

LOGICAL POSITIVISM AND RELIGIOUS LANGUAGE

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1. INTRODUCTION

There has been much discussion in recent times about the problem of God in the Anglo-Saxon philosophical tradition. It is the advent of logical positivism that has prepared the background for such analysis and discussion. According to logical positivists, the question of the meaning of language is logically prior to the question of its truth; one cannot and should not ask whether a statement is true if it has no meaning. Consequently in the case of religious language the question of its meaning takes precedence over that of its truth. The traditional discussions regarding religious beliefs were concerned about establishing the truth of a particular statement or a system of statements, but had often neglected the question of their meaning. But, according to the logical positivist position, unless the issue of the meaning of religious statements is first resolved, we cannot even raise the question of their truth. This constituted a challenge to religion, since some of the philosophers came to the conclusion through the analysis of religious language that it has no meaning; and hence we cannot speak about the truth of religious propositions.

Our approach to the problem is historical as well as interpretative. First of all, we give some historical account of the problem of the meaning of religious language, its

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background and some attempted solutions. Secondly, our approach is interpretative. We select only some philosophers who, we think, are the typical representatives of these discussions. Our purpose is to place the challenge to the meaning of religious language and the responses to this challenge in its clearest perspective. With this idea in mind, we first try to give the philosophical background of the problem by giving an exposition of the logical positivist theory of language in the second part of the paper, and its consequences to religious language in the third part. Finally, in the critical evaluation, we shall indicate some trends of thought which have attempted to overcome the logical positivist approach to religious language.

We have already used the word 'meaning' a number of times. A clarification of its meaning is in place. We adopt the terms given by Klein to refer to meaning. In our present context, the word 'meaning' can be used interchangeably with the following terms: 'factual meaning,' 'factual content,' 'factual significance,' 'literal meaning,' 'literal content,' 'literal significance,' 'cognitive meaning,' and 'cognitive significance'.

II. LOGICAL POSITIVIST THEORY OF LANGUAGE

Logical positivism, as represented by Ludwig Wittgenstein, (of course, of the *Tractatus Logico-Philosophicus*),² A.J.Ayer and Karl Popper, can be said to constitute the appropriate philosophical background of the recent discussions on the meaning of religious language. Of course Bertrand Russell is another important philosopher of the analytical tradition, but we limit ourselves to the above mentioned philosophers. Whereas Wittgenstein in his *Tractatus* proposes in clearest terms the logical positivist theory of the meaning of language. A.J.Ayer in his *Language, Truth and Logic*,³ and Karl Popper in his *The Logic of Scientific Discovery*,⁴ propose the criteria of meaning, namely, verification and falsifiability respectively.

A. The Logical Positivist Theory of Meaning

Wittgenstein's *Tractatus* marked the 'linguist turn'⁵ in philosophy, a change in the mode of philosophising comparable to Kant's 'Copernican revolution.' Wittgenstein is "concerned with the conditions which would have to be fulfilled by a logically perfect language".⁶ His question is: what is the condition for a language to make sense, or to have meaning? His answer is that sense must be determinate.⁷ This is the fundamental principle underlying the *Tractatus*. In order that sense be determinate, a proposition must describe reality completely,⁸ that is, terms of truth and falsehood. "A proposition must restrict reality to two alternatives: yes and no."⁹ Hence language has a two-valued logic; that is, propositions have only two truth-values, namely, truth and falsehood.

Moreover, according to Wittgenstein, the principle of the determinateness of sense implies the truth functional concept of language, which is the totality of elementary and complex propositions. Now, complex propositions are nothing but the truth functional extensions of elementary propositions; they are the conjunctions, disjunctions, implications, etc., of elementary propositions as bases.¹⁰ This means that the truth of complex propositions derivable from the truth values of their elementary components. Hence the content of every possible speech is laid down in advance and determined by the totality of elementary propositions about reality; and all complex propositions are no more than the result of the logical manipulations with elementary propositions and their truth values.¹¹

Wittgenstein is better known for his picture theory of language. In fact, this theory is the reverse side of the principle of determinateness of sense. It is because sense is determinate that language should be a picture of reality: the demand for the determinateness of sense and the deduction of the atomistic character of the logical structure of

language are one and the same. According to picture theory, language is a picture or model of reality.¹² The world-reality is the totality of facts; a fact is made of atomic facts which is a combination of objects which are simple.¹³ Now, language pictures the world - the totality of facts - as follows: A name directly refers to an object; an elementary proposition which is a nexus of names pictures an atomic fact. Complex propositions constituted out of elementary propositions by logical connectives, such as conjunction, disjunction, implication, etc., mirrors a fact. Finally language, the totality of propositions pictures the world, the totality of facts - the existence of states of affairs. Thus, according to Wittgenstein, there is a complete one-to-one correspondence between language and reality.

Two other important notions in Wittgenstein's theory of language are the concepts of logical space and logical place, which are also implied in the principle of the determinateness of sense. Logical space is the space of all possibilities that can be thought of, a space all possible states of affairs¹⁵, which can be expressed by the totality of thinkable elementary propositions about reality. Now a proposition determines a logical place in logical space.¹⁶ And every direct determination of a place in logical space is at the same time an indirect determination of the rest of logical space.¹⁷ Thus when I say, "It is raining," that is, when I identify reality with logical place of 'raining' I logically exclude the possibility of 'not-raining'. Hence to hold something for true is to hold another thing for false. Thus every proposition asserts the existence of some possible world while excluding the possibility of others.. In this play of exclusion and inclusion of possible worlds, there are two extreme cases, namely, tautology and contradiction. A tautology admits all possible situations, and contradiction admits none.¹⁸ Between these two extremes lies the meaningful, 'sayable' world of language and speech.

This brings us to the concept of 'saying'. According to Wittgenstein 'to say something' is not something speakers do with propositions, but something done by the proposition itself. The proposition *p* says something, in so far as it includes *p* and excludes *-p* from reality as a whole. Thus 'to say' something is to operate an inclusion of a possible world, which means at the same time the exclusion of other possible worlds from reality; and this is in fact the same as determining a logical place for reality in logical space. Hence it belongs to the essence of saying to leave something out: some possible worlds must be excluded from reality. Therefore every proposition can be falsified.¹⁹

A consequence of the principle of the determinateness of sense and the picture theory of language is to divide the propositions of language into two classes: those which 'say' something - namely, the propositions of natural science, and those which do not 'say' anything - namely, tautologies and contradictions.²⁰ For these do not determine any specific place for reality in logical space. This division of propositions into two classes is accepted by all the logical positivists.

B. The Logical Positivist Criteria of Meaning

The logical positivist criteria of meaning, namely, verification and falsification, are in fact implied in Wittgenstein's theory of meaning. Whereas A.J. Ayer holds that verification is the criterion of meaning, Karl Popper maintains that falsification is the criterion of meaningful propositions.

1. Verification as the Criterion of meaning

Ayer's position about the meaning of language is substantially same as that of Wittgenstein, but he proposes verification as the criterion of meaning. Closely following Wittgenstein's division of statements into two, Ayer divides meaningful propositions into analytical propositions, whose

validity depends solely on the definitions of the symbols they contain; and synthetic propositions, whose validity is determined by facts of experience. Analytic propositions are valid independently of experience, for example, the proposition, "Either some ants are parasitic or none are". One need not resort to observation to discover whether there are, or are not, ants which are parasitic. The propositions of logic and mathematics are such analytic propositions.²¹ Such propositions provide no information about the factual world; nor can they be refuted by experience.

According to Ayer, a proposition is synthetic or empirical when its validity is determined by the facts of experience. For example, "There are ants that have established systems of slavery." We have to resort to the actual behaviour of ants in order to decide whether this proposition is true, that is, by verification. Thus for Ayer, verification is the criterion of factual or empirical meaning. A proposition is factually meaningful, if, and only if, one knows how to verify it, that is, if he knows what observations would lead to him to accept the proposition as true or reject it as false.²²

2. Falsifiability as the Criterion of Meaning

Karl Popper does not speak of criterion of meaning, but rather of criterion of demarcation "which would enable us to distinguish between the empirical sciences on the one hand, and mathematics and logic as well as 'metaphysical' systems on the other."²³ According to him, "not the verifiability but the falsifiability of a system is to be taken as the criterion of demarcation."²⁴ The reason is that statements are never conclusively verifiable; there is always the possibility of finding counter-evidence. Even though a simple statement such as "All crows are black," is apparently true, there is always a possibility of finding a crow that is not black. Verification does not guarantee for

the truth of future statements. Hence Popper advocates falsifiability. The criterion of falsifiability says that "statements or systems of statements, in order to be ranked as scientific, must be capable of conflicting with possible, or conceivable, observations."²⁵ In other words, "it must be possible for an empirical scientific system to be refuted by experience."²⁶ Thus, for example, the statement, 'It will rain or not rain here tomorrow' will not be regarded as empirical, simply because it cannot be refuted; whereas the statement 'It will rain here tomorrow' will be regarded as empirical.

The similarity between Ayer's position and that of Popper is very evident. Though the former speaks about 'criterion of meaning' and about 'criterion of demarcation', their intention is the same; both are concerned about discovering a principle by which to distinguish the propositions of natural science from the propositions of mathematics and logic. The difference is that, whereas one speaks about verification by experience, the other speaks about the falsifiability or refutation by experience.

III. THEOLOGICAL CONSEQUENCES OF LOGICAL POSITIVISM

With the coming of logical positivism on the philosophical scene, a radical version of religious agnosticism has been propounded. Until then theists and the atheists shared the common assumption that statements about God were meaningful; that the proposition that "God exists" is true or false. This assumption is now denied, and the logical positivists suggest that statements about God are devoid of any meaning; indeed that they are not genuine statements at all. They do not 'tell' us or 'say' anything²⁷; they are not even false. Hence both the theists and atheists are disputing a meaningless question.

A. The Challenge to Religious Language

A challenge to the cognitive meaning of religious language is already implicit in the positions of Wittgenstein and Ayer. Having divided the propositions of language into tautologies of logic and mathematics on the one hand, and the propositions of natural science on the other, Wittgenstein left no room for religious discourse. Of course, he refers to the 'mystical'. But, according to him, we cannot 'speak' about the realm of the mystical. "There are indeed, things that cannot be put into words. They make themselves manifest. They are the mystical."²⁹ It is an experience that cannot be put into words. Thus religious discourse lies beyond the realm of meaningful speech.

Equally damaging is the effect of Ayer's criterion of verification on religious language. He mainly concentrates his attack on the question of the existence of God, which, he says, cannot be proved from empirical propositions since these are only probable; nor from a priori propositions since these are merely tautologies. Moreover, the existence of God cannot be even a probable hypothesis, because in that case it should be possible to deduce from it empirical propositions which, in fact, is impossible. Ayer affirms that his position is neither atheism nor agnosticism. For if the theist's assertion that there is a God is nonsensical, then the atheist's assertion that there is no God is equally nonsensical, since it is only a significant proposition that can be significantly contradicted. The agnostic, though he suspends his judgement about God's existence, does not deny that it is genuine question.³⁰ Ayer concludes, then, that the theist's "assertions cannot possibly be valid, but they cannot be invalid either. As he says nothing at all about the world, he cannot justly be accused of saying anything false, or anything for which he has insufficient grounds."³¹

But it is Antony Flew who for the first time openly challenged the theists to establish whether religious statements are assertions, whether they have cognitive or factual meaning.³² He begins his attack on theism with the haunting parable of the invisible, intangible, eternally elusive gardener who tends a plot of land. But no empirical methods, such as setting up a watch, encircling the garden with an electric fence, patrolling with bloodhounds, etc., give the evidence of the gardener. Nevertheless the believer, faced with the objections of the religious skeptic, goes on qualifying his statements about God's presence until his hypothesis is "killed by inches, the death of a thousand qualifications."³³

Flew's challenge is: "what would have to occur or to have occurred to constitute for you the dispute of the love of, or of the existence of, God?"³⁴ For it would seem that no conceivable event, not even utter misery, as the case of an innocent child dying of cancer, would go against the propositions, such as "God exists" or "God loves us". In other words, religious people "tend to refuse to allow, not merely that anything actually does occur, but that anything conceivable could occur, which would count against their theological assertions and explanations"³⁵

Flew's attack on the meaningfulness of religious language is based on the principle of falsification which is implicit in Wittgenstein's concept of 'saying', and which is made explicit by Popper. The logical principle operative in Flew's argument is that one way to find out the meaning of an assertion is to determine what would count against the assertion must be part of, or whole of, the meaning of the negation of that assertion. And to know the meaning of the negation of an assertion is to know the meaning of the assertion. For if there is nothing that an assertion denies, then there is nothing that it asserts either. In other words, "an assertion to be an assertion at all, must claim that things stand thus and thus; and not otherwise."³⁶ Flew's argument

in short, is that the intelligibility of an assertion is the function of its falsifiability. A statement informs us to the extent that it delimits a state of affairs. A statement whose truth nothing could conceivably count against delimits no state of affairs and cannot be informative. Religious statements are such, and so they do not inform us about anything.³⁷

B. The Responses to the Challenge

Antony Flew's challenge put the philosophers of religion in an uncomfortable predicament. The responses to his demand to justify the cognitive meaning of religious discourse can be grouped into two: descriptivist and non-descriptivist. Whereas the former affirms that religious statements have a meaning, that they describe a state of affairs, the latter denies that religious propositions affirm anything. Both these groups of philosophers accepted unquestioningly the legitimacy of the principles of verification and falsifiability. Philosophers who belong to the descriptivist move, such as John Hick, Basil Mitchell and I.M. Crombie hold that even after admitting the validity of the logical positivist position on meaning, it can be shown that religious propositions have meaning.

1. The Descriptive Response

In dealing with the descriptive position, we shall limit ourselves to the position adopted by John Hick. He acknowledges that, "verifiability is a valid criterion of factual meaning."³⁸ Accordingly, in order to defend the factual meaning of religious discourse, he elaborates the theory of "eschatological verification."³⁹ According to him, the existence and the love of God are hypotheses that can be verified at the end of time. Thus the possibility of experiential confirmation is built into the Christian notion of God. This alleged future experience of God does suffice to render the choice between theism and atheism real and not an empty choice.

Thus the universe envisaged by the theist differs as a totality from the universe visualised by the atheist. The theist does, and the atheist does not, expect that when history is completed, a particular state of affairs would be verified.⁴⁰

Now, since the idea of an eschatological verification of theism implies continued personal existence after death, Hick sketches a doctrine of immortality, and tries to imagine after-life experiences, which would verify theism. According to him, the following experiences, if they occurred in conjunction with one another, would verify the existence of God. First, an experience of the fulfillment of God's purpose for ourselves, as this has been disclosed in Christian revelation; and in conjunction, second, with an experience of communion with God as he has revealed himself in the person of Christ. Hick claims that these experiences conceivably would verify the truth of theism, and so the propositions of theism, and so the propositions of Christian theism, are cognitively meaningful.⁴¹

2. The Non-descriptive Response

While the descriptive move affirmed that factual meaning of religious discourse can be salvaged even after accepting the principles of logical positivism, the non-descriptive philosophers held that on the basis of these principles, religious propositions are non-descriptive; they have no cognitive meaning in the sense that they do not assert a state of affairs. Thus, according to R.B. Braithwaite, religious assertions do not have an irreducible meaning. He reduces them to ethical discourse accompanied by certain stories.⁴² As in the case of Flew, he too accuses the theists of a 'double think' attitude: "they want to hold that religious statements both are about the actual world (i.e., are empirical statements) and also are not refutable in any possible world."⁴³

Basing himself on the principle of verification, Braithwaite divides the propositions of language into three classes, namely, statements about particular matters of fact, scientific hypotheses, and propositions of logic and mathematics. Religious propositions cannot belong to the first category - statements about particular facts - for these have observable properties, whereas religious statements ascribe to God properties, which are not observable. Nor can religious assertions be regarded as scientific hypotheses, since in this case they would have to be refutable by experience, which is impossible with regard to religious statements. Finally, religious utterances cannot be included with the propositions of logic and mathematics. For these latter do not make any assertions about existence, and hence religious statements would have the consequence of making no assertion about existence.⁴⁴

Now if religious utterances cannot be held to fall into any of these three classes, does this imply that they are meaningless? Braithwaite does not think so. According to him, religious statements are similar to moral statements. Though the latter too are unverifiable by experience, still they have a use and a meaning. Here, quoting the authority Wittgenstein in his *Philosophical Investigations*, he modifies the verification principle of meaning into the use principle: "the meaning of any statement is given by the way in which it is used."⁴⁵ The primary use of moral statements is to express the intention of the asserter to act in a particular sort of way specified in the assertion. A utilitarian, for example, in asserting that he ought to act so as to maximise happiness, is thereby declaring his intention to act in accordance with the policy of utilitarianism; he is not making a statement that is true or false, but subscribing to a policy of action.⁴⁶

Now, what is the use and meaning of religious statements? Braithwaite's contention is that "the primary use of religious assertions is to announce allegiance to a set

of moral principles"⁴⁷ Just as in the case of moral assertions, so religious statements express the asserter's intention to follow a specified policy of behaviour, which, for, Christians, is the following. Basing himself on I Cor. 13, Braithwaite regards "the typical meaning of the body of Christian assertions as being given by their proclaiming intentions to follow an agapeistic way of life."⁴⁸

How can we distinguish between religious assertions, which are Christian and Jewish, if their respective policies turn out to be the same? According to Braithwaite, the real difference between a Christian and a Jew, both of whom have intentions to pursue an agapeistic way of life, is that their behaviour policies are associated with thinking different stories. By a story is meant "a proposition or a set of propositions which are straightforwardly empirical propositions capable of empirical test and which are thought of by the religious man in connection with his resolution to follow of life advocated by his religion."⁴⁹ Thus Braithwaite gives a non-cognitive interpretation of religious statements in terms of moral assertions accompanied by stories.

IV. A CRITICAL APPRAISAL

It is Flew's essay that for the first time questioned the meaning of religious language. What puzzled him was the theist's 'double think'⁵⁰ attitude which consists in holding that religious statements are assertions, and on the other, declining to submit to the test for assertions. Hence he stipulates that religious statements be subjected to certain criteria of meaning - logical positivist principles of verification and falsifiability - which he had adapted; that it must be shown that these assertions describe a state of affairs. Heimbeck questions Flew's position on three counts; first, the assumption that the meaning of a sentence is equivalent to the empirical expectations; second, the identification of the 'counts against' relation with the 'is

incompatible with' relation, that is conflation of falsifiability with incompatibility; and third, the concluding suggestion that religious statements are in principle unfalsifiable.⁵¹

Coming to the responses to Flew's challenge, while there is something commendable in the emphasis given by Hick on the prepositional element of religious discourse, there is something amiss about the way in which he proceeds to argue this point. For he uncritically accepts Flew's position on the meaning and criteria of language: namely, the theory of meaning as taught in Wittgenstein's *Tractatus Logico-Philosophicus*, and the criteria of meaning - verification and falsifiability - as proposed by Ayer and Popper.⁵² In order to defend theism in the face of this attack, he develops the concept of 'eschatological verification' as a device to test the central religious claim 'God exists'.⁵³ It is also this uncritical acceptance of logical positivist theories about language that prompts Braithwaite to reduce religious language to moral discourse accompanied by stories. For religious assertions cannot be fitted into any three of the categories of proposition, based on the principle of verification.

When we take a critical look at the positivist analysis of language, it should be noted that it has severe limitations as a tool in analysing language and discovering its meaning. It is this realisation that has turned away the philosophers of science, for instance, from the positivist approach to science, and from the principles of verification and falsification as proposed by Ayer and Popper. They have advanced much further, making use of the insights of philosophers of science such as Thomas Kuhn⁵⁴, Imre Lakatos⁵⁵, and Ernst Nagel.⁵⁶ This means that philosophers of religion also must turn to new tools of analysis and inquiry.

Here too we could follow the lead given by Wittgenstein in his later works. In fact he was acutely aware of the limitations of his position proposed in the *Tractatus*. That is why he made a right-about-turn in his subsequent writings, especially in the *Philosophical Investigations*.⁵⁷ As Stegmeuller observes "The deadly ruthlessness with which he destroyed his whole earlier philosophy is a unique event in the history of philosophy."⁵⁸ In his later work Wittgenstein abandoned the proposal made in the *Tractatus* for an ideal language with the exactness and precision of logic and mathematics. He criticised this ideal of exactness and the notion of absolutely perfectly language as a logical myth. Instead of looking for an ideal language, the philosopher must pay attention to the multiplicity and heterogeneity of different situations, and learn the meaning of the way they are used in these diverse situations. Hence the slogan in the *Philosophical Investigations* is: "the meaning of a word is its use in the language."⁵⁹ According to this interpretation of language, meaning belongs to the words when uses for them are at hand. Wittgenstein exhorts us not to look for precise meaning of words and perfect sense of statements, divorced from all social relations and circumstances in which they are used.⁶⁰

Thus Wittgenstein speaks of many kinds of language, or many 'language games,' used in many 'forms of life', that is situations and circumstances in which language is used. According to him, "Here the term 'language-game' is meant to bring into prominence the fact the speaking of language is part of an activity, or a form of lyife."⁶¹ By the concept of 'language game' he wants to show that the behaviour of people and their language are very closely woven together, and that the speaking of a language is a part of an activity or of a form of life. To quote again, "I shall also call the whole, consisting of language and the actions into which it is woven, the 'language-game.'"⁶² There is no single ideal

and the criteria of meaning as proposed in the *Tractatus*, but each language game, Wittgenstein urges us "to look at it's use and learn from that."⁶³ This is accomplished by looking for the 'depth grammar' of each language game. Depth grammar is concerned with the rules and uses of language in a language game, that is, in the total context of life-situations. "Depth grammar is made explicit by asking what can and what cannot be said of the concept in question. To understand the limits of what can be said about a concept, one must take account of the context in which the concept is used."⁶⁴ In this way we discover the meaning of each language game.

Philosophers of religion such as D.Z.Philips, Peter Winch, Paul Holmer, Norman Malcolm, and so on, in their approach to the question of the meaning of religious language accept the concept of meaning as found in Wittgenstein's *Philosophical Investigations*. Now language is often used for religious purposes in the religious form of life. Here we have the 'religious language game'. This means that in certain context words and communities and groups use concepts in order to evoke responses characteristic of what is traditionally called religious behaviour. Thus when the word 'religious' is used with the word 'language' it is meant to draw attention to the fact that certain concepts are being used for religious purposes.⁶⁵ Such a religious language game has its own rules and patterns of use, and meaning. The work of the philosopher of religion is to look at the religious language game and learn its meaning instead of imposing alien criteria of meaning. As strict followers of Wittgenstein, they would admit no extra-religious criteria, such as verifiability and falsifiability, or even any sort of justification to religious belief. Religious language game is autonomous; it has its own criteria of meaning and rules of usage. But then there is the problem: can we talk at all about any general criteria of meaning? Is a kind of schizophrenic pluralism in

meaning the only fate of language? Here we come back to one of the basic problems of philosophy: the problem of unity and diversity.

V. CONCLUSION

Logical positivism has greatly influenced the development of contemporary theory of knowledge, philosophy of science and especially philosophy of religion. What is impressive about logical positivism and the subsequent discussions on religious language is the cognitive thrust of the whole movement. In fact, the positivist analysis of religious language has made a valid point which philosophers of religion belonging to all persuasions must keep in mind; namely, the importance of the analysis of religious language in order to discover its meaning. It was the positivists who aroused the philosophers of religion from their dogmatic slumber, for they had taken for granted the meaning of religious statements, and were concerned mainly about their truth. Unless we ascertain the meaning of a statement, we cannot even ask the question of its truth. But in this attempt to analyse and discover the meaning of language, the positivists fell into extreme views, such as the picture theory of language, principles of verification and falsification in their crude forms. But we should keep in mind that every philosopher or philosophical movement in history has an insight or a perspective on a dimension of reality, which he tends to exaggerate. We try to incorporate his insight, and then forget the exaggeration.

NOTES

1. Kenneth H. Klein, *Positivism and Christianity* (The Hague: Martinus Nijhoff, 1974), p. 81.
2. Trans. D.F. Pears & B.F. McGuinness (London: Routledge & Kegan Paul, Paperback ed., 1974). Hereafter *Tractatus*.
3. (London: Victor Gollancz, 1936; Penguin paperback, 1975).
4. (London: Hutchinson & Co, 1959; 1977).
5. Richard Rorty, "Metaphysical difficulties of Linguistic Philosophy," in idem, ed., *The Linguistic Turn* (Chicago: University of Chicago Press, 1967), pp. 1-39.
6. *Tractatus*, p. ix.
7. *Ibid.*, 3.23, 3.251.
8. *Ibid.*, 2.0201, 3.201, 3.25.
9. *Ibid.*, 4.023.
10. *Ibid.*, 5, 5.234, 5.2341. The mechanics of truth functional logic is well known. Take, for example, two elementary propositions, p & q; "He is old" and "He is tired". By means of logical connectives, such as conjunction, disjunction, implication, etc.
11. *Tractatus*, 4.0312, 5.32, 5.4, 5.441, 5.47. Wittgenstein here prescribes that language should have the logical calculus of *Principia Mathematica*, the Bible of symbolic logic.
12. *Ibid.*, 2.12, 4.01.
13. *Ibid.*, 1.1, 2, 2.01, 2.02.
14. *Ibid.*, 2.04.
15. *Ibid.*, 2.11, 2.202.
16. *Ibid.*, 3.4, 3.41, 3.411.
17. *Ibid.*, 3.42.
18. *Ibid.*, 4.462.
19. As we shall see later, Anthony Flew refers to this principle, though in different words, in support of his challenge to the cognitive meaning of religious language. See below p.8.
20. *Ibid.*, 4.11. Tautologies are the propositions of mathematics and logic.
21. Ayer, *Language, Truth and Logic*. pp. 105-108.
22. *Ibid.*, pp. 48-50.
23. *The Logic of Scientific Discovery*, p.34. see also Popper, *Conjectures and Refutations* (London: Routledge & Kegan Paul, 1963,

- 1972), p.39.
24. Popper, *The Logic of Scientific Discovery*, p.40.
25. Popper, *Conjectures and Refutations*, p.39.
26. Popper. *The Logic of Scientific Discovery*, p.41.
27. See above Wittgenstein's concept of 'saying' on p.4.
28. Tractatus, 6.522.
29. Ibid., 6.45.
30. *Language, Truth and Logic*, pp.152-153.
31. Ibid., p.153.
32. "Theology and falsification," Idem and Alasdair MacIntyre, eds. *New Essays in Philosophical Theology* (London: SCM Press, 1955; study edition, 1972), pp. 96-100; 106-109.
33. Ibid., p.97.
34. Ibid., p. 99.
35. Ibid., p.106.
36. Ibid.,
37. Klein, *Positivism and Christianity*, p.29.
38. *Faith and Knowledge* (London: Macmillan, 1967), p.169.
39. "Theology and Verification," in Basil Mitchell, ed., *The Philosophy of Religion* (London: Oxford University Press, 1971), pp. 53-72, Reprinted from *Theology Today* 17(April 1960), pp. 12-31.
- 40 Ibid., pp 58-60.
41. Ibid., pp 60-70.
42. *An Empiricist's View of the Nature of Religious Language* (Cambridge: Cambridge University Press, 1955). Reprinted in Basil Mitchell, ed., *The Philosophy of Religion*, pp.72-92.
43. Ibid., p76.
44. Ibid., p73-77.
45. Ibid., p77. In fact this modification of the verification principle into the use principle is unwarranted because, for Wittgenstein, use principle is entirely different from the principle of verification.
46. Ibid., pp. 77-79.
47. Ibid., p82.
48. Ibid.
49. Ibid., p84.
- 50., Flew, "Theology and Falsification" p 22.
51. Raeburn S. Heimbeck, *Theology and Meaning* (London: George

Allen and Unwin, 1969), p 78.

52. For a criticism of the principles of verification and falsifiability, see Klein, *Positivism and Christianity*, pp. 90-93.

53. For a criticism of Hick's concept of "Eschatological verification," see *ibid.*, pp121-134.

54. *The Structure of Scientific Revolutions* (Chicago: University of Chicago Press, 1962; second edition, enlarged, 1970). See also Kuhn, "Metaphor in Science," Andrew Orteny, ed., *Metaphor and Thought* (Cambridge: Cambridge University Press, 1979). pp. 409

55. "Falsification and Methodology in Scientific Research" Idem and Alan Musgrave, eds., *Criticism and the Growth of Knowledge* (Cambridge: Cambridge University Press, 1970), p 91-196.

56. *The Structure of Science* (London Routledge & Kegan Paul, 1961).

57. Trans. G.E. M. Anscombe (Oxford: Basil Blackwell, paperback edition, 1974).

58. Wolfgang and Stegmüller, *Main Currents in Current German, British and American Philosophy*, trans., Albert E. Blumberg (Dordrecht: D. Reidel Publishing Co., 1969), p 423.

59. Wittgenstein, *Philosophical Investigations*, p. 20, para. 43.

60. *Ibid.*, pp 40c,42e, para 87; pp. 36e-38e, para 43.

61. *Ibid.*, p 11e, para 23.

62. *Ibid.*, p. 5e para. 7.

63. *Ibid.*, p 109e, para. 7.

64. D.Z. Philips, *The Concept of prayer* (London: Routledge & Kegan Paul, 1965), p.8.

65. Richard Bell, "Wittgenstein and descriptive Theology", *Religious Studies* 5 (October 1969): 5-7.