

is that it has only a limited validity and that too most probably in the field of Formal Logic. The great danger that is feared of letting anarchism loose by the denial of this law is strange when we consider the harmony and the agreement achieved by those who have been accepting this law for ages past. Philosophy is known for its proverbial lack of agreements—and was not that Eleatic the first philosopher who said 'A is A'? In denying the absoluteness or supremacy of logic, we are aware of the warning given by McTaggart in his *Studies in Hegelian Cosmology*, that "no man ever went about to break logic, but in the end logic broke him".* But we shall only add what he himself goes on to add after it: "But there is a mysticism which starts from the standpoint of understanding, and only departs from it in so far as that standpoint shows itself not to be ultimate, but to postulate something beyond itself. To transcend the lower is not to ignore it." Logic reveals its own limitations—and that is what we have been trying to show in this chapter. But with us, as with McTaggart, to transcend the lower is not to *ignore* it.

CHAPTER IV

KNOWLEDGE—SCIENCE AND PHILOSOPHY

The second great presupposition, as we saw in our chapter on 'Presuppositions and Implications', concerns both the organon and the object of knowledge. It is believed, or rather implied, that both of these are unchanging and final in character. A difference between 'opinion' and 'knowledge', as we have already seen, was made as early as Ancient Greece. This difference seemed to have been the result of the existent difference between knowledge that was completely certain and knowledge that was only probable. In Mathematics, the Greeks had found a type of knowledge that was so obviously certain that it seemed to provide the standard for all knowledge that claimed universality, necessity or certainty for itself. Further in mathematics they found themselves in contact with a type of entities the validity of whose relational structure did not depend on any specific instance or set of instances. Yet, though the truth and validity of these entities and their relational structures did not depend on any set of spatio-temporal occurrences, the events themselves seemed to observe the laws of those relational structures. Geometry, which seems to be a relational science of points that, by definition, could not exist, provided, then as now, the back-bone of the Engineering Sciences. Thus it came to be conceived that the nature of reality could be determined by an *a priori* consideration of things, for geometry had shown that the world of existent objects conformed, in an ultimate analysis, to the relational laws discovered *a priori*. Thus, long before Kant, the legislative function of the *a priori* had been recognized, though the Greeks were certainly not the persons to relegate the *a priori* to the realm of the mind.

The certainty of mathematical knowledge combined with the non-spatio-temporal nature of mathematical entities, gives rise to another belief, viz., that reality is essentially non-spatio-temporal in character and that true knowledge consists in our awareness of such a reality. Hence the admission of a 'world of Being', the world of Reality as opposed to a 'world of Becoming', the world of Appearance. 'Unchanging Essences', thus, come to form the content of the Real; for, it is felt that there could be no certain knowledge of that which itself was susceptible to change. The certainty of mathematical knowledge was, in fact,

* p. 299.

supposed to follow from the unchanging nature of its subject-matter and hence it was just natural to conclude that only that could be certainly known which was unchanging in its nature.

The search for absolute certainty, at the very beginning of modern philosophy, made philosophers turn again to mathematics for guidance. But this time the certainty was seen to lie in the method rather than in the specific contents of this science. It was the formal, deductive method which was supposed to yield the absolute certainty for which mathematics, by now, had become famous. Hence the search for some universal, self-evident major premise which, through a process of deduction, would serve to determine the nature of reality with absolute certainty. The use of the mathematical method could not, however, leave unaffected the nature of true knowledge and its object as understood by these thinkers. If logical involvement in some self-evident premise be the criterion of a true proposition, then reality must come to be conceived of as a *timeless implication* in some logically self-evident proposition. This was clearly demonstrated in the system of Spinoza where the temporal relation of causality was reduced to the non-temporal relation of ground and consequent. The mathematical method of formal deduction, in fact, can yield no view of reality except that it is an unchanging order in which everything is what it always has been and could not have been otherwise.

In recent times, mathematical analysis and its ultimate identification with logic, has again given an impetus to the use of formal logical analysis in the determination of reality. The result, as is well-known, is an infinite world of atomic propositions which are unchangingly true or false in their own right. Idealistic logic, on the other hand, gives us a timeless Absolute in which all that has to be, has been, and all that can be, already is. The distinction between Russellian and Bradleyan logic, therefore, lies not in the unchanging nature of their reality but in the unity or the multiplicity of its constituents. The correlation between their logic and their view of reality is obvious and they both agree regarding the unchanging, non-temporal character of their logics.

Whitehead has tried to suggest another reason for the unchanging character of Reality, viz., the physical analysis of the Greeks. While the logical analysis had already resulted in the Parmenidean notion of Being, the physical analysis resulted in

the 'Elements' of Empedocles, the 'Roots' of Anaxagoras and the 'atoms' of Leucippus and Democritus. The notion of an unchanging, self-identical bit of matter which is both unbreakable and impenetrable continued to persist till quite recent times, when we were assured that it gave way to revolving masses of protons and electrons which, we are told, are nothing but charges of positive and negative electricity. The common, but understandable, prejudice that the reality of a thing is commensurate with its degree of resistant impenetrability makes it quite intelligible that the truly and the ultimately real be conceived in terms of a self-identical, impenetrable unchangeability which, then, comes to be considered as the only true criterion of the real. Further, the fact of change was not so obvious in the realm of physical and biological nature. Species seemed to be eternal, and mountains and seas unchanging. The rise of the evolutionary sciences like biology, geology and sociology had to wait till the middle of the nineteenth century. The unchanging elements of chemistry and the unbreakable atoms of physics persisted till almost the first quarter of the twentieth century. What is a matter for surprise, on the contrary, is the strange fact that even in the fifth century before Christ, an individual thinker like Heraclitus in Greece and a collective community like the Buddhists in India, were able to forego this 'common, but understandable, prejudice'. Even today when Matter is supposed to have been reduced to Energy and the differences between things to different frequencies in their wave-lengths, the question concerning the *in what* and *of what* of these wave-lengths dies hard.

The substance-quality view of things seems to come natural to us. But whether it is because of the supposed analysis of things implied in the very structure of our language or because of the logical analysis of all propositions into those of the Subject-predicate or Substance-attribute type on the part of Aristotle or because of that fundamental fact of psychological experience which makes us feel an unchanging core at the very heart of all change and experience—is difficult to say. Whatever the cause—and the causes just mentioned are not incompatible—it seems quite clear that the view, however natural, is not necessary. There are primitive languages in which, we are told, the common concept does not occur. They would, for example, have one word for washing the hands and another for washing the clothes, but no word for 'washing'

in general.* The Heraclitean or Humian language would certainly be more akin to such a language than the language we generally use. Such a language does not abstract two permanent concepts of 'hand' and 'washing' and combine them to denote merely a specific instance of some universal occurrence, but takes the concrete instance of 'washing the hand' and gives it a distinct name. Of course, the very formation of language, the very naming of an event involves some degree of abstraction and universalisation. 'Washing the hand', even if it has a distinct name to itself, still involves an abstract generalization of all 'washing of hands'. In fact, each washing of hand is a unique occurrence and, thus, must have a name distinct for itself. No doubt, the whole language would become so prolix and cumbersome as to defeat its own purpose. The concrete specificity is conveyed, almost continuously, even by our language, though with a technique different from that of distinct naming. 'He is washing his hand' is almost a perfect example of the analytico-synthetic way in which the concrete specificity is conveyed in our language. Only the under-tones suggest a substantival analysis of the meaning conveyed—a suggestion that we should hesitate to accept unless supported and substantiated on more independent grounds. Language, in itself, involves neither a static, unchanging view of the objects referred to nor a dynamic and an eternally changing one. It only refers to a 'state of affairs' which may have the characteristic of a 'relative stability' that is practically sufficient for our immediate purposes, or a dynamic, changing character which we may wish to refer to.

Language is, thus, primarily *instrumental* in character. It is an attempt to communicate a 'state of affairs' which is, generally, not perceptually, or rather experientially, present. It can, therefore, convey both the stability and the change that is actually involved in almost all experience. Language, in order to convey

* "It is of interest to note that many primitive languages are very deficient in names for more general objects; though they may have a profusion of names for special classes of objects of practical importance. It is said, for example, that one tribe of American Indians had names for the white, the black, the red and the burr oak, but none for oak in general. Another tribe used thirty different words to denote different kinds of washing—washing one's own face, washing the face of another, washing hands, washing clothing etc. but no word to express washing in general. The Australian aborigines, it is said, had no names for general or abstract objects; they had a distinct name for each of the many species of trees, but no name for tree in general, and no names for such abstract objects as hardness, softness, warmth, cold, shortness or roundness." *An Outline of Psychology*, William McDougall, p. 385.

the specific particularity or change of experience, need not itself be changing or specifically particular. This, we suspect, is the mistake of Bergson who seems to think that the moment we say 'this', we make of reality something unchanging, something abiding. No doubt, the static view of things is suggested, nay, even covertly facilitated, by most of the language we use. The use of a common word for different things or types of experiences, naturally suggests that there is something distinct corresponding to that word, distinct from all the things or the experiences to which it is usually applied. Socrates was not the only person who went in search of the distinct concepts denoted by such words as 'Justice', 'Love' or 'Beauty'. Plato was not the only one who tried to find the 'horseness' that was distinct from all horses and by virtue of which each horse was a horse. But such procedure, even if not uncommon, is by no means necessary. One must only grasp that language has no *intrinsic* meanings of its own and is, therefore, *purely referential* in character. One who doubts this can easily convince himself by reading or listening to a language which he does not know. Of course, one may always slip into the under-tones suggested by the language and, as Russell has somewhere remarked, it is so difficult to express one's meaning exactly except in the symbolic language; but, in spite of it all, the difficulty can be avoided and the besting sin overcome—for, consciousness, as Hegel said, is another name for freedom.

The Aristotelian analysis of all propositions into those of the Subject-predicate type has, undoubtedly, had a tremendous influence on the Substance-attribute view of Reality. But as modern logic has almost conclusively shown that all propositions cannot be reduced to the Subject-predicate type, the Substance-attribute view of Reality is, by no means, necessary. Of course, modern logic, in its own turn, has given rise to what Russell has called 'logical atomism', a doctrine that introduces us to a world of infinite, unchanging propositions which are eternally and absolutely true or false in their own right. Russell is quoted by Joachim in his *The Nature of Truth* as having written "that there is no problem at all in truth and falsehood; that some propositions are true and some false, just as some roses are red and some white; that belief is a certain attitude towards propositions, which is called knowledge when they are true, error when they are false".* We are not, however, concerned here with the question whether the statement just quoted can be exactly said to represent

* p. 37.

Russell's views. There seems to be little doubt that Russell will admit the fact that, at least, certain propositions can only be considered to be true *because* certain others have been *assumed* to be such. That the necessity of the axioms is not intrinsic to them, but is only the necessity of the System, has been a doctrine preached so explicitly by Russell that he calls them 'assumptions' and not 'axioms'. But that there is a deep suggestion of 'logical monadism' can hardly be denied. Present-day logic can, perhaps, fight successfully an unchanging *Monism* of the Spinozistic variety but whether it can, equally successfully, fight against an *unchanging Pluralism*, is another question. Both for the monistic Spinoza and the pluralistic Leibnitz, Time is something unreal. All that is to be, has already been and neither the Substance can have any Attribute or mode which it already has not nor can the monad have any clear representation of what is not already there as confused. Thus Logic, whether it be Aristotelian or Russellian, seems always to suggest an unchanging view of Reality—a suggestion that should, at best, be treated only as a suggestion. Logic, by its very nature, cannot deal with anything except formal, implicational structures which, by their very nature, are unchanging. But this need not necessarily lead us to think that all that is real is unchanging, unless, of course, we are convinced that to be real is to be logical, a view that we have already examined and found wanting.

The fact of experience, again, is undeniable. And about experience it must be said that we do feel an unchanging core at its heart, a feeling that has received its clearest recognition in the philosophy of Sāṃkhya. The pure, unchanging, inactive Puruṣa is merely a transcription of this feeling into one of the usual categories of philosophy. The pure Dṛaṣṭā who is neither a Kartā (agent) nor a Bhoktā (enjoyer) seems to be merely an articulation of the Witness-Consciousness, the eternal Bystander that seems to lie under or along with all experience whatever. The concept of the Ātman goes still deeper; it tries to articulate that which is not even the seer. The immobile Stasis which seems to lie untouched underneath all experience and seems to have no relation to all that we feel, know or do is the sanction behind this profound Vedantic concept. Change and mutability seem, at best, to be suffered as a superficial interplay, which almost is not, on this Vast Immobile Stasis that refuses to be caught or even stir itself into any formulation whatsoever. This, evidently, does not mean that change, mutability and multiplicity are all unreal or illusory, but only that there is a certain experience in

which they are felt as unreal or superficial. The possibility of a counter or contrary experience is not eliminated or negated by this experience. In fact, the Buddhistic experience is such an experience where the abiding self seems to be unreal. Phenomenalistic formulations of Hume and the Buddhists conceive of experience as a continuous flow in which the experience of identity is unreal or illusory. Bergson, in recent times, has conceived of Reality as 'l'intuition durée' while the experience of identity is ascribed by him to the falsifying character of Intellect. These counter-formulations of Bergson, Whitehead, Hume and the Buddhists clearly suggest that the psychological feeling of an unchanging core at the heart of all experience is not inevitable. And even if inevitable as a fact of experience, it need not *necessitate* an unchanging view of the real or of *all* of our objects of knowledge. Just as the supposedly static character of language or logic does not necessitate the unchanging view of the real, so also we find that the psychological experience of a static immobility does not lead to any inevitable conclusion either way.

Thus neither logic, nor language nor experience *necessitates* the view that the object of knowledge must *necessarily* be unchanging, but only that in *certain cases* it is so. This would, of course, be sufficient to disprove the view that no object of knowledge can be unchanging but it could hardly suffice to establish that *all* objects of knowledge *must be* unchanging. In fact, change and permanence both seem to be elements in experience and the problem with philosophers has always been to decide which is real and which is illusory. The relation between change and permanence has been classically formulated in the doctrine that the Substance remains unchanging while some of its qualities may change. We are not here concerned with the tenability of this doctrine or that of the objections made against it, but merely with the *fact* that the *two opposing elements are recognised* and the need for some intelligible relationship between them admitted.

The different factors that we have pointed to, have led in the past and commonly lead even now to the acceptance of the view that only what is unchanging can be truly known. The reason for this is not difficult to understand. Behind all the factors that we have pointed out lies the simple question: how can we know a thing which, in its very being, is continuously changing? For a thing to change in its very being is to become an entirely different thing and if such change be continuous, it is impossible to know or conceive of any thing at all. At best, we can have a picture of static, atomized bits of time which are what they are

and which can hardly be said to have any relation with any other bit of time—a direction which would ultimately lead to an extreme atomistic monadism of the Antisthenian variety. A moving arrow, then, would seem continuously to be at rest, for at every moment it is where it is. Bergson has characterized this as the static view of change which intellect, because of its very nature, cannot but conceive as composed of bits which have a self-identical unchangeability in their very nature. Time is conceived as a mere succession of unrelated and self-identical ‘instants’ while space is thought to be a simultaneous coexistence of points which are each different from the other. Hence, ‘to know’ means to know something unchanging, whether we take this, with Bergson, as something to be overcome or, as with most other philosophers, something to be accepted. Intuition is supposed to give not the juxtaposed, static, snapshot views of the change, but the change in its very living motion itself. Thus, Intuition that gives you the feel of that Living Change, finds itself contrasted with Intellect which is supposed to give an atomized, static view of objects.

This diametrical contrast, however, loses its significance and purpose when it is simultaneously asserted that the one alone gives Reality while the other falsifies it. The throbbing pulse that one seems to feel with an intuitive identity is, undoubtedly, real, but, so also, is the static contemplation of unchanging objects which, at least to the usual experience, do not seem to change. Unchanging objects are supposed to be impossible because of the fact of time, which, from its very nature, must make, at least, some difference to the thing. The thing at one instant cannot be the same as the thing at another instant, because the second instant is obviously the second and not the first. The notion of a ‘thing’ as persisting or as ‘something’ to which or in which the changes happen or as the identical substratum of changing qualities, has so often been refuted in the history of philosophy, particularly in the classic arguments of Hume and Hegel, that we need not tarry or repeat. Of course, the statement that ‘things persist’ conveys a definite meaning—a meaning that remains entirely unaffected by the alleged inadequacy of the logical analysis involved. Even here, Russell has tried to show that what we want for the adequate conveying of our meaning is not the persistence of ‘things’ but the persistence of ‘effects’.

The Law of Contradiction seems to get its supposed invulnerability not from some psychological self-evidence or logical indisensibility but from the supposedly necessary atomicity in our

conceptual analysis of Time and Space into ‘instants’ and ‘points’ respectively. The reason why a table cannot be both circular and square at the same time is not *merely* that ‘circular’ and ‘square’ are opposed concepts, but *also* the fact that the moments of time are instantaneous, for it certainly is not denied that one and the same table can be circular at one moment and square at a different one. It is only at any one particular ‘point-instant’ of Space-Time that the entity called ‘table’ cannot be *both* circular and square. Of course, the supposedly intrinsic opposition resulting in the quality of mutual exclusion is also important for, otherwise it would have been impossible to ascribe both ‘circularity’ and ‘redness’ to the entity called table at the *same* ‘point-instant’ of its space-time. What is meant is that there is always a specific determination in some particular dimension, a determination that, by its very existence, excludes other determinations of that dimension. Of course, a thing may be quite ‘open’ with regard to some dimension i.e., it may have no determination at all with reference to that dimension—for example, colour.

The ‘point-instant’ analysis of Space-Time, on the other hand, may make it impossible for the table to be circular and square even at different times for, it may easily be urged that the table at a *different* ‘point-instant’ of Space-Time is not the same but a different table. If we symbolise the first table by A, then the second table is not A but A’. For logical purposes, A’ is not different from B; it merely suggests that there is greater similarity between the two. The one-one correlativity is complete except with relation to spatial and temporal diversity. This, by no means, makes the correlativity complete and, therefore, the two should be understood as two and not the different but changing states of the *same* thing. Joachim, for example, makes this an argument against Russell and writes: “If the simple ‘greenness’ becomes *numerically* multiple in the different complexes of which it forms a constituent, how can it be said to be ‘unaffected’ by being related to different entities? Whilst, if it does *not* become numerically multiple, how can it—a simple numerically identical entity—enter into different existent complexes?”* The notion of a ‘substrate’ in which qualities inhere, a substance which remains the same even when qualities change is, as the arguments of Berkeley and Hegel have amply proved against Locke and Kant, logically untenable. Thus the ‘point-instant’ analysis of Space-Time may result in the dissolution of

* *The Nature of Truth*, p. 47. Italics ours.

the notion of a self-identical, persisting thing and this is what has happened in the systems both of Whitehead and Russell. Of course, as Joachim has pointed out, the problem would then arise as to how these self-identical, atomic identities have relations to each other, without which the whole world of sense-experience would remain unintelligible.

In fact, from the analysis of Space-Time into point-instants two possibilities emerge. Either we may deny reality to all change and time, for a thing can certainly not be what it is not, or we may deny the very notion of a 'thing' and conceive of Reality either as a continuous Flow or Process in the sense of the Buddhists, Bergson and Whitehead, or as 'windowless' atomic bits which have no relation to each other. Leibnitz seems to have anticipated Joachim's objection and that is, perhaps, why he made his monads 'windowless'. The first alternative has so often been adopted since the time of the early Eleatics that one begins to suspect whether there was no ulterior psychological motive behind the choice. All the same, the second alternative has become quite the fashion in recent times. Pluralism is implicit in the atomistic analysis of time and the attempt to conceive of Reality as a Flow or Process is, in fact, to give up that atomistic analysis. Bergson has been quite conscious of this fact, but Whitehead, who has conceived of Reality under the fundamental category of 'Creativity' and has dissolved the notion of a 'thing' into that of a 'prehending Subject-Superject', seems at times perhaps to fall into the fallacy that the 'Subject-Superject' can sometimes become completely the 'object' or the 'thing'.

The Law of Contradiction may go still deeper and refuse to presuppose the atomistic analysis of Space-Time into 'point-instants'. It may be—and has been—urged that the inevitable contradictions arising from the inescapable distinctions of 'present', 'past' and 'future' and the equally inescapable analysis of time into 'instantaneous moments', each different from the other, necessitates the giving up of time as something 'unreal'. This has been the recent view of Mctaggart as presented in his *The Nature of Existence*. Of course, Mctaggart has not been the first, nor perhaps the last, to abandon the concept of time on the ground that it involves contradictions. Russell, as we have already seen at the beginning of our last chapter, has suggested that it is due to a mistaken analysis that contradictions are supposed to be involved in any atomistic analysis of space or time. In this connection, he has reminded us of Cantor's classical solution of the problem of Infinity. We are not interested here in the specific

arguments of Mctaggart and Russell, but in the deeper contention that if the analysis of the notion of time reveals that it involves contradictions, then the notion should be given up. This, obviously, would be a pointer that the Law of Contradiction goes deeper than the atomic analysis of time, for the atomic analysis itself is given up or, at least, seen to be positively untrue if it leads to contradiction. Bergson feels that the analysis of time into juxtaposed instants of present, past and future should be given up, while thinkers like Mctaggart, who are convinced that this analysis is inescapable, inevitable and necessary, contend that the notion itself be given up. Even Russell tries merely to assert that the contradiction involved in the analysis is only a supposed contradiction. Thus, however much we may think the atomistic analysis of time to be intimately related with the Law of Contradiction, the law when it turns against the analysis itself reveals its ultimate independence of it.

This independence may perhaps lie in the second factor we noted while explicating the Law of Contradiction. The supposedly intrinsic opposition, resulting in a mutual exclusion among the determinates of the same dimension was the other factor that we found to provide the back-bone of the Law of Contradiction. It was because the 'square' and 'circular' were supposed to exclude each other that the entity called 'table' could not be thought to be both 'circular' and 'square'. On the other hand, because 'square' and 'red' and 'beautiful' are not supposed to exclude each other, it is said that there is nothing wrong in a table being both 'square' and 'red' and 'beautiful'. This supposed exclusion may either be due to a logical exclusion of concepts or a sheer psychological difficulty in imagining the two together. The first, for example, is supposed to be the case with such concepts as 'triangular' and 'square'. Now, the logical identity of such concepts can easily be proved if all the mathematical functions of the one can be performed by the other. If, for example, the two opposite sides of a square be joined by a diagonal, then it is quite easy to see that the square is composed of two right-angled triangles. For all functional purposes a square, then, is equal to two right-angled triangles while a right-angled triangle is only a half square. Similarly a curved line is supposed to be opposed to a straight line. Yet, it is a well-known fact that the curvature of a circle is in inverse relation to the length of its radius. In fact, a circle with an infinite radius can, for all functional purposes, be treated as a straight line. Mathematically, then, the notions of 'curved' and 'straight' are not intrinsically opposed to each

other. The felt 'incoherence' or 'incompatibility' is *primarily* psychological in character ; it hardly affects the logical equivalence of functions which each can perform for the other.

This is still more evident in the 'wave-particle' controversy about the nature of light. 'Waves' and 'particles' seem so obviously opposed to each other that each seems to exclude the other. Yet, recent work on light seems conclusively to show that it should be conceived both as a wave and a particle and if this seems to some a psychological absurdity, it need only be pointed out that what we are talking about is 'functional compatibility' and not 'perceptual identity'.

The 'intrinsic opposition', then, is not generally a logical opposition of concepts but a sheer psychological difficulty in imagining the two together. The empirical incompatibility among the determinates of *different* dimensions is merely the observed incompatibility between the habits of behaviour of different things—an incompatibility that, at best, is only highly probable and, at worst, sheer prejudice. Among the determinates of the *same* dimension, 'incompatibility' seems more surely to be entrenched but even here it will be found to be merely psychological, unless, of course, it be buttressed by the atomistic analysis of both space and time. A thing can, certainly, not be both blue and red but this, as we have already pointed out, can hold good only under the proviso 'at the same point-instant of Space-Time'. True, the qualitative diversity between blue and red does not cease to be such, but their incompatibility seems hardly to follow except from the psychological difficulty of imagining the two together. No doubt, the contrast between blue and red does not vanish and, in fact, we may put the whole case by saying : 'the blue is not red, and the red not blue'. Ultimately, it is the Law of Identity that seems to loom large behind the Law of Contradiction and the latter seems to be, at best, but a reformulation of the former. 'A thing cannot be what it is not' is just an indirect way of saying that 'it is what it is'. The correct formulation of the Law of Contradiction will, therefore, be, not that 'A cannot be both B and Not-B' but that 'A cannot be B', if 'to be B' means to be something different from A. Ultimately, therefore, both the Law of Identity and the Law of Contradiction are but the positive and negative aspects of the same rule that 'within the context of an identical discourse, a term or a symbol should have one and the same meaning'.

The formal equivalence of symbols in a deductive system shows that the symbols, though seemingly different, mean the

same thing. The inherent exclusion implies that the one symbol can never be substituted for the other. For example, if $\sim p$ denotes all that p excludes, then $\sim p$ can never be substituted for p . But $\sim \sim p$ is the formally equivalent symbol of p , and is thus identical in meaning with it. In the context of empirical objects, this law requires that the words should have determinate and unchanging referents within the specific discourse in which they are occurring. The word 'cat', for example, has a determinate referent, the perceptual object generally denoted by the term 'cat'. So also the word 'elephant'. Both the words, not being onomatopoeic, do not *intrinsically* refer to their specific referents. Therefore, there can certainly be nothing wrong if the specific referents of the two words are interchanged except that it will cause utter confusion to those who are not aware that the referents have been so changed. In fact, the meaning of these words itself has had a history and it would be only a person ignorant of the evolution of language who would think otherwise. Not only the meaning but the very sound, the pronunciation, the spellings have all undergone such a profound change that the parent-word will appear absolutely incomprehensible to a modern man. Yet, even if the referents are interchanged, they will have to be *consistent* in the new usage, if the intelligibility of the discourse is to be saved. What is meant is the simple fact, that language, being primarily an instrument of inter-communication, cannot, without defeating its own purpose, use the same word indiscriminately to refer to different referents within the same discourse. There may, of course, be a play on the double meaning of a word but then the purpose is not to communicate a referent but to arouse a feeling of absurd incongruity which may result in laughter. Thus the Law of Identity, and with it the Law of Contradiction, is merely a rule of linguistic convenience, whether symbolic or otherwise.

Of course, it may be asked: "Does not this inevitable rule of linguistic convenience point to a deeper self-identity among the referents themselves and, in fact, is not the rule inevitable just because the referents themselves stand to each other in a relation of excluding opposition?" It should be easy to point out that because the referents 'cat' and 'elephant' exclude each other, therefore, on that ground alone, the symbol for each must be separate from the other. It will be foolish to deny the qualitative diversity involved in most of our experiences and we, in fact, have not been denying it. The square and the triangle, as Gestalt psychologists have definitely proved, are perceived in

their distinct structural organisations ; and so also 'blue' or 'red' or any other empirical referent that occurs in experience. But as we saw in the case of the 'square' and the 'triangle' or the 'wave' and the 'particle' the psychological opposition does not always imply a logical opposition of concepts. It may, however, be objected that even in the logical equivalence of these concepts the difference between the two persists—albeit, in a quantitative form. Outside the field of experience, the difference between different things can only be conceived as a quantitative one. From the shortest wave-lengths of the cosmic rays which have a frequency of about 10^{12} and a wave-length in the dimensions of 10^{-12} to the wave-lengths which seem scarcely to have any higher limit the difference is always a quantitative one. Of course, the qualitative emergent is associated not only with the frequency of the waves or the numbers of atoms but also with the pattern of their organisation. The pattern can only with difficulty be considered a quantitative factor though, undoubtedly, as it is nothing but a spatial configuration it may be treated as geometrical, and hence quantitative. Even then, it seems difficult to remove all quality from the very heart of matter for, even among the microscopic constituents of the atom, the difference between electrons and protons—the negative and positive charges of electricity—survives.* Leaving aside the question whether a complete quantitative reduction is possible or not, or whether the notions of 'positive' and 'negative' or even that of 'pattern of organisation' are considered to be qualitative or otherwise, we can fairly understand what can be meant by the persistence of the difference—albeit in a quantitative form. A square, we found, could be treated as functionally equivalent to two right-angled triangles and a right-angled triangle as equivalent to half-a-square. Here, obviously, the difference persists between the quantitative ratios—one square being equal to *two* triangles and one right-angled triangle being equal only to *one-half* the square. It could easily be urged, therefore, that the logical equivalence between different concepts could only be considered as established if we choose to disregard the quantitative differences as relevant to the constitution of the concepts themselves. This, we believe, would hardly be denied in the case of concepts to the constitution of which the quantitative notions are irrelevant ; excepting, of course, in the most general sense that because there

*Of course, there are not merely electrons and protons, but neutrons, mesons positrons, etc., etc.

is some difference—no matter, if only quantitative—there must be *some difference* in the concepts too. The concept of 'square', for example, contains in its constitution only the quantitative notions of the number of sides (4) and the degree of angle (90°). The length of the sides, however, it does not determine in any way except that they must be equal. In other words, it is irrelevant to the constitution of the concept of 'square'. But each square would have some determinate length and, because of this, it may be urged that the length of the sides is constitutive, at least, of the concept of square in its determinate specificity. But this would be to destroy all difference between concepts and existents and, in effect, to misunderstand the nature of concepts.

There can, therefore, be a *functional* equivalence of *concepts* as well as an indistinguishable similarity between psychological sense-data. Equally, there can be an excluding opposition between both. In the realm of pure logic, it simply means the impossibility of substituting one set of symbols for another. If the symbols can be so substituted, then they are logically equivalent or formally identical. In the realm of experience, the fact of excluding opposition is ultimately psychological in character and is, thus, only more or less probable. Empirical incoherence is always experiential, and if experience reports factual incoherence or even suggests that the so-called incoherence is not incoherence at all, then no argument from symbolical opposition should be brought in to invalidate that report, for the incoherence was supposed to be grounded on experience and not on the logical opposition of formal symbols. To take but one example, the fact of ambivalence brought to light by modern psychology should not be opposed by any such argument that to affirm love and hate of the same mental state is a contradiction in terms for, the so-called opposition was supposed to be grounded on experience, and if experience reveals the opposition to be invalid, no other ground can be found still to uphold the validity of the opposition. Of course, if the concepts were previously defined in a way so as to exclude each other because of the supposedly experiential foundation, they should now *be redefined* in a suitable way so that they may eliminate their supposedly opposed character. The Law of Contradiction, then, primarily applies to concepts and not to things denoted by the concepts and, hence, can always be met by a suitable reformulation or redefinition of concepts.

It is almost certain that we shall be told of the mistake we are making in taking the laws to be laws of thought and not of things. We are certain to be reminded of Hegel who is supposed

to have refuted—once and for all—the distinction between ‘thought’ and ‘being’. But we have already discussed the problem in our chapter on ‘Logic and Reality’ to reopen it here once more. It should be clear, however, that we are not denying the *formal* validity of the Law of Contradiction—in fact, it is our contention that its greatest value lies just in the field of these formal deductive structures which, however tautological, have great value in and by themselves. Fundamentally, in this field, as we have already said, it is the necessary counterpart of the Law of Identity. Prof. Bosanquet in his discussion on ‘The Philosophical Importance of A True Theory of Identity’ in his *Science and Philosophy* objects to the formal, symbolic presentation of the Law as ‘A is A’. He writes: “If we take A is A in the sense to which I object as meaning that the real type which underlies the judgment is an identity without a difference, we simply destroy the judgment. There is no judgment if you assert nothing ; and if there is no difference between predicate and subject, nothing is asserted.”* In fact, Prof. Bosanquet objects to the use of any letters at all for, according to him, they can hardly represent or symbolize the judgment in its essential intrinsicity. He himself says : “In point of fact, the letters, taken as mere letters, are atomic existences, and the judgment cannot be represented by their help.”† He then continues: If you “try to whittle away the differences and leave the identity, you will find that when the differences are all gone, the identity is all gone too.”‡ But it would be difficult even for Prof. Bosanquet to deny the existence of such a thing as symbolic logic. In fact, the symbols never claimed to represent what he charges them as failing to represent for the very simple reason that the symbols never represent the matter at all. Formal logic does not deal with ‘judgments’ or ‘propositions’ but with what Russell has called ‘propositional functions’. That certain characteristics are possessed by the form of a proposition with complete irrelevance to the specificity of its contents and that these characteristics have various formal properties of their own, is a truth which will be denied by few thinkers in the field of logic. In fact, Prof. Bosanquet is right when he contends that the propositional function ‘A is A’ asserts nothing and is, therefore, no judgment at all. Only he has forgotten that it was never *meant* to assert anything ; that it never conveyed some ‘real type’ which underlay the judgment in the sense that it was ‘an identity without a difference’. What it

* p. 35.

† p. 36.

‡ p. 37.

meant was simply a rule of linguistic convenience that one symbol should refer to only one determinate referent in one and the same discourse. Of course, this formal tautological self-identity may appear *trivial* to thinkers like Prof. Bosanquet but then, for the moment, we are not concerned with the question of its triviality but merely with the determination of its exact meaning and significance.

In the realm of experience, on the other hand, the rule is, at best, a heuristic hypothesis ultimately supported by psychical exclusion of different elements in experience and an atomistic analysis of space and time. The incompatibility of empirical characteristics is only empirical and hence whether there is an incompatibility or not can only be decided by experience. Even then that incompatibility will only be in the nature of an ‘is’ and not in the nature of a ‘must’. The supposedly atomistic character of space and time is the last stronghold through which the inherent incompatibility of empirical characteristics can be saved. Thus writes Durant Drake in his contribution to *Essays in Critical Realism*: “No existent can have (or be) contradictory qualities ; it *must* be one particular somewhat and nothing else, just as it *must* occupy one position in space and time and no other”.* This ‘axiom of uniplicity’, as Montague has called it, is to Prof. G. E. Moore, according to Drake himself, merely an ‘assumption’. And what has appeared as an ‘axiom’ to one and as an ‘assumption’ to the other becomes for Prof. A. N. Whitehead, what he bluntly calls ‘the fallacy of simple location’. It does not seem nonsensical to Prof. Holt to hold that the object of perception possesses all the incompatible sense-qualities that are ever perceived and that the physiological organism picks out and selects only those qualities out of them which it is fitted to pick and select. This physiological fitness of the organism for selecting certain specific particularities out of the objective world can hardly be doubted in face of the increasing evidence of science. Even in the field of qualitative organisations, which Gestalt psychologists have definitely proved to be genuine objects of perception and not mere inferences, examples can be found where the pattern perceived is so obviously picked out by virtue of the position of the percipient that the notion of a general selectivity by the existent condition of the psychophysical organism can hardly be denied. Sri Krishna Prem, for example, writes about “a children’s toy which consisted of a picture of black and

* p. 19. Italics ours.

white drawing which if looked at from one point of view, was of one subject, say a cottage in the midst of a wood, and if looked at from a different angle, revealed a quite different scene, say someone cooking his dinner over a fire".* So also is Russell's theory of 'perspectives' according to which each 'perspective' is as real or true as the other.

We are not interested here in discussing the validity of these views but merely with the *fact* that the only objection raised against them has been on the ground of what Whitehead has called a 'fallacy'. Thus writes Drake in the same article: "The very meaning of 'existence' involves a definite locus. If a particular somewhat has no particular describable locus, we do not call it an existent." † We do not know whether Drake is merely trying to explicate the notion of 'existence' as used in the common usage or giving some particular reason for holding such a belief. He himself has charged his opponents saying that "few of the upholders of this contention attempt any proof that it is true".‡ Yet this seems to be the very charge that can be brought against him as well. The only reasons that he seems to give are, firstly, that it accords with science and commonsense and, secondly, that it explains the fact of error. We are not very sure whether the first can be regarded as a reason at all and as for the second we are very much in doubt whether it has got anything to do with the point-instant analysis of Space-Time and its correlate notion of 'simple location'. Of course, Mr. Drake is concerned with the problem of 'Critical Realism' but even he will admit the difficulty of accepting as an *axiom* what appears as a downright fallacy to others. We are, of course, not contending that the opposite view has sufficient grounds for it but merely that there have been many thinkers who have remained unconvinced of the arguments for the atomicity of space and time and who, therefore, have either completely changed their notions of these concepts or given them up. What we are trying to show is that the importance of the Law of Contradiction in the field of empirical experience § will merely be that of a *useful workable hypothesis* unless the atomistic analysis of Space-Time be considered an *indubitable fact*.

* *The Yoga of the Kathopanished*, p. 50.

† p. 16.

‡ p. 13.

§ The term "empirical experience" is used to denote experience whose object is of an empirical nature. As "experiencing" all experience is, of course, empirical. But it certainly is not the case with respect to the objects that are experienced. Logico-mathematical objects are one of the classic examples of such kinds of objects. The phrase, therefore, is not so tautological as it may seem at first sight.

At least, this much we believe ourselves to have shown that such an analysis is neither inevitable nor indubitable, in fact, that there have been thinkers of the utmost eminence who have regarded it as a sheer blunder, a positive fallacy.

This lengthy discussion of the so-called invulnerability of the Law of Contradiction was undertaken with a view to examine the *a priori* reason for the view that the object of knowledge cannot but be unchanging. Now that we have shown that it is at best a heuristic hypothesis in the field of experience, we need not be deterred from giving up our presupposition by any supposed grounds of *a priori* reasoning. No doubt, we have admitted its inevitability in the field of formal, deductive sciences like logic and mathematics but then this will only prove that there are some objects of knowledge which are unchanging, and not that all are such. There being no *a priori* reason for the unchangeability of the object of knowledge, and the fact being that there are, at least, some objects which are *prima facie* changing, we do not see any reason why the object of knowledge should be regarded as necessarily unchanging. The question how a changing object can ever be known at all, therefore, belongs to the same type as the questions that urge how language, being itself static, can ever represent or refer to any changing reality, or how the Substance-attribute view being the only thinkable view, the reality can still be thought as changing—problems that are the result of our confused notions about Logic or Language or Thought. That we do perceive and not infer motion can, in face of the overwhelming evidence of the Gestalt psychologists, be denied only on the ground of some confused notion of logic.

Thus, there seems no necessity why the object of knowledge must always be unchanging. In fact, the changefulness or otherwise of the object seems completely *irrelevant* to the knowledge-situation. Yet, the prejudice that knowledge, to be knowledge, must relate to some unchanging object, dies hard. Of course, one can hardly have any quarrel if somebody wishes to restrict the word just to this sense and to no other, but that certainly will not affect the fact that there are changing objects and objects that change, as also the fact that we are aware of them. The philosopher has, generally, not denied the fact of change but only found it unintelligible. But to call a thing unintelligible, if it cannot be reduced to pure deductive intelligibility, has no meaning, for, there seems no reason why deductive intelligibility should alone be recognised as the sole intelligibility.

The prejudice that knowledge must be of something unchang-

ing is not confined merely to philosophy but is equally prevalent in Science. Scientific knowledge is supposed to be the knowledge of Laws that are eternal and unchanging. Of course, our knowledge is changing and approximates only more or less to the Laws that Nature eternally observes. What changes, therefore, is *our knowledge of the Law* and not the Law itself. In fact, the degree of the truth of our knowledge is determined with reference to the degree of its approximation to the unchanging Law—for, if there were nothing to correspond to, how could the question of truth or falsity arise? Even on the Coherence theory of truth, the question of 'degrees' and the determination of degrees with reference to the 'absoluteness' of the Absolute, remains. However we may conceive of the Absolute—even if as mostly immanent and through its immanence giving rise to that continuous self-transcendence of the dialectic which always strains towards the completeness of the Absolute and yet never reaches it—the problem of the relation between the Absolute and the Appearances remains. This relation can only be conceived as Plato conceived it: whatever is real in the 'appearance' is real by virtue of the Absolute, and hence is conserved in the completed experience while that by virtue of which the 'appearance' is appearance gets eliminated by the continuous dialectic of the immanent Idea. In the same way Science conceives of the Law as eternally self-existent in Nature while our knowledge of the Law has elements of both truth and falsehood in it. The negative element in our knowledge leads to an incoherence that makes us move to a greater approximation while the positive element is conserved and harmonised in the new fabric of knowledge.

Science, therefore, does not deny change but merely asserts that the change is according to a Law which is, in itself, unvarying and which, if known, would give us the knowledge of what the change would develop into. Thus it is the scientists' belief that given the knowledge of the Law or a set of Laws and the existent situation, he can construct the past or the future a million years backwards or forwards. In other words, the knowledge of the Law makes us transcend Time. And though, in order to have a literal perceptual or rather sensory experience, we might have to *wait* for the lapse of the required time and while in the case of the past it may be physically impossible, it is yet absolutely certain that we can conceptually know whatever can be known through such a mode of knowing. This absolute, objective determinism is supposed to be involved in the very methodology of science. It is because of this supposed absolute and objective

determinism that it appears 'obvious' to such a great scientist as Max Planck "that an ideal mind, apprehending all the physical occurrences of today in their minutest points, should be able to predict with absolute accuracy the weather of to-morrow in all its details". "And", as he writes further, "the same argument can be applied to every other prediction of physical events". Of course, he is fully conscious that it is a mere assumption, "an extrapolation, a generalization, which can neither be maintained by a logical conclusion nor refuted *a priori*".* If this literal and absolute transcendence of time is a mere assumption—an assumption that, by the very nature of empirical facts, is impossible of being verified for, as Planck himself has put it, "no method which transforms an object is suitable for examining it" † and "every measurement, whatever method may be used, brings in itself a more or less strong perturbation of the phenomena to be measured" ‡—then we see no necessity for making the assumption at all. Planck is right in ultimately thinking of it merely as a 'heuristic principle', a 'sign post' that may have value within the abstracted world-picture of physics but which, in the world of sense-experience, is, by the very nature of the case, impossible of being true.

Even in the realm of physical matter, a thing changes and is changed by the things with which it comes in contact. Heisenberg's 'principle' is a classic example of this fact which is everywhere found in nature. The principle states that "the *simultaneous determination of velocity, or any related property e.g., energy or momentum, and position* is impossible".§ The reason for this is very simple. As Planck writes: "We are able to measure the position of a flying electron only when we can see it, and, therefore, we must illuminate i.e., we must let light fall upon it. But the light which falls on the electron gives it a shock and changes its velocity in uncontrollable manner. The more accurately the place of the electron is to be measured, the shorter must be the waves of the illuminating light, and hence the greater the shock, and therefore, the greater uncertainty of the measurement of the speed." || In this connection, it would be interesting to understand the 'wave-particle' controversy we referred to earlier, for

* *Science To-day*, ed. J. Arthur Thomson, p. 364.

† *Ibid.*, p. 366.

‡ *Ibid.*, p. 359.

§ *Text-book of Physical Chemistry*. Samuel Glasstone, p. 19. Author's Italics.

|| *Op. cit.*, p. 356. Italics ours.

"if a close examination is made into the significance of the description 'particle', it can be shown that experiments are designed with the object of obtaining information concerning the *position* of the electron".* The converse correlation between 'wave' description and 'determination of the momentum' can also be made. And if so, it should be easy to see that it is only within a determinate set of experimental conditions that matter behaves as a particle; if the conditions be changed—again, in a determinate way—it will start behaving as a wave. From this, it should be clear that 'waves' and 'particles' do not refer to any psychological percepta which, because of their very nature, must exclude each other. As Glasstone remarks, the wave properties merely imply "that the probability of finding an electron, or other particle, at any given point is *determined by a mathematical relationship analogous to that whereby wave motion can be described*".† Thus in the very heart of matter, we find a beam of light itself disturbing the momentum of an electron. Not only this, the beam of light itself gets disturbed when it falls on any substance whether gaseous, liquid or solid. This, in fact, is the famous 'Raman Effect' discovered by Sir C. V. Raman in the year 1928. Thus writes Glasstone talking about 'Raman Spectra' in his *Textbook of Physical Chemistry*: "If any substance, gaseous, liquid or even solid, is exposed to radiation of a definite frequency, then the light scattered at right angles contains frequencies, differing from that of the incident radiation, which are characteristic of the substance under examination."‡

A thing, which is not affected and which does not affect, is the very type of non-entity that constitutes our concept of Nothing—but the contention of Science is that it can determine the specific manner and measure in which a thing affects and gets affected by other things. Leaving aside the point whether this determination does not have a 'lower limit' because of Heisenberg's 'principle' or because of that 'elementary quantum of action', which, "sets an objective insuperable limit to the sensitiveness of the physical measuring apparatus at our disposal",§ we will only emphasize the fact that absolutely isolated systems being impossible in Nature, the very principle that everything affects and is affected would result in the things having new characteristics and thus behaving differently to other things in the universe, which in their own turn would get affected by things behaving differently

* *Text-book of Physical Chemistry*, p. 18.

† *Ibid.*, p. 19. ‡ p. 576.

§ Max Planck, *Op. cit.*, p. 362.

towards them and so on in an eternal spiral movement—making possible the perpetual emergence of new 'evolutes' with their new modes of behaviour. The whole evolution is a standing confirmation of this principle for, it is not a mere mechanical repetition of repetitive movements but a creative emergence of new levels with modes of behaviour of their own which can be known and determined only when those levels have emerged. Law, then, is not something that stands over and above the phenomena and *constrains* them to behave as they do, but merely a description of the way in which things have usually been observed to behave and which, on that ground, is considered to be the more probable way of their behaviour in the future.

'Habits of Behaviour,' however, being merely the relationships which a thing evinces to other things, it has been asserted that what we can know is only the relationships and not the terms themselves. Further, as the relationships are fundamentally concerned with change and the measurement of that change, it has been affirmed that these relationships are purely mathematical in character, with Space and Time as their general coordinates. Thus writes Birkhoff in his article 'Mathematics: Quantity and Order' in *Science Today*: "The aggregate effect of recent advances in physics has been to bring about the general conviction that the understanding of the final law in the physical universe will turn out to be a *mathematical understanding* rather than one in which ordinary physical concepts and intuitions play the chief role."* Thus also concludes Sir William Cecil Dampier in his *A Shorter History of Science*: "From the latest point of view, substance vanishes, and we are left with *form*, in quantum theory with waves and in relativity with curvature."† About the so-called 'Laws of Nature' the same author writes: "Mental concepts are necessary for scientific analysis, and the relations which are called 'laws of nature' are relations between mental concepts and not between concrete realities",‡ for, "the regularities of science may be put into it by our methods of observation or experiment. For instance, white light is an irregular disturbance into which atoms can only be examined by external interference which must disturb their normal structure: Rutherford may have created the nucleus he thought he was discovering."§

Yet, however difficult it may be to think that we know anything else excepting the mathematical equation describing the

* p. 296. Italics ours.

† p. 173. Italics ours.

‡ p. 172.

§ p. 173.

change, still it is equally obvious that qualitative description cannot be completely eliminated from Science. Rather, the quantitative equation gets its direct meaning and interpretation from and within the experimental situation which it seeks to describe and this experimental situation can only be understood and described in qualitative terms. In short, mathematics is not Science, even if it be true, as Merz concluded in his *History of European Thought in the Nineteenth Century*, that progress in the several fields of science had been more or less proportionate to the extent to which mathematical methods had been introduced. What is rather unapparent in theoretical physics, becomes inescapable in other Sciences. In Chemistry, for example, the difference between one of the most reactive elements, Fluorine, and one of the most non-reactive 'noble' gases, Neon, is explained as being due to the unstable second orbit in the case of the first with its complete converse in the case of the second. The second outer orbit in the case of Fluorine consists of seven electrons while the 'saturation' capacity of the second orbit is eight, an unbalance giving it a constitutional disequilibrium resulting in its phenomenal reactivity to other elements. The converse is the case with Neon, which has a zero valency, having its second orbit full of eight electrons and thus constitutionally so stable as to need no reactive interchange with other elements. The same occurs with Chlorine and Argon though, in this case, the reason lies in the constitutional saturation of the third outer orbit. This may seem, and really is, the sufficient quantitative reason lying behind the qualitative reactivity between elements. But it should not be forgotten that the difference between the unstable reactive elements like Fluorine and Chlorine can be described only in qualitative interactive terms. The further fact that they have different atomic numbers in the 'Periodic Table' is no *explanation* but only a sign of association of different electronic constituents with different qualitative properties.

We have taken our example from 'electronic valencies' for in all other departments it is evident, even to an ordinary student of the subject, that qualitative characterisations are indispensable. In the sciences of biology, psychology and sociology the proposition is so evident as hardly to need any discussion. Even in physics it would be wrong to admit with Eddington that "our knowledge of the objects treated in physics consists solely of readings of pointers and other indicators".* For "if we wish to

* *New Pathways in Science*, p. 18.

make any reasonable use of pointer-readings: first, such words as 'resistance', 'current', 'temperature', 'velocity', 'pressure', 'mass' must have a meaning and, secondly, we must be able to decide which of these various entities we are, in a particular experimental situation, about to measure by a pointer-reading".* In fact, unless the experimentalist is able to decide "to what concrete data of his perceptible experimental set-up the various symbols refer" he "could not verify or refute by experimentation what the mathematical physicist predicts in terms of his symbols".† Symbols, therefore, can only be "ultimately defined in perceptual context, and all the various pointer-readings have their specific meanings in such contexts" only.‡

There seems to be, then, no reason why the relationships that Science is supposed to study should be conceived of as purely mathematical in character. Otherwise, mathematics would have been the only science. In short, the empirical element in Science can never be completely eliminated. Rather, it is that element alone because of which Science remains science and does not become pure logic or mathematics. Further, the contention that what we know is only the relationship and not the terms themselves is completely refuted by the very fact that words ultimately have meanings only in the experiential situations they refer to. Unless 'knowledge by acquaintance' is not to be called knowledge at all, this contention seems hardly to have any ground. Of course, there is such a theory in psychology which holds that what we perceive is the relation between sensations and not the sensations themselves. However correct within certain limits, the attempt to raise this theory into an absolute law of perception by Bain has already met a classic refutation at the hands of James Ward. If the theory were absolutely true, then the perception of one pair of objects respectively 1 ft. and 2 ft. long and of another pair respectively 10 ft. and 20 ft. long should not have differed from each other; for the proportionate relational ratio in both cases is the same.

Therefore, even on a purely scientific consideration of things, the nature of the objective world seems to be such that it provides in its very nature the possibility of the emergence of new levels of organisation with their new modes of behaviour which we call their laws. Thus the notion of law in Science seems to go in no way against the creative emergence of new modes of being with their novel habits of working or 'laws'. Not only this; even the

* *The Place of Value in a World of Facts*, Wolfgang Kohler, p. 157.

† *Ibid.*, p. 158.

‡ *Ibid.*, p. 161.

'laws' of previous levels of organisation get modified when operating in a higher level of organisation. This is obvious not only in the case of biological organisms but also in the case of such entities as atoms, molecules and even macroscopic non-living objects. "The atom is everywhere recognised as a definite entity which cannot be described by a simple enumeration of all its components. In the atom these components are *functionally* not *independent* entities, and therefore the atom-unit is certainly not an arbitrary concept." * And slightly further on, "as inside a molecule an atom is doubtless not quite the same thing as it would be in complete freedom, so at least the *behaviour* of a molecule is, inside a macroscopic object, strongly determined in this larger context". † The reductive fallacy, therefore, is really a fallacy, for, even in macroscopic physics the reduction cannot be carried out. Such seems to be the case when we are considering only physical entities and the report of science about them. What then would be the result if we bring, in addition, the fact of our consciousness or awareness of things? The attempt to predetermine with the help of the so-called law of causality, the activities and motions of one's will, to quote Max Planck once more, "is from the beginning bound to fail, because every application of the law of causality to the will would produce knowledge of the will which would itself act as a motive and thereby always change the result". ‡

There seems to be, then, no ground, whether philosophical or scientific, for believing that the object of knowledge must be unchanging, finished or final in character. And there seems little cause for surprise at this conclusion. For, otherwise, the whole of astronomical, geological, biological and social evolution would have been impossible—a conclusion which, perhaps, none but a philosopher could accept. This—unless the scientist is confined to the narrow strip of his present—should open vast vistas of possibility for the future. The world is not what it once was. There seems, therefore, no reason why it should always remain what it to-day is.

The other counterpart of the presupposition that the object of knowledge must be unchanging is the correlate presupposition about the organon of knowledge. Discursive Understanding, Dialectical Reason, Mythopoeic Imagination, Mystic Intuition—all have been the claimants to this august office of being the sole organon of knowledge. The hypothetico-deductive-verificational

* Köhler, *op. cit.*, p. 177. Italics ours.

† *Ibid.*, p. 177. Italics author's.

‡ *Science To-day*, p. 366.

method of Science has also put forward its claim and, though late to arrive, it has already performed such amazing feats that no rival seems to be left in the field. 'Instinct' is the word that we oppose to all these ways of our knowledge, though it hardly seems to afford any explanation for the amazing solutions of problems in the insect and the animal world. It seems impossible even to conceive of the very possibility of some new mode of knowledge. Mythopoeic Imagination and Mystic Intuition seem long ago to have lost the field—at least, as far as the new 'Weltanschauung', the new 'Zeitgeist' is concerned. For Benedetto Croce, Imagination or, as he puts it, 'intuition' with its correlate 'expression', is the first activity of the human mind. We may be reminded in this connection of Vico who said: "Poetry is the primary activity of the human mind. Man, before he has arrived at the stage of forming universals, forms imaginary ideas." * On this view, the logical universal i.e., the concept, transcends the intuitional expression i.e., the image. In short, Logic transcends Aesthetics; Philosophy builds upon and goes beyond Art. Mystic Intuition, in spite of Monsieur Bergson, does not seem to carry conviction for the very simple reason, that we cannot do anything with it. Not a single objective problem of the world seems to get solved by this method, though it can claim to have produced personalities who, by their very existence, have almost justified and redeemed the human race. Yet, Poverty, Hunger, Disease—how can it solve these? And how it can ever be a substitute for or an alternative to the method of Science, is difficult to understand. Pure Reason too, whether dialectical or otherwise, seems to have lost power. Philosophers are becoming more and more apologetic because they are becoming more and more doubtful about the necessity or the utility of their function. So also the poets. They too have begun to question, to justify their activity. Thus wonders C. Day Lewis in his Clark lectures for the year 1946: "Can he (the poet, of course) survive in the modern world except as a kind of village idiot, tolerated but ignored, talking to himself, hanging round the pub and the petrol pumps, his head awhirl with broken images, mimicking the movements of a life in which he has no part?" † And writes Mayakovsky, the great communist poet of Soviet Russia:

"I dont want to be

A way-side flower

* Quoted by C. Day Lewis in *The Poetic Image*, p. 26.

† *The Poetic Image*, p. 110.

To be plucked
 In an idle hour.
 I want the pen,
 To equal the gun
 To be reckoned
 With steel in Industry."

Yes! But why this bluster, this noise about being useful? Is not the 'bourgeois decadent' as well as the communist 'revolutionary' equally in doubt about the usefulness of his function and are not both of them agreed about the indubitable value of the 'gun' and the 'steel' in industry? A horticulturist studying 'a way-side flower', on the other hand, whether a bourgeois or a communist, would hardly have stopped to think about the usefulness of his occupation; far less, to justify it. Examples can be quoted *ad nauseum* from other arts, but these should suffice.

Science, with its method, seems to have swamped all other modes and methods of experiencing and knowing. Yet science itself is a mode of the analytico-synthetic consciousness which seems to be a general function of the psycho-physical organism that we are. This psycho-physical organism, with all its different modes of knowing, has not always been what it seems to-day. It is only when we forget that the apprehending organism is itself as changing as the objects which act on it and on which it reacts, that the mistake arises of thinking the organon of knowledge unchanging. It was hardly a million years ago, when, as biology assures us, man emerged from his sub-human ancestor and scarcely six thousand when he started building his first civilizations. Geology and Astronomy give a few billion years more for the survival of this planet and it seems literally impossible that within this unimaginable time all further evolution will have stopped. In fact, there seems no reason why this should be so, and if the past is any clue to the future, it seems certain that it will not be so. Any further evolution will involve, as it has always done in the past, a change in the mode of consciousness with an inevitable accompanying change in the modes of knowing.

There seems to be no *a priori* reason for the belief that the organon of knowledge must be unchanging. All the arguments that we have given against the unchangeability of the object of knowledge will apply *mutatis mutandis* to the organon of knowledge. The psychological difficulty, on the other hand, is immense. In fact, it is practically impossible to conceive of a mode of knowing we do not possess. Yet the very fact that what is to-day the dominant mode of consciousness was once non-existent,

as well as the other obvious fact that even to-day there are different modes of awareness such as the perceptual, aesthetic, scientific and mystic should make us hesitate in regarding our own present mode of awareness as final. Even among the sciences themselves there are different methods adapted to different subject-matters. A proposition in physics, history and psycho-analysis will be established in such different ways that the notion of a unitary scientific method may itself be thrown into question. Of course, if we choose to define by the term 'knowledge' what we wish to mean by it, nobody can have any quarrel. But, in that case, it will be difficult to regard anything as knowledge except mathematics, theoretical physics and perhaps certain parts of physical chemistry. We, then, see no reason why the possibility of the emergence of new levels of consciousness should be denied. Science and philosophy both have tried to deny such a possibility but, perhaps, only due to mistaken reasons. On the other hand, it should be noted that both Science and Philosophy fail to catch the concrete particularity of the percept for they both are interested in the universal aspects of it. This very fact should be sufficient to condemn the so-called complacent self-sufficiency of these methods of knowing.

When both the knower and the known are changeable, it seems surprising that the relationship between them should remain unchanging. The relationship is not external or accidental, but is itself a function of the psycho-physical organism and the objective world, both of which, from their very nature, are eternally changing. There seems then no reason why we should grant changeability to the object of knowledge and deny it to its organon. If the Brain and Mind have been evolved, then the interactive reaction we call 'knowledge' must also be said to have evolved and if the brain and mind are to undergo further change in the course of evolution, we see no reason why there should be no change in that interactive reaction we call knowledge. We are not using 'evolution' here in the specifically biological, Darwinian sense of the term—though, that too is included in it—but in the general sense of Change as following from the very nature of Time itself.

What we have been trying to show in this chapter is that there seems no reason, philosophical or scientific, to believe that change, either with regard to the object or the organon of knowledge, is impossible. At least, of this, we seem to be assured by science, that changes *have occurred* with regard to both of them. That they will not occur in the future is hardly asserted by

Science. In fact, it asserts just the contrary. Philosophical reasons for the denial of this possibility would equally invalidate the factuality of change that is supposed to have occurred in the past. We have tried to show that there is no *necessity* for the conclusions that are drawn from those reasons and, also, that at certain places they are considered to be reasons because of some confusion about what they are trying to say. We hope that, at least, we have raised the possibility of some legitimate doubts about this second great presupposition of philosophical thinking.

CHAPTER V

REALITY AND VALUE

The third great presupposition of philosophical thinking, as stated in our chapter on 'Presuppositions and Implication', divides itself into two parts. The first is concerned with the rational nature of values and the second with their reality. The identity of the real, the rational and the valuational has been the classic contention of philosophy. Since Plato conceived of the highest reality as the Idea of the Good, combining with it the Socratic doctrine of Virtue as knowledge and of knowledge in its true sense as the knowledge of unchanging rational forms, philosophy has continuously tended to revolve round this position.

We, of course, are not unaware of philosophers like Hume who have tried to deny this identity, but they can hardly be said to represent the main tradition of philosophic thought. Besides, even they have thought it right to determine by a purely rational analysis and discussion the nature both of Reality and Value. We have already discussed in our chapter on 'Logic and Reality' whether the notion of a rational determination of 'Reality' has any meaning or even whether the question 'what is real' has any sense. In this chapter, we shall be concerned with the other great presupposition relating to the rationality and the reality of values.

The problem of the relation of Reality to values has always had great importance in the philosophical systems of the past. If the real were also not found to be possessed of the highest value, it will hardly be taken to be real at all. Rather, 'to be real', with most thinkers, used to be considered the same thing as 'to be of highest value'. The 'real' was opposed to the 'unreal', and it seemed quite obvious to most of these thinkers that that which is unreal or mere appearance could not have any value in itself. The contrast between 'real' and 'unreal' seems conveniently to correlate itself with that between 'value' and 'dis-value' and as both unreal and disvalue seem to be negations, it seems quite obvious that somehow they must be eliminated from, or synthesized or reconciled in the ultimate which cannot but be conceived as the most valuational.

Thus, 'Degrees of Value' go together with 'Degrees of Reality' for those thinkers who are somehow convinced that short of the Absolute there can only be more or less of reality and

more or less of value. This 'more or less' is always determined with reference to the degree of their 'approximation' to the absolute which, for them, can alone be fully real and completely valuational.

With this correlation recognised more or less consciously, there went another, perhaps equally conscious, *viz.*, between the rational and the valuational. The 'real' being already regarded as both rational and valuational, it seemed quite obvious that it should become the middle term uniting the concepts of rationality and value. Kant's is the classic example of this position. His attempt to find good in the pure form of practical reason with the three maxims as its formal constituents, is inspired by the view that the rational alone can be the valuational. Kant had found that rationality provided no direct clue to reality but he found it to be sufficient as a clue to value and, thus, indirectly to reality.

In recent times, too, value has played a very great part in providing a clue to the nature of reality. In fact, in face of the increasing domination of knowledge by non-valuational scientific researches, metaphysicians seem increasingly to rely on aesthetic, moral and mystic experiences for the construction of the real. The valuational experiences, it is urged, fall within reality and not outside it and, therefore, must have some integral relation to it. Pringle-Pattison, for example, in his *The Idea of God* and William Temple in his *Nature, Man and God* base their main thesis on this argument.

The situation, moreover, gets still further confused owing to the fact that that which is rational or real may have value, even if its being valuational does not follow from its being rational or real. The connexion between rationality and reality on the one hand and value on the other, however fortuitous it may be, facilitates the identification of the one with the other. The problem is further complicated by the fact that 'rationality' and 'reality' as intrinsic characteristics seem to have value in themselves. If it be so, then it seems quite obvious that, for those, who think that these characteristics ('rationality' and 'reality') are capable of degrees, value would be a correlate function of these factors. The fact that there is more of 'rationality' or 'reality' will mean that there is 'more' of value for rationality and reality themselves are supposed to possess intrinsic value. But, even if this were true, there will remain the question whether these were the only determining correlates of value or even whether this determining relation between rationality and reality

on the one hand and value on the other, sufficiently describes the value-meaning and the value-situation.

The meaning and the situation connoted or described by a word can ultimately be understood only in terms of the experiential referents to which they are generally supposed to refer to, yet there seems to be such a great variety between different things and situations to which the term value is usually applied, that it seems *prima facie* difficult to find what exactly is meant by the use of such a term. Still, we can find one common persistent character among most of the valuational situations, *viz.*, the desire for the continuance of that state if it is present and for its presence if it is absent. This desire, of course, has no strict correlation with the pleasantness of the state, though, undoubtedly, the pleasantness, by the very fact of its being pleasant, facilitates such a desire.

The sheer desire for the continuance of a state is, however, no sign of that state's being valuational. The desire may operate simply because the state is felt to be pleasant and this may occur even when the state is consciously judged to be disvaluational. Of course, the conscious judgment will generally result in another simultaneous judgment, *viz.*, that the desire for the continuance of that state *should* not operate. This 'should not' may either further result in a counter-desire for the cessation of that state which may prove more or less effective, or in a mere value-judgment without any effect on the desire for the continuance of that state. Those who seem to sense some contradiction here may be referred to the fact of ambivalent affects in modern psychology. Those, on the other hand, who dispute the possibility of a pure valuational judgment, which is entirely ineffective in the conative-affective life of the individual, will find themselves, perhaps, supported by modern psychology.

Yet, it seems certain to us that such a judgment can, and frequently does, occur. Particularly where occurrences have been in the remote past, it seems obvious that the conative-affective effect is almost nil. That some injustice was done thousands of years ago is still recognized by us as injustice but, by the very nature of the case, it arouses hardly any movement in our conative-affective life except the desire involved in the very judgment itself, *viz.*, that it should not have happened. Even to-day the news that a few millions have died of famine in China or that some more millions have been sent to the so-called corrective labour camps' in Soviet Russia arouses hardly any movement in the human psyche excepting the usual valuational judgment '*How*

bad. We are, of course, not denying the existence of persons who are moved to a righteous indignation resulting in a willed action to fight against these things, but only pointing out that there are also persons, sufficient in number, who, while recognizing these things to be bad, are yet moved in no other way. It may be questioned whether such a valuational judgment should be considered a judgment at all but, as we are not concerned at present with what a valuational judgment 'ought' to be but what it generally 'is', we need not be concerned with this question.

Thus the valuational judgment, even if it is generally accompanied by the desire for the continuance of that state if it is present and for its presence if it is absent, is not *necessarily* related to it, for the desire may occur even where the valuational judgment is absent and, in certain rather unusual cases, the judgment itself may occur even when the desire is absent. The two situations can only occur if, as in the first case, self-consciousness has hardly developed at all or, as in the second, it has been developed to a very great extent.

If, then, the phenomenon of desire, striving or seeking does not completely or even adequately describe the valuational situation where else should we seek for those referents in which alone the meaning of value can be found? Desire itself seems to be some sort of a relation between the subject and the object. It both presupposes and implies it, even if the term 'relation' seems too static for such a dynamic and teleological concept. Should value then be conceived in terms of some specific subject-object relationship different from that of 'desire' which we have already examined? No doubt, value, like every other object, falls within experience and thus shares the essential duality that belongs to it. But apart from this general duality, is there any further specific or special sense in which values can be said to belong to the relational complex alone—a sense which is alien to the ordinary objects of cognition?

Value seems *prima facie* to depend, perhaps, more intimately on conative-emotive factors in personal life and, thus, seems more intrinsically bound up with the existence of a person and his desires and feelings. Yet, a closer examination would reveal the difference to lie more in the *factors* on which the dependence is sought to be shown than in the essential situation which is equally revealed in the case of cognitive objects. After all, the experience of cognitive objects is equally dependent on the existence of a person and his brain and sense-organs. Outside experience, the objects can only be conceived as determinate possi-

bilities for the arousal of certain determinate experiences in certain specific situations. Such determinate objectivity belongs to value-experience no less than it does to other experiences. Whatever becomes an object of experience, has a *determinate structure* which resists any attempt to change it. This structure is more and more revealed *i.e.*, gets a greater self-conscious articulation as our attention gets more and more directed to it.

Subjectivity, therefore, apart from its reference to one of the ever-existing poles of experience, is mostly a pragmatic concept. Whatever does not seem to find its place in the spatio-temporal world of sense-objects, is conveniently relegated to the world of the Subjective. Yet, the whole world of the Subjective can itself become an *object* of study and reveal determinate laws and relationships obtaining therein. It is only because the imaginary food is unsatisfying to the hungry stomach that it is usually regarded as subjective while to the studying psychologist it is as objective as the cognitive relationship between the sensing organism and the object sensed. Of course, there remains a subjective pole, an inescapable residual nodal point, but that cannot be the object of any study. It merely is logically presupposed and implied but itself it can never be an object of study.

Yet, if value cannot be conceived as some sort of a specific relationship or even as something subjective inhering in the desire, mood, emotion or feeling of the subject, then how and in what sense can it be conceived? Or, can it even be conceived at all? Value, certainly seems to be a determinate object of experience, though undoubtedly in another dimension than that of the usual objects of experience. Value seems to go at a tangent touching the usual experiential continuum at one point only. It seems to rise up into another sphere which cannot be described in any other way excepting as valuational. Those who have tried to find value in a *mode* of human experiencing, have forgotten that on their argument even cognitive objects can be conceived in this way. Thus, for example, writes Mr. Sreenivasa Iyengar in his *The Metaphysics of Value*: "Value is an entity that is neither in the object (which has only qualities) nor in the subject (who has only needs, desires and purposes) but in the interrelation between these needs or desires and those qualities or character." * "The value-formula," he says on page 51, "may be expressed thus: given such and such a desire, the corresponding value of the object arises."

* p. 58.

Mr. Iyengar has forgotten that qualities and objects, desires and purposes do not and cannot *arise* unless there be both a Subject and an Object, the two vanishing poles of all experience. The object apart from the subject is merely a determinate possibility for a certain determinate kind of experience which can *arise* and exist only when there is a suitable subject in a certain determinate relationship with the so-called object. The subject without the object, on the other hand, can only be conceived as a nodal point which, within a suitable situation, can become aware of something which the experience itself seems to suggest, is different from itself. The two, in themselves, are the irreducible minima which all experience inevitably presupposes and implies. But, in themselves, they are merely the hypothetical limits, which, however, much one may try to approach them, can never be reached. James Ward has brought out this point in almost a classic manner in his 'Psychological Principles' and his contention that all experience is an interrelation between the Subject and the Object is confined not merely to valuational experience but extends to cognitive and conative modes of experience as well. The Subject with his 'needs and desires and purposes' and the Object with its 'qualities' presuppose an already existent active interrelation between themselves.

Mr. Iyengar seems to think that "there is not even the shade of a shadow of doubt. . . . that value cannot *exist apart* from the desires of the conscious subject".* If, for the moment, we disregard the 'desire-clause' of this sentence and understand the phrase *to exist* in its usual sense of spatio-temporal occurrence, the statement would hold true not merely of value but of everything else. But if Mr. Iyengar means, as perhaps he wishes to do, that value, in contradistinction to cognitive objects, has no *meaning* apart from the experience in which it occurs, he certainly is wrong. For, what to speak of 'the shade of a shadow of doubt', there are thinkers both competent and eminent who are convinced of just the opposite. Mr. Iyengar himself is aware of this, for he writes a few sentences earlier that "there is no parallelism at all between mathematical and axiological judgments, as the phenomenologists think there is".†

The only reason for this statement given by Mr. Iyengar is the variability of value-feeling with variations in desire, but this variability would be found with regard to all objects, including

* *The Metaphysics of Value*, p. 51. Italics ours.

† *Ibid.*, p. 50.

the mathematical ones, with the difference, of course, in their respective correlate variants. In fact, variability is no sign of subjectivity but, rather of objectivity for, it only implies that an entity enters into objective relations with different other entities. The ordinary qualities are, in this respect at least, on all fours with the valuational ones. Either neither has real self-existence or both have it equally. In no case, can we affirm it of the one and deny it of the other excepting, of course, on pragmatic grounds. As Hartmann writes: "Whoever, therefore, doubts ideal self-existence must also doubt real self-existence."* Further, Mr. Iyengar is confusing between relationality and relativity. As Hartmann has said: "The opposite of relationality is the substratum, that of relativity is the absolute. There are relative substrata, and there are absolute relations. The relation of the value of goods to the subject is an absolute relation which is *comprised in the content of their values*." And slightly further on: "In both cases the binding relation is *purely objective*, and, as regards any understanding of it, is *absolute*."* It is only 'the consciousness of the relation' that is 'relative to the existing relation'. Hartmann here seems to suggest that "the relation of goods to a personal subject. . . . is not at all a relativity of their value as such, but is a *relation* which is *contained in* the valuational material and *exists before and independently of any consciousness of it*, just as the things themselves actually exist to which the value adheres".†

We are not here interested in Hartmann's contention that relation to a personal subject is an essential constituent of value itself, but merely in the fact that even if it were true that "the value of the object arises only when there is a desire for it" that would not prove that it does not 'exist before and independently of any consciousness of it'. In fact, the ideal self-existence of values is not at all impugned, for Hartmann, by the fact—even if it were a fact—that they involve a necessary constituent reference, or relationship within themselves, to the 'desires, needs or purposes' of some possible subject.

Mr. Iyengar seems to be undecided upon this point. He continuously alternates between the acceptance of this position and an outright rejection of it—the balance tilting considerably in favour of the latter. Summing up the whole of his discussion, he writes: "The gist of the discussion then is that the definition

* *Ethics* Vol. I., p. 209. Italics ours.

† *Ibid.*, p. 208. Italics ours.

of value should be given (as has been attempted in these pages) in purely genetic terms." Yet immediately after, he adds, "It does *have a nature of its own*, of course," and immediately withdraws this admission by adding, "but this nature is so inevitably mixed up with or dependent upon the effective relatedness of subject and object. . . .that apart from such casual factors. . . .*it has no reality*, and in fact, *no meaning*".* Clarifying his difference from Dewey's position, he positively states that "there is no such thing as a value quality or essence which is embodied or actualised in concrete objects".† Yet only a few pages before he had no hesitation in saying "in the language of those who believe that value is a unique quality inherent in the object," that "in order that a thing be valuable, it must not only exist. . . .but must possess *some other quality or relation which is not given in mere existence*".‡ This 'some other quality or relation' obviously cannot be 'satisfyingness' or 'desire', for they certainly are existents.

Mr. Iyengar's solution of the problem is that values, as they are emergents from the effective relatedness between desires and objects, should be called neither 'existents' nor 'subsistents' but 'transistents.' "Transistents", according to Mr. Iyengar are a "peculiar variety of existents whose *existence* is subject to transition, depending upon the motor-affective life of the valuing agent."§ If we substitute 'cognitive' for 'motor-affective' and 'knowing' for 'valuing' in the above sentence, would it not form an equally correct description of mathematical entities as well? In fact, the whole trick lies with the word 'existence'—for, no ideal entity can exist in any other way. All experience, then, whether valuational or otherwise, would be a 'transistent', for its 'existence' is certainly subject to transition depending, of course, not merely upon the motor-affective life of the valuing agent, but in a generalised sense, on the whole concrete subject itself. 'Existents' and 'Subsistents' would then be forms of possible objectivity—spatio-temporal in the one case and non-spatio-temporal in the other.

But Mr. Iyengar has forgotten that by merely speaking of the occurrence of a 'transistent' he cannot settle the question nor close the problem whether what has 'emerged' is an existent or a subsistent. Even Mr. Iyengar is forced to admit, beside his usual formula of effective relatedness between 'desire' and 'object,'

* *The Metaphysics of Value*, p. 88. Italics ours.

† *Ibid.*, p. 89.

‡ *Ibid.*, p. 87. Italics ours.

§ *Ibid.*, p. 104. Italics ours.

a third entity which is purely ideal and non-empirical in character, some "transcendental ideal, the norm, the highest, which is never completely realised in any or all of its successive empirical manifestations".* "The actual content of this norm, may be", he writes, "is. . . .beyond our ken." † All empirical values are, for him, "grounded in a transcendental Value—they are *phenomena bene fundata*".‡

If this 'transcendental ideal' is the true source of value, as seems to be implied by these sentences, what happens to the 'desire-object formula' of Mr. Iyengar? It can have only the value of a *descriptive* account of the *usual* conditions under which the value-experience first emerges but which have certainly no *intrinsic* relationship to it. The value-experience, according to Mr. Iyengar himself, occurs only on the level of self-consciousness. But if it is so, it is inevitably preceded by the great instinctive drives seeking their objects and finding pleasure or pain in the success or failure thereof. Such being the situation before the arousal of self-consciousness, it is inevitable that things which come to be desired, either because of the need felt or the pleasure anticipated, should projectively be also regarded as having value. But it is of the essence of self-consciousness that it provides the possibility and, in course of time, the factuality, of a transcendence of every immediate sensation, feeling or even desire. However much, therefore, the desired, at its first emergence in self-consciousness, may be felt to have value it, later on, like all other objects of experience, comes to be questioned and judged as to its validity. Mathematical entities are first met with as involved in the process of counting itself. Their independence of even the objects of enumeration, seems at first impossible of being conceived and yet at a later stage of the development of self-conscious judgment, they are judged to be such.

It is self-consciousness, therefore, that makes even a person like Mr. Iyengar, see the necessary logical involvement of some 'transcendental ideal, norm or value' in spite of his repeated harping on the 'desire-object relatedness' formula. In fact, if value cannot be understood, as Mr. Iyengar himself admits, without reference to some 'norm' or 'ideal' then, for that very reason, it should be considered to belong more intimately to the realm of 'ideal essences' than to those of 'existents' and 'transistents.' It should be noted here that the 'transcendental norm' is

* *Ibid.*, p. 114.

‡ *Ibid.*, p. 115.

† *Ibid.*, p. 114.

not merely the logical but also the valuational prius of all values. If so, the mere fact that value exists as a transistent-emergent does in no way decide whether its nature is to be conceived as an existent or a subsistent.

There seems little doubt that value, unlike mathematical entities, can sometimes be *completely actualized* and in such cases it seems futile even to ask or to seek to understand its nature apart from that in which it can concretely be sensed or perceived. The beauty of a great master-piece of art is so concretely embedded in it that any attempt to abstract and then understand it, seems an utter impossibility. This concrete absolutization is never found with regard to mathematical entities—the existents only approximate to them but, owing to *the very nature of the case*, can never completely embody them. Points, lines, irrationals, imaginaries, infinitesimals, infinites are all concepts with determinate nature and behaviour of their own, yet are such that they can never exist—and this due to their very nature. The 'rationals' which seem, at first sight, to be different, get quickly assimilated to these and are seen to be in no way different in their essence from them. Further, an increasing acquaintance with these entities leads necessarily to the insight that the existents, in association with which they are first met, are rather more of a hindrance than help in understanding their nature. Such a situation, however, seems impossible with regard to value. The flesh that melts in the mobile rhythms of an Isadora, the emotion that gets an undreamt of nuance in the gestures of a Duse, the dynamic stillness of Cézanne's 'Poplars', the mad movements of Van Gogh's 'Cypress', the vast yet elegant proportions of a Taj—are all ununderstandable as regards the value they reveal apart from the concrete existents in which it exists. The more one comes to know and feel value, the more one finds that it is intimately bound up with objects, situations and persons. They do not seem to become *irrelevant* with the progress of our acquaintance with the valuational field, but rather gain an *integral relevance* without which value seems to be but an empty name. But equally radically does value seem opposed to the existents as well. Far too often has everybody been heart-broken at the notorious lack of value among existents and no person who has discerned values has ever felt them to be less of value because they did not exist. Existence may seem to gain enormously by realising value, but value seems hardly to gain anything by being realised.

Hartmann has tried to reconcile these facts by finding the essence of values in an '*Ideal Ought-to-be*.' Value, as actualized, is understood by Hartmann in a very beautiful and subtle sense when he says that 'the thing is as it ought-to-be.' "Hence", he writes "it follows that the Ought belongs to the essence of the value and must be already contained in its ideal mode of existence."* The Ought is here distinguished from the usual Ought-to-do. The impossibility of being realized, in no way militates against this pure, ideal Ought-to-be. Thus he writes: "Because something is in itself a value, it does not follow that someone ought to do it; it does mean, however, that it Ought to 'Be', and *unconditionally*—irrespective of its actuality or even of its possibility."† The essential antimony at the very heart of values, their indifference to and yet their concern with the world of existents is, according to him, superbly expressed by this formula. Yet value and the Ideal Ought-to-be, though indissolubly linked together, are, according to Hartmann, still not identical. He writes explicitly that "they are not on that account identical. The Ought signifies *direction towards* something, the value signifies the *something itself* of which the direction points."‡

But is it even true that this Ideal Ought-to-be is indissolubly linked with value? The fact that ontological and even logical impossibility leaves this 'Ought' unscathed, suggests that perhaps this is the case. Yet, if we look closely we shall find that this 'Ought' is purely from the side of the existent; it gets meaning only when value is confronted with Existence. Hartmann calls this the positive Ought-to-be which arises only where "the ideal finds itself in opposition to reality, where the self-existent values are unreal".§ But even in the ideal Ought-to-be, which is supposed to be present even when the ideal does not find itself in opposition to reality, the reference to existence seems pretty obvious. (Of course, it should be clear here that Hartmann is using 'reality' in the sense of the 'existent'.) There have been thinkers who contend that such a reference to existence is essential to the nature of value itself. Thus writes, for example, Professor sorely in his Gifford lectures on *Moral Value and the Idea of God*: "Without the postulate of existence, expressed or implied, actual or hypothetical, the attribution of goodness or of

* *Ethics*, Vol. I, p. 247.

† *Ibid.*, p. 248. Italics ours.

‡ *Ibid.*, p. 248-49. Italics ours.

§ *Ibid.*, p. 249.

any value would be out of place."* And he continues: "the existence implied concerning the subject of the value-judgment need not be asserted or believed, but it *must at least be assumed*. Apart from its claim upon existence in some such way nothing is either good or evil." † That 'possible existence' alone can give meaning to a value-judgment seems surprising, for, that the subject of a valuational judgment should exist is entirely irrelevant to its being valuational. In this respect, values seem more akin to mathematical entities whose essence and meaning are independent of all or any existent whatsoever; but with this difference that while they, by their very nature, are precluded from existence, value is not so precluded. Values *can* exist, though they *may* not and, perhaps, in their essence *need* not exist. Mathematical entities, on the other hand, *can not* exist; with them there is not a 'may' but a 'must'.

Here, we think, Hartmann's conception of mathematical entities as categoreal in nature, is utterly mistaken, for, there certainly are realms of pure mathematics which have got nothing to do with the world of the existent. Not only this, even in the realm of the existent all concepts of mathematics cannot be *equally* applied to *each* occupant of that realm. If it be said that the concepts are mutually interrelated and form a system including even those that belong to pure mathematics, and that thus even the use of a single concept inevitably involves all other concepts, we need only point out that there is not *a* system but *systems* in Mathematics. In the ultimate sense of finding a minimum of mutually independent positions which are yet jointly sufficient for the building up of any deductive system whatever, it is obvious that the propositions are purely 'assumptional' in character—for, their necessity is only the necessity of having *a* system, while as to *the* system you have they are utterly indifferent. We need not here remind ourselves of non-Euclidean geometries and if it be said that Euclidean geometry is merely some sort of a specific limitation of the non-Euclidean ones in circumstances where the assumption of parallelism holds good, it need only be pointed out that *without* the introduction of this 'assumption', which mathematically is neither true nor false, Euclidean geometry could not have arisen. There seems to be no *a priori* necessity why the existent should be mathematical in character as there seems to be no reason why it should be logical or valuational in character.

* p. 83.

† p. 85. Italics ours.

Yet another difference is revealed with regard to mathematical entities when they are discerned by some person or are confronted with Existence. In such cases, they do not seem to make any demand or claim that they should be realized or that the Existent should conform to them. This may seem surprising when we remind ourselves of the fact that science consists mainly in finding quantitative correlations, an enterprise that has met with so much success that thinkers like Jeans and Eddington have started conceiving of their God as a pure mathematician. But this, even if true, would be a pure accident for mathematics and God, if he were a pure mathematician, would have taken hardly any trouble to create a world whose existence was totally irrelevant to the truth of the mathematical entities that he contemplated. From the viewpoint of pure mathematics, the existence of things that exemplify mathematical relationships is a sheer accident, a pure redundancy. Of course, the accident is interesting, even important, for the understanding of the existent but is in itself irrelevant as regards the truth or validity of the mathematical entities themselves. Further, the mathematical relationships only *apply*: they do not and cannot *exist*. The inevitable categoreal application or exemplification which Hartmann envisages for the mathematical entities may perhaps be due to the fact that all things are necessarily numerable and, therefore, capable of quantitative treatment. But if this be the sense, then value-categories would equally and inevitably apply to all existents, for, when Hartmann contends that value may not be realized, he is simply being misled by the notion of value as being merely positive.

Value, in fact, is a *bi-polar* category which contains the contrasting poles of value-disvalue within itself and, therefore, is inevitably applicable to all existents whatsoever. The question whether there can be existents which are 'indifferent' with regard to value, is difficult to answer. But this, at least, is clear that if an existent is 'indifferent', it lacks positive value and, therefore, is certainly not as it Ought-to-be, for as we have already seen, existence confronted with a positive value always gives rise to an inevitable '*Ought-to-be*'. Thus, unless the notion of disvalue involves some *positive negativity*, the existent can never be 'indifferent' with regard to value. The notion of positive evil seems to have its justified foundation in the will that continuously and consciously seeks disvalue—the Lucifers, the Stavrogins and the Spandrells of this world. The bewitching fascination of the Tiberiuses and Caligulas of History seems to be equally positive,

along with the sublime humility evoked by a Christ or a Buddha or a Gandhi. Yet, this type of positive evil is, perhaps, found only in the realm of the will, the will that has sold itself to the devil. Apart from this realm, there seems only a lack of value—something negative, something that Ought-not-to-have-been. There can, therefore, be no 'indifferent' existent to which the value-category in its positive, negative or positive-negative dimension does not apply.

What, then, is the notion of a 'fact' which we usually contrast with that of 'value'? It is a commonplace in any philosophical discussion of values to start with the assertion that values are not facts and facts are not values. But this, even if true, would not decide the question whether value, either in its positive or negative aspect, is not inevitably associated with fact. Is not value some sort of a tertiary quality ascribable to objects in the same sense in which we ascribe to them the primary and the secondary qualities? Mr. Iyengar's objection to this view proceeds from a misconception. He contends that value is a 'relational emergent' forgetting in the meanwhile that all qualities, or rather all experience, is such. A 'relational emergent' is a quality which, when it has emerged, is ascribed either to the object or to the subject and, *in its meaning*, involves no reference to that to which it is not ascribed. 'Redness' is an 'emergent' alright but it gets ascribed to the object alone. So also is the case with the primary qualities. Values, however, are, perhaps, the only qualities—if they are qualities—that are ascribed both to the subject and the object. Relations, on the other hand, in their very *meaning* involve a reference to two or more entities. Even when we conceive of a relation between an entity and itself, as in *modern logic*, the entity has to be taken twice over. Further, the 'relation' qualifies the entities related in a very determinate way. 'Quality' gets ascribed only to one term among the 'relational emergents' it arises from, but 'relation' affects all the terms entering into its field in a determinate way. Of course, 'relations' too are 'emergents' but their characteristics and structure are different from those that are 'qualities'. The argument, therefore, that value is a 'relational emergent' is irrelevant to the question whether it can be conceived as some sort of a tertiary quality or not.

Professor Sorley, however, raises another objection to the view that value is some sort of a tertiary quality. He writes: "If this predicate were simply a quality constituting the nature of the object, then the assertion that the object ought to be as

it is, would be equivalent to saying that it is as it is, which would be a tautology, as Croce holds the assertion of positive value to be. Or again, when we call an object bad or ugly we assert or imply that it ought not to be as it is; and, if its negative value were simply one of its constitutive qualities, this assertion would be a logical contradiction, as Croce holds is always the case with the negative value-judgment."*

Professor Sorley here significantly admits that what appears to him an *insuperable objection* to the acceptance of values as a tertiary quality, is *consciously* conceived by another thinker to be the very nature of values—a situation that we have often met with in these pages. The situation is significant, for, it gives the ground for suspicion that it is not the argument that has been decisive for the position held, but something else. When an objection does not seem to another an objection at all the situation seems really interesting. But, leaving aside this point, it seems surprising that Professor Sorley has not seen that his argument, if valid, would apply to other qualities as well. After all, when we say 'the rose is red' or that 'fire is hot' we can always be charged, on the ground of which Professor Sorley speaks, *i.e.*, of having uttered a tautology. The point that 'red' is not a constituent of the 'rose' is irrelevant, for, when the rose *is* red, the 'red' is certainly a constituent of the rose. When we say 'the rose is not red', we are, according to Professor Sorley, uttering a logical contradiction. It is, of course, a subtle point whether the negative characteristic of 'not being red' is to be considered a 'constituent quality' or not. What is, perhaps, meant by a 'constituent quality' is a quality that *can never be* denied of a particular subject. If so, then the denial of such a quality with regard to that subject would certainly involve a logical contradiction. But, even here, it should be noted that the affirmation of such a quality would not be a tautology. The statement that 'fire is fire' is certainly tautologous but that 'fire is hot' can hardly be so. Even the statement 'equilateral triangles are equiangulars' seems hardly to be a tautology.

In fact, the whole question of tautology is irrelevant in the field of empirical experience, for, here there are no logical definitions or essences which determine what qualities are to be considered as 'constituent' and what not. There are no 'non-constituent' qualities in the field of logic and mathematics. But in the field of empirical experience, the difference between the 'essence'

* *Moral Values and the Idea of God*, p. 77-78.

and the 'accident', and 'constituent' and the 'non-constituent' is, though inescapable, made always from some particular viewpoint and mostly with reference to some purpose. Even, in the realms of logic and mathematics, we should distinguish between what W. E. Johnson has called the logical tautology and the 'epistemic novelty'. The distinction between 'essential' and 'accidental' qualities is logically untenable—a point shown long ago by Hegel and Berkeley in their different ways. The validity of the distinction, in fact, is purely empirical and is determined through and through by pragmatic considerations. Logically, it always is a problem for logic cannot understand a non-tautologous proposition. How can one ever assert of a 'subject' what it does not already possess—is a problem, insoluble on logical grounds. For, logic deals with sheer necessity; there is no place for chance or accident in its realm. Spinoza realised this and, therefore, made everything follow from his Substance with a geometrical necessity. But, as we have already seen, he did this under the influence of a sheer misunderstanding regarding the relations between Logic and Reality. As for the alleged logical contradiction involved in the denial of value to any existent, it may be pointed out that Value as a tertiary quality is not possessed by every existent because of the mere fact of its being an existent, but in virtue of the further fact that it is an existent of a *certain sort*, just as no existent is 'red' simply because it is an existent of a certain sort.

Values, thus, may be conceived of as third-level qualities associated with certain facts. This would, it is bound to be objected, make of value an existent quality and, thus, destroy the distinction between 'fact' and 'value'. But, it would be surprising if value were not to become an 'existent' even when it existed. Either, then, we are to deny that values can ever exist or be realised or we would have to admit that, in some cases at least, they can become 'existents'. That the beauty of a rose, or the value of a moral act does not exist is a position which seems hardly to have any meaning unless we wish to deny 'existence' to the rose or the moral act itself.

When we say 'the rose exists', we only mean that in a certain determinate situation we would have a certain determinate kind of experience which we have agreed to call by the usual name 'rose'. But if so, the same meaning would apply to the 'redness' or the 'beauty' of the rose and, thus, they too would come to be regarded as 'existents'. True, the 'redness' or the 'beauty' may not exist but, so also, may not the rose. Possible or even actual

'non-existence' is no sign that the thing or entity cannot become an 'existent' at all.

An 'existent', then, is regarded as a 'fact' only when we abstract it from its value aspect. In fact, this abstraction is made with reference to some purpose—the purpose of considering the object as it is apart from the valuational aspect of it. The rainbow when it is regarded as a mere dispersion of white light through the rain-drops, does not cease to be 'coloured' or 'beautiful'. It is only that we ignore these aspects. When 'colour' is considered in its 'factual' aspect of 'vibration-frequencies', it does not cease to be colour and if somebody considers those 'frequencies' to be 'more really' colour or colour as it is 'in-itself', it can only be because of reasons which we have already exposed in our chapter on 'Logic and Reality'.

Even in the determination of what is usually called a 'scientific fact', valuational considerations are not entirely absent. What is absent is only values of a certain sort—primarily those which concern themselves with pleasure, pain or human welfare. Scientific values of coherent description continuously determine what is to be considered a 'scientific fact'. The problem presented by Science is not due to the fact that it conceives the world in abstraction from all values whatsoever, but that it finds no harmony between the values it seeks and thinks as supreme and the other values. In other words—to use the phrase of Nicolai Hartmann—the problem is one of 'valuational antinomy'. The universe in its scientific aspect seems indifferent to values most cherished by humanity. The poison and the bullet do not stand abashed before a Socrates or a Gandhi. The loftiest love stands uncared for by the universe; the individual sits forlorn among the vast impersonal immensities that whirl purposelessly around him. The demand for a 'valuational coherence' like the demand for a 'rational coherence' is merely a demand, which the universe may not, and perhaps, does not, fulfil. The latter is a presupposition of scientific methodology, the former, perhaps, of human sanity itself. But the universe seems, in no way, to constrain itself to fulfil these demands and if one were to look at the world, one would be forced to say with Omar Khayyam :

'Ah, Love! could thou and I with Fate conspire
To grasp this sorry Scheme of Things entire,
Would not we shatter it to bits—and then
Re-mould it nearer to the Heart's Desire?'

Yes, the world seems indifferent to the 'heart's desire' and, as Somerset Maugham wrote somewhere, 'the tragedy of love is

not hate, not even death, but only, indifference'. The demand for 'valuational coherence' is such a 'heart's desire'—a desire which seems to be negated at every step of valuational experience.

A fact, then, which has no valual aspect, is an impossibility. It may, of course, be treated in abstraction from certain valuational aspects but the abstraction does not destroy those aspects nor can it be carried to its logical extreme of exclusion from all valuational aspects whatsoever. But, it will be said, values do not belong as characteristics to things as they-are-in-themselves. Only when things are considered in relation to human needs, desires and purposes, they are said to possess valuational characteristics. But it is forgotten that whatever characteristics we apply to objects—and a characterless entity is either a nonentity or merely a determinate potentiality or possibility—can only be applied when we regard things as *in relation* to human beings. The 'ego-centric predicament' is not a predicament, but a necessary condition of any experience at all.

There seems, therefore, hardly any reason why values should not be conceived as some sort of third-level qualities which belong not only to objects but to subjects and to their relationships with objects as well. Values are always met with in some determinate form of their own. In this, they are akin to qualities such as colour, which is never met as such but only in a determinate form of itself. In fact, 'value' is just a common name which has some determinate meaning only when we contrast it with the usual sense of 'fact'. But, as we have already seen, this is only a contrast, or perhaps, even an antinomy between certain values and others. The 'value-centric predicament' is as inescapable as the 'ego-centric' yet neither the one nor the other is truly a predicament, but only a necessary condition of all self-conscious experience.

In its generic sense, therefore, there can be no experiences which lacks a value-aspect. The value-aspect, however, is only an aspect, even though an inescapable and inevitable aspect, for it presupposes the object with its primary and secondary qualities. It is a *unique* qualitative aspect in the sense that it can equally well apply to the subject and its interrelations with the object. It would be difficult to think of primary or secondary qualities as applying to the subject of experience, but there seems hardly any doubt that valuational characterizations can and do apply to it. On the other hand, we find an essential dichotomy within the value-aspect itself. There seems to be no necessity that the value-aspect as revealed must always be positives; in fact, this is noto-

riously not the case with regard to most of the existents.

The breaking up of the value-aspect into its contrasting poles of positive and negative is of extreme significances for the world of the Existent. The lack of positive values generates what Nicolai Hartmann has called the 'positive Ought-to-be'—the felt judgment that things ought to be otherwise than what they are. This possibility that things may not be what they ought to be, clearly differentiates Positive Value from reality. Positive Values are certainly real, but all that is real does not necessarily have positive value. The Real, as we saw in our chapter on 'Logic and Reality', has no opposite to itself. The notion of unreality is an inadequate notion, a notion that springs into existence when we regard some characteristic or feature of such great importance that its lack begins to have an overwhelming significance for us.

There are philosophers who have consciously accepted the position that the notion of Reality is a valuational notion. In fact, they have gone further and argued that for any 'intelligible world' the distinction between reality and unreality is inevitable and that this distinction is essentially valuational in character. On these grounds, they have concluded that the Real and the Valuational coincide and cannot be conceived apart from each other. Thus writes Willbur Marshall Urban: "To separate value and reality is *ultimately* contradictory, and makes all our thinking and its communication *ultimately unintelligible.*"* He writes further: "We have repeatedly seen that to make *any* intelligible distinctions between the real and the unreal—still more to communicate such distinctions—presupposes mutual acknowledgement of values."† Professor Urban means by ultimate intelligibility the three characteristics of penetrability, comprehensibility and liveability. In fact, he writes: "The only linkage of facts that is really ultimately intelligible is one which is interpretable in terms of value. Any explanation, to be really intelligible, must somewhere in the chain of explanation involve the idea of purpose."‡ Intelligibility, for professor Urban "*is bound up with intelligible communication*"§ and as "the only thing that is self-explanatory is a will oriented towards value"¶ the world can only be ultimately intelligible if it be conceived as the expression of a will oriented towards value. Such a world is

* *The Intelligible World*, p. 152. Italics ours.

† *Ibid.*, p. 159.

‡ *Ibid.*, p. 186.

§ *Ibid.*, p. 187.

¶ *Ibid.*, p. 186.

inevitably presupposed in all intelligible communication and as there certainly is such a thing as 'intelligible communication' the classical world-conception of traditional *philosophy*, which professor Urban is seeking to rehabilitate, *must* be granted.

There are many facets of professor Urban's argument which need discussion. It is easy to see that his whole position rests on the problem of 'communication, intelligibility and value'. We do not know whether he would admit the possibility of an intelligible communication of unintelligibility. At least, he should—for, he continuously tries to communicate to the reader his sense of unintelligibility with regard to many of the statements he is trying to controvert. He writes, for example: "I must confess that such statements are to me wholly unintelligible."* We hope he would not deny that this is an intelligible communication even though it concerns itself with statements which he finds to be unintelligible. What we are attempting to point out is the *distinction* between the *intelligibility* or the *success of the communication* and the *intelligibility of the content* communicated. What is fundamental for communication—even if it be granted that communication is an ultimate fact—is only the intelligibility of the communication and not of the content that is communicated. The necessity for 'intelligible communication' does not imply the necessity of an 'intelligible world', for, the communication about the unintelligibility of the world is certainly intelligible. Professor Urban, therefore, is wrong in arguing from the one to the other.

The distinction we are urging is quite clear, for, the intelligibility in two cases can vary independently of each other. Intelligible communication about colour to a congenitally blind person is impossible but it does not mean that the content communicated is not intelligible. Further, Professor Urban's meaning of intelligibility is rather strange. He writes, as we have already noted, that "in the last analysis, perhaps, the only thing that we immediately understand is a will acting for the sake of good". It seems surprising, however, that 'in the last analysis' or 'ultimately' the multi-form phenomena become more 'intelligible when conceived in such a way. Colour certainly does not become more intelligible when conceived of as an aesthetic product in the pursuit of Beauty by some transcendental will. Evil does not cease to be evil, even if it seems to be unintelligible and is, therefore, declared to be unreal. Lucifer and Faust are not unintelligible

* *Ibid.*, p. 190.

—rather they have a compelling fascination which, perhaps, surpasses even that of Christ or Buddha.

Professor Urban, of course, does not deny commonsense and scientific intelligibility but he contends that they are *ultimately* unintelligible. We feel that this taint of *ultimate* unintelligibility would be found to corrupt what he considers as the only self-explanatory thing in the world. 'A will seeking value' is *ultimately* unintelligible for, why should there be a will at all, and, if it be, why should it seek value? And why should there be values; and why should it not seek dis-value? In fact, the whole problem is *why should there be anything at all?* Why not Nothing?—that is the question which *ultimately* makes all existent, subsistent and value *unintelligible*. There is no sufficient reason for any thing, and if the sufficient reason be God, there is no sufficient reason for him.

It is no objection to this to say with Henri Bergson that Absolute Nothing is not a conceivable term of thought. Bergson has argued that whenever we say there is nothing, we only mean that there is something else, something other than what we expected. Descartes would have said that the very thinking of Nothing disproves that there can be such a thing as Nothing for thinking, at least, is a positive thing. Others would readily prove that we are asserting a positive contradiction, for, how can the Nothing *BE*? But all these objections are essentially irrelevant, for, we are not saying that there *is* Nothing but only asking why it is not so. There can, of course, be no answer to such a question but that is the reason why things, wills and values are all ultimately unintelligible.

Further, if only 'a will seeking value' were to be self-explanatory, what would happen to the 'uni-total' aspect of reality which, according to professor Urban, is one of the three inevitable presuppositions of intelligible communicability? For the 'seeking' does make a difference between 'will' and 'value' and thus divides the world not only into 'will' and 'value' but also the objects without which the value can neither be realised nor sought. The objects that are inevitably presupposed by all values do not become the least intelligible by the fact that they have values. Axiological interpretation does not replace, in fact, is no substitute for scientific explanation. If it were not so, the whole scientific endeavour of the last four centuries should have been in vain, for, objects were *ultimately* intelligible in the religious-mythological conceptions of the world.

Professor C. G. Jung in his book, *Modern Man in Search of*

A Soul, cites the example of some African savages who explained the gobbling of a woman of their tribe by some crocodile when she had gone to the sea with three other women, as due to some enemy magician who had cast spells on the crocodile and sent it to eat her up. Prof. Jung finds this explanation more intelligible for, after all, why was that particular woman eaten by the crocodile and not the others and why did the crocodile come there at all when that place was not infested by crocodiles? All these and a hundred other questions are evaded by our calling it a 'chance coincidence of events' and the whole thing is hardly rendered intelligible by our thinking of it as a mere accident. The savages' explanation is more intelligible or rather, the only intelligible explanation, for we, certainly, have none to offer. Yet who would accept that explanation, even if it is the most intelligible one? What stands in our way of accepting such an intelligible explanation is the scientific enterprise of the last four hundred years. Professor Urban may disown that enterprise and choose to accept what he calls the intelligible explanation but then he would only find that other's choice is a different one. He is bound to admit that other's choice as well as his is determined not by 'factual' but by 'valuational' considerations.

It is his great contribution to have shown that even in Science valuational considerations are not only not absent but predominant. But he has forgotten that Scientific Values do not exhaust all values and that they are in veritable conflict with other values. It is not that science lacks values but that the values it seeks and regards as supreme are in dynamic conflict with other values nearer the human heart. The problem is a problem of *choice*, not of *acknowledgement*—for, the demand for valuational harmony is merely a *demand* while the valuational antinomy is a *fact* of all experience.

The identification of meaning and value is the great defect of Urban's argument for, an object may have quite determinate meaning and yet lack positive value. When we say 'the table is not beautiful' we do not mean that the table is unintelligible or that it has no meaning but only that it lacks a particular kind of value. '*Lack of value*' is not identical with '*lack of meaning*'. In fact, Professor Urban has completely failed to consider the negative value-judgment. Either he should deny that existents do sometimes lack positive value or he should give up the complete identification of Reality and Value. If Prof. Urban asks us to take value in both its positive and negative dimensions, we, certainly, can have no objection, but what then would happen

to the classical tradition which has always taken the identification of the Real and Valuational to be a positive conception?

The only way in which Prof. Urban tries to meet the problem of negative values is through his concept of 'significant negation'. He writes: "In the first place, significant negation enters into the very formation of the concepts that mark the broad divisions or levels within the hierarchical series. In the second place, because without it we *cannot even form intelligible concepts of being*, this negation expresses at once an axiological and an ontological meaning."* Disvalues, therefore, for Professor Urban, are necessary for an Intelligible world and their existence in experience, therefore, should raise no problem for the philosopher. In this he seems to be right, for an intelligible world is a world in which there are distinctions and all distinctions are ultimately valuational. Yet, as he himself has admitted, there is no *meaning* in calling the universe *valuational*, for, the distinctions may be within the universe but they cannot belong to it. But if this were true, the universe would be unintelligible too, for, according to Professor Urban, value and intelligibility are inseparable.

Nobody, of course, can have any quarrel with him if he refuses to call this universal totality of Being, Reality; but what is more important is the fact that he is forced to admit the meaningless unintelligibility of this almost ultimate term of human thought. He has insisted "that the proposition 'to be real is to be real' is tautologous, and as such meaningless".† We would simply ask how can the proposition 'to be real is to be valuational' be anything but a tautology, if 'to be real' *means* 'to be valuational'. For Professor Urban the proposition is analytic and not a synthetic one. He refuses to recognize that the term 'reality' has any *meaning* apart from 'value' for the very simple reason that 'meaning' and 'value' as he holds are completely *identical*. Just because the predicate consists of a word composed of different letters from the subject, the proposition does not become a non-tautologous one. In fact, the last few sentences *seem* to have some sense only because we have been using different words such as 'reality', 'meaning' and 'value'. According to Professor Urban, the sentence can be intelligible only when we substitute the term 'value' for all other terms. That there *must be some distinction* between the value-aspect and the reality-aspect in order to make

* *Ibid.*, p. 541. Italics ours.

† *Ibid.*, p. 452.

an *intelligible* ascription of value to reality, is, perhaps, the strongest proof that the Real can, in no case, be considered as identical with the valuational. Professor Urban himself has argued against the reduction of value-terms to other terms but, if there are no other terms than the valuational ones, how can there be any danger of a reduction at all?

The aspect of value, then, to be intelligible, in its own turn, needs to be differentiated from some other aspect which, whether we call it 'reality' or not, is something *other* than the value-aspect. The two, then, cannot be identified in their *meaning*. To do so, on Professor Urban's own view, would spell complete unintelligibility. But even as a matter of empirical fact, the complete correlation between Reality and positive value is impossible to maintain and, thus on grounds both of logic and experience, the doctrine regarding their complete identity is ultimately untenable.

This rather prolonged discussion of Professor Urban's position was undertaken with a view to examine the arguments of one of the foremost among those modern thinkers whose continuous and conscious thesis has been that any dissociation between Reality and Value would make the world ultimately unintelligible. That there is no *a priori* necessity why the world should be ultimately intelligible has been our contention in the last few chapters. Professor Urban himself, at the end of his book, seems to feel that it is more a matter of *acknowledgement* than *argument*. He writes, for example, "Here we have, perhaps, merely a question of taste, even if from our point of view, perverted taste, and all disputation is futile."* Yet, he seems to feel that something more can be said and this he tries to say by finding that "we are all *thinking* here, irrespective of what we think." †

But this, even if true, will not undermine the fact urged by Urban himself that all "thinking" presupposes that which is "spontaneous". What ground can there be for the belief that the "necessities of thinking" must be the "necessities of the spontaneous" even when the two do not coincide? He writes: "Pure impressionism is, however, in the last analysis, incommunicable"—but this is no charge, for it is exactly the contention made by the opponent. Spontaneity is incommunicable—and where is the poet, the philosopher or the scientist who has not felt that things

* *Ibid.*, p. 470.

† *Ibid.*, p. 470. Italics author's.

'in the last analysis' are incommunicable? What is that 'trenching on the mystical' of which Professor Urban speaks excepting a hovering over the verges of the incommunicable. "Whereof one cannot speak, thereof one remain be silent"—wrote Wittgenstein in his *Tractatus*. But he admits by implication that there are things 'whereof one cannot speak' and the fact of ultimate incommunicability, therefore, is only to be acknowledged but not discussed.

The notion of "acknowledgement", brought into focus by Professor Urban in his discussion on values, reveals a new characteristic that we had not yet noticed about them. Values, as we saw earlier, were some sort of third-level qualities which presupposed a world of objects with primary and secondary qualities and which, unlike those first and second level qualities, could apply not merely to objects but to subjects and to their relationships with objects as well. Value, we also said, occurs only in a *determinate* form of its own and, in its case, as in that of other qualities, there is a "more" or a "less" about it. This 'more' or 'less' is, of course, valuational—but if we are talking of values, what else could it be?

People have objected to the use of the term "quality" in such a context. Thus writes Bernard C. Heyl objecting to the objectivistic character of values in general and aesthetic values in particular: ".....Anyone advocating this analogy (i.e. between value and secondary qualities) should be able to point to a distinct *quale* characterizing artistic quality, esthetic quality, or beauty, which could be reasonably compared with that of a colour or sound."* Mr. Heyl would admit that we can *point* only to a *determinate* colour and not to colour in general. The notion of a "colour in general" can be given some meaning only if we accept the optical notion of colour i.e. if we do not recognise black and white as colours and contrast all that is coloured with reference to them. The phrase "colour in general" would then primarily mean its being something different from either black or white. Though even then the colour would always be only a *determinate* colour. On the other hand, if we regard black and white as colours,—and *qualitatively* they must be recognized as such—then the challenge to point to the particular *quale* denoted by the term 'colour' must remain unmet. The third-level *quale* that can be pointed to is not value-in-general but only a deter-

* *New Bearings in Esthetics and Art Criticism: A Study in Semantics and Evaluation*, p. 112.

minate value, just as the second-level quale that can be pointed to is not colour-in-general but only a determinate form of colour. True, value reveals characteristics which are very different from first and second level qualities and if, on this ground, one were to refuse it the name of 'quality' we would have no objection, for the problem would be merely a problem of language.

The 'acknowledgement' characteristic of value seems to be equally a characteristic of other qualities for, "acknowledgment" means objectivity and all that is experienced must, in virtue of that very fact, be objective. But Professor Urban wishes to convey something different. What he means is not the acknowledgment that is forced by the object just because it is the object but the acknowledgment that is unforced—an acknowledgment which *may not* be acknowledged. He, of course, is not decided whether he thinks of 'acknowledgment' in the first sense or in the second but the only sense in which it can be significant in a discussion on values is, undoubtedly, the second, for the first is shared by other qualities as well. Hartmann has admitted that the Ideal Ought-to-Be of values implies that they may-not-be. In fact, in this 'ought' and yet 'may-not' lies, for him, the whole nature of values. But as to the question whether there is a 'May-Not' with regard to *the acknowledgment of values themselves*, Hartmann seems to be silent. Of course, he distinguishes between the Ought-to-Be and the Ought-to-Do; and even with regard to the latter he admits that it can have no meaning apart from the May-not-Do. But with regard to the Ideal Essence of value, he thinks that it *must* be acknowledged.

Here we should be clear about the exact nature of the question we are raising. One aspect of the question is whether we can give up the notion of value altogether or whether we are *free* to acknowledge the value-standpoint. In other words, Is there such a thing as a 'value-centric predicament'? The other aspect of the question is simpler to state for, it merely concerns our freedom to acknowledge the values of particular objects, relationships or persons. Hartmann would deny our freedom in both the aspects and grant it only in the field of our realizing of particular values. Urban would grant us freedom in the second aspect of our question but not in the first. It seems to us—and it has been our contention all along—that values are objective. Yet, while it seems certain that the notion of value cannot be given up, there remains a feeling that we are free to acknowledge particular values. This feeling remains intact in spite of the

fact that we generally feel constrained to admit certain values which, perhaps, we do not even wish to acknowledge.

The only reason that we can think of for such a situation is that Freedom itself is a value—perhaps, the only ultimate and intrinsic value. The distinction between 'intrinsic' and 'instrumental' values is, at best, relative but the freedom of the subject seems to be the highest as well as the most intrinsic value that we can conceive of. Values themselves belong to two levels; those that belong to the world of objects and those that presuppose this world and can only be realised in the pursuit of these first-level values. The second is impossible without the freedom of the Subject. Metaphysical Freedom is the prius of the realization of all values at the second level, as at this level we do not find values but *create* them. The translation of this metaphysical freedom into empirical freedom seems to be the highest positive value that man can conceive of. True, when confronted with a spiritual personality, which is the *sine qua non* of this translation, we feel constrained to admit the absolute superiority and objectivity of such a realized value. Lazarus, when he looks into the eyes of a Tiberius or a Caligula, must make them see the Creative Freedom welling into Life that He is and thus constrain them to realize the deathness of the Death they hide in their heart.*

Yet, even in such a case the Subject *feels free*—free to betray the Christ and become a Judas, to fight the Lord and become a Lucifer. Gabriel stands in no comparison with Satan for, even the genius of a Milton cannot make 'Thy will be done' superior to 'I will'. The spiritual personality is beyond both. Unconstrained by 'ought', 'is' or 'will'—it is just Freedom. A creativity welling out of the fount of Being, he appears as beautiful as the maiden of the morn stepping lightly on the roses that fall. At a higher level, of course,—but higher than that we do not know. This is, in a sense, a transcending of the ordinary level of 'is' and 'ought', but it is not a transcendence of all values, for it itself is the supremest of all values.

Thus, while it seems impossible to give up the notion of value, it seems necessary that we have *freedom* with regard to all particular values, for freedom itself is the supreme value. But, if this is so, we can have no rational determination of particular values, for it lies in their very nature that we should be free to acknowledge them or not. Even on grounds of the irreducibility of our value-notion, it can be shown that a rational

* *Lazarus Laughed*, a play by Eugene O'Neill.

determination of values is impossible. Moore is right when he contends for the irreducibility of the notion of value and thus for its indefinability. Ultimately, there can be no *reason* why a thing has value *excepting that it has*. This is a point that was clearly recognized by Mill when he wrote, "Questions of ultimate validity are not capable of proof or disproof" and when Bradley wrote his famous 'Why should I be moral'? Mr. Iyengar's objection to this position of Professor Moore, though extremely subtle, is, we hold, invalid. He argues that it is only because of a confusion between value and moral value that the repeated question with regard to everything, whether it is really good, seems to have some meaning. Otherwise, he writes, it "only shows that the question does not prove that the definition offered is not a proper definition of value. When once he is *convinced* about it, there would be no further significance in the question, whether it is itself valuable."* The problem, as Mr. Iyengar seems to admit, is one of *being convinced* but this conviction does not depend upon any reason or on any other ground and, thus, is absolutely free and beyond any discussion. This is what is meant by Moore, Mill and Bradley that there is no reason why anything—even Mr. Iyengar's 'Desire'—has value excepting that it has.

The second aspect of the valuational presupposition that they are rational and, therefore, an object of rational discussion and determination, thus, seems not to hold water. In fact, the identity of rationality and value is unmeaning—for, the rational as well as the irrational may have value. The value-category, then, transcends rationality and irrationality and to equate it to either of the two would be due to a confusion or a choice which, however, satisfying to the person who has chosen, leaves the others cold. One may *choose* to regard rationality or irrationality as positively valuational, but there can be no ground on which he can convince others to *choose* in the same way. Even if there were sufficient agreement as to what things are to be considered as positively valuational—and there *is* such an agreement—yet what things were to be considered as of utmost importance would seem difficult to decide.

It is this fundamental fact of freedom with regard to the superior importance of particular values, that lies at the base of most philosophical disagreements. Philosophical positions are valuational positions and the philosophers disagree not about each

* *The Metaphysics of Value*. Vol. I, p. 108. Italics author's.

other's arguments but about the *importance* of their arguments. Pure logic is pure tautology: it can neither prove nor disprove anything. Philosophers, therefore, have to *choose* and no one can be convinced who has made a *different* choice. The ultimate impossibility of philosophers being able to convince each other springs from the fact that, excepting immediate sense-data and pure logic, everything else is a matter of choice and belief. There is no objective ground on which one can constrain others to one's own opinion. Intuitive apprehension and the formal law of contradiction provide the absolute bed-rock for those two "hard certainties" and within their field they are inescapable. But any attempt to go beyond these fields, becomes more or less of an *assertion*—an assertion that may be reasonable but never rational. Philosophers have been prone to talk about 'the All'—yet, as every mathematician knows, how difficult it is to solve the problems arising from the use of such a word. Russell's 'theory of Types' and 'the axiom of reducibility' brought in to solve the paradoxes arising from the use of the word 'All' have hardly mended matters. For, "the fact remains that the axiom is not acceptable to the great majority of mathematicians and that the logical paradoxes, having divided mathematicians into factions unalterably opposed to each other, have still to be disposed of".*

The identity of Reality and Value on the one hand and that of Value and Rationality on the other, then, is wrong and the third great presupposition of philosophy, therefore, is unwarranted. We have tried, in this chapter, to show that there is no *a priori* reason why the real should be valuational or that the valuational should be rational. The only sense in which the first statement can have any meaning is that Reality must be conceived under the value-aspect—that either it must be positively or negatively valuational or even disvaluational. Even under such an interpretation the reality-aspect would have to be completely distinguished from the value-aspect. This statement, therefore, would be as much significant as the statement that the reality should be coloured—for, if we include white and black within colour, there is, if we may be permitted the phrase, the 'colour-centric predicament'. And even if they be not included, the situation would be the same if we are allowed the use of phrases like 'negative colour' and 'dis-colour' or 'non-colour'. At least,

* *Mathematics and the Imagination*. Edward Kasner and James Newman, p. 216.

it is an empirical fact, that many existents lack positive values. The situation can only be retrieved by calling them 'unreal'. But such a linguistic triumph we shall leave for the enjoyment of those who are in love with the words 'real' and 'valuational'. The second statement concerning the rational and the valuational is merely a particular *choosing*, a *question in Importance* and thus *beyond discussion*.

The detailed examination of the three great presuppositions of philosophical thinking has brought us to the conclusion that they are of very questionable validity. On grounds that are so open to doubt, it would be folly to build imposing superstructuresyet that seems to be exactly what philosophy has been doing for the last few thousands of years. The fourth seems inevitably to follow from these three presuppositions together and if they seem to fail under scrutiny, it can hardly find another fate. These 'Presuppositions and Implications' characterise the Traditional Philosophy. But anyone who is acquainted with contemporary thinking would be aware of the fact that they have been under a torrent of criticism from all sides. Alternative views of philosophy are being put forward and new definitions of philosophy are being continually attempted. It is necessary that we should examine these alternative conceptions of philosophy and try to find out if they are more adequate than the traditional one. The next part, herefore, will be devoted to a discussion of some of the leading representatives who have suggested some alternative views of philosophy. But before we do it, it would be well if we undertake a brief discussion on the nature of three traditional values of Truth, Beauty and Goodness. This should be considered as some sort of a short supplement to our chapter on 'Value and Reality'.

CHAPTER VI

TRUTH, BEAUTY AND GOODNESS

The distinction between 'instrumental' and 'intrinsic' values, however relative, is inevitable. It is not that things or activities which are valued only instrumentally may not come to be valued for their own sakes, but only that such distinction inevitably arises in the pursuit of values. It should be borne in mind that such distinction arises only in connection with the '*pursuit*' of values and not with reference to the values themselves. Values, in fact, have been understood by many as things 'worth striving for'. But this, as we have seen, is only when they are viewed in relation to the human will and not as they are in themselves. Value is indeed the ground of both the 'Ought-to-Be' and the 'Ought-to-Do' but, between themselves, they do not exhaust the nature of values.

Truth, Beauty and Goodness have been the traditional intrinsic values, while most of the remaining values have generally been regarded as 'instrumental'. This distinction is based on the empirical fact of causation which, within the context of psychological purposes, is viewed as the relation of means and end. On the valuational level, the distinction gets reformulated in terms of 'instrumentality' and 'intrinsicity'.

A deeper interpretation of this distinction seems to correlate it with the hierarchichal structure of values. Hartmann, who has argued most powerfully to establish the view that the lower values should never be regarded as merely a means to those higher than themselves, has nevertheless formulated the law that the higher cannot be realised without the lower, thus making the realisation of the lower values a *necessary precondition* for the actualization of the higher. In this interpretation, all values are regarded as intrinsic. The distinction, on the other hand, is based on the fact that in the hierarchy of values, the higher cannot be realised without the realisation of the lower. The lower values are 'instrumental', therefore, in the sense that without their being realised, the higher cannot be realised. But they are not 'instrumental' in the sense that they are not 'intrinsic'. They do not lose their self-insistent intrinsicity, in face of the higher values. Rather they continue to assert themselves, just