4.1. INTRODUCTION

One of the major difficulties with functionalism as noted in the previous chapter is that it fails to accommodate the qualitative features of mental states. More precisely, it does not provide identity-conditions for their type identification. Two mental states are said to be type identical if and only if they satisfy the same functional definition. But there can be alternative functional definitions for a given mental state. Consequently, two states that are type-identical on a given functional definition could be type-different on another such definition. According to Sydney Shoemaker, among the various alternative functional definitions available to us, only a "maximally good" functional definition can properly type-identify mental states. That is, two mental states are type-identical only if they satisfy the maximally good functional definition. And a functional definition $D$ is a maximally good definition of the mental state $M$, "if it is not possible to formulate an alternative functional definition $D'$ of $M$ such that there are logically possible cases that are counter examples to $D$ but not to $D'$ and none that are counter examples to $D'$ and not to $D$". In other words, a maximally good functional definition is one which cannot be further improved in the light of counter examples, because there cannot be counter examples to such a definition.

In the light of the maximally good functional definition, we may state

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the qualia centred objections to functionalism as follows. The inverted qualia argument says that if a mental state type-identical to a qualitative state on a maximally good functional definition, can differ from the latter either slightly or grossly in its qualitative character, then the qualitative mental states cannot at all be functionally defined. The absent qualia argument states that two states may satisfy the same maximally good functional definition, yet one of them may lack qualitative character while the other possesses it. The bearing of these two objections to functionalism is that a set of important aspects of mental states cannot be accommodated within the framework of the most plausible materialistic model of the mind.

The failure of functionalism to account for qualitative states has a very crucial implication: it cannot satisfactorily explain one of the most fundamental cognitive functions of the human mind viz., perception. The perceptual mental states of humans are essentially qualitative states. Hence, according to a very influential line of thinking in contemporary philosophy of mind, without involving qualia and relations of similarities and differences among them, the perceptual processes cannot be given a functional account. Therefore, in order to provide a plausible model of the mind, functionalism has to evolve a strategy for providing functional definitions of qualitative states. Shoemaker has developed a strategy for accommodating qualia into functionalism and the present chapter is a discussion of this strategy.

The absent qualia argument implies that the qualitative characteristics are not essential to mental states and hence the occurrence of cognitive mental states can be explained without reference to their qualitative or phenomenal aspects. But this is not true at least in the case of the human cognitive system. Therefore it must be shown that the cases of absent qualia are impossible. The way Shoemaker accomplishes this task will be dealt with in the first section of the present chapter. In the second section, Shoemaker's defense of functionalism against the inverted qualia argument is discussed. In the process of defending functionalism against qualia centred arguments Shoemaker has provided a functionalist account of perception within the framework of functional specification theory. This forms the subject matter of the third section.
In the final section, we shall make a review of Shoemaker's project.

Before we go into the details of Shoemaker's strategy, one clarificatory remark is in order. In order to give a functional definition of qualitative or phenomenal aspects of mental states, Shoemaker assumes that there is a set of ontologically autonomous qualitative mental states or pure qualia. I do not subscribe to this view. It does not mean that I deny the qualitative or phenomenal features of our mental life. My point is that they do not form a separate autonomous class of their own as each of our cognitive mental states has phenomenal aspects. I present Shoemaker's position here, because it is against the position he adopts that I defend my thesis on the unity of consciousness according to which there is a conceptual relation among the three features of consciousness, namely, phenomenality, intentionality, and awareness. Because of this conceptual relation, there are no pure phenomenal states called qualia separable from the features of awareness and intentionality. This is a view I defend in the fifth chapter. Hence I do not intend to go into the details here.

4.2 THE IMPOSSIBILITY OF ABSENT QUALIA

That cases of absent qualia are not possible means that, of two states that are functionally equivalent, if one of them has qualitative content, the other also must possess the same qualitative character. If a mental state were connected to inputs, outputs and other mental states the way a pain state is related to them, it is nomologically necessary that the state in question itself must be a pain state. Shoemaker's argument to this effect revolves round the idea that there is absolutely no way of knowing the possible cases of absent qualia, whereas the cases of present qualia can, undoubtedly, be known. In Shoemaker's opinion, the cases of absent qualia are impossible, because a maximally good functional definition of a qualitative state must refer to the awareness of qualia which they give rise to. We shall characterise this argument as the epistemological argument against absent qualia.

4.2.1 The epistemological argument against absent qualia

It is undoubtedly true that if there are cases of absent qualia, we cannot know them. But from the knowledge of the existence of qualitative
states how do we say there are no possible cases of absent qualia? To answer this question, we must specify the way we have of knowing qualitative states. In one's own case, one comes to know the existence of qualitative states through introspective awareness. If I am having an introspective awareness of pain, then I must be in pain. The flaw in the absent qualia argument, according to Shoemaker, is that it fails to take note of introspective awareness in one's own case. In his opinion, "introspection, whatever else it is, is the link between a man's mental states and his beliefs about (or his knowledge or awareness of) those states." The qualitative states give rise to introspective awareness of themselves. Shoemaker characterises the introspective awareness of one's own qualitative mental states as 'qualitative belief.

The absent qualia argument seems to be based on the assumption that the qualitative characteristics belonging to one's mental states are necessarily inaccessible to introspection. It means that they are in principle unknowable. The assumption, however, has very odd consequences. Suppose at a given time I am in the qualitative mental state, pain. But the inaccessibility assumption would imply that in spite of being in pain, I do not and cannot know whether I am in pain. In Shoemaker's opinion, such odd consequences can be avoided if the causal power of qualitative states to produce qualitative beliefs or introspective awareness of themselves is acknowledged. And a qualitative mental state can be functionally defined provided its maximally good functional definition makes reference to qualitative beliefs in addition to sensory inputs, behavioural outputs and other mental states like beliefs, desires etc. Shoemaker's point is that if the qualitative belief is included in the other mental states referred to in the functional definition, the cases of absent qualia are in absolutely no way possible.

2Introspective awareness is not available to one in finding out whether others are in qualitative states or not. However, it could be known indirectly either from their verbal report or from their non-verbal behaviour characteristic of the qualitative states in question. But Shoemaker admits that behavioural evidence is not conclusive in determining whether one is in a qualitative state or not.

The qualitative States are accessible to introspection and form a significant aspect of one's knowledge of mind. If qualitative states such as the ways things look, smell, sound, etc. are knowable in introspection just as human feelings are knowable, then. Shoemaker argues, it is not nomologically possible, perhaps not even logically possible that a state lacking qualitative character is functionally equivalent to a state possessing qualitative character. Shoemaker's epistemological argument, he says, is based upon the causal theory of knowledge and the causal theory of reference. The causal theory of knowledge holds that the states and features that lack causal powers are in principle unknowable. Similarly the causal theory of reference maintains that the states and features of things independent of their causal features are in principle unnameable and hence cannot be referred to at all. The qualitative mental states are knowable because they have the causal powers to produce introspective awareness of themselves and to influence overt behaviour, whether verbal or non-verbal, in certain ways. Again because of their causal powers, these states are nameable and hence accessible to reference. Since qualitative states are knowable and nameable, it is not nomologically possible (that is, given the psychological laws that relate one's psychological states to one another and to inputs and outputs) that a state lacking qualitative character is functionally identical to a state that possesses it.

In the functional definition of a mental state, each mental state is defined in terms of its causal relation to other mental states in addition to inputs and outputs. It is a requirement of the functional definition of a mental state that the 'other mental states' referred to must themselves be functionally defined. In the light of this, observes Shoemaker, there is a possible objection to the epistemological argument. A maximally good functional definition of qualitative states must make reference to 'qualitative beliefs' in addition to Inputs, outputs and other mental states. But the 'qualitative beliefs' Involved in the functional definition of qualitative states cannot themselves be functionally defined. So, the definition of qualitative mental states that makes reference to

4"Functionalism and qualia," 190-91.
In reply to this objection, Shoemaker maintains, in his "Functionalism and qualia", that the qualitative beliefs themselves can be functionally defined in terms of their tendency to produce verbal behaviour. However, in his "Absent qualia are impossible - a reply to Block" he maintains that his argument in "Functionalism and qualia" is directed against a particular version of the absent qualia argument and adds that the functional undefinability of some of the mental states referred to in the functional definition need not be of much concern to the functionalist.

Shoemaker identifies two versions of the absent qualia argument: 'Absent Qualia Thesis One' (AQT-1) and 'Absent Qualia Thesis Two' (AQT-2). The two theses are differentiated on the basis of a distinction between a strong and a weak sense of the maximally good functional definition. A maximally good strong functional definition is one in which the 'other mental states' occurring in the definition are functionally definable. In a maximally good weak functional definition, on the other hand, it is not specified whether the 'other mental states' themselves are functionally definable or not. So the weak definition retains the possibility that some of the mental states referred to in the maximally good functional definition are not themselves functionally definable. The thesis that qualitative states cannot be functionally defined even in the weak sense of the maximally good functional definition, is called AQT-1. The other thesis namely, AQT-2 states that the qualitative states are not functionally definable in the strong sense of the maximally good functional definition.\(^5\)

AQT-1 is a stronger thesis than AQT-2. Shoemaker clarifies it with the help of the notions of the "ersatz" mental state and the "imitation man". A token of the mental state of the type M is said to be ersatz M if it is not a genuine token of M inspite of its satisfying either a weak or a strong maximally good functional definition of the type M. And AQT-1 grants that there could exist a creature whose qualitative states are ersatz but whose non-qualitative mental states such as beliefs, desires

\(^5\)Cf."Absent qualia are impossible - a reply to Block.- 311-12.
etc. are genuine. Shoemaker names such a creature an "imitation man". AQT-2 also would grant the possible existence of creatures whose states satisfy maximally good functional definitions of mental states but whose qualitative states are ersatz. While both the theses grant the possible existence of creatures whose qualitative mental states are ersatz, the difference between them lies in that AQT-1 clearly states that the non-qualitative mental states of the creature satisfying the maximally good functional definitions are genuine whereas AQT-2 does not specify whether the non-qualitative states are genuine or not. Therefore, the imitation man AQT-1 holds to be possible would satisfy AQT-2 as well. Hence AQT-1 entails AQT-2. However, the falsity of AQT-1 does not guarantee the falsity of AQT-2. That is, even if an imitation man is impossible, AQT-2 would be true if there could be a 'super imitation man', a creature whose states satisfy maximally good functional definitions of various mental states but all of whose mental states — qualitative as well as non-qualitative — are ersatz.

Shoemaker maintains that his argument against the possibility of absent qualia is a refutation of the stronger thesis of the two namely, AQT-1. In other words, he defends the thesis that qualitative states are functionally definable in the weak sense in terms of their causal powers to give rise to genuine mental states such as qualitative beliefs, desires etc. AQT-1 is not true because if qualitative mental states can be functionally defined in terms of their causal relation to some genuine mental states like qualitative beliefs, then it is not possible to

\[\text{Cf. "Absent qualia are impossible - a reply to Block," 313. Shoemaker maintains that the denial of AQT-2 --- viz. qualitative states are functionally definable in the strong sense --- would mean the correctness of functionalism as a general philosophy of mind. For it implies that all or most mental states are functionally definable in the strong sense. But the denial of AQT-1 i.e., the thesis that qualitative states are functionally definable in the weak sense is compatible with the falsity of functionalism as it grants the possibility that at least some non-qualitative states are not functionally definable even in the weak sense. It is also compatible with the view that no mental states are functionally definable in the strong sense. That is, if mental states are functionally definable only in the weak sense it is possible that no mental states are functionally definable in the strong sense.}\]
distinguish cases of genuine pain from the cases of ersatz pain on the basis of their causal features. One of the causal features of pain is that it gives rise to introspective belief about its occurrence on the part of its possessor. As a result the organism in question has knowledge of pain and its qualitative character. Since both genuine pain and ersatz pain have the same functionally relevant causal features, it must be true of ersatz pain that it also gives rise to the same qualitative beliefs and the same behavioural outputs in an imitation man. That is, ersatz pain too gives rise to the knowledge of pain with its qualitative content. It follows that the distinction between ersatz pain and genuine pain is baseless.\(^7\) If there is no possible way to distinguish between cases of genuine and ersatz qualitative states, the distinction between genuine man and imitation man too cannot be maintained. If so, AQT-1 cannot be true.

One could argue that the distinction between genuine and ersatz mental states can be maintained on the basis of the 'total causal role' though not on the basis of the maximally good functional definition. An important causal factor outside the maximally good functional definition but well within the total causal role is the physical factors that realise the mental state in question. Shoemaker argues that if mental state terms are considered natural kind terms in line with the Kripke-Putnam view about natural kinds, then there is a possibility of distinguishing genuine mental states from ersatz ones. On this view, since mental state terms are natural kind terms, they are rigid designators having their references fixed to certain physiological (neural) states. On the basis of this, it is possible to argue that only the neural states that realise the maximally good functional definition of mental states in humans are genuine mental states. Consequently a distinction can be maintained between ersatz qualitative states and genuine ones, implying that the cases of absent

\(^7\)The possibility of ersatz pain. Shoemaker argues, gives rise to insurmountable epistemological difficulties. How could we know that the pains of the people we come across and interact in our day to day life are not ersatz and that the other people are not imitation men? Or how could I know I myself am not an imitation man? Cf. "Absent qualia are impossible — a reply to Block," 316.
According to the above discussion, a genuine mental state must satisfy two conditions: (1) it should satisfy the maximally good functional definition; (2) it should be realised by the kind of neural states that realise it in humans. On this view, the human mental states become paradigmatic. In Shoemaker's opinion, this is a parochial view. He identifies a restricted and an unrestricted version of the parochial view. If it is held that the qualitative and non-qualitative mental states are realised by the human neural states, it is called an unrestricted version of the parochial view. The restricted version of the parochial view maintains that the qualitative states are genuine only if they are realised by the neural states of the sort that realises them in humans. On this view, the non-qualitative states are genuine even if they are non-neurally realised. According to the restricted version of the parochial view, a qualitative state is ersatz if it is not realised by the neural state of the type that realises them in human. It does not matter at all whether the qualitative state is causally related to the multiply realizable yet genuine non-qualitative mental states in addition to inputs and outputs. It could be maintained that AQT-1 is committed to the restricted version of the parochial view.

Shoemaker illustrates this point with the example of hypothetical martians. Suppose the martian psychology is isomorphic with ours. Yet on account of a radical difference in their biochemistry and neurobiology, the martian states functionally equivalent to our mental states are physiologically realised quite differently from the way they are realised in us. The physiological differences between them and us are such that, according to the restricted version of the parochial view, their non-qualitative mental states are genuine but their pains and other qualitative states are ersatz. This means by discovering the physiological differences between the states that realise pain in humans and those that realise pain in martians it is possible to find out that martian pains are

8Cf. "Absent qualia are impossible — a reply to Block," 317-21.
ersatz.\textsuperscript{9} A distinction between genuine and ersatz qualitative states on the basis of their physiological differences can prove that AQT-1 is true.

According to Shoemaker, even on the above line of thinking, it is not possible to distinguish ersatz qualitative states from the genuine ones by appealing to the total causal role. The way of distinguishing ersatz and genuine qualitative states on the basis of their physiological differences is faced with very serious epistemological difficulties. If humans can discover that their pains are genuine and martian pains are ersatz cm account of their physiological differences, the discovery of the same physiological differences must reveal to martians that their own pains are ersatz and human pains are genuine. But this is not a plausible view. Suppose that our qualia words like 'pain' have their references fixed a la Kripke to a class of physiological states that humans have and martians lack. If martians also speak English, then, on this assumption, it is possible to argue that qualia words like 'pain' in martian language refer to the neural states that realise pain in the humans and that they are systematically mistaken in their introspective beliefs while claiming to have pain. However, this odd consequence, in Shoemaker's opinion, is ruled out by the causal historical account of reference advanced by Kripke and Putnam. Accordingly, the qualia terms like 'pain' in martian language refer to the physiological states that martians have and we lack. For it is with their physiological states that martian qualia terms would be causally connected in ways that make for reference. Similarly qualia words in human language refer to the human physiological states which martians lack and with which our qualia words are causally connected in ways that make for reference. Hence, while our philosophers could say that there is nothing it is like to be martians, theirs could say that there is nothing it is like to be humans. And each would claim their own qualitative states to be genuine and those of others to be ersatz.

The moral of the story, according to Shoemaker, is as follows. On the assumption that martians have a common sense psychology isomorphic with ours and that they share our non-qualitative mental states, there is no

\textsuperscript{9}Cf. "Absent qualia are impossible — a reply to Block." 321-22.
possible criterion on which it could be said that martian pains lack qualia while human pains possess qualitative contents. So it turns out that the distinction between a genuine pain and an ersatz pain is spurious because if martian (common sense) psychology is isomorphic with ours and they share our non-qualitative mental states, then martians too must have qualia. However, in Shoemaker's opinion, the conclusion that martians have qualia must be entertained with a caution. Because of the differences in physical make up, their qualia are bound to be different from our qualia. That is, their pain need not feel to them the way our pain feels to us. So the claim that martians have qualia does not mean that they have our qualia but only that they have some qualia or other.\(^\text{10}\)

4.3 QUALIA INVERSION AND FUNCTIONAL DEFINITION

For Shoemaker, cases of absent qualia are impossible because a functional isomorph of a creature having qualitative states must have some qualia or other if not the same. However, he concedes that qualia inversion is a logical possibility. Despite such a possibility qualia are functionally definable. But there is a sense in which qualia are functionally definable and another in which they are not.

4.3.1 The sense in which qualia are functionally undefinable

If the talk of defining functional states is equivalent to the talk of defining names or 'rigid designators' for various types of qualitative states, then, argues Shoemaker, qualitative states do not seem to be functionally definable.\(^\text{11}\) He clarifies it with the idea of spectrum inversion, a special case of qualia inversion. Spectrum inversion pre-supposes that there is a set of colour qualitative states corresponding to various perceivable colours and that every determinate shade is mapped onto some determinate shade, and at least some shades are mapped onto shades other than themselves. The shade onto which a shade is mapped is called the inverse of the shade. There is \textit{intersubjective} spectrum

\(^{10}\)Cf. Absent qualia are impossible — a reply to Block," 322-24.

\(^{11}\)"Functionalism and qualia," 193-95.
inversion if the way each determinate shade of colour looks to a person is the same as the way its inverse looks to another. A person is said to have intrasubjective spectrum inversion if a shade of colour appears to him just the way its inverse appeared to him previously.  

The functional analysis of the colour qualia 'being appeared blue to associated with blue colour can be stated as follows. A person S is in the state being appeared-blue-to if he is in a state associated with blue colour produced in him by an object of blue colour under standard conditions. However, the logical possibility of intersubjective or intrasubjective spectrum inversion shows that a colour quale type cannot be functionally defined in this way because the role of the type of colour quale currently involved in the perception of blue things in a person could be played in a different person S' by colour quale of a different type, say one involved in perception of yellow things in S, due to intersubjective spectrum inversion. Similarly intrasubjective spectrum inversion shows that the role of a colour quale in the perception of blue things could be played at a different time by a different type of colour quale, say the one usually associated with the perception of yellow things in one and the same person. From the possibility of intrasubjective and intersubjective spectrum inversions Shoemaker concludes that the individual qualitative types like being appeared-blue-to are not functionally definable.

4.3.2 The sense in which qualia are functionally definable

Shoemaker argues that though particular qualitative types cannot be functionally defined, there is a sense in which a class of them can be functionally defined. Of the two kinds of spectrum inversion, it is the seeming conceivability and detectability of intrasubjective spectrum inversion that points to the possibility of the intersubjective spectrum inversion. Again the seeming conceivability and detectability of intrasubjective spectrum inversion suggests that a class of qualia are functionally definable. The intrasubjective spectrum inversion is conceivable only on the assumption that there are degrees of similarities

12Cf."Functionalism and qualia." 195-98.
and differences among one's colour qualia analogous to those among determinate shades of colour. The relations of similarity and difference holding among the qualitative states are called qualitative similarities and differences. Following Quine. Shoemaker names the qualitative states corresponding to the determinate shades of colour, the "quality space" of colours. The quality space and its structure, according to both Quine and Shoemaker, are innate.  

The intersubjective spectrum inversion, if there is any, is undetectable since it is neither available to anyone in introspection nor does it manifest itself in one's behaviour, as two persons whose colour spectrum are inverted relative to each other can make the same colour discriminations and the same judgments of colour similarity or difference. The intrasubjective spectrum inversion, on the other hand, is detectable. First of all, it would reveal itself in introspection or in introspection cum memory. So the subject can report that he has undergone spectrum inversion. Secondly, there can be non-verbal discriminatory behaviour which will reveal that the person has undergone spectrum inversion. If there can be no such evidence, then Shoemaker argues, we have no reason to think that spectrum inversion of any sort is even logically possible:

To claim that spectrum inversion is possible but that it is undetectable even in the intrasubjective case would be to sever the connection we suppose to hold between qualitative states and introspective awareness of them (between them and the qualitative beliefs to which they give rise), and also their connections to perceptual beliefs about the world and, via these beliefs, to behaviour.  

Shoemaker argues that intrasubjective spectrum inversion is manifested in non-verbal behaviour. When two experiences (token qualitative states) of a person are co-conscious (two experiences are said to be co-conscious if a person is actually having them both at the same time or if he correctly remembers them), the similarities between them tend to give rise

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14 "Functionalism and qualia," 197-98.
to belief about Objective similarities in the physical world. Similarly, the differences between them tend to give rise to the belief about the objective differences in the physical world. These beliefs together with one's other mental states such as desires, wants, etc. give rise to appropriate overt behaviour. If intrasubjective spectrum inversion takes place, one's experiences would give rise to a set of mistaken beliefs because those beliefs represent things different from the way they are actually in the world. The behavioural manifestations of these mistaken beliefs will be an evidence for the occurrence of spectrum inversion.

In addition to the non-verbal behavioural evidence, the occurrence of spectrum inversion can be reported by the subject. This assumes that the intrasubjective spectrum inversion is accessible to introspection. The relations of qualitative similarity and difference that hold among one's co-conscious experiences tend to give rise to 'qualitative beliefs' to the effect that such relations hold among one's qualitative states. It is because of these qualitative beliefs that the victim can report that he has undergone spectrum inversion.\(^{15}\)

Despite the logical possibility of spectrum inversion, its detectability, according to Shoemaker, shows that a class of qualitative states ordered by relations of qualitative similarity and difference can be functionally defined. A class of them is functionally definable because relations of qualitative similarity and difference holding among them can themselves be functionally defined. That is, these relations holding among one's experiences is causally related to sensory inputs, behavioural outputs and other mental states. When relations of qualitative similarities and differences hold among one's qualitative states, they tend to produce the belief that there are objective similarities and differences among things in the world. They also tend to give rise to the belief that qualitative similarities and differences hold among one's own experiences. Shoemaker calls the beliefs of the latter kind 'qualitative beliefs'. The beliefs of the former kind, we shall name 'objective beliefs'. The objective beliefs give rise to certain recognitional and discriminatory

behaviour. This overt behaviour reveals that it has been affected by qualitative similarities and differences among one's experiences via objective beliefs. The verbal behaviour of a person, on the other hand, is influenced by the qualitative similarities and differences via qualitative beliefs. That is, one's qualitative beliefs enable a person to make verbal report to the effect that qualitative similarities and differences hold among one's mental states. In short, what makes the relations among one's experiences the relations of qualitative similarity and difference is their causal roles in the production of perceptual awareness of objective similarities and differences, and in the introspective awareness of qualitative similarities and differences among one's experiences.

Shoemaker's strategy is to provide type-identity conditions for a class of qualitative states on the basis of the causal roles of relations of qualitative similarity and difference. A functional duplicate of a creature having qualitative states will have a quality-space structured by relations of qualitative similarity and difference isomorphic with the relations of qualitative similarity and difference holding among the states of the creature of which it is a functional duplicate. Qualia inversion being a logical possibility, it cannot be a condition for the functional equivalence of two organisms that a set of the same type of qualitative states must be common to both. However, it is required that the functional duplicate of an organism must have some set of qualitative states or other, and that the sets of qualitative states belonging to those of organisms must have the same structure, even though the individual members are of varying nature. More precisely, a functional isomorph of an organism having quality space will itself have a quality space with the same structure though the nature of the individual qualia forming the quality spaces could vary in both organisms.

The conceivability and detectability of intrasubjective spectrum inversion, we have seen, suggest the possibility of intersubjective spectrum inversion. There is a natural line of argument from intrasubjective spectrum inversion to the conclusion that intersubjective

spectrum inversion actually exists. Suppose a person S undergoes intrasubjective spectrum inversion at time \( t \) and others do not. It would have been true that either before or afterwards (or both) his colour experiences must have been radically different from those of others. Thus there is intersubjective spectrum inversion in the cases where intrasubjective spectrum inversion takes place. If so, it is logically possible that there is intersubjective inversion without intrasubjective inversion because we can conceive of two persons whose colour spectra are inverted relative to each other from their birth.\(^{17}\)

In order to say that the colour spectra of two persons are inverted to each other, relations of qualitative similarity and difference must hold intersubjectively. The functional account of relations of qualitative similarity and difference considered so far applies only when these relations hold intrasubjectively. There must, however, be a way of saying that the qualitative states of two creatures are similar or different in the interpersonal cases. Qualia types can be shared by different persons because they are realised in other properties shareable by different people. Functional states can have physical realisation. They can be realised in the physical states of an organism that play the causal role definitive of them. Since there is a sense in which qualia can be functionally defined, qualia too have physical realization; there are physical states that realise the 'causal roles' definitive of qualitative similarity or difference. The physical properties that realise qualia could be instantiated in different people. Consequently, their experiences could be qualitatively similar or different depending upon the kind of physical states that realise them. This account makes it possible that qualitative similarities and differences in the interpersonal cases could be discovered by appropriate empirical investigations.\(^{18}\)

The above account does not guarantee that the colour experiences of any two different creatures are qualitatively comparable in spite of having states that play the causal roles definitive of qualitative similarity and

\(^{17}\)Cf. The inverted spectrum.” 328-29.

\(^{18}\)Cf. Ibid., 342,
difference. Even if martian psychology is isomorphic with ours, if their qualia are realised radically differently from the way they are realised in us humans because of the difference in neurophysiology and biochemistry, martian qualia and human qualia are not comparable. None of the properties that realise qualia in humans could be instantiated in martians and vice versa. So the question whether qualitative states of two creatures are comparable or not, can be settled by an empirical inquiry as to whether the relevant physiological similarities hold between the brains of two different creatures. Science has not made sufficient progress to make such discoveries of the relevant physiological similarities. In the absence of such evidences, argues Shoemaker, the members of the same species could be presumed to have the relevant physiological similarities. The reason is that the members of the same species have a common evolutionary history. Hence they share a common genetic endowment. Martian evolutionary history and their genetic endowment for that reason are totally different from those of humans. Hence it is not possible for us to say that the human and the martian qualia are qualitatively comparable.

4.4 THE ROLE OF QUALIA IN PERCEPTION

Cognition may partly be defined as the mental process directed towards the production of certain beliefs about the objective world. We shall call such beliefs objective beliefs. Shoemaker has provided a model of cognition within the functional specification theory. On this model, cognition takes place as a result of the interaction between the organism and the environment on the one hand, and the causal interaction among the various mental states of the organism on the other. I shall elucidate this point with reference to a reconstruction of Shoemaker's causalist model of perception. Perception is an important cognitive process through which objective beliefs are formed. We shall call the objective beliefs formed through perception perceptual beliefs. On Shoemaker's account of perception, qualia are essential for the production of perceptual beliefs. Our experience of the world and the resultant perceptual beliefs would not

have been as they are, and perhaps would have been impossible, if no qualia were involved in perception.

An account of visual perception can be traced in Shoemaker's attempt to give a functional definition of qualia. On his weak version of the maximally good functional definition of mental states, if a state is functionally type-identical to a state having qualitative character it is nomologically necessary that the former itself must have the qualitative character. A close examination of the functional definition of qualitative states shows that it provides a functionalist account of perception. Qualia are those essential properties of sensory or perceptual states which give them their phenomenal characteristics. On this account, qualia have a very important role to play in perception because for perception to occur, there must be some qualitative states or other.

The role of qualia in perception can be explicated taking the case of visual perception. An account of visual perception involves reference to colour qualia. Shoemaker defines a colour quale as "being appeared-to in a certain way".\footnote{Functionalism and qualia," 193.} "Being appeared-blue-to" for example, is a type of particular colour quale. If a person looks out at the clear sky on a summer day it looks blue to him and in Shoemaker's terminology he is said to be appeared-blue-to. However, the occurrence of the colour quale being appeared-blue-to does not guarantee that the person sees something blue because he could be appeared blue to both in the case of visual perception of something blue and in the case of illusion and hallucination. Therefore, Shoemaker uses the expression 'appeared-blue-to' as an abbreviation for the locution 'sees or seems to see something blue'.

Each organism has a repertoire of qualitative states or what might be called "quality space". For the explanation of visual perception, Shoemaker identifies a subset of qualitative states - the set of colour qualia that are isomorphic with the visual spectrum. An organism is able to perceive only those colours for which it has the corresponding colour qualia. The set of colour qualia is related to the colours of objects in the world in such a way that visual stimulation by an object of a certain
colour Under Standard conditions produces in the organism the associated qualitative state. Each member of the set of colour qualia is similar or different from other ones in various degrees. Hence, as noted earlier, the set of colour qualia are structured by the relations of qualitative similarity and difference. The degrees of qualitative similarity and/or difference correspond systematically with the degrees of similarity and/or difference among the associated colours. It is because of the systematic correlation between qualia and the qualities of the objects seen that we see the objects as coloured. Under this strategy a person sees something blue if and only if the following three conditions are satisfied together:

(a) He is in a state associated with the colour blue produced in him as a result of visual stimulation by a blue object;
(b) the state tends to give rise to the objective belief that there is something blue before him; and
(c) the state tends to give rise to the qualitative belief that one is oneself in the qualitative state, being appeared-blue-to.\(^{21}\)

Since qualitative states produced as a result of visual stimulation by external objects reflect the objective similarities and differences, the qualitative states stand in relations of phenomenal similarity and difference. The qualitative similarities and differences tend to give rise to two types of belief: the objective belief to the effect that the perceived objects are similar or different in varying degrees with respect to their properties and the qualitative belief to the effect that one's qualitative states themselves stand in relations of qualitative similarity and difference. Objective beliefs, Shoemaker maintains, are not always accompanied by qualitative beliefs. However, by mere shift of one's attention from external objects to one's internal states one comes to have qualitative beliefs.

For the exercise of the perceptual faculty, an organism must be endowed with a quality space. The innate subjective quality space structured by relations of qualitative similarity and difference "accords

\(^{21}\)Functionalism and qualia." 193.
well with the functionally relevant grouping in nature" because of which our inductive generalisations turn out to be successful. Quine explains the success of induction in behavioural terms, i.e., in terms of the dispositions of an organism to respond to conditioning. Shoemaker, on the other hand, thinks that the success of inductive generalisation is due to the fact that the relations of similarity and difference that hold between one's experiences reflect corresponding relations that hold between things in nature. In other words, our inductions based on experiences of things in nature come out true because of a sort of "pre-established harmony" with experiences causally related to things they are of, in such a way that, ceteris paribus, similarities and differences in experience reflect significant similarities and differences in nature.\textsuperscript{22}

On Shoemaker's account, the similarity of experiences yields the experience of similarity. The phrase "experience of similarity" is understood intentionally. When the experiences are similar and are co-conscious, they jointly are of objective similarities. However, to have experience of similarity, the objective similarities need not actually exist in the world. The objective similarities are those which can exist in the world.\textsuperscript{23}

To become aware of objective similarities, we do not have to become aware of the similarities between our perceptual experiences. The mere fact that our qualitative states stand in determinate relations of qualitative similarity and difference by itself would not give awareness of similarity relations among our experiences. Had it been so, whenever the similarity relations hold among our experiences, or at least when we become aware of objective similarities, we would have become aware of the qualitative similarities among our experiences. Since awareness of objective similarities is possible only because our experiences stand in relations of qualitative similarity, Shoemaker is of the opinion that whenever we are aware of the objective similarities, by mere shift of our attention we can have direct or immediate awareness of phenomenal

\textsuperscript{22}"Phenomenal similarity." 167-68.

\textsuperscript{23}Cf. Ibid., 180-81.
similarity. The same is true mutatis mutandis of the awareness of objective difference as well as of qualitative difference.

The experience of similarity and difference (i.e., the awareness of objective similarity and difference) is explained in causal terms. However the awareness of phenomenal similarity and difference, argues Shoemaker, cannot be causally explained, for such an explanation would run into infinite regress. A causal account of the awareness of phenomenal similarity and difference would posit an experience of experience, an experience of experience of experience and so on ad infinitum with an infinite hierarchy of "quality spaces". There is a second reason why a causal account of the awareness of qualitative similarity and difference is not tenable. There is an asymmetry in the epistemic status of our awareness of objective similarity and difference and that of qualitative similarity and difference. The awareness of objective similarity and difference is fallible. But our awareness of qualitative similarities and differences cannot be mistaken in any analogous way. That is, "if someone believes two of his present experiences to be phenomenally similar then, ceteris paribus, they will be phenomenally similar." That is, if one's two experiences stand in the relationship of phenomenal similarity, it ipso facto implies an awareness of phenomenal similarity.

Shoemaker claims that we are endowed with the ability to have the direct (i.e., immediate and non-inferential) awareness of the similarities of our perceptual experiences: "our ability to be aware of experience similarities is implicit in, and is a sort of shadow or reflection of, our ability to be perceptually aware of objective similarities in nature." Reflexivity of our experiences is a function of the system of concepts involved in the perception of objective facts. The concepts of "oneself", 'seeing' etc. result from the sophistication of our conceptual architecture. It is because of the sophistication of our system of concepts that we become aware of the fact that we perceive. This does not

24“Phenomenal similarity.” 168.
25Ibid., 174.
26Ibid., 181.
mean that whenever we perceive we become aware of the fact of perception. Our non-awareness of our own perception, in Shoemaker’s opinion, is in no way analogous to blindness. “It is not by an inner sense, which I might have lacked without lacking the ability to see, that I am aware that I see.”²⁷ We can perceive something to be the case without being aware that we perceive. Yet we possess the capacity to be aware of our own perception. This capacity can be exercised if we decide so.

4.4.1 Phenomenal similarity and intentional similarity

Our objective beliefs are about things in the world. Hence they can be called intentional beliefs. Qualitative beliefs, on the other hand, pertain to the qualitative states of the mind. They may be called phenomenal beliefs. Parallel to these two kinds of beliefs, Shoemaker makes a distinction between intentional similarity and phenomenal similarity. Intentional similarity is the similarity in the representational contents of one’s mental states. They may be said to represent the similarity ordering among the stimuli. The experience "as of red" or "as of green" is an instance of an intentional or representational mental state. Phenomenal similarity means similarity of 'experiences' or sensory (representational) states by virtue of certain of their intrinsic features. Two instances of being appeared-blue-to, for example, are qualitatively similar. The phenomenal similarity among one's experiences is innate and does not get modified by the external stimuli.

The distinction between intentional and phenomenal similarities is based on the seeming conceivability of intrasubjective qualia inversion. The intentional contents and hence the intentional similarity among our mental states depend upon the way they are related to the environment. The qualitative character of our mental states and the phenomenal similarity among them are not so related to the external factors. Hence the intentional or representational content of one's experience can remain the same before and after qualia inversion.²⁸ Shoemaker Illustrates this as

²⁷ "Phenomenal similarity." 182
follows. Suppose a person living in a yellow painted house undergoes a total spectrum inversion. After the inversion the yellow coloured objects look blue to him and the blue coloured objects look yellow. Suppose after a period of time he gets himself accommodated to this change such that his verbal behaviour is no evidence for the spectrum inversion. That is, his accommodation to the colour change shows that he uses the word 'yellow' to refer to the yellow coloured objects and 'blue' to blue coloured objects though in fact they appear to him blue and yellow respectively. After the spectrum inversion and the subsequent accommodation there is a sense in which his house 'looks the same' to him: his experiences before and after the inversion are of the same objective colour. This, according to Shoemaker, is the intentional sense of 'look the same'. There is however a different sense, namely, the phenomenal sense in which his house does not look the same to him. In this sense, the house no longer looks yellow to him but blue. Spectrum inversion is specified with reference to the qualitative sense of the expression 'look the same'.

According to Shoemaker, it is by virtue of the phenomenal similarity and difference among one's experiences that they have the representational content they do. The structure of the quality space makes one sensitive to the similarities and differences in the world. The phenomenal similarities represent objective or intentional similarities because there is a sort of parallelism between the similarities and differences among one's experiences and those among the causes of one's experiences. A change in the structure of quality space resulting in a different similarity-difference ordering among one's experiences would imply that the similarity-difference relations among the intentional contents of one's experiences too would undergo a corresponding change. Shoemaker illustrates this point with the example of Frank Jackson's Fred who can discriminate between two shades of red which an ordinary member of our species cannot. The two shades are not phenomenally alike for Fred, whereas our experiences of the shades are exactly alike with regard to

their phenomenality. Fred's experiences are phenomenally different. Consequently they have different representational content. Since we are not able to distinguish between the shades, our experiences of them have the same (similar) representational content. Hence Shoemaker concludes that the phenomenal similarity of our experiences underlies the similarity of their intentional content.

Because of the determination of intentional similarities and differences by phenomenal similarities and differences, the possibility of an alternative quality space would imply that there could be alternative sets of intentional similarities and differences. This means that the secondary qualities and the similarities and differences among them are perceptual system relative. And they could perhaps vary from species to species. For example, colours that are phenomenally similar to a set of observers with a certain type of quality space could be phenomenally different for another set of observers with an alternative type of quality space. However this, according to Shoemaker, does not mean that possessors of alternative quality spaces misperceive the objective similarity-difference relations among the colours.\footnote{Shoemaker. "Qualities and Qualia: What's in the Mind?" Philosophy and Phenomenological Research 50 (Supplement. 1990): 119.} Relative to an observer with a certain perceptual system, the objects are really similar or dissimilar under certain aspects, say colour, because they are apt to produce experiences that are phenomenally similar or dissimilar.\footnote{Cf. "Qualia and Consciousness." 519.}

We have seen that the perception of objective similarities and differences are perceptual system relative. This does not mean that objective similarities and differences do not exist in the world. Nor is it the case that the similarity-difference relations together with the properties because of which they hold, are projected on to the world. (According to the projectivist thesis the objects look in a certain way because we perceive them as having a qualititative character that in fact belongs to the experience.) In Shoemaker's opinion, though qualia are purely mind-dependent, there are mind-independent secondary qualities corresponding to them. The secondary qualities are not anything over and
above certain physical properties. Yet, there is no straightforward identification of a secondary quality with a physical property because the physical property with which the secondary quality is identified must be highly disjunctive. What gives unity to the disjuncts is not their intrinsic nature which makes them natural kinds but rather their relation to creatures with perceptual systems like ours.

Shoemaker, however, concedes that there is a sense in which we project similarities and differences among our experiences on to the world: "what similarity and difference relations we perceive in the world is a function of what relations of phenomenal similarity and difference relations hold among our experiences, . . . "33 The similarity/difference relations we perceive, in fact, hold among the objects but they hold relative to observers like us. The similarity/difference relations holding among the perceived objects are not solely grounded in objects but also in the similarity-difference relations among our experiences. The same is true of the secondary qualities. The colours we perceive, for example, do not merely depend upon the qualitative features of experience, but also upon the properties of the external objects. So when the experiences represent them as red, blue, etc. they normally represent them correctly.

To sum up: Perceptual states are qualitative states. In the absence of qualia it is not possible to specify what it is like to perceive. For example, if one does not possess the colour qualia, say being appeared-blue-to, one cannot experience what it is like to see blue objects. Similarly, without qualia, and the relations of similarity and difference among them, the perception of objective beliefs and differences is not possible. Hence qualitative features are essential for the production of objective or perceptual beliefs.

4.5 A CRITICAL REVIEW OF SHOEMAKER'S THEORY

Each of us is aware of the existence of qualitative features of mental states. Hence a theory of mind that fails to accommodate and account for them would be intuitively unacceptable. It is in this context that

33"Qualities and Qualia: What's in the Mind?"
shoemaker's Strategy for functional definition of qualia becomes very appealing. However, a close look at the strategy reveals some of its glaring weaknesses. In this section, I shall deal with the difficulties that confront Shoemaker's approach. Shoemaker's functionalist account of qualitative states is based upon two assumptions. First, qualitative states and awareness states are distinct and separable states. Second, though intentional states are causally dependent upon qualitative states, they too are distinct and the two can occur independent of each other. My basic objection to Shoemaker is that these assumptions are false and therefore, his functionalist account fails to define qualia.

Qualitative mental states are essentially conscious mental states. That is, the occurrence of qualitative mental states is invariably revealed in our awareness. But, in Shoemaker's functionalist account of qualia there is a clear-cut bifurcation of qualia and awareness of them. Consequently, for Shoemaker the qualitative states can occur without awareness of them. Though qualitative states tend to give rise to awareness of themselves, they do so only in the absence of countervailing factors. This means that there can be unconscious qualia. But we do not have even the slightest idea as to what unconscious qualia are, or what it is like to have unconscious qualia. It makes no sense to say that I am in a qualitative state but I am quite unaware of being in such a state. It would be a contradiction to say, for example, 'I am feeling pain but I am completely unaware of it'. On account of the separation of qualia from awareness, qualia cease to have their phenomenal aspects. Hence, it turns out that the qualitative states whose functional definition Shoemaker tries to provide are not genuine qualitative states but only proxies for them.

The above objection is based upon the idea that qualia and awareness of qualia are inseparable. They are inseparable because they are identical. The reasons for it can be cited as follows. One cannot be in a qualitative state without one's awareness of being in such a state. Take for example, the qualitative state pain or being appeared-blue-to. It makes no sense to say that I feel pain without being aware of my pain. Similarly, I cannot be appeared-blue-to without my awareness of being appeared-blue-to. To be aware of pain is to feel pain. To be aware of being appeared-blue-to is, in fact, to be appeared-blue-to. Pain may be
considered as a feeling in a certain way. Similarly, being appeared-blue-to is being appeared to in a certain way. Feeling in a certain way and being appeared to in a certain way etc, cannot occur and cannot be conceived without awareness; they may be called modes of awareness.

Shoemaker identifies awareness of something with the belief that something is the case. To be aware of my pain would be, on this account, to believe that I am in pain. The awareness of or the belief about the occurrence of qualitative states, in Shoemaker's terminology, are qualitative beliefs. Since awareness states and belief states are identical, beliefs states also can be considered modes of awareness. We have already seen that qualia and awareness of qualia are identical. Hence it follows that qualia, and the qualitative beliefs that reveal the contents of our mental states are identical. That is, the occurrence of pain and the belief that one is oneself in pain are is one and the same. This view is, in fact, supported by Shoemaker's own position that we become immediately and non-inferentially aware of qualia.

In short, I have been arguing that the ontological distinction between qualitative states and qualitative beliefs is not tenable. The distinction would mean that one could exist without the other, and Shoemaker, we have seen, grants that qualitative states can occur without the occurrence of qualitative beliefs. The odd consequence of this position, as noted above, is that there can be unconscious qualia. On the other hand, the possible occurrence of qualitative beliefs without the occurrence of qualia is rather inconceivable. If I am, for example, in the qualitative belief that I myself am in pain, then I am in pain. Because I cannot have the qualitative belief that I myself am in pain without being in pain. If qualia and qualitative beliefs are identical, Shoemaker's functional definition of qualia in terms of their tendency to give rise to qualitative beliefs, among other things, turns out to be circular. That is since qualitative beliefs with reference to which we define qualia are Just another name for qualia. Shoemaker's strategy amounts to defining qualia In terms of qualia.

Shoemaker's reply to the above objection, would be on the following lines. There are two sets of qualitative beliefs. the first is the set of
qualitative beliefs in whose prepositional content there is reference to a particular qualitative content. The qualitative beliefs which I have identified with the qualitative states, he would argue, belong to this category. These beliefs, he would concede, cannot be functionally defined, as each of them states that one is oneself in a specific qualitative state. But there is a second set of qualitative beliefs whose prepositional contents does not make reference to any specific qualitative states. Instead they just quantify over qualitative states. And these beliefs, Shoemaker argues, can be functionally defined. However he suggests that the qualitative beliefs of the first sort can be functionally defined provided they are quantified over; what is essential for the functional definition of mental states is quantification over them. So it can be built into the functional definition of a qualitative state, say pain, that being in pain gives rise to some qualitative belief to the effect that one has a specific qualitative state without specifying the nature of the qualitative state the belief is about. It must be noted that Shoemaker does not argue that the qualitative states referred to in the prepositional contents of the qualitative beliefs that are quantified over, must themselves be quantified over. But in effect, his proposal demands it, as it is not specified what particular qualitative contents are referred to in the prepositional contents of these qualitative beliefs. In other words, a quantified belief is a belief to the effect that one is in some specific qualitative state without saying what qualitative state it is. We must incorporate into the functional definition of pain, for example, that being in pain gives rise to some qualitative belief to the effect that one is in a specific qualitative state. Since it is not pin-pointed what specific qualitative state it is, this amounts to the quantification of qualitative states referred to in the prepositional content of qualitative beliefs. Therefore, we say, in effect, that pain gives rise to some belief to the effect that one is in some particular qualitative state.

Shoemaker's strategy of quantifying the qualitative beliefs which make reference to individual qualia does not seem to make any advances

Instead, the move leads him into a dilemma: the functional account becomes either empty or illegitimate. It is empty as it fails to functionally define qualia. If there are no specific qualitative states with specific contents, then the qualia which are contents of the qualitative beliefs turn out to be abstract. But it is absurd to say that there are abstract qualia. This means Shoemaker's strategy fails to define the phenomenal characteristics of our experiences. It cannot specify, for example, what it is like to see something blue. In short, the strategy does not accommodate the subjective point of view or the first person account of our mental states. Though Shoemaker starts with a promise of the first person account of qualia, he ends up with providing a third person account of qualia. If Shoemaker tries to remedy this difficulty by trying to define qualia with reference to the particular or specific qualitative beliefs they give rise to, then his strategy becomes illegitimate, for the particular qualitative states are nothing other than qualia themselves. In short, the totality of one's introspective and behavioural evidence unambiguously points to the fact that one is in a specific qualitative state. But ironically enough in the functional definition, reference cannot be made to a particular qualitative state one is in.

In this context, let us examine Shoemaker's claim that though individual qualia cannot be functionally defined, a set of them structured by the relations of phenomenal similarity and difference can functionally be defined. They are functionally defined because the relations themselves yield to functional definition. It is important to note that when my qualitative states resemble or differ, they do so in terms of specific qualitative or phenomenal characteristics. Similarly, the similarities and differences among the objects of the external world are in terms of the specific qualities they possess. This means that neither the objective similarities and differences nor the qualitative similarities and differences can be specified in abstract terms. So just as the objective similarities and differences are specified in concrete terms, the qualitative beliefs which our qualitative states give rise to must specify the relations of qualitative similarity and difference with regard to their specific qualitative aspects. But Shoemaker does not allow reference to such specific qualitative aspects. Consequently, be talks of the
differences and Similarities among qualia in general and abstract terms.

I shall make a closely related point which again suggests that Shoemaker's strategy fails to accommodate the first person point of view of one's mental life. Shoemaker concedes that in spite of the isomorphism among the quality spaces of two species, say martians and humans, they may have entirely different types of qualia. In other words, the functional equivalence between two sets of qualia does not guarantee that they are type-identical. That means the experiences referred to in the individual qualitative beliefs of martians and humans are different in nature. Consequently, these qualitative beliefs themselves must be type-distinct. What is common to the particular qualitative beliefs of a sort possessed by both humans and martians is only their name. That is, as Shoemaker allows, what it is like to have martian pain is different from what it is like to have human pain; for, that martians have qualia does not mean that they have same type of qualia as we humans possess. This means that what it is like to be a human could be radically different from what it is like to be a martian. In short, in spite of Shoemaker's thorough-going exercises in factionalism, the phenomenal aspects of mental states defy any functional definition.

Let us now come to the second assumption Shoemaker makes viz., that the qualitative states and intentional states are distinct and separable. The way we become aware of phenomenal similarities and differences, according to Shoemaker, is different from the way we become aware of objective similarities and differences. The intentional states viz., the beliefs about the objective similarities and differences are produced by the qualitative states caused by sensory stimulation. So it may be said that on Shoemaker's account, the awareness of objective similarities and differences is mediate and inferential because it is through qualitative similarities and differences that we come to know objective similarities and differences. The awareness of qualia and the similarities and differences among them cannot be causally explained as such an explanation leads to infinite regress. Hence Shoemaker assumes that the awareness of qualitative similarity and difference is immediate and non-inferential in the sense that they are directly accessible to us in awareness.

If it is true that we become aware of objective similarities and
differences only through qualitative similarities and differences, then it is not possible to become aware of the former without being aware of the latter as Shoemaker claims. In other words, in the process of becoming aware of qualitative similarities and differences, we became aware of objective similarities and differences. So it is not true that we mediatelly or inferentially become aware of objective similarities and differences. The awareness of objective similarities and phenomenal similarities is given to us simultaneously. In the presence of a blue object in the visual field, a subject does not become aware of the qualia, being appeared-blue-to, and then make an inference to the effect that he sees something blue. On the other hand, being appeared-blue-to and the awareness of the blue object are present at the same time. On similar terms, the qualitative similarities and differences as well as the corresponding objective similarities and differences are known simultaneously and immediately.

On the basis of the above discussion, we can make the following observations: (a) the awareness of qualitative similarities and differences and that of objective similarities and differences are given simultaneously; (b) we become aware of both kinds of similarity-difference relations immediately and non-inferentially; (c) we cannot become aware of objective similarities and differences without becoming aware of qualitative similarities and differences; and (d) similarly, we cannot become aware of the qualitative similarities and differences without at the same time becoming aware of objective similarities and differences. In the light of these observations, it is clear that the awareness of objective similarities and differences (objective or intentional beliefs) and awareness of qualitative similarities and differences (qualitative or phenomenal beliefs) are inseparable and are in fact one and the same state.

According to Shoemaker, when we perceive something, we have an objective belief. But by a mere shift of attention we can have a qualitative belief that reveals the qualitative aspects of our mental state. On this account, it seems that, at a time we can pay attention either to qualitative or phenomena) states or to intentional aspects. That is, we can have either objective beliefs or qualitative beliefs but not both at the same time. But when we turn our attention to qualitative
states and become aware of them, do we cease to be aware of their intentional aspects? The answer is clearly no. However, for the sake of an argument, let us grant that on becoming aware of the phenomenal aspects, we cease to be aware of the qualitative aspects and vice versa. That we become aware of the intentional aspects of our mental states means that we are aware of the existence of external objects and the objective similarities and differences among them. Our awareness of the existence of external objects with their similarities and differences does not mean that they are given to us directly in awareness. On the other hand, it is quite reasonable to conclude that when we became aware of the external objects and the similarities and differences among them, we are in fact aware of qualitative states and the phenomenal similarities and differences among them, for it is only these internal states that are available to us. So when we pay attention to external objects and become aware of them, it is through the internal states with qualitative features that we pay attention to them. At the same time, we cannot become aware of these qualitative states as such because whenever we become aware of the qualitative states we become aware of the external objects. In short, the objective beliefs and the qualitative beliefs are not distinct states, for intentionality and phenomenality are inseparable features of our experience.

What threatens the unity of phenomenality and intentionality is the logical possibility of qualia inversion. If phenomenality and intentionality are inseparable features of our experience, then the logical possibility of qualia inversion would imply that the same set of qualitative states would have different intentional content before and after the inversion, meaning that phenomenality and intentionality are separable. By the inseparability of phenomenality and intentionality, we do not mean that qualia inversion is not logically possible. On the other hand, whether it is before or after the inversion, the qualitative states can occur only with intentional content. That is, qualitative states occur with some intentional content or other.

The second reason for the apparent separability of phenomenality and intentionality is that we speak of them in abstract terms. While considering qualitative states we say that they have some qualia or other that stand in the relationships of qualitative similarity and difference.
without specifying under what aspects they are similar or dissimilar. Similarly, with regard to the external objects we say that there are objective similarities and differences without caring what these specific similarities and differences are. If, on the other hand, particular qualitative beliefs and particular objective beliefs are specified, it can be seen that neither phenomenality nor intentionality could occur independently. For example, I cannot have the qualitative belief 'I am appeared blue to' without the objective belief 'I see something blue'. A possible objection to this would be from the point of view of illusions and hallucinations. It might be argued that in hallucinations and illusions, one can have only the qualitative belief 'I am appeared blue to' without the objective belief 'I see something blue'. But this is not true. When one has the hallucination of blue objects, one is appeared blue to and has the qualitative belief to that effect. At the same time, the person has the objective belief 'I see something blue'. The main difference between the perception and the hallucination of blue objects lies in the fact that the objective beliefs they give rise to differ in their truth-value. In the case of the former they are true while they turn out to be false in the latter.

Qualia, according to Shoemaker, are the "non-intentional features of experiences that somehow underlie their intentional features". Yet he thinks that the qualia and the intentional features of experience are distinct and separable. One of our arguments against Shoemaker is that this is not true. The ways things feel, look, sound etc., no doubt involve qualitative features. But they are at the same time intentional or representational states as well. Since the looks, sounds, feel etc. are of something, when I am appeared red or blue to, I have colour quale but there are no pure colour qualia. As Shoemaker himself observes, "[i]f I am aware that my experience is as of something red, I am aware of the intentional property of it."

Shoemaker's arguments against absent qualia and qualia inversion as well as his account of perception are based on the assumption that awareness, intentionality and phenomenality are separable from each other. My criticism of Shoemaker has been from the point of view of the unity of
consciousness. I agree with Shoemaker that cases of absent qualia are not possible, and qualitative aspects are essential to our perceptual states. However, I disagree with his claim that qualitative aspects are functionally definable. My point is that qualia, intentionality and awareness are three inseparable features of our conscious mental states. In the next chapter, I shall discuss in detail some arguments for the separability of these features of consciousness and my arguments against them.