knows that he believes it'. It seems plausible at the outset, but turns out to be
false on closer scrutiny. When we say that "Baq" and $\mu^*$ is an epistemic alternative to $\mu$, we should take into account that $a$ knows at least as much as he knows in $\mu$. But there are other epistemic alternatives, i.e. other states-of-affairs, and there remains a possibility that he may have more information about $p$ of which he only has a belief in $\mu$. With more information, $p$ may become object of knowledge and hence number of beliefs entertained by $a$ in $\mu$ may decrease. But this possibility is checked by the admission of the condition (C.BB* ep). It can be retained only at the cost of rejecting this possibility. This is called by Hintikka, "an unrealistically high standard of defensibility".

Hintikka refers to one of the consequences of the condition, viz. "Bap$\Box$Ka$\Box$Pap". In order to prove that this sentence is self-sustaining, we have to admit that believing that $p$ implies that the possibility of $p$ is known. It is obvious however that such admission is unreasonable.

In fact, it is the argument from introspection that gives support to the condition (C.BK). The argument presupposes that knowledge and belief are mental states, and as mind cannot be unaware of its own states, it is not possible for a man to have a belief and to be ignorant of it. But we've already argued that belief is not a state at all. So the question of argument from introspection is irrelevant here. Hence (C.BK) cannot be accepted. Thus, we can show how Hintikka rejects

the possibility of irrational beliefs within the consistent formal system.

6.5 COMMENTS ON HINTIKKA'S VIEW

Hintikka's rejection of irrational beliefs cannot be accepted dogmatically. Its weakness can be shown from different viewpoints.

(A) First of all, it can be said that, in spite of his well-built system, he cannot maintain his view that to believe a self-contradiction is to believe everything. Numerous counter-examples are found in religion. For example, one may believe that God is both immanent and transcendent, or God is both finite and Infinite. But this does not commit one to believe everything.

Another example is this. In religion, a theist may utter the sentence: (a) We cannot speak of God. Now, the very utterance of (a) is itself an assertion of God. So in order to make (a) true, it is essential not to utter it. It is contradictory because the truth of (a) implies its falsity. But this sentence can very well be believed by the utterer. Thus, if inconsistency is the criterion of rationality, irrational belief can be entertained. And this shows the difficulty in Hintikka's theory.

(B) The second reaction against Hintikka's opinion is found in Prof. Partee. Hintikka's treatment of inconsistent beliefs
is natural from a logician's point of view. It is a fact that within a consistent formal system a person cannot have inconsistent beliefs because it is the same as believing everything. But a formal system can allow believing everything only at the cost of consistency.

However, it is not the final word regarding inconsistent beliefs. Prof. Partee aptly puts it in this way: "But a formal system which disallows inconsistent beliefs, no matter how elegant it may be, is of dubious value as an explication of the meaning of belief-sentences in ordinary language unless it can be argued that all purported attributions of inconsistent beliefs to a person are necessarily in error." 9

Prof. Partee says that a man may entertain an inconsistent belief, if not in his conscious level of mind, at least in his unconscious level. The reason is that the logical consequences of a person's beliefs are not automatically his own beliefs. The clear evidence for inconsistent beliefs is that the man may be made to give up one of his beliefs. There are, however, both verbal and non-verbal evidences in support of an inconsistent belief, viz.,

(a) Smith believed that all the women at the party were accompanied by their (monogamous) husbands, and that there were more women at the party than men. 11

10. Prof. Partee calls it 'the most natural explanation', Partee, ibid.
11. ibid., pp. 317-318.
The verbal evidences include Smith's first-person declaration of belief or his responses to remarks made by others etc. The non-verbal evidences may be like this:

i) Smith is helping in the kitchen, and gets out more pink napkins than blue ones.

ii) Smith is helping with coats and takes the women's coats to the larger of the two closets.

iii) Smith does not ask any of the women to dance although at all other parties he has always asked all women not accompanied by their husbands to dance.

According to Prof. Partee, the possibility of a mute animal having inconsistent belief\textsuperscript{12} may be an additional evidence in this context. One such example is-

(b) My dog believed (saw, noticed) that every dog who came to the dog-show brought his person with him, but he believed that there were many more dogs there than people.

The probable evidence may be this: though he noticed the one-to-one correlation of dogs and people as they entered, still the number of dogs present seems larger to him than it actually is because he is not used to seeing crowds of dogs.

(C) Another possibility of inconsistent belief is found in the context of belief-ascription. In explaining the cases of self-deception where the mind is confronted with two mutually inconsistent beliefs, I have followed Prof. Ginsberg's line of thought. He distinguishes between the two beliefs one as unconscious and the other as reactive in nature. It is the reactive belief which finds outer expression while the

\textsuperscript{12} Partee, \textit{ibid.}, p. 319.
believer really has another counteracting unconscious belief in his mind. There is the real conflict between them and no question of compromise arises there.

(D) The fourth view against Hintikka's theory is as follows. Many thinkers in different ages explicitly showed that though we may believe what is possible, belief does not necessarily depend upon possibility. Prof. R. Needham refers to Tertullian's famous paradox.13 'I believe because it is impossible'. To quote Prof. Needham, "...this is just the form of proposition in which the notion of belief can be used."14 It may be true that the proposition cannot be meaningfully uttered in the context of ordinary physical world. On the other hand, we can believe such a proposition only if it is theological in nature. So at least in theological context, belief and impossibility can be together.

Prof. Needham goes a step more and says that even in non-theological context where emotional attachment is deepest, belief can be matched with impossibility. Hence irrational beliefs can be maintained without any difficulty.

Some may cite examples of irrational beliefs in cases of great logicians like Quine, Frege, etc. There are really inconsistent propositions in the axioms of Quine's Set Theory in the first edition of Mathematical Logic. The inconsistency was proved later. The point however is that Quine believed those inconsistent propositions before the inconsistency was

14. ibid., p.65.
pointed out. Similar thing is found in Mill's argument of utilitarianism. All these examples are examples of entertaining inconsistent propositions unknowingly. But our point is not that irrational beliefs are possible unknowingly. Entertaining of such beliefs can be the result of the play of conscious mind. And such an example is found in Hegel's theory of dialectical method.

6.6 RATIONALITY OF BELIEF IN HEGEL'S PHILOSOPHY

According to Hegel, the Absolute is the Totality. It is the Reality as a whole. The task of philosophy is to construct the life of the Absolute. There are three main phases - Idea, Nature and Spirit. Spirit sees itself in Nature, it sees Nature as the objective manifestation of the Absolute. Philosophy will exhibit systematically the rational dynamic structure. It will exhibit the teleological process of the cosmic Reason in Nature and the sphere of the human Spirit, which process culminates in the Absolute's knowledge of itself. Hegel identifies rational with real. This identification means that reality is the necessary process by which infinite Reason actualizes itself.

The understanding is active in the level of ordinary knowledge, viz., natural sciences. So understanding is important for practical purposes of maintaining clear-cut concepts.
But the life of the Absolute is the combination of two opposite things, it is the identity-in-difference of the infinite and the finite. The one and the many constitute the Absolute. These two concepts of the infinite and the finite are mutually exclusive. So understanding that deals with clear-cut concepts is of no value in constructing the life of the Absolute. For this, the mind must elevate itself from the level of understanding to the level of dialectical thinking. The thinking overcomes the rigidity of the concepts of understanding and sees one concept (the concept of 'one' or that of 'many') as passing into its opposite. When the rigidity of the concept is lost, and the concept passes into its opposite, then the implicit contradiction in the concept becomes explicit. It is the function of reason which is capable of apprehending, or grasping the moment of identity-in-difference.

It has been attempted to show that Hegel's view of contradictory concepts standing together is a deviation from the classical view of the logical principle of non-contradiction. But this sort of criticism can be answered in this way. Hegel's concept of contradiction is a concept that forces the mind to synthesis. In other words, the contradiction is to be overcome. The reason behind it is that, unlike Fichte who considers the contradictions or antinomies as unreal, Hegel insists on the reality of the contradiction. Being real and at the same time not absolute, the contradictory concepts are to be preserved, but not in the relation of mutual exclusive-
ness. Thus the contradiction is resolved by preserving both the contradictory concepts. Hegel's interpretation of the principle is thus not static, but dynamic one.

What follows from the discussion is that, contradiction is inevitable, hence our mind consciously believes in this contradiction which is to be resolved in the way just explained.

So far we have seen that there is some sort of criterion of rationality in belief-context. But there is a tendency to dispense with the idea of a fixed criterion. Such a tendency is found in the writings of Stuart Hampshire. Before going into the details, it is necessary to see what is meant by belief in Hampshire's theory.

6.7 HAMPSHIRE'S DENIAL OF 'THE' CRITERION OF RATIONALITY OF BELIEF

According to Stuart Hampshire, study of belief is relevant only in human-context. The difference between human beings and animals is that in case of the former intentions are expressed, but it is impossible in case of the latter. More importantly, the attribution of intention is meaningful in human-context, while it is meaningless in animal-context. The reason is, the animals do not possess any language, no specification of the process of attribution is possible here. To quote Hampshire, "An intention ... is possible only in a

15. cf. S. Hampshire, Thought and Action
being who is capable of at least the rudiments of conceptual thought."

There are two features of such belief:

(1) Belief is not something momentary. Sometimes beliefs are formed effortlessly without conscious and controlled deliberation. But when we are asked to give reason for some actions which are the results of some silent beliefs, we at once speak of those beliefs without hesitation.

(2) Belief is distinguished from its expression. It is clear from the fact that reasons for which a belief-statement is made is quite different from the reasons for which the said belief is held.

Regarding the question of rationality, Hampshire's remark is this. In the context of a sentence, the reason or logic of it is to find out the rules of language that determine how particular expressions of the language can be intelligibly combined. Now, human beings possess various beliefs some of which appear to be contradictory to one another. Hampshire admits that there is no question of irrationality when a person is both a physicist, and a theosophist, viz., Sir Oliver Lodge. The problem is: How is it possible?

Any reflection regarding the connection of these beliefs is virtually a survey of our opinions. Any sort of change of opinion may influence us to have belief. Hampshire distinctly says, "I have to sharpen my beliefs and to establish the

16. ibid., p. 99.
pattern of rationality to which I commit myself.... In the domain of opinion, rationality is simply the opposite of disconnectedness, the opposite of holding my opinions apart without forcing myself to range them in a decided order of dependence. The primitive and natural way of finding a decision may be arguments with others, but a fully rational and reflective man silently learns it by himself.  

Now, the reason for believing something is a range of fact which appears to be conditioned by the content of the statement believed. It is limited by the desires and interests of the speaker. A behaviour to be called as intentional human action must contain a minimum consistency and regularity. If some putative reasons for a particular belief seem irregular and unconnected with the conclusion, then they are not proper reasons.

To review the reasons for a particular belief is virtually to review a train of thought that leads to a conclusion. A sentiment, mood or impulse cannot be the reason for any belief, it rather points to some lapse or failure. It cannot even be the justification of belief. The point is that if mood or sentiment becomes prominent, we may be compelled to do some action, but we may not have a belief.

This consistency in the passage from reason to belief must be shown by the person. At different times, a man may

17. ibid., p. 145.

18. Hampshire says, "Nothing will count as 'thought', and therefore as 'belief', without a certain minimum of stable consistency and rule in the transition from ground to conclusion.", ibid., p. 146.
have different mutually opposing policies. Some beliefs may be supported by different arguments at different periods in life. But belief is not episodic; hence to some extent, it must be stable. Hampshire says, "Any one man inevitably carries with him an enormous load of settled beliefs about the world, which he never has had occasion to question and many of which he never has had occasion to state." These beliefs constitute the generally unchanging background of his thought and observation. His culture is also partly formed by his beliefs. To state my reasons for believing that p is to state what I would want to say in an argument arising from a denial of the original statement.

6.8 THE REQUIREMENT OF RATIONALITY IS UNIVERSAL

In the conclusion we can say that there are various common beliefs which are not explicitly supported by reasons. Hume himself admitted that custom is the source of belief and this custom is the result of an expectation based on the past repetition. But we have seen that beliefs have truth-claims. So we cannot avoid the obligation to discuss the question of rationality of belief.

The essentiality of the concept of rationality is stressed by Hampshire also. In case of opinion and belief, there is a demand for reason. This requirement of rationality is

19. ibid., p.150.
universal. It means that an opinion or a belief should be connected with other opinions or beliefs in such a way that a doubt undermining any of them would in a greater or lesser degree, undermine the others. Even in G.E. Moore's concept of intrinsic goodness, there is the necessity to justify the claim that certainty can be attained in such and such a way.

This requirement is universal because men always try to connect new judgements with the already-held opinions, otherwise thought is to be abandoned. There are different possible rational grounds for a belief and it is difficult to review all of them at the same time. So with Hampshire, we can say that there is a system of the possible dependence of a particular belief upon other beliefs and it is difficult to hold in mind the whole system. Beliefs of some areas may be systematised, but some beliefs may remain vague. A particular reason given for a particular belief is a small part of the whole system. These beliefs taken together are responsible for our action-guiding intentions and decisions.

So degree of rationality is different in different people's practical thinking. For example, in religious discourse, a particular man may believe the cosmological, teleological, ontological proofs for the existence of God. Yet, these very proofs may not be considered to be sufficient by some other man. Similar comment is made by MacIntyre as it is mentioned
Wittgenstein's lectures on religious belief also carries the same line of thought:

"Suppose someone were a believer and said: 'I believe in a Last Judgement', and I said: 'Well, I am not so sure, possibly'. You would say that there is an enormous gulf between us. If he said 'There is a German aeroplane overhead', and I said 'Possibly. I'm not so sure', you'd say we were fairly near.

It is not a question of my being anywhere near him, but on an entirely different plane.""21

In fact, there are two reasons, as Needham points out22, for the impossibility of doubting a belief:

(1) the belief-assertion is a report more about the maker of the assertion rather than about any objective fact. As the inner state of the person is involved, the question of contradiction is less important.

(2) The very premises of contradictory beliefs may be very disparate, and so the two apparently opposing belief-assertions

20. MacIntyre writes, "There is no logical transition which will take one from unbelief to belief. The transition is not in objective considerations at all, but in the person who comes to believe. There are no logical principles which will make the transition for one." A MacIntyre, "The Logical Status of Religions Belief", Metaphysical beliefs, by S.Toulmin, R.W.Hepburn and A. MacIntyre (London: S.C.M. Press, 1957), p. 209. It has been mentioned by Prof. Needham in Belief, Language and Experience, p. 72.


cannot be brought on the same platform. An example of the point is found in Wittgenstein's writing which I have just mentioned.

In fact, it is the obligation of rationality that prompts us to connect our intentions. An irrational man is indifferent to maintaining an order of dependence of his intentions and opinions. Philosophical reflection shows that classification of our bodily behaviour and mental states are relative to the "prevailing practical interests and morality of a particular society." 23

What comes out of the whole discussion is this. In belief-context, the 'how'-questions are irrelevant, because there is no fixed method of having belief. The relevant questions in this context are 'why'-questions. So it is concerned with the question of justification in different ways. We now turn to the concept of justification.

SECTION II: JUSTIFICATION OF BELIEF

6.9 THE QUESTION OF JUSTIFICATION OF BELIEF

The relation between knowledge and belief is this: Knowledge entails belief and knowledge is a species of belief. According to Woozley, a confirmed belief becomes knowledge. 24 Now there is no question of a false belief being confirmed or

justified. So we can say that if a true belief is justified then it can be called knowledge. There is another issue very closely linked with it which says that regarding all kinds of belief there is no question of justification. There may be personal likings, or superstitions that give rise to beliefs where question of justification does not arise. In other words, the element of rationality is not relevant there. So to understand the difference between rational and irrational belief, justification plays an important role. What I have said should not be understood to imply that in case of superstitions, etc. the person having superstition also admits that there is no such question of justification. He also claims that he is justified in having the belief. But it is needless to mention that the criterion of rationality in this belief is different from that in rational belief. So let us first understand the concept of justification, its function and its various types.

In any belief - situation, there is a relation among the believer, the believed content and the fact. The relation between the second and third is the issue of the theory of truth. The question of justification arises in the context of the relation between the first and the third. To make the point clear, it is in the context of belief - ascription that we are concerned with the justification of belief.

According to Prof. Chisholm, "the term 'justify' in its application to a belief is used as a term of epistemic
appraisal - a term that is used to say something about the reasonableness of a belief".25 'It is an epistemic appraisal' means that it is a sort of assessment or evaluation which is epistemic in nature. It is therefore distinct from moral, legal or practical justification.

6.10 EPISTEMIC AND MORAL JUSTIFICATION

Thinkers like W.L. Clifford advocate that epistemic justification is a species of moral justification. Chisholm in his book Perceiving also appears to advocate the same view. Clifford's and Chisholm's arguments for reducing the concept of epistemic justification to moral justification are refuted by Roderick Firth who denies such a relation between the two. I shall refer to the arguments of Dr. Sandhya Basu26 who tries to effect a compromise between these two views, i.e., she shows that some characters of the ethical statements are shared by epistemic statements also, yet there is a remarkable gap between the two types of justification.

The notion of epistemic justification includes two elements. Primarily, a person S is said to be justified in believing p if and only if S has adequate evidence in favour of p and he does not have defeaters for p at his immediate disposal. This is called doxastic warrant.

Secondly, the proposition p must in itself be justifiable. This is called the propositional warrant. This propositional

26. Her view is taken from some unpublished papers in connection with the issue of justification.
warrant together with the doxastic warrant, constitute what is meant by the notion of justification.

The propositional warrant is independent of the issue of the person's having belief in p, or his justifying in believing p. It is the doxastic warrant that makes a connection of believing between the person and the warranted proposition. So in order to have justification, we should have the propositional warrant as well as the psychological informations regarding the believer. So there is no question of reducibility of these psychological elements to ethical elements. Hence the question of reducibility of epistemic justification to ethical one amounts to the question of reducibility of propositional warrant to ethical concepts.

There are two attempts in favour of the reducibility. The first one gives two alternative analyses and the second brings the concept of responsibility.

According to one categorical analysis, the sentence 'p is warranted for S' means 'It would be morally good for S to believe p.' It is rejected by Firth because he says that no question of ethical issue can be settled with reference to epistemic fact. But there may be a non-logical relation between the two. So there is an alternative hypothetical analysis of propositional warrant.

The hypothetical analysis has two forms. One form offers an ethically neutral antecedent of the hypothetical sentence. 'p is warranted for S' is interpreted as 'S ought to believe p.
if S's believing $p$ would result in no less human happiness than S's failing to believe $p'$. But no additional conditions to epistemic warrant yield an ethical statement.

The second form presents an ethically loaded antecedent. 'p is warranted for S' means, 'S ought to believe $p$ if S has such and such duties.' The requisite ethical conditions however cannot include any epistemic concept. The duty or condition may be explained as a duty to believe propositions if and only if they are true. There are various difficulties here.

Firstly, the duty to believe truth has its counterpart, i.e., duty to shun error. These two duties being equally competing they cannot be executed at the same time. Secondly, duty to believe true propositions is a duty which cannot be fulfilled merely by believing warranted propositions. There are various true propositions which are either warranted or not for a particular individual. Thirdly, Chisholm points that there are some true propositions regarding which reason restricts us to believe them and similarly some false propositions that reason provokes us to believe them. Lastly, any criterion of rational being necessarily includes the concept of believing warranted proposition. It is definitely circular.

Thus the first attempt of reducibility is rejected.

Another weaker attempt brings the concept of responsibility as an intermediate concept. Responsibility is an important
concept in epistemic justification, and this attempt claims that it is also an ethical concept. In believing something, we are under a sort of obligation to consider pertinent evidences and cannot take thoughtless steps. Any such step is criticised as a lack of responsibility.

The question therefore arises regarding the fact of responsibility being a moral concept. Answer to this question depends on answers to two allied questions:

(a) Is believing a voluntary act?
(b) Are we always conscious of our believing?

There are two different kinds of answer to the first question. According to Descartes, believing is a freely chosen self-conscious activity. Hume however is of the opposite view that there is no question of deciding to believe. In fact there are many things that cannot be believed at will, and many other things impossible not to believe. So far we agree with Hume. But our incapacity to believe or disbelieve at will is due to the nature of believing. Goldman however, admits that there is still scope for deliberate voluntary attitude towards belief. This is evident in cases of search for evidence on voluntarily chosen issues. In fact there may be doxastic regulative principles for having beliefs. These are not so important for forming beliefs as they are for improving our belief-habits. It implies that the believer is not a voluntary agent.
Answer to the question (b) may be that we are not always conscious of our believing. There are spontaneous associations giving rise to beliefs. But as C.I. Lewis views it, even then we may be charged for responsibility regarding our beliefs. In fact, such a charge does not need an awareness on the part of the believer in a belief-context. In a case where the believer is not aware of his belief, the charge means that if he were aware of his belief, then he could have avoided such and such errors. Moreover, criticisms of spontaneous beliefs, are not criticisms of particular beliefs, but of some belief-habits.

The result thus is: though the believer is not necessarily a voluntary agent, he will have to bear responsibility for his conscious or unconscious beliefs. Responsibility thus is an essential element of epistemic justification. The question is whether it is ethical in nature.

Prof. Price considers it to be a prudential obligation. It is our long term interest that makes us believe true propositions and disbelieve false ones. But it is a sort of considering responsibility as a descriptive concept. Dr. Sandhya Basu says that this sort of view destroys the normative nature of justification. If justification is a normative concept, then our obligation or responsibility towards our beliefs cannot be descriptive in nature. But 'non-descriptive' does not mean ethical. So epistemic responsibility is non-descriptive, and though it is very close to
moral responsibility it is not totally identical with the latter. This concludes our discussion that epistemic justification is not a species of ethical justification.

Now there is a distinction between being justified in believing p and giving the justifying arguments on the spot. The requirement is the ready availability of the arguments that are to be produced when the situation demands. In a technical way of putting it, we can say that the justifying ground of the belief must be internal to the subject.

In the field of directly justified or self-justified beliefs, the necessary and sufficient conditions of the justification and truth of such beliefs merge together. But in cases of mediately justified belief, the question of justification and that of truth excludes each other.

6.11 CLASSIFICATION OF JUSTIFICATION

Justification depends on the concept of adequate evidence. Primarily justification may be of two types - prima facie justification and ultima facie justification. S's belief that p is prima facie justified if and only if S has adequate evidence in support of p and S has no reason for believing in the falsity of p. On the other hand, S's belief that p is ultima facie justified if and only if S has adequate evidence in support of p and there is no evidence that overrides the original evidence. This distinction between prima facie and
ultima facie is very close to that between defeasible and indefeasible justification. Simply stated, defeasible justification is that it is possible to be defeated whereas indefeasible justification is that which cannot in principle be defeated. Here 'cannot be defeated or overridden' means the absence of true counter-evidence. But counter-evidences are sometimes misleading and so it is better to refer to a concise presentation of indefeasible justification in this way: S's justification for p by h is indefeasible if and only if there is no q such that (1) q is true, (2) S is completely justified in believing q to be false, and (3) the conjunction of h and q does not completely justify S in believing that p. There are however other alternative definitions of indefeasible justification which will not be relevant in the present context.

Justification which is necessary for knowledge and belief is classified as subjective and objective justification.

Ordinarily, S is subjectively justified in believing p if S believes p for reasons which are considered by him to be good reasons for p. S is objectively justified in believing p if S believes p for what are in fact good reasons for p. In the first case, possibility of S being mistaken about the goodness of reasons remains. In the second case, there is no exact specification about 'what are in fact good reasons for p'. Hence this formulation proves to be too simple and not workable in complex situation. Accordingly this formulation is
to be dispensed with in favour of a revised formulation given by Ernest Sosa who says, $S$ is subjectively justified in believing that $p$ (where $p$ is a non-basic proposition) if and only if the following conditions are satisfied:

1. There is a set of statements, $e_1, e_2, \ldots, e_n$ each of which $S$ believes to be true and to provide positive evidential force for $p$ and that the truth of the set of $e_1$s provides strong enough evidence for $p$. $S$ is subjectively justified in believing the above.

2. There is no set of statements $f_1, f_2, \ldots, f_n$ which $S$ believes to be true to furnish strong enough evidence for not-$p$. $S$ is further justified in not believing that there is any true set of $f_1$s which casts sufficient doubt on $p$ such that the strength of $e_1$s in favour of $p$ is weakened or lost.

3. Any set which is evidentially weaker than $e_1$s (in the context of disconfirming evidence, if there be any) is regarded by $S$ as not strong enough.

$S$ is objectively justified in believing that $p$ if and only if

1. there is a true set of statements $e_1, \ldots, e_n$ which is strong enough evidence for $p$ and which subjectively justifies $S$ in believing that $p$. The set contains no superfluous statement and no statement which disconfirms $p$. each member of this set has positive evidential force for $p$. $S$ is justified in believing the same.

27. Dr. Sandhya Basu refers to the article "The Analysis of Knowledge that $p$" in her unpublished paper.
(2) There is no true set of statements known to be true by S, which supports not-p. S is justified in not believing that there is any such set. Even if S believes that there is some evidence for not-p, the evidence for p overrides or defeats this counter-evidence.

(3) If S's belief that p is based substantially on a report that p then the reporter must be objectively justified in believing that p.

This formulation seems good as an explanation. But it's workability in the context of a concrete example is questionable. It however serves the purpose of eliminating cases which are wrongly considered as justified belief.

6.12 THE STANDARDS OF JUSTIFICATION

We now pass over to another aspect of justification. The concept being a normative one, must admit of norms or standards. This standard is just a set of principles for theoretical evaluation, not of practical one. Several accounts of standards are offered of which we shall refer to some.

Foundationalism is the first one to be considered. The main tenets of this theory are:

(1) there are some foundational or basic beliefs that are immediately justified in the sense that their justification does not depend on any other beliefs, and
(2) all other justified beliefs are derivative in nature. The justification of these beliefs are derived at least partly from the basic beliefs. Chisholm is one of the exponents of this theory. He says that behind every directly evident belief, there is a self-presenting property constituting its sole justification. A property \( F \) is said to be self-presenting to a subject \( S \) at time \( t \) if and only if \( F \) occurs to \( S \) at \( t \) and if \( F \) occurs at \( t \) then \( F \) is evident to \( S \) at \( t \). A property becomes self-presented to a person when in addition to having the property he considers the question whether he is having the property. The property of being sad is a self-presenting property and it can be self-presented to a certain subject at a certain time. Both self-presenting and non-self-presenting properties are directly evident propositions. While self-presenting properties constitute the basis of indirectly evident beliefs, they cannot sufficiently justify the latter. For justification, some epistemic principles are needed which are called by Chisholm as rules of evidence.

This theory of justification is an internalist theory. An externalist theory of justification makes the standard of justification external to the believer. The internalist theory, on the other hand, makes the standard internal to the believer, something to which the believer has or can have cognitive access. According to Foundationalism, the ultimate source of justification is a self-presenting property which is
evident to the subject and so this theory is internalist in nature.

The second theory is the **Coherence theory** that upholds that every belief has the same *apriori* epistemic status as every other belief. There are various forms of Coherentism. According to one form, a belief is said to be justified if and only if it coheres with the believer's system of beliefs. On the holistic version of Coherence theory, it is the system of beliefs as a whole which is the preliminary unit of justification.

There is reciprocal dependence within the system. There are various models of dependence - inferential, evidential, explanatory, probabilistic and accordingly there are inferential, evidential relations, etc. The coherence of a system of beliefs is enhanced by the number and importance of such relations among the component beliefs.

Each and every form of coherence is not internalist in nature, though usually coherentism is a supporter of internalism in nature, though usually Coherentism is a supporter of internalism. It says that the believer is aware that he accepts the belief only because it coheres with his system of beliefs. But it is not always internalistic in the sense that a given belief may cohere with our system of beliefs though the believer may remain ignorant of it.

Some bring the charge against this theory that it makes justification a matter of relations between one's beliefs.
and has no connection with the world. But this is a good objection against the Coherence theory of truth and not against the Coherence theory of justification. The Coherence theory of justification is quite consistent with the Correspondence theory of truth, because according to the theory the value of our justified beliefs lies in the fact that they put us in touch with reality.

Another objection is that there is apparent multiplicity of equally coherent systems and it is difficult to choose among them. A probable answer from the Coherentists that the choice depends on degree of comprehensiveness of system also fares no better because the criterion of comprehensiveness is yet to be specified.

A third theory giving standard of justification is called Historical Reliabilism. According to this theory, a belief is justified if and only if it is well-formed, i.e., if it is acquired through reliable belief-forming processes that generally lead to truth. These processes may be either conditionally or unconditionally reliable, i.e., they are either belief-dependent or belief-independent. In the formulation given by Goldsmith of ultima facie justified belief, we get this version.

A different version is presented by Marshall Swain. He says that whether a belief is justified is partly a function of the set of reasons upon which the belief is causally based.
S's belief that h at t is justified if and only if S's believing that h at t on the basis of R is a reliable indication that h at t. To say that belief that h is a reliable indication that h is to mean that this belief together with other facts constitute good evidence for the truth of the proposition h.

One objection against this theory is that it is concerned more with the causal origin of belief than with the standard of justification. A belief may be justified though it has an illegitimate origin. In this connection, we shall refer to Quine, "...the story of the origins and intensities of our beliefs, the story of what happens in our heads, is a very different story from the one sought in the quest for evidence. Where we are rational in our beliefs the stories may correspond, elsewhere they diverge." 28

Another objection is that, for having a justified belief, it is also necessary that the believer accepts the source as reliable.

Reliabilism is also charged as being involved in circularity. Dependence of reliability may be caused by some other faculty or its own record of success. But this second faculty needs support of its own and thus the faculties become interdependent. Again in order to have its record of success, we have to rely on the reliability of some other faculty. Hence circularity is inevitable.

In fact, Reliabilism makes the concept of justification a naturalistic concept while it is an evaluative one.

A fourth theory regarding the standard of justification is the **Contextualist theory** of justification. Some supporters of this theory consider it to be a variety of the Coherence theory. But actually it rejects both Foundationalism and Coherentism. It denies any sort of basic propositions, it also denies coherence as understood traditionally.

According to this theory, since man is a social animal, the society with its form and particular variety is the ultimate determinant of justification of belief. As there are different forms of society, so there cannot be any fixed standard of justification universally valid for all believers of all times. The reasonableness of this theory is obvious in the context of scientific inquiry where adjustment is to be made with the changing situation. Such theory is usually called internalist theory.

In the conclusion, it may be said that no standards of justification proposed so far are adequate. Among these four, the fourth view, however, seems to be better than the other three, though it also has its limitations.