INTRODUCTION

I - Historical Background.

The problem of the 'a priori' has been traditionally discussed from various points of view. To determine the a priori elements, if any, in knowledge is the logical or epistemological problem of the a priori. To determine the a priori elements, if any, in moral consciousness, is the ethical problem of the a priori. To determine the a priori elements, if any, in the experience of beauty, is the aesthetic problem of the a priori. To these we may perhaps add a fourth aspect of the problem. Religious consciousness, prima facie, is different from cognitive, moral or aesthetic experience. So we can have a problem of determining the a priori elements of religious consciousness. Although the problem of the a priori has been studied by philosophers, ancient and modern, in almost all these aspects, yet they have not been clearly differentiated. This will be evident from the historical introduction which we give below, where we shall confine our attention only to the first, i.e. the epistemological point of view, omitting completely the other points of view. We discuss here briefly the theories of Plato and Kant. Of these, Plato's theory can be regarded as an objective theory of the a priori, while Kant's theory emphasizes the subjective
nature of the a priori. Let us now treat the theories of these philosophers in detail.

A. Plato.

Most modern men take it for granted that empirical knowledge is dependent upon, or derived from perception. There is, however, in Plato and among philosophers of other schools a very different doctrine, to the effect that there is nothing worthy to be called 'knowledge' to be derived from the senses and that the only real knowledge has as its objects eternal immutable things (In Plato, they are the Ideas and Forms). This view is perhaps traceable to Parmenides, but in its explicit form the philosophical world owes it to Plato.

Plato arrived at his own definition of knowledge by rejecting the prevalent views that identify knowledge with perception. Plato's criticism of the view occupies the first half of the Thaetetus.

It was the doctrine of Protagoras, who said that man is the measure of all things. According to this theory, perception is always of something that is, and as knowledge it is infallible. To this doctrine is added the Heraclitean view of reality as becoming.
with the definition of knowledge as perception, it follows that knowledge is of what becomes, not of what reality is. Plato's aim was to prove that genuine knowledge consists in viewing reality as it is and not the change or becoming which is not reality at all. And as perception gives us only the changing view of reality it cannot be regarded as true knowledge.

Plato has two distinct views in mind. First, reality is permanent and unchanging. Second, knowledge to be true knowledge, must correspond to the object or reality that is permanent. As this permanent reality cannot be known through sense-experience, knowledge has nothing to do with empirical conditions. In other words, knowledge is always a priori knowledge and this ariority is contributed by the object itself to the knowledge. Knowledge does not add anything to the object, but only reveals its true nature. Knowledge must not

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1 It may be asked whether Plato really wanted to deny that sensible objects have existence. Walsh, for example, refers approvingly to N. F. Murphy's interpretation. "There is another way of interpreting Plato's theory of the Ideas. The ideas are what they seem to be, whereas the sensible objects are not what they seem to be." (Metaphysics, p.23) This shows that we need not interpret Plato's theory to mean that the objects of perception are 'relatively non-existent' (Ibid).
in any way alter its object, to which it is directed. The act of cognition is always outward going, has always an object other than itself. At the same time it is immanent in the sense that it causes no modification whatever in the object with which it is concerned. This type of knowledge Plato explains with the help of Ideas or Essences. To him there was no confusion between empirical knowledge or opinion and true or a priori knowledge. They are diametrically opposed to each other, the former has nothing to do with the latter; for, they are different in kind. To understand Plato's theory of knowledge, we have to understand his theory of the faculties of the soul.

(a) Plato's theory of the soul and its faculties

Every animal has both a body and a soul which is different from the body. In man the soul is most real and "the most honourable" part. This soul "is identical with the self-moving", and hence is "immortal". Some regard the theory of immortality or the preexistence of the soul as a myth, but we agree with Copleston in holding that although the "account of the soul's future life is conjectural" yet

1 Laws, 731.
2 Phaedrus, 246, Mem. 81
the soul is "certainly immortal."

The human soul has three principles, reason, spirit, and appetite. Reason is the highest principle of the soul, spirit the second, and appetite the lowest. (Some think that according to Plato, not the whole human soul but only the rational part is immortal. Of these two interpretations, we think the second one, i.e. the view that only the rational part of the soul is immortal, agrees with the general tenor of Plato's philosophy. See below, p. 497). As we have mentioned above, according to Plato, it is reason which is the source of knowledge. But Plato gives another classification of the mental faculties which is more important for our purpose. According to this classification, there are four stages of knowledge, 'eikasia', (imagination), 'pistis' (certainty), 'dianoia' and 'noesis'. Corresponding to these four stages of knowledge and opinion, there are in the soul four faculties, "reason answering to the highest, understanding to the second, faith (or conviction) to the third, and perception of shadows to the last and let there be a scale of them, and let us suppose that the several faculties have clearness.


Copleston, however, suggests that in the latest phase of his philosophy, Plato left the question of the immortality of the soul open (ibid, p. 251).
in the same degree that their objects have truth.”¹ Thus corresponding to the four faculties of the soul, there are four types of objects also. Let us explain these four stages of opinion and knowledge in detail.

The two stages of opinion, 'eikasia' and 'pistis', can be explained as follows. Plato uses the term 'eikasia' to mean a mental state (i) of very little certitude, (ii) and the objects of which are images, shadows and reflections. Copleston, however, thinks that Plato does not imply that any man mistakes shadows and reflections in the water for the original. According to him, Plato means by 'eikasia' images of images, "imitations at second hand".²

In 'pistis', the next higher stage of opinion, the mental state is one of certainty, and the objects are "the animals which we see, and every thing that grows or is made."³

The third stage of 'dianoia' is a state of knowledge and is not mere opinion. Plato states two characteristics of knowledge at this stage. It uses images and is based upon hypothesis. At the fourth and the highest stage, the human mind knows reality as it is, without the aid of

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¹ Republic. 511
² Copleston, ibid, p.153.
³ Republic. 510.
of any images. We shall have to explain these two stages of knowledge in detail.

(b) Plato’s Theory of Mathematics.

The third stage of knowledge, 'dianoia', is knowledge, because its objects are the Forms or Essences. Yet it is not the highest stage of knowledge because we do not know the Ideas or Forms in themselves at this stage, but only through images or symbols. This stage represents the stage of scientific knowledge. Although in sciences, say arithmetic and geometry, visible forms are used, yet they are not the objects of knowledge. The geometrician knows the circle or the triangle as such, the figure that he draws is a mere symbol of the real figure. The visible images themselves are objects of opinion, whereas the object known is the 'form of the triangle' or "the triangle itself".

Here Plato seems to suggest that although mathematics uses symbols which themselves are empirical objects, yet the objects of mathematical knowledge are "the things themselves, which can be seen with the eye of the mind." But it is difficult to accept this interpretation, for, according to Plato, every stage of opinion or knowledge has its

1 Cf. Republic, 510
2 Rep. 510
corresponding type of object. The more clear and certain the mental state is, the more real is its object. Then corresponding to 'dianoia', there must be a type of objects which are neither Forms, nor sensible objects. They are not Forms because Forms are the objects of the highest state of knowledge, whereas 'dianoia' is not the highest stage. They again cannot be sensible objects because sensible things are objects of opinion, whereas 'dianoia' is knowledge. This leads Aristotle to hold that according to Plato, the objects of 'dianoia', specially of mathematics, are of an intermediate type. 1

In the earliest writings of Plato, however, the numbers are regarded as Forms or Essences. In the Republic, this theory seems to have been rejected in favour of the theory of intermediate status of numbers. The difference between a Form of a number and the number itself is due to the fact that while the Form of a number, say, number 2 is one, yet we need an infinite number of 2's for addition etc. Moreover, every number has its corresponding Form, so that no number can be regarded as a composite of other numbers. Thus, for example, the number 7 is just an instance of the Form of the number 7 and hence cannot be regarded as ontologically produced by the addition of the numbers 3 and 4.

1 Cf. Norman Gulley, Plato's Theory of Knowledge p. 131, and Copleston, ibid, pp. 156-157
The connection between Number Form and mathematical numbers has been stated by Gulley thus. The mathematical numbers are "considered to be perfect instances of the Number-Forms. This is not, however, a type of instantiation comparable to that whereby sensibles are "copies" of Forms. It is not simply that in the one case the instances are perfect and nonsensible, in the other, imperfect and sensible. It is also that with the exception that the series of Number-Forms is parallel to the series of mathematical numbers, no systematic parallelism is assumed between the relation of numbers in 'philosophical' arithmetic and either the relation of Number-Forms to one another or the relation of Forms-as-Numbers to one another within the system of Forms as a whole, whereas such a parallelism is assumed between the system of Forms and the order of the physical world, insofar as that world is a 'copy' of the world of Forms.¹

Professor A.E. Taylor, however, confines the sphere of mathematical objects to ideal spatial magnitudes. Copleston does not accept this interpretation, for, the mathematical objects should include those with which 'arithmetic and the kindred sciences' deal, i.e. numbers etc.²

¹ Gulley, ibid, p. 182.
² Copleston; ibid, p. 158

In the latest phase Plato seems to have regarded all Forms whatsoever as numbers. This theory ascribed to Plato by
The second characteristic of 'dianoia' is that it reasons from hypothesis. The meaning of the term 'hypothesis' is not clear. According to Nettleship the term does not have the modern meaning of a 'provisional view awaiting confirmation or disproof.' It means only a truth regarded as independent or self-contained, while really it is dependent on and derivable from a first principle. But Copleston does not accept this meaning of the term 'hypothesis', because according to Plato, in the highest stage of knowledge the dialectic "destroys the hypothesis", which would be impossible if the hypothesis were a truth. What Plato means by the destruction of a hypothesis may be explained by an example 'Plato refuses to accept the Pythagorean idea of the point-unit and spoke of the point as "the beginning of a line", so that the point-unit, i.e., the point as having magnitude of

Aristotle is sometimes regarded as Plato's relapse into Pythagorean "mysticism" in old age. But Copleston does not accept this interpretation. "... the only reasonable conclusion to be drawn from Aristotle's words would appear to be that Plato held more or less the same doctrine, at least during the time that Aristotle worked under him in the Academy". (ibid p.163).

1 Nettleship, Lectures on the Republic of Plato, pp.252 ff.
2 Rep. 533
its own, would be a fiction of the geometer, "a geometrical fiction," an hypothesis that needs to be "destroyed." ¹

Thus there seems to be no unanimous interpretation of Plato's theory of 'dianoia' in general, and of mathematics in particular. Nettleship seems to hold that mathematics deals with ultimate realities through images and symbols, but is inferior to 'noesis' because mathematics assumes that its basic principles are independent truths, while in reality they are dependent truths. Copleston, on the other hand, suggests that the basic assumptions of mathematics are fictions and are to be destroyed by dialectic in noesis.

(c) Plato's Theory of Physics.

'Dianoia' represents not merely mathematical knowledge, but scientific knowledge in general. Plato does not make any distinction between the pure a priori sciences like mathematics and sciences which are now considered as empirical like physics, zoology, botany. Science "is always looking for laws, and the sensible things around us become to it symbols of them". ²

¹ Copleston, ibid, pp. 159-60.
² Nettleship, ibid, p.250.
Copleston, however, points out that Plato in his later days gave a new theory of Physics in the Timaeus. In the Timaeus, Plato wanted to exhibit the organized cosmos as the work of Intelligence and to show that man partakes of both worlds, the intelligible and the sensible. He is convinced that "mind orders all things." Plato holds, however, that there cannot be an exact science of nature. This is not because of any inherent inability of human mind but because of the very "nature of the subject."

In Physics Plato gives an explanation of the sensible world and its generation. The world of sense is becoming and "that which becomes, must necessarily become through the agency of some cause." This agent is the Demiurge. He represents the divine Reason which is operative in the world. But he is not a Creator-God. It is clear from the Timaeus that the Demiurge "took over" a pre-existing material and did his best with it; he is certainly not said to have created it out of nothing." In reality this

1 Copleston, ibid, p.245.
2 Copleston, ibid, p.247.
Demiurge should be regarded as a 'symbol of Intelligence operative in the world .... But if the Demiurge is a symbolic figure, it may also be that the sharp distinction implied in the Timaeus between the Demiurge and the Forms is only a pictorial representation .... it might be that the Forms were Ideas of Mind or Intelligence.

The demiurge, therefore, which is the operative principle immanent in the world needs some material and creates the world .... only by 'making the "blind" elements subserve design and conscious purpose even though the material is partly intractable and cannot be fully subordinated to the operation of Reason. The Demiurge "takes over" the "Receptacle"—"the nurse-of all Becoming"—which Plato describes as space. This space is everlasting, "never departs at all from its own character," it receives all things but never 'takes on any character which is like any of the things that enter it.' "And we must acknowledge that as there are two kinds of knowledge, so there are two kinds of being corresponding to them; the one uncreated, indestructible, immovable, which is seen by Intelligence only; the other

1 Ibid, pp. 248-49.
2 Ibid, p. 248
created, which is always becoming in place and is vanishing out of place and is apprehended by opinion and sense. There is also a third nature—that of space, which is indestructible, and is perceived by a kind of spurious reason without the help of sense. This is presented to us in a dreamy manner, and yet is said to be necessary, for we say that all things must be somewhere in space. For they are the images of other things and must therefore have a separate existence and exist in something (i.e., in space). But true reason assures us that while two things (i.e., the idea and the image) are different they cannot inhere in one another, so as to be one and two at the same time."

"To sum up: Being and generation and space, these three, existed before the heavens, and the nurse or vessel of generation ........" ¹

Space, as Plato conceives it, is again of an intermediate ontological status. It is not known by senses or by the reason. Plato does not say that it is known by understanding either, so the ontological status of space cannot be the same as that of the mathematical objects which Copleston interprets as "intelligible particulars." ²While the mathematical objects with their intermediate ontological

¹ Timaeus, 52
² Copleston, ibid, p. 157.
status are known by the understanding which is the faculty of 'dianoia' space does not seem to have any faculty by which it can be known. It is not clear at all what Plato means by "a kind of spurious reason" which knows space, but he is definite that the knowledge of space is not sensuous—it is known "without the help of sense".

The Demiurge also "takes over" the four elements, earth, air, fire and water, which, according to Plato, cannot be regarded as substances as they are constantly changing. They are rather to be termed qualities, which make their appearance in the Receptacle. The Demiurge then proceeds to confer geometrical shapes on the four primary elements and it is only when the third dimension is reached that the things become perceptible to sense. Having constructed the universe the Demiurge seeks to make it still more like its pattern, the Living Creature or Being. But Being is eternal, "this character, it was not possible to confer completely on the generated things. But he took thought to make a certain moving likeness of eternity; and, at the same time that he ordered the Heaven, he made, of eternity, that abides in unity, an everlasting likeness moving according to number—that which we have named Time." 1 "Time

1 _Timaeus_, 37
is the movement of the sphere and the Demiurge gave man the bright Sun to afford him a unit of time. Its brightness, relative to that of the other celestial bodies, enables man to differentiate day and night. 1 This completes for our present purpose the account of Plato's Physics.

(d) Noesis - The Highest stage of knowledge.

The highest stage of knowledge which is obtained through reason is about the Essences, or the Forms, which are absolutely real. "It involves, he tells us, ....... a state of perfect intelligence with no element of sense in it." 2 Thus we see that according to Plato, it is only the highest stage of knowledge which is completely a priori. The term 'a priori' here may be understood in two senses --- temporal and non-temporal. The knowledge of the Forms that we have through reason, we already possess, so that knowing is nothing but recollection. We had already known the Forms before we were born; what we need is simply to remember it. 3

1. Copleston, ibid, p. 252.
3. "The soul, then, as being immortal, and having been born again many times, and having seen all things that exist, whether in this world or the world below, has knowledge of them all, .... and it is no wonder that she would be able to call to remembrance all that she ever knew
Knowledge can be a priori in another sense too. To be a priori in this sense, knowledge has to be independent of sense elements. As Plato himself suggests that the highest stage of knowledge, 'noesis' is 'a state of perfect intelligence with no element of sense in it.'

There is, however, a difference of opinion among scholars as to whether the highest stage of knowledge is an actual state or a merely ideal state which can never be attained by the human mind. Copleston believes that "Plato has assumed from the outset that knowledge is attainable, and that knowledge must be (i) infallible and (ii) of the real." 1

1 Copleston, ibid, p. 149.
"Plato was not a critical thinker in the sense of Immanuel Kant, and though it is possible to read into his thought, an anticipation of the Critical Philosophy ...... he is inclined to assume that we can have knowledge and to be primarily interested in the question what is the true object of knowledge."

There is, however, another interpretation of Plato's doctrine, according to which this state of knowledge, 'noesis', is a mere ideal that cannot be attained by the human mind. This, as Plato describes it, is a pure ideal, to realize it is not within the scope of the human mind. But it expresses his idea of what we should aim at and what knowledge tends towards."

1 Ibid, pp. 142-43.
2 Wattleship, ibid, p. 254. See, for example, the following:
"It has been proved to us by experience that if we would have pure knowledge of anything we must be quit of the body—the soul by herself must behold things by themselves; and then we shall attain that which we desire, and of which we say we are lovers—wisdom; not while we live, but as the argument shows, only after death; for if while in company with the body the soul cannot have pure knowledge, one of the two things follows—either knowledge is not to be attained at all, or, if at all, after death.
Now the question arises why the faculties of reason and understanding can know only the Ideas or the Essences directly or indirectly but not the sensible objects or,

For then, and not till then, the soul will be parted from the body and exist by herself alone. In this present life we think that we make the nearest approach to knowledge when we have the least possible intercourse or communion with the body, and do not suffer the contagion of the bodily nature, but keep ourselves pure until the hour when God himself is pleased to release us. And thus getting rid of the foolishness of the body we may expect to be pure and hold converse with the pure, and to know of ourselves all that exists in perfection unalloyed, which, I take it, is no other than the truth. For the impure are not permitted to lay hold of the pure.” (Phaedo, 66-67).

This is why we think that according to Plato only the rational part of the soul, the pure part, survives bodily death and is immortal. See above p.5.
to put the question in another form, why the faculties of faith and perception can have only things of the world of becoming as their objects but never the Essences. The reply to this is that there is a close correspondence, indeed an affinity, between the various faculties of knowledge and opinion and their objects. This affinity is explained as an identity of nature; for example, the faculty of reason and its objects, the Essences, are of the same nature. 1

1 "The divine is beauty, wisdom, goodness, and the like; and by these the wing of the soul is nourished and grows space." (Phaedrus, 246).

"The divine intelligence being nurtured upon mind and pure knowledge, and the intelligence of every soul which is capable of receiving the food proper to it, rejoicing at beholding reality once more ...." (ibid, 247).

"The reason why the souls exhibit this exceeding eagerness to behold the Plain of Truth is that pasturage is found there which is suited to the highest part of the soul ....." (ibid, 248).

"Plato assumes further a correspondence in structure between the immortal soul in man and the cosmic soul,
Thus we can summarise Plato's theory of knowledge and its relation to experience. The soul has four faculties only the highest two of which, reason and understanding, can give knowledge. It is not clear whether the highest stage of knowledge 'noesis', is attainable by man, that is, whether the faculty of reason is operative in man. The immediately lower stage of knowledge 'dianoia' is scientific knowledge given by the understanding. This knowledge is attainable by man. The other two faculties are not faculties of knowledge at all. Thus according to Plato only the highest stage of knowledge is completely a priori which the soul possessed before its birth and may possess after the death of the body but which may not be attainable in life.

The 'harmony' of the structure being constituted by a system of numerical ratios. This allows the possibility of an assimilation of the rational activity of the individual human soul to that of the cosmic soul.

(Gulley, ibid, p. 170) 'Plato tells us that "the good is not essence, but far exceeds essence in dignity and power" while on the other hand it is "not only the source of intelligibility in all objects of knowledge but also of their being and essence." '(Copleston, ibid, p. 178).
Kant agrees with Plato in holding that knowledge derived from experience cannot be universal or necessary. Judgements which may be regarded as units of knowledge can be classified into two types, a priori and a posteriori. (Plato, however, did not consider the so-called empirical judgements as constituting knowledge, they belong only to opinion). The term 'a priori knowledge' literally means knowledge prior to experience. This priority may be either temporal (or historical) or non-temporal. Plato sometimes (specially in his myths) suggested that the soul had knowledge of the Essences or the Ideas before it was born on earth. All knowledge, according to Plato, is nothing but the recollection of the knowledge which the self already had. Thus knowledge of the Essences or the Ideas is prior to experience in the sense that the soul has this knowledge literally before it has experience. But Plato also suggests that this knowledge is independent of experience. As we have already remarked, the highest stage of knowledge, 'noesis', is 'a state of perfect intelligence with no element of sense in it.' Kant, however, uses

1 Cf. Meno, 81, Phaedo 75.
the term 'a priori' only in the non-temporal sense. 1
A judgement is a priori if and only if it is not derived from experience. This a prioricity can be of two types,—relative and absolute. 2 Take, for example, the judgement 'John is mortal.' If I know it by a syllogistic inference from the two premises 'All men are mortal' and 'John is a man', then it is known independently of experience, and hence is a priori. But if I see John dying (or dead) and know by perception that he is mortal then the same judgement is a posteriori. The judgement when known independently of experience (i.e., by inference) is a priori, but only relatively so. For, the premises are, (in the long run, at least,) a posteriori. So also when I know something from the testimony of others, my knowledge is relatively a priori, if the person from whom I know it (or, from whom he has known it, and so on) has to depend on experience to acquire it. On the

1. As Copleston remarks. "In any case we should not use the doctrine of reminiscence as an excuse for attributing to Plato an explicit anticipation of Neo-Kantian theory. The Neo-Kantians may think that the a priori in the Kantian sense is the truth that Plato was getting at... but they cannot be justified in fathering the explicit doctrine on to Plato, without much better evidence than they can offer." (Ibid, P.172).

other hand, a judgement is absolutely a priori, if and only if, to make it we do not need to depend on any experience at all. The examples of such absolutely a priori propositions are the analytic truths of logic, the synthetic truths of pure mathematics and of pure physics.

The criterion of such a priori knowledge is necessity and universality. For Kant, it is "easy to show that there actually are in human knowledge judgements which are a priori and in the strict sense universal, and which are therefore, pure a priori judgements." And "it is possible to show that pure a priori principles are indispensable for the possibility of experience, and so to prove their existence a priori." 1 But for Kant these a priori principles have their application only to possible experience, or to the sensible world only. He inherited from Plato the view that knowledge must be certain and a priori, but the tremendous progress of the natural sciences prevented him from following the Platonic tradition, that knowledge can be only of the ideal world beyond the reach of experience. As he says, "It was thus that Plato left the world of the senses, as setting too narrow limits to the understanding.

and ventured out beyond it on the wings of the Ideas, in the empty space of the pure understanding. It seems clear that we can have synthetic a priori knowledge only of the world of sensible things (by pure intuition) but all attempts to apply the a priori principles to metaphysics are bound to fail.

So, for Kant the question was, how the synthetic a priori principles in mathematics and physics are possible, or, more briefly, how the sciences are possible. The question does not mean whether they are at all possible or not, but how they are intelligible. But pure mathematics and pure science, by the very fact of their existence, preclude the question whether synthetic a priori judgments are possible. Unless we regard the fundamental principles of sciences as synthetic and a priori the sciences cannot have absolute certainty and cannot claim to give us new information about their subject-matter. Their actuality proves their possibility. The question of their possibility is, therefore, to be interpreted as the question of their intelligibility.

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1 A5, B9, Kemp-Smith, ibid, p. 47.
2 We have followed here the interpretation of Professor Gopinath Bhattacharyya.
Sensibility and understanding are the two faculties of the mind by which alone knowledge is possible. Sensibility is passive and merely receives what is given, while the understanding is spontaneous and introduces regularity into the discrete sense elements. There can be no knowledge without sensibility. "Objects are given to us by means of sensibility and it alone yields us intuitions; they are thought through the understanding, and from the understanding arise concepts. But all thought must directly or indirectly, by way of certain characters, relate ultimately to intuitions, and therefore, with us, to sensibility, because in no other way can an object be given to us." So anything a priori that the knowledge has, must come from the subjective side, because the object as it is in itself can never be known by us. What are, according to Kant, the a priori contributions to knowledge from the two faculties of mind? These are the pure forms of intuition in sensibility, and the pure categories of the understanding. These two must combine in order to produce concrete knowledge. Space and time are the two pure forms of intuition through which all sensations are given to us. As they are the universal and necessary conditions of all appearances so their objectivity is conditioned by these subjective forms of intuition. Likewise the twelve categories of the understanding are the different forms or ways in which representations are

1 Kemp Smith, ibid, p. 65.
combined to become knowledge. The human mind is so constituted that it can think only in terms of the categories. The categories as also space and time, although derived from the nature of the human mind, are in Kant's sense fully objective not only because they hold good for every thinking mind, but also because they enter into the constitution of every object of human experience. And all the categories and forms of intuition are ultimately based upon the Transcendental Unity of Apperception.

Thus the objective world is a construction of the subjective faculties of the mind—out of the matter given to it through sensibility. So the rules of understanding coincide with the rules of the nature, or in other words understanding makes nature. As Kant says "Thus the understanding is something more than a power of formulating rules through comparison of appearances; it is itself the lawgiver of nature. Save through it, nature, that is, synthetic unity of appearances according to rules, would not exist at all; ... All appearances, as possible experiences, thus lie a priori in the understanding, and receive from it their formal possibility, just as, insofar as they are mere intuitions, they lie in the sensibility, and are, as regards their form, only possible through it." 1 Thus there is no question of constructing a

1 Kemp Smith, ibid, p.143.
real thing-in-itself or of knowing anything about it a priori. 
So far as the world of experience is concerned we do have 
real a priori knowledge. The scientific objectivity is achiev­
able on this view of subjective a priori. Kant, therefore, 
claimed to have shown the limits of a priori knowledge and 
also justified their synthetic and necessary character.

In Kant we find the subjectivistic explanation of a 
priori knowledge. This is not ordinary subjectivism but is 
called transcendental subjectivism. It came as a reaction to 
the Platonic theory of knowledge and also as an explanation 
of the truths of science. In fact the scientific laws and 
truths led Kant to formulate a new point of view in explain­
ing the problem of knowledge. Kant was over-confident of the 
certainty of the scientific laws. This confidence led him to 
ascend the a priori certitude of these principles to the 
subjective principle of reason.

This extreme subjective transcendentalism was later 
on subjected to criticism and finally it had to give way to 
the old Platonic theory of knowledge as an objectively 
determined process. Thus the theory of subjective a priori 
gives way to that of objective a priori of the later thinkers 
like Husserl and Hartmann.
It is easy now to give a comparison of Plato's theory of the a priori with Kant's. According to Plato, completely a priori knowledge is attained only in the highest stage, 'noesis', by a faculty of reason without any element of sense. Reason can know the Forms which are absolutely real and hence independent of it because reason and the Forms are similar or even identical in nature. Reason is that part of the soul which is immortal and is, therefore, absolutely real like the Forms. It is the 'divine' element in man and can behold truth in its purity. So they are both 'pure'. "For the impure are not permitted to lay hold of the pure." So Plato can explain how reason or intelligence can know the Forms which are independent of it by postulating an affinity between the knowing faculty and the objects known.

Kant, however, seems to think that reason can have insight only into itself. "I have to deal with nothing save reason itself and its pure thinking; and to obtain complete knowledge of these, there is no need to go far afield, since I come upon them in my own self. Common logic..."

1 *Phaedo*, 67.
itself supplies an example, how all the simple acts of reason can be enumerated completely and systematically.\textsuperscript{1} Kant's idea here seems to be that reason can know only itself and its principles or forms with certainty and completeness. It cannot know anything outside itself in this manner. "Kant's proposed criticism is concerned with pure reason alone which cannot hide itself."\textsuperscript{2} This seems to suggest that according to Kant reason can discover directly, by looking into itself, as it were, its own forms and principles. But this seems to be contradicted by what Kant says in the second edition of the first critique. "They learned that reason has insight only into that which it produces after a plan of its own ......

Even physics, therefore, owes the beneficent revolution in its point of view entirely to the happy thought, that while reason must seek in nature, not fictitiously ascribe to it, whatever as not being knowable through reason's own resources has to be learnt, if learnt at all, only from nature, it must adopt as its guide, in so seeking, that which it has itself put into nature.\textsuperscript{3} In this passage Kant seems to hold that

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\item[(1)] Kemp Smith, ibid, AXIV, p.10.
\item[(2)] R.Das, \textit{A Handbook to Kant's Critique of Pure Reason}, 1949, p. 4 (Italics ours).
\item[(3)] Kemp Smith, B XII-XIV, p. 20.
\end{itemize}
reason can have insight into that which it has put into nature only by studying nature, but not by directly looking into itself. He is not putting us in the position of men who tried to test their vision by looking at their own eyes, but in the position of men who compared the objects which they saw clearly with those they saw only dimly, made generalizations as to the kinds of objects which fall into the two classes and explained the difference by a theory of vision.*1

But this interpretation given by Ewing involves certain difficulties. The metaphor of the eye is rather unfortunate, for, while the eye can never see itself the reason cannot but be self-conscious and 'look into itself'. Secondly it is not clear why reason cannot know what it puts into nature without examining nature. This would be intelligible if reason were unconscious of its own activities, but then this seems to go against Kant's earlier contention that reason 'cannot hide itself'. But whatever interpretation we may accept here, the difference between Kant and Plato is obvious. While according to Plato the Forms are independent of reason, according to Kant, reason can have insight either only into itself, or into whatever

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1 A. C. Ewing, A short commentary on Kant's Critique of Pure Reason, p. 13.
it itself produces, but never into something which is external to and independent of it. This explains why according to Kant, all the a priori factors in knowledge have to proceed from the subject and cannot be objective as in Plato.

We now compare Plato's theory of mathematics and physics with Kant's. According to Plato numbers are either identical with Forms, or have an intermediate ontological status. Yet they are not sensuous at all. We have already noted that Copleston interprets them as intelligible particulars. Although Plato says that the geometrician has to use particular figures of various geometrical objects, yet these particular figures themselves which are sensible are not the objects of geometrical study. Kant, however, distinguishes between two types of sensations, impure and pure, and thinks geometry is concerned with space which is a pure form of sensibility. Thus while in Plato it is not clear what this intermediate ontological status means, in Kant the answer, whether acceptable or not, is, at least unambiguous. In arithmetic the difference between Kant and Plato is more striking. The Kantian doctrine that the arithmetical entities and operations are connected with time, is wholly unknown in Plato. There is one point, however, on which Plato and Kant seem to agree although for different reasons.
According to Plato, the number 7, for example, cannot be regarded as a construction from the numbers 3 and 4, for the number 7 has its own form which is uncreated and every instance of it is an individual number 7. According to Kant also the judgment $3 + 4 = 7$ is not an analytic judgement, for the concept 7 is not contained within the concepts 3 and 4.

So far as the theory of physics is concerned, Plato's position is not well-developed. Still it is clear that space is regarded by Plato as an object to be known independently of sense-experience. Still space is not known by reason or understanding either. Plato does not clarify his position when he says that it is known by a type of 'spurious reason'. It is not clear what this faculty is, or what the ontological status of space is. Kant's theory is definitely an improvement on Plato's theory because he at least clarifies the metaphysical status of space and the way in which it is known. The theories of Plato and Kant have this superficial similarity that the world of sensible objects is created out of two types of elements, matter and form, by consciousness or intelligence which is not empirical (Demiurge, in the case of Plato, and transcendental consciousness in Kant). This seems to militate against Plato's general theory
that the Forms are objective and independent of mind. As Copleston says: "But if the Demiurge is a symbolic figure, it may also be that the sharp distinction implied in the Timaeus between the Demiurge and the Forms is only a pictorial representation. In treating of the Forms I inclined towards what might be called a Neo-Platonic interpretation of the relation between Mind, the Forms and the One, but I admitted that it might be that the Forms were Ideas of Mind or Intelligence." 1 This Intelligence, of course, is not the Intelligence of any finite individual; but so also the Forms of the understanding are not the Forms of the empirical subject even according to Kant. Thus we see that Plato's theory interpreted in this way, loses its opposition to Kant's on a vital point.

We have already noted that there is a difference of opinion among the interpreters of Plato as to whether the highest knowledge is attainable in this life. Nettleship holds that the highest knowledge which is of the Forms—the absolutely real objects—is not attainable by men. If we accept this interpretation then Kant's contention that metaphysics is impossible as a science seems to agree with Plato's theory. But if we accept Copleston's interpretation of Plato, then Plato's theory is radically

1 Copleston, ibid, p. 249.
opposed to Kant's. According to Copleston "Plato has assumed from the outset that knowledge is attainable, and that knowledge must be (i) infallible and (ii) of the real." But according to Kant knowledge of the non-sensible, metaphysical entities is impossible because reason is discursive and never intuitive. Really, however, even if we accept Nettleship's interpretation, Plato's theory remains fundamentally different from Kant's. For according to Plato to "have pure knowledge of anything we must be quit of the body." But in this disembodied state, reason which is the immortal element of the soul, intuits the ultimate truths. But according to Kant, the human reason is incapable of intuition and there is a radical difference between human reason and divine reason, so that the human reason cannot be identical with the divine reason without losing its identity.

To sum up, Plato's a priori knowledge has its objects—Forms which are independent of reason, whereas according to Kant a priori synthetic knowledge is possible only because of the pure a priori forms of the subject. Secondly, according to Plato, reason intuits the Forms, (whether in the body, or out of it), whereas according to Kant, human reason can never be intuitive.

1 Copleston, ibid, p. 149
2 Phaedo, 66
II. Statement of the Problem.

So far we have tried to trace the development of the concept of a priori in the philosophical systems of Plato and Kant. The purpose of this work is not to discover or determine the a priori elements of knowledge or of aesthetic, moral or religious experience. We shall attempt rather to analyse the concept of the a priori and to determine its relation to other allied concepts. Moreover, we shall confine our attention to the meaning of 'a priori' exclusively in logical and epistemological contexts. It will be rash to assume that the meaning of the term 'a priori' remains the same in logic, ethics, aesthetics and the philosophy of religion. For it may well be that the sense in which the term 'a priori' is used in logic and epistemology is not exactly the same as that in which it is used in ethics or aesthetics. For our present purpose, however, it is not necessary to solve this problem. Our problem is the much narrower one, i.e. of determining the exact sense in which the term 'a priori' is used only in logic and epistemology.

Now in determining the meaning of 'a priori' in this restricted sphere, we find a group of related terms which are used in more or less the same sense. We give below a list of five pairs of terms:-
(1) a priori - a posteriori,
(2) universal - particular,
(3) formal - material,
(4) analytic - synthetic,
(5) necessary - contingent.

This list is, however, far from complete. We can, for example, add the pair 'logical — non-logical' to the five we propose to discuss in the following pages.

Now, each of these pairs is usually regarded as a contradictory pair; for example, the terms 'analytic' and 'synthetic' are usually treated as mutually exclusive and jointly exhaustive. There is no proposition which is both analytic and synthetic, or which is neither. (The Hegelian theory is, of course, an exception; according to it every judgement is both analytic and synthetic.) So also with the other pairs.

In the following pages we shall try to distinguish the various meanings which each pair has. Then we shall try to

1 Although it is desirable that all these terms are given different, if possible, independent, definitions yet in this work we shall not suggest any new definitions of these terms. Our business here will be rather to analyse the various definitions which have been given by different philosophers.
show the inter-relations of the different pairs in their different senses. We shall particularly discuss one extreme theory which identifies the first members of all these pairs with each other, and hence, also the second members with each other. 'A priori' according to this theory, means the same as 'universal', 'formal', 'analytic' and 'necessary'; 'a posteriori', too has the same meaning as 'particular', 'material', 'synthetic' and 'contingent'. Though this theory is as good (or as bad) as any other theory, yet this identification should not be based on definitions of these terms. If we choose to define the terms in such a way that 'a priori' becomes 'analytic' etc., then questions like 'Are there synthetic a priori propositions?' cannot even be asked significantly, for 'synthetic' and 'a priori' become, by definition, contradictory. So this identification has to be based on some 'grounds', i.e. reasons have to be given for it. As it is, the reasons for identifying the different pairs, are ontological. So, although in the main body of the work we maintain strict neutrality as regards metaphysics, yet in the concluding chapter we shall discuss metaphysical questions and try to justify a realistic theory. This realism will be 'direct' in the sense that according to it objects are known 'directly' as they are, without any intervening 'tertium quid' like sense datum or image or essence. Although 'universals' will be admitted as...
distinct from 'particulars', yet they will be given no
metaphysical status different from that of the particulars.
Reality comprising the particulars and the universals is of
one type, and universals and particulars may also be known
in the same way. This means that the difference between a
priori and a posteriori knowledge or between analytic and
synthetic truth cannot be one of kind. If there be any
difference, it can at best be one of degree.