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Lawrence D. Roberts
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THE NATURE OF REASONING IN JOHN HENRY CARDINAL NEWMAN'S GRAMMAR OF ASSENT

by

Lawrence David Roberts

A Thesis Submitted to the faculty of the Graduate School
of Loyola University in Partial Fulfillment of
the Requirements for the Degree of

Master of Arts

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LIFE

Lawrence David Roberts was born in Chicago, Illinois, on August 23, 1937.

He was graduated from Quigley Preparatory Seminary, Chicago, Illinois, June, 1956, and from St. Mary of the Lake Seminary, Mundelein, Illinois, with degrees of A.B. in June, 1959, S.T.B. in June, 1961, and A.M. in June, 1962. He began his studies at Loyola University, Chicago, Illinois, in September, 1962.

He taught logic at Loyola University during 1963-1964.

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CHAPTER I

INTRODUCTION

John Henry Newman was born in London on February 21, 1801. He was brought up in a sort of bible religion of the type common in England at that time. In 1808 he was sent to a private school in Ealing. As a youth he read Tom Paine's tracts against the Old Testament, some of Hume's essays, and some French verses denying the immortality of the soul. Such reading however did not influence the young Newman as deeply as did his reading of evengelical writers such as William Romaine (1714-1795) and Thomas Scott (1741-1821). In the Apologia Newman says that he practically owes his soul, humanly speaking, to Thomas Scott. While at Ealing Newman experienced a religious conversion which was not merely emotional but involved intellectual convictions. Newman in his autobiographical memoir says that one of the teachers at Ealing, Reverend Walter Mayer, gave him "deep religious impressions, at the time Calvinistic in character, which were to him the beginning of a new life."

¹ Cf. John Henry Newman Apologia pro Vita Sua, London, Oxford edition, 1913, 107. This book will be referred to as Apologia in these notes.

^{2 &}lt;u>Ibid.</u>, 108.

³ Letters and Correspondence of John Henry Newman, ed. by Anne Mozley, London, 1891. I, 27.

After eight and a half years at Ealing, Newman left for Trinity College at Oxford. At Oxford in 1822 he won an Oriel Fellowship. Wilfrid Ward points out that this was the turning point in Newman's life. Newman himself says this of the Oriel Fellowship:

It opened upon him a theological career, placing him upon the high and broad platform of University society and intelligence, and bringing him across those various influences, personal and intellectual, and the teaching of those various schools of ecclesiastical thought, whereby the religious sentiment in his mind ... was gradually developed and formed and brought on to its legitimate issues.

Newman much, even though he reacted against their religious liberalism and rationalism. Of Whately, Newman says, "He, emphatically, opened my mind, and taught me to think and to use my reason." From the Oriel Fellows, Newman learned religious toleration and the need for definiteness in religious matters as opposed to the vagueness of the evangelicals. The Oriel Fellows, however, placed too much emphasis on reasoning in theology, and because of this fact they later were known as the Noetics.

In 1824 and 1825 Newman received Orders in the Church of England, and became a curate at St. Clement's Church, Oxford. In 1828 he was appointed

⁴ Wilfrid Ward, The Life of John Henry Newman, London, 1921. 1. 36.

⁵ Mozley, Letters, I, 73; Newman wrote this memoir using pronouns of the third person to refer to himself.

⁶ Apologia, 114.

Vicar of St. Mary's. In this year Newman became a more intimate friend of Hurrell Froude. Through Froude, he also became friendly with John Keble. These friendships were extremely important in Newman's development. Also in 1828 Newman began to read systematically the Fathers of the Church. They were a great influence on his philosophical and theological thought, especially in regard to the nature of the universe and the nature of the Church. Later in life Newman said, "The Fathers made me a Catholic."

In 1832 Newman traveled about the Mediterranean. While in Sicily he contracted a fever which brought him near death. Despite the severity of his fever he believed that he would not die, and he also believed that God had some special work for him to do. 8 When Newman returned to England in July of 1833 he found his work. The disestablishment of the Church of England seemed imminent; ten Irish bishoprics had been suppressed. Froude, Keble and Palmer had already pledged themselves to write and associate in defense of the Church, and Newman joined them wholeheartedly. On July 14, 1833, Keble preached his famous sermon "The National Apostasy," about England's desire to foresake the Church. In September of 1833 the "Tracts for the Times" began to be published, and the Oxford or Tractarian Movement was well on its way. This movement was against disestablishment, but it was more fundamentally a call to holiness, and to a return to the primitive and apostolic Christianity, and to dogma and scientific theology.

⁷ Newman, Lectures on Certain Difficulties Felt by Anglicans, II, 24, as quoted in Harrold, John Henry Newman, London, 1945, 18.

⁸ Cf. Apologia, 135.

Newman gained eminence at Oxford through his leadership of the Oxford Movement and through his tracts and sermons. In 1839 however he began to doubt the validity of the Church of England: his study of the Monophysites, and an article by Wiseman on the Donatists were the immediate causes of his doubts. Newman saw the similarity of the Church of England to the schisms of the Monophysites and Donatists. In 1841 Newman published Tract 90 which examined the Thirty-nine Articles of the English Church, and tried to show that they agreed with the Roman Catholic creed and were enacted only against popular errors and exaggerations. Newman thought that by this tract he had vindicated the claim of the English Church to Catholicity.

Because of <u>Tract 90</u> Newman was ordered by Bishop Bagot to discontinue the series of tracts. In 1842 Newman left Oxford and moved to the seclusion of Littlemore. In 1843 he resigned his fellowship at Oriel. At Littlemore from 1842 to 1845 Newman studied the history of doctrine and its development, and prepared his <u>Essay on the Development of Christian Doctrine</u>, which was published late in 1845. The study which he did in preparing this work helped to convince him that the Roman Catholic Church was the true Church of Christ.

On October 8, 1845, Newman was received into the Roman Catholic Church by Fr. Dominic Barberi, an Italian Passionist. In 1847 Newman was ordained a priest in Rome, and shortly thereafter he entered the Congregation of the Oratory. He returned to England and founded Oratories in London and

^{9. &}lt;u>Ibid.</u>, 212-213.

Egbaston (Birmingham). In 1851 Newman was picked to be the first Rector of the Catholic University in Dublin, but he received little cooperation in this work. He failed in his work on the University, but The Idea of a University was the result of Newman's intellectual efforts in this matter.

In 1864 Newman wrote his Apologia pro Vita Sua in answer to attacks on him by Charles Kingsley. In 1870 Newman published his Essay in Aid of a Grammar of Assent. This work was in answer to a problem that was most important to him from his days at Oriel and throughout his life, the problem of the relation of reason and faith.

Through much of his life in the Catholic Church, Newman encountered opposition and suspicion from the Catholic heirarchy. Newman's plans for the Irish University, for an Oxford Oratory, for a new translation of the bible, and for working with a certain Catholic periodical were all opposed by his superiors. Newman was very sensitive and the many reverses he suffered as a Catholic must have hurt him deeply. However, the end of any ecclesiastical suspicion of Newman was necessitated by Leo XIII when he made Newman a Cardinal in 1879. When Newman learned that he was to be made a Cardinal he said, "The cloud is lifted from me for ever."

John Henry Newman, like most philosophers, received the philosophical problems on which he was to work from his society and friends. The basic

^{10.} Ward, Life, II, 446.

cause of the philosophical problems which Newman encountered in his society was rationalism. Bookraad says that the rationalism of this period in England was "not so much a doctrine as a mode of thinking, an emphasis laid on the human mind as the faculty of reasoning, to the neglect of all other elements."

The only type of reasoning which this rationalism recognized was formal and mechanical; the optimistic rationalists believed that with such an automatic tool man's reason would be unerring. In religious matters the spirit of rationalism had three main results: Evidentialism, scientific scepticism, and sentimentalism.

evidences and proofs which he could advance for it. Evidentialism made the assent of faith into a rather mechanical and inhuman conclusion to a syllogism. The chief exponent of Evidentialism was William Paley. His <u>View of the Evidences of Christianity</u>, published in 1794, became the exemplar of the Evidentialist outlook on religion. Newman encountered Evidentialism at Oxford and in the Oriel College. It was said that the Common Room of Oriel College "stank of logic." Rationalism had led the Oriel fellows not only toward Evidentialism but also toward a more rationalistic (or "liberal") outlook on other parts of theology in addition to apologetics. Newman saw that reasonable and logical men could investigate the evidences for Christianity and for God, and still remain doubtful; furthermore, he saw the Evidentialist

¹¹ A.J.Boekraad, The Personal Conquest of Truth according to John Henry Newman, Louvain, 1955, 74.

^{12.} Zeno, John Henry Newman, Our Way to Certitude, Leiden, 1957, p.v. of Introduction; quotation taken from Whitridge, Dr. Arnold of Rugby, 163.

method of arriving at faith to be at variance with his own personal experience. In his <u>Grammar of Assent</u> he said, "If I am asked to use Paley's argument for my own conversion, I say plainly I do not want to be converted by a smart syllogism."

The second result of rationalism, also found at Oxford, and also with consequences in the religious sphere, was scientism or scientific scepticism. Scientific scepticism transfers the attitudes and methods which are required for science to all other fields: the result is that certainty in any field can be attained only through explicit proofs of the type used in mathematical physics. Even if such proofs are had, there still may remain a duty for the investigator to remain open to any further facts which may invalidate the proofs: therefore the advocate of scientific scepticism, in order to maintain a mind that is open and fair to facts, must forego certainty and be content with a high degree of probability. Nicolaus Theis says that Newton and Locke were the intellectual lights of Oxford in Newman's time, and "philosophy had experienced a breaking-in of the mathematical method, and developed into geometry of the mind." Newman's friend. William Froude, younger brother of Harrell Froude, was an outstanding scientist and a scientific sceptic. In a letter to Newman he states his position that the human mind is not capable of arriving at an absolutely certain conclusion. 15

¹³ Newman, An Essay in Aid of a Grammar of Assent, ed. by C.F. Harrold, London, 1947, 323. This book will hereafter be referred to as GA in these notes.

¹⁴ Theis, Nicolaus, "An den Quellen des Persönlichen Denkens, Einführung in J.H. Newman's 'Grammar of Assent, " Newman Studien, II, Nürnberg, 1954, 167

¹⁵ Harper, G.H. Cardinal Newman and William Froude, F.R.S. a Correspondence, Baltimore, 1933, 119-120.

Newman became thoroughly acquainted with scientific scepticism through a long correspondence which he and William Froude carried on.

The third result of rationalism in the religious sphere was a sort of sentimentalism which makes religion into a matter of taste or emotions. Because a void had been left in the religious sphere through scientific scepticism's doctrine that reason cannot attain certitude about religious matters. many tried to fill this void with the power of human emotions. The truth or validity of a religion is then judged on the basis of how it suits one's taste and emotions. Perhaps the reduction of religious belief to a matter of sentiment can also be viewed as a reaction against Evidentialism's overemphasis of reason and reduction of religious belief to a syllogistic conclusion. Newman found this sentimentalism in religion among Evangelicals and also among some "liberal" theologians whom he knew. He saw the falsity and the dangers in this attitude toward faith, and combatted it throughout his life. In a speech which he gave in Rome on the occasion of receiving the official announcement that he had been made a Cardinal, Newman said this about religious liberalism:

One of the purposes of the Oxford Movement had been to oppose the growing tendency to treat religion as emotional and non-intellectual.

In Evidentialism, scientific scepticism, and sentimentalism, Newman met challenges to his own faith. All three of these results of rationalism made

¹⁶ Ward, Life, II, 460.

him investigate the true relation of reason and faith. This relationship
was first studied by Newman in his Oxford University sermons, which were given
while he was an Anglican. For a long time he planned to develop more fully
his thought on the reason-faith problem. The result of all of Newman's
thought on this problem was An Essay in Aid of a Grammar of Assent. 17 Shortly
after its publication in 1870, Newman wrote in a letter to Fr. Coleridge:
"for 20 or 30 years I have felt it a sort of duty to write upon it the subject of the Grammar of Assent and I have begun again and again but never
could get on." 18 Not only had Newman spent much time in thinking about
the subject of the Grammar of Assent, but he also considered this work to be
his last word on the subject: "I have written and rewritten it more times
than I could count. I have got up to my highest point -- I mean, I could
not do better, did I spend a century on it, but then, it may be 'bad is the
best.'" 19

¹⁷ Newman gives this explanation of the title: "You see, I called it an Easay, as it really is, because it is an analytical inquiry. A Grammar ought to be synthetical. But to put it in synthetical form, had I after all attempted it, would have been to write a new book. And it would, to my own feelings, have been bumptious." (letter to Canon Walker of April 8, 1870, quoted in Boekraad, Personal Conquest, 191). Walgrave points out that Newman intended to describe the structure of thought and discover the mechanism and movement of it, using thought itself as his starting point, in the same way as grammar derives the laws of language from current use (J.H. Walgrave, Newman the Theologian, New York, 1960, 62).

¹⁸ Ward, Life, II, 268.

¹⁹ Ibid., 262.

In the Grammar of Assent Newman shows that reason is other than what the Evidentialists and scientific sceptics say it is; therefore there is no need for a sentimentalism to take over the sphere of religion. Behind these three views is a false rationalism which makes human reasoning into a formal, mechanical process. The main purpose of the Grammar of Assent is to show how reason, in its true meaning, has a rightful place in our way of arriving at religious faith. In order to show the relationship of reason to faith, Newman had to analyze the nature of reasoning in man. The purpose of this thesis is to study this analysis of reasoning.

It should be kept in mind from the start that Newman's theory of reasoning in the <u>Grammar of Assent</u> is not a complete theory of reasoning, nor was it meant to be such. His development of a theory of reasoning is limited to a particular type: reasoning which results in a concrete and individual conclusion. This limitation of his reasoning theory is shown by many explicit statements and all of his examples in his treatment of reasoning, 20 and also by his ultimate purpose, as shown by the last chapter of the <u>Grammar of Assent</u>, an application of his reasoning theory to a question of concrete fact, whether or not the Christian religion is from God. 21

²⁰ E.g., GA, 204, 211, 212, 219, 222, 251.

^{21 &}lt;u>Ibid.</u>, 374, 292-375.

CHAPTER 11

FORMAL INFERENCE

There are good reasons for beginning a study of Newman's doctrine on reasoning with a consideration of formal inference. First of all, Newman undertook his study of reasoning in reaction against a rationalism which had reduced reasoning to a formal, mechanical process; his doctrine of formal inference presents such a mechanical view of reasoning. Secondly, in the Grammar of Assent, Newman considers formal inference first, and then proceeds to consider natural and informal inference, both of which go beyond formal inference. Since Newman's thought, both historically and as he writes in the Grammar of Assent, proceeds from a consideration of formal inference and its inadequacies to a consideration of concrete reasoning as we actually find it in man, this same order will be followed in this thesis.

The first point to be considered is what inference and formal inference meant to Newman. Inference in general for him signifies the conditional acceptance of a proposition. It is conditional because a proposition is accepted on the condition of an acceptance of its premisses. Newman states this simply: "We reason when we hold this by virtue of that."

¹ GA, 119, 197.

² Ibid., 57.

³ Ibid., 197.

Formal inference, which Newman sometimes calls "logical inference" or simply "inference", a ratiocination restricted and put into grooves so that the mind will not run wild, but will advance with precision and effect. Ratiocination is placed into orderly grooves through the use of words; in this way language is treated as though it has a monopoly of thought. Formal inference, therefore, is reasoning as it is marked out by words, propositions, and syllogisms; it is verbal reasoning as opposed to mental reasoning, and logic is its scientific form.

Formal inference is far more concerned with the comparison of propositions than with the propositions themselves. Formal inference must regard propositions not in relation to their own truth, or falsity, but in relation to their mutual consistency. Since the concern of formal inference is with the comparison of propositions, whatever makes this comparison easier and more accurate will aid formal inference. If the words used in formal inference are made more simple, definite, and narrow they will make comparison easier and more accurate and thus benefit the formal inference. The more that words and propositions are made to express "exact, intelligible, comprehensible, communicable notions" and the less they stand for objective things, so much more suitable they become for formal inference. Since symbols, unlike words,

⁴ E.g., Ibid., 31, 69, 200.

⁵ Ibid., 200

⁶ Ibid.

⁷ Ibid.

^{8 &}lt;u>Ibid.</u>, 201.

⁹ Ibid.

are most exact and constant in their meanings, they are the best means of conducting the formal process of reasoning. On After Newman has concluded that symbols are most apt as members of syllogistic reasoning, he states the consequence of this fact on the meaning of words in syllogisms:

Symbolical notation, then, being the perfection of the syllogistic method, it follows that, when words are substituted for symbols it will be its aim to circumscribe and stint their import as much as possible, lest perchance A should not always exactly mean A, and B mean B; and to make them, as much as possible, the calculi of notions, which are in our absolute power, as meaning just what we choose them to mean, and as little as possible the tokens of real things.....!

Herein is contained one of Newman's fundamental tenets on the nature of formal inference: in order that formal inference may accurately compare propositions, it must have a narrowness of meaning, and a lack of the depth of reality.

However, Newman is not entirely unfavorable to formal inference. In his Oxford University Sermons, he calls Aristotelian logic (a scientific form of formal inference) the "boldest, simplest, and most comprehensive theory which has been invented for the analysis of the reasoning process." In the Grammar of Assent Newman even states that formal inference is somewhat natural to man: we think in logic as we talk in prose, without aiming at doing so, and we instinctively put our conclusions into words as far as we are able. Newman finds formal inference useful as a scientific method, a

¹⁰ Ibid., 201-202.

¹¹ Ibid., 202-203.

¹² Newman, Fifteen Sermons Preached before the University of Oxford, London, 1884, 258. In the same sermon however, he says that logic is mainly a critical and negative test of reasoning. (Ibid., 276).

13 GA. 218 •

principle of order, and an intellectual standard. As a scientific method it enables us to progress beyond what gifted intellects could do by their own unaided power; 14 it helps us in finding and verifying conclusions; it shows us the coherence or weakness of a theory, and where further experiment and observation are necessary. 15 As the great principle of order in thinking, formal inference catalogues the accumulations of knowledge and maps out the relations of the separate departments of knowledge. 16 As an intellectual standard, formal inference helps in providing a common measure between minds, thereby freeing us from the capricious ipse dixit of authority. 17

Despite all these uses of formal inference which Newman mentions, his usual attitude in the <u>Grammar of Assent</u> toward formal inference is one of unfavorable criticism. He finds that formal inference has these deficiencies:

(a) it does not prove its premisses; (b) it does not reach the concrete and individual in its conclusions; (c) it is verbal and therefore inadequate in representing thought.

(a) In a sermon given in 1839, more than thirty years before the publication of the Grammar of Assent, Newman said that in any proof "there must ever be something assumed ultimately incapable of proof." In another

^{14 &}lt;u>Ibid.</u>, 198.

¹⁵ Ibid., 229, 217.

^{16 &}lt;u>Ibid</u>., 217.

^{17 &}lt;u>Ibid.</u>, 199, 217, 275.

¹⁸ Newman, Oxford University Sermons, 213.

sermon, preached in 1840, he stresses the importance of antecedent views and presumptions in relation to formal proofs: the strength of the proof depends on whether the presumptions are accepted or not. ¹⁹ In the <u>Grammar of Assent</u> Newman holds that if we follow verbal argumentation back to its starting points we find first principles which are "the recondite sources of knowledge, as to which logic provides no common measure of minds. ²⁰. These first principles are rejected by some and accepted by others, and in them lies the whole problem of attaining to truth; we are not able to prove by syllogism that there are any self-evident first principles at all, and therefore, syllogisms miss the most important part in the process of attaining truth. ²¹

Many types of assumptions that must be presupposed during formal inferences are mentioned by Newman. 22 Even in the most direct and severe kind of formal inference there must be those assumptions in the process which are based on the conditions of human nature: our nature itself and our method of reasoning are assumptions. In less strict reasoning such as reasoning on concrete matters, there are assumptions that are quite subtle. These assumptions may arise from the sentiments of the age, country, religion, social habits and ideas of the particular inquirers or disputants. Because such assumptions may be admitted by all, they can pass and be accepted without

^{19 &}lt;u>Ibid.</u>, 273.

^{20.} GA, 205.

^{21 &}lt;u>Ibid</u>.

^{22 &}lt;u>Ibid.</u>, 286; 205-206, 208.

detection. Another type of assumption arises from the nature of the case which is being treated: some cases might require assumptions to be made because of the tediousness of the proof in full, or because the full proof would be so immense in size that it would be practically impossible to write it down. Yet another type of assumption, and undoubtedly the most important of all, is the personal assumption. Such assumptions are based in the intellectual, moral, and emotional character of the individual person. No matter what the basis of an assumption may be, formal inference is unable to prove the truth of it. Because of this impotence alone, formal inference by itself would have to admit to uncertainty in its conclusions. However, in addition to its weakness at its beginnings, it is found also to have another essential weakness at its conclusion: this is its inability to reach in its conclusions the concrete and individual.

(b) The inability of formal inference to reach the concrete and individual follows from the nature of the terms that are used in formal inference.

According to Newman, each term in formal inference is narrowed down in meaning "so that it may stand for just one unreal aspect of the concrete thing to which it properly belongs, for a relation, a generalization, or other abstractions, for a notion neatly turned out of the laboratory of the mind, and sufficiently tame and subdued because existing only in a definition. "23 Since formal inference is concerned with abstractions rather than with things, it can deal with things only partially and indirectly, and thus abstract

²³ Ibid., 203.

arguments can reach only the probable in concrete matters.

Newman states that the terms used in formal inference are not really universals, but are only "generals." Since formal inference is carried on by means of the so-called universals which are really generals, all conclusions of formal inference will be true in general about the concrete, but not universally and necessarily. Such conclusions can give a degree of probability about the concrete and individual, but not certitude. Newman illustrates his doctrine on universals with the following example: "All men have their price; Fabricius is a man; he has his price; but he had not his price; how is this? Because he is more than a universal. 126 In this example the term "all men" is not a genuine universal, nor does "having a price" pertain to the very nature of man. Such a general statement as the major premiss of this syllogism could lead at best to a probable conclusion, and not to a necessary conclusion. The concrete fact that someone actually will have their price is not included within any universal in such a way that the fact can be deduced from the universal.

Another example concerns the application of general attributes of "man as such, the typical man, the auto-anthropos" to individual men:

^{24 &}lt;u>Ibid.</u>, 211; cf. 204.

²⁵ Cf. Ibid., 212.

^{26 &}lt;u>Ibid</u>.

²⁷ Ibid.

But we think we may go on to impose our definition on the whole race, and to every member of it.... No; each of them is what he is in spite of it. Not any one of them is man, as such, or coincides with the <u>auto-anthropos</u>. Another John is not necessarily rational, because "all men are rational," for he may be an idiot;—nor because "man is a being of progress," does the second Richard progress, for he may be a dunce; — nor, because "man is made for Society," must we therefore go on to deny that the second Robert is a gipsy or a bandit, as he is found to be.28

This example is more difficult to analyze. The first factor to be noted is that the conclusion with which Newman is concerned is about a concrete fact, as is indicated by the fact that the conclusions obtained from the qualities of the <u>auto-anthropos</u> are contradicted by the concrete facts about the man who is an idiot or dunce or gipsy. The terms <u>rational</u>, being of progress, and <u>made for society</u> could in themselves be taken as referring to a radical capacity and exigency in man for thinking, progressing, and living socially. Such a meaning however cannot be the one intended by Newman in this example. His example refers obviously to concrete facts. Attributes of man as such will not determine concrete facts. If someone pretends to have discovered an attribute of man as such which will enable one to determine a concrete fact about an individual, this attribute will be found to be something that is generally true about individuals, but not universally true.

Newman's next example on universals is this:

All men die; therefore Elias has died; . . . but he has not died, and did not die. He was an exception to the general law of humanity; so far, he did not come under that law, but under the law (so to say) of Elias." . . . "But all men are mortal?" not so; what is really meant by this universal, is that "man, as such, is mortal," that is.

²⁸ Ibid., 213

The inability of formal inference to reach the concrete and individual has been treated in some detail here in order to clarify two points. (1) The more important point is that Newman is concerned with the attainment of concrete ⁵⁰ facts in conclusions. (2) A more subtle point is that so-called universals which are used to determine concrete facts are really only generalizations of facts. Such general terms cannot accomplish the determination of concrete facts.

The inability of formal inference to reach the concrete is a serious weakness. Even if a solution to the problem of the inability of logic to prove its assumptions were found, logic or formal inference would still be unable to determine toncrete facts. This inability of formal inference is especially important for Newman in the <u>Grammar of Assent</u> because his purpose is to discuss how man can reason to the divine origin of Christianity, which is a question of concrete fact.

²⁹ Ibid.

³⁰ In a footnote in a later part of the <u>Grammar of Assent</u>, Newman says that what he has called the "concrete" is what Aristotle in his <u>Nicomachean Ethics</u> called the "contingent." (<u>GA</u>,268, notel).

(c) A further inadequacy of formal inference, according to Newman, follows from the fact that it is verbal. Since formal inference is verbal, it does not do justice to the mind, which is more vigorous than any of its works, of which language is one. Words are inadequate carriers of thought: "Thought is too keen and manifold, its sources are too remote and hidden, its path too personal, delicate, and circuitous, its subject matter too various and intricate, to admit of the trammels of any language, of whatever subtlety and of whatever compass." 32

In this chapter we have seen Newman's views on the nature of formal inference, and on the values and inadequacies of this type of inference. In the remainder of the thesis we will investigate how Newman solves the problem of these inadequacies: lack of proof of assumptions, inability to reach the concrete and individual fact, and limitation to what can be verbalized.

³¹ GA, 273; cf. 206.

³² Ibid., 216; cf. 201.

CHAPTER III

NATURAL INFERENCE

equacies of formal inference in regard to concrete conclusions by studying his theory of natural inference. This type of inference is called <u>natural</u> because it is the most ordinary mode of reasoning and is used by the uneducated and by men of genius. This mode of inference differs from formal inference in that it is "not from propositions to propositions, but from things to things, from concrete to concrete, from wholes to wholes."

Natural inference works directly on concrete and whole realities without the mediation of propositions.

The outstanding characteristic of natural inference is its simplicity.

Vatural inference, which is our usual type of reasoning, is a simple act, not a process or series of acts. We apprehend the antecedent and then apprehend the consequent, without explicit recognition of the medium connecting the two, as if by a sort of direct association of the first thought with the second. Often even the antecedent itself is only indirectly recognized as the antecedent or subject for analysis; thus not only the process of the inference is ignored, but in some cases the antecedent itself is also ignored.

¹ GA, 251.

^{2 &}lt;u>Ibid.</u>, 197, 250.

³ Ibid., 187.

simplicity of natural inference is explained by Newman as the result of an "instinctive perception." By instinct Newman does not mean that the faculty is the same in strength and quality in all men, but rather that the process of reasoning is unconscious and implicit. By this reasoning instinct we are able to reason spontaneously, without consciousness of the reasoning, and without effort or intention of reasoning. Newman defines instinct in the Grammar of Assent as a "perception of facts without assignable media of perceiving." In a letter to Dr. Meynell Newman says "By instinct I mean a realization of a particular . . . without assignable media of realization." This instinct is the heart of natural inference. By means of it one can conclude directly about a concrete fact with no consciousness of how one proceeds to the conclusion.

Since natural inference is instinctive in this sense, it cannot be analyzed so as to give a clear account of how a particular conclusion was reached. Natural inference is like taste, skill, and invention in the fine arts, or discretion in conduct in that these are exerted spontaneously and

⁴ Ibid., 251.

⁵ Cf. ibid., 197, 250-251.

⁶ Cf. ibid., 197-198.

⁷ Ibid., 254.

^{8 &}quot;The Newman-Meynell Correspondence," appendix of Zeno, J. H. Newman, 240. Meynell, a "scholastic" philosopher, checked over the Grammar of Assent for Newman before it was published.

are not entirely explainable. Newman had long recognized man's power of implicit or instinctive reasoning. In an Oxford University sermon which he preached in 1840 he said: "All men have a reason, but not all men can give a reason. The process of reasoning is complete in itself, and independent. The analysis is but an account of it; it does not make the conclusion correct." He compares this implicit reasoning to mountain climbing:

And thus it [reason] makes progress not unlike a clamberer on a steep cliff, who, by quick eye, prompt hand, and firm foot, ascends how he knows not himself, by personal endowment and by practice, rather than by rule, leaving no track behind him, and unable to teach another.11

Thus far we have seen that natural inference deals with things directly, and is a simple unanalyzable act with no consciousness of a process within the act. The fact that we are not conscious of the process of this act is an indication of the nature of natural inference; "as we cannot see ourselves, so we cannot well see intellectual motives which are so intimately ours, and which spring up from the very constitution of our minds." These motives are taken up into the action of the illative or ratiocinative principle of the mind which is an intrinsic and personal power. This illative principle assimilates these motives and moves toward or to the conclusion, with the motives themselves, however, remaining unconscious. Thus the end result is

⁹ GA, 257.

¹⁰ Newman, Oxford University Sermons, 259.

^{11 &}lt;u>Ibid</u>., 257.

¹² GA, 255.

a divination or prediction.

Newman throws more light on the nature of at least some cases of natural inference when he says that what is called reasoning is often only a peculiar and personal mode of abstraction. 13 "It is a power of looking at things in some particular aspect, and of determining their internal and external relations thereby." 14 Therefore the unconscious mechanics of natural inference may be made up of abstraction of an aspect of a thing with the recognition that this aspect involves a relation to some other factor; this relation to the other factor is the conclusion. By means of this type of natural inference "a word or an act on the part of another is sometimes a sudden revelation: light breaks in upon us, and our whole judgment of a course of events, or of an undertaking is changed. This abstraction and determining of relations is done "by a sense proper to ourselves," since someone else may see the same phenomena as we do but come to a different conclusion because he abstracts a different set of general notions from the phenomena. 16 This Baense proper to ourselves does not refer to a sensitive power as opposed to an intellective power, but rather it refers to the Illative Sense which is a power of the mind. This Illative Sense will be studied in the chapter on informal inference.

¹³ Ibid., 256.

^{14 &}lt;u>Ibid</u>.

^{15 &}lt;u>Ibid</u>.

¹⁶ Ibid.

Natural inference has the peculiarity of being departmental: it is attached to a definite subject-matter according to the aptitude of the individual.

No one would for a moment expect that because Newton and Napoleon both had a genius for ratiocination, that in consequence, Napoleon could have generalized the principle of gravitation, or Newton have seen how to concentrate a hundred thousand men at Austerlitz.

Different persons will be skillful in different fields of natural inference. The faculty of natural inference is not one general instrument of knowledge, but is rather "a collection of similar or analogous faculties under one name." That there are as many distinct but similar faculties of natural inference as there are subject matters, is exemplified by Newman's descriptions of men who excel in one field of reasoning, but are poor reasoners in other fields. Furthermore, natural inference is not the only mental skill that is departmental; so also is memory: various people have different memories, e.g. for poetry or dates, vocabulary of languages, faces, names, or day-to-day occurrences. On

The fact that natural inference is departmental has an important consequence in the way in which we should go about acquiring knowledge. In beginning to learn any field we must trust persons who have experience in their field, rather than trust logical science. We must take up a subject as those

^{17 &}lt;u>Ibid.</u>, 257.

^{18 &}lt;u>Ibid</u>.

¹⁹ Cf. <u>ibid</u>., 257-258.

²⁰ Ibid., 258-259.

who are proficient in it took it up, beginning at the beginning and giving ourselves to it, depending more on practice and experience than on reasoning; thus, we gain that mental insight into the field which the masters of it have. 2. Newman quotes Aristotle on this matter:

We are bound to give heed to the undemonstrated sayings and opinions of the experienced and aged, not less than to demonstrations; because their having the eye of experience, they behold the principles of things.²²

Natural inference is found in all men, especially however in the uneducated ucated and in men of genius.²⁵ The reason for this fact is that the uneducated do not know about intellectual aids and rules such as logic, and the men of genius care nothing about such rules and aids. Newman also says that "this divination [natural inference] comes by nature, and belongs to all of us in a measure, to women more than to men."²⁴

Newman²⁵ gives many examples of natural inference. I will indicate some of them here. A weather-wise peasant may be unable to give reasons why he thinks it will be a fine day tomorrow, but this fact doesn't weaken his confidence in his prediction. His mind does not proceed step by step. He feels together the force of various combined phenomena, though he is not conscious of them.

²¹ Cf. ibid., 259.

²² Ibid.; the reference to Aristotle is given as Eth. Nicom., vi, ll, fin.

²³ Cf. ibid., 198, 251.

²⁴ Ibid., 252.

²⁵ Ibid., 252-253.

Some physicians excel in the diagnosis of complaints, though they could not give defense for their diagnosis against that of another physician.

Newton perceived mathematical and physical truths without giving proof:
his rule for ascertaining the imaginary roots of equations was without proof
for a century and a half and rested on no other evidence than Newton's sagacity.

These examples of natural inference show that it is an immediate and spontaneous grasping of the conclusion without a conscious grasping of its reasons, with the result that the conclusion cannot be defended. The conclusion is about a concrete fact, and the unconscious reasons for the conclusions are themselves perceptions of concrete fact; words and propositions are not used in arriving at the conclusion. The only justifications of the conclusion are the reasoner's past experience and the actual truth of the conclusion.

quacies of formal inference (limitation to the verbally representable level of thought, inability to prove its assumptions, and inability to determine concrete contingent facts). Natural inference has given the solution to the problem of the limitation of formal inference to the verbally expressible level of thought. Natural inference is non-verbal and non-propositional; it works from things to things and from concrete to concrete. Natural inference has not solved the problem of the inability of formal inference to prove its assumptions. The assumptions of natural inference are not only unproved, they are also unknown. Not to know one's assumptions is worse than to know one's assumptions and be unable to prove them. However, if the person who is

using natural inference is familiar with the subject-matter on which he is working, it seems as though he would make the correct assumptions in this subject-matter; but even in such a case the assumptions would not be proved nor known explicitly.

Natural inference is an answer to the problem of formal inference of reaching concrete and contingent facts. Newman had objected that formal inference could not determine contingent facts because it used so-called universals and abstractions which could not determine the concrete and contingent. Natural inference, in proceeding from things to things and from concrete to concrete and from wholes to wholes, uses no universals to determine its conclusions. Therefore it avoids the problem which formal inference involves of proceeding from a narrow verbalized aspect of reality to a concrete fact of reality. Although natural inference does avoid this problem, it still does not justify the process by which it does proceed to the new concrete fact. Its process is implicit, and its sole justification lies in the facts that it is a natural process and that it works.

we see that although natural inference brings reasoning above the merely verbal level of thought and works directly on concrete reality and gives concrete conclusions, it still leaves the following difficulties in reasoning: (1) Natural inference can account neither for its assumptions nor for its own unconscious process (except by its naturalness and success): the question is therefore raised as to whether there is a conscious counterpart

²⁶ Of. this thesis, 54-57, for a consideration of Newman and nominalism, and whether he can consistently speak of the nature of anything.

of natural inference which can account for its assumptions and process.

(2) Natural inference does not explain how the mind works on long complicated cases in which the parts of the argument and groupings of these parts must at some time be seen separately; in such a case, the whole would be too large to be taken in at first with one unconscious view of it. (3) Natural inference does not explain how formal inference is to be of use to man. Newman has stated earlier in The Grammar of Assent that formal inference is useful, 27 but natural inference is unconscious and non-verbal, and therefore cannot be aided by formal inference. In the next chapter we will investigate Newman's theory of informal inference and the Illative Sense in order to learn whether this theory can give a solution to the problems of reasoning raised thus far.

²⁷ Of. GA, 198, 199, 217, 229.

CHAPTER IV

INFORMAL INFERENCE

Informal inference for Newman is fundamentally a cumulation of probabilities which together enable us to be certain of a concrete and individual conclusion. Newman first learned the importance of probabilities from Butler's Analogy; however he developed his doctrine of the cumulation of probabilities far beyond Butler's doctrine on probability. For Butler, probabilities gave the answers to practical questions only; for Newman, probabilities also enable us to attain answers to speculative questions: "Butler tends to reduce the certainty to a practical certainty, viz. that it is safer to act as if the conclusion were true; I maintain that probabilities lead to a speculative certainty."

The probabilities which are accumulated in informal inference are called probabilities because <u>each one</u> of them, taken separately, is a probable indication of the conclusion. Considered in itself, each one of the probabilities is really known certainly by the reasoner; its probability lies in its function as indicating by itself a conclusion. Perhaps P. Flanagan states this more

l J. Butler, The Analogy of Religion, Natural and Revealed, to the Constitution and Course of Nature, 1736.

² From Newman's letter to Canon Walker, 1864; quoted in Boekraad, Personal Conquest, 288. Harper points out that the scientific sceptic, William Froude, seems to have adhered more strictly than Newman to Butler's dictum that probability is the guide of life (Harper, Newman and Froude, 124-125).

clearly when he says that "the probability attaches not to the existence of the evidence but to the judgment which each isolated piece of evidence will warrant." This fact is not stated explicitly by Newman in the <u>Grammer of Assent</u>, but it is quite clearly implied throughout the section on informal inference; he does state that the <u>arguments</u> of informal inference are, in their letter, probabilities; calling the argument a probability indicates that the conclusion is probably determined by the piece of evidence, even though the evidence itself is certainly known.

Each of these cumulating probabilities must be independent of one another 5 If they were not independent, their cumulation would not have as much meaning and strength in pointing out a conclusion. These probabilities should confirm and correct one another. By their mutual confirmation the cumulation of probabilities is able to converge toward one conclusion. If the probabilities were not independent their mutual confirmation and correction would have no added value toward indicating a conclusion. The converging probabilities, however, do not actually touch the conclusion in the way that a demonstration does. The conclusion in concrete matter is foreseen or predicted rather than

³ P. Flanagan, Newman, Faith and the Believer, Westminster, 1946, 101.

⁴ Ga, 223.

^{5 &}lt;u>Ibid.</u>, 219, 242.

⁶ Ibid., 222.

actually grasped. 7 In a letter written in 1846, when a French edition of his Oxford University Sermons and Essay on Development was being prepared,

Newman said, "I use 'probable' in opposition to 'demonstrative'." Such a meaning for probable is not necessarily opposed to what is certain, but only to what is demonstrated. Arguments which are probable in the sense that they do not demonstrate the conclusion, can still require an assent with certitude from us.

Newman compares the way that the cumulation of probabilities in informal inference arrives at its conclusion with the way that a regular polygon inscribed in a circle tends to become that circle as its sides are continually diminished. 10 As this tendency of the polygon to become the circle never gets beyond a tendency, so also the accumulated probabilities of informal inference converge toward a conclusion, and "approach it more nearly than any assignable difference, yet do not touch it logically, (though only not touching it,) on account of the nature of its subject-matter, and the delicate and implicit character of at least a part of the reasonings on which it depends." 11 We should note that the subject-matter of informal inference is such that it cannot be touched logically in any way, either by the cumulation of probabil-

⁷ Ibid., 244.

⁸ Ward, Life, I, 168.

⁹ In this thesis I will not treat directly of certitude because it is an assent, rather than the mere result of inference.

¹⁰ GA, 244.

ll lbid.

ities in informal inference or by the universals of formal inference. The converging probabilities however, unlike the universals of formal inference, can render the conclusion "as good as proved" or they can "amount to a proof": the proof is the limit of the converging probabilities, as the circle is the limit of the approaching polygon in Newman's analogy. 12

The converging probabilities are called by Newman "subtle and circuitous," 15 "delicate and implicit," 14 "intricate" and "in part invisible." 15 Thus it is seen that the converging probabilities that make up informal inference do not have the obviousness that characterizes formal inference, but rather partake of the implicitness of natural inference. The reasons of informal inference may often be missed by people because of their subtle character. But not all of the converging probabilities are subtle; Newman says that they are more or less implicit and that at least part of the reasoning is delicate and implicit, 16 hinting that some parts are explicit.

The convergence of probabilities in informal inference is something that is felt as a whole, rather than something that can be exactly enumerated.

Newman says that the probabilities are too numerous and various to be convert-



¹² Ibid.

¹³ Ibid., 219.

¹⁴ Ibid., 244.

^{15 &}lt;u>Ibid.</u>, 250.

¹⁶ Cf. ibid., 222, 244.

ed into syllogiams. 17 These numerous probabilities work on the mind in a body, by some sort of unwritten summing up; this body of probabilities which is the proof is seen only as a body. 18 Analogous to this judgment based on a body of proof seen only as a body is the way by which we distinguish the old from the young, or brothers from one another, without being able to give the reasons for the distinctions. 19 Not only is the body of proof taken as a whole in informal inference, but also the conclusion is taken as a whole together with the body of proof: "We grasp the full tale of premisses and the conclusion, per modum unius, - - by a sort of instinctive perception of the legitimate conclusion in and through the premisses." Again Newman compares this perception to the way in which an object of sense presents itself to our view as one whole, and not in separate parts. 21

In the matter of the implicitness of proof and in the fact that the proof and conclusion are taken as a whole, informal inference is not identical to natural inference. Newman says that the process of informal inference is "more or less implicit," whereas the process of natural inference is completely implicit. Newman indicates the greater explicitness of informal

¹⁷ Ibid., 219.

¹⁸ Cf. ibid., 222 .

¹⁹ Ibid.

²⁰ Ibid., 229.

²¹ Ibid.

²² Ibid., 222.

inference as compared to natural inference both by his examples of informal inference ²⁵ and by his theory. The very fact that a <u>cumulation</u> of probabilities is used in informal inference suggests that the various parts of the proof must be known; these parts must be seen to some extent individually and explicitly in order that they can be known as independent and corroborating one another. The fact that informal inference, unlike natural inference, has use for the explicit processes of formal inference, also indicates the relative explicitness of informal inference. Zeno, in comparing the explicitness of informal inference, states that in the former "the probable propositions converging to one definite point, are more or less explicitly prominent in the mind though not in all details, whereas with the latter there is no explicit consciousness of antecedents at all. *24*

In a sermon given at Oxford University in 1839, Newman said: "A good and a bad man will think very different things probable." The idea behind this saying was later developed by Newman in the <u>Grammar of Assent</u>, where Newman attaches much importance to the personal elements in the acquisition of truth. We should expect that personal elements would be important in informal inference since the probabilities which are to converge toward a

²³ Cf. ibid., 223-228, 230-240, 245-250, for examples.

²⁴ Seno, J. H. Newman, 140.

²⁵ Newman, Oxford Sermons, 191; cf. also 237.

²⁶ R.g., GA, 223, 229, 235, 243, 249; cf. also Newman's letter to Fr. Coleridge in 1871, in Ward, Life, II, 270.

conclusion in informal inference are often subtle and partly invisible; a man with the wrong personal dispositions may find that for him the probabilities are too subtle or invisible and therefore have no value in indicating the truth of a conclusion. Newman saw personal factors involved throughout the reasoning process: in relation to first principles and the way that a case is viewed, in relation to antecedent reasons and prejudices, and in relation to the acceptance of probabilities and their convergence.

The personal elements that Newman mentions as important in concrete reasoning pertain to the moral, intellectual, and experiential aspects of a person. The moral character of a person influences the way in which he sees first principles of truth: "perception of its [truth's] first principles which is natural to us is enfeebled, obstructed, perverted, by allurements of sense and the supremacy of self, and on the other hand, quickened by aspirations after the supernatural." Newman's view on the relationship between prudence and reasoning also indicates the prominence of personal moral factors in his reasoning theory. He holds that the moral quality of prudence is required in all non-abstract proofs. The judicium prudentis viri is the standard of certitude in all concrete matters, not only in cases of practice but also in speculative questions (in regard to truth or falsity) as the supplement of logic. The addition to prudence, other personal moral

²⁷ GA. 223.

²⁸ Ibid., 237.

^{29 &}lt;u>Ibid.</u>, 241.

³⁰ Ibid.

prerequisites for inferring truth in concrete matter include a sense of duty and an intellectual conscientiousness. In special fields of inquiry, other added moral qualities are required; Newman says this about inquirers in the field of religion: "They must be 'as much in earnest about religion, as about their temporal affairs, capable of being convinced, on real evidence, that there is a God who governs the world, and feel themselves to be of a moral nature and accountable creatures. Without such moral prerequisites a person is most likely to misunderstand, or to miss completely, arguments about religious matters.

Although Newman stresses the moral personal elements in concrete reasoning, he also mentions intellectual and experiential factors in reasonings which are personal. In commenting on a statement by Coleridge about the relation of God and creatures, Newman mentions these personal elements which would determine how much benefit one could derive from Coleridge's statement: "The general state of our mental discipline and cultivation, our own experience, our appreciation of religious ideas, the perspicacity and steadiness of our intellectual vision." In other places Newman speaks of strength of mind, power of sustained attention, and presentiments and opinions as personal factors which influence one's reasoning.

³¹ Ibid., 242.

³² Ibid., 243; Newman says his quotation is from Butler, Analogy, 278.

³³ Ibid., 232.

³⁴ Cf. ibid., 235, 240.

Newmen finds that the personal element in informal inference is indicated by the language used to describe concrete conclusions.

We are considered to feel, rather than to see, its cogency; and we decide, not that the conclusion must be, but that it cannot be otherwise. We say that we do not see our way to doubt it, that it is impossible to doubt, that we are bound to believe it, that we should be idiots. If we did not believe. 35

Newman states that phrases such as these are used when doubt is altogether absent in order to signify that we arrived at the conclusions not by a scientific necessity independent of ourselves, but by the action of our minds under a sense of duty to the conclusions and with intellectual conscientiousness. A man has a duty to accept some things as true; to act otherwise would be to act as an idiot would act. Even though we cannot demonstrate some conclusions, we know that they cannot be otherwise.

The fact that the personal element is so important in the attainment of truth in concrete matters has important consequences in the ways in which such matters are to be taught or learned. Newman says that we should use language "to stimulate, in those to whom we address ourselves, a mode of thinking and trains of thought similar to our own, leading them on by their own independent action, not by any syllogistic compulsion." Such a method of teaching will produce better results because it considers the manner in which the mind operates, as living and personal, and not as a computer which can be forced to give specific results if it is fed specific data. The procedure of <u>learning</u>

³⁵ Ibid., 241.

³⁶ Ibid., 242.

³⁷ Ibid., 235.

is also affected by the importance of the personal element in acquiring truth. "Our criterion of truth is not so much the manipulation of propositions as the intellectual and moral character of the person maintaining them." 38

The teacher's personal qualities indicate how trustworthy his teaching may be.

It is not merely by chance or by man's planning that such a process as informal inference exists. Newman states that informal inference is the method by which we reach certitude in concrete matters "from the nature of the case, and from the constitution of the human mind." Because of the nature of the human mind it must use the method of converging probabilities if it is to reason to concrete conclusions and attain certitude about them. Newman calls it a "law of our nature," that we accept as true and assent absolutely to propositions that are not logically demonstrated by their premisses.

Fundamental to the supra-logical processes of informal and natural inference is their principle, the Illative Sense. In a letter to Dr. Meynell,

Newman says: "But I consider Ratiocination far higher, more subtle, wider,

more certain than logical inference, and its principle of action is the

"Illative Sense," which I treat of towards the end of the volume the Grammar

of Assent. "Although the Illative Sense is called a sense, it is an in-

³⁸ Ibid., 230.

³⁹ Ibid., 223.

⁴⁰ Ward, Life, II, 248, from a letter of Newman's to H. Wilberforce in 1868; Harper, Newman and Froude, 202.

⁴¹ Ward, Life, II, 258.

tellectual power; Nawman points out that he is using "sense" as parallel to its use in good sense, common sense, or sense of beauty. 42 In the Grammar of Assent, Newman calls the Illative Sense the perfection or virtue of the personal action of the ratiocinative faculty; 43 it is the power of judging and concluding in its perfection. 44 By comparing these descriptions of the Illative Sense with that given in the letter to Dr. Meynell, we discover that the Illative Sense had two meanings for Newman: the principle of concrete reasoning in everyone, and the perfection of the principle of reasoning. Everyone has an Illative Sense, yet the Illative Sense implies a perfection of reasoning. It seems that these two meanings of the Illative Sense should be taken as two aspects of man's reasoning power: the first aspect is this power in as much as it comes from the very nature of man; the second is this power as it exists in gifted or experienced reasoners. Much of Newman's exposition of the Illative Sense is through analogies between the Illative Sense and parallel "senses". One of these parallel senses is phronesis. It is noteworthy that Newman holds that phronesis includes two aspects parallel to the two of the Illative Sense: "It phronecis | comes of an acquired hebit, though it has its first origin in nature itself, and it is formed and matured by practice and experience:45

⁴² GA, 262-263.

⁴³ Ibid., 262.

⁴⁴ Ibid., 268; cf. also 260 and 274 for similar definitions.

⁴⁵ Ibid., 269.

The function of the Illative Sense is to be the ultimate test of truth and error in our inferences in concrete reasonings: 46 it is " a rule to itself. and appeals to no judgment beyond its own: 47 it goes beyond words and syllogisms, and is more versatile than they are. Newman again uses senses parallel to the Illative Sense in order to show the reasonableness of the supremacy of the Illative Sense in its field: "just as there is no sufficient test of poetical excellence, heroic action, or gentlemanlike conduct, other than the particular mental sense, be it genius, taste, sense of propriety. or the moral sense, to which these subject-matters are severally committed. #49 so also is the Illative Sense the test of reasoning, in concrete matter. Phronesis especially is stressed by Newman as a power of the mind similar to the Illative Sense in its ability to go beyond rules and deal with the concrete. 50 Only by our own phronesis can we decide our own personal needs and our own golden mean; ethical rules are not in themselves enough for the particular case, and can be applied to the particular case only by the living action of the intellect. Likewise, in the field of reasoning on concrete matter, the rules of logic are inadequate by themselves; we are obliged to use the Illative Sense in reasoning on concrete matter, and thereby we are applying the living action of the intellect as the final norm of reasoning.

⁴⁶ Ibid., 273.

⁴⁷ Ibid., 274.

^{48 &}lt;u>Ibid.</u>, 228, 273.

⁴⁹ Ibid., 273.

⁵⁰ Ibid., 268-271.

Another similarity of the Illative Sense and Phronesis is found in the fact that both are departmental: <u>i.e.</u>, both <u>phronesis</u> and the Illative Sense tend to be attached to particular subject-matters, rather than to be of equal power in all subject-matters.⁵¹

Properly speaking, there are as many kinds of phronesis as there are virtues; for the judgment, good sense, or tact which is conspicuous in a man's conduct in one subject-matter, is not necessarily traceable in another. ...he may be just and cruel, brave and sensual, imprudent and patient. 52

In a similar manner, taste and skill are used in reference to painting, architecture, music, or gymnastic exercises, even though no one taste or skill is applicable to all of these; rather, there is a taste or skill united indissolubly to the subject-matter of each field. In the same manner, the Illative Sense may be possessed by a person in one department of thought, for instance, history, and not in another, for instance, philosophy. In 1871 in the preface to the third edition of his Oxford University Sermons, Newman gave reasons for the departmentality of reasoning.

This inequality of the faculty in one and the same individual, with respect to different subject-matters, arises from two causes: -from want of experience and familiarity in the details of a given subject-matter; and from ignorance of the principles or axioms, often recondite, which belong to it. 55

⁵¹ We have already seen that natural inference, which is carried on by the Illative Sense, is departmental. Newman had long recognized that reasoning is departmental, and had mentioned this fact in a sermon in 1840. (Newman, Oxford Sermons, 259-260).

⁵² GA, 271.

⁵³ Cf. ibid., 271-272.

⁵⁴ Ibid., 272.

⁵⁵ Newman, Oxford Sermons, xiii-xiv.

phronesis, Newman also held some type of real connection between these two powers. We have already seen that prudence is a part of any non-abstract proof and is the standard of certitude in concrete matter. ⁵⁶ In a letter to H. Wilberforce in the summer of 1868, Newman is more explicit about the connection of phronesis with reasoning and certitude:

I think it is phronesis which tells when to discard the logical imperfection and to assent to the conclusion which ought to be drawn in order to demonstration but is not quite. No syllogism can prove to me that Nature is uniform — but the argument is so strong, though not demonstrative, that I should not be Phronimos but a fool, to doubt. 57

This letter shows the identification of a function of phronesis with a function of the Illative Sense; 58 this function is to judge when a conclusion that is not demonstrated should receive an assent.

We now come to the question of the range of the Illative Sense. Newman says that this power attends the whole course of concrete reasoning, from antecedents to consequents, at the start, course, and conclusion of the inquiry. In its application to a specific case the Illative Sense at the beginning acts on the statement of the case. This depends on the particular aspect under which we view a subject, that is, on the abstraction which forms

⁵⁶ GA, 241.

⁵⁷ Ward, Life, 248-249. Ward points out that this letter was written at the time that Newman had nearly finished the first draft of the Grammar of Assent.

⁵⁸ The Illative Sense has other functions besides this one, as will be seen in the following consideration of its range.

⁵⁹ GA, 274, 275.

our representative notion of what it is. #60 In other words, the statement of the case is the peculiar and personal way in which our Illative Sense views the concrete matter which is to be investigated. Thus in regard to the investigation of the physical world, the case could be stated as concerning a series of final causes or a series of initial (efficient) causes. 61 Sometimes a case may be stated in a simpler and more intelligible manner than it had been previously, because of the discovery of a new aspect of the case. However, such a new aspect may be discovered to be unreal. Newman exemplifies the different ways in which different people view things by reference to how differently people will interpret lines, colors, letters of the alphabet, or family likenesses: e.g., the same curved line will be taken by some people as concave and by others as convex. 63 In intellectual questions about concrete matters, personal factors are even more likely to influence our statement of the case to be investigated. It is the Illative Sense which does this work of stating the case.

Further, the Illative Sense is responsible for the "implicit assumption of definite propositions in the first start of a course of reasoning, and the arbitrary exclusion of others." As always, this work of the Illative Sense

⁶⁰ Ibid., 282.

⁶¹ Cf. ibid.

⁶² Cf. ibid., 283.

⁶³ lbid., 283, 284.

⁶⁴ Ibid., 285.

is personal. The action of the Illative Sense on first principles is extremely important. Newman says that assumptions, principles, tastes and opinions, all of which are of a personal character, are half the battle in inference. 5

To assume that we have no right to make any assumptions and that we must begin with a universal doubt, is the greatest of assumptions; and to forbid assumptions universally is to forbid this one also. 66 Even our nature and our method of reasoning are assumptions; 7 it is up to the personal action of the Illative Sense to decide what assumptions are the correct ones to be made at the start of any course of reasoning in concrete matter.

Yet another function of the Illative Sense is to act on the arguments by which the question is to be answered and on the determination of the conclusion. Some of the arguments advanced as part of the solution of the case are what Newman calls antecedent reasons. Antecedent reasons are probabilities or arguments which we bring with us to an investigation even before we start investigating. They amount to prejudgments about the facts of the case, are in great measure made by ourselves, and belong to our personal character. Such antecedent reasons can be good or bad depending on the nature of the case and on our character. Newman says that antecedent reasoning is safe when it is negative; e.g., the notorious bravery of Alexander the

⁶⁵ Ibid., 274.

⁶⁶ Ibid., 286.

⁶⁷ Ibid.

⁶⁸ Ibid., 289.

Great is an antecedent reason which would justify us in rejecting any charge of cowardice against him. 69 However, our knowledge of his bravery does not enable us to perform an act of positive antecedent reasoning in order to conclude that on a particular occasion he placed a particular act of bravery. 70 It is the function of the Illative Sense to judge on the value of antecedent reasons; this function, like any other function of the Illative Sense, is exercised in a personal manner according to the individual Illative Sense.

Finally, the Illative Sense is the principle of the judging and accumulating of probabilities or arguments, and of discerning the convergence of the probabilities toward a conclusion. Newman refers to this method of procedure of the Illative Sense in coming to a conclusion as "the elementary principle of that mathematical calculus of modern times."

The Illative Sense operates throughout the entire course of reasoning on concrete matter, from beginning to end. Since all of this work of the Illative Sense is done in a personal manner, it does not provide a common measure between minds; 72 a strictly personal action cannot be communicated in exact common measure to another person in the manner that abstractions can be communicated.

If the Illative Sense is to be the ultimate test of the validity of

⁶⁹ Ibid.

⁷⁰ Cf. <u>ibid</u>.

^{71 &}lt;u>Ibid.</u>, 273.

⁷² Cf. ibid., 275.

inference in concrete matter, its credentials for such a position must be examined. Newman's starting point in showing the validity of the Illative Sense is that we must accept the facts of nature.

If I may not assume that I exist, and in a particular way, that is, with a particular mental constitution, I have nothing to speculate about, and had better let speculation alone. Such as I am, it is my all; this is my essential stand-point, and must be taken for granted; otherwise, thought is but an idle amusement, not worth the trouble . . . I cannot think, reflect, or judge about my being, without starting from the very point which I aim at concluding. It is enough for the proof of the value and authority of any function which I possess, to be able to pronounce that it is natural. 73

Newman⁷⁴ continues his argument for the Illative Sense by saying that what is natural to a being cannot be considered as a fault of that being. The principle of vitality of every being keeps the being as one whole with no warring parts. Since other beings find their good in the use of their particular natures, there is reason for anticipating that to use duly our own nature is our interest as well as our necessity. Feculiar to man is the fact that he is a being of progress; this progress is had by his personal effort in the use of his faculties. The law of man's being is that he be emphatically self-made. This law of progress is carried out by means of the acquisition of knowledge, of which inference and assent are the immediate instruments. We appeal to man as a fact to find out the law of his mind in regard to the faculty of inference. Facts make us confess that there is no ultimate test of truth besides the testimony borne to truth by the mind itself, in regard to concrete conclusions. This situation is inevitable for man. His progress

^{73 &}lt;u>Ibid</u>., 263, 264.

⁷⁴ This argument is from Ibid., 264-267.

is a living growth, not a mechanical movement, and the instruments of his growth are mental acts and not formulas of language. All that we can do is to take man and his powers as we find them. Since we know that all creation is the expression of God's will, we may substitute for a resignation to man's destiny and nature, a cheerful concurrence in an overruling Providence, and securely take our faculties as we find them. The theory of the Illative Sense fits in with man's powers as we find them and with his growth through mental acts rather than by formulas of language.

Newman explicitly rejects the position that man has faith in his reasoning power (i.e., Newman holds that man knows the validity of his reasoning power; its validity is not something in which man has a weakly-based trust.):

"but of all these improprieties, none is so great as to say I have faith in consciousness, and in reason or reasoning, for reasoning is the very breath of my existence, for by it I know that I exist."

The end result which man achieves after the work of the Illative Sense in informal inference may be called moral certitude. 76 Certitude is an assent, rather than an inference; but if the person by his Illative Sense sees that the probabilities so indicate the conclusion that he would be a fool not to assent to the conclusion, he will normally assent to the conclusion and have

⁷⁵ This is from an unpublished manuscript of Newman's (MS A.46.3) which was written in 1859. It has recently been published in Boekraad and Tristram, The Argument from Conscience to the Existence of God according to J. H. Newman, Louvain, 1961, 106, and also in J. Collins, Philosophical Readings in Cardinal Newman, Chicago, 1961, 194.

^{76.} GA, 242. On the same page Newman says that he generally avoids using the word moral in relation to certitude and evidence because it has a vague meaning.

moral certitude about it. Newman says that moral certitude is all that we can attain not only in ethical and spiritual matters but also in terrestrial and cosmical questions. 77 Informal inference gives a moral demonstration which leads toward moral certitude. Newman made the following analogy in order to clarify the nature of moral demonstration:

An iron rod represents mathematical or strict demonstration; a cable represents moral demonstration, which is an assemblage of probabilities, separately insufficient for certainty, but, when put together, irrefragable. A man who said "I cannot trust a cable, I must have an iron bar", would in certain given cases, be irrational and unreasonable: -- so too is a man who says I must have a rigid demonstration, not a moral demonstration, of religious truth.

We have considered the nature of informal inference and its principle, the Illative Sense, in this chapter. We have seen that informal inference is a cumulation of independent probabilities in concrete matter which converge toward a conclusion; this cumulation is carried on by the Illative Sense, and the entire process of reasoning is influenced by personal elements. It now remains for us to learn the relation of the process of informal inference to formal and natural inference.

First we shall consider the relation of informal inference to formal inference. Newman says that informal inference "does not supersede the logical form of inference, but is one and the same with it; only it is no longer an

^{77 &}lt;u>Ibid.</u> We should keep in mind that Newman is speaking about questions regarding concrete matters in these fields.

⁷⁸ Letter of Newman's to Canon Walker, July 6, 1864, quoted in Ward, Life, II, 43.

abstraction, but carried out into the realities of life. "79 He also save that informal inference, "acting through them i.e., formal processes of inference reaches to conclusions beyond and above them. #80 Informal inference works "not indeed to the exclusion, but as the supplement of logic." statements indicate that informal inference is not completely separated from formal inference, but rather works both through and beyond it. Whereas formal inference cannot reach the concrete at all, informal inference, working through formal inference, can go beyond formal inference and indicate concrete facts in its conclusions so that we can assent with certitude to the conclusions. Formal inference aids informal inference by keeping the mind from running wild, 82 and by providing the many other aids which were mentioned in the chapter on formal inference. 83 Newman is not speaking exactly when he says that informal inference is the "supplement of logic." 84 It is rather formal inference which is a supplement to informal; Newman states that the relation of formal inference to informal is analogous to the relation of a sketch to a portrait. 85 As a sketch shows the rough outlines of a portrait in order that

⁷⁹ GA, 222.

⁸⁰ Ibid., 240.

^{81 &}lt;u>Ibid.</u>, 241.

^{82 &}lt;u>Ibid.</u>, 200.

⁸⁵ Cf. this thesis, 13-14.

⁸⁴ GA, 219.

⁸⁵ Ibid., 241.

a well ordered portrait might be obtained, so formal inference shows the rough outlines of thought and reasoning, in order that we might have a well ordered teasoning process. Formal inference is useful, but only in subordination to a higher logic, \$\frac{86}{1.e.}\$, in concrete reasoning, formal inference is useful only in subordination to informal inference.

The relation of informal inference and natural inference is not treated explicitly by Newman. That there is a close connection between these two types of inference is shown by the similarities of the two: both are the work of the Illative Sense and departmental; both are personal, depending upon the moral character and intellectual exill and experience of the individual; both deal with concrete evidence and arrive at concrete conclusions. Informal inference also partakes of the implicitness of natural inference to a certain extent; some of the probabilities may be grasped in an implicit manner, and the summing up of the converging probabilities into the conclusion is an unwritten summing up, in which the premisses and conclusion are seen as a whole.

Despite these similarities, informal and natural inference are distinct.

The main difference between the two is the fact that the process itself of natural inference is entirely unconscious; the man using natural inference cannot say how he arrived at his conclusion. Informal inference on the

⁸⁶ Ibid., 230.

contrary is not so unconscious: the converging probabilities can be enumerated. Informal inference's explicitness is also shown by the fact that it has use for formal inference, whereas natural inference is so implicit that it has no use at all for formal inference.

CHAPTER V.

SUMMARY AND EVALUATION.

Newman's purpose in his theory of reasoning in the Grammar of Assent was to discuss the process by which we arrive at concrete and individual conclusions. In his effort to find the reasoning process which would enable us to know the concrete and individual, Newman first considers formal inference. Formal inference is reasoning as it is marked out by words, propositions and syllogisms. The scientific form of formal inference is logic. Although Newman admits many uses of formal inference, he maintains that it has serious inadequacies, especially in regard to concrete matter. Formal inference must assume some premisses; it is unable to prove all its premisses. Formal inference is unable to reach the concrete and individual in its conclusions because it is carried on by means of abstractions. Formal inference is unable to do full justice in expressing thought since formal inference is verbal, and thought exceeds the merely verbal.

Natural inference, according to Newman, is the apprehension of a conclusion without consciousness of the process, and sometimes even of the antecedents, which lead to the conclusion. Natural inference proceeds from the concrete to the concrete; it does not use words. Informal inference is the cumulation of probabilities which converge toward a concrete conclusion. The conclusion is the limit toward which these probabilities tend; they do not actually touch the conclusion logically, but they show that the conclusion is

inevitable. Some conclusions of informal inference can be attained only if certain personal elements (concerning moral character, and skill and experience in the subject-matter) are present in the reasoner. Informal inference has somewhat of a resemblance to natural inference in that some of its premisses may be implicit and its antecedents and conclusion may be grasped as a whole, and to a certain extent it is non-verbal.

The Illative Sense is the principle of the supra-logical reasoning of both natural and informal inference. It operates throughout the entire course of concrete reasoning, from the statement of the case and acceptance of first principles, to the judging of arguments and the judgment about the conclusion. It is the ultimate norm of truth in reasoning on concrete matters. Its sanction is found in the fact that man is a personal and growing being, and the Illative Sense fits in with personal growth through reasoning. The Illative Sense is departmental; therefore, both natural and informal inference tend to be attached to particular subject-matters according to the individual's aptitudes. Since the process of natural inference is completely unconscious, it has no use for formal inference. Informal inference however is able to use formal inference, and works through and beyond it.

The first task of this evaluation of Newman's reasoning theory is to locate this theory in regard to its own position as a body of knowledge within the field of philosophy. There is some difficulty in classifying Newman's reasoning theory within any one of the traditional divisions of philosophy.

As reasoning theory, one would expect that it would fall within logic; if logic is the science that studies mental operations in order that they may be directed toward truth, any theory that purports to aid reasoning in attaining truth is a part of logic. Therefore, there is good reason for considering Newman's reasoning theory to pertain to logic since it does study mental operations in order that they may be directed toward truth. However, Newman himself took logic to be the scientific form of what he called formal inference, and he considered his theory of natural and informal inference to be above the logical. What Newman called logic was really the formal logic of reasoning; this is concerned with the formal structures of reasoning as they are manifested by language structures. Material logic, which might prevent formal logic from becoming overly abstracted from reality, was neglected in Newman's age. Because of this neglect. logic became practically synonomous with formal logic; even in our day, logic is often considered only in its formal aspect; especially in symbolic logic. Since Newman's theory of reasoning contains so much beyond the formal aspects of reasoning, in regard to both the objects on which we reason and the subject who reasons, it might be misleading to classify his theory as logic. Nevertheless there is some

l We are here prescinding from the question of the validity or non-validity of such a theory; true logic and false logic both pertain to the field of logic.

^{2 &}quot;Indeed, for some three hundred years, no less, prior to the advent of this newer logic, the schools of Europe had apparently committed themselves to presenting an empty husk of logic, which they called Aristotelian,..." (Henry B. Veatch, Intentional Logic, New Haven, 1952, 3;:cf. also 396, note 2, on the neglect of material logic).

reason for calling it logic, since it does give a method and other advice (e.g. the method of converging probabilities, the recommendations to consider personal factors required for various reasoning processes, and the need for familiarity with the subject-matter) in order that the mind may be directed to truth.

Newman himself speaks of a "higher logic" above verbal argumentation.

Another possible classification for Newman's reasoning theory is epistemology. Dessain.4 however, holds that Newman is not dealing with epistemology in the Grammar of Assent. Although Newman's main purpose in the Grammar of Assent was not epistemological, he does treat an epistemological problem in a brief way. Newman does decide that his theory of the Illative Sense is valid because it explains the living growth of man through knowing and reasoning. He also judges from the nature of concrete matter and from the nature of the human mind, that certitude may arise from arguments that are in their letter probabilities. Therefore, Newman does hold that man can know concrete external reality. Newman, however, does not have an epistemology in the usual sense of the word. He does not argue to a theory of what the mind knows, as does Kant in his Critique of Pure Reason, or Hegel in his Phenomenology of Mind. He rather takes for granted that the mind does know reality in the moderate realist sense of reality. Any development of epistemology would seem to be impossible for Newman since he held that in any criticism of our

³ GA, 230.

^{4.} C. S. Dessain, "Cardinal Newman on the Theory and Practice of knowledge," <u>Downside Review</u>, 75 (1957), 7.

minds we must start at the very point at which we hope to end. His epistemology amounts to a practical attitude: use your human nature as you find it;
accept natural and informal inference because they are descriptive of the
living, personal growth of a human nature in knowledge.

Most of Newman's theory of reasoning pertains to the field of rational psychology or philosophy of man. Newman's psychology is greatly to be preferred to much modern psychology which evolves its theories within analogical models of man, thereby saying nothing directly of man; Newman's theory, on the contrary, is a descriptive theory of man's reasoning; he described the observable facts of man's reasoning processes in concrete matter, and then he points out the essential factors within these processes, and then he adds his hypothesis of the Illative Sense to explain these facts. Instead of attempting to isolate his reasoning theory from the philosophy of the human person, as is done in logic, Newman tries to include his reasoning theory within the philosophical position that man is a self-making personal unity that grows through acquiring knowledge.

Newman's theory of reasoning shows many insights into the nature of man's reasoning and the nature of man himself. His doctrine of the wholeness or simplicity of natural inference indicates an important insight into the operation of the human mind. The most valuable of Newman's insights into the nature of reasoning and of man concern the personal and non-verbal aspects of reasoning. His doctrine that moral character and skill and experience affect reasoning ability, and that what is a proof to one person will be inadequate for another, shows the unity of the human person and the mutual

interaction of the various parts of the person. His theory that concrete reasoning goes beyond the merely verbal level of thought indicates more about the nature of man's mind. His realization that reasoning to concrete conclusions requires a different method from that of reasoning to non-concrete conclusions, and his theory of informal inference are also important for an understanding of how man's mind operates. The Illative Sense also represents a contribution to psychology. And all of Newman's reasoning theory fits in with his doctrine that man is self-creating and grows through acquiring knowledge in a living way.

Although Newman does present a "higher logic" with methods and advice for correct reasoning, his reasoning theory should be considered primarily as a contribution to the philosophy of man: his insights are primarily into the nature of man's mental operations and secondarily into the means for correctly guiding these operations.

Since Newman's theory of reasoning is primarily part of a philosophy of man that is based on observation, it is fitting that our primary evaluation of it be based on a consideration of how accurately Newman does describe the reality of reasoning. First we shall consider natural inference. Our decision about the accuracy of Newman's description of the reality of reasoning will depend upon the answers to these questions: Does reasoning sometimes occur as the apparently immediate grasping of a conclusion, without awareness of the antecedents? Can we reason directly from unconscious concrete antecedents to a concrete conclusion, without using words as mediums of our reasoning?

One example that Newman gives of natural inference concerns physicians who excel in the diagnosis of complaints. We should study this example in order to learn whether it shows (a) an immediate grasp of a conclusion while the process leading to the conclusion, and maybe even the antecedents, are unconscious; (b) reasoning from concrete to concrete, without words as a medium.

Newman says that some physicians excel in the diagnosis of complaints even though they may be unable to defend their diagnosis against that of another physician. In such a case the physician would perceive (we should not restrict "perceive" to the merely sensible level, but rather include also intellectual perception) the over-all physical state of the person. He would proceed from this perception to his diagnosis, which is his conclusion. he cannot defend his diagnosis against other physicians. This fact indicates that he was unconscious of the process by which he arrived at his conclusion; had he known the process, it would serve as his defense. Also it appears that he proceeded from concrete to concrete. He perceived the concrete fact of the person's physical condition and then judged what was wrong with the person, another concrete fact. It seems obvious that there were no words involved as media of arriving at the conclusion; if words were media in his process of reasoning, he could use these words to defend his conclusion against other physicians.

Another of Newman's examples of natural inference concerns Napoleon's

conclusions in military matters, which appeared as immediate judgments. 5 the enemy's troops were scattered. Napoleon knew at once how long it would take them to concentrate and how many hours must elapse before they could attack. In other words, Napoleon perceived the scattered state of the enemy (this perception is the concrete and non-verbal antecedent), and judged spontaneously as to how long it would take them to concentrate for attack. This judgment was based on his perception of the scattered state of the enemy. was not aware of any reasoning process leading from his perception of the scattered state of the enemy to his judgment of how long it would take them to concentrate, because this judgment immediately followed his perception. Perhaps he was even unconscious of the fact that his judgment about the time needed for the concentration of the enemy was based on his perception of their scattered state. This latter unconsciousness however seems very improbable. At any rate it is not absolutely necessary for natural inference. The essential element of natural inference is that the process from antecedent to conclusion be unconscious, and in this example it appears such; it also appears that the reasoning does proceed from concrete to concrete, from the scattered condition of the enemy to the length of time required for them to concentrate. There is no verbal medium; Napoleon could proceed immediately from the perception of the concrete situation to a judgment on the concrete fact of how long concentration will take.

Newman's doctrine of natural inference not only agrees with facts but also

⁵ GA, 253-254.

represents a good insight into facts. Many examples of this spontaneous reasoning can be found in everybody's life; e.g., we directly conclude that a person is not feeling well from our perception of his appearance, or we judge that a person is angry at us from our perception of his appearance. Even though Newman has described in natural inference a phenomenon of which we should be aware, such a form of inference gives little insight into the way by which we reach concrete conclusions. Newman's theory of natural inference merely tells us that we reach concrete conclusions and that we do so by an unconscious and non-verbal power of our mind; it provides no explanation of these facts. Nevertheless it does represent an accurate description of the reality of reasoning.

Next, we must evaluate informal inference in regard to its accuracy as a description of the reality of reasoning. The question which we must answer here is this: can and do men arrive sometimes at concrete conclusions by means of non-demonstrative arguments (i.e., "probabilities") which converge toward a conclusion and indicate that the conclusion must be true?

The concrete conclusion "Great Britain is an Island," is given by Newman as an example of a conclusion that we hold by an informal inference, Men hold this conclusion even though we do not have the highest kind of proof possible: "Those who have circumnavigated the Island have a right to be certain: have we ever ourselves even fallen in with any one who has?" Here are the reasons Newman gives for the average man's belief that Great Britain is

⁶ Ibid., 223-225.

⁷ Ibid., 224.

an island:

We have been so taught in our childhood, and it is so in all the maps; next, we have never heard it contradicted or questioned; on the contrary, every one whom we have heard speak on the subject of Great Britain, every book we have read, invariably took it for granted; our whole national history, the routine transactions and current events of the country, our social and commercial system, our political relations with foreigners, imply it in one way or another. Numberless facts, or what we consider facts, rest on the truth of it; no received facts rests on its being otherwise. If there is anywhere a junction between us and the continent, where is it? and how do we know it? is it in the north or in the south? There is a manifest reductio ad absurdum attached to the notion that we can be deceived on such a point as this.

No one of these arguments is a demonstration of the fact that Great Britain is an island. Yet each one of them does point toward the conclusion that Great Britain is an island. If we take all of them together we still would not have a logical demonstration that Great Britain is an island, but the indications of this fact converge so strongly toward this conclusion that only a fool would not accept this conclusion. Of course, we might object to Newman that we hold that Great Britain is an island on the basis of a human faith which we have not investigated. This may be true for some or many individuals, but could not such a person investigate the indications of the insularity of Great Britain and by means of an informal inference arrive at a reasonable certitude that Great Britain is an island? There is no apparent reason for not accepting Newman's theory of informal inference as descriptive of a method by which one could arrive at a concrete conclusion, and it appears to the author of this thesis as though this method is often used.

⁸ Ibid.

Newman proposed his theory of reasoning as the solution to the problem of three inadequacies of formal inference in regard to concrete conclusions. These inadequacies are (1) the inability to prove all of its premisses and assumptions, (2) the inability to reach the concrete and individual, and (3) the insufficiency of verbal logic in representing the sublety of the mind. In our evaluation of Newman's reasoning theory we should consider whether these inadequacies are really present in formal inference, and whether informal inference overcomes these inadequacies.

(1) First we shall consider the inability of formal inference to prove all of its premisses and assumptions. This inability seems to be a necessary factor within syllogistic reasoning such as formal inference. Before such reasoning can be carried on, there must be two premisses which can be compared in the syllogism. If these two premisses are proved in two other syllogisms, these other syllogisms contain a total of four premisses; somewhere there must be a beginning to this series of syllogisms, and there, premisses will be found, which are not proved syllogistically. Aristotle would tend toward agreeing with Newman on this first inadequacy of formal inference, although it appears that he would require a smaller number of undemonstrable principles of reasoning: "For it is impossible that there should be demonstration of absolute by everything (there would be an infinite regress, so that there would still be no demonstration)."

⁹ Aristotle, Metaphysics, Works of Aristotle, trans. by W. D. Ross, VIII, Oxford, 1928, bk. G, ch. 4, 1006a9.

It is even more obvious that assumptions of a personal character or from local customs or ideas of the age, are not prowed by formal inference or formal logic; formal logic works at the comparison of premisses to learn what conclusion is justified from given premisses; it does not investigate or judge about assumptions of the reasoner. Therefore, it must be admitted that Newman is correct in holding that formal inference is unable to prove all of its premisses and assumptions.

The problem next to be solved is whether informal inference is able to overcome the inability of formal inference to prove its premisses and assumptions. Informal inference, in fact, must begin with some assumptions; according to Newman even our nature and our way of reasoning are assumptions. Also, in any particular informal inference, there must be assumptions made as to first principles, and there also must be assumptions of a personal nature. Informal inference is no more able to prove these assumptions than is formal inference. Newman's solution to this difficulty is his Illative Sense, which judges the validity of the assumptions to be used in informal inference. In other words, the personal action of one's mind, working in accord with one's noral character and experience in the particular subject matter, judges whether assumptions are true or false.

This solution to the inability of formal inference to prove its premisses invites two objections: (A) the Illative Sense may be in error in its judgment bout the assumptions; (B) formal inference may use the Illative Sense in the ame manner as does informal inference, in order to judge its premisses. The irst objection must be allowed to stand as valid. Since everyone has an

Illative Sense (at least the first aspect of the Illative Sense, even though the second aspect. of skill and experience in the subject-matter may be missing) and since people do make errors in assumptions for concrete reasonings, we may safely conclude that the Illative Sense can err about assumptions. Newman, himself mentions a case in which an Illative Sense erred in regard to assumptions. 10 Newman's position is not that every Illative Sense is infallible, but rather that the Illative Sense, through growth in moral character, skill and experience becomes a more and more reliable judge, and that one with "an honest purpose and fair talents" will make his way to the truth. Although the Illative Sense neither proves assumptions nor is always infallible about them, it still remains our only way of judging them, and an Illative Sense in its full meaning, one which has been perfected through experience and is joined with good moral character and natural ability, is to be fully trusted in its judgments about assumptions and principles of reasoning. Without such a sense, how could man grow in his knowledge?

The second objection, that formal inference could use the Illative Sense, as informal inference does, to judge its premisses, cannot be allowed as valid if one accepts Newman's view of formal inference. Formal inference, as presented by Newman, is a process which is isolated from the living action of the mind. It appears that the rationalists who would hold such a view of reasoning as described in Newman's formal inference must have objectified reasoning so much

¹⁰ GA, 289.

¹¹ Ibid., 287.

that it became strictly a syllogistic process on paper, and was cut off from the good judgment of the mind. Such an objectified process of reasoning would therefore be unable to receive help from the Illative Sense because the Illative Sense does not work syllogistically, nor can all of its work be written down, since some of it is non-verbal. Whether or not such a completely objectified view of reasoning was held, Newman is making a point against those who stressed logical inference since this type of inference by itself is unable to prove or judge its premisses; it was unwise of rationalists to misplace effort on logical inference when the effort should be spent on an investigation of assumptions.

(2) The second inadequacy of formal inference according to Newman is its inability to reach the concrete and individual. Because of this position, Newman has often been accused of nominalism or conceptualism. 12 The only way to solve the problems raised by this position is to discover first of all what concrete and individual or concrete meant to Newman. The possible meaning of these terms is not as unique as might be thought at first sight; in fact, there are several types of the concrete, each of which might be called concrete. Newman himself does not explicitly state the meaning of the concrete, except for one footnote in which he states that what he calls the concrete, Aristotle

¹² Cf. Charles F. Harrold, <u>John Henry Newman</u>, London, 1945, 403, note 5, for references to sources accusing Newman of Nominalism. Many authors state that Newman was not concerned with metaphysics and did not intend to enter the famous controversy about universals (e.g., Theis, "Einführung," <u>Newman Studien</u>, II, 194; Zeno, <u>John Henry Newman</u>, 73-74; Dessain, "Newman on Knowledge," <u>Downside Review</u>, 75 (1957), 18).

called the contingent. 13 The examples which Newman uses to illustrate concrete conclusions are most useful in enabling one to decide what concrete meant to Newman. First of all, let us consider a division of various types of the concrete based on the relation of the concrete to a universal. There are some concrete things which are determinable merely because they are contained within the extension of a universal, e.g., John is a social being because he is a man and all men are social beings. In this example, social being, signifying that one has a radical aptitude and tendency toward living in society, can be inferred from the fact that one is a man, because it is part of the nature of man that it have a radical aptitude and tendency toward living in society.

Besides this one type of the <u>concrete</u>, which is determinable by universals, the other types of the <u>concrete</u> are not determinable by universals by themselves. These types of the <u>concrete</u> include the following: (1) the fact of existence, e.g., Great Britain exists; (2) the fact of a mode of existence in no way contained under a universal, e.g., Great Britain is an island; (3) a fact which appears to be contained under a universal physical law, but since there could be exception to the physical law, is not absolutely determined by the physical law, e.g., the sun will rise tomorrow; (4) a fact which appears to be contained under a universal "moral" law, but which is not absolutely determined by the "moral" law since there can be exception to the "moral" law through man's free acts; such a fact would be, e.g., John will act socially in this particular instance. None of these four types of the concrete can be

¹³ GA, 268.

determined by means of a universal; it appears that the best way in which these types of the concrete can be designated as a group is to say that they pertain to the singular as singular.

It will be seen by an examination of the examples of what Newman called the concrete or the concrete and individual, that none of them refer to the concrete in the sense of a concrete radical aptitude and tendency existing in a nature. All of his examples refer rather to the concrete in the latter four senses mentioned above, i.e., the concrete which is not determinable by universals. Therefore, in the Grammar of Assent, concrete refers to facts that pertain to the singular as singular.

We are now able to judge with facility about the second inadequacy of formal inference, its inability to reach the concrete and individual. Formal inference for Newman is syllogistic inference conducted by means of universals. Universals, however, cannot enable us to determine facts about the singular as singular; such facts are independent of universals. Therefore, formal inference and its universals are unable to reach the concrete (which for Newman signifies facts about the singular as singular).

The charge that Newman is a nominalist cannot be based on the fact that he held that universals are unable to determine facts about the singular as singular; moderate realists also maintain that universals cannot enable us to determine facts about the singular as singular. Newman however does make statements in the Grammar of Assent which seems to indicate nominalism: e.g., "What is called a universal is only a general." This statement, however, is

¹⁴ Ibid., 212.

made in a context about attempts to determine the concrete and individual by means of a universal, and its meaning could be taken to be: a universal which is used in an attempt to determine a concrete conclusion, is only a general. In other words, Newman was concerned only with the attainment of concrete conclusions; universals used to determine such conclusions cannot be based merely on the nature of man (e.g.) since the nature of man tells us nothing about the singular as singular; we can however make statistical summaries about singulars and apply such data to other singulars; such statistical summaries about singulars are "generals."

That Newman did not hold nominalism is also indicated by many statements in the <u>Grammar of Assent</u> in which he speaks of true universals that are not generals. He says that "even one act of cruelty, ingratitude, generosity, or justice, reveals to us at once <u>intensive</u> the immutable distinction between those qualities and their contraries." He speaks of original forms of thinking "connatural with our minds" and of the "conditions of human nature"; he also mentions the duty of resignation to the "laws of my nature," He holds that the "mind is made for truth", and he speaks of errors which belong to the individual and not to his nature. All of these statements indicate that Newman held some sort of true universal which has its basis in reality.

¹⁵ Ibid., 50.

^{16 &}lt;u>Ibid.</u>, 49, 205, 264; cf. also 6.

¹⁶ Ibid., 167 and 6.

Now that we have finished discussing the problem of the inadequacy of formal inference to reach the concrete, we will consider whether informal inference does not experience the same difficulty in its attempt to reach the concrete. Newman himself holds that the probabilities of informal inference converge toward a conclusion, but they do not touch the conclusion: as a regular polygon inscribed in a circle tends to become that circle as its sides are continually diminished, so also the cumulation of probabilities approaches the conclusion more nearly than any assignable difference, yet does not touch it logically. Therefore, it appears that informal inference is also unable to reach the concrete. However, there is a difference in the ways in which formal and informal inference reach conclusions; formal inference, by means of general terms, has only one indication that its concrete conclusion is true; this indication is that the concrete fact should be included within the scope of the general term. On the other hand, informal inference has many converging indications of the truth of the concrete conclusion. The single indication of formal inference of the truth of a concrete conclusion is not sufficient to make us assent to it, but the many indications of informal inference may so reinforce one another that we are able to see that the concrete conclusion cannot be false, and we would be imprudent not to assent to it. In this way informal inference is able to reach the concrete; even though it does not logically include the concrete conclusion within its premisses, it nevertheless indicates the conclusion so strongly that the human mind in the right condition recognizes an obligation to assent to the conclusion.

The objection was placed against Newman that his theory of informal

inference violated the fundamental rule that the conclusion cannot be stronger than the premisses: 18 in informal inference the conclusion may be certain even though the premisses are probable. Such an objection presupposes an unawareness of the meanings of probable and certain for Newman in this context. probable in regard to arguments for a conclusion is opposed not to certain but to demonstrative; an argument which does not demonstrate a conclusion may nevertheless indicate the conclusion with some degree of probability. A number of independent arguments or facts, each one of which, taken separately. probably indicates a conclusion, may, taken as a whole, so indicate the conclusion that a prudent man would be certain of the conclusion. This certitude about (or certain assent to) the conclusion is a moral certitude and not an absolute certitude. Newman said in an unfinished letter to William Froude: "We differ in our sense and our use of the word 'certain'. I use it of minds. you of propositions . . . I maintain that minds may in my sense be certain of conclusions which are uncertain in yours. 19 The prudent man recognizes a duty to assent to undemonstrated conclusions when there is sufficient evidence for them. Therefore, there is no conflict between probable premisses and a certain conclusion in Newman's theory of informal inference.

(3) The third inadequacy of formal inference according to Newman concerns

¹⁸ Leslie Stephen, "Cardinal Newman's Scepticism," The Nineteenth Century, 29 (1891), 190, referred to by John F. Cronin, Cardinal Newman: His Theory of Knowledge; Washington, D.C., 1935, 77.

¹⁹ Ward, Life, II, 587-588.

the relationship of formal inference, as verbal, to thought: formal inference, as verbal, cannot do full justice to thought. The mind is more vigorous than any of its works, of which language is one. According to Newman's description of formal inference, it is undoubtedly limited to the level of thought that can be verbalized; formal inference is carried on by means of universal terms within syllogisms. Anything non-verbal would not fit in with the highly objectified nature of formal inference; the non-verbal brings in the subjective aspect of thought, which is out of place in formal reasoning which can be objectively written down in its entirety. It appears that Newman is correct in limiting logic to the verbal level of thought. The question remains, however, as to the ability of informal inference to go beyond the merely verbal level of thought and to utilize the power of the mind more fully. It is apparent that there are non-verbal factors in informal inference. Non-verbal factors of primary importance in the theory of informal inference are the personal qualities of the reasoner. The moral character, skill and experience of the reasoner are not verbal in nature, nor are they communicable to others merely by words. Yet these personal elements affect the entire process of informal reference; because of such personal elements one person will choose correct first principles, another will choose incorrect ones; these personal elements affect the way in which one views the case to be considered, and the judging of the various probabilities that make up an informal inference: they also affect one's judgment as to whether probabilities converge so strongly that the concrete conclusion should receive one's assent.

Another class of non-verbal factors in informal inference are implicit

premisses. It seems quite possible that one or two premisses of an informal inference remain implicit in the manner of the antecedents of natural inference. For instance, one could reason to the probable date of origin of a piece of music on the basis of certain harmonic structures and a certain type of melody, and also because of some other quality which one perceives but is not able to state; such reasoning would involve some sort of an implicit and non-verbal premiss. This is not to say that such implicit premisses are also entirely non-verbalizable. The writer of this thesis cannot see how a premiss could be entirely non-verbalizable, nor how such a premiss could ever be spoken about if it did exist.

A third class of non-verbal factors in informal inference concerns the matter of how the probabilities go about converging on a concrete conclusion. A person can state all the arguments of an informal inference and also state that they converge toward a conclusion as a limit, but he cannot state how they do so. Each person must look for and see how the convergence takes place with his own mind, rather than merely receive a verbal statement of it from another. Words are not adequate to stating the comparison of all the arguments as a whole with the conclusion.

This non-verbal aspect of reasoning is very important for Newman's theory of reasoning in concrete matters. It is precisely because of this non-verbal element in reasoning that we are able to reach concrete and individual conclusions. In a non-verbal way we are able to see that the sum total of the probabilities of an informal inference so indicate a concrete conclusion that

it is inevitable. By the mere words of formal inference we could not determine the concrete conclusion. By the power of the mind in informal inference which works through and beyond words, we can determine a concrete conclusion as the limit of converging probabilities (non-demonstrative arguments). A non-verbal power of the mind enables us to see arguments as converging upon a concrete conclusion and as indicating that conclusion as their limit. Of course, personal elements (e.g., prudence, sense of duty to truth, and experience in the subject) will affect the view which the person takes of the unwritten summing up of all the arguments.

Throughout Newman's theory of reasoning there is an emphasis on the importance of personal factors. The personal action of the Illative Sense is responsible for the statement of the case, the choosing of first principles, the evaluation of arguments, and the judgment as to the convergence of arguments and whether the conclusion merits assent. The problem raised therefore, by the whole of Newman's reasoning theory, is whether his theory is completely subjective, with no regard for the objectivity of truth. If each person has his own way of looking at a case, his own first principles, and his own outlook on the parts of the proof and their value as a whole, what happens to the objectivity of the knowledge obtained by reasoning? There can be no doubt that Newman himself held that man can and does obtain objective knowledge of external reality. His entire reasoning theory was developed to explain how we attain conclusions about the concrete and individual. He says, "We reason in order to enlarge our knowledge of matters, which do not depend on us for being what they are."20

^{20 &}lt;u>GA</u>, 211.

The question still remains, however, as to whether Newman's theory of reasoning has stressed personal elements so much that it no longer allows the possibility that knowledge be objective.

It appears that there is no opposition between Newman's stress of personal factors in reasoning and the objectivity of knowledge. Newman's stress of the personal should be taken as a good attempt at explaining how objective knowledge exists within the human person. Any theory of human knowledge and reasoning should explain how these exist in the person; otherwise it is overlooking one of the most obvious facts about knowledge and reasoning, that they are of a activities/person. That personal factors of skill and experience do in fact influence reasoning ability must be admitted. Everybody shows respect for the reasoning ability of competent physicians, engineers, lawyers, or physiciats in their respective fields; such men have a familiarity and rapport with their subject matter, which were developed through experience. The departmentality of reasoning ability in a person is a recognized fact, and is well illustrated by Newman's reference to the incongruity of a Newton who could concentrate an army for battle and a Napoleon who could generalize the principle of gravitation.

The relation of personal elements of the moral order to concrete reasoning is a more subtle one, but Newman's stress of the moral personal elements in reasoning also is congruent with our experience. Nobody is convinced of a concrete conclusion that is entirely contrary to his wishes. Since it is the person who perceives reality and reasons about it, the quality of that person should be expected to influence the quality of the perception and reasoning. A physician who has no sense of duty or intellectual conscientiousness will not

reason as well as one who is conscientious. An enquirer about religion who leads a dissolute life will reason differently about it than will a person who leads a virtuous life.

Another charge of subjectivism against Newman is based on his doctrine of the Illative Sense. 21 However, the fact that the Illative Sense is called the ultimate test of truth or falsity in concrete reasonings does not signify that Newman has abandoned the objectivity of knowledge. He is always clear about the fact that the Illative Sense in its developed state works upon evidence. In other words, the Illative Sense is the ultimate <u>subjective</u> norm of truth or falsity in concrete reasonings, but it works upon objective evidence. However, the ability of the Illative Sense to assimilate the evidence will depend upon the condition of the particular Illative Sense; some Illative Senses may err because they do not have the required moral, intellectual and experiential attributes needed to succeed in a particular subject.

The Illative Sense has value as an explanatory principle of important factors in Newman's reasoning theory: it indicates that concrete reasoning is a living activity done in a personal and partially non-verbal way. The theory of the Illative Sense presents difficulties however. One of these is the fact of the two aspects of the Illative Sense: (1) the concrete reasoning principle in everybody, and (2) the concrete reasoning principle in those who have developed their reasoning skill through experience, and who have a good moral

²¹ Of. Cronin, Newman, 79.

character. In most of Newman's development of the theory of the Illative
Sense, he speaks only of the second aspect of it. However, the first aspect of
the Illative Sense must also be admitted since it is the principle of any concrete reasoning (in which everyone indulges) and since it can err. These two
aspects easily lead to confusion about Newman's theory since he does not explicitly distinguish them. The result is that he appears either to have left most
people without an ultimate subjective norm of truth in most fields, because
they do not have an Illative Sense (in its second aspect), or to have given
everybody some sort of infallibility since everyone has an Illative Sense (in
its first aspect), and it is the ultimate subjective norm of truth. Newman's
position is rather that everyone does have such a subjective norm of truth, but
they must work to improve this norm. The mere fact that the Illative Sense is
the ultimate subjective norm does not require that it be infallible.

Another difficulty concerning the Illative Sense is its ontological status. Although Newman speaks of parallel <u>faculties</u> to the Illative Sense, it is not a faculty in the scholastic sense of the term. The Illative Sense performs so many diverse operations throughout the reasoning process that it could not be called a faculty in the strict scholastic sense. In its first aspect, the Illative Sense is the native ability of the mind for concrete reasoning. In its second aspect (the one in which Newman ordinarily uses it) it is the source of a facility or ease in concrete reasoning, and is parallel to <u>phronesis</u>, sense of beauty, sense of good taste, etc. The Illative Sense amounts to an explanatory principle by which the many points of Newman's concrete reasoning theory can be explained. Its ontological reference points are the various aspects of the

mind which are involved in concrete reasoning.

A final question concerns the limits of the application of Newman's reasoning theory. Our main criterion of the limits of its use should be the limits which he sets to it himself. Unfortunately he does not speak explicitly about the limits of his theory; this fact might lead one to gather as a first impression that there are no limits to the applicability if his theory and that Newman intends his theory to be the complete theory of reasoning. Such an impression however would be erroneous. Throughout his development of his own reasoning theory in the Grammar of Assent, Newman states explicitly and shows by his examples that he is concerned with "concrete reasoning", i.e., reasoning which concludes in the knowledge of a concrete and individual fact. Since this is his express purpose, and since he states nothing about the completeness of his reasoning theory, it is reasonable to accept Newman's theory as applicable only in concrete reasoning. That Newman did not consider his reasoning theory in the Grammar to be complete is also indicated by his reference to the Grammar as a "conversational essay" and a "preliminary opening of the ground."22 The limitation of the purpose of Newman's reasoning theory also offers an explanation for his devaluating of formal inference and his stress upon informal inference. Since formal inference cannot account for our certitude about concrete and individual conclusions, whereas informal can, it is entirely consistent with Newman's purpose that he show how formal inference is inadequate in regard to the concrete and individual, and not develop the value of formal inference in science and philosophy.

²² Letter to Father Walford, in Ward, Life, II, 266.

Newman has given important insights into the nature of reasoning on concrete matter. He has shown the inability of logic in questions about the singular as singular, and has offered a method by which such conclusions can be reached; in this method is included an important insight, that the convergence of arguments toward a concrete conclusion, so as to indicate that the conclusion must be true, can be judged by the mind even though a verbal demonstration of the conclusion cannot be given; the mind is more vigorous than any one of its works, such as language. Newman has described facts about implicitness in reasoning that must be considered in a philosophy of man and his operations. He has shown throughout the reasoning process the importance of the person and personal qualities, such as prudence, sense of duty, and familiarity with a particular subject-matter. As a whole, Newman's theory of reasoning in the Grammar of Assent is a valuable contribution to philosophy.

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APPROVAL SHEET

The thesis submitted by Lawrence David Roberts has been read and approved by three members of the Department of Philosophy.

The final copies have been examined by the director of the thesis and the signature which appears below verifies the fact that any necessary changes have been incorporated, and that the thesis is now given final approval with reference to content, form, and mechanical accuracy.

The thesis is therefore accepted in partial fulfillment of the requirements for the Degree of Master of Arts.

May 27, 1964

Francis (Cataria Ch.).
Signature of Adviser