THE PRINCIPLES OF CHRISTIAN APOLOGETICS

AN EXPOSITION OF THE INTELLECTUAL BASIS OF THE CHRISTIAN RELIGION

SPECIALLY WRITTEN FOR SENIOR STUDENTS

BY

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"Le siècle porte au besoin d'examiner : vous le combattriez en vain ; c'est du besoin d'examiner que vous devez faire sortir le besoin de croire."—MADAME DE RÉMUSAT

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THIS BOOK IS DEDICATED

TO

RELATIVES AND FRIENDS

LIVING AND DEAD

WHO ARE TO ME A SYMBOL OF

GOD'S FIDELITY AND LOVE

PREFACE

THE study of the science of Apologetics is very necessary in these days of doubt and agnosticism. The fundamental principles which underlie all religious belief are daily called in question. And even if the urgent need of a reasoned grasp of the foundations of Faith did not exist, the interest of the subject of Apologetics, the large outlook upon life which it involves, the coherence of its parts and the cogency of its conclusions make it desirable that an examination into the principles of Theism should be an indispensable adjunct of Christian teaching.

The first step to take in the investigation of the claims of Natural Religion is to prove that an objective world exists, a world external to consciousness. The ground for this belief must be examined so as to justify the transit from consciousness to reality. In the process, one begins to realise, perhaps for the first time, the truth that there are many characteristics of the external world which our perceptive faculties are not keen enough to observe. At the same time, it can be shown that our perceptions, though not adequate, are true as far as they go, and this conclusion is sufficient for the validity of the well-known argument that contingent beings postulate the existence of a First Cause upon whom all contingent existences depend, the necessary personal Being, to whom we give the name of God. God exists. Man has been created by God. Man has been endowed with a spiritual soul—spiritual because for its exist-

ence and action it is independent of matter, and therefore persists after the death of the body. Man owes to God the debt of private and public acknowledgment and worship. Here in brief are the main theses of Natural Religion. Supported by this basis of Natural Religion, and aided by the application of the criteria of miracles and prophecy, the enquirer is led to the further conclusion that there is one and only one true form of Supernatural Revelation, namely Christianity. In the following chapters an attempt has been made to reproduce in English form the classical arguments which are set forth in text-books of Apologetics written chiefly in Latin, French and German. The aim has been to avoid as far as possible technical nomenclature, so that Senior Students of Secondary Schools may follow the trend of the discussion. If such students are called upon to unravel the intricacies of the Differential and Integral Calculus set for B.A. and B.Sc. degrees, it is surely not too much to expect that the metaphysical principles which are the support of Natural and Supernatural Religion should have some share of their attention.

In the development of the Apologetic argument, I desire to acknowledge my indebtedness to the Dominican work—Père Garrigou-Lagrange's "Dieu, son existence et sa Nature,"[1] and to another work of great merit, "Foi et Raison," written by M. le Chanoine Valvekens.[2] Whilst following these authors in the more formal and "scholastic" portions of their works, I have not hesitated to adopt another treatment if such appeared preferable. I desire to thank the Editor of the "Irish Theological Quarterly" for permission to republish some articles on Apologetic subjects contributed by me from

[1] "Dieu, son existence et sa Nature," par P. Fr. R. Garrigou-Lagrange. Paris, Gabriel Beauchesne, 1915.

[2] "Foi et Raison" (Cours d'Apologétique), par M. le Chanoine Valvekens.

time to time. I desire also to thank Dr. Keith,[1] and his publishers, Messrs. Williams and Norgate, for the use of two illustrations which appear in Chapter IX, and the Rev. H. Thurston, S.J., for valuable suggestions and for the time and trouble involved in the correction of the proof sheets.

Regret has often been expressed that more use has not been made by writers on Apologetic subjects of the various branches of Natural Science—Physics, Astronomy, Biology, Geology, Anthropology—sciences which point to conclusions relevant to the theistic argument. Surely it is by endeavouring to comprehend the Natural as well as the Supernatural Revelation that foundations are more securely laid, and a better opportunity given of appreciating the harmony, beauty, and stability of the Divine edifice of Faith. Should any measure of success attend the present effort, should reflection be aided, doubt removed, reverence increased, I shall indeed be amply rewarded for my labour. But in the investigation of Divine Truth, we must not forget our limitations, so admirably expressed by the earliest of Christian Apologists: "O the depth of the riches of the wisdom, and the knowledge of God! how incomprehensible are His judgments, and how unsearchable His ways!" The "windows into the Absolute" permit us to see but "through a glass darkly." It is the trial of Faith. Presently we shall see "face to face."

T. J. W

[1] "The Antiquity of Man," by Dr. Keith.

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THE PRINCIPLES OF CHRISTIAN APOLOGETICS

CHAPTER I

THE EXTERNAL WORLD

THE student, who is accustomed to accept implicitly the testimony of the senses, finds at first the suggestion bewildering that sense-impressions do not represent accurately external qualities and objects. But once raised, the question, how far subjective states correspond to objective reality—how far our faculties may be trusted in the search after truth—is obviously of primary importance. Doubtless the student has many times watched a sunset with its gorgeous manifestation and changing panorama of colour; many times too perhaps has he admired a landscape in which "meadow, grove and stream" seemed "apparelled in celestial light," or listened in time of storm to the roar of the angry waves as they lashed a rock-bound coast. Should science analyse the feast of colour into mere undulations of ether, resolve the roar of the angry ocean and the song of the lark into wave-lengths of air; should the redness of the rose, the whiteness of the lily, the verdure of the fields be merely a subjective vision, the objective world becomes indeed drab and uninspiring, and the gain in knowledge will never compensate for the loss of the "vision splendid," and the loss of Nature's orchestration with its sacramental suggestion of invisible power and beauty.

The attitude of students of philosophy in regard to the

objective value of sense-impressions may be classified as threefold—the attitude of the Sceptic, of the Idealist, and of the Realist.

First, the contention of the sceptic confronts us—the contention, namely, that objective knowledge is impossible, that between states of consciousness and their external causes there may not be the remotest resemblance, that it is impossible to bridge over the gulf which separates the subjective from the objective (if in truth the latter has any existence), that under the circumstances doubt is the truest wisdom :

> There lives more faith in honest doubt,
> Believe me, than in half the creeds.

An examination, however, of this position shows inconsistency and indeed contradiction. The assertion " doubt is the truest wisdom " is put forward either as (*a*) a sure principle, or (*b*) as a doubtful one, or (*c*) as neither certain nor doubtful. If the first supposition be taken, it is clear that a positive and certain principle is laid down in direct contradiction to the fundamental tenet that " nothing is certain," and in the second and third hypotheses the element of doubt is fatal to the value of the statements. Nay, the expression of an opinion on the part of the sceptic involves at least three contradictions : (1) he assumes as certain his own existence ; (2) he accepts the truth of the principle of contradiction inasmuch as this principle underlies every statement ; and (3) he draws a distinction between knowledge and ignorance, between certainty and doubt. Scepticism stands self-condemned.

Idealism is a modified form of scepticism. Idealists admit the certainty of states of consciousness. The " monistic idealists " recognise the unity of the subject which experiences the states of consciousness in contradistinction to the " pluristic idealism " of Hume and others who held that the succession of conscious states are so many separate experiences without an underlying unity of subject. Monistic idealism is subdivided according as the percipient subject is

believed to be the individual "ego" (subjective monistic idealism); whereas if the percipient subject be a world mind (universal consciousness, of which the individual mind forms but a manifestation) another form of idealism emerges, objective monistic idealism, of which Fichte, Hegel and Schelling were the chief supporters. Berkeley, bishop of the Irish diocese of Cloyne, taught that God acts upon our sensitive powers so as to produce the appearance of an external world, whereas the only real objective beings are spirits. This form of idealism is no longer held, nor did Berkeley ever succeed in reconciling the deceitful appearance of phenomena with the truthfulness of God. Perhaps the most striking example of an idealistic system logically developed is that of Kant. He attributes to the human mind three main cognitive faculties—perception, understanding and reason. Each of these faculties contains forms of thought by the application of which to the materials given in the senses knowledge in the scientific sense is produced. Perception has two forms—time and space. Understanding has twelve categories under four general heads—quantity, quality, relation, modality; and reason seeking after unity places before itself ideals in which the phenomena of consciousness, of the outer world and of possible existence are summed up. Hence the ideals of the soul, of the universe, and of God. And these ideals are not objects of actual and positive knowledge, but regulative principles which guide reason in its search after highest truth.

It will be sufficient in this chapter to point out two objections fatal to Idealism. First it misapprehends the true meaning of Knowledge. The mere succession of mental phenomena can never furnish materials for scientific knowledge, unless the mind can grasp the causal relations which bind them together. The discovery of the planet Neptune is a case in point. Leverrier and Adams both noted irregularities in the orbit described by Uranus which led them finally to postulate the existence of another planet. Here surely was a suggestion, the truth of which depended upon the reality of the force of attraction, the respective positions of the planets and other objective considerations. And though

Neptune had never been recognised as belonging to our solar system and was invisible to the naked eye, the astronomer relying upon the objective truth of physical principles was able to indicate the portion of the heavens where the new planet would be seen, if suitable optical means were employed. Physical science and Idealism are not compatible. The second objection is equally strong: every form of Idealism questions the truth of the information derived from the perceptive faculties, and thus logically leads to Scepticism.

Some students of philosophy take up a position midway between Idealism and Natural Realism. They are known as Critical Realists. Their system rests upon a fundamental principle which may be stated thus: states of consciousness are primarily known and from them by aid of the principle of causality, the inference to the objectivity of the external world is made. But the question arises how can the truth of the law of causality be known unless we are assured of the real existence of cause and effect which our sensitive faculties perceive? The intuitive principle of causality is recognised by the intellect from the materials furnished by sense-perceptions; so that to invoke the aid of causality in order to establish the objectivity of sense-perceptions is a flagrant instance of the logical fallacy known technically as "petitio principii," or in more familiar language the fallacy of the "vicious circle." But even if the truth of the principle of causality be granted, the only inference which can be made is that there is an external cause of sensitive cognition, but of the nature of the cause nothing is known. Critical Realism is thus seen to be practically identical with the phenomenalism of Kant alluded to above.

Special attention must now be given to an examination of the chief principles of Natural Realism, the most fundamental and important of which asserts that we have an *immediate* perception of the outward world, that sense-impressions are not directly perceived but determine the sense to the *immediate* perception of the outward object. This is the complementary truth which, overlooked by Idealists, vitiates their

conclusions. No matter how logical their reasoning may be, if it sets out from faulty premises, the harvest of error will be more abundant in accordance with the efficiency of the logical process.

Scholastic writers distinguish between the primary and secondary qualities of bodies: the primary qualities, extension, movement, etc., capable of being tested by more than one sense are called "sensibilia communia," whereas each of the secondary qualities appeals to one particular sense, colour to the eye, sound to the ear, odour to the nose, taste to the palate, sense of resistance, of heat and cold, to the touch. Hence a secondary quality is appropriately named "sensibile proprium." Students of Natural Science have succeeded in making interesting discoveries regarding the nature and causes of secondary qualities of bodies. Sound, for instance, has been analysed as the energy of a body propagated by air—an energy which is perceived when the air-waves reach the ear. There are three qualities of sound well known to students of the subject: (1) intensity (loudness), which is due to the amplitude of the vibration; (2) pitch, due to the length of the vibrating body, and consequently to the number of vibrations per second; and (3) timbre or quality of tone. "Doh," for instance, sounded on a piano may have the same intensity and the same pitch as "Doh" sounded on a violin, but the two notes will differ markedly in timbre. The strings both of the piano and violin vibrate as whole strings, but there are minute vibrations of portions of the strings forming "overtones," which, coalescing with the principal tones, give to each note its peculiar quality. The number of vibrations per second of a note compared with those of an octave higher gives the proportion 1 : 2. The vibrations per second of C and G are as 2 : 3. Those of C and F are as 3 : 4. The number of vibrations of F, A, and C' are as 4 : 5 : 6.

Interesting discoveries and speculations have been made also in regard to Colour. The energy of the molecules of a body (e.g. the Sun) propagated by transverse vibrations of ether are said to be the fundamental cause of colour, and the

perception by the eye of this undulatory energy constitutes the sensation of colour. It is well known that the light of the Sun may by means of the spectrum be split up into seven different colours—red, orange, yellow, green, blue, indigo, violet. The analogy between the seven notes of the musical scale, doh, ray, me, fah, soh, lah, te, and the seven spectral colours is striking and suggestive. It has been estimated that the vibrations per second of the red rays of the spectrum are about 460 billions, and those of the violet rays 670 billions. Whence it appears that colour is the "pitch" of light. Again we are assured that when sunlight falls upon a body—say upon the red petals of a rose—owing to their molecular constitution the petals absorb all the rays except the red which are reflected to the eye. In case of black objects all the rays are absorbed, whilst all the rays are reflected from white surfaces. And the conclusion is formed generally by scientists that colour exists in bodies in the sense that they possess a certain selective or absorptive power. Colour exists fundamentally or causally in the external object, and exists in its formal character of colour only in the eye.

Many writers of the Neo-scholastic school accept the general teaching of scientists in regard to the subjectivity of secondary qualities of bodies and justify their acceptance by the following arguments to which we shall endeavour to do the fullest justice. Our criticism of this aspect of Natural Realism will follow in due course.

A. Thesis in Regard to Sound

If the truth of perception requires that in the vibrating body or air, sound should exist objectively as it is perceived, then it must exist objectively with the same intensity, pitch and timbre wherewith it is perceived.

But that is impossible.

Therefore the truth of the perception does not require, etc.

The minor is proved as follows:

(*a*) Intensity. Loudness or intensity decreases as the square of the distance. Two men placed at different distances

from the sounding body perceive different intensities. But if they both hear the sound as it exists in the body, there must be different intensities there at the same time.

(*b*) Pitch. A simple diagram will illustrate the argument in this case.

A ——————— S ——————— A^1

Let S represent a railway station. A indicates an approaching train. The pitch of the engine's whistle when first heard as it approaches the station is recognised to be soh (G), but when the whistle is sounded in the station preparatory to departure, the pitch is fah (F), and as the train recedes in the direction A^1, the pitch sinks to me (E). From the scientific standpoint there is a satisfactory explanation. The air-waves created by the whistle of the approaching train, falling with accelerated frequency upon the ear, raise the pitch, whilst falling with less frequency as the train recedes, the pitch is lowered. And many writers of the Neo-scholastic school appeal to this experiment as showing that sound does not exist formally outside the sense. "The engine-driver," they say, "hears the note fah (F) all the time. The listener at the station hears soh, then fah and finally me. If sound exists objectively as heard, we have contradictory and confusing results."

(*c*) Timbre. The quality of a tone can be artificially produced by the vibrations of a number of distinct bodies (tuning forks). In this case of artificial production no individual body can lay claim to the formal sound. But the quality of a note is due, as explained above, to the overtones which come from segments of the string and which correspond to the tuning forks. In no case then can the particular formal sound (timbre) exist objectively.

B. Thesis in Regard to Colour

The Neo-scholastics for the most part accept also the subjectivity of colour. "Colour exists fundamentally in the object and formally in the sense." And the following arguments are advanced in support of this thesis.

(*a*) Argument based on the "interference" of light. In the case of a soap-bubble if observers be differently stationed, one notes that a certain part of the bubble is red, another judges that same part to be green, whilst a third concludes that it is violet. It is contended that if formal colour existed objectively, each observer would see the same colour in the same place.

(*b*) Argument based on mixture of colours. Blue and yellow pigments produce greenish colour. Now the green (if formally present) must inhere either in the aggregate of the particles or in the particles themselves. Not in the aggregate of the particles, which is a mixture of blue and yellow; and not in the particles themselves, which have their own respective colours. The colour of the aggregate, therefore, cannot be explained on the hypothesis of "formal" colour in the object.

(*c*) Newton's disc. The experiment with Newton's disc is well known. It depends on the fact that the eye requires $\frac{1}{8}$ of a second to discriminate colours. The spectral colours on the disc rotated rapidly produce the sensation of white colour. Formal colour is therefore claimed to be subjective.

(*d*) Change of Light. Finally the change of colour produced by change of light points also to subjectivity. Blue and green, distinguishable in daylight, appear in both cases to be green in candle light.

An endeavour has been made to state the arguments for the subjectivity of formal sound and formal colour in the fairest way, but this teaching is open to the serious objection that it favours Idealism. If in truth secondary qualities of bodies are not objective, the inference follows that even primary qualities lose their claim to objectivity, since they are revealed to us by secondary qualities. The extension of a body is known through its colour, and if there is deception in regard to colour, the deception affects the extension. Indeed both Berkeley and Kant deduced their idealistic views from the supposed subjectivity of secondary qualities.

It will be well to indicate first of all the answer to a few

general difficulties before treating specifically those which arise from sound and colour.

1. It is asserted that sound, light and heat are "modes of motion." Granted. But motion is not the *total phenomenon*. Scholastic writers of the greatest weight from Albert the Great and Thomas Aquinas down to exponents of philosophical science at the present day (Gredt, Pesch, Farges, Mivart, etc.) claim that sound and colour and the other sensibilia propria exist objectively as sensible qualities. The total phenomenon is sometimes very different from its constituent parts. Water has no resemblance to either hydrogen or oxygen. Both sound and colour are far more than wave-motion of air or ether.

2. The objection is urged that electrical action conveyed to the retina produces light, applied to the ear produces sound, the phenomena in both cases being subjective.

We do not contend for a moment that there may not be purely subjective phenomena due to artificial stimuli or to some abnormal condition. Our contention is that when the senses in their normal condition perceive sound or colour, these sensible qualities have an objective existence as sound and colour apart from the sense.

3. The Weber-Fechner law is sometimes quoted in favour of subjective sensation. The law claims that increase of sensation (intensity) in arithmetical progression 1, 2, 3, 4, etc., requires increase of the stimulus in geometrical progression 1, 2, 4, 8, etc. The application of mathematical measurement to psychological phenomena must be received with caution. Many question the truth of this law, but granting its truth, it does not in the least tell against the objectivity of sensation. Scholastics have always contended that what the sense perceives is true *as far as it goes, but is not the whole truth.*

We proceed now to criticise the specific arguments adduced by many Neo-scholastics to prove the subjectivity of formal sound and colour.

I. Intensity, pitch and timbre of sound.

(*a*) Intensity. Experiments show that the same sound is

heard with different intensities in accordance with variation of distance. This fact is in perfect accord with the objectivity of sensation which Realists claim. The physical law is well known which states that if an observer doubles his distance from a sounding body the intensity perceived at the new position will be only ¼ of what it was at the former position. But the lessening of intensity in accordance with distance is not a positive error. The sense-perception is true as far as it goes. The sound has *in the ear* the exact intensity which is perceived.

(*b*) Pitch. The argument based upon the change of pitch of the locomotive whistle as it approaches or recedes is not convincing. The supposition is that though the whistle sounds fah (F), the ether vibrations of the rapidly approaching train, when wave overtaking wave they reach the ear are interpreted as sounding soh (G). Realists readily assent. The ear perceives the note soh (G), because the note soh (G) is actually produced *in the ear* by the increase of undulations per second. And if the objection be raised that there is in this case a positive error—inasmuch as the note perceived differs from the actual note—the answer is at hand. The ear perceives not only the pitch of the whistle but witnesses to the fact of the whistle's rapid approach, so that the correspondence between the perception and reality is maintained. Should the ear have perceived fah (F) in this case, the fact would favour the subjectivity of sensation rather than support its objectivity. The note soh (G) is produced in the ear and perceived as such, and if the judgment be made that soh is the actual note sounded by the whistle, the error obviously belongs to the judgment.

(*c*) Timbre. Let it be granted that the ear does not as a rule catch the overtones which, added to the principal tone, cause the quality of a note. But from this fact nothing more can be inferred than that the sense fails to perceive the whole objective phenomenon. As laid down before, the perception of the sense is true as far as it goes, but is not the whole truth.

II. Colour and its manifestations.

(*a*) Example based on "interference" of light. It will be remembered that in the case of the soap-bubble, the same part viewed from different positions appeared red to one observer, green to another, and violet to a third.

It is curious that an experiment which is regarded as a crucial test of the subjectivity of formal colour should lend itself admirably to establish the opposite conclusion. Spectators differently placed viewing the same part of the soap-bubble receive (owing to "interference") some and not others of the spectral rays. The red rays forming red colour are received by one, green rays forming green colour by another, etc. The sense reports truly but the judgment erroneously refers the colour to the object. Indeed the Neo-scholastic argument in this case proves too much, for not only secondary qualities but the primary quality of extension is apparently affected by distance. A circle appears as such to one spectator, and to another differently placed seems to be an ellipse. And yet the Neo-scholastics contend strongly for the objectivity of the primary qualities.

(*b*) Mixture of colours. Blue and yellow powders give out when mixed a greenish tint. The perception is not false but insufficient. The eye cannot appreciate the inequalities which undoubtedly exist in what is regarded as a straight line, and similarly the eye sees but indistinctly the blue and yellow ingredients. The resultant impression produces objectively a sensible quality resembling green which is accordingly seen.

(*c*) Newton's disc. The experiment with Newton's disc depends upon the fact that the eye requires $\frac{1}{8}$ of a second for the discrimination of colours. When the disc is rapidly rotated, the rays from the spectral colours blend, and reaching the eye simultaneously they form for the eye the quality of whiteness. An authority of great weight records very briefly his judgment on the merits of the view favoured generally by Neo-scholastic writers: "The view you describe is the one which is, I suppose, commonly accepted. It certainly seems to me to imply that the mind, or else, as some think, the sense organ or sense apparatus, including nerve

centres, creates colour, and so it is idealistic (Locke). I do not think that the white appearance of the rainbow disc can be explained by an act of judgment. It is rather purely physiological. Under the conditions the eye is stimulated in the same way as by a white surface and it sees white. There are different theories, as you know, of what the physiological process is. On the Hering theory all the other colour excitements except white cancel each other out and leave only white. There is no judgment involved in seeing white when the eye is excited in the white way. White is the corresponding object. You may say if you like it is hallucination, but in that case every sensation is a hallucination. In like manner when you stimulate a cold point on the skin with a hot tube you have the sensation of cold. The rainbow disc in revolution produces the excitement specific to white and white is seen. I vote for the old scholastic view."

But does not the example of the stimulation of cold points on the skin suggest a want of correspondence between the sensation and the non-mental object and thus favour a subjectivist view? The writer continues: "I do not think that the paradox of the sensation of cold when a cold point is stimulated by a hot tube or metal point favours the view of subjectivism. Of course the solution involves the whole of the opposite or realistic view. The apparatus set going by excitement of the cold point is the machinery for mental response to the non-mental object cold. No matter how it is excited, the object is the same. The way I put it is that this mental response is compresent with cold in the external world. The metal point is not as it happens cold but hot. Consequently it is an illusion if you think that the metal point is cold. But the cold is still not mental but external. It does not happen to be in the metal point but somewhere else. The illusion consists in referring it to the metal point. I am accustomed to describe the process of apprehending the external cold under these conditions in this way. I compare it to turning round to see something which is not in front of you. When the cold machinery is set going you turn round to see the cold in the world. And so the illusion that the metal

point is cold is like squinting. You see the metal point with one eye and the cold with the other. I wish I knew the scholastic writers, old or new. But is not my answer in the spirit of the older writers? You know better than I."

(*d*) Change of light. The colours blue and green cannot be distinguished in candle light. For this light, differing in composition from sunlight, is differently absorbed and reflected by the bodies upon which it falls. Falling upon a blue object, the green rays of the candle light are strongly reflected, thus partially or wholly masking the blue colour. And as green rays are reflected both from blue and green objects, the sensible quality of green is formed and perceived by the eye.

It is sometimes said that the subjectivity of the sensations perceived by the faculties of taste and smell is especially noticeable. The same food, for instance, is appraised differently in accordance with individual taste. "One man's meat is another man's poison." But it must be remembered that the "sensibile proprium" (i.e. the object) of taste is not the food alone, but the food mixed with saliva. Hence individual idiosyncrasies. In regard to odour, it is recognised as due to small particles which are given off by the odour-emitting body, which particles reach the nose and produce objectively the sensible quality. The "sensibile proprium" of touch—the sense of resistance, of the roughness and smoothness of bodies, of cold and heat, etc., have likewise objective existence. Heat, for instance, like light and sound is a mode of motion, but the motion is not the whole phenomenon.

Conclusion

What then do we see when we look at an orange?

1. We see *directly* the orange, the reflected rays from which constitute formal colour which is perceived by the eye.

2. The perception of the colour (or sound) is of course affected by distance. The intensity of the formal colour (or formal sound), which is in the eye (or ear), though distinct from the sense, is the sensible quality which is perceived. In other words, the sense perceives what is true but not the whole truth.