THE WORK OF HENRY DRUMMOND AS A BASIS FOR A PRACTICAL SPIRITUALITY

James Beresford Paterson

A Thesis Submitted for the Degree of MPhil at the University of St Andrews

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THE WORK OF HENRY DRUMMOND AS A BASIS
FOR A PRACTICAL SPIRITUALITY

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Honorary Canon of the Diocese of Brechin
in the Scottish Episcopal Church.

Submitted to the University of St. Andrews in
fulfilment of the requirements for the Degree
of Master of Philosophy, 29th September, 1984.
DECLARATIONS

I certify that the Revd. Canon J.B. Paterson has fulfilled the conditions of the Resolution of the University Court, 1981, No.2, and is qualified to submit this thesis in application for the Degree of Master of Philosophy.

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I was admitted as a research student under Ordance 350 (General No. 12) and as a candidate for the degree of M.Phil. under Resolution of the University Court, 1981, No.2 on 7th October, 1979.

The following thesis is based on the results of research carried out by myself, is my own composition, and has not previously been presented for a higher degree. The research was carried out in the University of St Andrews under the supervision of the Revd. J. M. Keeling, M.A.

In submitting this thesis to the University of St Andrews I understand that I am giving permission for it to be made available for use in accordance with the regulations of the University Library for the time being in force, subject to any copyright vested in the work not being affected thereby. I also understand that the title and abstract will be published and that a copy of the work may be made and supplied to any bona fide library or research worker.

J.B. Paterson
Henry Drummond was born in Stirling in 1851. After studying at Edinburgh University and New College, he was appointed Lecturer and subsequently Professor in Natural Science at the Free Church College, Glasgow. He remained in the post until ill health forced him to resign in 1895, and died in Tunbridge Wells in 1897. His major works include *Natural Law in the Spiritual World* (1883), *Tropical Africa* (1888), *The Greatest Thing in the World* (1889), *The Ascent of Man* (1894) and two posthumous collections, *The Ideal Life and other Unpublished Addresses* (1897) and *The New Evangelism and other Papers* (1899).

In Section I, a short biographical sketch is followed by a discussion on possible methods of approach to the theme of the thesis. In Sections II to IV, Drummond's work is analysed in chronological sequence of writing and related to his overseas visits. Spirituality is examined in Section V and a number of factors identified which are likely to be taken into account by those who pursue a spiritual path. These are used as a basis for analysing Drummond's spiritual outlook. His theological and scientific viewpoints are then discussed and recent developments in evolutionary thinking surveyed.

In Section VI, eight models of spirituality are described and the likely appeal of Drummond's work to those sympathetic to each model considered. The models include the evangelical and the charismatic; the contemplative and the sacramental; the experimental and the therapeutic; the ecological and the cosmological. Finally it is suggested that Drummond's work is still remarkably stimulating and can serve as a valuable basis for developing a practical spirituality; that his views on the goal of evolution and the emergence of altruism are still relevant; and that he is a figure worthy of renewed attention by those interested in Scottish spirituality.
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LIST OF ABBREVIATIONS

The following is a list of abbreviations used in textual references with the editions of Drummond's published works from which quotations are taken:

AM  The Ascent of Man, ninth edition (London, 1899)
GW  The Greatest Thing in the World and Other Addresses (London, 1894) which includes:
   CL  "The Changed Life"
   CC  "The City without a Church"
   PC  "The Programme of Christianity"
   PV  "Pax Vobiscum"
IL  The Ideal Life and other Unpublished Addresses, second edition (London, 1898)
NE  The New Evangelism and Other Papers (London, 1899) which includes:
   CS  "The Contribution of Science to Christianity"
   FM  "The Problem of Foreign Missions"
   NT  "The Method of the New Theology, and some of its Applications"
   TK  "The Third Kingdom"
NL  Natural Law in the Spiritual World, twenty-second edition (London, 1888)
TA  Tropical Africa (London, 1888)

Where one book or address is dealt with at length, the initial reference is given by footnote, and subsequent references given in the text by page number after each quotation.

References to addresses and papers from collected works are given by appropriate abbreviation followed by the abbreviation for the parent publication, e.g., (CL–GW p. 43).
SUMMARY OF KEY DATES

1851 Born at No. 1 Park Place, Stirling, 17th August.
1858 Stirling High School.
1863-66 Morrison's Academy, Crieff.
Oct 1866 Entered Edinburgh University.
Apl 1870 Closed Arts course. Passed degree exams in Mental Philosophy.
Nov 1870 Entered Free Church of Scotland Divinity Course, New College, Edinburgh. Continued to attend Science classes at University.
May 1873 Visited Tubingen
Oct 1873 Postponed final year at New College to engage in mission work and further study in Natural Science.
Nov 1873 "Spiritual Diagnosis" delivered to Theological Society.
1873-75 Mission work with Moody and Sankey.
Oct 1875 Re-entered New College for final session of Divinity Course.
Apl 1876 Passed second part of Exit Examination.
1876-77 Assistant at Barclay Church, Edinburgh.
Sep 1877 Appointed Lecturer on Natural Science, Free Church College, Glasgow.
1878-82 Responsible for Mission Station at Possilpark, Glasgow.
Aug 1879 Expedition to Rocky Mountains with professor Geikie.
1880 "The New Evangelism and its Relation to Cardinal Doctrines" delivered to the Free Church Theological Society, Glasgow.
Jun 1883 Expedition to Central Africa, and publication of Natural Law in the Spiritual World.
Nov 1884 Induction to Chair of Professor of Natural Science, and delivery of "The Contribution of Science to Christianity".
Dec 1884 Repetition of lecture to Christian Medical Association, Edinburgh University, and beginning of Edinburgh student meetings.
Apl 1885 Grosvenor House Addresses.
Jun 1887 Visit to American Colleges.
1888 Publication of Tropical Africa.
1889 Publication of "The Greatest Thing in the World" in booklet form.
Mar 1890 Visits to Australia, New Hebrides, Singapore, China, Japan and return to U.K. via Canada.
Nov 1890 "The Problem of Foreign Missions" delivered in Free Church College, Glasgow.
1890 Publication of "Pax Vobiscum" in booklet form.
1891 Publication of "The Programme of Christianity" in booklet form.
Jan 1892 "The Method of the New Theology and some of its Applications" delivered to the Theological Society in Glasgow.
1892 Publication of "The City without a Church" in booklet form.
Apl 1893 Visit to America to deliver the Lowell Lectures in Boston.
1893 Publication of "The Changed Life" in booklet form.
May 1894 Publication of The Ascent of Man.
First attacks of illness.
1894 Publication of The Greatest Thing in the World and Other Addresses.
Mar 1895 Ceased work at Free Church College, Glasgow.
1897 Died at Tunbridge Wells, 11th March.
1897 Publication of *The Ideal Life and other Unpublished Addresses.*

1898 Publication of *The Life of Henry Drummond* by George Adam Smith.

1899 Publication of *The New Evangelism and other Papers.*
SECTION I
INTRODUCTION

A BIOGRAPHICAL SKETCH

Henry Drummond was born on 17th August, 1851, at No. 1 Park Place, Stirling. He began his education at Stirling High School and Morison's Academy, Crieff, and entered Edinburgh University in October, 1866. He took Senior Humanity (Latin) and English Literature in the opening session. In the second year he went on to Junior Greek, Logic and Metaphysics, and Junior Mathematics. In the third year he took Senior Mathematics and Natural Philosophy and passed the examination in Mathematics and Physics for the Degree of M.A. Although he left Crieff with a prize for Latin, he appears to have had relatively little aptitude for classics. In his final year he took the third year course in Senior Greek and Senior Humanity for the second time but never proceeded to the final examinations. He closed his Arts course in April 1870 by passing the degree examination in Mental Philosophy and left the University without a degree. George Adam Smith in his extensive biography The Life of Henry Drummond refers to his dislike of classics and records that he wrote, 'I had never courage to attempt the classical department of the M.A.'.

Despite this inauspicious start to his academic career, Drummond was appointed Lecturer on Natural Science in the Free Church College, Glasgow, in September 1877, and elected to the chair of Professor of Natural Science in May 1884. His first book, Natural Law in the Spiritual World, published in 1883, had by 1905, sold 141,000 copies and was in its 41st edition. His last book, The Ascent of Man, published in 1894, based on the Lowell Institute Lectures which he

delivered in Boston in the United States the previous year, was well received, ran into nine editions, and was considered to be his most effective piece of work. The most well known and widely circulated of his religious addresses, The Greatest Thing in the World, must by now have sold over two million copies and was recently reprinted by Hodder and Stoughton in paper back form.  

The coupling of his interest in Natural Science and Theology took formal shape in November 1870 when he entered the Divinity Hall of the Free Church of Scotland, New College, Edinburgh, and continued reading for the University Degree of Bachelor of Science. During this period Drummond's gift as an evangelist began to be apparent and he took a full part in the work of the College Missionary Society. At the end of the third year of his divinity course, Drummond spent the summer semester at the University of Tubingen in Germany and on his return, made the decision to postpone the fourth year of his course in order to devote himself to the study of natural science and to practical mission work. He maintained his association with New College and the University and as President of the Theological Society, in November 1873, read an essay entitled "Spiritual Diagnosis" which made a great impact on his audience, and in which he argued forcefully for 'a spiritual psychology to tell us of the unseen realities of the soul' which would supplement existing University training.

His evangelistic work took on a new dimension during 1874 when he became closely involved with the mission to the United Kingdom of the Americans Dwight L. Moody, and Ira D. Sankey. After initial meetings in Liverpool and York they had successful gatherings in Newcastle and Sunderland and were invited to Scotland. "The Great Mission" 1873-1875

3. SD-NE p.194.
is well documented by George Adam Smith in Chapter IV of *The Life of Henry Drummond*, and by other authorities.⁴ Drummond and a number of his friends from New College played a major role in the supporting organisation, taking part in the meetings and assisting with the "enquirers" who stayed behind. Drummond's work was so effective that he was invited to continue with Moody and Sankey in meetings in the major cities of England and Ireland until the autumn of 1875 when he returned to his studies in New College. The following extract from a letter to his father written on 9th July, 1875, describing a mission at Epsom, gives an idea of his personal enthusiasm.

I had a grand meeting on Monday night at 9 p.m. The district is terribly dead, so we had at first a general meeting at 7.30 and then the men's meeting at 9. The latter was crammed away out into the street with men — many of them jockeys and racing men, just the kind to reach. It was a most interesting meeting, and some thirty or forty remaining, anxious. Next night there were one hundred in the inquiry room, and the following night two hundred.⁵

Drummond seriously considered the possibility of making evangelism his life work, but eventually decided to resume his studies. His state of mind is illustrated in a letter written to his father quoted by James Young Simpson in his book on Drummond in the "Famous Scots Series".

I am profoundly thankful for the long time of comparative quiet I have had, as I see now what it has all meant ... And if doors seem to be closing on this side and on that, all one sees is that it is the truest wisdom, and even the truest service, to be 'waiting', if the 'waiting' be 'on the Lord'.⁶

He took note of the advice of friends and was much helped at that time by Mrs. George Freeland Barbour of Bonskeid, Pitlochry, mother of his friend and fellow student Robert Barbour. He never lost interest in evangelism and was later to devote a considerable amount

---

⁴ For example, see G.F. Barbour, *The Life of Alexander Whyte* (London, 1923), pp.163-165.
⁵ Adam Smith, p.89
of time and effort to mission work with students in Edinburgh University. Many regarded this as his most important contribution to the Christian life of his time. Cuthbert Lennox who took a considerable part in the movement in its earliest stages and was deeply influenced by Drummond's personality and character, made a special study of his work with students both in this country and abroad, in his book *Henry Drummond, A Biographical Sketch with Bibliography.* This is a most valuable supplement to George Adam Smith's *Life of Henry Drummond* and the biographical notes which include published appreciation and criticism of Drummond's work in books, pamphlets, magazine articles and reviews, are indispensable for any serious student of Drummond's work. They give a clear indication of the wide interest which Drummond stimulated in his time, and are reproduced in Appendix II.

In April 1876 Drummond completed his four year course in Divinity at New College, and passed the exit examination. The next sixteen months was a time of some uncertainty. He did not wish to become an ordained minister, but he continued evangelistic work in a number of different localities, and over the winter of 1876/77 accepted the post of assistant to the Revd. Dr. Hood Wilson in the Barclay Church, Edinburgh. Some of his sermons were later reprinted in *The Ideal Life and other Unpublished Addresses* (with Memorial Sketches by W. Robertson Nicoll and Ian Maclaren), by Hodder and Stoughton in 1897. Soon after his return from a summer holiday in Norway with Robert Barbour, he learned of the death of Mr. Keddie, Lecturer on Natural Science in the Free Church College, Glasgow. After sounding out the Principal, he applied for the post, was accepted, and appointed by the College Committee, in the first instance for a single session. He remained

in the appointment, which was later raised to the status of a Professorship, until March 1895 when ill health forced him to leave Glasgow.

Two years later, after a progressively incapacitating illness, subsequently found to be a malignant growth of the bones, he died in Tunbridge Wells on 11th March, 1897. The funeral was held in Stirling on 15th March. Professor George Adam Smith writes:

The news came to us in Glasgow, by a tragic coincidence, as we were gathering to the funeral of his colleague, Professor Candlish. Upon the following Monday we went to Stirling to lay his body beside his father's, on the Castle Rock, in the shadow of the old Greyfriars' Church. This was not the only mourning for him. On that day, or upon one of the Sundays on either side of it, services were held in many towns of the kingdom; also in Princeton University, at Ottawa, at Adelaide, at Singapore, and I know not where else. Telegrams, public and private, with many later letters, proved that there was hardly a country on earth in which he was not being mourned.

The events of his mature years, his travels abroad, his contribution to the debate on science and religion, and his work with students will be discussed in relation to his written work during the course of the thesis. They are well documented by George Adam Smith, Cuthbert Lennox, and James Y. Simpson in the biographies already referred to, and more recently in an anthology edited by James W. Kennedy and published in New York in 1953.

8. Adam Smith, p.468.
PRELIMINARY CONSIDERATIONS

Current Interest

A focus of interest in Henry Drummond has been maintained over the years at Drummond House, Stirling, which until recently has been the headquarters of the Drummond Press and the Stirling Tract Enterprise. They arose through the initiative of Drummond's uncle, Peter Drummond, a local seedsman who published a pamphlet against Sabbath-breaking in 1849 which sold 10,000 copies in one month. Drummond House has now been closed and the historical publications transferred to Stirling University Library, and the Drummond Trust formed to further the aims of the Enterprise. One of the final actions of the Drummond Press was the publication of a set of daily readings from Henry Drummond, entitled A Mirror Set at the Right Angle, edited by John Birbeck who states in the preface:

There is an undoubted resurgence of interest in the writings of Henry Drummond. Post-graduate research by students in quest of a Doctorate of Philosophy thesis centred on the two aspects of the many varied gifts of Drummond - his power of communication and his scientific approach to theology.¹⁰

Birbeck goes on to suggest that Drummond is articulating clearly what many young people are feeling and saying or wanting to say, and draws a parallel between the evolutionary thinking of Teilhard de Chardin and the ideas of Drummond, who he suggests, expressed similar views in 'simpler, less abstruse wording', and whose great contribution was 'to build a new and firm bridge across the gulf between scientific and spiritual experience'.¹¹ Samuel M. Shoemaker, in his introduction to James W. Kennedy's anthology, comes to the same conclusion where he states that Drummond 'stood on border, between the lands of science and religion ... not as a storm center, but as a reconciler, as a

¹¹ A Mirror Set at the Right Angle, pp.13-14.
peace-maker ... He felt called to interpret one to the other.  

Kennedy himself, while allowing that Natural Law in the Spiritual World and The Ascent of Man contain metaphors and analogies 'still valid which give fresh insight into many aspects of the Christian religion' makes the point that 'neither Drummond's science nor his theology, both mainly intuitive and poetical, fits perfectly the needs of this generation', and goes on to suggest that what makes Drummond of importance to this modern age is 'Primarily, his vital and practical grasp of the Spirit of the living Christ as immediately possessible for men's lives'.

A.L. Drummond and J. Bulloch, authors of The Church in Late Victorian Scotland, express doubts as to his stature as a theologian and scientist while acknowledging his ability as a communicator and preacher.

Henry Drummond, a man of unusual personal charm of whom all who knew him wrote lyrically, was essentially an amateur and a dilettante, of no importance as a scientist or theologian. His academic qualifications were of the slightest and his great gifts lay in communication.

Ian G. Barbour in his book Issues in Science and Religion describes him as a Scottish layman and scientist whose Modernist views of God 'were combined with deep personal piety and devotion to Christ'. The Oxford Dictionary of the Christian Church simply states that he was a theological writer and revivalist 'who was also well known as a geologist and explorer in N. America and Central Africa', while the New International Dictionary of the Christian Church gives a rather more positive assessment where it refers to him as a Scottish

writer and evangelist and states 'He might have been a great scientist had not evangelism been the master passion of his life'.

There is no doubt that there are relatively few references to Drummond's work in current theological and scientific literature and it is perhaps surprising that there is no mention of him in the recently published *Dictionary of Christian Spirituality* either under the heading of Scottish Spirituality or as a separate entry in his own right. It will therefore be a matter for this thesis to attempt to establish whether Drummond is of sufficient stature and his work of sufficient significance to justify renewed commendation today. It is the writer's view that many of Drummond's ideas are in fact still stimulating and provocative and relevant to the development of a practical spirituality with a strong element of social engagement in a world increasingly being influenced by science and technology. He also considers that Drummond's contribution to the understanding of the process of evolution may have been undervalued, and that some of his material, particularly on the question of the growth of altruism, is worthy of attention.

At the same time it is also hoped that the thesis may serve as a response to one of the recommendations of a Scottish Churches Council working party, of which the writer was a member, which advocated 'the encouragement of the study of spirituality past and present in the different church traditions in Scotland through thesis work at universities'.

Method of approach

What criteria should be used in assessing 'the work of Henry Drummond as a basis for a practical spirituality'? The term spirituality itself, though in common use, does not appear to have a single formal definition. Reference to *A Dictionary of Christian Spirituality* reveals a wide range of possible interpretations of the subject. The editor, Gordon, S. Wakefield, states in the Preface, 'In all traditions, and in many non-Christian faiths and philosophies, the underlying implication is that there is a constituent of human nature which seeks relations with the ground and purpose of existence, however conceived'. In the entry for Spirituality itself, he states that 'This is a word which has come much into vogue to describe those attitudes, beliefs, practices which animate people's lives and help them to reach out towards super-sensible realities'. Going on to examine Christian Spirituality he makes it clear that it must be understood as embracing the whole of life.

... Christian spirituality is not simply for 'the interior life' or the inward person, but as much for the body as the soul, and is directed to the implementation of both the commandments of Christ, to love God and our neighbour. Indeed our love, like God's, should extend to the whole creation. Christian spirituality at its most authentic includes in its scope both humanity and nature.

The working party referred to in the previous sub-section attempted their own personal definitions after a brief period of reflection. These are of interest in that they confirm the wideness of the range of the topic, and are listed in Appendix I. The writer's own definition was as follows:

An attempt to grow in sensitivity, to self, to others, to non-human creation,

and to God who is within and beyond this totality.

This can be criticised in that it lacks a Christological element, and does not spell out the need for a practical engagement with society, both emphases which are certainly not neglected by Drummond. The definition is only mentioned here as a disclosure of possible bias, which it is hoped will not colour the argument.

There would seem to be two possible methods of approaching the subject. One would be to attempt to establish what is meant by 'a practical spirituality' in the light of present understanding of the subject, drawing out a number of elements which can be used as a framework for analysing the written works. The other would be to start with the works themselves, consider them in chronological sequence, summarising their general content, and then proceed to the question of spirituality, selecting material to illustrate Drummond's view of the spiritual life and practical spirituality. In either case it would then seem necessary to consider developments in theological and evolutionary theory since Drummond's time, and go on to assess the extent to which a present day enquirer is likely to find his work acceptable in terms of style and content and in relation to the enquirer's own spiritual outlook. The second method is preferred in that it relates logically to the title of the thesis, and may allow the essence of Drummond's thought to stand on its own merits before further analysis.

Drummond's published material falls into two main categories, books and booklets published during his lifetime, and collections of addresses and papers published posthumously. Many of his addresses were repeated on several different occasions before final publication. Some contain elements from earlier addresses adapted as required for a specific situation. James W. Kennedy in his anthology states that
Drummond was writing constantly 'but most of his "pen time" was given to a reworking and polishing of the material he had presented to live audiences'. It will not, therefore, always be possible to establish an exact chronology, but it is intended to deal with the material so far as possible in sequence of initial delivery rather than sequence of publication.

This will also make it possible to consider the influence of his main overseas visits on the growth of his thinking. The first was in 1879, two years after he had begun lecturing at the Free Church College, Glasgow, when he was invited to accompany Professor Geikie on an expedition to the Rocky Mountains in the United States. The second was in 1883, just before he was appointed Professor of Natural Science in Glasgow, when he was invited by the African Lakes Company to make a scientific exploration of the Lake Nyasa and Tanganyika region. The third was in 1890, when he was invited by students of Melbourne University to visit Australia, and extended his tour to include some work in the New Hebrides and then returned home via the Far East and Vancouver. This leads to a convenient breakdown of the analysis of his published material into three sections, 'Early Years' (1873-1883), 'Middle Years' (1883-1889), and 'Final Years' (1889-1897). Consideration will then be given to the question of spirituality, Drummond's own spiritual, theological and scientific viewpoints, subsequent developments in evolutionary thinking, and an assessment of possible present day responses to his work in two further sections 'Evaluation' and 'Conclusion'.

22. Kennedy, p.52.
SECTI0N II
EARLY YEARS (1873 -1883)

A. "SPIRITUAL DIAGNOSIS"

"Spiritual Diagnosis" was read by Drummond to the Theological Society in New College, Edinburgh, in November 1873, while President of the Society. He had completed the first three years of the Divinity Course and was about to take a two year break from formal academic study in order to devote more time to mission work and to the study of Natural Science. It was later included among the papers published after his death in The New Evangelism and other Papers. The essay made a considerable impact on his audience. James Stalker, a fellow student and lifelong friend, recalled that 'he electrified us with an essay on Spiritual Diagnosis, the thread of which I still perfectly remember'. John Watson, another intimate friend of the same year at New College, wrote in similar terms. 'He once electrified the students by a paper - it seems yesterday, and I know where he stood - which owed much to Holmes and Emerson, but revealed his characteristic spiritual genius'.

Drummond begins by suggesting that the study of the soul ought to be as much an object of scientific study and training as the health and diseases of the body, and draws attention to the potential influence of the individual and the respect due the single human soul:

Men, not masses, have done all that is great in history, in science, and in religion ... And if a man would act upon every other man, he can do so best by acting, one at a time, upon those beside him ... Recognise the personal glory and dignity of the unit as an agent. Work with units, but, above all, work at units.

1. Adam Smith, p.50.
2. II, p.35.
3. SD-NE, p.192. Further references are given after quotations in the text.
He argues that the capacity to act on individuals is almost a lost art, often spoilt by platform speeches and what he terms 'pulpit eloquence'. He illustrates this in a perceptive passage:

We know how to bring the mob about us, how to flash and storm in passion ... and how to throw in a calm when no one expects, but every one wants it. Every one knows this, or can know it easily; but to draw souls one by one, to buttonhole them and steal from them the secret of their lives, to talk them clean out of themselves, to read them off like a page of print, to pervade them with your spiritual essence and make them transparent, this is the spiritual science which is so difficult to acquire and so hard to practise. (pp.193-194)

One senses here, that despite his youth, Drummond speaks from insights gained from his own practical experience. George Adam Smith refers to his work with the College Missionary Society in visiting families in Covenant Close, and meetings in the Cowgate district in which he 'took his share with great heart'. He also comments on Drummond's potential capability in the field of hypnosis, noting that he wrote an essay in January 1869 on "Mesmerism and Animal Magnetism" and practised mesmerism on some of his fellow students.

In "Spiritual Diagnosis", Drummond goes on to point out that of the three elements, body, mind and soul, which make up a responsible human being, only two have so far been subjected to scientific inquiry. 'Physiology has told all that is possible of the human body; psychology, of the mind. But the half is not accounted for. We wish, further, a spiritual psychology to tell us of the unseen realities of the soul' (p.194). He does not attempt his own definition of the soul at this point, but simply goes on to affirm:

There is a soul, and there is a spiritual life. Plato knew it and called it, in his wonderment over it, "the soulish mind". Solomon knew it when he talked of "the hearing ear". Addison knew it and defined it: "'Tis the divinity that stirs within us". And in "Culture and Religion" the Principal of St. Andrew's University charges his students "that there

4. Adam Smith, p.42.
5. Adam Smith, p.31.
is a faculty of spiritual apprehension which is very different from those which are trained in schools and colleges, which must be educated and fed not less but more carefully than our lower faculties, else it will be starved and die". (p.195)

Drummond then asks 'Are we content to let this great spiritual life work silently around us without attempting to know more about it, to analyse it, to make it more accessible to us and us to it?' (p.196). He accepts that some may find this thought repulsive, but arguing from scientific practice suggests that there is nothing irreverent in attempting to classify the facts of the spiritual life. He admits that these facts may be difficult to determine, partly because they lie in the order of the supernatural which is pervaded by an element which no man can fathom, and partly because of the invisibility of the initial inner changes in the process of conversion:

We look in a man's soul for that which we saw there yesterday, but the unseen influence has swept across the heart, and the spiritual scenery is changed. The man himself is the same, his passions unaltered in their strength, his foibles unchanged in their weakness, but the furniture of the soul has been moved, and the spiritual machinery goes on upon a new and suddenly developed principle. (p.197)

Drummond digresses at this point from the argument for scientific study of spiritual development into the need for spiritual advisers to encourage such development; possibly an equally novel thought to his audience. He suggests that such men, drawn from the ranks of Christian teachers or ministers, should be thoroughly acquainted with the rationale of conversion, and should know every phase of the human soul in health and disease, in the fulness of joy and the blackness of despair. That such men are few and far between, he frankly admits:

How few have penetration enough to diagnose our case, to observe our least apparent symptoms, to get out of us what we had resolved not to tell them, to see through and through us the evil and the good. Plenty there are to preach to us, but who will interview us, and anatomize us, and lay us bare to God's eye and our own? (p.199)

It seems clear, however, that his idea of a spiritual adviser is to be thought of more as an evangelist and catalyst rather than
someone who might give regular counsel over a period of years and that the function of giving spiritual advice is not one to be left in God's hands, or confined to the ordained ministry. 'He hath appointed us to be our brother's keeper ... We cannot expect the Spirit's help to teach us what only laziness and personal indifference hinder us from learning' (p.199).

Returning to the problem of the study of the soul, a difficult question because 'the soul as far transcends the mind in complexity and in variety as the mind the body', he refers to an analysis of human character by 'a well-known American essayist and poet' which suggests that every man is in reality a threefold man, and when two persons are in conversation there are potentially six persons interacting. (From John Watson's comments quoted in the introductory paragraph of the section, the essayist and poet is presumably Emerson.) Drummond describes the situation in his own words in terms of three Johns and three Toms:

**Three Johns**

1. The real John; known only to his Maker.
2. John's ideal John; John, i.e., as he thinks himself; never the real John, and often very unlike him.
3. Tom's ideal John i.e., John as Tom thinks him; never the real John, nor John's John, but often very unlike either.

**Three Toms**

1. The real Tom.
2. Tom's ideal Tom.

He goes on to elaborate the misconceptions that can arise when talking and listening and states that the power of soul analysis 'requires intense discrimination and knowledge of human nature - much and deep study of human life and character' and that the person being helped 'must be led with much delicacy to make a little introspection of himself' (pp.201-202). He then deals with the objection that such
action may be considered as taking away from the freedom of God's grace in the process of salvation, by pointing out that every action of every man has 'an ancestry and posterity in other lives'. God is God of variety who has made room for individual action in the building up of his kingdom. It is therefore not a presumption but a duty for 'every man to be moulding and making the souls around him, to be perfecting and guiding his own faculties for this great work' (p.204).

He describes God's apparent silence in the process in a passage which is a good example of the originality of his expression:

And how do you explain that most wonderful phenomenon, which is as surprising a contemplation to some minds as the thought of eternity itself - the silence of God? God keeping silence! And man doubting and sinning and repenting all alone, and groping blindfold after truth, and losing his way and working out his salvation with painful trembling and fear! It is an unfathomable mystery; but may it not be ... on the one hand, God offers man the glory and honour of sharing His work; and on the other, that He wishes human souls to be graven with the marks of other human souls in all their free and infinite variety? (p.203)

He goes on to acknowledge those who have already made valuable contributions to the study of human nature including Henry Ward Beecher, Dr. Spencer, Spurgeon, Thomas à Kempis, Blaise Pascal, the Puritan writers Baxter and Owen, and lastly Bunyan whom he considered 'quite unsurpassed'. At the same time, he suggests that many of the Puritans 'were quite destitute of the foremost quality which distinguishes the successful analyst - respect, veneration even, for the soul of another', and makes the point that the whole of etiquette is founded on respect 'and by far the highest and tenderest etiquette is the etiquette of soul and soul' (p.207).

He then introduces a lighter note, as he defines the terrible disease of 'Theophobia' which is liable to infect the ministry of great and holy men.

A minister catches it, and his power is gone ... Those who have it become wrapped up in one subject; and though that
subject be the highest of all, it is nevertheless a monstrosity when followed to the exclusion of everything else ... They are always vindicating God. Their whole atmosphere is of God. They have left the earth before their time. They have left human nature in the lurch; they have forgotten humanity and humanity can no longer profit by them, it can only wonder at them. (pp.208-209)

In contrast, he suggests that the one great thing is to study life earnestly, practically and realistically. They should aim at the manly, sturdy type of religious diagnosticist, who in the words of Oliver Wendell Holmes "knows men in the street, at their work, human nature in its shirt sleeves ... who has found out that there are plenty of praying rogues and swearing saints in the world". He assures his listeners that anyone who develops the faculty of reading others will never be without practice, and goes on to assert that 'the amount of spiritual longing in the world at the present moment is absolutely incredible'.

His final paragraph, which reveals something of his own inner attitudes, is worth quoting in full:

No one can ever even faintly appreciate the intense spiritual unrest which seethes everywhere around him; but one who has tried to discern, who has begun by private experiment, by looking into himself; by taking observations upon the people near him and known to him, has witnessed a spectacle sufficient to call for the loudest and most emphatic action. Gentlemen, I have but vaguely hinted at this subject; I venture to think it a question of vital interest, giving life a mission, giving clear and burning interest even to the most commonplace surroundings, and opening up a field for lifelong study and effort. (p.210)

Drummond was certainly true to his early statement of interest and intent. He succeeded throughout his life in combining the study of science and religion, with a practical form of evangelisation which rested on a deep insight of human nature and the realities of spiritual development. In "Spiritual Diagnosis" he identifies themes and concepts which are explored and elaborated in greater depth in subsequent addresses, especially "The New Evangelism and its Relation to Cardinal
Doctrines. James W. Kennedy goes so far as to state that "Spiritual Diagnosis" 'became a classic which marked the beginning of the modern movement of scientific, personal evangelism'.

B  THE IDEAL LIFE AND OTHER UNPUBLISHED ADDRESSES

Introduction

The collection of addresses which make up The Ideal Life was published in December 1897, only nine months after Drummond's death. This swift action can be interpreted as an indication of the high regard in which he was held, and also perhaps of the commercial acumen of his publishers, Messrs. Hodder and Stoughton. The addresses are preceded by Memorial Sketches by W. Robertson Nicoll and Ian Maclaren (the pen name of John Watson, boyhood friend and fellow student at New College). Despite an understandable tendency to eulogise, these sketches provide useful historical material, later to be filled out by George Adam Smith in The Life of Henry Drummond.

Robertson Nicoll draws attention to the widespread interest in Drummond's works outside Scotland, especially on the Continent and in America. He doubts whether any living novelist had so many readers, and notes that his influence reached all classes both within and beyond the Christian Church. He goes on to point out that his deepest influence was personal and hidden:

In the long series of addresses he delivered all over the world he brought about what may at least be called a crisis in the lives of innumerable hearers. He received, I venture to say, more of the confidences of people untouched by the ordinary work of the Church than any other man of his time. Men and women came to him in their deepest and bitterest perplexities. To such he was accessible, and both by personal interviews and by correspondence, gave such help as he could. He was an ideal confessor.7

John Watson writes in more intimate terms from close personal knowledge. His final word was that 'Henry Drummond was the most perfect Christian I have known or expect to see this side of the grave' (p.42). He, like Nicoll, considered that the man was greater than all his writings and gives further evidence of the impact of Drummond's presence:

7. IL, p.2. Further references are given after quotations in the text.
His eye was not bold or fierce; it was tender and merciful. But it had a power and hold which were little else than irresistible and almost supernatural. When you talked with Drummond, he did not look at you and out of the window alternately, as is the usual manner; he never moved his eyes, and gradually their penetrating gaze seemed to reach and encompass your soul. It was as Plato imagined it would be in the judgment; one soul was in contact with another — nothing between.

(p.27)

The main part of the book consists of fifteen addresses, delivered between the years 1876 and 1881. They vary in quality and are printed in what at first seems a somewhat random and undated sequence. The title The Ideal Life, comes from an address which bears no date, but from a cross reference in a later sermon would appear to originate late in 1876. The full title is "The Man after God's Own Heart — A Bible Study on the Ideal of a Christian Life". The sequence of addresses printed in the book, and the dates of delivery where quoted are as follows:

- Ill Temper
- Why Christ must depart
- Going to the Father
- The Eccentricity of Religion
- To me to live is Christ
- Clairvoyance
- The Three Facts of Sin
- The Three Facts of Salvation
- Marvel not
- Penitence
- The Man after God's Own Heart
- What is your Life?
- What is God's Will?
- The Relation of God's Will to Sanctification
- How to know the Will of God

This period was a formative and turbulent time in Drummond's life. He had just completed his final year at New College after a two year break during which he worked with Moody and Sankey. He had spent the summer preaching and evangelising in various parts of Scotland and during the autumn of 1876 accepted an invitation to serve as Assistant to Dr. Hood Wilson at Barclay Church, Edinburgh. The addresses dated 1876 and 1877 were probably delivered from that pulpit. Drummond was uncertain of his longer term future and later referred to this year...
as 'the most miserable time of his life, not seeing what definite work he could do to earn his bread and yet get time to preach'. There is no evidence of this unhappiness in the sermons themselves, although there is a possible reflection of his uncertainty in the final address in the book, "How to Know the Will of God" where he makes the eloquent plea:

But let it be remembered, as already said, that it requires a well-kept life to will to do this will. It requires a well-kept life to do the will of God, and even a better kept life to will to do His will. To be willing is a rarer grace than to be doing the will of God. For he who is willing may sometimes have nothing to do, and must only be willing to wait ...

(p.314)

In September 1877 he was appointed Lecturer on Natural Science in the Free Church College, Glasgow. The following summer, having attached himself to Renfield Free Church, under the ministry of Dr. Marcus Dodds, he was given charge of a recently established mission station in Possilpark, a northerly working-class suburb of Glasgow. His work load is illustrated by the following extract from a letter dated 22nd November, 1878:

In the first place I have my college lectures, which are enough for any man. Secondly, I have now a church. On Sabbath I preach twice, attend schools and classes. On Mondays I look after a bank, on Tuesdays I give a popular lecture. On Wednesday a mothers' meeting in the afternoon; a lecture to children at seven; the congregational prayer-meeting at eight. The other two nights I visit the poor and the sick, or hold meetings elsewhere. I am just starting now - ten miles - for a meeting tonight. This is my programme every week.

In June of the following year, he was invited by Professor Geikie to join him in an expedition into Western North America to study volcanic phenomena. Drummond had been the first student to enrol in the classes Geikie established after being appointed to the Chair of Geology and Mineralogy at Edinburgh University and had soon become

8. Adam Smith, p.117.
his favourite pupil. The expedition took place in August and September, and was of enormous benefit to Drummond. In a letter of appreciation to Professor Geikie he writes 'The whole of America impresses me now as a revelation - a revelation in civilisation, in politics, in human nature; and if not a revelation in geology, a confirmation, elevation, and consolidation, which is more than equivalent. I feel the gain in every department of my work'.

The gain certainly showed itself in Drummond's thinking expressed in *Natural Law in the Spiritual World*, and to some extent in his sermons in *The Ideal Life*. There would therefore seem to be some merit in dealing with these, so far as it is possible, in two chronological sections, 1876 - 1877 and, 1879 to 1881. There are no sermons dated 1878, when he was presumably settling into his new surroundings in Glasgow and concentrating on preparing lectures in his Natural Science syllabus.

**Early addresses - 1876 to 1877**

The first address in this period seems likely to be "The Man after God's Own Heart - A Bible Study on the Ideal of a Christian Life". It is undated, but as it is an introductory study on the theme that the end of life is to do God's will, and the next but one sermon dated 1877 begins with the words "We resume today a subject the thread of which has been broken by the interval of a few Sabbaths - the subject of the Will of God", and the intervening sermon as printed in the book is sub-titled "An old year sermon" dated 31st December, 1876, it can confidently be dated late 1876.

Drummond begins by asking the question 'What is life for?' and

10. Adam Smith, p.175.
suggests that the highest aim and model for a Christian life is, in the words of his text, to be "A man after Mine own heart, who shall fulfil all My will" (Acts 13. 22). There are two practical helps to achieve this - the Model Life realised in Christ, the living Word - and the Model Life analysed in the Bible, the written Word. He concentrates on the latter, illustrating from texts that the ideal man finds a reason for being alive, sustenance for the growth of the soul, a supportive society, a language to speak to God which can change from prayer to praise, a promise that prayer after God's will is answered, and finally the assurance that the ideal life does not cease and is projected into eternity above the circumstance of time.

There are two passages worth quoting, both on prayer and the energies of God, arising from Drummond's reflection on the clause in the Lord's Prayer "Thy will be done":

It is intensely active. It is not an acquiescence simply in God's dealing. It is a cry for more of God's dealing - God's dealing with me, with everybody, with the whole world. It is an appeal to the mightiest energy in heaven or earth to work, to make more room for itself, to energise. It is a prayer that the Almighty energies of the Divine will may be universally known, and felt, and worshipped. (p.227)

The second quotation follows on directly from the first and illustrates the intensity of Drummond's concern that God's will be done in all areas of life:

Now the ideal man has no deeper prayer than that. He wants to get into the great current of will, which flows silently out of Eternity, and swiftly back to Eternity again. His only chance of happiness, of usefulness, of work, is to join the living rill of his will to that. Other Christians miss it, or settle on the banks of the great stream; but he will be among the forces and energies and powers, that he may link his weakness with God's greatness, and his simplicity with God's majesty, that he may become a force, an energy, a power for Duty and God. Perhaps God may do something with him. Certainly God will do something in him - for it is God who worketh in him both to will and to do of His good pleasure. So his one concern is to be kept in the will of God.

The old year sermon "What is your Life?" already referred to, could be termed a "Concordance sermon", and may have been put together
under pressure of the Christmas season. In it Drummond expands on 17 Biblical metaphors which answer the question "What is your life?" grouped under five headings. Life is a very little thing, a shadow, a shepherd's tent removed, a tale that is told, Life is a short thing, a handbreadth, a weaver's shuttle, nothing, an eagle hastening to the prey, a swift post, a swift ship, Life is a transitory thing, a pil- grimage, a vapour, a sleep, a dream, the wind. Life is an irrevocable thing, water spilt on the ground. Life is an uncertain thing, a thread cut by the weaver, as grass. He ends on a somewhat gruesome note.

What means the grim image in the Bible of the weaver's thread suspended in the air, and the blade of the lifted knife just touching its edge? It means that you must die. The thread of your life is to be cut. The knife may be lifted now, the keen blade just touching it; one pressure of the hand and it is done ... Is your life already for the swiftly falling knife, for the Reaper who stands at your door? Have you heard that there is another life - a life which cannot die, a life which, linked to your life, will make the past still bright with pardon and the future rich with hope? This life is in His Son. (p.255)

The three addresses, "What is God's Will?", "The Relation of the Will of God to Sanctification", and "How to Know the Will of God", all dated 1877, are of a high quality and show Drummond at his best. They are related to each other, and to the earlier introductory sermon "The Man after God's Own Heart" and are considered here as a single work. Drummond begins by reminding his hearers that the end of our life is to do the will of God and that this was the end of Christ's life. We are called to know God's will, therefore it is reasonable to believe that God will give us light on the subject of his will. God's will is Universal for all and at the same time Particular to the individual. The Universal part is written in the Bible, with special force in the Ten Commandments and the Beatitudes, and in the other words of Christ. It is also written in Nature, which expresses God's will for our bodies:

As there is a will of God for our higher nature - the moral
laws - as emphatically is there a will of God for the lower - the natural laws. If you would know God's will in the higher, therefore, you must begin with God's will in the lower: which simply means this - that if you want to live the ideal life, you must begin with the ideal body. The law of moderation, the law of sleep, the law of regularity, the law of exercise, the law of cleanliness - this is the law or will of God for you. (p.264)

The Particular part of God's will is a private thing, known only to the individual. It is a region in God's will 'unmapped in human charts, unknown to human books, a region for the pure in heart, for the upright, for the true ... a land where the Spirit moves, a luminous land, a walking in God's light ... where God's own people have their breathing from above, where each saint's steps are ordered of the Lord' (p.273).

The capacity to know God's will in particular is closely related to the sanctification of the individual. This is to be understood as not only outward consecration but inward holiness, 'an internal purification of the heart from all uncleanness, and an enduing it with the mind of Christ' (p.280). But before asking "How are we to become Holy?" it is necessary to ask "Why do I want to be Holy?" Right motivation is important. It is not enough to be infected by the example of some one of high aims and great enthusiasm; or to respond to inspirational reading; or to act from a sense of prudence or fear, or gratitude; or even because of a sense of vocation. It is a matter of response to the Divine voice. "Be ye holy, for I am holy". Drummond goes on to assert 'There is no other explanation of the mystery of our life than this, that God would have us holy. At any cost God will have us holy. Whatever else we may be, this one thing we must be. This is the will of God, even our sanctification' (pp. 292-293).

Sanctification is to be achieved by putting on Christ. It is not a thing to be generated but to be received. Sanctification is
not what morality gives, not what the Bible gives, not even what Christ gives' ... it is what Christ lives. It is Christ Himself' (p.295). The beginning of all things is in the will of God - the end of all things is in sanctification through faith in Jesus Christ. 'Between these two poles all spiritual life and Christian experience run' (p.296).

Drummond then examines in detail the very difficult problem of how to discern the will of God as it applies to the individual. He asserts that God has a life-plan for every human life and suggests that there are two classes of Christian, those who have God's will in their character in a general sense, and those who have God's will in their career. The first class miss the private part, the secret whispering of God in the ear, because they have not really taken God into their life. 'No one will succeed in knowing even what God in his career can mean till he knows what it is to have God in the secret chambers of his heart. It requires a well kept life to know the will of God, and none but the Christlike in character can know the Christ like in career' (pp.301-302).

He admits that there are objections to the idea of special providences every hour of the day and that some will consider the thought that God's will is being done a hallucination of the mind, and goes on to state that there are four minor instruments for finding out the will of God - reason, experience, circumstance, and the advice of others. But the great instrument for finding out God's will is Obedience, which is the organ of spiritual knowledge. 'As the eye is the organ of physical sight; the mind, of intellectual sight, so the organ of spiritual vision is this strange power, Obedience' (p.305).

Drummond then turns to his text "If any man will do His will, he shall know of the doctrine, whether it be of God" (John 7.17).
He makes the point that the whole sense of the passage turns on the first word will, which is a separate verb meaning "is willing" or "wills". The passage can therefore be interpreted "If any man is willing to do God's will he shall know", or in plainer language, "if any man is sincerely trying to do God's will, he shall know". This viewpoint is corroborated in B.F. Westcott's commentary on St. John's Gospel.

Drummond goes on to state that being willing is the highest form of obedience, and elaborates on the parable of the two sons who were sent to work in the vineyard. (Matt. 21.28-32) He then asks the critical question 'How are we to separate God's light on the point from our own, disentangle our thoughts on the point from His, and be sure we are following His will, not the reflected image of ours?' (p.310). His answer is in self-examination of the most solemn and searching kind:

It means that the heart must be watched with a jealous care, and most solemnly kept for God. It means that the hidden desires must be taken out one by one and regenerated by Christ - that the faintest inclination of the soul when touched by the spirit of God, must be prepared to assume the strength of will and act at any cost. It means that nothing in life should be dreaded so much as that the soul should lose its sensitiveness to God. (pp.310-312)

Drummond acknowledges that there is a mystery at the centre of the operation of God's will which cannot ultimately be known. 'The mysterious meeting-place in the prepared and willing heart between the human and divine - where, precisely, the will is finally moved into line with God's - of these things knoweth no man save only the Spirit of God'. Nevertheless he goes on to attempt to describe the

11. B.F. Westcott, The Gospel according to St. John, re-issued with a new Introduction by Adam Fox (London, 1958), p.118. Westcott renders the first clause of John 7.7 "If it be any man's will to do His will", and comments 'The force of the argument lies in the moral harmony of the man's purpose with the divine law so far as this law is known or felt'.

process in an illuminating passage:

When every passion is annihilated, and no thought moves in the mind, and all the faculties are still and waiting for God, the spiritual eye may trace perhaps some delicate motion in the soul, some thought which stirs like a leaf in the unseen air and tells that God is there. It is not the stillness, not the unseen breath, nor the thought that only stirred, but these three mysteries in one which reveal God's will to me. God's light, it is true, does not supersede, but illuminates our thoughts. Only when God sends an angel to trouble the pool let us have faith for the angel's hand, and believe that some power of Heaven has stirred the waters in our soul. (p.313)

He concludes by saying that there is no grander possession for any Christian life than 'the transparently simple mechanism of a sincerely obeying heart', and that in time of trial, when God's love may seem dim, there may be nothing left to cling to but 'this will of the willing heart, a God-given, Godward bending will' (pp.314-315).

The next two sermons "The Three Facts of Sin" and "The Three Facts of Salvation", preached on consecutive Sundays in 1877 at Barclay Church, are best dealt with together. Drummond uses the same text from Psalm 103 for both "Who forgiveth all thine iniquities; Who healeth all thy diseases; Who redeemeth thy life from destruction", and relates it to three facts of Sin - The Guilt of Sin, the Stain of Sin, and the Power of Sin. He analyses and illustrates each of these three characteristics at some length, in reverse order. He sees the Power of Sin as a natural bias in man to break away from God and good, 'an acting ingredient in his soul which not only neutralises the inclination to follow the path which he knows to be straightest and best, but works continually and consistently against his better self, and urges his life onwards towards a broader path which leads to destruction' (pp.151-152).

The power of sin running through a man's life inevitably leaves its mark as the Stain of Sin. This can be seen in society in prisons, mad-houses and hospitals, and also in individuals in their lives and
in their faces. Drummond then describes the effect of sin in a per-
ceptive passage:

There is a physical demonstration of sin as well as a reli-
gious; and no sin can come in among the delicate faculties of
the mind, or among the coarser fibres of the body, without
leaving a stain, either as a positive injury to the life, or,
what is equally fatal, as a predisposition to commit the same
sin again. This predisposition is always one of the most real
and appalling accompaniments of the stain of sin. There is
scarcely such a thing as an isolated sin in a man's life.
Most sins can be accounted for by what has gone before. Every
sin, so to speak, has its own pedigree, and is the result of
the accumulated force, which means the accumulated stain of
many a preparatory sin. (p.159)

The stain of sin spreads. Every action of every man has an
ancestry and a posterity in other lives. The stains of other lives
have crossed over into our lives, stains from our lives into theirs.
'The blight of the vicious parent shall be visited on the insane off-
spring. The stain on the intemperate mother shall reappear in the
blasted lives of her drunken family. Finer forms of sin reappear in
the same way — of companion on companion, of brother on sister, of
teacher on pupil' (p.161).

Guilt is inseparable from sin whether felt or not. We feel guilt
when we reflect on our sin before God, and most deeply when we look
at Christ. 'Christ cannot move through the chambers of our thoughts
without the dazzling contrast to ourselves startling into motion the
sense of burning shame and sin' (p.163).

Drummond continues in the second sermon to demonstrate that those
who experience the three facts of sin, may also experience the three
facts of salvation, as indicated in his text — '1. He forgiveth.
2. He healeth. 3. He redeemeth' (p.165). He suggests that those
who face the fact of the power of sin may attempt to resist it several
ways, by becoming totally absorbed in business or some other activity,
by withdrawal in to the solitary life of the recluse, by taking refuge
in religiousness, or by resort to the doctrine of the Atonement.
None of these ways, however, can deliver man from the power of sin. The Atonement itself, although salvation depends upon it, is not the fact of salvation that saves the sinner. 'If you believed in the Atonement today, if you were absolutely assured that your past sins were all forgiven, that would be no criterion that you would not be as bad as ever again tomorrow' (pp.169-170). Drummond then turns to the image of the miller and the water wheel to make his point:

You saw the miller come out to set his simple machinery agoing for the day. He turned on the sluice, but the water-wheel would not move. Then, with his strong arm, he turned it once or twice, then left it to itself to turn busily all the day ... the Atonement is the first great turn as it were which God gives in the morning of conversion to the wheel of the Christian's life. Without it nothing more would be possible: alone it would not be enough. The water of life must flow in a living stream all through the working day and keep pouring its power into it ceaselessly till the life and the work are done. (p.170)

Drummond stresses that it is the Water of Life, which flows from the life of Christ, which has the power to deal with sin and deliver our lives from destruction. There need be no conflict between atoning power and saving power, you can call the one justification and the other sanctification but 'God is the author of them both' (p.171). After further discussion on the doctrine of Atonement he returns to the theme of the power of the indwelling Christ, and after quoting the text "As many as received Him, to them gave He power to become the sons of God" (John 1.12), he illustrates his theme in a charac-
teristic passage:

This power, this life, is within our reach each moment of our life; as near, as free, as abundant as the air we breathe. A breath of prayer in the morning, and the morning life is sure. A breath of prayer in the evening, and the evening blessing comes. So our life is redeemed from destruction. Breath by breath our life comes into us. Inch by inch it is redeemed. So much prayer today - so many inches redeemed to-
day. So much water of life today - so many turns of the great wheel of life today. Therefore, if we want to be saved - whosoever will, let him take of the water of life freely. If you want to be saved, breathe the breath of life. (p.175)
Drummond deals with the problem of the stain of sin much more briefly. He suggests that it is a more complicated matter than the power of sin because an individual's sin affects so many other souls over the years. The stain of sin on the individual soul can be undone in part by God's healing action, 'He is blotting them from His own memory and from ours'  (p.177). The stain of sin on those affected by the individual may perhaps be healed by God giving grace to the individual to deal with them:

You must retrace your steps over that unburied past, and undo what you have done ... The other servant in the kitchen, the clerk on the next stool, the lady who once lived in the next house, we must go to them, by the grace of God, and take the sin away. (pp.177-178)

The second fact of salvation is therefore God's healing presence, mediated in part by the individual. 'He is to heal our diseases, and we are to spread the balm He gives us wherever we have spread our Sin' (p.179).

Drummond then turns to the third fact of Salvation - Forgiveness, which deals with the third fact of sin - Guilt. It is not enough to seek the power of the indwelling Christ to resist the power of sin, or by God's grace to attempt to cope with the stain of sin; guilt which arises from the conscience, must be acknowledged, and the wrong doing punished. In a somewhat emotional piece of exegesis, Drummond links the sin of disobedience in the Garden of Eden, and its declared punishment, death, with the atoning suffering and death of Christ.

Now the punishment of Sin is death. "In the day that thou eatest thereof, thou shalt surely die" ... So death, and nothing less then death, must be in the fact of salvation from the guilt of sin, if such salvation is to be ... We all know who deserved to die. We all know Who did die. We know we were not wounded for our transgressions, we were not bruised for our iniquities; but we know Who was. (pp.180-181)

The sermon ends with an appeal for the acceptance of the facts of the atonement and forgiveness as an act of trust in Christ without
delay. There is no need to attempt to understand. If salvation cannot be received as a fact, Christ may be received as a gift. Drummond concludes 'Receive the Lord Jesus Christ as a gift, and thou shalt be saved from the power and the stain and the guilt of Sin, for His is the power and the glory. Amen' (p.184).

The sermon "Marvel Not" is an extended comment on the story of Nicodemus in St. John's gospel. It is a plea to think hard about the need for regeneration. Drummond begins by noting that while a sense of wonder does not inhibit a thorough examination of secular subjects, men who would be very much ashamed to confess ignorance in secular things have no scruples in saying "I do not know" in religious things:

The inscrutableness of God is made a veil for the neglect of God, the divine infinity becomes a plea for human ignorance, and the spirituality of the laws of heaven an excuse for failure and irresponsibility on earth. So there are times when Christ has to put His finger on this wonder, and tell us to wonder not. (p.187)

Regeneration is seen by Drummond as intelligible, possible and necessary. It is a change from one state to another. If God can give life, He can surely give more life. Christ came into the world to give abundant life - this is Regeneration. When men come into the world, they are born outside the kingdom of God, they cannot see into it. Regeneration makes all the difference:

It is as if some one had been standing outside some great cathedral. He has heard that its windows are of stained glass and exceeding beautiful. He walks all round it and sees nothing but dull, unmeaning spaces - an iron grating over each, to intensify the gloom that seems to reign within ... But let him go in. Let him see things from the inside. And his eye is dazzled with the gorgeous play of colours; and the miracles and the parables are glowing upon the glass; and the figure of Jesus is there, and the story of His love is told on every pane - and there are choirs of angels, and the cherubim and seraphim, and an altar where, in light which is inaccessible, is God. (p.197)

The final section of the sermon brings Drummond to the difficult question of selectivity. This is a major theme to which he returns
at greater length in Natural Law in the Spiritual World, and on which in later life he appeared to modify his stance. Here he simply states that in the history of mankind, reformation and reconstruction has failed to improve human life. 'The heart - the national heart or the individual heart - remains deceitful above all things and desperately wicked" (p.198). God's experiment with the nucleus who survived the flood in the ark failed. "The picked few failed. Their children failed. Their children's children failed. Things got no better; only worse' (p.199). So regeneration and rebirth became a necessity. Drummond then suggests that in the final day when Christ presents his Church to God it must be a spotless bride. In that eternal kingdom, the saints who are the companions of the king must be a select number and a 'high born company'. But he avoids a moralising conclusion and true to his text and the story of Nicodemus itself he leaves the matter open ended: 'Marvel not, as if it were unnecessary that ye must be born again. But marvel if you are. Marvel if you are not. Marvel that you may be today' (p.200).

The next address entitled "Penitence" is a good example of Drummond's ability to work at a theme and relate it in an imaginative way to a single incident in the gospels. It is well constructed, but somewhat sentimental, and is based on the text "And the Lord turned, and looked upon Peter ... and Peter went out, and wept bitterly". (Luke 22.61, 62) Drummond suggests that Peter's penitence is a greater fact than Peter's sin, and identifies four characteristics of the state of Penitence. It is a divine thing, it is a very sensitive thing, it is a very intense thing, and it is a very lonely thing. These are characteristics not only of the penitential state but also of all God's operations on the soul. Under the heading of sensitivity Drummond draws attention to the gentleness of God:
His way is to be gentle. He seldom drives; but draws. He seldom compels; but leads. He remembers we are dust. We think it might be quicker work if God threatened and compelled us to do right. But God does not want quick work, but good work. God does not want slave work, but free work. So God is gentle with us all-moulding us, and winning us many a time with no more than a silent look. Coarse treatment never wins souls. (p.209)

Under the heading of loneliness, there is a helpful passage on stillness and solitude:

When God speaks He likes no other voice to break the stillness but His own. And hence the place that has always been given to solitude in all true religious life. It can be overdone, but it can be grossly underdone. And there is no lesson more worth insisting on in days like ours than this, that when God wants to speak with a man He wants that man to be alone. And God develops the germ of the recluse enough in all true Christian hearts to see that it is done... he who knows not what it is to go out from the crowd sometimes and be alone with God is a stranger to the most divine experience that comes to sanctify a Christian heart. (pp.214-215)

Drummond ends his sermon with a powerful plea not to postpone penitence, in a passage which recognises and reinforces the emotional state likely to have been generated in his congregation:

Today, perhaps, as the service has gone on, the Lord has turned and looked on someone here. And the soul of someone has gone out to weep. No one noticed where the Lord's glance fell, and no one knows in the Church that it was - you. You sit there in your wonted place. But your spirit is far away just now, dealing with some old sin, and God is giving you a lesson Himself - the bitterest, yet the sweetest lesson of your life, in heartfelt penitence. Come not back into the crowd till the Lord has turned and looked on you again, as He looked at the thief upon the cross, and you have beheld the "glory of the love of God in the face of Jesus". (p.216)

Later addresses - 1879 to 1881

The first address in this second period is "To me to live is Christ". It is dated 1879 and is a straightforward evangelical sermon, based on the text "For to me to live is Christ, and to die is gain" (Phil. 1.21 in connection with Acts 9.1-18). Drummond begins by pointing out that the present thirst for memoirs and biographies of great
men is not just a matter of hero worship, but that great living is being appreciated for its own sake, and is being imitated. Each ideal figure, however, may be flawed by selfishness or pride, and the ideals which form character may be complex. In the case of Paul the Apostle, his ruling passion is clear, it is "To live is Christ". Drummond then constructs a rather fanciful description of Paul's life prior to his conversion, and suggests that reflection while travelling across the hills of Samaria in execution of his commission to make havoc of the Church, led first to a discovery of himself and then to a discovery of Christ, under the silent working of the Spirit which 'had been telling on his mind during all these quiet days' (p.116). His life was changed at its most radical part. 'Paul deliberately removed the old centre from his life, and put a new one in its place' (p.117). So too may life be for us. Conversion may appear to be sudden, but there is a preparatory phase. It is a solemn thought that we have all in some way made the discovery of Christ. We know more about him than Paul did when we became a Christian. The change of centre from self to Christ could happen at any time. We may be as near it now as Paul was when he left Jerusalem. 'The new Master simply crossed his path one day and the great change was come' (p.124).

There are three addresses dated 1880. The first as printed in The Ideal Life is entitled "Why Christ Must Depart", and is based on the text "It is expedient for you that I go away". (John 16.7). It is sub-titled "A sermon before communion" and begins with a somewhat over dramatised account of the Last Supper and ends with a moralising conclusion. In the body of the sermon, Drummond lists six reasons why Christ must depart. To prepare a place for us and a way for us; to be near us in a spaceless land in a timeless eternity; that we may see Him better, as a great mountain is seen best at a distance;
that we may walk by faith and encourage the spiritual appetite; that the Comforter might come and act as a spiritual presence, revealing Christ; and finally that we should grow in faithfulness, usefulness and strength of character, exercising the responsibility consequent on Christ's confidence in us. The sermon contains an interesting passage on the relationship between the risen Christ and the Holy Spirit:

The Holy Spirit is just what Christ would have been had He been here. He ministers comfort just as Christ would have done - only without the inconveniences of circumstance, without the restriction of space, without the limitations of time ... He is the nexus, the connection between the absent Christ and the world - a spiritual presence which can penetrate where the present Christ could not go. It was expedient for the present Christ to go away that the universal Christ might come to all. (pp.72-78)

This is followed by a sermon written after the death of a friend on the text "I go to my Father". (John 14.12) Drummond makes the point that Christ took the word 'Father' and transfigured, illuminated and transformed it, resolving the complexity of religion into the simplicity that God is our Father, we are His children, and the whole of life can be considered as 'a going to the Father'. If we take this principle into our lives, it explains, sustains and completes Life. God has arranged our life as progress, and sooner or later we find out that life is not a holiday but a discipline, and the world not a playground, but a school. This is a theme to which Drummond frequently returns. There is a Victorian sternness and sentimentality in this address which makes it something of a period piece. He ends with an appeal to those who stay away from God:

My fellow pilgrim, you do not know what you are losing by not going to the Father. You live in an appalling mystery. You have nothing to explain your life, nor to sustain it; no boundary line on the dim horizon to complete it. When life is done you are going to leap into dark. You will cross the dark river and land on the further shore alone. No one will greet you. You and the Inhabitant of Eternity will be strangers. Will you not today arise and go to your Father? (p.90)
The next sermon "The Eccentricity of Religion" is much more readable today. It is an ingenious exposition of the text "He is beside himself". (Mark 3.21) Drummond points out that being beside oneself is eccentricity, having a different centre from other people. Jesus humbled himself. The true centre of his life was with God. The unseen and the eternal moved him. His centre was to one side of self, so he was beside himself, and the world thought him mad. To the world, Christianity is still an eccentricity, and a Christian cannot escape being considered an eccentric.

He defines Christianity as 'the projection into the world of these lines along with Christ lived. It is a duplicating in modern life of the spirit, method, and the aims of Jesus, a following through the world the very footprints he left behind' (pp.96-97). This inevitably conflicts with the way of the world and may lead to isolation and suffering. Christian eccentricity is an eccentricity of godliness. 'If we would follow the eccentricity of our Master, let it not be in asceticism, in denunciation, in punctiliousness, and scruples about trifles, but in largeness of heart, singleness of eye, true breadth of character, true love to men and heroism for Christ' (p.104).

He goes on to point out that Christ's life was one of perfect composure. Men came to him and found not restlessness, but Rest. Those who attempt to go along the lonely path with Christ without that spirit are liable to do harm, not good, leave half-done work, and wear out before their time. So Drummond continues 'Do not say, "Life is Short". Christ's life was short; yet he finished the work that was given Him to do. He was never in a hurry. And if God has given us anything to do for Him, He will give time enough to finish it with a repose like Christ's' (p.105).

12. The theme of Rest is one which Drummond develops further in his booklet "Pax Vobiscum".
He ends the sermon by affirming that Christ's life was consistent, and that a consistent eccentricity is the only sane life. 'To be beside oneself for Christ's sake is to be beside Christ, which is man's chief end for time and eternity'. (p.106)

Two sermons are dated 1881. The first "Ill Temper", based on the text in the story of the Prodigal Son "He was angry, and would not go in" (Luke 15.28), is relatively slight, and there is no indication to whom it was addressed. It may have been delivered to Drummond's congregation at the mission station at Possilpark. He concentrates on the attitude of the elder son, analyses the ingredients of ill temper, notes that it is compatible with high moral character and is the vice of the virtuous, and goes on to show how it incapacitates for sound judgement and causes sourness in the soul. It is a sin against love and therefore against God. The cure lies not in seeking to empty the angry passions out of our life by force of will, but by allowing God's love to act within the soul.

The soul is to be made sweet, not by taking the acidulous fluids out, but by putting something in - a great love, God's great love. This is to work a chemical change upon them, to renovate and regenerate them, to dissolve them in its own rich fragrant substance. If a man let this into his life, his cure is complete; if not, it is hopeless. (p.56)

This is an illustration that Drummond later elaborates both in Natural Law in the Spiritual World and in The Greatest Thing in the World. He ends the sermon by pointing out that the curtain drops on the story of the Prodigal Son, leaving him in the heavenly state of the Kingdom of God and the elder brother excluded, and he warns that there are many heavens in the world from which we shut ourselves out by our own exclusiveness. He concludes, possibly drawing on his own experience in the mission field:

Because of some personal pique, some disapproval of methods, because the lines of work or some of the workers are not exactly to our taste, we play the elder brother, we are angry
and will not go in ... All sins mar God's image, but the sins of temper mar God's image and God's work and man's happiness. (p.59)

"Clairvoyance", the second address of 1881, and the last of the whole period, is one of the best in the book. Drummond's text is "We look not at the things which are seen, but at the things which are not seen: for the things which are seen are temporal; but the things which are not seen are eternal" (2 Cor. 4.18), and he suggests that there are four reasons why we should look at the things which are seen. Firstly, because God made them. We live in no chance world. 'All its parts together, and every part separately, are stamped with skill, beauty, and purpose' (p.128). Secondly, God made us to look at them. He who made the light made the eye. 'The whole mechanism of man is made with reference to the temporal world' (p.128). Thirdly, God not merely made the world, but He has made it conspicuous. The whole temporal world clamours for observation. 'Certainly he has warned us not to love it, but nowhere not to look at it' (p.129). Fourthly, and greatest of all, it is only by looking at the things that are seen that we can have any idea of the things that are unseen. Our whole conception of the eternal is derived from the temporal. The literary form of the Bible illustrates this perfectly. '... it distinctly, unconsciously, recognises the fact that truth can be borne into the soul only through the medium of things' (p.131).

Drummond then argues that the earth is not merely a place to live in, but to see in. We are to pass through it as clairvoyants, regarding the temporal world as a vast transparency:

Look then at the temporal, but do not pause there. You must penetrate it. Go through it, and see its shadow, its spiritual shadow, on the further side. Look upon this shadow long and earnestly, till that which you look through becomes the shadow, and the shadow merges into the reality. Look through till the thing you look through becomes dim, then transparent, and then invisible, and the unseen beyond grows into form and strength. (p.132)
He then goes on to deal with the practical application of this principle in daily life - at work, in the home, and in the religious sphere. Most men see work as no more than work, even a curse, others see it as their appointed life, to be accepted with Christian resignation, but to the spiritual man, work 'is an incarnation of the unseen ... There is a subtle machinery behind it all, working while he is working, making or unmaking the unseen in him. Integrity, thoroughness, honesty, accuracy, conscientiousness, faithfulness, patience - these unseen things which complete a soul are woven into it in work' (p.134). He elaborates his theme in a passage which is worth quoting as an example of his flowing style:

An office is not a place for making money - it is a place for making character. A workshop is not a place for making machinery - it is a place for making men: not for turning wood, for fitting engines, for founding cylinders - to God's eye, it is a place for founding character: it is a place for fitting in the virtues to one's life, for turning out honest, modest-tempered God-fearing men. A school of learning is not so much a place for making scholars, as a place for making souls. And he who would ripen and perfect the eternal element in his being will do this by attending to the religious uses of his daily task, recognising the unseen in its seen, and so turning three-fourths of each day's life into an ever-acting means of grace. (p.135)

Drummond then outlines the contribution of the family to spiritual growth. It is a higher source of spirituality than work, a divine institution, and home is a preliminary heaven. The mind of Christ is to be learned in the family. Strength of character may be acquired at work, but beauty of character is learned at home.

There the affections are trained - that love especially which is to abide when tongues have ceased and knowledge fails. There the gentle life reaches us, the true heaven-life. In one word, the family circle is the true conductor of Christianity. Tenderness, humbleness, courtesy, self-forgetfulness, faith, sympathy; these ornaments of a meek and quiet spirit are learned at the fireside, round the table, in common-place houses, in city streets. (p.138)

Under the heading of religion, the third element in his threefold division of daily life, Drummond points out that Christ never demon-
strated anything. He did not appeal to the reasoning power in man, but to the seeing power, the power of imagination.

Hence the triumphant way in which He ransacked the temporal world, and what we, with our false views of spirituality, had never dared - marked off for us all its common and familiar things as mirrors of the eternal. So light, life, vine, wine, bread, water, physician, shepherd and a hundred others, have all become transformed with a light from the other world. Observe, Christ does not say He is like these things, He is these things. Look through these things, right through, and you will see Him. We disappoint our souls continually in trying, by some other way than through these homely temporals, to learn the spiritual life. (pp.139-140)

He then goes on to speak briefly of the sacraments of Baptism and Holy Communion by which 'the souls of men are tied down at the most sacred moments of life to the homeliest temporal things; so that the highest spirituality ... comes to God's children through lowly forms of the material world' (p.141). Finally he turns to the incarnation, suggesting that while every eternal truth had its material image in the world, there was one thing wanting. 'There was no temporal for the Eternal God Himself'. He continues:

God made a seen image of Himself - not a vision, not a metaphor - an express image of His person. He laid aside invisibility, He clothed Himself with the temporal, He took flesh and dwelt among us. The Incarnation was the eternal become temporal for a little time, that we might look at it. (pp. 141-142)

He ends the sermon with a reference to three classes of men, the materialist who will not look at the unseen at all and 'is utterly blind to the eternal'; the mystic, who is utterly blind to the temporal, and does not look for the unseen in the seen but 'works, or tries to work, by direct vision'; and the ritualist who is neither blind to the unseen nor the seen, but 'short-sighted to both'. He concludes with a definition of spirituality:

Worldliness has been defined as looking at the things that are seen, but only close enough to see their market value. Spirituality is that further look which sees their eternal value, which realises that

"Earth's crammed with Heaven,
And every common bush afire with God." (p.143)
To which may be added a further definition given earlier in the sermon, 'True spirituality is to see the divinity in common things' (p.141).

Comment

The fifteen addresses in The Ideal Life provide valuable information on the thinking of Drummond at a formative stage of his life. He had completed his studies at New College, he had been actively engaged in the mission of Moody and Sankey, and was faced first with the task of communicating his ideas to an established congregation in Barclay Church, and then adapting his methods to two widely different audiences, his students at the Free Church College in Glasgow, and the newly formed working-class congregation at Possilpark. There is evidence of the growing influence of science in his thinking, a widening of his horizons, partly through his visit to America, and the emergence of themes to be elaborated in his later works.
C THE NEW EVANGELISM AND OTHER PAPERS

Introduction

The New Evangelism and other Papers was published in 1899, some two years after The Ideal Life and other Unpublished Addresses, illustrating again the extensive public interest in Drummond's work in the period immediately after his death. A note after the title page states that 'with the exception of the article on "The Contribution of Science to Christianity", which appeared in The Expositor, none of the following papers were intended for publication, nor were they revised by the Author'. The contents and probable dates of delivery are as follows:

The New Evangelism: and its Relation to Cardinal Doctrines. 1880
The Method of the New Theology, and some of its Applications. 1892
Survival of the Fittest (formed part of the preceding address).
The Third Kingdom. Unknown
The Problem of Foreign Missions. 1890
The Contribution of Science to Christianity. 1884
Spiritual Diagnosis. 1873

The papers are not printed in chronological sequence, and two are undated, one of which has suffered the loss of the first page of the manuscript. The earliest, "Spiritual Diagnosis", read before the Edinburgh Theological Society in November 1873, has already been commented on in this thesis. "The New Evangelism: and its Relation to Cardinal Doctrines", although undated seems likely to have been read to the Free Church College Theological Society in Glasgow during the session 1880/81. (The internal evidence leading to this conclusion is discussed below). "The Contribution of Science to Christianity" was delivered on the occasion of Drummond's ordination and induction to the Chair of Professor of Natural Science in the Free Church College in Glasgow on 4th November, 1884. "The Problem of Foreign Missions" was read at the opening of the session in the Free
Church College in November 1890. "The Method of the New Theology and some of its Applications", together with "Survival of the Fittest" formed the substance of an address to the Theological Society of the Free Church College in Glasgow in January 1892, the year before the delivery of his major work, the Lowell Lectures, published as The Ascent of Man in 1894. "The Third Kingdom" which lost its introductory page, corresponds well with Drummond's later thinking and may have been related to material drafted and discarded in his preparation of the Ascent of Man.

In view of the fact that these papers cover almost the entire working life of Drummond, and the desirability in this thesis to consider each document as far as is possible in chronological sequence, and to relate the content to his wider activities, it is intended to deal with "The New Evangelism; and its Relation to Cardinal Doctrines" at this point, and to consider "The Contribution of Science to Christianity", "The Problem of Foreign Missions", "The Method of the New Theology, and some of its Applications" together with "Survival of the Fittest" and "The Third Kingdom" at appropriate points in Drummond's life as indicated in the List of Contents.

The dating of "The New Evangelism"

A note at the top of the first page of "The New Evangelism" states that it is a 'Paper read to Free Church Theological Society, Glasgow' but gives no date. In the text of the paper, however, there are a number of clues as to when it may have been delivered. The first is a reference to the death of the American theologian Horace Bushnell:

I do not stay to characterise the sermons of Horace Bushnell, but he has long been to me a representative man of the new Evangelism, although I know nothing of him, or his life, of his methods of thought or work. But the other day he died,
and his life was written. There I have found, to my great amazement, that Bushnell's method of looking at truth is defined by himself as an exercise of the Imagination.13

Bushnell died in February 1876 and his Life and Letters were published by his daughter M.B. Cheney, in New York in 1880. Then there is a reference to a visit by Drummond to the Niagara Falls. 'I once saw an hotel-keeper on a starlit night in autumn erect an electric light to show his guests Niagara' (p.40). This could have occurred while visiting Northfield, Massachusetts, near Lake Erie, during the last five days of his expedition to the Rocky Mountains in the late summer of 1879.

Drummond gave a talk to the Theological Club on 9th January 1882 on "Natural Law in the Spiritual Sphere" in which he tested reaction to ideas later included in the Introduction of Natural Law in the Spiritual World. He is unlikely to have given two addresses to the Club in the same year. A paper in 1880 or 1881 therefore seems a possibility, especially as he begins "The New Evangelism" with a passage on the danger of voicing heretical opinions. 'It is no small heroism in these times to deal with anything new. But this is a theological society; and I do not need to ask the protection of that name while I move for a little among lines of thought which may seem to verge on danger' (p.3). This could be a reference to the intense theological unrest and disturbance within the Free Church as it wrestled with the challenge of biblical criticism which led to the suspension and removal of Professor Robertson Smith from the Chair of Oriental Languages and Old Testament Exegesis at the Free Church College, Aberdeen, in 1881. An earlier rather than a later date is

13. NE, p.38. Further references are given after quotations in the text. Horace Bushnell (1802-76) is described in the Oxford Dictionary of the Christian Church as an American Congregational divine, the pioneer of liberal theology in New England. Drummond later called on his widow during his visit to American Colleges in 1887.
also implied by Drummond's tentativeness about the whole subject. 'I do not know what the new Evangelism is, and it is because I do not know that I write this paper. I write because I ought to know, and am trying to know' (p.3). 14

The text of "The New Evangelism"

Drummond argues for the need for a new evangelism on two counts. First, current experience shows that the Gospel as preached is failing to influence the minds of men, particularly the younger generation, and is having little impact on the non-church-going population. He quotes statistics for Glasgow indicating that the numbers of non-Roman Catholics who did not go to church had increased from 30,000 in 1847 to 150,000 at the time of writing, out of all proportion to the increase in population of the city. He suggests that this is because what is being presented is a Gospel for a Former Age. 'It does not fit into all the folds of men's being. It is not in itself bad - but it is a bad fit' (p.7).

The second reason is that the nature of truth demands from time a new Evangelism. 'Theology is a thing that moves.' It must continually accommodate and come to terms with new and emerging areas of knowledge, particularly in the field of Nature. This is in no way contrary to truth in the Bible which he describes as 'a book of such boundless elasticity that the furthest growth of the truth-sense can never find its response outgrown. And it is in this elasticity that

14. It should be noted, however, that James W. Kennedy in his introduction to his chapter on "The New Evangelism" in Henry Drummond: An Anthology implies a later date, but without quoting evidence, when he states 'Almost twenty years after presenting his address on "Spiritual Diagnosis", Drummond prepared another paper out of the richness of his experience, in which he attempted to make clear what he called "The New Evangelism".'
one finds a sanction for a new theology to be the basis of a new Evangelism. It encourages a new theology' (p.10). Drummond then gives an apt illustration of the effect of Time on Truth.

As the serpent periodically casts its skin, so Truth. The number of times it has cast its skin marks the number of stages in its forward growth. Many of the shelves of our theological libraries are simply museums of the cast skin of Truth. The living organism has glided out of them to seek a roomier vestment. (p.11)

He then makes three specific charges against the old theology. First, the conception of God generally conveyed was not a God of love, but a God to be feared. ' ... an uncomfortable presence about one's life. He was always in court, either actually sitting in judgement or collecting material for the next case. He was the haunting presence of a great Recorder' (p.14). Secondly, Christ was presented as a theological person whose function 'was to adjust matters between hostile kingdoms of heaven and earth' (p.15). The part played by Christ was looked at largely from the divine and cosmic aspect. His humanity was underplayed although there were signs that this was beginning to be corrected. Thirdly, the concept of man's salvation emphasised his status rather than his character. It was concerned with the judicial salvation achieved by Christ in the life to come, rather than character formation in the present life. 'The prime end of religion was to get off; the plan of salvation was an elaborate scheme for getting off; and after a man had faced that scheme, understood it, acquiesced in it, the one thing needful was secured' (p.18).

Drummond then goes on to establish two guiding principles in constructing the new Evangelism. The first is that 'the new Evangelism must not be doctrinal'. By this he means that a man must not be confronted with doctrine in the form of ready made propositions, he must be encouraged to seek out the truth for himself by study and reflection on biblical material direct. He suggests that there are three essen-
tial departments in the church's work—criticism that guarantees truth, dogmatism that defines truth, and evangelism that propagates truth. A propositional theology, supported by the authority of the Church, is a danger to true evangelism in that it relieves a man of personal responsibility and encourages the idea of infallibility.

An infallible standard is a temptation to a mechanical faith. Infallibility always paralyses. It gives rest, but it is the rest of stagnation. Men make one great act of faith at the beginning of their lives—then have done with it for ever. All moral, intellectual, and spiritual effort is over; and a cheap theology ends in a cheap life. (p.22)

There is a sense in which the Bible is infallible, but truth in the Bible is not the same as truth as expressed in theology.

In theology ... truth is propositional, tied up in neat parcels, systematized and arranged in logical order. In the Bible, truth is a fountain. There is an atmosphere here, an expansiveness, an infinity. Theology is essentially finite, and it only contains as much infinite truth as can be chained down by its finite words... There are few minds which can really take truth in this theological form. Truth is a thing to be slowly absorbed, not to be bolted whole. (p.23)

Pointing out that few of the products of Nature can be assimilated as they stand, corn for example must be ground and cooked, Drummond suggests that Truth can only be absorbed in a similar way. 'Man must separate, think, prepare, dissolve, digest, work, and most of these he must do for himself and within himself' (p.25). He then compares theology with a greengrocer who arranges fruit in his window. He describes different varieties but he does not help a person to eat them.

He concludes by asserting that '... truth in infallible propositional lumps is not natural, proper, assimilable food for the soul of man; and therefore a propositional theology is not the subject-matter of Evangelism' (p.26).

There are a number of quite lengthy passages in this section which are repeated more or less word for word in the chapter on Parasitism in Natural Law in the Spiritual World. They can be tabulated as follows:
Key phrases | New Evangelism | Natural Law
--- | --- | ---
Criticism, dogmatism and evangelism ... | p.20 | p.358
You cannot cut and dry truth | p.21 | p.360
Infallibility always paralyses | p.22 | p.361
The Greengrocer | p.25 | p.364

A close study shows that some words in the Natural Law version have been altered to meet the needs of a wider secular audience and that this version contains amplifying paragraphs. It would seem likely that the "New Evangelism" is the earlier version. Drummond would hardly have used material from a published work in a paper to a theological society without some hint that it had already appeared in print. It is also a good illustration of the careful way in which Drummond conserves and polishes his material so that it makes maximum impact on his audience. There is a reference worth quoting here on this aspect of his work. It is from a letter to a friend, dated 2nd January, 1890.

This is a delightful sketch of yours, and really important. If you ask my honest opinion, I shall give it on all the points you ask ... The style is not good! ... Sentences are overloaded; and though words are always well chosen, no work has been spent on improving it ... You can do it, i.e., write better, if you will only keep the simple rule of the Umbrian and "fence in the morning hours". A Nineteenth Century article should be written at least three times - once in simplicity, once in profundity, and once to make the profundity appear simplicity.15

The second guiding principle in constructing the New Evangelism is defined by Drummond as 'The leading Faculty of the new theology is not to be the Reason'. He argues convincingly that spiritual truth is apprehended by the faculty of the imagination and this is particularly relevant when considering the words and ideas of Christ which he suggests were expressed with that end in view.

15. Adam Smith, p.291.
Take almost any of His words. To what faculty do they appeal? Almost without exception to the Imagination. And this is the main thing I wish to say tonight. I do not merely refer to His parables, to His allusions to nature, to the miracles, to His endless symbolism - the comparisons between Himself and bread, water, vine, wine, shepherd, doctor, light, life and a score of others. But all His most important sayings are put up in such form as to make it perfectly clear that they were deliberately designed for the Imagination. (pp.28-29)

A passage follows which is strongly reminiscent of part of the sermon entitled Clairvoyance in The Ideal Life, dated 1881 where he also refers to Christ's appeal to the imagination.

Words of the intellect cannot hold God - the finite cannot hold the infinite. But an image can. So God has made it possible for us by giving us an external world to make image-words. The external world is not a place to work in, or to feed in, but to see in. It is a world of images, the external everywhere revealing the eternal. The key to the external world is to look not at the things which are seen, but in looking at the things which are seen to see through them to the things that are unseen. (pp.29-30)

He continues to the logical conclusion that in Christ God gave man an image of Himself, 'He gave the Man Christ Jesus the express image of His person. This was the one image that was wanting in the image-vocabulary of truth, and the Incarnation supplied it' (p.30).

Drummond's remarks on the potential numinosity of the parables are worth quoting at this point.

You see a parable, you discern it; it enters your mind as an image, you image it, imagine it. I am the Bread of Life. With what faculty do we apprehend that? We look at it long and earnestly, and at first are utterly baffled by it. But as we look it grows more and more transparent, and we see through it. We do not understand it; if we were asked what we saw, we should be surprised at the difficulty we had in defining it. Some image rose out of the word Bread, became slowly living, sank into our soul, and vanished. The peculiarity of this expression is that it is not a simile. "I am like bread". Christ does not say that. I am bread - the thing itself. And that faculty, standing face to face with truth, draws aside the veil, or pierces it, seizes the living substance, absorbs it; and the soul is nourished. (pp.31-32)

He concludes his paper with the suggestion that there are two main hindrances to the acceptance of the new Evangelism, unspirituality
and laziness. He asserts that the carnal mind hates any spiritual exercise or effort and that the supreme factor in achieving spiritual knowledge is consecration. 'To know His doctrine a man must do the will of God' (p.41). A doctrinal sermon can be made with little effort. The minister can become 'a mere mechanic, a repeater of phrases, a reproducer of Hodge.' And the people - they too are spared all effort' (p.42).

Finally Drummond sweetens the pill for his hearers with a caution based on Jesus' words, "No man having tasted the old wine straightway desireth new". The introduction of the new Evangelism is a delicate matter. It should not be urged on those who really feel that the old is better. Like so many of his addresses, his final words are worth quoting in full.

There are many saints in our Churches, and if the old wine is really their life-blood, we can but wish them God-speed with all humility. Younger men will come to us, too, when our wine is old and the sun has set upon our new theology; but to the many who are waiting for the dawn, and these are many, our evangel may perhaps bring some light and fulfil gladness and liberty.

Least of all have we anything to do with wilfully destroying the old. Christ was never destructive in His methods. It was very exquisite tact, a true understanding of men and a delicate respect for them, that made Him say, "I came not to destroy but to fulfil". (pp. 42-43)

Comment

"The New Evangelism: and its Relation to Cardinal Doctrines" exhibits a freshness of style and liveliness of imagination that make it one of the most readable and stimulating of his addresses. It represents perhaps Drummond's first attempt to outline his personal

16. Charles Hodge (1797-1878) was a noted American Presbyterian whose three volume Systematic Theology (1871-1873) was much in vogue in Drummond's time.
theology before his immediate professional contemporaries in a more or less formal way. His ideas are further developed in "The Contribution of Science to Christianity" in 1884, "The Problem of Foreign Missions" in 1890, and "The Method of the New Theology, and some of its Applications" in 1892. These four papers, prepared for clerical and academic audiences would seem to constitute a strand in his work to be distinguished from his sermons, his addresses to students, and his major published works Natural Law in the Spiritual World and The Ascent of Man.
Introductory Remarks

Natural Law in the Spiritual World was published in June 1883. It was an immediate success. Within five years 69,000 copies had been sold and translations made into French, German, Danish, Dutch, and Swedish. The book consists of a series of papers arising from addresses first given to the mission congregation at Possilpark during the years 1878 to 1882, some of which were published in a London journal The Clerical World, together with a lengthy introduction which was originally formulated as a paper given to the Glasgow Theological Club in January 1882.

Encouraged by the reception of the articles in The Clerical World and by one of his friends in the Theological Club, Drummond tried out the Introduction and some of the papers on two leading London publishers. They were rejected, but shortly after, Mr. H.H. Hodder of Messrs. Hodder and Stoughton approached him independently with a view to reprinting the articles and the idea of a book was consolidated. The following extract from a long undated quotation from Drummond's papers indicates both the pressure under which he worked and something of his method of construction.

The next step was to hold a post mortem examination on my Rejected Addresses. I found mortal wounds in one or two of the papers, but the few which seemed most fit for resuscitation were forwarded as a first instalment to the publisher ... I would have given anything just then to have gained time, for nearly half my remaining material was useless ... I set to work replacing the most decayed of the papers with new ones, and these were literally written, I believe, like most literary work - with the printer's demon waiting at my elbow. The subjects were chosen as I went along, and as the printer was exasperatingly punctual, they received the barest possible justice ... Owing to the lengthened interval between the writing of one paper and another, consistency was almost impossible.17

In the book itself, Drummond confirms that the papers were not

17. Adam Smith, p.150.
designed to appear in a collective form, but were published 'out of regard to the wish of known and unknown friends' and that they will be found 'of unequal interest and value, according to the standpoint from which they are regarded'. Nevertheless, they are more than held together, despite this unevenness, by Drummond's vigorous style and freshness, and the use of stimulating and unusual illustration, factors which George Adam Smith referred to in his analysis of the immediate popularity of the book:

With the exception of a few passages the book is beautifully written. But the clear and simple style is charged with an enthusiasm, and carries a wealth of religious experience which capture the heart, and tempt the thoughtful reader to become indifferent to almost every prejudice which the introduction has excited in his mind.

Drummond took considerable trouble over layout and presentation. Each chapter, apart from the Introduction, has an appropriate philosophic or poetic quotation on the reverse of the title page, and opposite under the chapter title, two short quotations, one from scripture and one from a secular source, illustrating his general theme that religion and science operate under the same laws. The chapter headings after the Preface are as follows:

<table>
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The form and content of *Natural Law in the Spiritual World* are such that it merits chapter by chapter comment, similar to that given to the addresses in *The Ideal Life*. The chapter lengths vary considerably, and it has been a little difficult to achieve a satisfactory balance. Inevitably a considerable amount of material has been

18. NL, (p.xv). Further references are given after quotations in the text.
omitted, including nearly all the supporting references from religious
and scientific writers, but it is hoped that enough has been retained
to give a true indication of the general style and argument of the
book.

The Preface

In the Preface, Drummond outlines the background to the emergence
of the over-riding principle which links his chapters together - that
many of the laws of the Spiritual World are simply the laws of the
Natural World. He frames the principle as a question:

Can we identify the Natural Laws, or any one of them, in the
Spiritual Sphere? That vague lines everywhere run through
the Spiritual World is already beginning to be recognised. Is it possible to link them with those great lines running
through the visible universe which we call the Natural Laws,
or are they fundamentally distinct? In a word, Is the Supernatural natural or unnatural? (p.vi)

The necessity for formulating the proposition arose from his ex-
perience in preparing weekday lectures on the Natural Sciences for
his students at the Free Church College alongside the preparation of
Sunday sermons for his working class audience at Possilpark. He
originally kept the two areas of thought 'shut off from one another
in two compartments of my mind'. Gradually as the wall of partition
gave way he found the greatest change in his expression of religious
ideas. 'I found the truth running out to my audience on the Sunday,
by the week-day outlets ... I discovered myself enunciating spiritual
law in the exact terms of Biology and Physics' (p.vii).

He interpreted what he was doing as more than parabolic illustra-
tion 'It was an entire re-casting of truth'. If Natural Law could
be traced in the Spiritual World 'it would offer religion a new cre-
dential' and lead to a 'truly scientific theology'. The emergence
of this theory captivated his mind with what would appear to be the
self-authenticating power of religious experience.

I confess that even when in the first dim vision, the organis-
ing hand of Law moved among the un-ordered truths of my SPIri-
tual World, poor and scantily-furnished as it was, there seemed
to come over it the beauty of a transfiguration ... and it has been a substantial relief to me throughout that the idea
rose up thus in the course of practical work and shaped itself
day by day unconsciously. (pp.ix-xi)

He cautions the reader on the danger of applying a new principle
too widely and warns that its application has decided limits. In
characteristic style he goes on:

And if elsewhere with undue enthusiasm I seem to magnify the
principle at stake, the exaggeration - like the extreme ampli-
fication of the moon's disc when near the horizon - must be
charged to that almost necessary aberration of light which
distorts every new idea while it is yet slowly climbing to
its zenith. (p.xvi)

He continues in the same vein, illustrating again the emotional
impact of the new idea in his mind:

I ran up the Natural Law as far as it would go, and the appro-
priate doctrine seldom even loomed in sight till I had reached
the top. Then it burst into view in a single moment. I can
scarcely now say whether in those moments I was more overcome
with thankfulness that Nature was so like Revelation, or more
filled with wonder that Revelation was so like Nature.
(p.xvii)

He moves on to discuss the relationship between Science and
Theology and suggests that now that Science 'has made the world around
articulate', it offers both to corroborate and purify Theology. He
points out that no man can study Science without a change coming over
his view of truth. 'Science cannot overthrow Faith; but it shakes
it'. Those whose mental attitude has been affected by the scientific
method cry out in Religion for a new standpoint, and he concludes 'What
is required, therefore, to draw Science and Religion together again
- for they began the centuries hand in hand - is the disclosure of
the naturalness of the supernatural' (p.xxii).
The Introduction

In a somewhat lengthy Introduction, Drummond defines the Laws of Nature as 'statements of the orderly condition of things ... found in Nature by a sufficient number of competent observers' (p.5), and points out that these laws in themselves may not in fact have absolute existence. They are like parallels of latitude 'drawn for us to understand the part by some Hand that drew the whole'. He resolves his inquiry into the simple question 'Do these lines stop with what we call the Natural Sphere? (p.6). He goes on to discuss the place of analogy in comparing the phenomena of the spiritual world with those of the natural world, quoting Plato's doctrine of the cave and the views of other writers, finally suggesting that 'we are spared all discussion on this worn subject', firstly because it is not the function of Nature to prove Religion but to interpret, and secondly it is not a question of analogy but of identity. 'The position that we have been led to take up is not that the Spiritual Laws are analogous to the Natural Laws, but that they are the same Laws' (p.11).

He notes that up to the present Science has taken theology at its own estimate, as a thing apart, a different world, a 'world under a different governmental scheme'. The Reign of Law has crept into every department of Nature, but when it comes to the borders of the Spiritual World, the Law of Continuity ceases and men are suddenly confronted with 'the Great Exception'. The fact that Science can hear nothing of 'the Great Exception' makes it regard religion as decadent. But Theology, like Science must progress and evolve. If the phenomena of the Spiritual World are real, they ought to come into the sphere of Law and be subject to criticism by the scientific method.

Drummond does not see this as an attempt to prove the existence of the Spiritual World, a possibility no more likely to be successful than an attempt to prove the Natural World to be an object of recogni-
tion to the senses. His aim is to consider certain known facts in the Spiritual World, arrange them, discover their Laws and to 'inquire if they can be stated "in terms of the rest of our knowledge" ', in order to help the earnest enquirer and to remove vagueness. He allows, however that room is still left for mystery. 'A Science without mystery is unknown; a Religion without mystery is absurd' (p.28).

Drummond moves on in Part II of the Introduction to attempt to demonstrate that the Spiritual is not the projection upward of the Natural, but the Natural the projection downward of the Spiritual. He begins with the statement:

Briefly indicated, the ground taken up is this, that if Nature be a harmony, Man in all his relations - physical, mental, moral and spiritual - falls to be included within its circle. It is altogether unlikely that man spiritual should be violently separated in all the conditions of growth, development, and life, from man physical. (p.35)

He goes on to point out that while the division of Science into departments such as Botany, Geology and Astronomy is a necessary artificiality to facilitate knowledge, it is important to think of Nature as a whole. And as the principle of evolution is found in many different sciences, it is likely to be a universal principle and cannot be presumed to be excluded from the domain of the spiritual life.

He then suggests that there is a Law which governs Laws, the Law of Continuity, which puts 'the finishing touch to the harmony of the universe'. There is 'the necessity of some principle or Law according to which Laws shall be, and be "continuous" throughout the system' (p.40). He illustrates its application by considering the law of gravitation:

There is no reason apart from continuity to expect that gravitation for instance should prevail outside our world. But wherever matter has been detected throughout the entire universe, whether in the form of a star or a planet, comet or meteorite, it is found to obey that law. (p.41)

Turning to the objection that many of the Natural Laws appear
to have no connection with the Spiritual World, he discusses the place that gravitation might have in such a world and points out that there is no proof that it does not hold there, and that 'If the spirit be in any sense material it certainly must hold'. And further, it may be that the spirit 'be armed with powers which enable it to rise superior to gravity' (p.42).

After emphasising that Laws are only modes of operation and not themselves operators, he discusses the possibility that there may be new and undiscovered laws in the Spiritual World. After a lengthy and complex argument he concludes that such laws may well exist, and that the old laws in the lower world still apply in the spiritual, though in a weaker sense, being less conspicuous on account of their subordination to the new laws. He goes on to suggest that the impression received in studying the two worlds side by side would naturally be that the lower world was formed first, 'as a kind of scaffolding on which the higher and Spiritual should afterward be raised', but in fact the exact opposite has been the case 'The first in the field was the Spiritual World' (p.53). He draws his arguments to a close in a passage which affirms the priority of the Spiritual:

The lines of the Spiritual existed first, and it was natural to expect that when the "intelligence resident in the 'Unseen'" proceeded to frame the material universe He should go upon the lines already laid down. He would, in short, simply project the higher Laws downward, so that the Natural World would become an incarnation, a visible representation, a working model of the spiritual. (p.56)

He then refers to a text from St. Paul "We look not at the things which are seen, but at the things which are not seen; for the things which are seen are temporal, but the things which are not seen are eternal" (II Corinthians 4.18) which was also the text for his sermon "Clairvoyance" already referred to in the Ideal Life, and concludes his Introduction with a passage which is almost word for word the same as one in that address:
The visible is the ladder up to the invisible; the temporal is but the scaffolding of the eternal. And when the last immaterial souls have climbed through this material to God, the scaffolding shall be taken down, and the earth dissolved with fervent heat - not because it was base, but because its work is done. (p.57, and IL p.137)

"Biogenesis"

Drummond introduces his first main chapter "Biogenesis", with an account of the eclipse of the doctrine of spontaneous generation of life from matter by experimental evidence which showed that life can only come from pre-existing life. He quotes T.H. Huxley as announcing categorically that the doctrine of Biogenesis, or life only from life, is 'victorious along the whole line at the present day' (p.63).

He goes on to suggest that there has been a similar discussion in the religious world. The equivalent to spontaneous generation is the concept that 'a man may become gradually better and better until in the course of the process he reaches that quality of religious nature known as Spiritual Life ... it is the normal and appropriate development of natural man'. Opposing this is the equivalent to Biogenesis, the doctrine of Regeneration. 'The Spiritual Life is the gift of the Living Spirit. The spiritual man is no mere development of the natural man. He is a New Creation born from Above' (p.65).

Biogenesis in Nature affirms that 'the passage from the mineral world to the plant or animal world is hermetically sealed on the mineral side ... no change of substance, no modification of environment, no chemistry, no electricity, nor any form of energy, nor any evolution can endow any single atom of the mineral world with the attribute of Life' (p.68). There is an equivalent barrier in Biogenesis in Religion ' ... the first thing that strikes the eye is a
great gulf fixed. The passage from the Natural World to the Spiritual World is hermetically sealed on the natural side ... No organic change, no modification of environment, no mental energy, no moral effort, no evolution of character, no progress of civilisation can endow any human soul with the attribute of Spiritual Life' (p.71).

Drummond goes on to state that the Spiritual World is guarded from the world next in order beneath it by a law of Biogenesis - 'except a man be born again ... except a man be born of water and of the Spirit, he cannot enter the Kingdom of God' (p.71). The agent of change is the Spirit. 'The breath of God, blowing where it listeth, touches with its mystery of Life the dead souls of men, bears them across the bridgeless gulf between the natural and the spiritual ... and develops within them those new and secret faculties, by which those who are born again are said to see the Kingdom of God' (pp.72-73). Drummond reinforces his argument with further quotations from scripture and then suggests that there are not two laws of Biogenesis, but one. 'Wherever there is Life, Life of any kind, this same law holds' (pp.75-76).

After asserting that knowledge of the Spiritual World can only come by way of revelation from above, and that the agnostic 'really does not know' about spiritual matters, Drummond goes on to suggest that the distinction between the Christian and the non-Christian man is similar to that between a crystal and an organism, between a stone and a plant. Both are made of the same atoms and display the same properties of matter, but a plant possesses something more, 'a mysterious something called Life ... an original and unique possession added over and above all the properties common to both' (p.81). Natural man belongs to the present order of things and is endowed with a high quality of the natural animal life. The Spiritual man 'has a distinct kind of Life added to all the other phases of Life which
he manifests ... he that hath the Son hath Life - a new and distinct and supernatural endowment. ... He is of the timeless state, of Eternity' (pp.81-82).

It is a difference not of development but of generation. The distinction is a grim one, an old fashioned stern theology, which nevertheless must be retained. It also distinguishes Christianity from all other religions. 'There is no true sense in which a man can say, He that hath the Buddha hath Life' (p.83). He acknowledges that these religions 'may be developments of the natural, mental or moral man'. But Christianity is more. It is the infusion into the Spiritual man of a New Life, of a quality unlike anything else in Nature' (p.84). The 'something extra' is Christ.

Like Vitality in nature, Spiritual Life is inside the tissue and substance. It is not a visit from a force 'but a resident tenant in the soul' (p.87), whose mode of indwelling is a mystery. Analogies can be drawn from Biology as to the process of Regeneration in the individual soul. New life should dawn suddenly, coming 'without observation' and then develop gradually. There may be a distinction between the real moment of contact with the living Spirit and the conscious moment. Drummond ends the chapter with a passage linking his scientific observation with his evangelical experience.

The line between the living and the dead is a sharp line. When the dead atoms of Carbon, Hydrogen, Oxygen, Nitrogen, are seized upon by Life, the organism at first is very lowly. It possesses few functions. It has little beauty. Growth is the work of time. But Life is not. That comes in a moment. At one moment it was dead; the next it lived. This is conversion, the "passing" as the Bible calls it, "from Death unto Life". Those who have stood by another's side at the solemn hour of this dread possession have been conscious sometimes of an experience which words are not allowed to utter - a something like the sudden snapping of a chain, the waking from a dream. (p.94)

The 'grim distinction' which Drummond so clearly asserts, was one of the points taken up his critics. James Young Simpson in his short
biography states:

... it was urged with justice that he not only took no account of personal volition, but also in the hard line drawn between the living Christian and the man who is spiritually dead, failed to recognise the whole range of "prevenient grace", and the "radical spirituality of all men".20

Drummond apparently considered the withdrawal of the chapter on Biogenesis in later editions of Natural Law, but eventually decided to leave the book unchanged. Simpson states that in a draft of a new preface probably dated 1891, Drummond wrote 'Some of the forms in which truth is stated in this book are now outgrown. And yet, after much reflection, I have resisted the thought of materially adding or taking away from it except by a passing word. The wise know that a book is written for its day'.21

"Degeneration"

The second chapter is less controversial. After introducing the natural law 'The Principle of Reversion to Type' by quoting an example of a variegated colony of pigeons, which if left to its own on an uninhabited island would revert to a single monochrome species, Drummond sets out his thesis:

If a man neglect himself for a few years he will change into a worse man and a lower man. If it is his body that he neglects, he will deteriorate into a wild and bestial savage - like the de-humanised men who are discovered sometimes upon desert islands. If it is his mind, it will degenerate into imbecility and madness - solitary confinement has the power to unmake men's minds and leave them idiots. If he neglect his conscience, it will run off into lawlessness and vice. Or, lastly, if it is his soul, it must inevitably atrophy, drop off in ruin and decay. (p.99)

He then notes that according to Science there are three possibilities open to all living organisms - Balance, Evolution, and Degenera-

The first is not really applicable to the world of organic life, but where attempted by man is difficult, fatiguing, monotonous and uninspiring. Evolution, or upward growth is more difficult, most men attempt it for a time, but growth is slow and despair overtakes them. The majority accept Degeneration. The principle is already supreme in each man's nature. 'He feels within his soul a silent drifting motion impelling him downward with irresistible force' (p.101). In theological terms this is sin, a gravitation or bias towards evil. 'Gradually, with gathering momentum it sinks a man further and further from God and righteousness, and lands him, by the sheer action of a natural law, in the hell of a neglected life' (pp.102-103).

Spiritual life, the 'sum total of the functions which resist sin', alone gives the soul power to utilise temptation and trial. The soul left to itself 'unwatched, uncultivated, unredeemed, must fall away into death by its own nature' (p.104). Salvation is an active saving principle. Man can only escape his fate by taking resolute hold of the upward power and 'be borne by it to the opposite goal' (p.108). It is a definite process to which a man must submit to obtain its benefits.

Neglect of the soul despoils it of its capacity for salvation. In a characteristic passage, Drummond then both describes the soul, and its potential destruction.

The soul, in its highest sense, is a vast capacity for God. It is like a curious chamber added on to being, and somehow involving being, a chamber with elastic and contractile walls, which can be expanded, with God as its guest, illimitably, but which without God shrinks and shrivels until every vestige of the Divine is gone, and God's image is left without God's Spirit. One cannot call what is left a soul; it is a shrunken, useless organ, a capacity sentenced to death by disuse, which droops as a withered hand by the side, and cumbers nature like a rotted branch. (p.110)

Escape lies 'in the gradual putting off of all that cannot enter the higher state, or heaven, and simultaneously the putting on of Christ' (p.117). Each man 'in the silence of his own soul must work
out this salvation for himself with fear and trembling'. The lines of escape can be summarised in the words 'do the opposite of Neglect'. The soul must be cultivated so that all its powers open out to God, 'and in beholding God be drawn away from sin' (p.118). A new creature must be developed among the ruins of the old.

The chapter ends with an appeal to develop in the religious nature the equivalents of the Sense of Sight (purity of heart), the Sense of Sound (the hearing of the Shepherd's voice), the Sense of Touch (faith), and the Sense of Taste (a spiritual hunger for God). Together with them must be cultivated the Talent for Inspiration which 'pene-trates the whole soul with sacred fire, and illuminates creation with God', and the capacity for the Love of God 'the expanding capacity for feeling more and more its height and depth, its length and breadth' (p.120).

"Growth"

Drummond heads this chapter with the text "Consider the lilies of the field how they grow" (Matthew 6.28). He suggests that spiritual growth is not a matter of violent effort, but the adoption of one organic principle with two characteristics, spontaneousness and mysteriousness; applicable to the natural and spiritual, animal and plant, body and soul.

The spontaneousness of growth is seen in science, and in universal experience. "A boy grows, for example, without trying. One or two simple conditions are fulfilled, and the growth goes on' (p.126). A doctor has no prescription for growth, he can explain how it may be stunted or impaired, but Nature keeps the process in her own hands. No physician of the soul has any prescription for spiritual growth:
It is the question he is most often asked and most often answers wrongly. He may prescribe more earnestness, more prayer, more self-denial, or more Christian work. These are prescriptions for something, but not for growth. Not that they may not encourage growth; but the soul grows as the lily grows, without trying, without fretting, without ever thinking... earnest souls who are attempting sanctification by struggle instead of sanctification by faith might be spared much humiliation by learning the botany of the Sermon on the Mount. (pp. 126-127)

Drummond goes on to distinguish between the growth of the Christian and the growth of the moralist, comparing them to a living organism and a dead crystal. 'The first grows initially from within, the last adds new particles from the outside' (p.128). The distinction is related to that already made in the chapter on Biogenesis as to whether or not a man has within him the indwelling Christ. 'The end of Salvation is perfection, the Christlike mind, character and life... the Life must develop out according to its type; and being a germ of the Christ-life, it must unfold into a Christ' (pp. 128-129). This growth has an element of mystery. 'A lily grows mysteriously, pushing up its solid weight of stem and leaf in the teeth of gravity' (p.131). So also the soul, pushing up its delicate virtues in the teeth of sin, shaping itself mysteriously into the image of Christ.

It is a question not of working, but of being taken in hand by God. '... "it is God which worketh in us, both to will and to do His good pleasure."'(p.135). This does not however take away all conflict in the Christian life or destroy man's responsibility for his own soul. Drummond goes on to point out that he is not here concerned with the question of 'faith and works' but of seeking to discover the attitude of mind which the Christian should preserve regarding his spiritual growth. 'We are not lodging a plea for inactivity of the spiritual energies, but for tranquillity of the spiritual mind' (p.136). Anxiety is irrelevant and superfluous. 'If God is adding to our spiritual stature, unfolding the new nature within us, it is
a mistake to keep twitching at the petals with our coarse fingers ...
If God is spending work upon a Christian, let him be still and know that it is God. And if he wants work, he will find it there — in the being still' (p.137).

He then analyses the work required of a Christian to fulfil the conditions of growth, and relates it to the life of a plant which needs heat, light, air, and moisture. The conditions come to the plant. 'It simply stands still with its leaves spread out in unconscious prayer, and Nature lavishes upon it these and all other bounties, bathing it in sunshine, pouring the nourishing air over and over it, reviving it graciously with its nightly dew' (p.138).

Conflict begins when a man forgets this and struggles to grow himself. 'He makes the church into a workshop when God meant it to be a beautiful garden. And even in his closet, where only should reign silence ... is heard the roar and tumult of machinery' (p.139). The most anxious people in the world are Christians who misunderstand the nature of growth. Drummond ends the chapter with a fine passage:

To abide in Christ, to be in position, that is all. Much work is done on board a ship crossing the Atlantic. Yet none of it is spent on making the ship go. The sailor but harnesses his vessel to the wind. He puts his sail and rudder in position, and lo, the miracle is wrought ... God gives the wind, and the water, and the heat; man but puts himself in the way of the wind, fixes his water-wheel in the way of the river, puts his piston in the way of the steam; and so holding himself in position before God's Spirit, all the energies of Omnipotence course within his soul ... (p.140)

"Death"

Drummond begins the chapter by asserting that Death is one of the outstanding things in Nature which has a spiritual equivalent, but ignorance and platitude has robbed the word of its power, 'its threat is gone for the modern world' (p.144). The meaning of Death
depends upon the meaning of Life, which for a physiologist involves the active functions of Assimilation, Waste, Reproduction and Growth, and is defined by Herbert Spencer in his *Principles of Biology* as 'The continuous adjustment of internal relations to external relations'. It is a matter of a living organism being 'in vital connection with its general surroundings', or in biological language, in the case of man, as being 'in correspondence with his environment' (p.147). Death, therefore, can be defined as a want of this correspondence, and may be partial or complete. A deaf man is dead to the world of sound. Complete death occurs when finally some important part breaks down:

The correlation with the other parts is very intimate, and the stoppage of correspondence with one means an interference with the work of the rest. Something central has snapped, and all are thrown out of work. The lungs refuse to correspond with the air, the heart with the blood. There is now no correspondence whatever with environment – the thing, for it is now a thing, is Dead. (pp.150-151)

After quoting Herbert Spencer on death by natural decay, from disease, and by accident, Drummond goes on to define Spiritual Death as 'a want of correspondence between the organism and the spiritual environment' (p.152). He describes the natural environment as 'the entire surroundings of the natural man, the entire external world in which he lives and moves and has his being', whether he is conscious of it or not. It can be thought of as widening areas of possible correspondence as one moves up the biological scale. Plants, insects, birds, and finally man, have access to more and more of the total environment, depending upon their capacity for correspondence. The spiritual world is 'simply the outermost segment, circle, or circles of the natural world' (p.157). Drummond continues:

Now of the great mass of living organisms, of the great mass of men, is it not to be affirmed that they are out of correspondence with this outer circle? Suppose, to make the final issue more real, we give this outermost circle of environment a name. Suppose we call it God. Suppose also we substitute a word for 'correspondence' to express more intimately the
personal relation. Let us call it Communion. We can now
determine accurately the spiritual relation of different sec-
tions of mankind. Those who are in communion with God live,
those who are not are dead. (pp.157-158)

Spiritual death can therefore be further defined as 'a want of
communion with God'. The unspiritual man who lives in the 'circum-
scribed environment of the present world' is spiritually dead but not
necessarily 'purposely irreligious, or directly vicious' (p.158). Those
who believe in a Creator, a Supreme Being, or a Great First Cause,
have a theology, but unless they have correspondence with this 'Unknown
God' they are dead. At the same time, without a religion of nature,
religion is only half complete. God is active in the whole, and the
Christian who seeks God in the outer, or 'spiritual' zone only, only
finds a part. 'He who knows not God in Nature only partially lives'
(p.165). Drummond insists however, that the converse is not true:

He who knows God only in Nature lives not. There is no
'correspondence' with an Unknown God, no 'continuous adjust-
ment' to a fixed First Cause. There is no 'assimilation' of
Natural Law; no growth in the Image of 'the All-embracing'.
To correspond with the God of Science assuredly is not to live.
"This is Life Eternal, to know Thee, the true God, and Jesus
Christ Whom Thou has sent". (p.165)

He goes on to reflect on the inadequacy of natural religion and
theism. 'Theism is the easiest of all religions to get, but the most
difficult to keep' (p.166). It is basically unstable and has always
fallen into 'the wildest polytheism' or into 'the blankest atheism'.
History testifies that the abandonment of belief in a personal God
leads to the total eclipse of virtue. Sin is both a turning away from
God, which results in a 'benumbing of the heart'; and selfishness,
'self-gratification rather than self-denial'. Both are equally
connected with Death in that they cause paralysis of the moral nature
through cutting off correspondence with God. 'The true environment
of the moral life is God' (p.171). The degree of correspondence with
this environment determines development. 'If I correspond with the
world, I become worldly; if with God, I become Divine ... To refuse to cultivate the religious relation is to deny to the soul its highest right - the right to further evolution ... You can dwarf a soul just as you can dwarf a plant by depriving it of a full environment' (pp.172-173).

"Mortification"

In the chapter headed "Mortification" Drummond begins by reminding his readers that the scientific definition of Death is 'A falling out of correspondence with environment', and that a soul which has no correspondence with the spiritual environment is spiritually dead. He goes on to discuss the problem which faces the newly born spiritual man, who has passed from death to life, and is in correspondence with a new environment. How is he to get out of correspondence with the old environment?

The moment the new life is begun there comes a genuine anxiety to break with the old. For the former environment has now become embarrassing. It refuses its dismissal from consciousness. It competes doggedly with the new Environment for a share of the correspondences ... The complex and bewildered soul, in fact, finds itself in correspondence with two environments, each with urgent but yet incompatible claims. (p.179)

Organic death and 'to go to heaven', which would be an immediate solution, is not an open option. The alternative is progressive withdrawal of correspondences with the old environment. 'Having opened up the new set of correspondences, he must deliberately close up the old. Regeneration in short must be accompanied by Degeneration' (p.181). Drummond suggests that the New Testament writers recommend three methods, Suicide, Mortification and Limitation, each being appropriate to different forms of temptation.

He uses the term suicide, not in its absolute sense, but to convey the need for abrupt and self-inflicted action to deal with the sins
of the appetites and passions. The correspondence of a drunkard with his wine can occasionally be broken gradually, but the immediate break is likely to be more effective. 'The expression "total abstinence" in such a case is a strictly biological formula' (p.183). Drummond then points to a peculiarity of the sinful state in which as a general rule, men are linked to evil mainly by a single correspondence. 'There may be only one avenue between the new life and the old, it may be but a small and subterranean passage, but this is sufficient to keep the old life in' (p.187). He goes on to suggest that as in the natural world the loss of a single vital correspondence, such as the functioning of the heart ensures death, so in the spiritual organism 'the disease of one member may involve the ruin of the whole' (p.187).

The second method of treatment, Mortification, is applicable to certain temptations that are not amenable to abrupt action. Mortification implies a gradual rather than a sudden process. Dealing with a sin such as ill-temper can be a long and humiliating discipline. 'The case now is not at all a surgical but a medical one, and the knife is here of no more use than in a fever' (p.191). He continues:

A specific irritant has poisoned his veins. And the acrid humours that are breaking out all over the surface of his life are only to be subdued by a gradual sweetening of the inward spirit ... he whose spirit is purified and sweetened becomes proof against these germs of sin. "Anger, wrath, malice and railing" in such a soil can find no root. (p.192)

The third method, Limitation, applies to correspondences which cannot be reduced by gradual mortification or cut short by sudden death. Some of these are only sinful when carried to extremes. 'The love of money up to a certain point is a necessity; beyond that it may become one of the worst of sins' (p.194). What that point is, is a matter for each man to determine for himself. There are other situations, areas of legitimate pleasure in which adjustment may be more difficult to determine. Drummond gives no specific examples here,
but argues that self-denial, or limitation results in a compensation which though difficult to see is always real and proportionate. Self-denial or limitation implies concentration. 'To concentrate upon a few great correspondences, to oppose to the death the perpetual petty larceny of our life by trifles - these are the conditions for the highest and happiest life' (p.196). Commenting on the text "He that loveth his life shall lose it, and he that hateth his life in this world shall keep it unto life eternal" (John 12.25), Drummond continues:

Christ does not say it is wrong to love life. He simply says it is loss. Each man has only a certain amount of life, of time, of attention - a definite measurable quantity. If he gives any of it to this life solely it is wasted. Therefore Christ says, Hate life, limit life, lest you steal your love for it from something that deserves it more. (p.197)

To hate life is to be interpreted as a matter of selecting a given area of our environment and strengthening correspondence with it. Although this may seem to some a poor life, a well chosen limited life really is the fuller life. 'The well-defined spiritual life is not only the highest life, but it is also the most easily lived. The whole cross is more easily carried than the half' (p.199). Drummond concludes by affirming that he who has drawn a boundary line, sharp and deep about his religious life finds the yoke easy and the burden light

'His faculties falling out of correspondence, slowly lose their sensibilities. And the balm of Death numbing his lower nature releases him for the scarce disturbed communion of a higher life. So even here to die is gain' (pp.199-200).

"Eternal Life"

The chapter "Eternal Life" is the longest in the book after the Introduction. In it, Drummond poses the question 'Do those who profess
to possess Eternal Life fulfil the conditions required by Science, or are they different conditions? In a word, is the Christian conception of Eternal Life scientific?" (p.204). He begins by describing Herbert Spencer's analysis of the relations between Environment and Life, as set out in his book *Principles of Biology*.

Some lives have more and fuller correspondence with Environment than others - the amount being determined by the complexity of the organism. As one moves up the scale from amoeba to man 'Life becomes fuller and fuller, richer and wider, more and more sensitive to an ever widening Environment as we rise in the chain of being' (pp.207-208). Death is a failure of the organism to adjust to some change in the Environment. The more complex organisms have greater capacity to adjust and are the longest lived. Drummond then quotes Spencer's definition as a hypothetical ideal state in which perfect continuing adjustment results in a form of eternal life:

"Perfect correspondence would be perfect life. Were there no changes in the environment but such as the organism had adapted changes to meet, and were it never to fail in the efficiency with which it met them, there would be eternal existence and eternal knowledge". (p.214)

Drummond affirms that the Spiritual World is such an Environment and is both perfect and eternal, and then puts alongside Spencer's definition the text, "This is Life Eternal, that they may know Thee, the only true God, and Jesus Christ whom Thou hast sent" (John 17.3), which he describes as the definition of Eternal Life laid down by Christ. He then comments:

*Life Eternal is to know God. To know God is to "correspond" with God. To correspond with God is to correspond with a Perfect Environment. And the organism which attains to this, in the nature of things must live for ever. Here is "eternal existence and eternal knowledge".* (p.215)

Drummond goes on to qualify this statement. The Future Life is not a 'prolonged existence, an eternal monotony, a blind and indefinite continuance of being' (p.216). Everlastingness is part of the concept
of Eternal Life, but the essence is knowing. This is the highest possible correspondence in the evolution of complex beings.

Drummond then argues that if the world with which biology deals evolution culminates in knowledge, and that if there is to be further evolution it is in this correspondence that one would expect it to take place. In its highest form, beyond science in the realm of religion, this faculty of knowledge is expressed as communion. The question then arises whether this perfect correspondence, this 'knowing' of God, can be sustained beyond physical death.

The problem is, with a material body and a mental organisation inseparably connected with it, to bridge the grave. Emotion, volition, thought itself, are functions of the brain. When the brain is impaired, they are impaired. When the brain is not, they are not. Everything ceases with the dissolution of the material fabric; muscular activity and mental activity perish alike. (p.222)

Drummond quotes a number of authorities who suggest that neither recent philosophy nor physiology allow any place for individual immortality or the existence of a soul, but goes on to point out that science does not rule out the possibility completely, and some authorities hesitate to draw conclusions. That mental and physiological processes are related is beyond controversy, but how they are related is still unknown. Speculation is not barred, 'a permission to go on is often the most that Science can grant to Religion' (p.225), but such speculations are probably superfluous, because for the Christian the fact of immortality rests upon a different basis. That basis is simply the doctrine 'as it came from the lips of Christ'. Drummond then quotes the text "He that hath the Son of God hath life and he that hath not the Son hath not life" (John 5.12) and continues 'This, as we take it, defines the correspondence which is to bridge the grave. This is the clue to the nature of the Life that lies at the back of the spiritual organism' (pp.227–228). He then quotes at length from Romans 8.35–39, on the theme that nothing can separate us from the
love of God "which is in Jesus Christ our Lord".

He goes on to discuss the objection that there is a discontinuity in the intrusion of something from outside the natural environment, and argues that what we call Nature is only part of the total environment, and that it is not unreasonable to expect that spiritual environment provides man with his spiritual faculties. They are a gift but are in no sense ready made. It is a matter of growth. "... the spiritual faculties are organised in the spiritual protoplasm of the soul, just as the other faculties are organised in the protoplasm of the body" (p.233). Drummond then affirms that the Christian argument for Immortality rests on the Resurrection of Jesus Christ and his promise to give men abundant life. "And that He meant literal Life, literal spiritual and Eternal Life, is clear from the whole course of His teaching and acting" (p.235). Further definition of spiritual life is no more to be expected than a similar definition of natural life:

The effort to detect the living Spirit must be at least as idle as the attempt to subject protoplasm to microscopic examination in the hope of discovering Life. We are warned, also, not to expect too much. "Thou canst not tell whence it cometh or whither it goeth". This being its quality, when the Spiritual Life is discovered in the laboratory it will possibly be timè to give it up altogether. It may say, as Socrates of his soul, "You may bury me - if you can catch me". (p.237)

Drummond then turns to the question of personal response. To inherit Eternal Life a man must cultivate correspondence with the Eternal. As he does this a parallel process occurs. The Environment has the power to transform organisms, develop or suppress function, and to determine growth. He then asks 'Reaching out his eager and quickened faculties to the spiritual world around him, shall he not become spiritual? In vital contact with Holiness, shall he not become holy?' (p.242). He goes on to suggest that sanctification can be considered in terms of regeneration and draws a parallel with the adaptation of
certain forms of aquatic life to terrestrial life:

Will the evolutionist who admits the regeneration of the frog under the modifying influence of a continued correspondence with a new environment, care to question the possibility of the soul aquiring such a faculty as that of Prayer, the marvellous breathing-function of the new creature, when in contact with the atmosphere of besetting God? Is the change from the earthy to the heavenly more mysterious than the change from the aquatic to the terrestrial mode of life? (p.244)

Drummond ends the chapter by re-affirming that the quality of everlastingness belongs to a single set of correspondences and other correspondences which do not share this quality must be shed if man is to enter Eternal Life. 'The final preparation, therefore, for inheriting of Eternal Life must consist in the abandonment of the non-eternal elements. These must be unloosed and dissociated from the higher elements. And this is effected by a closing catastrophe - Death' (p.248). Death is the final sifting of all the correspondences and is an indispensible factor of the higher life. This is a function of Nature and its last and greatest contribution to mankind. 'Over the mouth of the grave the perfect and the imperfect submit to their final separation. Each goes to its own - earth to earth, ashes to ashes, dust to dust, Spirit to Spirit. "The dust shall return to the earth as it was; and the Spirit shall return to God who gave it" ' (pp.249-250).

"Environment"

Having argued that eternal Life is a matter of correspondence or Communion with the Eternal Environment of God, Drummond now examines the attitude necessary to maintain and deepen that correspondence. He begins by discussing the relationship between heredity and environment, which he describes as the 'master-influences of the organic world' (p.255), and points out that he who understands these influences
and continually seeks a more perfect adjustment to them has the secret of 'a well ordered and successful life'. He goes on to suggest that heredity and environment play an equivalent role in the spiritual life in forming and transforming the soul. Few things are less understood than the conditions of the spiritual life, yet living in the spiritual world is as simple as living in the natural world, 'the conditions of life in the one are the conditions of life in the other' (p.257).

He comments briefly on the relative importance of the two factors, suggesting that the main influence must be assigned to Heredity, but as a matter of practice, concern must be directed to Environment.

No man can select his own parents. But every man to some extent can choose his own Environment. His relation to it, however largely determined by Heredity in the first instance, is always open to alteration. And so great is his control over Environment and so radical its influence over him, that he can so direct it as either to undo, modify, perpetuate or intensify the earlier hereditary influences within certain limits. (pp.257-258)

Drummond then refers to the capacity of the Environment to induce change in a species, discussing experiments conducted on birds to show how alteration in diet can modify the digestive system, and mentioning the way in which certain animals adapt in colour and marking to their habitat. He then goes on to point out that the main function of Environment is not to modify but to sustain. 'Our Environment is that in which we live and move and have our being ... I am, only as I am sustained. I continue only as I receive. My Environment may modify me, but it has first to keep me' (p.261).

The same principle applies in the spiritual world. The spiritual Environment is God, without whom 'there is no life, no thought, no energy, nothing' (p.265). The cardinal error in the religious life is to attempt to live without an Environment. It is a matter of dynamics. The energy the soul expends must first be taken into it from without. 'We are not Creators, but creatures, God is our refuge and strength'
In the natural world we act on this law unconsciously, but in the spiritual world we have to learn. Drummond suggests three things especially necessary to keep in view:

The first is that the organism contains within itself only one-half of what is essential to life; the second is that the other half is contained in the Environment; the third, that the condition of receptivity is simple union between the organism and the Environment. (p.268)

Expanding on the religious meaning of the first of these propositions, he suggests that it is the repetition of the evangelical confession of the helplessness of man. The dependence of the soul is both a law of Nature and a fact insisted on in the New Testament. 'The condition of entrance into the spiritual kingdom is to possess the child-spirit — that state of mind combining at once the profoundest helplessness with the most artless feeling of dependence' (p.271).

On the second proposition, Drummond suggests that once a person realises his helplessness he will no longer waste time in trying to manufacture energy and will turn to the spiritual environment where he finds adequate provision for his needs. 'God as the Environment of the soul has been from the remotest age the doctrine of all the deepest thinkers in religion' (p.274). It is profoundly expressed in the psalms. 'The psalmist's "God is our refuge and strength" is only the earlier form, less defined, less practicable, but not less noble, of Christ's "Come unto Me, and I will give you rest"' (p.276).

Man has a sense of incompleteness which expresses itself initially 'by an unexplained restlessness or dull sense of want' (p.278). This deepens into a mental agony when the intellect considers the abyss beyond the verge of the mental horizon. The problem appears graver still when man explores his moral and social nature and asks 'Is the unfinished self to remain unfinished?' (p.279). A further witness to man's incompleteness can be seen in prayer. 'It is the symbol at once of his littleness and of his greatness. Here the sense of imper-
fection, controlled and silenced in the narrower reaches of his being becomes audible' (p.279).

Drummond then turns to the third of his propositions and rephrases it in the form of a question. 'How does that which is becoming perfect avail itself of its perfecting Environment?' The answer is just as in Nature 'The condition is simple receptivity', and he ends the chapter by stating that 'Christ has condensed the whole truth into one memorable sentence, "As the branch cannot bear fruit of itself except it abide in the Vine, no more can ye except ye abide in Me". And on the positive side, "He that abideth in Me the same bringeth forth much fruit"' (p.283).

"Conformity to Type"

This chapter might well be sub-titled "Embryology of the New Life". Drummond discusses the question of formation and growth from the earliest stages in natural and spiritual life, based on the state of knowledge of his time, in which he could confidently state that there was no visible difference in the germs of oak, palm, or man. 'No matter into what strangely different forms they may afterwards develop, no matter whether they are to live on land or sea, creep or fly, swim or walk, think or vegetate, in the embryo as it first meets the eye of Science, they are indistinguishable' (p.288). He asks what is the mysterious something which establishes the form and directs the growth of each species and includes a vivid quotation from Huxley's Lay Sermons describing cell division and growth. He then suggests that according to the Law of Conformity to Type 'every living thing that comes into the world is compelled to stamp upon its offspring the image of itself. The dog, according to its type, produces a dog; the bird a bird. The Artist who operates upon matter in this subtle
way and carries out this law is Life' (p.292). Drummond then draws the spiritual analogy in terms of the growth of the life of Christ in the soul of man.

As...the Bird-Life builds up a bird, the image of itself, so the Christ-Life builds up a Christ, the image of Himself, in the inward nature of man. When a man becomes a Christian the natural process is this: The Living Christ enters into his soul. Development begins. The quickening Life seizes upon the soul, assimilates surrounding elements, and begins to fashion it ... And all through Life this wonderful, mystical, glorious, yet perfectly definite process, goes on "until Christ be formed" in it. (pp.293-294)

Drummond acknowledges that there is much mystery in both biology and in the spiritual life, but continues to assert that the laws of the natural and the spiritual are the same and suggests that there is no fallacy in speaking of the 'Embryology of the New Life'. The fact that the New Testament uses the language of biology is significant. He then pursues the analogy in terms of protoplasm which he notes has two qualities, the capacity for life, and plasticity. The bases of the spiritual equivalent are the mind, character, will and affections of the natural man. This basis is spiritually lifeless.

'However active the intellectual or moral life may be, from the point of this other Life it is dead ... It has not yet been "Born of the Spirit" ' (p.299). Nevertheless, this basis, or spiritual protoplasm has a capacity and a yearning for God. It also has a universal dimension.

In every land and in every age there have been altars to the Known or Unknown God. It is now agreed as a mere question of anthropology that the universal language of the human soul has always been "I perish with hunger". This is what fits it for Christ. There is a grandeur in this cry from the depths which makes its very unhappiness sublime. (p.300)

Turning to the question of plasticity or mouldableness, Drummond suggests that it increases as one rises up the scale from the inorganic, through plant and animal to man, who is the most mobile sensitive, impressionable and open to change. 'This marvellous plas-
ticity of mind contains at once the possibility and prophecy of its transformation. The soul, in a word, is made to be converted' (p.306).

On the process of change itself, Drummond makes the point that there is a new element not shared by lower forms of life - the conscious power of choice. For a choice to be made the mind must have adequate knowledge of what it is to choose. This is provided for in the incarnation. 'There we find how the Christ-Life has clothed Himself with matter, taken literal flesh, and dwelt among us' (p.305). But Christ is also the agent of change. Drummond asks 'Can the protoplasm conform itself to its type? Can the embryo fashion itself?' and he answers 'Conformity to Type ... is secured by the type. Christ makes the Christian'.

He draws a parallel with the automatic processes of the natural body, breathing, blood circulation, heart rhythm, secretion, digestion and reflex action. These functions are provided for man ready made, yet he turns upon his soul and attempts to organise it himself.

0 preposterous and vain man, thou who couldest not make a finger nail of thy body, thinkest thou to fashion this wonderful, mysterious, subtle soul of thine after the ineffable Image? Wilt thou ever permit thyself to be conformed to the Image of the Son? Wilt thou, who canst not add a cubit to thy stature, submit to be raised by the Type-Life within thee to the perfect stature of Christ? (p.308)

Pointing out that this is a humbling conclusion and men will resent it, he draws attention to a number of passages from Scripture which are phrased in the passive voice and support his argument, e.g., "The new man which is renewed in knowledge after the Image of Him that created him" (Colossians 3.10). At the same time, man has an essential part to play:

Let him choose Life; let him daily nourish his soul; let him for ever starve the old life; let him abide continuously as a living branch in the Vine, and the True-Vine Life will flow into his soul, assimilating, renewing, conforming to Type, till Christ, pledged by His own law, be formed in him. (p.312)
Drummond draws the chapter to a close by inviting his readers to mark the splendour of the whole scheme of salvation both in its individual and evolutionary aspects. 'It is not, vaguely, "to get to heaven". It is to be conformed to the Image of the Son ... to attain to the Supreme Beauty'. And all this within an evolving Unity of man and man, God and man, God and Christ and man, till "all shall be one". He suggests that now the revelation is made to it, Science should recognise this as the missing point in Evolution and the climax to which all Creation tends. He ends with a passage which shows similarity with the thought of Teilhard de Chardin, a topic which will be dealt with later in the thesis.

Hitherto Evolution had no future. It was a pillar with marvellous carving, growing richer and finer towards the top, but without a capital; a pyramid, the vast base buried in the inorganic, towering higher and higher, tier above tier, life above life, mind above mind, ever more perfect in its workmanship, more noble in its symmetry, and yet withal so much the more mysterious in its aspiration. The most curious eye, following it upwards saw nothing. The cloud fell and covered it. Just what men wanted to see was hid. The work of the ages had no apex. But the work begun by Nature is finished by the Supernatural ... And as the veil is lifted by Christianity it strikes men dumb with wonder. For the goal of Evolution is Jesus Christ. (pp.313-314)

"Semi-Parasitism"

In the next two chapters, "Semi-Parasitism" and "Parasitism", Drummond expounds the theme 'work out your own salvation' in practical terms, as a necessary compliment to the receptive attitude outlined in "Conformity to Type". He begins by discussing the acquired habit of parasitism in Nature as exhibited in the Dodder Plant, Mistletoe, and the Hermit Crab, defining parasites as 'the paupers of Nature ... forms of life which will not take the trouble to find their own food, but borrow or steal it from the more industrious' (p.317). The naturalist, he suggests, regards parasitism as one of the gravest crimes

Thou shalt evolve, thou shalt develop all thy faculties to the full, thou shalt attain to the highest conceivable perfection of thy race - and so perfect thy race - this is the first and greatest commandment of Nature. But the parasite has no thought for its race, or for perfection in any shape or form. It wants two things - food and shelter. How it gets them is of no moment. Each member lives exclusively on its own account, an isolated, indolent, selfish, and backsliding life.

(p.319)

Drummond apparently sees no incongruity in using moral terms to describe the behaviour of lower forms of life, and goes on to speak of Nature pouring out the 'vial of wrath' on those guilty of the double sin of disobeying the fundamental law of its own being and taxing the innocent.

The hermit-crab, which he regards as a semi-parasite, utilises the cast off shell of a mollusc as a home, and suffers the penalty of losing its own protective abdominal shell, and the atrophy and wastage of its fourth and fifth pairs of limbs. It is, he says, 'a case of physiological backsliding' (p.324). It achieves relative safety at the cost of freedom and independence. He goes on to state the spiritual principle to be illustrated as 'Any principle which secures the safety of the individual without personal effort or the vital exercise of faculty is disastrous to moral character' (p.326). He then sketches the 'Parasitic Doctrine of Salvation' in two forms. 'The first is the doctrine of the Church of Rome; the second, that represented by the narrower Evangelical Religion' (p.326). The sharply worded passages which follow must have raised hackles in both wings of the church. The following brief extracts must suffice to give the drift of his argument. Roman Catholicism, he suggests, offers to the masses 'a molluscan shell'. By sheltering themselves within its pale, they are "Safe", but the safety offered is that of an institution:

It is a salvation recommended to men by all that appeals to the motives in most common use with the vulgar and the super-
stitious, but which has as little vital connection with the individual's soul as the dead whelk's shell with the living Hermit ... it ministers falsely to the deepest need of man, reduces the end of religion to selfishness, and offers safety without spirituality. (pp.327-329)

The form of parasitism in the narrower Evangelical school is altogether different. The parasite in this case seeks its shelter not in a church but in a doctrine or a creed:

The perverted Doctrine of the Atonement, which tends to beget the parasitic habit, may be defined in a single sentence ... "You believe Christ died for sinners; you are a sinner; therefore Christ died for you; and hence you are saved". Now what is this but another species of molluscan shell? Could any trap for a benighted soul be more ingeniously alined? It is not superstition that is appealed to this time; it is reason. (pp.330-331)

Drummond notes the affinity between the two positions. The fundamental idea of both is Escape. 'Man's chief end is to "get off"' and 'Jesus Christ is the One who gets us off'. The mechanical nature of the transaction leaves the soul without stimulus. "He who is unjust is unjust still; he who is unholy is unholy still' (p.335). Unless the parasite's idea of salvation involves 'a trusting in Christ in order to likeness to Christ, in order to that holiness without which no man shall see the Lord, ... the parasite's hope is absolutely vain' (pp.335-336). He continues:

So far from ministering to holiness, that is to wholeness, parasitism ministers to exactly the opposite. One by one the spiritual faculties droop and die, one by one from lack of exercise the muscles of the soul grow weak and flaccid, one by one the moral activities cease. So from him that hath not, is taken away that which he hath, and after a few years of parasitism there is nothing left to save. (p.336)

He ends the chapter by dealing briefly with the objection that parasitism is opposed to the doctrine of Free Grace, accepting that salvation truly is the free gift of God, but stressing that it must be the beginning of growth. 'To pause where we should begin ... to seek a mechanical security that we may cover inertia and find a wholesale salvation in which there is no personal sanctification - this
is Parasitism' (p.337).

"Parasitism"

If the chapter on "Semi-Parasitism" proved disturbing in Roman Catholic and Evangelical circles, the chapter on "Parasitism" must have proved equally disturbing to many in the main stream of church life. Drummond begins with the example of a true natural parasite, the Sacculina, a minute organism found within the body of the Hermit Crab. It nourishes itself on the body of the crab through root like filaments which penetrate the living tissue. It is apparently a degenerate form of an organism which originally had an oval body and six feet, and was completely mobile and independent. Similar forms of life developed into shrimps, crabs and other crustaceans, but the Sacculina deteriorated into an amorphous and immobile sac. Again using emotive language, Drummond suggests that the Sacculina violated the law of Nature, disregarded evolution, evaded the great law of work and was accordingly punished. 'Its punishment was simply that it was a Sacculina when it might have been a Crustacean'. It deteriorated into a torpid sac 'doomed to a living death' (p.344).

The natural principle illustrated is again 'the physiology of backsliding'. The spiritual principle illustrated is that of degeneration and atrophy. Spiritual degeneration occurs in a similar way.

The penalty of backsliding is not something unreal and vague, some unknown quantity which may be measured out to us disproportionately, or which perchance, since God is good, we may altogether evade. The consequences are already marked within the structure of the soul. So to speak, they are physiological. The thing affected by our indifference or our indulgence is not the book of final judgement but the present fabric of the soul. The punishment of degeneration is simply degeneration - the loss of functions, the decay of organs, the atrophy of the spiritual nature. (p.346)
Drummond goes on to state that there are two main causes known to the biologist which induce the parasitic habit, 'the temptation to secure safety without the vital exercise of faculties', and the 'disposition to find food without earning it'. Having dealt with the first under the heading of Semi-Parasitism, he now considers the second, and suggests that going to church is one of the things in the religious world which is liable to induce parasitism. He accepts that churchgoing itself is 'an invaluable aid to the ripe development of the spiritual life', and that public worship has a firm place in the national religious life, but asserts that even the most perfect church affords to worshippers a temptation to parasitism. One man is set apart to prepare spiritual truth for the rest, he himself is nourished in the process, but although his hearers may be enriched, they do not fully develop their capacity for selecting and appropriating truth for themselves. He has a special warning to those in churches where worship is subordinated to the sermon.

The hearer never really learns, he only listens. And while truth and knowledge seem to increase, life and character are left in arrear ... The organism acquires a growing immobility, and finally exists in a state of entire intellectual helplessness and inertia. So the parasitic Church-member, the literal "adherent", comes not merely to live only within the circle of ideas of his minister, but to be content that his minister has these ideas - like the literary parasite who fancies he knows everything because he has a good library. (pp.352-353)

Drummond sees the danger in a more serious form for those whose worship is liturgical, and sketches an amusing picture of the sincere man who sets out in the Christian race with the best of intentions.

Connecting himself with a Church he is no less interested than surprised to find how rich is the provision there for every part of his spiritual nature. Each service satisfies or surfeits ... What more natural than that he should gradually exchange his personal religion for that of the congregation? ... What more tempting than to give up private prayer for the easier worship of the liturgy or of the church? ... Hanging admiringly, or even enthusiastically, on the lips of eloquence, his senses now stirred by ceremony, now soothed by music, the parasite of the pew enjoys his weekly worship - his character
untouched, his will unbraced, his crude soul unquickened and unimproved. (pp.353-354)

He sees the whole system as one which tends to destroy development and arrests the genuine culture of the soul. Church members become mere consumers. 'Their only spiritual exercise is the automatic one of imbition, the clergyman being the faithful Hermit-crab who is to be depended upon every Sunday for at least a week's supply' (pp.354-355).

After observing that there may be compensations for the flock of a poor minister where the 'really hungry will exert themselves to procure their own supply', Drummond moves on to consider the parasitism induced by certain abuses in systems of theology. Theology he sees as having three great departments, criticism, dogmatism, and evangelism. 'Without the first there is no guarantee of truth, without the second no defence of truth, and without the third, no propagation of truth' (pp.358-359). Theology can be no more dispensed with than the Church, but there is a tendency to exalt orthodoxy above all other elements in religion and to make possession of sound beliefs equivalent to the possession of truth. He asks, 'If the greatest minds of the Church's past, having exercised themselves profoundly upon the problems of religion, formulated as with one voice a system of doctrine, why should the humble inquirer not gratefully accept it?' (p.359). He answers.

Just because it is all cut and dry. Just because it is ready-made. Just because it lies there in reliable, convenient and logical propositions. The moment you appropriate truth in such a shape you appropriate a form. You cannot cut and dry truth. You cannot accept truth ready-made without it ceasing to nourish the soul as truth. You cannot live on theological forms without becoming a Parasite and ceasing to be a man. (p.360)

He goes on to state that there is no worse enemy to a living Church than a propositional theology, with the latter controlling the former by traditional authority. 'An infallible standard is a temp-
tation to a mechanical faith' (p.361). He then discusses the question of infallibility in relation to the Bible. 'The answer is that though the Bible is infallible, the Infallibility is not in such a form as to become a temptation. There is the widest possible difference between the form of truth in the Bible and the form in theology'. He continues in a passage which illustrates his understanding of the use of the Bible:

In theology truth is propositional ... But truth in the Bible is a fountain. It is a diffused nutriment, so diffused that no one can put himself off with the form ... It is seen, discerned, not demonstrated. It cannot be bolted whole, but must be slowly absorbed into the system. Its vagueness to the mere intellect, its refusal to be packed into portable phrases, its satisfying unsatisfyingness, its vast atmosphere, its finding of us, its mystic hold of us, these are the tokens of its infinity. (pp.362-363)

Drummond ends the chapter by stressing that man cannot use truth as it stands. 'He must work, think, separate, dissolve, absorb, digest; and most of these he must do for himself and within himself' (p.363). He allows for philosophical doubt which is required for a life-long learning and suggests that 'It is more necessary for us to be active than to be orthodox' (p.364)

"Classification"

In this, the final chapter of the book, Drummond recapitulates some of his earlier ideas and returns to the theme of the distinction implied by the text "That which is born of the flesh is flesh, and that which is born of the Spirit is spirit" (John 3.6). He contrasts the beauty of silica crystals taken from the hills of Arran with the beauty of tiny shells from the sands of Barbados. Both are attractive, the material is chemically the same, yet they belong to different worlds. The shells can only be formed by 'Life'. The crystals form under the Law of Crystallisation. He then draws the spiritual analogy:
We propose to enquire whether among men, clothed apparently with a common beauty of character, there may not yet be distinctions as radical as between the crystal and the shell; and further, whether the current classification of men, based upon Moral Beauty, is wholly satisfactory either from the standpoint of Science or of Christianity. (p.373)

He points out that in the entire European philosophy of the last three hundred years 'Moral Beauty is persistently regarded as synonymous with religion and the spiritual life' (p.375). He then argues that there is a difference between the underlying basis of moral beauty and spiritual beauty. The cardinal distinction is based on regeneration, as described in the law of Biogenesis which Drummond defines in the following terms.

That which is Mineral is Mineral; that which is Flesh is Flesh; that which is Spirit is Spirit. The mineral remains in the inorganic world until it is seized upon by a something called Life outside the inorganic world; the natural man remains the natural man, until a Spiritual Life from without the natural life seizes upon him, regenerates him, changes him into a spiritual man. (pp.380-381)

He asserts that this is more than a change of direction. It is a change of nature and 'it is certain that the Founder of the Christian Religion intended this to be the keystone of Christianity' (p.381). Drummond grants that man as a moral animal can, by obeying the law of his nature, arrive at great natural beauty of character, but affirms that 'no progress along that line can project him into the spiritual sphere' (p.382). He goes on to ask whether the distinction is palpable and suggests that although the difference as regards moral beauty may be imperceptible, the difference as regards future potential is another matter. 'In dealing with a man of fine moral character, again, we are dealing with the highest achievement of the organic kingdom. But in dealing with the spiritual man we are dealing with the lowest form of life in the spiritual world ... The spiritual man is a mere unformed embryo' (pp.385-386).

After discussing the possibility that as the organic can be dis-
tinguished from the inorganic by appropriate scientific testing, equivalent tests in the spiritual sense might be applied to determine spiritual life, Drummond concludes that 'Those therefore who find within themselves, and regularly exercise, the faculties for corresponding with the Divine Environment, may be said to live the Spiritual Life' (p.390). He then goes on to argue at some length that it is reasonable and scientific to include the Kingdom of Christ within the scheme of Evolution as third tier beyond the Inorganic and Organic Kingdoms.

The highest organism of the Second Kingdom — simple, immobile, dead as the inorganic crystal, towards the sphere above — must be vitalised afresh. Then from a mass of all but homogeneous "protoplasm" the organism must pass through all the stages of differentiation and integration, growing in perfectness and beauty under the unfolding of the higher Evolution, until it reaches the Infinite Complexity, the Infinite Sensibility, God. So the spiritual carries on the marvellous process to which all lower Nature ministers, and perfects it when the ministry of lower Nature fails. (pp.402-403)

Drummond raises the interesting hypothesis that there could be a Fourth Kingdom for which the Spiritual is a preparation whose characteristics must necessarily remain unknown to us. Meantime he defines the goal of organisms in the Third Kingdom in terms of holiness and perfection 'to be "holy as He is holy, and pure as He is pure"' (p.403). He then deals with the objection that the attempt to incorporate the Spiritual Kingdom involves a break in the harmony of the evolutionary process by pointing out that the emergence of life took place at a barrier point between the inorganic and organic kingdoms. Evolution began 'with some primeval nebulous mass in which lay potentially all future worlds'. When finally there emerged 'the cooled and finished earth', a barrier interposes 'and the process has to begin at the beginning with the creation of Life' (p.405). The second barrier introduced by Christianity between the Natural and Spiritual Kingdoms by no means destroys the doctrine of Evolution. It becomes necessary to frame a larger doctrine. 'What we are reaching, in short,
is nothing less than the evolution of Evolution' (p.407).

Drummond then returns to the question of exclusiveness.

The broad impression gathered from the utterances of the Founder of the Spiritual Kingdom is that the number of organisms to be included in it is to be comparatively small. The outstanding characteristic of the new Society is to be its selectness. "Many are called", said Christ, "but few are chosen". And when one recalls, on the one hand, the conditions of membership, and, on the other, observes the lives and aspirations of average men, the force of the verdict becomes apparent. (pp.410-411)

He goes on to suggest that throughout Nature 'the number ultimately selected for preferment is small', and refers briefly to the apparent waste of seed, of pollen, and of human lives. He returns to the image of a pyramid.

A comprehensive view of the whole field of Nature discloses the fact that the circle of the chosen slowly contracts as we rise in the scale of being. Some mineral, but not all, becomes vegetable; some vegetable, but not all, becomes animal, some animal, but not all, becomes human; some human but not all, becomes Divine. Thus the area narrows. At the base is the mineral, most broad and simple; the spiritual at the apex, smallest, but most highly differentiated. So form rises above form, Kingdom above Kingdom. Quantity decreases as quality increases. (pp.411-412)

Drawing his arguments to a close, Drummond recapitulates his vision of evolution as 'the majestic spectacle of the rise of Kingdoms towards scarcer yet more noble forms, and simpler yet diviner ends'. To Science the process is simply Evolution, to Christianity, 'discerning the end through the means' it is Redemption. Finally he writes.

And these Kingdoms rising tier above tier in ever increasing sublimity and beauty, their foundations visibly fixed in the past, their progress, and the direction of their progress, being facts in Nature still, are the signs which, since the Magi saw His star in the East, have never been wanting from the firmament of truth, and which in every age with growing clearness to the wise, and with ever-gathering mystery to the uninitiated, proclaim that "the Kingdom of God is at hand". (p.414)
Concluding Remarks

Drummond left England in June, 1883, just after publication of Natural Law but before it had reached the booksellers, in order to carry out a scientific expedition in Central Africa at the invitation of the African Lakes Company. He returned, nine months later, in April 1884, to find himself a celebrity. James Young Simpson states that by the time he set foot in Britain again, sixteen thousand copies had been published and before the end of the year, eighteen thousand more were to be called for. He suggested that freshness of thought, perfection of style and marvellous felicity of illustration were not enough to account for the public demand 'there was in it a response to a yearning in the spirit of the age'.22

The widespread public welcome given to Natural Law was not fully echoed in professional circles. Adam Smith states 'No volume of our time has provoked more bitter and passionate blame. It aroused both the odium theologicum and that which is scarcely less savage, the odium scientificum'.23 Scientists were disturbed by the introduction of religious concepts into evolutionary theory. Theologians and conservative churchmen found it hard to accept his unorthodox views and criticism of simplistic forms of salvation. A full analysis of the criticism of Drummond's contemporaries lies outside the scope of this thesis but an attempt will be made in a later section to consider his major lines of thought in relation to current theories.

Drummond was much influenced by his visit to Africa and his later journeys to Australia and the Far East. The views contained in Natural Law in the Spiritual World must be set against subsequent writing. These too, must now be summarised and examined.

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23. Adam Smith, p.222.
A TROPICAL AFRICA

Introduction

Although the book *Tropical Africa* was not published until 1888, some four years after Drummond's return from his visit to Central Africa, it is appropriate to consider it at this point in the thesis. It contains material from his travel diaries, addresses given to various audiences soon after his return, and certain scientific papers. It is a very varied collection in style and content, and although at first sight might not seem particularly relevant to the topic of spirituality, when read as a sequel to *Natural Law in the Spiritual World*, provides valuable material for reflection on the practical working of Drummond's faith in his own life, and indicates something of his stature in secular society. The chapter headings are as follows:

I The Water-route to the heart of Africa: The rivers Zambesi and Shire.
II The East African Lake country: Lakes Shirwa and Nyassa.
III The Aspect of the heart of Africa: The Country and People.
IV The Heart-disease of Africa: Its pathology and cure.
VI The White Ant: A Theory.
VIII A Geological Sketch.
IX A Political Warning.
X A Meteorological Note.

The visit was instigated by Mr. James Stevenson, F.R.G.S., of Largs, who was chairman of the African Lakes company, and who donated the sum of £6,000 to endow a Chair of Natural Science at the Free Church College, Glasgow, in the expectation that Drummond should be its first occupant. The Company had been formed in 1878 by a group of Glasgow businessmen in order to take advantage of the opportunities
created by David Livingstone's Zambesi Expedition of 1859. Drummond's interpretation of the role of the company was 'to open up and develop the regions of East Central Africa from the Zambesi to Tanganyika; to make employments for the native peoples, to trade with them honestly, to keep out rum, and, so far as possible, gunpowder and fire-arms, and to co-operate and strengthen the hands of the missionary' (p.81).

His own brief was to conduct a scientific examination of the countries extending to Lake Tanganyika, and he was given special leave of absence for the visit by the College Committee. He left Scotland in June 1883 and returned home in April 1884. In the Preface he gives the background to the production of the book, stating that he originally struggled to evade the obligation, and continues:

... but having recently had to lecture on African subjects to various learned and unlearned Societies in England and America, it has been urged upon me that a few of the lecture-notes thrown into popular form might be useful as a general sketch of East Central Africa. Great books of travel have had their day. But small books, with the larger features of a country lightly sketched, and just enough of narrative to make you feel that you are really there, have a function in helping the imagination of those who have not breath enough to keep up with the great explorers. (pp. v-vi)

The comments which follow do not represent a full analysis of the book and are limited to the highlighting of a number of incidents which seem to bear indirectly on his practical spirituality. They

1. Livingstone described the main object of the Zambesi Expedition as being 'to extend the knowledge already attained of the geography, and mineral and agricultural resources, of Eastern and Central Africa; to improve our acquaintance with the inhabitants, and to endeavour to engage them to apply themselves to industrial pursuits, and to the cultivation of their lands, with a view to the production of raw material to be exported to England in return for British manufactures; and it was hoped that, by encouraging the natives to occupy themselves in the development of the resources of the country, a considerable advance might be made towards the extinction of the slave trade, as they would not be long in discovering that the former would eventually be a more certain source of profit than the latter' (TA p.80). (Further references are given after quotations in the text)
are grouped under three headings; descriptive material, political papers, and scientific notes.

**Descriptive material**

Chapters I, II, III and V, taken together, represent a fine piece of descriptive writing and convey clearly the impact of the country and its people on Drummond's thinking. He speaks of the experience as 'an education in the meaning and history of man ... It is to have watched the dawn of evolution. It is to have the great moral and social problems of life, of anthropology, of ethnology, and even of theology, brought home to the imagination in the most new and startling light' (p.4).

In Chapter I, he discusses the question of alternative routes from the coast to the interior, and goes on to describe Zanzibar, his passage down the coast by steamer to the port of Quelimane, his journey up the rivers Zambezi and Shiré, and finally the overland traverse to Blantyre. His opening sentence echoes the confident tones of the lecturer before a responsive and expectant audience.

Three distinct Africas are known to the modern world - North Africa, where men go for health; South Africa, where they go for money; and Central Africa, where they go for adventure. The first, the old Africa of Augustine and Carthage, everyone knows from the history; the geography of the second, the Africa of the Zulu and the diamond, has been taught to us by two Universal Educators - War and the Stock-Exchange; but our knowledge of the third, the Africa of Livingstone and Stanley, is still fitly symbolised by the vacant look upon our maps which tells how long this mysterious land has kept its secret. (p.3)

In Chapter II, "The East African Lake country: Lakes Shirwa and Nyassa", he writes positively of the work of the Livingstonia and Blantyre missionaries who he describes as 'brave, efficient, single-hearted men, who need our sympathy more than we know, and are equally above our criticism and our praise' (p.42). He paints a vivid
picture of the condition of a native village on Lake Nyassa:

I tumbled into it early one morning, out of the Lala's dinghy, and lost myself at once in an endless labyrinth of reeking huts. Its filth was indescribable, and I met striken men, at the acute stage of smallpox, wandering about the place at every turn, as if infection were a thing unknown. The chief is the greatest slaver and worst villain on the lake, and impaled upon poles all round his lodge, their ghastly faces shrivelling in the sun, I counted forty human heads. (p.47)

He goes on to say that this was not typical, being Arab rather than African, and that the native villages were 'rarely so large, seldom so compact, and never so dirty'. He concludes the chapter with the contrast offered by Bandawé, the headquarters of the Scotch Livingstonian Mission and pays a special tribute to Dr. and Mrs. Laws:

In reality no words can be a fit witness here to the impression made by Dr. Laws, Mrs. Laws, and their few helpers, upon this singular and apparently intractable material. A visit to Bandawé is a great moral lesson. And I cherish no more sacred memory of my life than that of a communion service in the little Bandawé chapel, when the sacramental cup was handed me by the bare black arm of a native communicant - a communicant whose life, tested afterwards in many an hour of trial with me on the Tanganyika plateau, gave him perhaps a better right to be there than any of us. (p.48)

In Chapter III "The Heart of Africa: The Country and its People", after describing the terrain, the vegetation and animal life, he sketches the life of primeval man in a simple village and the more advanced culture of Bantu tribesman, and goes on to ask the question 'Can the African native really be taught to work?' He answers unhesitatingly in the affirmative and gives an example from the construction of the Stevenson road between Lakes Nyassa and Tanganyika:

I have watched by the day a party of seventy natives working at a cutting upon that road. Till three or four years ago none of them had ever looked upon a white man; nor till a few months previously, had one of them seen a spade, a pickaxe, or a crowbar. Yet these savages handled their tools to such purpose that, with only a single European Superintendent, they have made a road, full of difficult cuttings and gradients which would not disgrace a railway contractor at home. (pp.64-65)

He concludes that with enlisted capital, wise direction and considerate employers, Africa 'may yet be added to the slowly growing
list of the world's producers ... there is nothing in the soil, the products, the climate or the people of Africa to forbid its joining even at this late day in the great march of civilisation' (pp.65-66).

In Chapter V "Wanderings on the Nyassa-Tanganyika Plateau: A Traveller's Diary", Drummond deals with the period 29th September to 28th October, 1983, during which he made a circular expedition in the area to the northwest of Lake Nyassa, between it and Lake Tanganyika, 'a lofty plateau, cool, healthy, accessible and without any physical barrier to interrupt the explorer's march' (p.9). The chapter contains a passage which indicates his power of concentration and observation:

... I repaired to a natural bower in the dry bed of a shaded streamlet, where I spent the entire day. Here, even at high noon, was perfect coolness, and rest, and solitude unutterable. I lay among birds and beasts and flowers and insects, watching their ways, and trying to enter into their unknown lives. To watch uninterruptedly the same few yards of universe unfold its complex history; to behold the hourly resurrection of new living things, and to mise no change or circumstance, even of its minuter parts; to look at all, especially the things you have seen before, a hundred times, to do all with patience and reverence - this is the only way to study nature. (p.110)

Drummond's underlying attitude of reverence for life is not dissimilar to that expressed by Albert Schweitzer in his writings, particularly in his book, Civilisation and Ethics, a point further taken up later in the thesis.

There is also a passage worth quoting here, on the character and integrity of one of his retinue:

... I never saw Moolu do an inconsistent thing. He could neither read nor write; he knew only some dozen words of English; until seven years ago he had never seen a white man; but I could trust him with everything I had. He was not "pious"; he was neither bright nor clever; he was a common-place black; but he did his duty and never told a lie. The first night of our camp, after all had gone to rest, I remember being aroused by a low talking. I looked out of my tent; a flood of moonlight lit up the forest; and there, kneeling upon the ground, was a little group of natives, and Moolu in

the centre conducting evening prayers. Every night afterwards this service was repeated, no matter how long the march was nor how tired the men. I make no comment. But this I will say - Moolu's life gave him the right to do it. Mission reports are often said to be valueless; they are less so than anti-mission reports. I believe in missions, for one thing, because I believe in Moolu. (p.118)

Political Papers

Chapter IV "The Heart-disease of Africa: Its pathology and cure" must be considered along with Chapter IX "A Political Warning". Both are political essays of some quality. The first begins with a vivid description of the evils of the Arab slave and ivory trade which apparently continued to flourish with little political opposition since the initial public outcry at the time of Livingstone. After discussing the plight of the once prosperous Wa-Nkonde tribe, which had been driven out from their territory by Arab infiltration and intimidation, he pleads for action by the Western powers:

The Germans, the Belgians, the English, and the Portuguese, are crying out at present for territory in Central Africa. Meantime humanity is crying out for some one to administer the country; for some one to claim it, not by delimiting a frontier-line upon a map with coloured crayons, but by seeing justice done upon the spot; for some one with a strong arm and a pitiful heart to break the Arab yoke and keep these unprotected children free ... The one thing needed for Africa at present is some system of organised protection to the native, and the decisive breaking of the Arab influence throughout the whole interior. (pp.74-75)

He then refers to the degeneration of the situation in the Zanzibar region since the withdrawal of the British cruiser London, the dangers of absentee landlordism, and the historical reasons for maintaining a continuing British presence in the whole area, pointing out that the African Lakes Company was the only administrative agency in Nyassa apart from the missionary groups and a British consul. He makes two proposals to improve matters. The first, that England, Germany or France 'or some one with power and earnestness' should take a firm
stand at Zanzibar. The second, that a small military presence should be provided in the Upper Shiré, Lake Nyassa, Lake Tanganyika and the Great Lakes generally, with a small steamer on each lake and associated depots on the higher and healthier plateaus. On the question of the expense involved, he mentions various possibilities, including the Missions, the Lakes Company, and the Free Congo State, and concludes 'But whether alone, or in co-operation with the few and overburdened capitalists of the country, or in conjunction with foreign powers, England will be looked to to take the initiative with this or a similar scheme' (p.85).

In Chapter IX - 'A Political Warning', Drummond takes up the vexed question of international boundaries and zones of influence in Africa. He begins with a reference to a false claim of sovereignty by the Portuguese over the interior in the form of a 'Tax for Residing in the Interior' which the authorities at the port of Quelimane attempted to levy on Drummond as he left the country and which he successfully resisted. He then comments 'Why Africa should not belong to the Africans I have never quite been able to see, but since this Continent is being rapidly partitioned out among the various European States, it is well, even in the African interest, to inquire into the nature and validity of these claims' (pp.205-206). He then goes on to outline the history of the Portuguese, English and German interest in the country and draws attention to the 'almost hopeless entanglement of the Foreign Powers in Africa' by listing national occupations along the Atlantic seaboard from Gibraltar to the Cape. He then turns to the eastern seaboard of the continent which he describes as being in a state of chaos, and suggests that 'what is really required is an International Conference to overhaul title-deeds, adjust boundary-lines, delimit territories, mark off states, protectorates, lands held by companies, and spheres of influence' (p.213).
He gives details of the seven-point Anglo-German Convention of 29th October, 1886, which recognised the sovereignty of the Sultan of Zanzibar in the coastal region and British and German spheres of influence in the hinterland and subsequent political activity, and argues forcefully for the establishment of a further 'Sphere of British Influence' in the Upper Shire and Nyassa Districts. He concludes:

These regions are not even claimed at present by any one, while by every right of discovery and occupation - by every right, in fact, except that of formal acknowledgement - they are already British. It will be an oversight most culpable and inexcusable if this great theatre of British missionary and trading activity should be allowed to be picked up by any passing traveller, or become the property of whatever European power had sufficient effrontery at this late day to wave its flag over it ... It is now within the power of the English Government to mark it off before the world as henceforth sacred ground. Tomorrow it may be too late. (pp.220-221)

Scientific Notes

Chapter VI "The White Ant: A Theory", Chapter VII "Mimicry: The Ways of African Insects", and Chapter VIII "A Geological Sketch", are of a more scientific and academic nature. The first two were originally published by a monthly magazine, and the third, Drummond states in the Preface was 'rescued, and duly dusted, from the archives of the British Association' (p.vi). Their academic status is difficult to assess, but to the non-technical observer they appear to be competent pieces of work. James Young Simpson refers to "The White Ant" as 'one of Drummond's most original contributions to Science', and to "Mimicry" as a 'vivid and sympathetic study of the question'.

In "The White Ant" Drummond puts forward the thesis that the termite has an agricultural function in the hard-baked soil of Central Africa similar to that carried out by the earthworm in more temperate

zones. Both disturb and turn over the sub-soil in such a way as to improve its structure and fertility. The paper is a good example of the thoroughness of his observation and his capacity for accurate descriptive work, and is well illustrated with black and white line diagrams and sketches. It does not appear to contain, however, any material of particular relevance to his spiritual outlook.

Drummond begins the essay on "Mimicry" by suggesting that 'Mimicry is imposture in Nature', and goes on to describe mimicry as resemblances between an animal and some other object in its environment which is a practical gain to the creature, and which may be restricted to colour, but may extend to form and habit. His aim is to provide field notes to supplement museum specimens of mimetic insects, drawing on his journals written while surveying the Nyassa-Tanganyika plateau a region which he states 'has not yet been described or visited by any naturalist' (p.162). As in the previous essay, he provides the reader with a fascinating account of his observations and in the closing pages suggests that mimicry is not an occasional or exceptional phenomenon, but an integral part of the economy of nature, based on the sound utilitarian principle that 'Nature does everything as simply as possible, and with the least expenditure of material'. His concluding remarks are worth quoting, particularly as they represent a more positive assessment of mimicry than his view in Natural Law in the Spiritual World where he refers to it as a 'curious hypocrisy' (NL p.392).

At the first revelation of all these smart hypocrisies one is inclined to brand the whole system as cowardly and false. And, however much the creatures impress you by their cleverness, you never quite get over the feeling that there is something underhand about it; something questionable and morally unsound ... But is it so? Are the aesthetic elements in nature so far below the mechanical? Are colour and form, quietness and rest, so much less important than the specialisation of single function or excellence in the arts of war? Is it nothing that, while in some animals the disguises tend to
become more and more perfect, the faculties for penetrating them, in other animals, must continuously increase in subtlety and power? And, after all, if the least must be said, is it not better to be a live dog than a dead lion? (pp.179-180)

In Chapter VIII "A Geological Sketch", Drummond describes the various geological formations encountered on his journey from the coast at the mouth of the river Zambezi up to the highland plateau at the north end of Lake Nyassa. He includes a comment on a potential coal seam reported on several years previously by a Mr. James Stewart to the Royal Geographical Society, which he examined 'pretty carefully' and concluded that 'on the whole, therefore, the Lake Nyassa coal, so far as opened up at present, can scarcely be regarded as having any great economical importance' (p.188). He describes a search for fossils in stratified beds on the banks of the Rukuru river, which yielded six specimens of fossil fish remains, later to be submitted to Dr. Traquair of Edinburgh University. He wrote back in April 1888, confirming that it was a new species and asking to be allowed to name it 'Acrolepis ? Drummondi'(p.193).

Drummond ends the chapter with a passage which reflects his perception of the continuity of law and the unity of Nature:

Finally the thing about the geology of Africa that strikes one as especially significant is, that throughout this vast area, just opening up to science, there is nothing new - no unknown force at work; no rock strange to the petrographers; no pause in denudation; no formation, texture, or structure to put the law of continuity to confusion. Rapid radiation, certainly, replaces the effects of frost in northern lands - and the enormous denudation due to this cause is a most striking feature of tropical geology. The labours of the worm, again, in transporting soil in temperate climates are undertaken by the termite; but here, as elsewhere, every fresh investigation tends to establish more and more the oneness and simplicity of nature. (p.199)

Comment

Tropical Africa was not one of Drummond's most important works,
but it is a significant record of what must have been a further formative period in his life. The book itself must have given pleasure to many, and it may be that it influenced political events. Commenting on "A Political Warning", James Young Simpson states that it seems likely that the British Government had been considering handing over the Shire Highlands to Portugal, and goes on to say:

It may be safely stated that Drummond's stirring chapters, followed by some influential agitation and the loss of at least one Scotch seat to the Government, turned the scale, and the curious situation ensued of the Foreign Office urging the Missions to resist the suggestions of its accredited representative, so that the hands of the Foreign Secretary might be strengthened in his new resolve to hold to the country.4

It is also perhaps worth recording at this point that Drummond's potential political and administrative ability was quite widely recognised. George Adam Smith refers to the offer of a Government Appointment as Secretary of the Shipping Commission in November 1884, to the offer from the Earl of Aberdeen when Viceroy of Ireland of a post on his staff in February 1886, and also to pressure from the Liberal Party and from Mr. Gladstone in June 1886 urging him to stand as parliamentary candidate. All of these Drummond politely but firmly declined as possible distractions from his strongly felt vocation to teaching and evangelism.5

Drummond considered his first visit to America a revelation in civilisation, in politics, and in human nature. His African visit could be regarded as a revelation in pre-civilisation, international politics, and the depths of human suffering. George Adam Smith states that 'Central Africa left a deep mark upon Drummond' and continues:

... Drummond saw all the cruel sacrifices, inseparable from the first heroic assaults of Christianity upon the heathendom of the Dark Continent. He saw, too, the Slave Trade in its most ghastly features - the cruel Arab dealer, the tracks

5. Adam Smith, pp. 249, 263, 266-267.
dotted with human bones, the stockades with human heads impaled on them. Then came his own fits of lassitude and depression, attacks of fever in his tent under pitiless rain, and a month of weakness and inertia. All this marked him for life. When he returned to Scotland we noticed a splash of grey hair upon his head.6

"THE CONTRIBUTION OF SCIENCE TO CHRISTIANITY"

In the same year that he returned from Africa, Drummond was ordained and inducted to the chair of Professor of Natural Science in the Free Church College in Glasgow. This, as has already been mentioned, was made possible through the generosity of Mr. James Stevenson of Largs, who offered sufficient funds to increase Drummond's salary and raise the status of the post of lecturer to a professorship. The proposal was accepted by the General Assembly of 1883, agreed to by four out of five Presbyteries, and finally approved by the General Assembly of 1884. Drummond was elected to the chair on 31st May, 1884, and the ordination and induction took place in the College Free Church on 4th November, 1884. It was at this ceremony that he delivered the address "The Contribution of Science to Christianity".

In the following month he repeated it in substantially the same form when he gave the annual lecture of the Christian Medical Fellowship of the University of Edinburgh. George Adam Smith, commenting on his reception, writes:

Whatever his audience had previously known, or not known, about him, they now saw before them a religious teacher utterly free from conventionalism, ardent and enthusiastic as any of themselves, fearless of facts, loyal to the intellectual methods of the age, but still with an unshaken faith in God and in the reality of spiritual experience.\(^7\)

The address was subsequently published in two issues of the *Expositor* during 1885 and finally reprinted in *The New Evangelism* and other Papers in 1899. James Young Simpson refers to the articles as 'excellent examples of the type of work that Drummond achieved with such brilliance and apparent ease'.\(^8\) George Adam Smith considered the material of sufficient importance to devote ten pages of extensive quotation in *The Life of Henry Drummond* in the chapter "Evolution and

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7. Adam Smith, p.298.
Revelation'.

It would seem likely that Drummond worked on the address after he knew of his election to the chair, and took the opportunity to consolidate some of his ideas from *Natural Law in the Spiritual World* and set them out before his academic and clerical contemporaries, particularly in the University of Glasgow and in the Presbytery of Glasgow, in the hope of encouraging the emergence of self-critical and open-ended theology.

Drummond begins his lecture with the statement that 'There is nothing more inspiring just now to the religious mind than the expansion of the intellectual area of Christianity'. He notes that the Christian system inevitably takes time to assess and absorb new knowledge but sooner or later 'Christianity utilises the best that the world finds, and gives it a niche in the temple of God' (p.153). The Christian attitude to Science should be free from false hope and false fear, and should show a readiness to learn. There must be no assumption of superiority on either side. Science by systematic study has raised up a body of truth which is verifiable and which immediately affects the whole field of knowledge including Christianity.

He quotes Herbert Spencer as stating that 'the purification of religion has always come from science' and goes on to suggest that theology must take note of both the Scientific Method and the Doctrine of Evolution. The Scientific Method insists on the value of facts and the value of laws. Christianity possesses facts which, when presented to the world, enabled the faith to spread rapidly but as time went on, men or manuscripts began to be quoted as authorities, the facts lost power and impressiveness, and the church found it necessary to reinforce its authority by the establishment of judicial

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9. *CS-NE*, p.153. (Further references are given after quotations in the text.)
relations with the secular state. The Reformation was in part a revolt against intermediaries and a return to an appeal to facts. Christianity is now learning from science to go back to facts.

Critics in every tongue are engaged upon the facts; travellers in every land are unveiling facts; exegetes are at work upon the words, scholars upon the manuscripts; sceptics, believing and unbelieving, are eliminating the not-facts; and the whole field is alive with workers. And the point to mark is that these men are not manipulating, but verifying, facts. (p.160)

Drummond goes on to assert that the primary evidence for Christianity is the Christian, and echoing a plea first made in "Spiritual Diagnosis", suggests that one aim of a scientific theology should be to study conversion. 'The rational man, his regeneration by the Holy spirit, the spiritual man and his relations to the world and to God, these are the modern facts for a scientific theology' (p.160).

He goes on to point out that science has demonstrated the uniformity of nature through the study of different fields which revealed a 'brotherhood of common laws' and an underlying symmetry. In the same way through careful study, one day there may be disclosed a similar uniformity in the spiritual world and an ultimate convergence. 'The laws of both as they radiate upwards will meet in a common cupola, and between the outer and inner courts the priests of nature and the priests of God will go in and out together' (p.163).

Such a study would result in an intellectual gain to Christianity, particularly in a deeper understanding of the law of causation in the spiritual life. Christians wrongly imagine that in this field 'things are managed differently there from anywhere else - less strictly, less consistently; that blessings and punishments are dispensed arbitrarily, and that everything is ordered by a Divine discretion rather than by a system of fixed principle' (p.165). Consequently men often pray for things that they are unable to receive, or for which they are unwilling to pay the price.
There is nothing more appalling than the wholesale way in which unthinking people plead to the Almighty the richest and most spiritual of His promises, and claim their immediate fulfillment, without themselves fulfilling one of the conditions either on which they are promised or can possibly be given. If the Bible is closely looked into, it will probably be found that very many of the promises have attached to them a condition - itself not unfrequently the best part of the promise. True prayer for any promise is to plead for power to fulfil the condition on which it is offered, and which, being fulfilled, is in that act given. (p.165)

He suggests that the adoption of the scientific method would infuse new enthusiasm into thinking and attract 'an ever increasing band of workers'. He uses the image of a coral reef to illustrate the irresistible charm of working on the frontiers of knowledge.

Round the islands of coral skeletons in the Pacific Ocean there is belt of living coral. Each tiny polyp on this outermost fringe, and here only, secretes a solid substance from the invisible storehouse of the sea, and lays down its life in adding it to the advancing reef. So science and so theology grow. Through these workers on the fringing reef - behind, in contact with the great solid, essential, formulated past; before, the profound sea of unknown truth - through these workers, and through these alone, can knowledge grow. (p.166)

He then draws a distinction between the scientific method and the scientific spirit. The former may reveal fresh and revolutionary ideas, but the latter will ensure that while there is due respect for the findings of the past, these new ideas are not allowed to become dogma, and are 'held with caution and abandoned with generosity on sufficient evidence' (p.169).

Turning to the scientific contribution to theology in the doctrine of the creation, Drummond notes that while science affords a theory of the method of creation, it is silent in regard to the ultimate mystery of origins, and has not found a substitute for God. In fact science has made atheism unscientific in that it looks at the back of phenomena and says "The atheist tells us there is nothing there. We cannot believe him. We cannot tell what it is, but there is certainly something. Agnostics we may be, we can no longer be atheists". (p.171).
Drummond then illustrates how closely biology and theology are related by quoting at some length from T.H. Huxley's description in his *Lay Sermons* of the growth of a common salamander from the egg, italicising phrases which appear to indicate purposeful intervention from an outside agency, e.g., 'one can only compare them to those operated by a skilled modeller', and 'it is as if a delicate finger traced out the line to be occupied by the spinal column'. (This same descriptive passage was earlier quoted by Drummond, but without italics, in the chapter "Conformity to Type" in *Natural Law in the Spiritual World*). Here, however, he suggests that the natural is 'within a hair's-breadth' of the spiritual, and that this may be evidence of 'unseen contact all along the line' (p.173).

On the larger question of the creation of the world itself he considers that science offers to theology in the hypothesis of evolution a doctrine of the method of creation which is to be welcomed, which fills a gap in theological understanding and 'which the intellect can accept and which for the devout mind leaves everything more worthy of worship than before' (p.175).

Returning to the theme of conversion, Drummond suggests that to an enlightened theology, mental science would be the science of the future and that using biological analogies, theology may eventually give a scientific account of the phenomena of regeneration. 'We shall then have an embryology, a morphology, and a physiology of the new man' (p.176). He goes on to argue that if Evolution is accepted as a method of Creation, and can therefore be considered a form of revelation, it would not be unreasonable to expect the second form of revelation, God's word, also to be a gradual unfolding. The old understanding of the construction of the Bible as a 'Divine-fiad' hypothesis

10. NL pp.290-291.
must give way to the 'slow growth or evolution theory' (p.178).

The supreme contribution of Evolution to Religion is that it has given it a clearer Bible ... Science is the great explainer, the great expositor, not only of nature, but of everything it touches. Its function is to arrange things, and make them reasonable. And it has arranged the Bible in a new way, and made it as different as science has made the world. (p.179)

He admits that there are many perplexing things in the Bible which are difficult to reconcile with the idea of a just and compassionate God, but suggests that these arise from an unscientific understanding of the nature of the Bible. He continues:

We see now that the mind of man has been slowly developing, that the race has been gradually educated, and that revelation has been adapted from the first to the various and successive stages through which that development passed. Instead, therefore, of reading all our theology into Genesis, we see only the alphabet there. In the later books we see primers - first, second and third: the truths stated provisionally as for children, but gaining volume and clearness as the world gets older. Centuries and centuries pass, and the mind of the disciplined race is at last deemed ripe enough to receive New Testament truth, and the revelation culminates in the person of Christ. (pp.179-180)

Drummond then points out that long before the theory of evolution had been formulated, discerning minds had foreseen the steady growth of theological truth to higher forms, and includes an apposite quotation from John Henry Newman's University Sermons. He then re-asserts the importance that evolution has for theology. It has given theology new departments, increased its status and given it 'a vastly more reasonable body of truth, about God and man, about sin and salvation' (p.183). It has also given Christianity a new Bible.

The new Bible is a book whose parts, though not of unequal value, are seen to be of different kinds of value; where the casual is distinguished from the essential, the local from the universal, the subordinate from the primal end. The Bible is not a book which has been made; it has grown. Hence it is no longer a mere word-book, nor a compendium of doctrines, but a nursery of growing truths. It is not an even plane of proof texts without proportion or emphasis, or light or shade; but a revelation varied as nature, with the Divine in its hidden parts, in its spirit, its tendencies, its obscurities, and its omissions. (p.183)
Drummond accepts that many Christians have no need for new ways of understanding the Bible, and that for many years 'the old Bible will continue to nourish the soul of the Church, as it has nourished it in the past' (p.184). But he is convinced that there is an ever increasing number whose mental attitude has been radically changed by learning to think from science who need a new exegesis, a re-consideration of the historic setting, and a clearer view of the moral purposes of God.

He draws his paper to a close by asking whether the scientific contribution to theology helps Christianity practically, and suggests that 'Science has nothing finer to offer Christianity than the exaltation of its supreme conception - God' (p.186). He goes on to conclude:

The old student of natural theology rose from his contemplation of design in nature with heightened feeling of the wisdom, goodness, and power of the Almighty. But never before had the attributes of eternity, and immensity, and infinity, clothed themselves with language so majestic in its sublimity. It is a language for the mind alone. Yet in the presence of the slow toiling of geology, millenium after millenium, at the unfinished earth; before the unthinkable past of paleontology, both but moments and lightning-flashes to the immenser standards of astronomy: before these even the imagination reels and leaves an experience only for religion. (p.187)
C THE GREATEST THING IN THE WORLD

Background

The Greatest Thing in the World is Drummond's most popular and widely read work. It was first published in 1890 and has been reprinted constantly ever since. The latest edition in this country is a paper back version published by Hodder and Stoughton in 1980 with a biographical sketch by Denis Duncan, who confirms that at least two million copies of the book have been sold and suggests that it is one of the most influential devotional books in the English language.¹¹

The theme of the book is the practical application of love in daily life based on Chapter 13 of the First Epistle to the Corinthians. It is to some extent a reworking of ideas and illustrations which appear in earlier sermons and addresses, but it seems likely that Drummond consolidated it in its basic form very soon after his return from Africa. James W. Kennedy states that in June 1884 Drummond was a guest in the country home of Mr. Edward Denney along with Moody and others engaged in the London Mission. He then quotes from Moody, an account of how Drummond responded to a request to give them a Bible reading. 'After some urging and characteristic reluctance he drew a small New Testament from his pocket, opened it at the thirteenth chapter of First Corinthians, and without a note, in the most informal way, began to speak on the subject of love. It seemed to me that I had never heard anything so beautiful'.¹²

Similar sentiments are expressed by R.W. Barbour in a letter written from the Free Manse, Cults, Aberdeen, on 17th August, 1884.

Henry is here, and it is good to entertain angels aware or unawares ... Henry says it is his birthday - he is thirty-three today - but it has felt liker my own. He spoke to us tonight on Paul's Hymn of Heavenly Love in the thirteenth of First

Corinthians, and it was like being in heaven or in sight of it to hear him. One had the sweet pain of seeing something which he might strive after for many days.\textsuperscript{13}

Moody resolved that Drummond should be brought to Northfield, Massachusetts, to deliver his address on "Love". This he did during his visit to the United States in 1887, and it was published there, after the Northfield Conference, under the title of "Love – the Supreme Gift". Meantime, however, Drummond gave the address on a number of different occasions at home, including those given during his work with university students which extended over the period 1884 to 1894. This is an area of his life to which George Adam Smith devotes a whole chapter in his biography and which he considered to be Drummond's 'chief interest and burden', and which will be dealt with briefly in the next sub-section of the thesis. Drummond's concern for his students and a link with his African experience are reflected in an early passage in the book:

And I beg the little band of would-be missionaries – and I have the honour to call some of you by this name for the first time – to remember that though you give your bodies to be burned, and have not Love, it profits nothing – nothing! You can take nothing greater to the heathen world than the impress and reflection of the Love of God upon your own character ... It is the man who is the missionary, it is not his words. His character is his message. In the heart of Africa, among the great Lakes, I have come across black men and women who remembered the only white man they ever saw before – David Livingstone; and as you cross his footsteps in that dark con- tinent, men's faces light up as they speak of the kind Doctor who passed there years ago. They could not understand him; but they felt the Love that beat in his heart.\textsuperscript{14}

\textbf{Content}

The Greatest Thing in the World is relatively short. The text, in the 1960 edition, excluding the biographical sketch, is no more than

\textsuperscript{13} Adam Smith, p.251.
\textsuperscript{14} GW, pp.20–21. (The 1894 Collected Edition). Further references are given after quotations in the text.
47 pages. In a brief Introduction, Drummond asks 'What is the noblest object of desire, the supreme gift to covet?' He suggests that it is not Faith as many might suppose, but Love, the *summum bonum* singled out by Paul, Peter, John and Jesus Christ himself. He then outlines the form of his intended exposition as Love *contrasted*, Love *analysed* and Love *defended*.

Drummond then points out, in the chapter headed "The Contrast", that Paul contrasts Love with eloquence, with prophecy, mysteries, faith, charity, sacrifice and martyrdom. Drummond uses the word 'charity' here as shorthand for the text "And though I bestow all my goods to feed the poor", and draws out the distinction between charity and love in a perceptive passage.

Charity is only a little bit of Love, one of the innumerable avenues of Love, and there may even be, and there is, a great deal of charity without Love. It is a very easy thing to toss a copper to a beggar on the street; it is generally an easier thing than not to do it. Yet Love is just as often in the withholding. We purchase relief from the sympathetic feelings aroused by the spectacle of misery, at the copper's cost. It is too cheap - too cheap for us, and often too dear for the beggar. If we really loved him we would either do more for him, or less. (pp.19-20)

C.K. Barrett makes a similar point in his commentary where he states 'Paul ... affirms the possibility that charitable acts may proceed from lower motives'. Drummond then continues, after referring to sacrifice and martyrdom, with the appeal to the would-be missionaries already mentioned above, and ends the chapter with the following sentence. 'You may take every accomplishment; you may be braced for every sacrifice; but if you give your body to be burned, and have not Love, it will profit you and the cause of Christ *nothing*' (p.22).

The chapter entitled "The Analysis" is the longest in the book and takes the form of a sustained exposition of the nine ingredients

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of the 'Spectrum of Love' which Drummond identifies from verses 4 to 6 of his text as being Patience, Kindness, Generosity, Humility, Courtesy, Unselfishness, Good Temper, Guilelessness, and Sincerity. On 'Kindness' he notes that much of Christ's life was spent in doing kind things and suggests that as the only thing greater than happiness is holiness, and that as this is not in our keeping, we should do all we can to ensure the happiness of others.

Therefore love. Without distinction, without calculation, without procrastination, love. Lavish it upon the poor, where it is very easy; especially upon the rich, who often need it most; most of all upon our equals, where it is very difficult, and for whom perhaps we do least of all. There is a difference between trying to please and giving pleasure. Give pleasure, Lose no chance of giving pleasure. For that is the ceaseless and anonymous triumph of a truly loving spirit. (p.28)

'Courtesy' he defines as 'Love in society, Love in relation to etiquette' and asserts that 'You can put the most untutored person into the highest society, and if they have a reservoir of love in their heart, they will not behave themselves unseemly. They simply cannot do it' (p.31)

The section on 'Good Temper' begins with the assertion that the Bible condemns bad temper as one of the most destructive elements in human nature. Drummond then points out that it is often the vice of the virtuous and goes on to contrast the sins of the body of the Prodigal Son and the sins of the disposition of the Elder Brother, restating in a more elaborate form, some of the material in his sermon on "Ill Temper" dated 1881, included in The Ideal Life and other Unpublished Addresses. His advice on how to deal with ill temper is further developed in Natural Law in the Spiritual World. It is interesting to compare the three versions.

The Ideal Life

The soul is to be made sweet, not by taking the acidulous fluids out, but by putting something in - a great love, God's great love. This is to work a chemical change upon them, to
renovate and regenerate them, to dissolve them in its own rich fragrant substance. (IL p.56)

**Natural Law**

A specific irritant has poisoned his veins. And the acrid humours that are breaking out all over the surface of his life are only to be subdued by a gradual sweetening of the inward spirit ... he whose spirit is purified and sweetened becomes proof against these germs of sin. (NL p.192)

**The Greatest Thing in the World**

We must go to the source, and change the inmost nature, and the angry humours will die away of themselves. Souls are made sweet, not by taking the acid fluids out, but by putting something in - a great Love, a new Spirit, the Spirit of Christ. Christ, the Spirit of Christ, interpenetrating ours, sweetens, purifies, transforms all. This only can eradicate what is wrong, work a chemical change, renovate and regenerate, and rehabilitate the inner man. Will-power does not change men. Time does not change men. Christ does. (pp.39-40)

In his comments on the final ingredient 'Sincerity', Drummond shows how the word relates to the Authorised Version text "rejoiceth in the truth".

... he who loves will love Truth not less than men. He will rejoice in the Truth - rejoice not in what he has been taught to believe; not in this Church's doctrine or that; not in this ism or that ism; but 'in the Truth'. He will accept only what is real; he will strive to get at facts; he will search for Truth with a humble and unbiased mind, and cherish whatever he finds at any sacrifice. (p.42)

He then goes on to point out that the more literal translation of the text in the Revised Version "rejoiceth with the truth" extends the meaning of 'Sincerity' to include 'the self-restraint which refuses to make capital out of others' faults' (p.43).

Drummond's remarks on the priority of making truth one's own, echo in brief form, the extended discussion on 'parasitism' in Natural Law in the Spiritual World where he states that 'The faculty for selecting truth at first hand and appropriating it for one's self is a lawful possession to every Christian' (NL p.351).

Having analysed the ingredients of the 'Spectrum of Love', Drummond goes on to consider how they are to become part of a man's character. He asks 'Is life not full of opportunities for learning
Love? and he continues, 'The world is not a playground; it is a schoolroom. Life is not a holiday, but an education. And the one eternal lesson for us all is how better we can love' (p.30). There are echoes here of a passage already quoted from the sermon "Clairvoyance" in the Ideal Life (p.135), in which he speaks of a school of learning as a place for making souls. He then emphasises the need for practice, pointing out that there is nothing capricious about spiritual development.

We do not get the soul in different ways, under different laws, from those in which we get the body and the mind. If a man does not exercise his arm he develops no biceps muscle; and if a man does not exercise his soul, he acquires no muscle in his soul, no strength of character, no vigour of moral fibre, nor beauty of spiritual growth. (pp.44-45)

He reminds his readers of Christ's own need to learn. 'Though perfect, we read that He learned obedience, He increased in wisdom and in favour with God and man'. He continues in a passage which may reflect some of his own inner conflicts.

Do not quarrel therefore with your lot in life. Do not complain of its never-ceasing cares, its petty environment, the vexations you have to stand, the small and sordid souls you have to live and work with. Above all, do not resent temptation; do not be perplexed because it seems to thicken round you more and more, and ceases neither for effort nor for agony nor prayer. That is the practice which God appoints you; and it is having its work in making you patient, and humble, and generous, and unselfish, and kind, and courteous. (pp.45-46)

He introduces at this point a quotation from Goethe: "Talent develops itself in solitude; character in the stream of life". This appears in a different context in his sermon on 'Penitence' in the Ideal Life (p.214). Here he continues 'Talent develops itself in solitude - the talent of prayer of faith, of meditation, of seeing the unseen; Character grows in the stream of the world's life. That chiefly is where men are to learn Love' (pp.46-47).

He then makes a fresh and valuable comment on the nature of Love itself.
Love itself can never be defined. Light is something more than the sum of its ingredients - a glowing, dazzling, tremulous ether. And Love is something more than all its elements - a palpitating, quivering, sensitive, living thing. By synthesis of all the colours, men can make whiteness, but they cannot make light. By synthesis of all the virtues, men can make virtue, they cannot make love. (p.47)

Answering the question 'How then are we to have this transcendent living whole conveyed into our souls?' he affirms that Love is an effect which is produced only as we fulfil the right conditions. It is a matter of contemplating the love of Christ so that our hearts may be slowly changed.

Stand before that mirror, reflect Christ's character, and you will be changed into the same image from tenderness to tenderness. There is no other way. You cannot love to order. You can only look at the lovely object, and fall in love with it, and grow into likeness to it. (pp.48-49)

Drummond likens the process to that of electro-magnetic induction. 'Remain side by side with Him who loved us, and gave Himself for us, and you too will become a centre of power, a permanently attractive force; and like Him you will draw all men unto you, like Him you will be drawn unto all men' (pp.49-50).

In the final chapter "The Defence", Drummond reflects on the eternal nature of love and the passing away of prophecy, tongues and knowledge. He gives examples of social change during his time, the superseding of the coach by steam, the introduction of electricity, and the rapid developments of science. He urges his readers to love abundantly and to live abundantly, and challenges them to join him in an intense study of St. Paul's words over a three month period. He goes on to affirm 'It is worth doing. It is worth giving time to. No man can become a saint in his sleep; and to fulfil the condition required demands a certain amount of prayer and meditation and time, just as improvements in any direction, bodily or mental, requires preparation and care' (p.64).

He concludes the chapter with a reference to the parable of the
sheep and the goats and suggests that the final test of a man will not be in terms of "How have I believed?" but "How have I loved?". He ends the book with the following passage.

The words which all of us shall one Day hear sound not of theology but of life, not of churches and saints but of the hungry and the poor, not of creeds and doctrines but of shelter and clothing, not of Bibles and prayerbooks but of cups of cold water in the name of Christ. Thank God the Christianity of today is coming nearer the world's need. Live to help that on. Thank God men know better, by a hairs-breadth, what religion is, what God is, who Christ is, where Christ is. Who is Christ? He who fed the hungry, clothed the naked, visited the sick. And where is Christ? Where? - whoso shall receive a little child in My name receiveth Me. And who are Christ's? Everyone that loveth is born of God. (p.68)

Comment

The extracts quoted above have been selected to give an indication of the content and general argument of the book. For the spiritual impact to be rightly assessed it is necessary to treat the book as a total entity. Analysis and comparison with earlier related writings inevitably to some extent reduces this impact. Nevertheless it is hoped that enough has been included to suggest why it should have had and still has such a wide appeal. Denis Duncan, in his biographical 'Afterword', suggests that part of this initial appeal was undoubtedly due to its presentation, and states that Drummond 'prepared the book for publication in all its aspects - layout, cover design, proof-reading, etc., to ensure that its effect on eye and mind were equally pleasing'.

James W. Kennedy states 'It caught the public fancy and the sale was enormous'. Nevertheless, two fundamental factors remain, the character and personality of Drummond himself and the underlying spiritual content of I Corinthians 13. Duncan includes a number of testimonies to Drummond's spiritual stature in his 'Afterword' to the

book, the following of which, written by Moody, can appropriately be quoted at this point:

Some men take an occasional journey into the thirteenth chapter of I Corinthians, but Henry Drummond was a man who lived there constantly, appropriating its blessings and exemplifying its teachings. As you read what he terms the analysis of love, you found that all its ingredients were interwoven into his daily life, making him one of the most lovable men I have ever known.17

At the same time, perhaps it should be recorded that neither George Adam Smith, nor James Young Simpson, saw fit to include a separate entry in their indexes for The Greatest Thing in the World, nor do they say much about its origin, or its success, apart from the collective appeal of 'The Christmas Booklets', the remaining four of which must now be considered. It may be that the difference in circulation figures were not sufficient at that time to merit drawing a distinction, or that their awareness of the full range of Drummond's work affected their assessment. It is the writer's view that there was an element of sentimentality in The Greatest Thing in the World which may have increased its appeal to the public, and in terms of spiritual content, the booklets which followed have as much if not more to offer to the present day reader.

THE BOOKLETS

Background

In 1894, Hodder and Stoughton published *The Greatest Thing in the World and Other Addresses* with an introductory note 'In response to the wish of many who have read these Addresses in separate form, this Collected Edition, containing the complete series, is now prepared'. The "Other Addresses" selected were "The Programme of Christianity", "The City without a Church", "The Changed Life" and "Pax Vobiscum". In the final page of the volume the publishers intimated that they were still available in booklet form 'White leatherette, Gilt Top, 1s. each; or in Cloth, Gilt Edges, 2s.6d. each' and gave the circulation figures to that date as 63,000; 55,000; 85,000; and 122,000 respectively. The figure for *The Greatest Thing in the World* was then 315,000.

These booklets represent a distinctive element in Drummond's literary material and derive largely from addresses given by him during his work with students in Edinburgh during the period 1884-1894, already briefly referred to. A further quotation from George Adam Smith indicates how high the work rated in Drummond's priorities:

He reckoned as mere distractions from it not only the most honourable of calls to positions of eminence on other arenas of life, but even many of those forms of work in which he had hitherto achieved success. He shut himself off from the pulpits of his Church, denied his friends, turned from the public, banished reporters, and endured infinite misrepresentation, if only he might make sure of the students. Had one asked him towards the end what the work of his life had been, he would certainly have replied, 'My work among them'.

George Adam Smith includes an Appendix giving a summary of the Addresses given to students of Edinburgh University at Oddfellows Hall between January and March 1890. James W. Kennedy includes in his Anthology a chapter summarising a number of addresses from various

18. Adam Smith, p.295.
sources including *Stones Rolled Away and Other Addresses to Young Men delivered in America.* 19 He then adds a further chapter entitled "The Christmas Booklets" in which he deals specifically with those included in *The Greatest Thing in the World and Other Addresses.* He states there, that as the fame of Natural Law spread, the public clamoured for more published writing from the pen of its author, and Drummond conceived the idea of printing a series of his addresses as "Christmas Cards". Kennedy continues:

All five of these "Christmas Booklets" were translated into many languages and reprinted again and again in innumerable editions. Through them Henry Drummond reached a wider public than he ever dreamed of, and the total issue and "spread" of them made his name a household word around the world. The message of these little books is still as fresh and pertinent as ever. One can prove it by reading any of them with the date line removed. 20

The first "Christmas Booklet", *The Greatest Thing in the World*, was made available to students and Drummond's friends in December 1889, prior to wider publication early in 1890, and has already been considered. The remaining four will now be discussed, and will be taken as representative of Drummond's other addresses to students, most of which are variations on themes covered in the booklets. 21 Before doing so, however, mention must be made of the Grosvenor House addresses, which took place during the early part of the student period.

These addresses, which were given in two series on three successive Sundays in April/May, 1895, and in June, 1888, in the Ballroom of Grosvenor House, Hyde Park, the London home of the Duke of West-

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19. Published in London, 1900, with an introduction by Luther Hess Waring. Contains four lectures given to students at Harvard in April 1893 and three lectures given at the World's Bible Students' Conference, Northfield, Mass. in July 1893.
minster, were not published. The circumstances which led Drummond to accept the invitation to speak are described by George Adam Smith in the following terms:

So distinguished a writer as the author of Natural Law in the Spiritual World was bound to be sought after by the more religious portions of what is termed 'Society' ... In the author of Natural Law they discovered a teacher with a strong, fresh mind of his own; not only a subtle expert in religious experience, but one who enforced the principles of Christianity apart from ecclesiastical formulas ... From such persons of position there came in April and May 1884 a number of letters, either addressed to Drummond himself, asking an interview, or addressed to those who knew him, asking an introduction.22

Among those were Lord and Lady Aberdeen who invited Drummond to stay at Haddo House, in the autumn of 1884, and who were to become life-long friends and correspondents. It was through them that the initial invitation came in March 1885 to speak at Grosvenor House, and through Lord Aberdeen and a number of distinguished figures that the second series was instigated, this time for men only. Over five hundred attended the first address and the hall was filled to overflowing for the subsequent lectures. Drummond made a great impact on his audiences, and a number of specific social projects arose from the contacts he made. These are described in some detail by George Adam Smith and James W. Kennedy.23 Both quote from an article in the World, May 1885, reporting the first series, from which the following brief extracts are taken:

Mr. Drummond has invented a gospel which, if not entirely new, has just enough novelty about it to pique and interest the fashionable public ... He applies the principle of evolution, the law of the survival of the fittest, to spiritual existence. He does not consign to perdition all who fail to lead a highly spiritual life here. He only reminds them that they are not qualifying themselves for the life to come ... the audience has departed profoundly impressed by the words of wisdom and solemnity issuing from the lips of a young man with a good manner, a not ill-favoured face, a broad Scotch accent, clad

22. Adam Smith, p.252.
23. Adam Smith, pp.251-259, 277-283; and Kennedy, pp.47-50.
in a remarkably well-fitting frock coat ... That he will produce a moral or a social revolution is no more to be anticipated than that he will change the future history of the human race. But that he will be instrumental in effecting an appreciable degree of improvement in our social tone is far from impossible.24

The Pall Mall Gazette, June 11th, 1888, reporting on the second series stated 'The great square room was densely crowded by an interested and representative gathering - politicians, clergymen, authors, artists, critics, soldiers, and barristers, with a large sprinkling of smart young men, whose appearance would scarcely have suggested a vivid interest in serious concerns'.25 George Adam Smith mentions that the titles of the addresses were 'Evolution and Christianity', 'Natural Selection in Reference to Christianity', and the 'Programme of Christianity', and it would seem from his and other reports, that the lectures covered familiar themes dealt with a greater length in his published works, including the "Christmas Booklets" which must now be further considered.

"Pax Vobiscum"

"Pax Vobiscum" was the first to follow The Greatest Thing in the World. It was published for Christmas 1890, not long after Drummond's return from his visit to Australia and the New Hebrides. James W. Kennedy states however, that it had already been given many times to student audiences, appearing initially as the second of his Oddfellows Hall series in 1885.26

Like all the "Christmas Booklets" it begins with a text, in this case Matthew 11, 28-30, set out in characteristic style on a separate page, as indicated in the following photocopy taken from the Collected

25. Adam Smith, p.278.
Drummond begins by observing that he had recently heard a sermon on "Rest" which was full of delightful thoughts but contained no practical advice on how to find it, and goes on to discuss the need to connect the great words of religion with every-day life. Under the heading "Effects Require Causes" he asserts that nothing in the world happens by chance. 'The world, even the religious world, is governed by law' (p.245). Christian experiences such as Rest, Joy, Peace, Faith are brought about by definite causes just as a good cake 'is the result of a sound receipt, carefully applied' (p.246).

He then selects Rest as an experience to be examined in detail and suggests that just as restlessness has a cause, especially when associated with a physical fever, so physical, moral and spiritual rest must have their own particular causes. Christ did in fact tell his followers how Rest can be obtained. "'Come unto Me", He says, "and I will give you Rest.'" (p.251). Rest would be given to those who came to Him, but it also had to be acquired, as indicated by the words "Learn of Me and ye shall find Rest". It is a slow and orderly learning process which demands work and effort in the specific areas of Meekness and Lowness. 'To these accomplishments, in a special way, Rest is attached. Learn these, in short, and you have already

27. PV-GW p.238. Further references are given after quotations in the text for all four booklets.
found Rest' (p.255). Further thought will reveal the connection. Unrest is caused by Pride, Selfishness and Ambition. "Wounded vanity, then, disappointed hopes, unsatisfied selfishness - these are the old vulgar, universal sources of man's unrest' (p.256). Meekness and Lowliness cure unrest by making it impossible.

These remedies do not trifle with surface symptoms; they strike at once at removing causes. The ceaseless chagrin of a self-centred life can be removed at once by learning Meekness and Lowliness of heart ... Men sigh for the wings of a dove that they may fly away and be at Rest. But flying away will not help us. "The Kingdom of God is within you". We aspire to the top to look for Rest; it lies at the bottom. Water rests only when it gets to the lowest place. So do men. Hence, be lowly. The man who has no opinion of himself at all can never be hurt if others do not acknowledge him. (pp.257-258)

Drummond then states that the purpose of Christianity is to teach men the Art of Life. It is not to be learnt from books, lectures, creeds or doctrines but from Christ. 'We learn His art by living with Him, like the old apprentices with their masters' (p.260). It is by no means a bed of roses. It may be costly. 'Do we realise, for instance, that the way of teaching humility is generally by humiliation?' (p.261). The acceptance of humiliation is to give the cross a more definite meaning and connects it 'directly and causally with the growth of the inner life' (p.262). To be made humble may seem a roundabout way of producing Rest but we cannot make ourselves humble to order.

Drummond then points out that this is only half the truth. Outwardly Christ's life was troubled, but inwardly there was a great calm. 'The inner life was a sea of glass' (p.263). When we see what it was in Him, we can know what the word Rest means.

It lies not in emotions, nor in the absence of emotions. It is not a hallowed feeling that comes over us in church. It is not something that the preacher has in his voice. It is not in nature, nor in poetry, nor in music - though in all these there is soothing. It is the mind at leisure from itself. It is the perfect poise of the soul; the absolute adjustment of the inward man to the stress of all outward things; the preparedness against every emergency; the stability of
assured convictions; the eternal calm of an invulnerable faith; the repose of a heart set deep in God. (pp.264-265)

He then illustrates this conception of rest with two contrasting pictures. One a still, lonely lake among the mountains, the other a waterfall, with a birch tree bending over the foam and at a fork of a branch, a robin on a nest. 'The first was only Stagnation; the last was Rest. For in Rest there are always two elements - tranquillity and energy; silence and turbulence; creation and destruction; fearlessness and fearfulness. This it was in Christ' (p.266).

In the next section of the address, entitled "What Yokes are For", Drummond makes the point that the popular notion that a yoke is a restricting device is quite false. The purpose of a yoke is to make a burden light.

Attached to the oxen in any other way than by a yoke, the plough would be intolerable. Worked by means of a yoke, it is light. A yoke is not an instrument of torture; it is an instrument of mercy. It is not a malicious contrivance for making work hard; it is a gentle device to make hard labour light. It is not meant to give pain, but to save pain. (p.269)

Generations of preachers have used the phrase "The Yoke of Christ" in the wrong sense, making Christ a taskmaster, and misery a virtue. Christ knew the difference between a smooth yoke and a rough one. His intention was to ease the burden of human life itself which all men bear. Men harness themselves to the work and stress of the world in clumsy and unnatural ways, giving rise to the disease of "touchiness", which is one of the gravest sources of restlessness.

Touchiness, when it becomes chronic, is a morbid condition of the inward disposition. It is self-love inflamed to the acute point; conceit, with a hair-trigger. The cure is to shift the yoke to some other place; to let men and things touch us through some new and perhaps as yet unused part of our nature; to become meek and lowly in heart while the old nature is becoming numb from want of use. (p.274)

Christianity adjusts the burden of life. It has a miraculous gift of healing, sets human nature right with life, and restores 'those
who are jaded with the fatigue and dust of the world to a new grace of living' (p.275). It does this by removing the attraction of the earth, and alters the whole aspect of the world, by offering a wider horizon and a different standard.

In the final section of the address "How Fruits Grow", Drummond considers the application of the principle of Cause and Effect, to the concept of Joy. Joy cannot be got by simply asking for it. It is one of the ripest fruits of the Christian life, and must be grown. Christ's teaching on the subject is contained in the parable of the Vine. The words "These things have I spoken unto you, that My Joy might remain in you and that your Joy might be full" indicate the spring from which true happiness comes. The Vine was the Eastern symbol of Joy, its fruit made glad the heart of man, but *Christ was the true Vine*... the ultimate source of Joy' (p.282).

The words "He that abideth in Me the same bringeth forth much fruit", indicate the medium through which Joy comes. *Fruit-bearing is the necessary antecedent; Joy both the necessary consequent and the necessary accompaniment. It lies partly in the bearing fruit, partly in the fellowship which makes that possible' (p.283). But fruit must first grow and the conditions for growth must be fulfilled.

No man can make things grow. He can get them to grow by arranging all the circumstances and fulfilling all the conditions. But the growing is done by God. Causes and effects are eternal arrangements, set in the constitution of the world; fixed beyond man's ordering. What man can do is to place himself in the midst of a chain of sequences. Thus he can get things to grow; thus he himself can grow. But the grower is the Spirit of God. (p.285)

Drummond ends the address by inviting his readers to test the method by experiment by spending time on fulfilling the conditions of growth. 'Do not imagine that you have got these things because you know how to get them. As well try to feed upon a cookery book. But I think I can promise that if you try in this simple and natural
way, you will not fail. Spend the time you have spent in sighing for fruits in fulfilling the conditions of their growth' (p.285-286).

"The Programme of Christianity"

James W. Kennedy suggests that this booklet, which was produced for Christmas 1891, was originally given 'from rather sketchy notes to the Possilpark congregation in 1882'. George Adam Smith refers to it indirectly while commenting on Drummond's activities in the autumn. 'All September he worked steadily at home, was at Haddo House, fishing and holding services for part of October, and in the end of the month, after the publication of his new booklet "The Programme of Christianity" he began the winter session'. Like the others, it begins with a text. In this case it is the well known passage Isaiah 61. 1-3.

To . Preach. Good. Tidings. unto. the. Neck:
To . Bind. up. the. Broken-Hearted:
To . Proclaim. Liberty. to. the. Captives. and. the
   Opening. of. the. Prison. to. Them. that. are
   Bound:
To . Proclaim. the. Acceptable. Year. of. the. Lord,
   and. the. Day. of. Vengeance. of. our. God:
To . Comfort. all. that. Mourn:
To . Appoint. unto. them. that. Mourn. in. Zion:
To . Give. unto. them—
Beauty. for. Ashes,
The . Oil. of. Joy. for. Mourning,
The . Garment. of. Praise. for. the. Spirit. of
Beaiveness.

Drummond begins with the question 'What does God do all day?' and the assertion that 'To grow up in the complacent belief that God has no business in this great groaning world of human beings except to attend to a few saved souls is the negation of all religion' (pp. 72-73). Drummond, identifying Christ almost totally with God, suggests that to miss the larger view of Christ's purpose for all mankind is to miss the whole splendour and glory of Christ's religion. This purpose includes not only the spiritual good of every man and woman in every nation, but 'their welfare in every part, their progress, their health, their work, their wages, their happiness in this present world' (p.73).

Although Christ gave a new direction to religious aspiration, he did not come to give men religion as such, he came to make a better world:

The world in which we live is an unfinished world. It is not wise, it is not happy, it is not pure, it is not good - it is not even sanitary. Humanity is little more than raw material. Almost everything has yet to be done to it. (p.77)

Drummond continues, linking his ideas to the concept of Creation:

Before the days of Geology people thought the earth was finished. It is by no means finished. The work of Creation is going on. Before the spectroscope, men thought the universe was finished. We know now it is just beginning. And this teeming universe of men in which we live has almost all its finer colour and beauty yet to take. Christ came to complete it. (pp.77-78)

Drummond acknowledges that the re-creation of the world is a prodigious task and suggests that Christ's way to deal with it was to form a society to be known as the Kingdom of God. He points out that the words occur at least one hundred times in the Gospel. It was the leading thought in the mind of Christ, and must be grasped by those who want to understand what Christianity is. Isolated texts must not keep a person from trying to understand Christ's Programme as a whole.

'The perspective of Christ's teaching is not everything, but without
it, everything will be distorted and untrue' (p.83).

The sense of belonging to such a Society transforms life. 'It is the difference between being a solitary knight tilting single-handed, and often defeated, at whatever enemy one chances to meet on one's little acre of life, and the feel of belonging to a mighty army marching throughout all time to a certain victory' (p.85). The Programme of the Society deals with the real world 'the city and the hospital and the dungeon and the graveyard ... the sweating-shop and the pawn-shop and the drink-shop' (p.87). The key words in the Programme are Liberty, Comfort, Beauty, Joy, and the most prominent note - Gladness. 'Its first word is "good-tidings", its last is "joy"' (p.90).

Drummond then deals with each of the four key words in random order, beginning with Joy. Christianity makes an unspeakable contribution to the joy of living and especially to the joy of thinking, through its interpretation of history as progress and its faith in good as eternal. It alleviates depression, 'the Spirit of Heaviness'. It cannot remove the physiological causes, but its inspirations can lift the mind above them. Simple remedies lie in the hands of the Christian - a depressed elderly woman can be cheered by the visit of a sunny person' ... the old are hungrier for love than for bread, and the Oil of Joy is very cheap, and if you can help the poor on with a Garment of Praise, it will be better for them than blankets' (p.95). The dullness of the rich and important, often caused by riches or importance, can be cured by Christianity 'at a single hearing'. The monotonous life of a servant can be treated by more variety, leisure and recreation. The spiritual obesity of a leisured, healthy and accomplished person can be treated by the Christian application of his talents.

The Society of Christ is a sane Society. Its methods are rational. The principle in the old woman's case is simply
that one emotion destroys another. Christianity works, as a railway man would say, with points. It switches souls from valley lines to mountain lines, not stemming the currents of life, but diverting them. (p.97)

Beauty is one of the specific objects of Christ's Society. 'For Christianity not only encourages whatsoever things are lovely, but wars against that whole theory of life which would exclude them. It prescribes aestheticism. It proscribes asceticism' (p.99). Drummond then makes the point that in modern cities most of the paintings, the monuments, the music for the people, the museums and the parks are the gifts of Christian men and municipalities. He accepts that much of the people's world is bleak and ugly, but sees spiritual force in physical beauty and loveliness.

A mere touch of it in a room, in a street, even on a door knocker, is a spiritual force. Ask the working-man's wife, and she will tell you there is a moral effect even in a clean table-cloth. If a barrel-organ in a slum can but drown a curse, let no Christian silence it. The mere light and colour of the wall-advertisements are a gift of God to the poor man's sombre world. (p.101)

Drummond continues with an appealing account of a drunkard who spent his drinking money on a large Christmas card of an angel with tinsel wings for his mother in a distant glen, and makes the point that beauty by itself is not enough. 'Beauty may arrest the drunkard, but it cannot cure him' (p.103). Man's devouring need is Liberty 'to stop sinning; to leave the prison of his passions, and shake off the fetters of his past'. Statues, pictures, higher wages or cleaner streets are trifling compared with the need for a soul cleansed and renewed by Christ.

The power to set the heart right, to renew the springs of action comes from Christ. The sense of the infinite worth of the single soul, and the recoverableness of man at his worst, are the gifts of Christ. The freedom of guilt, the forgiveness of sins, come from Christ's cross; the hope of immortality springs from Christ's grave. (p.104)

Drummond then comments briefly on the word Comfort, affirming that Christ's Programme is full of it, but does not elaborate. He
makes the interesting observation that Christ did not finish the passage from Isaiah when he read in the synagogue in Nazareth. 'A terrible word, Vengeance, yawned like a precipice across His path; and in the middle of a sentence "He closed the Book, and gave it again to the minister, and sat down". A Day of Vengeance from our God - these were the words before which Christ paused' (p.109). Drummond suggests that when the prophet proclaimed it, he had some great historical fulfilment in his mind, and had the people to whom Christ read, been able to understand the ethical equivalents, He probably would have read on. He goes on to say that the Day of Vengeance is now, and the Avenger is the operation of criminal, sanitary, social and natural Law. 'Wherever the poor are trodden upon or tread upon one another; wherever the air is poison and the water foul; wherever want stares, and vice reigns, and rags rot - there the Avenger takes his stand' (p.110). Drummond continues his personification of evil in terms which suggest that he sees the Avenger as God's agent, operating within God's providence, leading to ultimate good.

Delay him not. He is the messenger of Christ. Despair of him not, distrust him not. His Day dawns slowly, but his work is sure. Though evil stalks the world, it is on the way to execution; though wrong reigns, it must end in self-combustion. The very nature of things is God's Avenger; the very story of civilisation is the history of Christ's Throne. (p.111)

There would appear to be echoes here of the prologue to the book of Job, coupled with a Victorian spirit of confidence and optimism. Yet Drummond does not intend to deny the need to combat evil at every level. What he does say is that while it is given to some to work for immediate results and see success, there are others who get no stimulus from visible rewards. These men '... whose lives pass while the objects for which they toil are still too far away to comfort them ... who hold aloof from dazzling schemes and earn the misunderstanding of the crowd because they foresee remoter issues, who even oppose a
a seeming good because a deeper evil lurks beyond - these are the statesmen of the Kingdom of God" (p.112).

The final section of the booklet, headed "The Machinery of the Society", continues in optimistic vein. Drummond sees the social evolution of humanity, the spread of righteousness, the amelioration of life, the freeing of slaves, the elevation of women and the purification of religion as positive evidence of the coming of the Kingdom of God on earth. He suggests that the crowning wonder of Christ's scheme is that he entrusted it to men, not to men acting alone, but to men responding to the Spirit.

The old theory that God made the world, made it as an inventor would make a machine, and then stood looking on to see it work, has passed away. God is no longer a remote spectator of the natural world, but immanent in it, pervading matter by His present Spirit, and ordering it by His Will. So Christ is immanent in men. His work is to move the hearts and inspire the lives of men, and through such hearts to move and reach the world. Men, only men, can carry out this work. (p.114-115)

He then points out that 'this humanness, this inwardness, of the Kingdom' is one reason why some scarcely see that it exists. Christ discarded the usual methods of propagating a great cause. 'The sword He declined; money He had none; literature He never used; the Church disowned Him; the State crucified Him' (p.115). He planted his ideals in the hearts of a few men, they went among other men, and by act and word passed on their secret. 'The machinery of the Kingdom of God is purely social. It acts, not by commandment, but by contagion; not by fiat, but by friendship' (p.116). Men are the only means God's Spirit has of accomplishing His purpose. Drummond then begins a sustained appeal to his readers.

What do you do all day. What is your personal stake in the coming of the Kingdom of Christ on earth? You are not interested in religion, you tell me; you do not care for your "soul". It was not about your religion I ventured to ask, still less about your soul. That you have no religion, that you do not care for your soul, does not absolve you from caring
for the world in which you live. But you do not believe in this church, you reply, or accept this doctrine, or that. Christ does not, in the first instance, ask your thoughts, but your work. No man has the right to postpone his life for the sake of his thoughts. Why? Because this is a real world, not a think world. Treat it as a real world — act. (pp.118-119)

Drummond accepts there are versions of Christianity which are so narrow, unreal or super-theological that no self-respecting mind can do other than disown them, and suggests that Christ had nothing to do with them 'except to oppose them with every word and act of His life' (p.120). He invites his readers to inquire at first hand what Christianity really is, and to deal with the 'Founder of this great Commonwealth Himself'. He continues, 'He who joins this Society finds himself in a large place. The Kingdom of God is a Society of the best men, working for the best ends, according to the best methods. Its membership is a multitude whom no man can number; its methods are as various as human nature; its field is the world' (p.121).

He ends his appeal with a telling reference to the world to come and a renewed emphasis on the importance of the working out of the Kingdom of Heaven in the world of today.

The Programme for the other life is not out yet. For this world, for these faculties, for his one short life; I know nothing that is offered to man to compare with membership in the Kingdom of God. Among the mysteries which compass the world beyond, none is greater than how there can be in store for man a work more wonderful, a life more God-like than this. If you know anything better, live for it; if not, in the name of God and of Humanity, carry out Christ's plan. (pp.122-123)

"The City Without a Church"

This address, the second booklet included in The Greatest Thing in The World and Other Addresses, was originally published on its own in the autumn of 1892, a year after "The Programme of Christianity". George Adam Smith, who joined the Free Church College in Glasgow that
November, and shared accommodation with Drummond for the first month of the session, mentions it in connection with the allegation that Drummond was not much of a churchgoer.

Now, it has been commonly supposed that he hung loose to church life, and very seldom of a Sunday worshipped with his fellow-Christians; and this idea has been strengthened by a mistaken reading of his booklet The City Without a Church, which was published in the autumn of 1892. I can only say that during all the winters I worked by his side in Glasgow I never knew him to miss attending church on Sunday; and a more hearty and reverent worshipper it would be hard to find.30

The booklet begins with a composite text from Revelation chapters 21 and 22 set out in the following form:

3. John,
Saw the Holy City,  
Now Jerusalem,  
Coming down from God out of Heaven.  
* * *
And I saw no Temple therein.  
* * *
And His servants shall serve Him;  
And they shall see His face;  
And His Name shall be written on their foreheads.

Drummond points out that there are two startling and revolutionary things about John's vision. 'The first is that the likest thing to Heaven he could think of was a City; the second, that there was no Church in that City' (p.127), and suggests that this conception of Heaven as a City is wholly new in religious thought:

No other religion which has a Heaven ever had a Heaven like this. The Greek, if he looked forward at all, awaited the Elysian Fields; the Eastern sought Nirvana. All other Heavens have been Gardens, Dreamlands - passivities more or less aimless. Even to the majority among ourselves Heaven is a siesta and not a City. It remained for John to go straight to the other extreme and select the citadel of the world's fever, the ganglion of its unrest, the heart and focus of its most strenuous toil, as the framework for his ideal of the blessed life. (pp.128-129)

30. Adam Smith, p.418.
He goes on to observe that in the city, human life is at its intensest, human relations most real. Christ came to save, inspire and sanctify the working life of the world. The Christian religion cannot exist apart from life - it is not something kept in a separate compartment called the soul. Life is meant for living. 'An abundant life does not show itself in abundant dreaming, but in abundant living ... among real and tangible objects and to actual and practical purposes' (p.133).

He suggests that in his vision of the City, John confronts us with a new definition of a Christian man - 'the perfect saint is the perfect citizen' (p.133). To make good cities for the present hour is the main work of Christianity, and visible evidence of the coming of the Kingdom of God on earth. 'What John saw, we may fairly take it, was the future of all Cities. It was the dawn of a new social order, a regenerate humanity, a purified society, and actual transformation of the Cities of the world into Cities of God' (p.137).

Drummond then urges his readers to see their own cities in the same terms. Within each there is 'a City descending out of Heaven from God'. It is the Christian's task to build up the City, to bring light to it, to realise God's will within it. The Christian is to begin with the nearest City, town or village and immerse himself in secular tasks. He should not be afraid of missing Heaven in seeking a better earth. The secular is intensely sacred. He can be sure that ' ... down to the last and pettiest detail, all that concerns a better world is the direct concern of Christ' (p.142).

Drummond amplifies his theme in his most vigorous style:

Where are you to begin? Begin where you are. Make that one corner, room, house, office, as like Heaven as you can. Begin? Begin with the paper on the walls, make that beautiful; with the air, keep it fresh; with the very drains, make them sweet; with the furniture, see that it be honest. Abolish whatsoever worketh abomination - in food, in drink, in luxury, in books,
in art; whatsoever maketh a lie — in conversation, in social intercourse, in correspondence, in domestic life.

... Then pass out into the City. Do all to it that you have done at home. Beautify it, ventilate it, drain it. Let nothing enter it that can defile the streets, the stage, the newspaper offices, the booksellers' counters; nothing that maketh a lie in its warehouses, its manufactures, its shops, its art galleries, its advertisements. Educate it, amuse it, church it. Christianise capital; dignify labour, Join Councils and Committees. Provide for the poor, the sick, and the widow. So will you serve the City. (pp.143-145)

He then returns to a favourite theme, the importance of personal sanctification. 'By far the greatest thing a man can do for his City is to be a good man. Simply to live there as a good man, as a Christian man of action and practical citizen, is the first and highest contribution any one can make to its salvation' (p.145). The gospel of material blessedness is part of the gospel but it is by no means the whole. The one need is for better men and women in workshop and home. The first priority must be '... the deeper evangel of individual lives, and the philanthropy of quiet ways, and the slow work of leavening men one by one with the Spirit of Jesus Christ' (pp.149-150).

Pointing out the many different opportunities for Christian service, he singles out for special mention the contribution of mothers, a theme which he later develops at considerable length in his major work The Ascent of Man. 'Most of the stones for the building of the City of God, and all the best of them, are made by mothers. But whether or not you shall work through public channels, or only serve Christ along the quieter paths of home, no man can determine but yourself' (p.152). There is 'an almost awful freedom' about Christianity. The carrying out of the mightiest enterprise ever launched on earth is left 'to individual loyalty, to free enthusiasms, to uncoerced activities, to an uncompelled response to the pressures of God's spirit' (p.153).

Drummond next turns to the question of the relationship between
the organised Church and the secular life of the city. He suggests that Christ himself went about doing good without indulging in any special religious activity. 'We never think of Him in connection with a Church. We cannot picture him in the garb of a priest or belonging to any of the classes who specialise/religion. His service was of a universal human order. He was the Son of Man, the Citizen' (p.154).

In the final section, under the heading, "I saw no Temple there", he states that Church life, though it has its place in personal development, must not be confused with Christianity. Masses of people decline to touch Christianity because they see other masses for whom it has become synonymous with a Temple service. The great organised bodies of ecclesiasticism have failed to understand that the natural home of the religion of Christ is in the heart of Humanity.

In many lands the Churches have literally stolen Christ from the people; they have made the Son of Man the Priest of an Order; they have taken Christianity from the City and imprisoned it behind altar rails; they have withdrawn it from the national life and doled it out to the few who pay to keep the unconscious deception up. (pp.158-159)

Despite the vision of a City without a Church, Drummond asserts that if he were to build a City, the first stone he would lay would be the foundation stone of a Church. For the present and for a long time to come the Church has an essential role in manufacturing and nurturing good men.

Here and there an unchurched soul may stir the multitudes to lofty deeds; isolated men, strong enough to preserve their souls apart from the Church, but short-sighted enough perhaps to fail to see that others cannot, may set high examples and stimulate to national reforms. But for the rank and file of us, made of such stuff as we are made of, the steady pressures of fixed institutions, the regular diets of a common worship, and the education of public Christian teaching are too obvious safeguards of spiritual culture to be set aside. (pp.162-163)

Its members make an important contribution through their social activity. 'Even for social purposes the Church is by far the greatest Employment Bureau in the world' (p.164). This activity is sustained
largely through the individual's participation in public worship. 'Church services are "diets" of worship'. The Christian goes to Church for a meal '... for strength from God and from his fellow-worshippers to do the work of life - which is the work of thirst' (p.166).

Returning to the question of the large numbers outside the church, he suggests that 'If the masses who never go to Church only knew that the Churches were the mute expression of a Christian's wants and not the self-advertisement of his sanctity, they would have more respectful words for Churches' (p.167). Sadly they do not understand this and break completely not only with the Church but also with all religion. They see the church building as representing the place where religion dwells; 'with a professional class moving out and in among them, holding in their hands the souls of men, and almost the keys of Heaven' (p.168). They feel outcast, and excommunicate themselves. Yet the life of the masses is the most real of all lives, full of religious possibilities and potential moral influence in the City and the State. They must be taught what Christianity really is and learn to distinguish between religion and the Church. 'After that, if they be taught their lesson well, they will return to honour both' (p.169).

Drummond then refers to traditional teaching on prayer, fasting, self-examination and meditation as establishing "meetness" for heaven and suggests that by themselves they may not be enough. These exercises of the soul are important beyond measure, 'but if life means action, and Heaven service; if spiritual graces are acquired for use and not for ornament, then devotional forms have a deeper function' (p.170). This function must be exercised in the City as an apprenticeship for the City of God. The religion of the Son of man is 'to move among the people on the common street; to meet them in the market place on equal terms; to live among them not as saint or monk, but as brother-man with brother-man' (p.172).
The City therefore, in many of its functions is 'a greater Church than the Church'. The highest Heaven lies all around us. The childhood idea of Heaven as a place often so dominated our thought that we are slow to learn that Heaven is a state. Drummond then adapts the last clause of John's vision to reinforce his message.

Within the Heavenly City he opens the gate of an inner Heaven. It is the spiritual Heaven - the Heaven of those who serve. With two flashes of his pen he tells the Citizens of God that all they will ever need or care to know as to what Heaven really means. "His servants shall serve Him; and they shall see His Face; and His Character shall be written on their characters". (p.174)

He ends with the assertion that those who serve in the City cannot help seeing Christ. 'He is there with them. He is there before him'. Men get to know God but by doing His will. God's character then becomes written on men's characters. 'Acts react upon souls. Good acts make good men; just acts, just men; kind acts, kind men; divine acts, divine men and there is no other way of becoming good, just, kind, divine' (p.175).

"The Changed Life"

This, the last of the "Christmas Booklets" was published in 1893. It is based on the text II Corinthians 3.18, set out in the following style:

With unveiled face
Reflecting
As a Mirror
The Glory of the Lord
Are transformed
Into the same image
From Glory to Glory
Even as from the Lord
The Spirit,
Drummond begins with a quotation from T.H. Huxley in which Huxley protests that if some great power would agree to make him always think and do what is right on condition of being turned into a sort of clock and wound up every morning, he would instantly close with the offer. Drummond proposes to his audience to make that offer to them. He names and partly discards four ways of betterment currently in vogue; spasmodic resolute exercises of will power; concentration and crucifying single sins one by one; copying virtues one by one; and maintaining a daily check list of virtues. He argues that all four, 'the self-sufficient method, the self-crucifixion method, the mimetic method, and the diary method' (p.186), are inadequate and distract attention from the true working and perfect method.

He goes on to state that the finest expression of the formula for sanctification is to be found in Scripture and in the Revised Version of his text, which he considers to be an 'immensely improved rendering'. He then comments. 'Now observe at the outset the entire contradiction of all our previous efforts, in the simple passive "we are transformed" ... we do not change ourselves' (p.189). What is implied for the soul is also claimed for the body. In physiology, growth is described in passive terms. ' ... it takes place, it happens, it is wrought upon matter' (p.190). He admits that the concept that something outside the soul of man produces a moral change upon him may seem to some a startling revelation, but re-affirms that:

The change we have been striving after is not to be produced by any more striving after. It is to be wrought upon us by the moulding of hands beyond our own. As the branch ascends, and the bud bursts, and the fruit reddens under the cooperation of influences from the outside air, so man rises to the higher stature under invisible pressures from without. The radical defect of all our former methods of sanctification was the attempt to generate from within that which can only be wrought upon us from without. (p.191)

Drummond then discusses the phrase "reflecting as a mirror the glory of the Lord" and suggests that the word "glory" can rightly be
interpreted, not as a radiance of some kind, but as divine "character" which is communicated in the process of reflection. The solution of the problem of sanctification is compressed into a sentence 'Reflect the character of Christ and you will become like Christ' (p.195). He goes on, in a not entirely logical way to illustrate his theme that all men are mirrors by considering the nature of encounters between individuals. He describes a chance meeting in a railway carriage and suggests that in course of conversation each person automatically analyses and assesses the other's status and background. 'What I am reading in him meantime he also is reading in me; and before the journey is over we could half write each other's lives'. He continues:

Whether we like it or not, we live in glass houses. The mind, the memory, the soul, is simply a vast chamber panelled with looking-glass. And upon this miraculous arrangement and endowment depends the capacity of mortal souls to "reflect the character of the Lord". (p.197)

Noting that these influences are retained and stored in the soul for ever, Drummond goes on to suggest that the process is not just a matter of reflection, but there is also a transfer of substance through the law of Assimilation.

All things that he has ever seen, known, felt, believed of the surrounding world are now within him, have become part of him, in part are him - he has been changed into their image. He may deny it, he may resent it, but they are there. They do not adhere to him, they are transfused through him. He cannot alter or rub them out. They are not in his memory, they are in him. His soul is as they have filled it, made it, left it. (p.198-199)

Under the heading of 'The Alchemy of Influence', Drummond expands his thesis that people are changed through personal encounters, and suggests that 'It is the Law of Influence that we become like those whom we habitually admire' (p.202). Paul was changed through his encounter with Christ which began on the Damascus road. So also were Christ's disciples, especially John. Drummond then asks, how can we, who are not Christ's contemporaries be influenced by Him, and answers
that Friendship is a spiritual thing, independent of Matter, Space or Time.

Our companionship with Him, like all true companionship, is a spiritual communion. All friendship, all love, human and Divine is purely spiritual. It was after He was risen that He influenced even the disciples most. Hence in reflecting the character of Christ it is no real obstacle that we may never have been in visible contact with Himself. (p.210)

Drummond then draws a distinction between imitation and loving reflection. Imitation is mechanical and occasional, reflection organic and habitual. 'In the one case, man comes to God and imitates Him; in the other, God comes to man and imprints Himself upon him' (p.211). In practice this means that we must make Christ our constant companion and aim to be under His influence more than any other. 'Ten minutes spent in His society every day, ay, two minutes if it be face to face, and heart to heart, will make the whole day different' (p.212). Drummond illustrates the importance of starting the day on the right note in a passage which seems likely to be drawn from his own personal experience.

Yesterday you got a certain letter. You sat down and wrote a reply which almost scorched the paper. You picked the cruelllest adjectives you knew and sent it forth, without a pang, to do its ruthless work. You did that because your life was set in the wrong key. You began the day with the mirror placed at the wrong angle. Tomorrow, at daybreak, turn it towards Him, and even to your enemy the fashion of your countenance will be changed. Whatever you then do, one thing you will find you could not do - you could not write that letter. Your first impulse may be the same, your judgement may be unchanged, but if you try it the ink will dry on your pen, and you will rise from your desk an unavenged but a greater and more Christian man. Throughout the whole day, your actions down to the last detail, will do homage to that early vision. (pp.212-213)

To live in that vision is Eternal Life, the life of faith. And faith, Drummond suggests, 'is an attitude - a mirror set at the right angle' (p.214), a phrase picked out and used by John Birkbeck as the title of his anthology of daily readings.

In the final section of the address, under the heading "The First
Experiment", Drummond suggests that it is not unreasonable to speak of sanctification in terms of Friendship. Observing that many connect sanctification with the search for some mysterious occult experience, and hope to find a solution in church, in meetings, conferences or personal study, he states that 'the pursuit of holiness is simply the pursuit of Christ ... Sanctity is in character and not in moods; Divinity in our own plain calm humanity, and in no mystic rapture of the soul' (p.223).

To others who complain that 'to abide in Christ', or to 'make Christ our most constant companion' is too mystical and intangible, Drummond answers that one can never evacuate life of mysticism. 'Home is full of it, love is full of it, religion is full of it' (p.224). Quoting the text "If ye abide in Me and My words abide in you" (John 15:7) he suggests a beginning should be made with His words.

Words can scarcely ever be long impersonal. Christ Himself was a Word, a word made Flesh. Make His words flesh; do them, live them, and you must live Christ. "He that keepeth My commandments, he it is that loveth Me". Obey Him and you must love Him. Abide in Him and you must obey Him. Cultivate His Friendship. Live after Christ, in His Spirit, as in His Presence, and it is difficult to think what more you can do. Take this at least as a first lesson, as introduction. (p.225-226)

But if one cannot feel the play of Christ's life directly, one should watch for it indirectly in the world around.

Christ is the Light of the world, and much of His Light is reflected from things in the world - even from the clouds. Sunlight is stored in every leaf, from leaf through coal, and it comforts us when days are dark and we cannot see the sun. Christ shines through men, through books, through history, through nature, music, art. Look for Him there. (p.226)

Drummond then turns to a favourite theme - the imperceptibility of growth. 'Do not think that nothing is happening because you do not see yourself grow, or hear the whirr of the machinery. All great things grow noiselessly. You can see a mushroom grow, but never a child' (p.227). The biologist running his eye over the long Ascent
of Life sees the lowest form of animal life develop in an hour, the highest forms in years. 'As the man is to the animal in the slowness of his evolution, so is the spiritual man to the natural man' (p.228). It is tempting to defeat the end by 'watching for effects instead of keeping the eye on the Cause' (p.229).

Drummond goes onto assert that although it may have seemed up to this point to have been a matter of passivity, all depends on activity.

A religion of effortless adoration may be a religion for an angel but never for a man. Not in the contemplative, but in the active lies true hope; not in rapture, but in reality lies true life; not in the realm of ideals but among tangible things is man's sanctification wrought. (pp.230-231)

Resolution, effort, pain, even self-crucifixion and agony, are required 'to move the vast inertia of the soul, and place it, and keep it where the spiritual forces will act upon it ... to rally the forces of the will, and keep the surface of the mirror bright and ever in position ... to uncover the face which is to look at Christ, and draw down the veil when unhallowed sights are near' (p.231).

Drummond ends with an illustration of the work of the astronomer who adjusts his telescope by candlelight to photograph a star. After much labour the instrument is finely focussed, the candle blown out and the light of the star left to do its work upon the plate. As the world moves, the telescope maintains its alignment with the star by clockwork. The day's task for the Christian is to bring his instrument to bear. The clockwork of the soul is the Will.

Hence, while the soul in passivity reflects the Image of the Lord, the Will in intense activity holds the mirror in position lest the drifting motion of the world bear it beyond the line of vision ... It is all man's work. It is all Christ's work. In practice, it is both; in theory it is both. But the wise man will say in practice, "It depends upon myself." (pp. 233-234).

Finally, Drummond records the story of a famous statue in Paris, the work of a genius who lived in poverty in a garret studio, and who, when the still moist clay was threatened by frost, covered the statue
with his bedclothes. In the morning the sculptor was dead, but the statue was undamaged. Drummond concludes:

The Image of Christ that is forming within us - that is life's one charge. Let every project stand aside for that. "Till Christ be formed" no man's work is finished, no religion crowned, no life has fulfilled its end. Is the infinite task begun? When, how, are we to be different? Time cannot change men. Death cannot change men. Christ can. Wherefore, put on Christ. (p.235)

Comment

These four booklets, together with The Greatest Thing in the World represent the fruits of Drummond's evangelical thinking during the "Middle Years". Their origins go back to his work with Moody and Sankey, his experience with his own students at the Free Church College in Glasgow, and with his early congregations at Barclay Church in Edinburgh and at Possilpark in Glasgow. They embody material used in his addresses to students of many different disciplines in Edinburgh and overseas, and in some cases take account of his immediate circumstances at the time of final preparation for publication. They therefore can be regarded as fairly carefully considered opinion reflecting well thought out positions, revised in such a way as to make maximum impact on his readers.
SECTION IV

FINAL YEARS (1889 - 1897)

A "THE PROBLEM OF FOREIGN MISSIONS"

Background

Drummond's work with the students in Edinburgh University led to invitations to visit student groups in many other places of learning both at home and overseas. The autumn of 1885 saw him in Oxford, October 1886 in Bonn, and the summer of 1887 in America, where he began by attending a conference of students organised by Moody at Northfield, Massachusetts and went on to speak at most of the major universities in the north east. Writing from Yale on September 30th 1887 he states 'My life is roaring along like a cataract. I have not been so busy for years, and have literally not had an hour to call my own. The Colleges have given us the most generous reception, and we have been allowed to hold meetings as often and at whatever hours we liked ... it has all been very wonderful and very delightful'.

1

Word of his success in America spread to Australia, and in 1889 two hundred and thirty members of Melbourne University invited Drummond to come out to them the following year. He agreed to go, and planned his itinerary to visit Singapore, Saigon, Hongkong, Shanghai and Tokyo, finally returning via Canada. Soon after his arrival in Australia he was urged by a number of influential men, including the Premier of Victoria to visit the New Hebrides so that on his return home, he might help refute French claims to the islands. He describes the background in a letter dated 27th May, 1890.

Do not be surprised if you hear that I am off to the South Sea Islands(!) in a few weeks. It is only a prospect as yet, but some people here are keen about my going, and I am at least

thinking over it. The point is mainly political - France wants the New Hebrides, and Victoria says she shan't get them. They want me to write the thing up at home. Then there is a very crucial missionary problem; and the escapade tempts me generally.\textsuperscript{2}

Drummond took the opportunity not only to examine the political and missionary situations, but also to do some first hand geological studies of volcanic action and the growth of coral reefs. George Adam Smith comments 'On all these lines the bright promise was fulfilled. Drummond made a close and most exciting inspection of the crater of a volcano in full activity. He conversed with sheer savages, and with his own eyes saw their customs. He obtained a clear view of the political situation. But, above all, he came home from his visit to the missions with a new belief in the power of Christianity, and in the heroism of his fellow-churchmen upon those lonely and barbarian edges of the world'.\textsuperscript{3} He crystallised his experiences in his address "The Problem of Foreign Missions" which was later published in \textit{The New Evangelism and other Papers}. He first delivered it, soon after his return, at the opening of the winter session in the Free Church College, Glasgow in November, 1890 under the title "The Christian Evolution of the World". As with "The Contribution of Science to Christianity" he then went on to repeat the address to a student audience in Edinburgh, where he states 'it bagged several really first-rate men for the mission field'.\textsuperscript{4}

The content of the address

Drummond begins the address with a plea for the scientific and methodical study of the missionary problem generally and points out

\textsuperscript{2} Adam Smith, p. 367.
\textsuperscript{3} Adam Smith, p.374.
\textsuperscript{4} Adam Smith, p.409.
that those who offer for mission work tend to fall into two categories. Those who take the popular evangelical view and look upon mankind as souls to be redeemed, and those who take an evolutionary view and see the peoples of the world as men to be perfected. He allows that both views are relevant and both have dangers associated with them but for the purpose of his paper he intends to make 'temporary use' of the second standpoint.

He then draws attention to the complexity of the mission field, and the consequent need for a specialist approach with an illustration from agriculture where different soils are suited to different crops and methods of cultivation.

Some crops it is a mere waste of time to try and plant in one place; the specialist's business is to find out what will grow there. Some crops will not and cannot come up in one year, or in ten years, or even in fifty years; it is the specialist's business to study the possibilities of growth, the limitations of growth, and the impossibilities of growth. It is irrational also for the missionary to carry the same message, or rather the same form of message, to every land, or to think that the thought which told today will tell tomorrow; he must rotate his crops as God through the centuries rotates the social soil on which they are to grow.\(^5\)

This leads him to an indirect criticism of the content of missionary college syllabi. 'To every land he must take, not the general list of agricultural implements furnished by his college, but one or two of special make which possibly his college has never heard of' (p.124). He continues with a statement which caused immediate controversy.

Above all, when he reaches his field, his duty is to find out what God has grown there already, for there is no field in the world where the Great Husbandman has not sown something. Instead of uprooting his Maker's work and clearing the field of all the plants that found no place in his small European herbarium, he will rather water the growths already there and continue the work at the point where the Spirit of God is already moving.

5. FM-NE pp.123-124. Further references are given after quotations in the text.
In the printed version of the address he adds the following comment: 'A hasty critic, when these sentences were spoken, construed them into a plea for building up Christianity upon heathenism. The words are "what God has sown there", and "where the Spirit of God is already moving". The missionary problem, in short, so far from being a mere saving of promiscuous souls with a few well-worn appliances, is a most complex question of Social Evolution' (p.124).

Drummond then goes on to contrast the problems in different areas as an example of a scientific classification of missions. In *Australia* he suggests that it is a matter of dealing with a civilised people undergoing abnormally rapid development complicated by the difficulty in assimilating new elements introduced by immigration. 'The chief problem of Christianity is to keep pace with the continuous growth' (p.125).

In the *South Sea Islands*, where growth has not yet begun, there are scarcely even tribes and 'people are still at zero'. Instead of the problem of assimilation of new elements due to immigration there is the opposite ' - depletion due to emigration'. As to religion 'the field is altogether open, for there is none at all' (pp.125-126).

In *China*, there is an instance of 'arrested development'. There is a strong shell of custom and tradition and a powerful religion already in possession, 'these two complications make the missionary problem in China one of the most delicate in the world' (p.126).

In *Japan*, isolated from external influence for three thousand years, custom has been broken, development has been sudden and mature, and the country seeks recognition as one of the civilised nations of the world. From the Christian point of view the case is unique. 'Its own religion was abandoned a few years ago, and the country is at present looking for another' (p.127).

He then argues that if the churches were to establish a detailed
classification, the would-be missionary could select the work to which he was most suited and undergo appropriate specialist training. He would not be inhibited by Missionary Boards which seemed to require only one particular type of person with a special type of theology. Some of the best men at University, who feel at present excluded, might then offer themselves for work overseas.

I am not arguing for free-lances, or budding sceptics, or rationalists being turned loose on our mission fields. But for young men - and our colleges were never richer in them than at this moment - who combine with all modern culture and consecrated spirit and the Christ-like life; for men who are too honest to go under false pretences to a work which, though they be not yet specially enthusiastic for it, they are entirely willing to face, there ought to go forth a new and more charitable call. (p.129)

He sees at least three specialist areas. Pioneer mission work in new fields; second stage development work from settled charges, planting schools and founding new congregations; and social and political work consolidating and moulding the nation state. The Christianising of a nation is an intricate ethical, philosophical, social and religious problem requiring as careful planning as a military operation.

We have at present, and, as already said, we shall always need, and they will always do their measure of good, devoted men of the sharp-shooter order who aim at single souls; but in addition to these the Kingdom of God needs men who work with a wider vision - men prepared by fulness of historical, ethnological and sociological knowledge to become the statesmen of the Kingdom of God. (p.131)

He then amplifies his thesis with further examples from the areas he recently visited. He begins with the New Hebrides where the population as a whole is being depleted, the adults by emigration and the children by 'white man's epidemics'. He suggests that what is required is a mission of 'pure benevolence' and pays tribute to missionaries who persevered in the face of cannibalism to establish the elements of civilisation, among them, Mr. and Mrs. Robertson on Eromanga.

For the first year of their life in Eromanga Mr. and Mrs.
Robertson lived in a bullet-proof stockade. They left it only under cover of night for a few yards, and on few occasions, once to bury their first born babe. For a year they never saw a European. Their work was to let the people look at them. Their message was to be kind. By-and-by acquaintance was picked up with one or two natives; the circle of influence spread, and after years of extraordinary patience and self-denial, their lives again and again hanging by a thread, they won this island for civilisation and Christianity. (p.136)

Turning to China he draws attention to the unco-ordinated diversity of Christian mission work as 'a disordered host of guerillas recruited from all denominations, wearing all uniforms, and waging a random fight' (p.138). He suggests that this is wasteful and confusing. Noting that the majority of conversions appeared to be from the lower classes, he proposes that additional skilled manpower should be devoted to recommending the appropriate form of message most suited to the Chinese mind. 'I would join with the best of the missionaries in arguing for a few Rabbis to be sent to China, or to be picked from our fine scholars already there, who would quietly reconnoitre the whole situation, and shape the teaching of the country along well-considered lines - men, especially, who would lay themselves out through education, lectures, preaching, and literature to reach the intellect of the Empire' (p.139).

He was struck by the fact that the Chinese regarded the Europeans a most inferior and even barbaric people. 'The Chinaman ... listens to a European missionary much as a London crowd would listen to a Red Indian - half curious, half amused, but wholly contemptuous as to his pretension to teach him anything' (p.141). Drummond notes that it is the opinion of many who know China intimately that half the preaching and especially the itinerant preaching, 'is absolutely useless'. He goes on to criticise the recruiting methods of some of the missionary societies.

This call is frequently uttered in such terms as to take almost an unfair advantage of a certain class of Christians - uttered
with a harrowing importunity and sensationalism of appeal which when it falls upon a tender conscience or an excited mind makes it seem blasphemy to decline. The kind of missionary secured by this process, to say the least, is neither the wisest nor the best; and not only China needs to be protected from these men, but they need to be protected from themselves and from those who, in genuine but unbalanced zeal, appeal to them ... (p.142)

Moving on to Japan, Drummond paints a graphic picture of the introduction of Western ideas to the country - civil law from France, military organisation from Germany, a navy from England, and an educational system from America' ... all the material and machinery of an advanced and rising civilised State - all the material except one. They have no religion' (p.143). Representatives from the whole of Christendom prospect for converts.

The noblest building in the capital of Japan is the Cathedral of the Greek Church. Roman Catholics are there, Unitarians are there, Episcopalians of different degrees of height and Presbyterians of different degrees of breadth, and Methodists of different degrees of heat, and Baptists and Independents, and Theosophists and Spiritualists, and every sect and church and denomination under heaven. The issue will be one of the most interesting events in ecclesiastical history ... When the result is known, it will be the purest possible case of the survival of the fittest. (p.143)

He records the suggestion from a cultured convert to Christianity that the time has come for the growth of indigenous faith. "We have got", he said, "our Christianity almost exclusively from the missionaries, ... and we can never thank them enough. But after a little we began to look at it for ourselves ... We found that Christianity was a greater and richer thing than the missionaries told us ... We want Christianity, not perhaps necessarily a Western Christianity"' (pp.144-145). He then reports that while he was in Tokyo, he addressed a group of some thirty or forty Japanese Christian pastors and asked them if they had any message he could take to the Churches at home or in America.

They appointed a spokesman, who stood up and told me, in their name, that there were two things they would like me to say.
The one was, "Tell them to send us one six thousand dollar missionary, rather than ten two thousand dollar missionaries". But the second request went deeper. I again give the exact words - "Tell them", he said, "that we want them to send us no more doctrines. Japan wants Christ". (pp.145-146)

He then turns lastly again to Australia, and suggests that there is a need for two kinds of missionaries. Firstly, men of the highest culture and ability to exercise leadership from the churches in the large towns, where there are 'opportunities of giving a tone and direction even to political life such as no one at home possesses' (p.147). And secondly, ready and adaptable men to act as bush ministers' ... to keep up an occasional service at some half-dozen wooden chapels - oases in the wilderness of forest and scrub - or to hold services in barns or, on great occasions, in some village church' (p.147).

He ends his address on an optimistic note with an indirect missionary appeal to his audience, inspired by the vision of thousands of ministers, missionaries and Christian laymen in every land, playing their part in the evolution of the world.

We have looked down only three or four of the vistas of useful work which in every region of the earth are opening up; but how attractive, how alluring each of them is to the man with a generous purpose in his soul! There is one thing for which I love the very sound of the word Evolution - its immense hope, its indescribable faith ... The message of science to this age is that all Nature is on the side of the man or of the nation who is trying to rise. An ascending energy is in the universe, and the whole moves on with the mighty idea and anticipation of the Ascent of Man. (pp.148-149).

Comment

Drummond's paper was well received by his student audiences, but it became a focus for bitter attack from certain circles. James Y. Simpson states that 'a storm of malignant criticism, of which mutterings had been heard on several previous occasions, broke over his
Many of them based their comment on a one-sided newspaper report, but the attacks also extended to the "Christmas Booklets" especially "Pax Vobiscum" which came out for Christmas of the same year. George Adam Smith records that 'Drummond's letters of this date are full of pain, and, for the first time in his life, of warm indignation on his own behalf'. Drummond's views on overseas mission work are now largely shared by the main-stream missionary departments and agencies, who have adapted their approach in the light of experience, but it is not surprising that his remarks should have provoked hostile reactions in his day, and that the breadth of his views on God's providential activity should have added fuel to those who were already uneasy about his theological position.

7. Adam Smith, p. 409.
8. To give one example only, one might quote the survey of the current position in Stephen Neill's Salvation Tomorrow (London, 1975) particularly chapter eight "A Moratorium on Missionaries?".
"THE METHOD OF THE NEW THEOLOGY, AND SOME OF ITS APPLICATIONS"

Background

In January 1892, just over a year after delivering "The Problem of Foreign Missions", Drummond gave his address "The Method of the New Theology, and some of its Applications" to the Theological Society of the Free Church College in Glasgow. It was later included in The New Evangelism and other Papers, where it was printed in two sections, the second being headed "Survival of the Fittest". There does not seem to be any particular reason for the giving of the address, but it may be, as is the normal practice in such societies, that it was Drummond's turn to present a paper. It is clear from the content of the address that there is some structural similarity to "The New Evangelism and its Relation to Cardinal Doctrines" which he gave to the same society some eleven years earlier, and it may be that he felt it was an appropriate occasion to follow up and expand on some of his original ideas.

It was an extremely busy time of Drummond's life. George Adam Smith notes that 'The session of 1890-91 was spent in his college work, his weekly visits, after the New Year, to the Edinburgh students, and a multitude of other duties'. These included coping with a very considerable correspondence and a constant stream of visitors, while maintaining contact with a number of social organisations in Glasgow including the University Settlements, the Boy's Brigade, and the Canal Boatman's Institute. He found time, however, to enjoy his vacations and the hospitality of his friends, particularly that of Lord and Lady Aberdeen, and was able to spend July and August in Sutherlandshire, 'fishing at Loch Stack, and driving about the country'.

9. Adam Smith, p.413.
10. Adam Smith, p.414.
of 1893, later to be published as *The Ascent of Man*.

**Content**

In marked contrast to the opening words of his 1880/81 address, where he speaks of the heroism required to deal with anything new, Drummond begins by congratulating the members on 'the free theological atmosphere in which it is the lot of this society to do its work'. He then goes on to discuss the implications of that freedom.

Never has there been fresher air in that dusty realm than there is today; and if we pay the price for our freedom in bewilderment or doubt, in the suspicion of our enemies, in the helplessness of our wisest friends to give us certainty, we have at least the sympathy of the best around us, and the stimulus of working in an age when theology is no longer stagnant, but the most living of all the sciences.iii

Drummond then asserts that the real contrast between the old and new theologies is a matter of method. The old way to make a sermon was to expound the authoritative ideas of Hodge, or Owen or even Calvin. The new way is not to assert a dogma but to unearth a principle. It is a matter of seeking out the basic truth and rephrasing it in modern terms. This is a spiritual exercise and likely to be opposed by the Pharisee 'who is not able to see spirit for forms', and by the lazy man 'who will not take the trouble to see the spirit in form' (p.51).

He describes this particular form of spirituality not as mere vagueness, but one based on a series of ethical principles grouped around spiritual, moral and natural law. It seeks to find new life in old doctrines. This was Christ's own method, and the method of the Reformation. It is a process of growth. Drummond illustrates the point by referring to the new way of understanding the doctrine

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iii. NT-NE p.47. Further references are given after quotations in the text.
of inspiration in the Bible.

The old view had become absolutely untenable, misleading and mischievous. But from the hands of reverent men who have studied the inward characters of these books, we have again got our Bible. The theory of development, the study of the Bible as a library of religious writings rather than as a book; the treatment of the writers as authors and not as pens; the mere discovery that religion has not come out of the Bible, but that the Bible has come out of religion; these announcements have not only destroyed with a breath a hundred infidel objections to Scripture, but opened up a world of new life and interest to Christian people. (pp.53-54)

He notes the absurdity of constructing a theology of Peter based on a page or two of scriptural evidence and the even worse danger of using texts as a substitute for thought, particularly when preaching about sin and salvation. When the street evangelist faced with a drunkard leaning against a lamp-post is asked "What must I, the drunkard, standing here tonight in Argyle Street, do to be saved?" he takes refuge in some text or metaphor, a proposition, and passes on (p.57). Metaphor is necessary, but when frequently repeated needs to be deepened by forceful teaching based on deep personal study. The mental act through which spiritual truth is apprehended is not so much the exercise of reason but the exercise of the imagination. 'We are to put up truth when we deliver truth to others, not in the propositional form, but in some visual form - some form in which it will be seen without any attempt to prove. Truth never really requires to be proved' (p.59).

In the second part of the address, Drummond goes on to give an extended illustration of the application of this principle as it applies to the Last Judgement. He begins by discussing Tintoretto's classical picture of the subject and Ruskin's description of it in the book Modern Painters. Drummond acknowledges the artistic and religious value of the picture but suggests that the material imagery 'are presentations to an age which has passed away. The very tying-down of Judgement to a Day, the whole machinery of a human court ...
are out of harmony with the other ways of God' (pp.66-67). A spiritual re-interpretation is required which can be accepted in a scientific age. It is a demand on religion 'for a further spirituality' (p.68).

He then goes on to point out that science has encouraged religion to remodel its doctrine of Creation. The old theory of a 'Six Days' Creation has been replaced by one in which Creation is seen not as 'a stupendous and catastrophic operation performed from without, but a silent process acting from within' (p.69). In a somewhat similar way the concept of God visiting the sins of the fathers on the children may now be seen as the working out of the law of heredity.

In the case of the Last Judgement, Drummond argues that the scriptures are perplexing and even contradictory and that in Christ's own teaching and in that of St. Paul, the principles of eschatology have a purely Jewish or Rabbinic basis, often with strong political overtones. He suggests that judgement is to be understood not as an act to be accomplished but as a quiet on-going process. 'Eternal life under the last analysis is a question of the survival of the fittest. And Judgement is a question of natural selection' (p.72). What is implied is the survival of those who have become adapted to the Divine Environment. Just as a tadpole requires to adapt to the atmosphere by developing an air breathing apparatus before becoming a frog, so human beings require to adapt a faculty to correspond and commune with God, described in theological terms as the process of sanctification. If an animal dies, its death is the natural culmination of its own past. If it lives, its survival is the direct result of what it at the moment is.

And so with man. It is not necessary that he should be judged from without; he will be judged from within. He is his own judge ... as he stands there, he is prisoner, gaoler, court, witnesses, all in one, all the past collected and focussed in his present, all the present defining and determining the unknown, but not unanticipated future. (pp.76-77)
Drummond suggests that the principle of judgement pervades the whole of nature. When there is a major change in the environment of a fish or a bird, this is the moment of judgement. In the case of man, judgement occurs 'when this present world is done' at 'the appearing of Christ'. Drummond does not specifically say that this is to be understood as being applicable to every man at the moment of his physical death, but the general tenor of his argument would suggest that this is his intention.

All that he is, the little that he is, all that he is fit for, all that he is not fit for, will be revealed. In terms of these, in himself, and at a glance, he will know whether he is to live or die. With his own eyes he will see the great gulf fixed; with his own reason he will see why it cannot be crossed. (pp.78-79)

Drummond then states that natural selection, or the survival of the fittest, is the means whereby nature brings all organisms 'to an ever increasing perfection and complexity, to carry on the evolution of the world to higher and higher beauty, usefulness, and efficacy' (pp.80-81). He continues with the comment 'If nature is in earnest about one thing, it is quality'. This is most significant for religion, 'nothing could more eloquently express its own deepest aim for the world, than this mighty gravitation of all in nature towards fitness, wholeness, perfectness' (p.81).

Drummond goes on to discuss the place of mercy within the process of judgement, and argues that while the whole scheme is established in mercy, even mercy has its laws.

The object of mercy can never be to "save" the unfit, i.e., to save the unadapted, which is inconceivable and impossible. Mercy can make the unfit fit; it has a vast machinery for this one purpose. That is its work, its line, the only line it can take. To "fit" the unfit is a possibility, to "save" them being unfit, to sentence them unfit in either relation to a heaven or a hell is impossible. (p.82)

He then illustrates the point by stating that the only way to save a fish tossed up on a rock by a wave is suddenly to supply it
with a lung or return it to the sea. To provide a lung is impossible and so 'On similar principles the unfit in relation to God cannot be saved, the fit can by no possibility be lost' (p.82). Drummond does not appear to allow for the possibility that the process of being made 'fit' could begin very close to or even at the end of physical life. Death-bed repentance does not seem to be acceptable, nor the possibility that the future state might have room for other than those who are on the road to perfection. At the same time, it would seem that the process of being made 'fit' is not to be understood in narrow ecclesiastical terms as is suggested in the following reference to Emerson which concludes the section.

As the Evangelist said of Emerson, "Emerson was one of the most beautiful souls I ever knew. There is something wrong with his machinery somewhere, but I do not know what it is, for I never heard it jar. He cannot be lost, for if he went to hell, the devil would not know what to do with him". (pp. 82-83)

Drummond returns to the theme of the survival of the fittest in his final paragraphs, looking at the subject in terms of the whole of mankind rather than the individual. He asks.

What is each man but one little thread in the loom of God? The great wheels revolve, the shuttle flies, not for the thread but for the web; not for the web alone, but for the pattern on the web; not for the pattern on the web, but for One, the Designer, who makes loom and web and pattern for Himself. To know why the loom is there, and why the shuttle moves, and why the threads are in this place or that, or why they are there at all, we must look beyond ourselves, discover if we may the hidden Workman's purpose, and see in the half-finished design and prophecy of some final harmony. (p.83)

Drummond concludes his address with a vision of the whole scheme of things being fulfilled in a spiritual realm beyond earthly life in a final paragraph which serves as a suitable introduction to The Third Kingdom, the next paper to be considered in this section.

Even now, in some poor way, we seem to see how God proceeds to secure His end. Our little world has had its own life-history. In the life-history of this one world we can dimly make out, not only the direction, but the method of progress,
for every feature of its marvellous evolution is a further vision of things to come. Look into this past for a moment, observe God's way of producing earth from chaos, and say whether no clue lies here to that further evolution of heaven from earth. (pp. 84-85)

Comment

The impact of the address on the Theological Society is not known. It is somewhat uneven and lacks the polish of some of his other papers. It is, however, appropriate to the occasion and can be regarded as an attempt to encourage his colleagues to take biblical criticism seriously and to work out the theme of judgement in the light of the wider understanding of evolution.
"THE THIRD KINGDOM"

Background

The paper "The Third Kingdom" was published posthumously in The New Evangelism and Other Papers. The following note is printed below the chapter heading. 'The Introductory page of the MS., which is lost, doubtless contained a reference to division into Inorganic or First Kingdom, Organic or Second, and Spiritual or Third'. It is undated, but its content and style reflect a later rather than an early period in Drummond's thinking. It may be that it formed part of the preparatory material for the Ascent of Man and therefore it is thought appropriate to consider it at this point in the thesis.

Content

Drummond begins by asserting that the concept of the Kingdom of God is the central idea of both the Old and New Testaments. He refers to Keim, Van Oosterzee, Reuss, Hausrath, Neander, Hess and the earlier chapters of Ecce Homo, and suggests that the Old Testament expectation of a Kingdom of God on earth was accepted by Jesus who 'deliberately announced Himself as the King of the promised Kingdom' and whose one idea was 'to found on earth the Kingdom of Heaven'. He then suggests that an evolutionist asked to formulate the fundamental idea of nature might reply.

All nature ... is gravitating towards a nobler order of things. The vision of the past presents man with a grand and harmonious picture of the Ascent of Life. Kingdom is seen to be rising above Kingdom. And yet withal the apex of the pyramid is still concealed. The perfect is not yet come. (p.92)

While accepting that God's ultimate purpose in the further evolution of man can only dimly be discerned, Drummond goes on to suggest

12. TK-NE p.91. Further references are given after quotations in the text.
that enough is known to attempt a provisional answer to the question
'What does the Kingdom of God propose to do for mankind'? This is
an odd way of putting it. One might have expected it to have been
framed the other way round in terms such as 'What is man's role in
the Third Kingdom?' He suggests the answer is to be found in the fur-
ther development of the agreed object of the Second or Organic Kingdom
- the **summun bonum** - the moral development of the race. Christianity
looks to the development of morality into spirituality. But it is
not a case of simple evolution.

The natural character does not simply grow better and better
until a pitch of excellence is reached such as finally deserves
the distinguishing name of spirituality. Spirituality and
morality differ qualitatively as well as quantitatively. The
natural development can never pass the barrier separating the
Second from the Third Kingdom. The transition is secured,
just as in the case of atoms passing from the First to the
Second Kingdom, by means of something not inherent in the lower
Kingdom but communicated **ab extra.** (p.95)

Drummond then goes on to suggest that although it may be seen
to be a paradox, 'the spiritual character is still a development of
the natural'. Here he seems to move from the position taken in Natural
Law in the Spiritual World where he regards the Third Kingdom as a
separate tier beyond the Second or Organic Kingdom, and allows that
the powers of the Third Kingdom operate on the Second Kingdom, prior
to the emergence of 'Twice-born organisms' (NL p.399). He goes on
in "The Third Kingdom" to say that 'The first object of the Third King-
dom cannot, without misconception, be said to be the creating merely
of a spiritual character. Its first work is to make what would be
called a perfect natural character ... the Third Kingdom alone
possesses the true ideal, and alone contains the energies effectually
to overpower those forces of sin which prevent men from ever becoming
men' (pp.95-96). It may be that he is here thinking of men like Emers-
son, mentioned at the end of the previous paper, and of his own recog-
nition of the movement of the Spirit of God in the minds of men of
different cultures expressed tentatively in his paper of Foreign Missions.

Drummond continues with a reference to three passages from the Bible which he considers particularly relevant to the concept of the Third Kingdom, 'the programme of Christianity penned by Isaiah' (Isaiah 61.1-3), the 'claims of the Third Kingdom' in the Sermon on the Mount, and the 'aspirations of the Kingdom' in the seven petitions of the Lord's Prayer. In his quotation from Isaiah on the preaching of the good tidings to the meek, he includes the second part of the third verse "That they might be called trees of righteousness, the planting of the Lord, That he might be glorified", which he omitted when using the text for the booklet "The Programme of Christianity". The underlining is Drummond's and he presumably has added the emphasis as an introduction to his discussion on the working of Holy Spirit which he develops later in the paper.

Drummond then turns to the powers of the Third Kingdom and suggests that the fundamental difference between the Second and Third Kingdoms consists in their Energies. Using a quotation from Ecce Homo, which suggests a personal attachment to the figure of Christ as the first step towards good dispositions, and which leads to a change felt as a new birth, Drummond objects that the scheme begins at the wrong end and asks 'Why not begin with the new birth? Why be guilty, even in appearance, of the scientific heresy of making Life the result of organisation instead of the cause of it?' (p.100).

The Kingdom of God is much more than the "Society of Jesus" or "a religious-moral institution" (Van Oosterzee), or "a filial relation to God" (Hausrath). It must be regarded as a biological question, and Christ's affirmation that he came to give men Life must be understood literally and not figuratively. New birth implies a new life 'a deeper and spiritual Life, a Life mysteriously entering into the
soul as by a breath from God' (p.102). This concept of life 'implies the idea of a power, an operation, a communication, since this life no longer remains, so to speak, latent or passive in God and in the Word, but through them reaches the believer' (p.103). This last passage is part of a longer quotation taken by Drummond from Reuss's History of Christian Theology in the Apostolic Age.

Drummond then asserts that the sum of New Testament doctrine is that there is 'an immediate action of the Spirit of God on the souls of men'. The Spirit is referred to nearly three hundred times in the New Testament alone, and is constantly associated with the word Power. Further definition as to the nature and action of the spiritual powers is almost impossible with our present faculties, 'in analysing spirituality the effort to detect the Living Spirit is as idle as to subject protoplasm to microscopic examination in the hope of discovering Life' (p.104). Despite this disclaimer, Drummond attempts an elucidation which is worth quoting as an indication of his understanding of the operation of the Holy Spirit within the concept of the Trinity.

The activities of the Third Person of the Trinity have always been described as dynamical. The Spirit is the executive of the Godhead, carrying out the sovereign Will by operations as irresistible as they are subtle. To this omnipotent agency are to be referred ultimately all changes which take place within the Kingdom of God on Earth. This is the Source of Energy for the Third Kingdom. (p.104)

After drawing attention to the medieval schoolmen's concept of the divine activity in nature as something physical (with a footnote quoting Turretin), confirmed by the Puritan writer John Owen's work on the Holy Spirit, Drummond speculates further on the evidence of action of the spiritual power. Looking back at the action of the Second Kingdom on the First Kingdom (the Organic on the Inorganic) he sees certain atoms subject to the law of gravity, affected by 'polar, molecular, or other forces', (including those which cause crystallisation) being manipulated by a mysterious power which enables
them to take their places as 'part of the higher symmetry of a living organism' (p.106).

In the same way, he suggests that in the Organic Kingdom, a power from the Kingdom above manipulates organisms in unprecedented ways. 'Here is one Organism raised from the dead. Here is another refusing to bend its will to the attraction of sin. A third, subject to deforming forces from the beginning suddenly defies them, and assumes a high and noble spiritual symmetry' (p.107). In both cases, the manipulations could be described within the category of the miraculous, as seen from the lower kingdom, or as normal, as seen from the higher. Drummond suggests that the usual understanding of the miraculous as applying to certain acts of healing, beneficent deeds of abnormal character, or deliverance from physical danger, want or death, is far too narrow. 'The outstanding miracles, on the contrary, are those effected on the moral and intellectual portions of the highest department of the Organic Kingdom - namely, on the life and character of the Natural Man. The attestation of Christianity is the Christian' (p.108). If one accepts the idea of the Third Kingdom, 'the miraculous becomes not only credible but necessary'.

Each Kingdom operates on the Kingdom below in a way which is bound to seem miraculous to the Kingdom below, and each Kingdom is superior in its powers and complexity to the one below. There is therefore a dynamic as well as a static evolution. Not only do the organisms evolve, but so do the powers and energies. Evidence of their action is limited in the early stages, but as time goes on and their operations extend, so evidence accumulates and doubts dissolve. The activities of the powers of the kingdom above become particularly evident at the boundaries between the kingdoms, where they are no longer isolated phenomena. If in the case of the Organic and Inorganic Kingdoms one casts one's eye over the seaward margin of a coral reef
fringed with living polypes one sees their reactions as no longer the exception but the rule. 'Miracle, in short, is the normal frontier phenomenon' (p.110). At the same time, the activity of the superior power is generally, by reason of its nature, discrete and imperceptible. 'The Kingdom cometh without observation' (p.110). This is true both for the Kingdom of God and the relations between the Second and the First Kingdoms.

Drummond goes on to discuss the question of miracle and the operation of spiritual power in the life of Jesus, and their relation to present day Christianity. He suggests that it was necessary for the secret operations of the Spirit in regenerating men, to be supplemented by manifestations of power in the 'lower plane in order to give Christianity an initial visibility and impetus.

It might be urged indeed that Virtue could not but go out of Jesus at whatever point He touched life; but at the same time this lower miracle was not due to the inadvertent overflow of a full vessel, but designed to strike men who could not rise to the perception of loftier manifestations. (p.112)

Drummond notes that the evangelists hint that such suspensions of the ordinary course of nature in obedience to a higher law occurred with great frequency, and comments that while Jesus appeared to exercise extreme conservation of this power, it is necessary to bear in mind that 'He continually did works which no other man did'. It would, however, be a great mistake to appeal to such rudimentary forms of miracle as the continued attestation of Christianity. What is required now is not to point to the first series of miracles, but to 'the series itself - the series which extends down to the present hour' (p.113). Drummond assumes that his readers are clear that he is speaking of the continuing conversion of natural men into spiritual men, and their witness within society, and goes on to say that the present widespread denial of miracles is due partly to defective observation, and partly due to lack of spiritual power within the present day
churches.

The members of the Third Kingdom have something to answer for themselves here. They have failed to provide due materials for observation ... The splendid machinery of Christianity is standing still. The Church is paralysed. When the Second Kingdom asks the Third for its credentials it remains silent. It has something to show in the past; it points sadly to the early centuries. But for the present nothing stirs; it is all as frozen as Labrador. (pp.114-115)

He affirms, however, that there are individuals who witness to the powers of the Third Kingdom, and that anyone who really wants to satisfy himself of the reality of the spiritual world will not seek in vain for a demonstration of the spirit and of power. Despite the state of affairs in the 'Visible Church of the Third Kingdom' we must not blind ourselves 'to the unspeakably important fact that the Spiritual World contains forms of energy infinitely more powerful than those of the First and Second' (p.116). He concludes the paper with the statement

... the one thing requisite at once for the attestation of the Third Kingdom and the further evolution of the Second is that the subjects of the former should give heed once more to the offer of its King and Founder, "If ye, being evil, know how to give good gifts to your children, much more will your heavenly Father give the Holy Spirit to them that ask it". (p.117)

Comment

Who Drummond had in mind when he prepared this paper is not known for certain, but it would seem from the references to theological authorities that it was intended for an academic audience. It may have been a draft for the Theological Society, or for an address at an opening session of the College, or for his students in the normal course of his lectures. Or it may have been as earlier suggested, part of the material prepared for The Ascent of Man, which concludes with a more extended consideration of the energies of the material
and spiritual worlds.

Whatever his original intention, it must be borne in mind that Drummond did not publish the paper, and he may not have been too happy with it. It does, however, contain useful material on his understanding of the work of the Holy Spirit and the nature of miracles.
THE ASCENT OF MAN

Background

In April 1893, Drummond delivered the Lowell Institute Lectures in Boston, Massachusetts. These had been established by Mr. John Lowell, Jun., in 1839 and the lectureship was offered to a series of famous scholars, artists and literary and scientific authorities. The Ascent of Man represents the lectures revised and adapted for publication in book form. Publication took place in May 1894, rather sooner than Drummond originally intended. A Philadelphia publisher attempted to issue the lectures independently, based on reports taken from the British Weekly. Drummond secured an injunction temporarily restraining publication. This was later made permanent, but initially left Drummond under pressure to go to press as soon as possible.

The book was generally very well received, though not with the same enthusiasm as Natural Law in the Spiritual World. It was recognised as a much more mature and well researched work. Among the reviews quoted by the publisher in the 9th Edition, printed in London in 1899, The Expositor stated that 'The Ascent of Man, whether we have regard to its literary style or its intellectual power, is unquestionably his greatest book'. George Adam Smith gives a thorough and well balanced review of his major critics, both adverse and appreciative in his chapter on the book in The Life of Henry Drummond.

The major preparation for the lectures took place during the session of 1892/93, a period of intense activity, described by Adam Smith as 'the last lap of Henry Drummond's race'. The lectures were originally drafted as a serious scientific study, mainly for scholars, but on arrival at Boston, Drummond found the audience such that he

13. AM penultimate page. Further references to this edition are given by page number after quotations in the text.
decided to redraft them. A Boston editor reported that 'standing room is at a premium, and scores are turned away every evening'. James Young Simpson stated that Drummond was surprised 'not only in the number, but in the character of his audience, and after the first lecture found it necessary to rewrite the whole series on the spot, making them more popular'. James W. Kennedy mentions that the lectures were of such tremendous public interest 'that speculators bought up whole blocks of tickets for the series and sold them at fabulous prices'.

In the final printed version of the lectures in The Ascent of Man there is some evidence of this conflict of presentation. There are a fair number of quotations from and references to, external authorities, and the overall style is not so fresh and stimulating as some of his earlier work. Much of the content is more anthropological and sociological than theological, and not directly related to spirituality. Nevertheless many of the fundamental ideas are of considerable relevance, and it is intended therefore, in this section of the thesis, to summarise in a rather more telegraphic form than has been the practice so far, in order to present the argument as concisely as possible and with a minimum of quotation and page reference.

The chapter headings give a useful outline of the scope of the book and are as follows:

Preface
Introduction
I  Evolution in General
II  The Missing Factor in Current Theories
III  Why was Evolution the Method Chosen?
IV  Evolution and Sociology
The Ascent of the Body
The Scaffolding Left in the Body
The Arrest of the Body

15. Adam Smith, pp.419-420.
17. Kennedy, p.216.
The Dawn of Mind
The Evolution of Language
The Struggle for Life
The Struggle for the Life of Others
The Evolution of a Mother
The Evolution of a Father
Involution

Preface

Drummond begins by stating that the book is an attempt to tell in a plain way what Science now sees with regard to the Ascent of Man. The nature of Evolution has been misconceived and the greatest factor overlooked in most contemporary scientific thinking. Evolutionary theory as given to the world is out of focus, the general basis has not been re-examined since Darwin, and adjustment is necessary to take account of the whole truth and reality of Nature and Man. This primary object is to supply no more than 'the accents' for a reconstruction, 'there is nothing here for the specialist - except, it may be, the reflection of his own work. Nor, apart from Theology, is there anything for the theologian' (p.vii). The limitations of a lecture audience preclude full treatment of theological themes, and the brevity of a course of lectures limits study to the earlier stages of man's evolution. Nevertheless, the lines of man's youth are also the lines of his maturity, and by studying these, the nature of Evolution and the quality of Human progress can be perceived.

Introduction

I. Evolution in General

No connected outline of the Ascent of Man has yet been attempted. The Embryology of Man, the Origin of the Animal Body, the Evolution of Mind, the Development of Morals, and the Evolution of Religion have
been researched by various pioneer minds. As knowledge grows further revelation may await us on the highest themes. Each footprint discovered in the Ascent of Man is a guide to the next step. There is an extraordinary human interest and desire 'to find some light upon the course' (p.3).

Evolution is simply a 'general name' of the history of the steps by which the world has come to be what it is. The outline of a continuous story is beginning to appear. The intention is to outline the story and to add interpretation and comment where justified by the facts. To give an account of Evolution, is not, however, to account for it. The field of science is hot with controversy. No one asks more of Evolution than permission to use it as a working theory. 'This is the age of the evolution of Evolution' (p.9).

Evolution is a Vision which revolutionises the world of Nature and thought, opening up avenues into the past and vistas into the future. Evolution has done for Time what Astronomy has done for Space. For Evolution to be interpreted it is essential that its universal characteristic be recognised, and that interpretation should begin with the final product - Man. The beginning must be interpreted from the end. The Evolution of Man is the complement and correction of all other forms of Evolution. The mistake of naturalism has been to interpret Nature from the standpoint of the atom. The Evolution of Man must take into account the whole Man, the work, thought, life and aspiration of Man, including moral consciousness together with social and religious forces. 'Man, body, soul, spirit, are not only to be considered, but are first to be considered in any theory of the world' (p.14).

II. The Missing Factor in Current Theories

The main error of evolutionary philosophy has been to misread Nature. The root of error lies indirectly with Darwin's *Origin of
Species from which the principle of the Struggle for Life became accepted by the scientific world as the governing factor in development. A second factor, The Struggle for the Life of Others, has played an equally prominent part but has escaped notice. Two fundamental functions in living organisms, Nutrition and Reproduction, involved in the fundamental nature of the proplasm, run a parallel (or spiral) course, determine the whole morphology of living things and form the basis of the Struggle for Life, and the Struggle for the Life of Others.

The Struggle for Life is not only concerned with Nutrition and the Struggle for Food, but also with man's conflict with the natural elements, sustained by hunger; and man's conflict with man, intensified by competition, 'and is ultimately known in the modern world under the name of War and Industry' (p.20).

The Struggle for the Life of Others is not only concerned with Reproduction and its physiological aspects, but also with its psychological and ethical aspects, and the development of Altruism. Sympathy, tenderness and unselfishness are the direct outcome and essential accompaniment of the reproductive process, especially in the higher forms of animal life, and are perfected in maternal solicitude and self-sacrifice. 'The vicarious principle is shot through and through the whole vast web of Nature' (p.23).

The scientific theory of evolution must keep in view both the Struggle for Life and the Struggle for the Life of Others. In lower Nature, the Struggle for Life, the Self-regarding function, obeys the law of self-preservation, devotes its energies to feed itself, and develops the active virtues of strength and courage. The Struggle for the Life of Others, the Other-regarding function, obeys the laws of species-preservation, devotes its energies to feed the young and lays the basis of the passive virtues of sympathy and love. Viewed
by itself the Struggle for Life appears irreconcilable with ethical ends, but viewed in continuous reaction with the Struggle for the Life of Others, discloses itself as 'an instrument of perfection of the most subtle and far-reaching that reason could devise' (p.37).

The failure of science to recognise the importance of the Struggle for the Life of Others is due largely to the followers of Darwin, who, ignoring his warnings, prejudged the issue; and to the narrowing effects of specialism. There are many scientific men, but few scientific thinkers. The moment any great half-truth in Nature is unearthed, unqualified practitioners leap to a generalisation. The original observers are too busy or oblivious to refute their heresies. The brilliant generalisation retains its hold on the popular mind before the complementary or neutralising facts can be supplied.

Drummond points out that there has been recognition of the altruistic factor by such thinkers as Herbert Spencer, who sees the care of offspring becoming greater with advancing organisation, and by Geddes and Thomson who write of the co-existence of twin streams of egoism and altruism. Drummond suggests that Evolution enters the rudimentary ethical plans at a much earlier stage than is usually supposed and that as Evolution proceeds, in qualitative terms, the Struggle for Life wanes while the Struggle for the Life of Others waxes. The Struggle for Life can never cease, but over the ages the harsher qualities must pass away and the altruistic spirit gradually create a social order in which the reign of love is realised. 'The path of progress and the path of Altruism are one. Evolution is nothing but the Involution of Love, the revelation of Infinite Spirit, the Eternal Life returning to Itself' (p.46).

III. Why was Evolution the Method Chosen?

One seldom raised question is why the process should be an evolution at all. Why not an instantaneous act? Modern natural theology
answers that the evolutionary method is an infinitely nobler scheme. The process of growth suggests the work of an intelligent Mind. The grandeur of the concept is attested by Darwin himself in the closing words of the *Origin of Species* which acknowledges the life-giving role of the Creator.

Drummond suggests that the planner must have foreseen that the direction of part of the course of Evolution would in time transfer to Man himself. In partnership with Nature he not only holds dominion over the world of lower life, but also shapes the path of human progress and destiny. The wisest and noblest must now be concerned with the Evolution of Mankind. The wisdom necessary for the tremendous task can be learned from a close study of Nature. The point has come in the process where there is sufficient Altruism to begin a new era. Now there must be wisdom enough to direct it. Love had to come before knowledge 'for knowledge is the instrument of Love, and useless till it arrives' (p.51). Creation has shown her hand in Evolution. The past of Nature is a working model of how worlds can be made. Man was not meant to begin de novo, but to work along the lines of the pattern disclosed.

IV. Evolution and Sociology

The study of Evolution is the key to the future progress of Man-kind. 'Evolution is the natural directory of the sociologist' (p.53). This study must, however, also consider the inner life of man in relation to external influences. Drummond quotes at length from Edward Caird's *The Evolution of Religion* which includes the statement "It is only through a deepened consciousness of the world that the human spirit can solve its own problem" (p.51). Drummond then suggests that modern sociology, considered by some to be inadequate to meet the practical problems of our time, must be reconstructed. Sociology, the crowning science of all the sciences, must give deep study to the
dynamics of social and national life and its biological roots, considering the diverse phenomena within the general frame work of Evolution and its two principles, the Struggle for Life and the Struggle for the Life of Others.

Drummond then criticises at some length the position taken by Benjamin Kidd in his book *Social Evolution* where this understanding of Darwin's theory as solely a matter of the Struggle for Life leads to an apparently irreconcilable conflict between the interests of the individual and the interests of society, the preservation of the species take precedence over the preservation of the individual, and Nature would appear to contain no sanction for morality or social progress. Kidd goes on to state that the motive force behind the process of social development is the fund of altruistic feeling which is the direct and peculiar product of the religious system. Drummond argues that to affirm that Altruism is a peculiar product of religion is to excommunicate Nature from the moral order, and religion from the natural order, and suggests the fund of altruistic feeling has been slowly built up as the direct result of the Struggle for the Life of Others. Religion does not sacrifice vital distinctions by allying itself with Nature, it enriches itself by extending its claims to matter, life, mind, space and time. But Nature must not be robbed of her due. 'We dare not say that Nature played the prodigal for ages and reformed at the eleventh hour. If Nature is the Garment of God, it is woven without seam throughout' (p.73).

**The Ascent of the Body**

The home of man has developed over the ages from cave and single roomed hut to many roomed lodge and castle. The body of man in its own lifetime has developed from a single cell to a structure of a
million cells. The science of embryology has revealed the astounding fact that there is no apparent difference between a human cell and that of any other mammal. Human development proceeds by cell partition, building up through differentiation and integration a complex organism with different parts and many varied functions, yet capable of acting as a whole.

Embryology also reveals that 'in the successive transformations of the human embryo there is reproduced before our eyes a visible, actual, physical representation of part of the life-history of the world' (p.85). After describing the process in detail including the resemblances of the human embryo to those of the fish, the amphibian, and the reptile as it grows in size and symmetry, Drummond suggests that the Descent of Man from the Animal Kingdom is not to be considered a degradation but 'an unspeakable exaltation'. He asks his readers to consider 'the busy processes, the multiplying energies, the mystifying transitions' from which arise 'an original creation with features, characteristics, and individualities of its own' and to remember finally 'that even to make the first cell possible, stellar space required to be swept of matter, suns must needs be broken up, and planets cool ... and judge if Creation could have a sublimer meaning, or the Human Race possess a more splendid genesis' (pp. 95-96).

Drummond ends the chapter with a brief reference to the second Creation narrative in the book of Genesis and the reflection by the author of Psalm 139 on the nature of man and God's pervading presence and concludes. 'What the Prophet said, and the Poet saw, and Science proved, all and equally will abide forever. For all alike are voices of the Unseen, commissioned to different peoples and for different ends to declare the mystery of the Ascent of Man' (p.97).
The Scaffolding left in the Body

Just as the growth of the embryo contains some reminiscence of an animal ancestry so the life and movement of the new born babe also witnesses to the ancient animal strain. Man and ape are two of the latest terms of an infinite series which make up the genealogical tree. Studies have shown that the baby's power of grip is similar to that of a young ape, both can sustain the whole weight of the body for a minute or two without distress. Within the body there are no fewer than seventy vestigial structures including clefts of the gill slits in the neck, occasional abnormalities such as the cervical ear, the ability to twitch the ear, the relic of the tail and the muscles for wagging it, the disposition and direction of hair on the lower and upper arms which apparently derives from the habit of sitting in a tree with arms above the head, and the appendix which had a specific digestive function in our herbivorous ancestors. It is difficult to account for these relics except to suggest that Man has evolved from a lower animal condition. 'To say that Providence, in making a new being, should deliberately have inserted these eccentricities, without their having any real connection with the things they so well imitate, or any working relation to the rest of his body, is, with our present knowledge, simple irreverence' (p.124).

The Arrest of the Body

It is a sober scientific possibility that having made Man, Nature can go no further. 'Organic Evolution has done its work ... we are confronted with a stupendous crisis in Nature - the Arrest of the Animal' (pp.126-127). Animal Man will not go on, but another Man, within Man, will go on.

Drummond traces the development of the hand from the tentacles of the sea anemone, to that of the fingers and thumb of the anthropoid.
ape and primitive man. Further physical development ceases. Man invents and uses tools, which become more elaborate and powerful. Evolution takes a new departure. 'The Arrest of the Hand is not the cessation of Evolution but its immense acceleration, and the redirection of its energies into higher channels' (p.132).

So also with the power of Sight. Natural vision is supplemented by spectacles, the microscope and telescope. The human eye is unlikely to develop further. Some functions deteriorate. The senses of smell and hearing in civilised man are inferior to those of the savage. Muscle power is being lost. Man as an animal is in danger of losing ground. '... not the least anxious task of future civilisation will be to prevent degeneration beyond a legitimate point, and keep up the body to its highest working level' (p.139).

The arrest of physical development is not confined to man. Many groups of animals and plants appear to have reached a terminal generic form of maximum working efficiency. Nature is therefore not an interminable succession. 'It is not always a becoming. Sometimes things arrive' (p.142). The body of Man can be considered 'a terminal point' in the evolution of Creation. Anatomy suggests that the size of the cranial cavity has almost reached its limit.

Evolution has culminated in a complex creation which has the power of thought ready to form the foundation of an 'inconceivably loftier super-organic order' (p.147). Man must now take charge of Evolution. His selection should replace Natural Selection. A new page in the history of the universe has begun to be written. Evolution has changed its course. 'Once it was a physical universe, now it is a psychical universe' (p.149). Mental Evolution has succeeded Organic Evolution. 'Man stands alone in the foreground, and a new thing, Spirit, strives within him' (p.150).
The Dawn of Mind

Drummond suggests that from an early dawn the elements of a future Mind have been associated with animal matter, that there is growing agreement that there is a mental evolution among animals and that there is a possible link between the development of the mind of a child and the mind of an animal. He notes that C. Lloyd Morgan in *Nature* Sept. 1, 1892, while accepting that there is no reason for believing that the mental processes in man differ in kind from the mental processes in animals, states that the analytical faculty in man is such a new departure that the faculty of conceptual thought must differ generically from the faculty of perception. Drummond argues for an open mind on the question. Self-consciousness is a qualitative difference, but the Law of Continuity suggests a continuing process and the partial truth may be that the earlier phases of life exhibit imperfect manifestations of principles which in later forms are more fully expressed.

'The present thesis is simply that Man has ascended ... little depends on whether the slope is abrupt or gentle, whether Man reaches the top by a uniform flight or has here and there by invisible hands to be carried across a bridgeless space' (p.160).

He identifies five sources of information about the past of Mind - the Mind of a child, the Mind of lower animals, the material witnesses to primitive states of Mind in form of flints, weapons and pottery, the Mind of a Savage, and the witness of Language. Drummond suggests, without substantiation at this point, that just as the embryo of the body re-capitulates the life history of the race 'so this subtler embryo in running its course through the swift years of early infancy runs up the psychic scale through which, as evidence from another field will show, Mind probably evolved' (p.164).

Acknowledging his debt to Romanes' conclusions in his two books *Animal Intelligence* and *Mental Evolution in Animals*, Drummond lists
an extensive range of mental phenomena exhibited by animals, and points out that animals have intelligence, share our feelings and emotions, have memories, form percepts, invent new ways of satisfying desires and learn by experience.

The relics of pre-historic man reveal traces of Mind of a very low order existing from unknown antiquity, gradually improving over time. Although civilisations may rise and fall, and Evolution is not always a matter of uninterrupted progress, the implements discovered from the Stone Age onwards witness to the probable growth of mind by 'infinitely gradual ascents' (p.178).

Study of the present-day savage in his natural conditions, such as the Malay Archipelago and the South Pacific indicate not the poverty of the early Mind, but the enormous potentialities that lie within it. The Mind of Man has had a slow gradual dawn. It still exists today among certain tribes at almost the lowest point of development, but from there 'An Ascent of Mind can be traced from tribe to nation in an ever increasing complexity and through infinitely delicate shades of improvement, till the highest civilised states are reached' (pp.185-186).

Language also provides evidence of the evolution of Mind, and is of almost unique importance. A word is a tangible expression of a mental state, 'an old word, like an ancient coin, speaks to us of a former currency of thought, and by its image and superscription reveals the mental life and aspiration of those who minted it' (p.187). With the discovery of language a new method arose of passing on a step of progress. When man learned anything he could pass it on; when he became wise, wisdom did not die with him, 'it was banked in the Mind of humanity' (p.192). At the same time, the acquisition of speech made thinking easier, brain energy was released for development in new directions and speech became the main factor in the intellectual
development of mankind. 'Language formed the trellis on which Mind climbed upward, which continually sustained the ripening fruits of knowledge for later minds to pluck' (p.193).

The Evolution of Language

Evolution suggests that the faculty of speech was no sudden gift. Homo sapiens must have been preceded by Homo alalus 'the not-speaking man' who built up the body of language through dumb signs and inarticulate cries word by word as the body was built cell by cell. The principle of co-operation emerged in the course of Evolution. Gregariousness became an established institution with advantages in the Struggle for Life such as physical strength of numbers and the multiplicity of powers of sight, smell and hearing.

The success of the co-operative principle depended on effective communication. Signs and signals developed within the herd as an elementary form of language. The power of communication is evident in a colony of ants. In the higher animals, physical signs, sounds and intonations convey different information, representing three kinds of language. In man these three develop into gesture or grimace; actual words; and emphasis or inflexion of the voice. The capacity of gesture language is still evident in the deaf mute, in savage man, in the early life of a child, and in modern adult speech, although it is often dispensed with when expressing the higher ranges of thought; 'when a speaker soars into a very lofty region, or allows his mind to grapple intensely and absorbingly with an exalted theme, he becomes more and more motionless, and only resumes the gesture-language when he descends to commoner levels' (p.211).

Sounds and words developed in situations where gestures were no longer effective, and included imitative sounds to denote things in
the environment with which the sound was directly or indirectly associated. Drummond then gives extensive examples of the origin of sound words in different cultures and goes on to illustrate man's capacity to invent new words, and the effect of geography and climate on language. He then points out that the evolution of language is still going on. The theory of the formation of language as part of the general theory of evolution is now corroborated by investigations made by Comparative Philology.

The Evolution of writing went through the same general stages as the Evolution of speech. The ideography, for example, is the equivalent of onomatopoeia. When writing was fully evolved, the time was ripe for a new development. 'Speech, whether by writing or by spoken word, is too crude and slow to keep pace with the needs of the now swiftly ascending mind' (p.233). Man invented the telegraph and the telephone and the mind is already feeling about for more perfect forms of human intercourse.

Drummond then suggests that 'there may be a stage in the Evolution of Mind when its material achievements - its body - shall be laid aside and give place to a higher form of Mind' (p.234). Telepathy, now a scientific word, is the theme of exhaustive observation, and is theoretically the next stage in the Evolution of Language. Speech only came when the instrument was ready for it. 'May it not be that that which delays the power to transport and drive one's thought as thought to whatever spot one wills, is not the fact that the possibility is withheld by Nature, but that the hour is not quite come - that the instrument is not yet fully ripe?' (p.235).

Drummond then asks whether Evolution has a further gift for the human race and reflects 'what strikes one most in running the eye up this graduated ascent is that the movement is in the direction of what
one can only call spirituality' (pp.235-236). He then suggests that 'If Evolution reveals anything, if science itself proves anything, it is that Man is a spiritual being and that the direction of his long career is towards an ever larger, richer and more exalted life' (p.236).

The Struggle for Life

The inertia of things is such that without compulsion they will not move. The act of living contains the principle of progress. 'An animal cannot be without becoming' (p.242). The first great principle is the Struggle for Life. The first law of Evolution is the first law of motion. "Every body continues in a state of rest, or of uniform motion in a straight line, unless it is compelled by impressed forces to change that state" (p.245).

The impressed forces in the case of savage Man are Hunger and the stimulus of Environment, both the inorganic world including climate and weather, and the organic world including plants, animals and other primitive Men. Hypothetical Man emerging from the animal state used branches as spears and clubs and gradually adopted an upright stance. The use of missiles led to mechanical aids to achieve greater distances. Defensive shields were evolved. Musical instruments were developed from weapons and domestic articles. Flints yielded fire. Hunger was the parent of all industries and led to further advances, the trapping of animals, the use of clothes, the development of agriculture and fishing and the domestication of animals. 'So Man slowly passed from the animal to the savage, so his mind was tamed, and strengthened, and brightened and heightened; so the sense of power grew strong, and so virtus, which is to say virtue, was born. In struggling with Nature, early Man not only found material satisfactions:
he found himself' (p.252). Moral and intellectual diversification took place under the influence of geography and geology leading to different types of men, types of industry, and blends of infinite variety.

On the whole the results of Evolution appear to be good. We must beware of over-colouring the representation, or flooding it with accompaniments of emotion borrowed from our own sensations' (p.259). Life itself is the Struggle and the whole of the activities and powers which make up life are involved in it. Drummond quotes Darwin with approval "'When we reflect on this struggle, we may console ourselves with the full belief that the war of nature is not incessant, that no fear is felt, that death is generally prompt, and that the vigorous, the healthy, and the happy survive and multiply'" (p.261).

Drummond asserts that the end of the Struggle for Life is not battle, nor victory, but evolution. 'The result is not wounds, it is health' (p.263). Natural Selection discourages imperfections and is the means employed by Nature to bring about perfect health, perfect adaptation, and in the long run, the Ascent of all living things. 'The fact that any given animal is alive at all is almost a token of its perfectness. Nothing living can be wholly a failure' (p.265). The Survival of the Fittest is not the survival of the strongest, but the Survival of the Adapted.

Rising up the scale, the physical fitness of the early world changes to fitness of a different quality. 'In one era the race is to the swift, in another, the meek inherit the earth. In a material world social survival depends on wealth, health and power; in a moral world the fittest are the weak, the pitiable, the poor' (p.268).

The 'gladiatorial theory' of existence has two lineal descendents in modern life, War and Industry. They represent the primitive Struggle for Life continued in the social and political plane. War,
Despite the awful experiences associated with it, has been the educator of the human race 'the patron of heroic virtues, the purifier of societies, the solidifier of states' (p.269). Industry is the same struggle in a different guise. 'The industrial conflict of today is the old attempt of primitive Man to get the most out of Nature - to grow foods, to find clothes, to raise fuel, to gain wealth' (p.269).

Despite social tragedy there is amelioration and progress. The Struggle for Life can never wholly cease, but the virulence of its animal qualities must surely pass away. The animal struggle and the principle of selfishness must lose its sting with time, the self become a higher self, and the eternal law of unselfishness become evident.

Drummond then suggests that if the fundamental problem of nutrition can be solved by science then the Struggle for Life in its coarser forms may be practically abolished. The time may even come when the aspirations of the spirit neutralise and supplant the compulsions of the body. The Struggle for Life is destined to be replaced by the Struggle for the Life of Others, and to build a nobler superstructure on the foundations which it laid' (p.273).

The Struggle for the Life of Others

In this chapter, the longest in the book, Drummond develops the argument set out in part II of the Introduction "The Missing Factor in Current Theories". He begins by asserting that Man's true life is neither in the body, nor in the intellect, but in the warm world of the affections. 'He reaches his full height only when Love becomes to him the breadth of life, the energy of will, the summit of desire' (p.276). Love has a lineage of its own which has scarcely begun to be investigated. It is necessary to correct the misconception that Evolution is a matter only of the Struggle for Life. The truth is
that there are two Struggles for Life in every living thing, the Struggle for Life and the Struggle for the Life of Others.

The two main activities of all living things are Nutrition and Reproduction. Nutrition seeks to secure the life of the individual and is self-regarding. Reproduction seeks to secure the life of the species and is other-regarding. Both at the outset are selfish, but the latter leads to the development of other-regarding virtues. The elements of self-sacrifice are inherent in the structure and process of cell division. The cell of the humblest unicellular organism, at the time of reproduction, divides itself into two, and each part sets up an independent life. The bulk of the cell grows faster than the absorbing surface. Unless it gains more surface it must starve, but by splitting, there is more absorbing surface than the two had when combined. 'It must divide, or die. If it divides, what has saved its life? Self sacrifice. By giving up its life as an individual it has brought forth two individuals, and these will one day repeat the surrender' (p.289).

Drummond develops his theme with illustrations from the world of plant life and goes on to discuss the value of reproduction in nature for the nurture of mankind, through the provision of seed, fruit, milk, and man's utilisation of them in natural and processed forms. He points out that three-fourths of the population of the world subsist on rice - a seed - a product of reproduction, that the first and universal food of the world is milk - a product of reproduction, and that distilled spirits and malted liquors are also products of reproduction. So he can say 'The Seed is tithe of Love, the tithe which Nature renders to Man' (p.296). Creation is full of meaning and anticipation of Good for Man. Nearly all the beauty of the world is 'Love-beauty'. Nearly all the music of the natural world is 'Love-music'. Nearly all the foods of the world are 'Love-foods', - all
the drinks of the world are 'Love-drinks'.

Co-operation is closely related to reproduction. Single celled life leads to colonies of cells which show co-operation and specialisation. A flower is not an individual entity, but 'a commune, a most complex social system' (p.299). Co-operation extends in the higher flowering plants to co-operation with insect life which leads to all that is beautiful and fragrant in the flower world. Co-operation with other agencies ensures the dispersion of seed. Such plants are among the most numerous, most vigorous, and most widely diffused in Nature. 'Self-Sacrifice and Co-operation are thus recognised as sound in principle. The blessing of Nature falls upon them' (p.303).

Co-operation in the animal world is equally evident. The more social animals are in overwhelming preponderance over the unsocial. Mutual aid is as much a law of animal alife as mutual struggle. The first commandment of Evolution is "Thou shalt mass, segregate, combine, grow large" (p.309).

Drummond goes on to point out that the specialisation of sex has received little attention from evolutionary philosophy, but the division into maleness and femaleness in almost every plant and animal has exceptional implications of ethical significance. Reproduction could have been effected without fertilization, by parthenogenesis as illustrated in bees and termites, but the fact of sex-distinction suggests that Nature had deeper motives than simply physiological advantage.

The first work of Evolution is to create a mass of similar things, the second is to break that mass into as many different kinds of things as possible. 'Now if Evolution designed, among other things, to undertake the differentiation of Mankind, it could not have done it more effectively than through the device of sex' (p.321).

A far more important implication lies in the development of social
and moral order out of maleness and femaleness. In certain organisms maleness and femaleness can be varied by varying nutrition. High nutrition leads to a preponderance of females as shown in experiments on tadpoles, butterflies, moths and bees. There is differentiation in organisation and life habit of males and females - the predominant note in the male being energy, motion, activity; and in the female, passivity, gentleness and repose. In Nature there is a constitutional difference between male and female 'a difference inclining the one to a robuster life, and implanting in the other a certain mysterious bias in the direction of what one can only call the womanly disposition ... Male and Female never have been and never will be the same' (pp. 328-329).

Man's life is determined chiefly by the function of Nutrition, the woman's by the function of Reproduction. Man finds satisfaction by going out into the world, in the rivalries of war, the ardours of the chase, in conflict with Nature, in industrial pursuits. Woman completes her destiny by occupying herself with the industries and sanctities of the home 'and paying the debt of Motherhood to her race' (p.330).

The evolution of Love arises out of Maternity which is nothing but the Struggle for the Life of Others transfigured and transferred to the moral sphere. Maternity is more than the mother of children or the affection between female and male. It is the mother of Love itself.

When one follows Maternity out of the depths of lower Nature, and beholds it ripening in quality as it reaches the human sphere, its character, and the character of the processes by which it is evolved, appear in their full divinity ... By an alchemy which remains, and must ever remain, the secret of Nature, the physiological forces give place to those higher principles of sympathy, solicitude, and affection which from this time onwards are to change the course of Evolution and determine a diviner destiny for a Human Race. (pp.331-332)

Reproduction as a physiological process had to be complemented
by an Altruistic process. The Altruistic process developed from Other-
regarding acts among animals which may initially have been selfish
and automatic, into an overflowing moral force which may be regarded
as the highest product of Nature and the object of Progress. It is
an important element in Natural Selection. 'A mother who did not care
for her children would have feeble and sickly children ... and the
day of reckoning would come when they would be driven off the field
by a hardier, that is a better-mothered, race' (p.339).

Drummond concludes that sociology has failed to recognise the
importance of the Struggle for the Life of Others. Nutrition and Re-
production are co-related evolutionary forces which have acted together
from the dawn of life, 'one continually looking to its own things,
the other to the things of Others. Both are great in Nature - but
"the greatest of these is Love'' (p.341).

The Evolution of a Mother

Drummond begins by asserting that the chief thing that Nature
did was to make Mothers. The goal of the whole plant and animal king-
doms seems to have been the creation of Mammalia. In the vegetable
kingdom maternity is foreshadowed in the flowering tree with the
elaboration of the seed or nut or fruit. The Botanist places the
mothering plants, the Phanerograms, at the top of his department of
Nature.

In the case of the animal kingdom, protective Motherhood evolved
after a long motherless beginning. In the lower reaches of nature,
the Mother never sees her child. There is great solicitude for the
egg, but Motherhood is often non-existent, or an anatomical impos-
sibility, as in the case of the butterfly. Maternal protection is not
required. The survival of the species is assured by vast nummbers
of eggs.

For Maternal Love to evolve, four conditions are necessary - fewer young at birth, the young produced in such a form that Mothers can recognise them, the young must be sufficiently helpless to require mothering, and they should be made physically necessary to the mother so as to compel her to attend to them.

The progressive bringing down of numbers of young can be seen by comparing the progeny of different species - the lowest plants with uncountable numbers of spores, the herring with a million ova, the frog spawning thousands of eggs, reptiles in hundreds, birds in tens or units, and in the highest of Mammals, the rule is one. 'This bringing down of the numbers is a remarkable circumstance. It means the calling in of diffused care, to focus it upon one, and concentrate it into Love' (p.351).

The next thing was to make it possible for the parent to recognise its young. In the lower reaches of Nature the young are never in the smallest degree like their parents. The power of the adult to identify its young is all but absent until the higher animals appear. Nature kept embryos hidden until they grew more presentable. '... the embryos were hindered in the eggs, and the eggs were hindered in the nest, and the young were hindered in the body, retained in the dark for weeks and months, so that when they first caught the Mother's eye they were "strong and of a good liking"' (p.353).

The increasing dependence of the child on the parent is evident as the different species are considered. The child from the bottom of Nature, e.g., a ciliated Infusorian, leaves the domestic hearth the moment it is born. A young bird remains in the nest and in the neighbourhood of the nest for only a few weeks. The child of the Mammal remains by its mother's side for months and years until its filial education is complete. Nature's object is the domestication
of the Human Race, the tightening of the bonds of family life, the
'most gentle introduction of gentleness into a world cold with mother-
less children and heartless with childless mothers' (p.357).

The fourth essential for the evolution of maternal love is the
development of the physiological ties which bind Mothers to their
young. No young of any Mammal can nourish itself. There is that in
it at this stage which compels it to seek its Mother, and there is
that in the Mother which compels it physically to seek its child'.
On the physiological side, the name of this impelling power is lacta-
tion; on the ethical side, it is Love' (p.358).

The development of higher forms of life on earth has depended
on the physical perfecting of Mothers and the physiological ties which
bind them to their young, and has led to the social state of Domest-
icity. 'While Man, restless, eager, hungry, is a wanderer on the
earth, Woman makes a Home' (p.360). No greater day ever dawned for
Evolution than when the first human child was born, 'there entered
then into the world the one thing wanting to complete the Ascent of
Man - a tutor for the affections. It may be that a Mother teaches
a child, but in a far deeper sense it is the Child who teaches the
Mother' (p.360).

The creation of Mammalia established two schools of Ethics, one
for the Child and one for Mother. The next effort of Evolution is
to lengthen out these school days and give affection time to grow.
Man only was permitted to have his education thus prolonged and simul-
taneously to allow mental evolution to make its contribution to the
ethical development of the world.

Into the infants frame must be fitted not only the apparatus for
automatic repetition of what its parents have done, the involuntary
and reflex actions, but also the machinery for voluntary and self-
conscious life 'which will do new things, choose fresh alternatives,
seek higher and more varied ends' (p.364).

This process continues through infancy and childhood which in its early stages is a slow experimenting with powers and faculties so fresh that 'heredity in handing them down has been unable to accompany them with full directions as to their use' (p.366).

Drummond goes on to describe the working of the brain in illuminating terms, pointing out that even in the oldest and most used brain there remain vast territories to be explored, 'and in all men multitudes of possible connections continue to the last unrealised' (p.367). As man rises in the scale of civilisation the necessary period of infancy lengthens so that in the case of the most highly educated man the age of tutelage extends for almost a quarter of a century.

The extended period of infancy enabled qualities of patience, sympathy, carefulness, tenderness and self-sacrifice to grow in the Mother, thereby over the centuries rooting themselves in humanity and adding to the moral stature of mankind. 'However short the earliest infancies, however feeble the sparks they fanned, however long heredity took to gather fuel enough for a steady flame, it is certain that once this fire began to warm the cold hearth of Nature and give humanity a heart, the most stupendous task of the past was accomplished' (p.372).

The Evolution of a Father

During the evolutionary development of Motherhood, the Father has gone his own way outside these changes, but gradually at the same time acquiring the robuster elements of the manly virtues, strength, courage, manliness, endurance, and self-reliance. These have been transmitted to both sexes through the law of heredity.

A prior change in his habits was necessary. 'Nature had to set
about another long and difficult process - to make the savage Father a reformed character' (p.376). In the lower reaches of Nature, paternity was non-existent, among the birds, some parents unite in the building of the nest and share in the incubation of the eggs. Among Mammals many Fathers were not only indifferent to their young, but hostile: 'and among the Carnivora the Mothers have frequently to hide their little ones in case the father eats them' (p.377).

Affection between parents is a very recent development in Evolutionary history. 'For the vast mass of Mankind, during the long ages which preceded historic times, conjugal love was probably all but unknown' (p.378). The higher evolution of the world could only take place after Family Life became instituted. This could only happen in species when the pairing season was lengthened sufficiently for mutual love to develop. In animals the pairing season is related to climate so that the young are born when they will have the best chance of survival, i.e., when the weather is mildest and food most abundant. In the case of man, developing control of his environment made it possible for the pairing season to become greatly extended and Family Life to be inaugurated. 'It was when Man's mind became capable of making its own provisions against the weather and the crops that the possibility of Fatherhood, Motherhood, and the Family were realised' (p.383).

One further development was required - the growth of mutual affection between husband and wife. Polygamy, where it existed, had to be changed into monogamy. 'Man could not love in the early days because he had a dozen wives. this love was too diluted to come to anything' (p.386). A few polygamous people became monogamous, the system worked well, gradually spread, and the change has been in the best interests alike of parents, offspring and society. At the same time, courtship became a possibility, and further extended the period during
which affection could develop by providing opportunities for its growth prior to marriage. This was unknown in primitive times. Men originally secured wives by capture or by purchase. The system still exists in modified forms. 'In some of the greatest of civilised countries real mutual knowledge between the youth of the sexes is unattainable; marriages are made only by a higher kind of purchase, and the supreme step in life is taken in the dark' (p.389). Drummond then contrasts this with a somewhat idealised picture of the situation in America, suggesting that its blending of different family lives in social intercourse, in recreation and in education must lead to more and more 'sacred and happy homes which are the greatest guarantees for the moral progress of a nation' (p.390).

Love expressed in terms of parental protectivity, food provision, sympathy and self-denial became an element in Natural Selection and determined extinction or survival. 'Bad parents mean starved children, and starved children will be replaced in the Struggle for Life by full-fed children, and ere a few generations parents without love will exist no more' (p.395).

The simple human Family became the nucleus of the social and national life of the world. The family is not only the greatest creation of Evolution but the greatest instrument for further creation. Ethical changes began as soon as it was formed. Responsibility and duty were shared. New relations sprang up. 'A man cannot be a member of a Family and remain an utter egoist' (p.398). With the incorporation of the Family into the Clan or Tribe the area of co-operation was further extended.

Within the Family the Mother and Father exerted divergent influences. The relationship between child and Mother is one of dependence, 'and its product is Love' (p.400). The Father as head of the Family (except in Matriarchates) represents Authority. It is his busi-
ness to make Family laws and exact obedience. 'Not less necessary to the world than the Mother's gift of Love is the twin offering of the Father - Righteousness' (p.403).

The Family is the starting point and threshold of the true moral life which reaches it consummation in the Christian era. A stage in Evolution has been reached where ethical factors are utilised by Natural Selection and affection becomes a power in the world. 'The completion of the arch of Family Life forms one of the great, if not the greatest of the landmarks of history ... Physically, psychically, ethically, the Family is the masterpiece of Evolution ... It is the generator and the repository of the forces which alone can carry out the social and moral progress of the world' (p.405).

**Involution**

In the final chapter of the book, Drummond sums up his view of Evolution, beginning by stating that until recently no organic connection was known between lower Nature and the higher world of Man. 'Atoms, cells, plants, animals were the material products of a separate creation, the clay from which Man took his clay-body, and no more' (p.409). But now the biologist working upward, and the psychologist, the moralist, the sociologist working downward have established an organic connection between the two, while Evolution has made the final revelation of the unity of the world, comprehending everything under one generalisation.

Evolution is not to be understood as a process in which Mind, Morals and Men evolve out of Matter, but a process which takes account of the whole Environment 'that in which things live and move and have their being; an Environment which can also be described as 'Nature, the world, the cosmos - and some thing more, some One more, an Infinite
Inhelligence and Eternal Will' (p.414).

Everything that lives, lives through its correspondences with this Environment. 'Evolution is not to unfold from within; it is to infold from without' (pp.414-415). Growth is no mere extension from a root but a matter of possession and being possessed by an ever widening Environment 'a ceaseless redistribution of energies flowing into the evolving organism from the Universe around it' (p.415).

Man has progressed upwards, not by any innate tendency to progress in himself, nor by the energies inherent in the protoplasmic cell, but by a continuous feeding and reinforcement of the process from without. As Man progresses, his capacity to interact with his environment expands. He is affected not only by the physical, but also by social, moral, and religious forces that surround him. The fact that these forces come from the same Environment and from the ultimate source does not imply that the spiritual forces are the same as the physical. The reverse could be true, physical energies could be spiritual energies. Science suggests that the term "material world" is a misnomer. The world may be a spiritual world employing "matter" for its manifestations.

The roots of a tree may rise from what we call a physical world; the leaves may be bathed by physical atoms; even the energy of the tree may be solar energy, but the tree is itself. The tree is a Thought, a unity, a rational purposeful whole; the "matter" is but the medium of their expression. (p.420)

Drummond suggests that the time is not ripe for daring to present even a partial view of what the transcendent process may have been. Nor is it essential for the course of Evolution to have been a continuous and uninterrupted rise. 'On the whole it has certainly been a rise; but whether a rise without leap or break or pause, or - what is more likely - a progress in rhythms, pulses, and waves, or - what is unlikely - a cataclysmal ascent by steps abrupt and steep, may possibly never be proved' (p.426).
God is not a God of the gaps. 'Nature is God's writing, and can only tell the truth; God is light and in Him is no darkness at all' (p.427). Those who are tempted to reserve a point here and there for special divine interposition are apt to forget that this virtually excludes God from the rest of the process. 'If He comes upon the scene at special crises, He is absent from the scene in the intervals'. The idea of an immanent God, the God of Evolution, is infinitely grander than the occasional wonder-worker, the God of an old theology. 'The daily miracle of a flower, the courses of the stars, the upholding and sustaining day by day of this great palpitating world, need a living Will as much as the creation of atoms at the first' (p.428).

The final miracle of Evolution is not the process but the product. And the product is not 'mountain and valley, sky and sea, flower and star, 'or 'the god-like gift of Mind', but that which commends itself 'with increasing sureness as time goes on, to the reason and to the heart of Humanity - Love' (p.429). Evolution is not progress in matter but progress in spirit. The perfecting of Love is the larger part of Nature's task - begun with the first beginning of life, and continuously developing quantitatively and qualitatively. This has either been read into Nature by our own imagination, or it is the revelation of a purpose of benevolence and a God whose name is Love' (p.431).

The Evolution of Love may possibly be foreshadowed in inorganic nature. Mutual attraction and chemical affinity were the means by which the fiery mass of nebulous matter eventually became a solid world. Science does not know what the forces are, it only classifies them. But it could be that 'the grand aggregation of units of matter in the condensation of a weltering star, and the slow segregation of men in the organisation of societies and nations' are different stages of a uniform process and 'different results of a single evolutionary law' (p.434).
Read from the root, this process can be described as Evolution. Read from the top, the word is Involution. 'Evolution is Advolution; better, it is Revelation - the phenomenal expression of the Divine, the progressive realisation of the Ideal, the Ascent of Love' (p.435). Evolution has ushered a new hope into the world - Nature is on the side of the man who tries to rise - all things are rising, all worlds, all planets, all stars and suns. 'An ascending energy is in the universe, and the whole moves on with one mighty idea and anticipation. The aspiration in the human mind and heart is but the evolutionary tendency of the universe becoming conscious' (pp.435-436).

The hope of finding a religion congruous with the past of Man, at one with Nature, and with a working creed with Science can accept is fulfilled in Christianity. Both Evolution and Christianity are methods of creation with the object of making more perfect human beings. Both work through Love. 'Evolution and Christianity have the same Author, the same end, the same spirit' (p.438). Christianity adopts the foundations of Man's body, mind and soul as fashioned by Organic Evolution and continues and accelerates the process. Christianity is a history of some of the later steps in the Evolution of the world. 'Christianity did not begin at the Christian era, it is as old as Nature; did not drop like a bolt from Eternity, came in the fulness of Time' (pp.441-442). The attempt to show that it was in the skies until the Christian era opened is fatal to its acceptance by Science and cannot be used defensively by Theology. On the other hand, Science must not ignore the growth of Altruism and its relationship to Christianity.

A system founded on Self-Sacrifice, whose fittest symbol is the Leaven, whose organic development has its natural analogy in the growth of a Mustard Tree, is not a foreign thing to the Evolutionist; and that prophet of the Kingdom of God was no less the spokesman of Nature who proclaimed that the end of Man is "that which we had from the beginning, that we love". (p.443)
Drummond ends the final chapter of *The Ascent of Man* with the affirmation that in the profoundest sense, this is scientific doctrine. 'The Ascent of Man and of Society is bound up henceforth with the conflict, the intensification, and the diffusion of the Struggle for the Life of Others' (p.443). This is to be understood as the Further Evolution, the page of history that lies before us. The struggle may be short or long, but the result is sure. The succession cannot break. 'The Further Evolution must go on, the Higher Kingdom come - first the blade, where we are today; then the ear, where we shall be tomorrow; then the full corn in the ear, which awaits our children's children, and which we live to hasten' (p.444).

**Comment**

The implications of Drummond's evolutionary thinking will be considered further in later sections of the thesis. Meantime it is sufficient to note that James W. Kennedy concludes 'Once again we have found the "poetry" of Drummond's science and the "suggestiveness" of his religion, and have faced up to words that have not yet outrun their meaning'. Kennedy also remarks that because of his forthright acceptance of evolution and Biblical criticism, Drummond barely escaped persecution by the Free Church, and that all twelve overtures against him brought before the General Assembly in May 1895 were based on *The Ascent of Man*.  

*The Ascent of Man* was the last of Drummond's works to be published during his lifetime. The debilitating illness which had shown its hand soon after his return from delivering the Lowell Lectures progressively took its course. He ceased work at the Free Church College in March 1895, and died two years later in Tunbridge Wells.

SECTION V
EVALUATION

A RELEVANT FACTORS

Drummond's major works have now been summarised and analysed in chronological sequence so far as this is possible, and an indication given as to how they relate to the more significant events in his life. It now remains to consider the validity of his work as a basis for a practical spirituality along the lines already mentioned in the Introduction.

The classical spiritual writings of the past retain their authority through the impact they make on those who reflect upon them. This may be affected not only by the content of the material, but also by the perceived spirituality of the author, though in some cases, as for example, with the Cloud of Unknowing, the circumstances and stature of the author may be almost unknown.¹ The fact that the author's outlook has been conditioned by a different culture and cosmology, and that this is reflected in his writing, may be of little importance. The present day reader generally knows the circumstances of the author's situation and makes due allowances.

Drummond, however, is sufficiently close to our time, and uses scientific and theological terms in such a way that some critical evaluation would seem to be necessary. If it could be demonstrated, for instance, that his description of biological growth was totally misleading, or his use of biblical material unduly selective or inaccurate, serious question marks would have to be set against his spiritual analogies and conclusions. At the same time, there have been rapid and extensive developments in scientific and religious thinking.

in the past fifty years which make such evaluation difficult and which are affecting modern understanding of spirituality itself.

John Macquarrie, in his recent book, *Paths in Spirituality*, notes that the word spirit is notoriously difficult and ambiguous, and suggests that fundamentally spirituality 'Has to do with becoming a person in the fullest sense'. He considers that there is a religious dimension in man which cannot be suppressed or annexed to some other dimension of human existence and points out that spirituality may not be confined to those who confess a religious faith. There are modes of experience and practices among non-religious persons 'which are analogous to, or inchoate versions of the definite religious forms of spirituality'.

Macquarrie expresses a view which is illustrated in *A Dictionary of Christian Spirituality* and is held by many modern writers. G.W.Lampe, for example, in his Bampton Lectures, *God as Spirit*, states that 'God in his creativity, that is God as Spirit, addresses and inspires all men everywhere at all times, enabling the fruit of the Spirit to grow in them. The modes of his approach to human spirit are manifold, including non-Christian faiths'. Rowan Williams in a recent survey of Christian Spirituality from the New Testament to St John of the Cross sees the spiritual life as a complex, demanding and far-reaching matter which 'must now touch every area of human experience, the public and social, the painful, negative, even pathological byways of the mind, the moral and rational world'.

Others, however, particularly those of a conservative outlook, may hold to the traditional view expressed by F. P. Harton in his

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classic, The Elements of the Spiritual Life, when he allows that non-Christian faiths may be attempts to live the spiritual life, but stresses that the Christian life 'demands upon a new principle peculiar to itself which is derived from Christ alone'. It is not a matter of degree, it must be different in kind from all else, the differentia being that '... it is a participation in the life of God, given by the Holy Spirit dwelling in us, in virtue of the merits of Jesus Christ ... summed up in the phrase from the Epistle to the Galations ... "I live, yet not I, but Christ liveth in me."'  

It seems clear therefore, that a number of different descriptive models of spirituality can be identified and explored, ranging from those which interpret the working of the spirit in its widest sense, taking account of several areas of scientific and religious enquiry, to those which are largely limited to biblically based categories of language and expression. Such models, however, will derive from individual outlooks which are moulded by temperament, culture and upbringing and which take account of certain basic factors to a greater or lesser degree. These are likely to include:

(a) A belief in the existence of God as Spirit as an active agent in the universe, capable of interacting with the mind of man and affecting his personality and character.

(b) A response to this belief in terms of the inner life and discipline of the individual.

(c) A response to this belief in terms of the outward style of life and engagement with society.

(d) A view as to the status of Jesus Christ in relation to God and the Spirit.

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(e) A view as to the role of the church in sustaining and developing the spiritual life.

(f) A view on the relationship of Christianity to the major world faiths, and their role, if any, in relation to the spiritual life.

(g) An overview of the function and goal of human society within the universe.

These factors are certainly relevant in the case of Drummond's thinking, and it is considered that they will serve as a satisfactory initial framework for analysing his work. It is therefore intended to proceed with the evaluation by illustrating his approach to these factors by selective quotation from his writing, and then to go on to discuss his theological and scientific viewpoints in more general terms. Recent developments in evolutionary thinking will then be examined. In the final section an attempt will be made to identify and elaborate a number of present day models of spirituality across the range already mentioned, and an assessment made of the likely appeal of Drummond's work to those sympathetic to such models before drawing general conclusions on the theme of the thesis as a whole.
B DRUMMOND'S SPIRITUAL VIEWPOINT

Drummond's views are expressed here under the headings of the various factors which a person engaged in a spiritual approach to life is likely to take account of in his thinking, as listed in the previous sub-section. There is some repetition of material previously quoted, but it is felt best to accept this in the interest of continuity rather than to require the reader to refer back to earlier sections.

Belief in God as Spirit

Drummond had no doubts as to the ever present activity of God in the natural world and in the hearts and minds of men. To some extent his use of the word 'Spirit' and the word 'Christ' were interchangeable. Writing on the possibility of man's transformation by God in Natural Law in the Spiritual World, and quoting a number of passages from scripture, he notes that the process of transformation is referred indifferently to the agency of each person of the Trinity in turn. He continues 'We are not concerned to take up this question of detail. It is sufficient that the transformation is wrought. Theologians, however, distinguish thus: the indirect agent is Christ, the direct influence is the Holy Spirit. In other words, Christ by His Spirit renews the souls of men' (NL p.310). In the "Third Kingdom", he points out that in the New Testament alone the Spirit is referred to nearly three hundred times and states 'The sum of New Testament doctrine is that there is an immediate action of the Spirit of God on the souls of men' (TK-NL p.103).

In the "Programme for Christianity", in a passage which he probably would not have considered a precise doctrinal statement, he writes 'God is no longer a remote spectator of the natural world, but immanent in it, pervading matter by His present Spirit, and ordering it
by His will. So Christ is immanent in men. His work is to move the hearts and inspire the lives of men, and through such hearts to move and reach the world' (PC-GW p.115).

In the final chapter of "Pax Vobiscum", he makes it clear that the Spirit is also the agent of spiritual growth. 'No man can make things grow. He can get them to grow by arranging all the circumstances and fulfilling all the conditions. But the growing is done by God ... what man can do is to place himself in the midst of a chain of sequences. Thus he can get things to grow: thus he himself can grow. But the grower is the Spirit of God' (PC-GW pp. 285). He compares the process of spiritual growth with biological growth in Natural Law in the Spiritual World and suggests that the protoplasm of the spiritual life is the moral nature of the natural man, which includes mind and character, the will and the affections, and which at the same time has a capacity or a receptiveness for God. This spiritual protoplasm is renewed and transformed imperceptibly and invisibly by the Spirit, so that the natural man is conformed to the likeness or image of Christ. Man is powerless to effect this change, but he has his own part to play 'Let him choose Life; let him daily nourish his soul; let him for ever starve the old life; let him abide continuously as a living branch in the Vine, and the True-Vine Life will flow into his soul, assimilating, renewing, conforming to Type, till Christ, pledged by His own law, be formed in him (NL pp. 297-312). Drummond acknowledges that the process is not subject to direct scrutiny and suggests that 'in analysing spirituality the effort to detect the Living Spirit is as idle as to subject protoplasm to microscopic examination in the hope of discovering Life' (TK-NE p.104).
Drummond advocated a practical regime and style of life based on his concept of seeking a correct balance between the active and the passive. He expressed it in terms of maintaining a right attitude, using illustrations such as 'A mirror set at the right angle' (CL-GW p.214) 'a plant standing still with leaves spread out in unconscious prayer' (NL p.138) and 'a sailor harnessing his vessel to the wind' (NL p.140). Sensitivity to God's will is essential and is to be attained by 'meditation, by self-examination, by consecration, and by the Holy Spirit's power' (IL p.312). Prayer is a requirement morning and night (IL p.175). It is an intense activity, 'an appeal to the mightiest energy in heaven or earth to work, to make more room for itself, to energise. It is a prayer that the Almighty energies of the Divine will may be universally known, and felt, and worshipped' (IL p.227). An element of solitude in life is essential. ' ... if religious character is developed and strengthened in the battle of the world, it is no less true that religious talents are cultivated in quiet contemplation and communion alone with God' (IL p.214). This is well described in a passage from the address "How to Know the Will of God".

When every passion is annihilated, and no thought moves in the mind, and all the faculties are still and waiting for God, the spiritual eye may trace perhaps some delicate motion in the soul, some thought which stirs like a leaf the unseen air and tells that God is there. It is not the stillness, nor the unseen breath, nor the thought that only stirred, but these three mysteries in one which reveal God's will to me. (IL p.313)

He appeared to regard meditation more as a matter of quiet biblical and theological reflection rather than a formal system in the classic sense. There is an indirect reference to his own private practice in a sermon, "The Three Facts of Salvation" where he states 'You did not take them to the closet you had at home, and let them see you on your knees, nor tell them of your Bible which was open twice a
day' (IL p.178). He regarded Truth in the Bible as a 'diffused nutrient' which cannot be bolted whole 'but must be slowly absorbed into the system' Truth is something a man must appropriate for himself. It cannot be used as it stands. 'He must work, think, separate, dissolve, absorb, digest; and most of these he must do for himself and within himself' (NL p.363). It is a lifelong educational task which 'yields rest in work and work in rest, and the development of immortal faculties in both' (NL p.365).

Drummond analyses the relationship between work and rest at some length in "Pax Vobiscum" where he expounds the text "Come unto me and I will give you Rest". He suggests that those who work at learning meekness and lowliness will counter the chief causes of unrest which are pride, selfishness and ambition. Rest is to be seen in the life of Christ.

It is the mind at leisure from itself. It is the perfect poise of the soul; the absolute adjustment of the inward man to the stress of all outward things; the preparedness against every emergency; the stability of assured convictions; the eternal calm of an invulnerable faith; the repose of a heart set deep in God (PV-GW p.265).

Outward response

Study and reflection, however, should lead to practical action in society. In The Greatest Thing in the World, Drummond suggests that I Corinthians 13 should be read once a week for three months as a stimulus to loving action in Christ's name in the everyday world. In his sermon "Clairvoyance" he makes it clear that work and family life are channels for spiritual development. 'Integrity, thoroughness, honesty, accuracy, conscientiousness, faithfulness, patience, these unseen things which complete a soul are woven into it in work' (IL p.134). 'Tenderness, humbleness, courtesy, self-forgetfulness, faith,
sympathy; these ornaments of a meek and quiet spirit are learned at the fireside, round the tables, in common-place houses, in city streets' (IL p.138). His most sustained plea for engagement in social action is contained in the booklet "The City Without a Church", in which he suggests that 'the perfect saint is the perfect citizen (CC-GW p.133) and which has the following passage.

Then pass out into the City. Do all to it that you have done at home. Beautify it, ventilate it, drain it. Let nothing enter it that can defile the streets, the stage, the newspaper offices, the bookseller's counters; nothing that maketh a lie in its warehouses, its manufactures, its shops, its art galleries, its advertisements. Educate it, amuse it, church it. Christianise capital; dignify labour. Join Councils and Committees. Provide for the poor, the sick, and the widow. So you will serve the City (CC-GW p.145).

The greatest thing a man can do for his City is to be a good man. Personal sanctification is both a matter of following Christ in practical action and in 'putting on' Christ and being conformed to his likeness. 'Acts react upon souls. Good acts make good men; just acts, just men, kind acts, kind men; divine acts, divine men. (CC-GW p.175).

At the same time, sanctification is not a thing to be generated but received. 'Our sanctification is not what morality gives, not even what the Bible gives, not even what Christ gives, it is what Christ lives. It is Christ himself' (IL p.295).

The Status of Jesus Christ

Many of the quotations listed above refer to Christ and it is clear that the figure of Christ is central in Drummond's devotional life. In an early sermon "Why Christ must depart", in a section on the doctrine of the Holy Spirit, he states 'The Holy Spirit is just what Christ would have been had He been here. He ministers comfort just as Christ would have done - only without the inconvenience of circumstance without the restriction of space, without the limitations of time' (IL
and the only alternative is 'a spiritual Christ - a Holy Spirit'. He continues:

And yet Christ did not go away that the Spirit might take His place. Christ is with us Himself. He is with us and yet He is not with us, that is, He is with us by His Spirit. The Spirit does not reveal the Spirit. He speaks not of Himself, he reveals Christ. He is the nexus, the connection between the absent Christ and the world - a spiritual presence which can penetrate where the present Christ could not go. It was expedient for the present Christ to go away that the universal Christ might come to all (IL p.73).

Drummond welcomed the renewed emphasis in his time on the humanity of Christ. In the paper read to the Free Church Theological Society in Glasgow, "The New Evangelism: and its Relation to Cardinal Doctrines" he refers to his early difficulties in accepting a theological concept of Christ which lays great stress on the atonement. 'Men fail to see that it was God Himself who conceived the wonderful idea of a humanitarian Christ ... When He made the Word flesh, when he made Jesus a Man, He made a Man ... It is a mistaken scruple even to minimise his Humanity. In our zeal for the doctrines of the Atonement we are really robbing God of His doctrine of the Incarnation (NE pp. 17-18). At the same time he spoke of the person of Jesus as a focus for devotion which could lead to individual transformation and a willing recognition of God as Love. 'To excite love, we need a person, not a doctrine ... To be changed into the same image we must look at the glory of God, not in se, but in the face of Jesus' (NE p.15). In his sermon "Clairvoyance", he develops his thinking on Christ as the express image of God and the imaginative use of the familiar words associated with his person such as light, life, vine, wine, bread and water. 'Observe, Christ does not say He is like these things, He is these things. Look through these things, right through, and you will see Him' (IL p.140).

He regarded it as essential to establish a living bond with
Christ. 'There is an ecclesiastical Christ and a living Christ; there is a historical Christ and a risen Christ; there is a theological Christ and a personal Christ. Is it not clear alike from reason, from nature, and from revelation that only by contact - immediate, personal, living - with a living, present Christ the eternal life can be a root in the heart of man?' (NT-NE pp.81-82).

He did not, however, by any means totally disregard the doctrine of the atonement. In his sermon "The Three Facts of Salvation" he states 'The death of Christ, which is the Atonement, reconciles us to God, makes our religion possible, puts us in the way of the power which is to come against our Sin and deliver our life from destruction. But the Water of Life, which flows from the life of Christ, is the power itself. He redeemeth my life, by His life, from destruction' (IL p.171). George Adam Smith notes that he was criticised in his later years for neglecting this aspect of the work of Christ, but makes it clear that it remained very much part of his underlying philosophy. He quotes a letter to Mr. Sankey dated April 3rd, 1892, in which Drummond confirms that a passage Sankey had come across stating that freedom from guilt and forgiveness of sins come from Christ's cross expressed his true position. 'These are my words, and there has never been an hour when the thoughts which they represent were not among my deepest convictions'.

Drummond also spoke of Christ in a cosmic sense. In Natural Law in the Spiritual World he sees the end point of Evolution, the climax to which all Creation tends as a 'Unity of man and man, God and man, God and Christ and man'. Evolution itself he describes as 'a pyramid, the vast base buried in the inorganic, towering higher and higher, tier above tier, life above life, mind above mind ... The work of the

7. Adam Smith, pp.412-413
ages had no apex. But the work begun by Nature is finished by the supernatural ... as the veil is lifted by Christianity it strikes men dumb with wonder. For the goal of Evolution is Jesus Christ' (pp.313-314).

The role of the Church

Drummond had a positive view of the role of the church in sustaining and developing the spiritual life. In his booklet "The City without a Church", after strongly advocating the active engagement of the Christian in the life of society, he made it clear that he had no intention to depreciate the church. 'On the contrary, if it were mine to build a City, a City where all life should be religious, and all men destined to become members of the Body of Christ, the first stone I should lay there would be the foundation stone of a Church' (CC-GW p.162). He allowed that isolated men might be strong enough to preserve their souls apart from the Church, but went on to say ' ... for the rank and file of us, made of such stuff as we are made of, the steady pressures of fixed institutions, the regular diets of a common worship, and the education of public Christian teaching are too obvious safeguards of spiritual culture to be set aside' (CC-GW p.163).

He was, however, very much aware of the danger of falling into a passive uncritical form of church membership, and in Natural Law in the Spiritual World made some sharp comments on simple doctrines of salvation offered by certain sections of the Roman Catholic Church and the extreme Evangelical Churches, which he interpreted as a matter of "getting off".

The Church in the one instance is a kind of conveying office where the transaction is duly concluded, each party accepting the other's terms; in the other case, a species of sheep-pen where the flock awaits impatiently and indolently the final
consummation. Generally, the means are mistaken for the end, and the opening-up of the possibility of spiritual growth becomes the signal to stop growing. (NL p.334)

In a subsequent chapter, after pointing out that every Christian will rightly consider Church-going as 'an invaluable aid to the ripe development of the spiritual life', he goes on to describe the dangers of 'parasitism':

Hanging admiringly, or even enthusiastically, on the lips of eloquence, his senses now stirred by ceremony, now soothed by music, the parasite of the pew enjoys his weekly worship—his character untouched, his will unbraced, his crude soul unquickened and unimproved... Our churches overflow with members who are mere consumers. Their interest in religion is purely parasitic. Their only spiritual exercise if the automatic one of imitation, the clergyman being the faithful Hermit-crab who is to be depended on every Sunday for at least a week's supply. (pp.354-355)

World Faiths

There are relatively few references to non-Christian religions in Drummond's work apart from those in his paper on Foreign Missions, but it may be that his perceptions altered as a result of his travels in Africa and the Far East, and his reflection on the implications of a common evolutionary basis for all cultures. In an early passage in Natural Law in the Spiritual World commenting on the 'grim distinction' which he saw in the text "He that hath not the Son hath not Life" he states:

Now it is this great Law which finally distinguishes Christianity from all other religions... There is no true sense in which a man can say, He that hath Buddha hath Life. Buddha has nothing to do with Life. He may have something to do with morality. He may stimulate, impress, teach, guide, but there is no distinct new thing added to the souls of those who profess Buddhism. These religions may be developments of the natural, mental, or moral man. But Christianity professes to be more. It is the mental or moral man plus something else or some One else. It is the infusion into the Spiritual man of a New Life, of a quality unlike anything else in Nature. This constitutes the separate Kingdom of Christ, and gives to Christianity alone of all the religions of mankind the strange mark of Divinity. (NL pp.83-84)
A later view, which takes account of the complexity of the mission field, is set out in "The Problem of Foreign Missions". Stressing the need for the missionary to study scientifically the social and cultural background and to find out what God has done already, he states 'Instead of uprooting his Maker's work and clearing the field of all the plants that found no place in his small European herbarium, he will rather water the growths already there and continue the work at the point where the Spirit of God is already moving' (FM-NE p.124). Further developments can be seen in The Ascent of Man where Drummond makes it clear that he regards evolution as a process embracing the development of spirituality. 'If Evolution reveals anything, if science itself proves anything, it is that Man is a spiritual being and that the direction of his long career is towards an ever larger, richer and more exalted life' (AM p.236). The essence of this life is wholeness, perfection and love, or in scientific terms, the growth of altruism, bound up with 'the intensification, and the diffusion of the Struggle for the Life of Others' (AM p.443). Within this context, he regards Christianity as possible ground where all the faiths and creeds may meet, the universal religion 'congruous with the whole past of Man, at one with Nature, and with a working creed which Science could accept' (AM p.438).

He quotes Jowett as saying "The glory of Christianity is not to be as unlike other religions as possible, but to be their perfection and fulfilment". He goes on to affirm that there need be no rivalry between Evolution and Nature on the hand, and Christianity on the other. 'A religion which is Love and a Nature which is Love can never but be one' (AM p.440). He then suggests that Christianity as a system founded on the principle of self-sacrifice can in a sense be regarded as pre-dating the Christian era. 'Christianity is history, a history of some of the later steps in the Evolution of the world. The con-
tinuity between them is a continuity of spirit; their forms are different, their forces confluent. Christianity did not begin at the Christian era, it is as old as Nature; did not drop like a bolt from Eternity, came in the fulness of Time' (AM pp.441-442).

The goal of human society within the universe

There can be no doubt from the short quotations included above, and from the more extended comments in the sections in the thesis which deal with Natural Law in the Spiritual World, and the Ascent of Man that Drummond developed a very powerful overview of the function and goal of society in terms of spiritual evolution. He envisaged a three-tier universe comprising the Inorganic or First Kingdom, the Organic or Second Kingdom, and the Spiritual or Third Kingdom, and did not rule out the possibility of a Fourth transcending the others and beyond human conception. Describing the vitalisation of the Second or Organic Kingdom from the sphere above he states:

Then from a mass of all but homogeneous "protoplasm" the organism must pass through all the stages of differentiation and integration, growing in perfectness and beauty under the unfolding of the higher Evolution, until it reaches the Infinite Complexity, the Infinite Sensibility, God. So the spiritual carries on the marvellous process to which all lower Nature ministers, and perfects it when the ministry of lower Nature fails. (NL pp.402-403)

He perceived love as being at the heart of life from the beginning, 'Love is not a late arrival, an after-thought, with Creation ... Its roots began to grow with the first cell of life which budded on this earth'. Man's true life is lived in the warm world of the affections. 'He reaches his full height only when Love becomes to him the breath of life, the energy of will, the summit of desire' (AM p.276).

The miracle of evolution is not the process but the product, and the product is not the beautiful world in which Man's body finds its home,
or the god-like gift of Mind, but

that which of all other things in the universe commends itself, with increasing sureness as time goes on, to the reason and to the heart of Humanity - Love. Love is the final result of Evolution. That is what stands out in nature as the supreme creation. Evolution is not progress in matter. Matter cannot progress. It is a progress in spirit, in that which is limitless, in that which is at once most human, most rational and most divine. (AM pp.429)

Yet at the same time, evolution is to be considered as occurring within a greater cosmic environment in which things live and move and have their being, and in which is found the secret of their being and their becoming.

It is Nature, the world, the cosmos - and something more, some One more, an Infinite Intelligence and Eternal Will. Everything that lives, lives in virtue of its correspondences with this Environment ... Growth is no mere extension from a root, but a taking possession of, or a being possessed by, an ever widening Environment, a continuous process of assimilation of the seen or Unseen, a ceaseless redistribution of energies flowing into the evolving organism from the Universe around it. (AM pp.414-415)

Comment

These quotations give some indication of Drummond's viewpoint on spiritual matters. They do not, however, convey the full potential impact of his writing when read in wider context. Much of the appeal of his work rests on the way in which a sequence of vivid illustrations and challenging phrases evoke a sympathetic response in the reader. It is hoped, nevertheless, that enough material has been included to confirm that Drummond's spiritual stance is a well balanced blend of the seven factors under discussion, with its own distinctive features.
His theological stance

The selections from Drummond's writings quoted earlier in this section to illustrate his spiritual viewpoint give quite a good indication of the general outlines of his theology, and also show to some extent how his views evolved during his lifetime from a relatively straightforward evangelical position during his early association with Moody and Sankey to a much more complex and speculative stance in which various elements were not fully integrated or developed.

He was by no means, nor would he claim to be, a systematic theologian. His theology and his spirituality were the products of his upbringing, his encounter with the thinking of his time, both religious and scientific, the impact of his social environment, particularly his travels abroad, the insights gained in his personal life of prayer and study, and the formative exercise of preparing material for sermons, addresses and publications. He was much affected by the work of scholars such as Professor Robertson Smith in the field of biblical criticism, and he welcomed the application of scientific method to the whole field of theological discipline. He read widely and kept up to date with theological developments in Europe and the United States from his early student days until the end of his active life.

His use of the Bible and his interpretation of textual material would seem to be reasonably well balanced and sound, and no more 'advanced' than the forward thinkers of his time. George Adam Smith, commenting on Drummond's attitude to the controversy over the new criticism, states that 'His religious teaching was as much based upon the Bible as it had ever been; but in his own practical use of the Bible he exercised a new discrimination, and he often said that the critical movement had removed very many difficulties in the Old Testament which puzzled him, and once had set him free for the fuller
appreciation of its 'divine contents'.

The more orthodox and devotional side of his theology can be seen in his early sermons and addresses published in *The Ideal World and Other Addresses* and in the booklets collectively published in *The Greatest Thing in the World and Other Addresses*. These, as can be seen from the extracts already quoted, evidence a robust form of Christology which encourages an active response in terms of discipleship and social engagement, coupled with a sensible balance between the active and passive life, and a positive reliance on the transforming grace of God.

Some of his more speculative ideas are contained in the relatively sketchy addresses published in the *New Evangelism and Other Papers*, particularly those given to his colleagues in the Theological Society, where he probably felt able to develop his views relatively freely. These were elaborated in *Natural Law in the Spiritual World* and the *Ascent of Man*, and often expressed in descriptive language using images and concepts from the natural sciences. This delighted many but troubled others. Owen Chadwick, in a chapter 'Evolution and the Churches', in *The Victorian Church* commenting on the reception given to *Natural Law in the Spiritual World* states that Drummond alienated his philosophical readers by confusion of language and quotes a comment by Hort to the effect that it was a 'muddle-headed book'. He continues:

> It is a sign of the Victorian state of mind, under the impact of the natural sciences, that the book was enormously successful. Its success was partly due to its purely religious side, to Drummond's ability to write movingly about the realm of grace. But its success was also due, at least a little, to its use of scientific jargon like biogenesis, and to its illustrations drawn from Darwin or Spencer, and its manifest assurance that science aided the religious understanding of man's predicament.

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8. Adam Smith, p.131.
His work was viewed with suspicion by a number of clergy who did not share his vision, and who felt that he neglected the atonement and the doctrine of original sin. Frank H. White, Pastor of the Talbot Tabernacle, for example, published a 'penny tract' in which he referred to "Pax Vobiscum" as 'one of the saddest pieces of reading, under a Christian guise, I have met since I first "learned Christ". From beginning to end it abounds in startling contradictions of Scripture and true Christian experience'. Others took more formal action. As has already been mentioned, at the Free Church General Assembly in May, 1895, no fewer than 12 critical overtures were tabled, and Drummond only escaped enlightenment through the intervention of his good friends Principal Rainy and Professor Stalker.

Times have changed. Not only has there been an appreciable increase in theological tolerance, but theological systems have multiplied. H.R. Mackintosh, writing in 1937, in his *Types of Modern Theology* (Schleiermacher to Barth) selects six variations for comment. John Macquarrie in his extensive review *Twentieth Century Religious Thought* (The Frontiers of Philosophy and Theology, 1900-1980) mentions some twenty categories and over one hundred theologians and philosophers. No one today, therefore, is likely to find Drummond's views so extreme, or so imprecise, that they detract from their potential spiritual value. The recent report by the Doctrine Commission of the Church of England suggests that it is the duty of theologians 'to adventure out on all the frontiers of knowledge, trying out new hypotheses, testing speculations, bringing the new knowledge of their age (e.g. scientific, psychological, historical or inspirational) to bear on all the problems of Christian believing'.

It could certainly be argued that Drummond did his best to fulfil such a role in his own time.

His scientific stance

Drummond's scientific stance was to some extent that of a lay enquirer. He was well aware of the issues of his time and kept abreast of them in order to fulfil his responsibilities as Lecturer, and later as Professor of Natural Science in the Free Church College in Glasgow. He was an able amateur naturalist and geologist whose powers of observation and description are reflected in the papers "The White Ant: A Theory", "Mimicry: The ways of African insects" and "A Geological Sketch", published in the book Tropical Africa. His professional ability was recognised in his election to the Fellowship of the Royal Society of Edinburgh and to the Fellowship of the Geographical Society. Neither Natural Law in the Spiritual World nor The Ascent of Man can be considered as formal scientific works, nor would Drummond have wanted them to be viewed as such. His acknowledgement of their limitations can be seen in his remarks in the prefaces of both books. His contemporaries, however, had no doubts as to his capacity to produce a work of scientific merit had he so wished. James Y. Simpson states that 'he undoubtedly had the patient spirit and observant eye that are the principal guarantees of success in original research', 14 while George Adam Smith, commenting on the possibility of Drummond elaborating the results of his African visit into a careful treatise on the geology and resources of the Zambesi and Nyas. regions, states that 'He could have given us such a work, and it would have established his scientific reputation upon a height from which his subsequent ministry might have

been directed with perhaps even greater force than it actually achieved. A similar view is taken by James W. Kennedy, in a comment on *The Ascent of Man*, where he states 'Had Henry Drummond lived to follow out the hints contained in this last chapter, he had it in him to do the work of an evangelist to the scientific and cultured classes (many of whom he did reach) for which the great work he had already done would have seemed but a preparation'.

At the same time, Drummond's stated aim in *The Ascent of Man* of correcting popular misconceptions of Natural Selection, by integrating the theory of evolution into a religious framework and giving proper weight to the growth of Altruism, can perhaps now be regarded as a valuable contribution to evolutionary theory. James Y. Simpson states that 'Drummond was not the discoverer of this "stream of altruism", but he first made a systematic exploration of it'.

George Adam Smith, while acknowledging his own lack of qualification to comment on the scientific validity of the *Ascent of Man* quotes extensively from two authorities on the subject, Professor Macalister, of the Chair of Anatomy in the University of Cambridge, and and Professor McKendrick of the Chair of Physiology in the University of Glasgow.

Macalister considers the book to be 'a seasonable contribution to the literature of the fundamental department of sociology', but doubts whether altruism can be detected in the self-multiplying cell. 'The multiplying cell may be the potential, but can scarcely be called the actual exponent (of the ethical element in life), for in its origin-ation cell division is really selfish, and solely for self-interest, as far as this language of moral import can be applied to a biological

15. Adam Smith, p.251.
17. Simpson, p.144.
process'. This is an issue which is very much a topic of current controversy and will be dealt with further in the next section.

McKendrick allows that Drummond's recognition of the principle of the struggle for others as a factor in Evolution is 'a substantial contribution to the philosophy of the subject, but while wishing to believe that Evolution really works through Love, suggests that 'facts seem to be against it'. McKendrick points out one potential error which occurs in both Natural Law in the Spiritual World and in The Ascent of Man - Drummond's statement that ova of different species are practically identical. McKendrick comments 'Certainly the highest microscopic powers can observe no marked distinction, although recently progress has been made in this direction, and we may be assured that physical differences exist'. Subsequent research has confirmed McKendrick's opinion. The electron microscope has shown that there are considerable differences in the internal elements of the cells of human, animal and plant life. This error, however, would not seem to seriously detract from Drummond's basic arguments.

McKendrick also notes that in not a few of his illustrations Drumond 'reads into the phenomena of nature some of his own mental moods'. The modern reader may also have reservations about Drummond's frequent 'personification' of Nature, and his unverifiable statements about the existence, nature and purpose of God in relation to evolution while observing that some present day popular scientific writers often unwittingly ascribe to 'nature' similar forms of purposeful motivation.

18. Adam Smith, p.135.
19. Adam Smith, p.433.
20. John W. Suttie, Introduction to Biochemistry Second edition, (London and New York, 1977) p.15, in a summary entitled 'Cell Morphology' points out that there is no typical or universal cell, and gives electron micrograph diagrams of a generalised animal cell plant cell, and human cell showing the differences which depend upon biological function, and features in common which include most of the same organelles, mitochondria containing energy-producing enzymes, and a nucleus containing chromosomal DNA.
McKendrick points out that a through-going evolutionary view will demand a new theology and that 'such fundamental questions as the origin of sin, human responsibility, the taking of our nature by the son of God (as implied in the doctrine of the Trinity), the possibility of miracle, the possibility of future life for the individual, will all need to be re-stated and to receive fresh answers'. In the meantime, he suggests, that Drummond 'deserves credit for the courage with which he has applied the evolutionary hypothesis to current views, for his attempt to form a consistent cosmology ...',\textsuperscript{21}

It would seem therefore, from these and other comments on Drummond's work, that his scientific stance was, in a sense, more orthodox than his theological stance, and there would seem to be little to hinder a present day reader interested in spirituality from accepting his general position as it stands, making due allowances for further scientific developments since his day.

\textsuperscript{21} Adam Smith, pp. 437-438.
D RECENT DEVELOPMENTS IN EVOLUTIONARY THINKING

Introduction

A.R. Peacocke, Dean of Clare College, Cambridge, in a lecture delivered at the Darwin Centenary Conference of the British Society for the History of Science, in November, 1982, stated firmly that 'whatever controversies there may or may not be about the mechanism(s) of evolution and its speed, there is no dispute among biologists about the inter-connectedness, through evolutionary relationships, of all forms of life, all having a common origin'. He points out that the evidence is now quite direct, and refers to the fundamental similarity of biochemical mechanisms, and the universality of the chemically arbitrary, genetic code. He goes on to state that biological evolution can be placed in a cosmic setting that manifests a continuous development of the forms of matter from the original 'hot big bang' through to atomic and molecular structures, including those that self-reproduce their pattern of organisation and can be designated as 'living', all of which 'gives us a new assurance in speaking of the cosmic significance of the process of evolution'.22

His lecture confirms the comments of John Habgood, writing as Bishop of Durham, in an essay entitled "After Darwin" in his book A Working Faith where he states that 'during the last hundred years, Darwin's basic ideas have been vindicated again and again' and goes on to identify five developments which while not affecting the fundamental issues, have to some extent 'changed the feel of the theory'. These developments include the new genetic theory and the mechanism of mutation; an awareness of a mutuality, and a high degree of co-operation between certain evolving species; the creative factor of environmental change; the inter-connectedness of structure and function and

the realisation of the importance of behavioural change; and finally, the extension of evolutionary concepts outside the realm of biological evolution, in some cases leading to inappropriate applications.23

Most of these developments have taken place since 1930 when Haldane and Fisher in England, and Sewall Wright in the USA developed the genetical theory of natural selection. They have been well charted recently by Charles Birch, Challis Professor of Biology, University of Sydney, and John B. Cobb, Jr. Ingraham Professor of Theology and Director of the Center for Process Studies School of Theology, Claremont, California, in their book *The liberation of life*, which contains a useful survey of the present debate about genetic influence on social behaviour and assesses the weight to be given to theories of biological determinism. They make the point that whereas people used to look to religion to give authoritative answers of origin and destiny, the growth of scientific knowledge has made their traditional answers unconvincing, they now want to learn from science what is to take their place. They go on to observe that because of the underlying religious interest, the debates are often intense. 'Today they are more frequently cast in political than in explicitly religious terms, but one can see the same concerns at work, for example, in response to the sociobiology of E.O. Wilson (Sociobiology Study Group) 1976). Merely factual and scientific questions are subordinated to questions of ultimate meaning'.24

Both Birch and Cobb were actively involved in the World Council of Churches conference on 'Faith, Science and the Future' held at the Massachusetts Institute of Technology in July, 1979. Two elements from the considerable material presented and generated seem to be worth quoting at this point. First, an editorial group responsible for

drafting the preparatory readings for the conference noted the following four characteristics of contemporary science:

First, scientists today rarely talk about "scientific method", in the sense of some single universal method of science. They talk about methods, and they devise new methods for solving new problems ... The methods of mathematicians devising a non-Euclidean geometry are quite different from those of geneticists studying the structure of DNA molecules.

Second, scientists sometimes are ready to use different complementary models to understand the same phenomena. The best known example has to do with the structure of both light and particles ... there is no hesitation to go on using both concepts, with the realisation that neither is final.

Third, there is rethinking of the meaning of objectivity in science ... there is increasing recognition that scientific investigation is engaged in answering human questions asked by human persons, not questions somehow asked by "objective" reality ... Furthermore especially since the work of Werner Heisenberg, there is an awareness that at least in some delicate experiments the influence of the observer affects the outcome of the experiment ...

Fourth, the expanding boundaries of science pose many intriguing questions ... Once the atom was defined as an indivisible particle ... Now there are so many identifiable nuclear particles that some scientists look forward to a major breakthrough and a new way of understanding the nucleus in a simpler conception ... but nobody claims to have the last word about the structure of the atom.

The group went on to state that the tensions between science and religion have changed. 'Science is less likely than in the past to seem to refute religion, although it still refutes many formulations of religious beliefs. It is more likely to challenge religion - to ask people of faith why they believe in God, what they mean by talking of God and of God's action in the world'.

Secondly, Section 1 of the conference itself, which dealt with 'The Nature of Science and the Nature of Faith', identified a number of ways of regarding the relationships between the two disciplines,

(i) Science and Faith deal with two separate realms.

(ii) Science and Faith are interacting approaches to the same reality, so each may modify the other.

(iii) Science and faith are two distinct and non-intersecting approaches to the same reality.

(iv) Science and Faith constitute two different language systems.

(v) Faith and Science complement and penetrate each other.

(vi) The integration of Faith and Science is realisable.

They observed that this variety is rooted in the plurality of ways in which the churches regard the faith and conceive of God's relation to the world, and that as a result of this theological plurality and the wide range of scientific activity, multiple interactions between modern science and Christian faith are to be expected.26

This is certainly true of the whole field of evolutionary thinking, and it is only possible in this thesis to select a very limited number of examples to illustrate recent developments. These have been drawn from two groups of writers, those who would seem generally to express an agnostic viewpoint, and those who allow for a religious element in their thinking. Each group is dealt with in the rough chronological sequence of the major works from which material is quoted, most of which have been published during the last twenty-five years.

'Agnostic' group

Jacob Bronowski

The first writer is the biologist Jacob Bronowski, who died in

1974, just after the publication of his popular book *The Ascent of Man*. Bronowski was Senior Fellow and Director of the Council for Biology in Human Affairs at the Salk Institute for Biological Studies in San Diego, California, and his book originated out of a very successful television series for the British Broadcasting Corporation. It is perhaps appropriate to begin with him, as he uses the same title as Drummond's major work, and like Drummond was a most effective communicator.

His stated ambition was to create a philosophy for the twentieth century 'which shall be all of one piece ... a philosophy of nature rather than of science ... a contemporary version of what used to be called Natural Philosophy'.

Drummond limited himself in his *Ascent of Man* to the earlier stages of man's evolution describing it as 'a study in embryos, in rudiments, in installations' tracing his rise only as far as Family Life. Bronowski covers a much wider canvas, summarising not only biological evolution but also man's cultural achievements in architecture, chemistry, geometry, mathematics, astronomy, nuclear physics, and genetics. He suggests that man's imagination, reason, emotional subtlety and toughness make it possible for him 'not to accept the environment, but to change it' (p.19). He goes on to assert that 'Man ascends by discovering the fullness of his own gift (his talents or faculties) and what he creates on the way are monuments to the stages of his understanding of nature and of self - what WB Yeats called "monuments of imageing intellect"' (p.24).

In his chapter headed 'Generation upon generation', discussing the question of cloning he makes it clear that he is strongly against any form of genetic engineering, and states 'Every attempt to make us uniform, biologically, emotionally or intellectually, is a betrayal of

the evolutionary thrust that has made man its apex' (p.400). He does not deal with the emergence of altruism as such. 'Sex' he states, 'was invented as a biological instrument by (say) the green algae. But as an instrument in the ascent of man which is basic to his cultural evolution, it was invented by man himself' (p.406). He goes on to say that spiritual and carnal love are inseparable, but apart from quoting from John Donne's poem *The Extasie* does not elaborate further. Apart from this, there appears to be little reference to the religious element in man's development. His own faith is perhaps hinted at in a passage on the horrors of Auschwitz prison camp in World War II in which he reflects on the potential dangers of nuclear war.

I owe it as a scientist to my friend Leo Szilard, I owe it as a human being to the many members of my family who died at Auschwitz, to stand here by the pond as a survivor and witness. We have to cure ourselves of the itch for absolute knowledge and power. We have to close the distance between the push button order and the human act. We have to touch people (p. 374).

In the final pages of the book he states that man is 'nature's unique experiment to make the rational intelligence prove itself sounder than the reflex. Knowledge is our destiny. Self-knowledge at last bringing together the experience of the arts and the explanations of science waits ahead of us'. At the same time, paradoxically, he expresses his infinite sadness to find himself surrounded in the west 'by a sense of terrible loss of nerve, a retreat from knowledge ... into Zen Buddhism; into falsely profound questions about Are we not really just animals at bottom; into extra sensory perception and mystery' (p.437). He concludes:

We are all afraid - for our confidence, for the future, for the world. That is the nature of the human imagination. Yet every man, every civilisation, has gone forward because of its engagement with what it has set itself to do. The personal commitment of a man to his skill, the intellectual commitment and emotional commitment working together as one, has made the Ascent of Man (p.438).
Ashley Montague

Bronowski's reference to a retreat from knowledge into falsely profound questions about man's animal nature, is a subject echoed in a series of essays entitled *Man and Aggression* edited by Ashley Montague, and worth quoting from briefly here, as being related to Drummond's views on the growth of altruism. Montague is concerned to inquire into the validity of the views on human nature expressed in Robert Ardrey's *African Genesis* and Konrad Lorenz's *On Aggression*, and also in more popular form in books such as Desmond Morris's *Naked Ape*. Montague states that Ardrey and Lorenz argue that man is by instinct an aggressive creature, and it is this innate propensity to violence that accounts for individual and group aggression in man. In his own essay in the book which is entitled 'The New Litany of "Innate. Depravity" or Original Sin Revisited', Montague asserts that

> Everything points to the non-violence of the greater part of early man's life; to the contribution made by the increasing development of co-operative activities, the very social process of hunting itself, the invention of speech, the development of food getting and food preparing tasks and the like.

He goes on to point out that field studies of Scheller, Goodall and Harrison as well as those of others have shown that pre-human primates are not irascible, but generally amiable and quite unaggressive. He concludes that 'it is not man's nature but his nurture ... that requires our attention.'

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33. *Man and Aggression* p.6 and p.16.
1975 saw the publication of E.O. Wilson's *Sociobiology* subtitled 'The New Synthesis'. It is a major work and has attracted wide comment both favourable and adverse. Wilson defines 'sociobiology' as 'the systematic study of the biological basis of all social behaviour', and states that the central theoretical problem of sociobiology is the question 'how can altruism which by definition reduces personal fitness, possibly evolve by natural selection?' He suggests that in a Darwinist sense, the individual organism does not live for itself, its primary function is not even to reproduce other organisms, but to reproduce genes. Certain genes are responsible for the transmission of altruism, but altruism must be balanced by the drive for personal survival and reproduction. The individual must suffer ambivalence as a way of life. He is forced 'to make imperfect choices based on irreconcilable loyalties - between the "rights" and "duties" of self and those of family tribe, and other units of selection, each of which evolves its own code of honor' (p.124).

The following passage gives a good idea of style and content of his argument, and the relatively neutral valuation he gives to love and altruism.

The hypothalamic-limbic complex of a highly social species, such as man, "knows", or more precisely it has been programmed to perform as if it knows, that its underlying genes will be proliferated maximally only if it orchestrates behavioural responses that bring into play an efficient mixture of personal survival, reproduction, and altruism. Consequently the centres of the complex tax the mind with ambivalences whenever the organisms encounter stressful situations. Love joins hate; aggression, fear; expansiveness, withdrawal; and so on, in blends designed not to promote the happiness and survival of the individual, but to favor the maximum transmission of the controlling genes. (p.124)

Wilson sees sociobiology as playing an increasingly important role

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in conjunction with adjacent disciplines such as behavioural ecology, ethology, physiological psychology, integrative neurophysiology, cellular biology and population biology. He also goes so far as to suggest that the science of sociobiology, coupled with neurophysiology 'might transform the insights of ancient religions into a precise account of the evolutionary origin of ethics and hence explain the reasons why we make certain moral choices instead of others at particular times' (p. 129). In the long term he envisages the possibility of a planned society in which a decision may be taken to 'mould cultures to fit the requirements of the ecological steady state' (p. 575), presumably through genetic engineering with the danger that eventually social control might rob man of his humanity. He sees mankind as being locked on to a particular course to maintain the species, in which 'we are compelled to drive towards total knowledge right down to the level of the neuron and the gene' (p. 575). There appears to be no place for religion in his thinking, though it is interesting to note that he begins and ends his book with pessimistic quotations from Albert Camus suggesting that in a universe divested of illusions and lights, man feels an alien whose exile is without remedy since 'he is deprived of the memory of a lost home or the hope of a promised land' (p. 575). At the same time, the introductory page of the book has two quotations from the dialogues between Krishna and Arjuna in the Bhagavad-Gita which suggests an identification between the Atman (quoted as 'Soul' in the translation used), and the controlling genes.
Leakey and Lewin

A more anthropologically orientated study of man's evolution, corresponding quite closely to Drummond's areas of interest, is set out in Richard E. Leakey and Roger Lewin's recent book Origins which is subtitled 'What New Discoveries Reveal About the Emergence of our Species and its Possible Future'. They discuss such matters as the value and limitation of evidence from fossil sites; the rewards of co-operation in hunting; the importance of communication and the development of intelligence and language and its relation to brain capacity; the importance of childhood education and the bond between mother and infant; the nature of aggression and territoriality and their relation to population growth and food shortage; and the role of sex differentiation in evolution. On this last topic much is made of the mechanism of incest avoidance and the social and political dominance of men and women, but very little recognition is given to the importance of good mothering.

Their final comments on the possibilities for the future are similar to those of Bronowski. Noting that Homo sapiens has occupied the planet for a tiny fraction of the planet's four and a half thousand million years of existence, they suggest that 'In many ways we are a biological accident, the product of countless propitious circumstances'. They do admit that 'mankind is special'; that evolutionary pressures have forged a brain 'capable of profound understanding of matters animate and inanimate'; and that if nations can live peaceably with respect for the natural world, the potential is enormous. They conclude 'We are One People, and we can all strive for one aim; the peaceful and equitable survival of humanity'.

Stephen Jay Gould

Finally in this 'agnostic' group it may be helpful to quote some comments by Dr Stephen Jay Gould, a palaeontologist and evolutionary biologist, partly to illustrate the differences of opinion of professionals in this field, and partly as a realistic corrective to both unduly pessimistic and over optimistic predictions of the human future. In his book, Ever Since Darwin, Reflections in Natural History, Gould suggests that many of the claims of sociobiology are 'unsupported speculations in the determinist mode', and that the assertion that individuals are no more than instruments of the genes is 'metaphorical nonsense' (p.269). He himself considers that 'inheritance has given us flexibility, not a rigid social structure ordained by natural selection' (p.16).

Gould goes on to point out that there are two different streams of thought - human "sociobiologists" who present a series of elaborate speculations rooted in the premise that all major patterns of behaviour must be adaptive or the products of natural selection - and molecular evolutionists who take the view that evolutionary changes are not only uninfluenced by selection but truly random in direction. He himself predicts the triumph of Darwinian pluralism and suggests that 'natural selection will turn out to be far more important than some molecular evolutionists imagine, but it will not be omnipotent, as some sociobiologists seem to maintain' (p.270). He suggests 'that Nature is so wondrously complex and varied that almost anything possible does happen', and finally concludes on a cautionary note.

A person who wants clean, definitive, global answers to the problems of life must search elsewhere, not in nature ... We can resolve small questions definitely ... We do reasonably well with middle-sized questions ... Really big questions succumb to the richness of nature - change can be directed or aimless, gradual or cataclysmic, selective or neutral. I will rejoice in the multifariousness of nature and leave the chimera of certainty to politicians and preachers. (p. 271)

'Religious' group

Alister Hardy

The biologist and naturalist, Sir Alister Hardy, has devoted much of his time to reconciling the claims of religion and science, and in contrast to Gould, would make no apology for attempting to seek definitive and global answers to the problems of life. His search is set out in his Gifford Lectures for 1963-4, and 1964-5, amplified in his books The Living Stream and The Divine Flame, continued in the setting up of the Religious Experience Unit at Manchester College, Oxford and further developed in his more recent books The Biology of God and Darwin as the Spirit of Man. 37 He acknowledges the pioneer work in building a natural history of religion of Starbuck in his Psychology of Religion (1899) and of William James on his Varieties of Religious Experience (1902). He then makes it clear that he is not saying that science is supporting the idea that religious experience is a transcendental reality, but that science has produced no valid evidence against such a concept being true and that the modern Darwinian position does not point only to a materialistic interpretation of the process. He argues that it is not unreasonable to hold a theistic view, involving not a belief in a deity with an anthropomorphic image, but 'a belief in an "extra-sensory" contact with a Divine Power which is greater than, and in part lies beyond, the individual self'. 38

His books contain much valuable material, covering new findings since Drummond's time, particularly in the field of genetics, and introducing related topics from psychology, psychical research and process theology.


38. The Living Stream, p.16.
His view on the possibility of a psychic input in the genetic process is worth recording as an alternative to the position taken up by the sociobiologist group.

I am not committed as to whether the universe is a dualistic one or not, but I think it more likely that it is. Space and time form a dualism in a sense – perhaps only a dualism of our perception; the psychological and the physical may well have a similar relationship. My "vitalism" is a belief that there is a psychic side of the animal which, apart from inherited instinctive behaviour, may be independent of the DNA code that governs the form of the physical frame, but that it may interact with the physical system in the evolutionary process through organic selection.39

Hardy describes himself as a biological heretic, believing that the living world is as closely linked with theology as it is with physics and chemistry and that the Divine element is part of the natural process 'not strictly super-natural, but para-physical'. He makes his own religious position clear in a postscript to The Divine Flame, as being a Unitarian whose 'heart is in the Church of England'40 and includes some interesting comment on the final chapter of The Biology of God on the reflective use of the Lord's Prayer as a formula for 'generating religious experience'.41 His whole approach is sympathetic to religion, but may perhaps be too uncritical for some of the scientifically minded. The following passage gives a further example of his style, and may indicate a tendency, like Drummond, to read back his religious insights into his speculative thinking.

We remember the words of the author of the fourth gospel: God is Love. Who knows? Perhaps all true love – animal, human or divine – may be part of one tremendous "force" animating the organic world on the psychic side. Physical energy, derived originally from the sun, is converted by the plant – into the fuel to drive the chemical machine of our bodies and as such is known to our senses; in addition, in the extra-sensory world to which consciousness belongs, may there not be another "psychic" element (which, except by analogy, we should not call a force): one intimately bound up with the behaviour of the

40. The Divine Flame, p.246.
41. The Biology of God, p.231.
organism and just as important as the energy on the physical side. 42

Hardy refers on several occasions in both The Divine Flame and The Living Stream to Sir Julian Huxley whom he acknowledges as a friend and former tutor, and although Huxley's work falls outside the period which material has been selected for this sub-section, it would seem appropriate at this point to note that in his Evolution in Action, published in 1953, he states that there are only three possible alternatives as regards the origin of living substance on this earth. 'Either it was supernaturally created; or it was brought to earth from some other place in the universe, or it was produced naturally out of less complicated substances'. He then continues:

The first suggestion runs counter to the whole of our scientific knowledge. Living substance consists of the same matter as lifeless substance; it transacts its operations according to the same general rules. There is no trace of any special 'vital force' which can be detected or measured. Both the inorganic and the organic world are built out of the same matter, and work by means of the same energy. To postulate a divine interference with these exchanges of matter and energy at a particular moment in the earth's history is both unnecessary and illogical. It is as illogical as it would be to postulate divine interference at each act of fertilisation of an ovum by a sperm. 43

W.H. Thorpe

Another Gifford Lecturer, also sympathetic to religion, W.H. Thorpe, Emeritus Professor of Animal Ethology at the University of Cambridge, in his book Animal Nature and Human Nature, has provided an illuminating and stimulating survey of current developments in both fields. In part one, he deals with the differences between the living and the non-living, the accumulation of information by organisms,

42. The Living Stream, p.254.
animal languages, innate and acquired behaviour, and the development of perception, particularly in insects and birds. In part two, he discusses the development of human behaviour, the problem of aggression, the uniqueness of man, the emergence of consciousness, and questions related to man as a religious animal.

He makes an important general point in his preface where he states that in spite of the enormous progress of science in explaining the complex in terms of the simple, and special cases as instances of general laws, 'there are big and seemingly unbridgeable discontinuities in the account of the world as we range from the supposed "primordial gasses" and particles to this stupendously complex and awesomely great universe which we now realise we inhabit.' He draws particular attention to the discoveries of the genetic code which seem 'quite contrary to the popular belief, to make it far less comprehensible how life might have arisen from non-living than it was before', and goes on to say 'The possibilities of this having happened "by chance" are, so far as we can see, so infinitely improbable that science as such can hardly have an opinion to express' (p.xvii).

Discussing the genetic question further in a later chapter he considers that we live in a universe of emergent novelty - a novelty which as a rule is not completely reducible to any of the preceding stages' (p.65). There is an echo here of the language of process theology, and it is not surprising to find in the final chapter of the book that he expresses admiration for A.N. Whitehead as 'the first great philosopher who really took the trouble to comprehend the biological developments of his time' (p.349).

In questions related to the growth of altruism, he gives due

weight to the "gentling" role of mothers, both in animal and human nature; and on the subject of aggression he states, 'Above all we must avoid the cardinal error of assuming that in the higher animals and in man group aggressiveness is the necessary and inevitable result of hereditary constitution' (p.252). He accepts that there are hereditary factors, but points out that they are often triggered by competition for a limited supply of space, or food, competition for mates, and by pain. In his chapter on animal perception, after drawing attention to some remarkable abilities which the higher animals display, especially the navigational capacity of migrating birds, and the almost inexplicable problem of the emergence of form and beauty in evolution as exhibited in the bird of paradise and the behaviour of the bower bird, he concludes: 'The more one investigates, the more elaborate, more organised, and the more highly adjusted the sensory powers of these animals are found to be. This leads me to an ever-new sense of wonder and an increasing appreciation of the value and significance indeed the "worthwhileness", of study of the animal Kingdom' (pp.206-207).

On the fundamental questions on the nature of man himself and the goal of the evolutionary process, Thorpe quotes with approval, a number of passages from John Hick's short study Biology and the Soul, the substance of the 1972 Arthur Eddington Memorial Lecture, in which Hick argues that God wills to exist an autonomous physical universe, within which men may grow as free beings towards 'that fullness of personal life, in conscious relationship to God, which (according to Christianity) represents the divine purpose for us' (p.372).

Thorpe welcomes Hick's contention that theology should be concerning itself with religions other than Christianity, but believes that Christianity as 'a moving, living, developing faith has a message of central and unique value for mankind' (p.381); and sees within this faith, an important place for a Christian mysticism which appreciates
the fundamental unity of all things, and a recovery of a scientifically based natural theology.

A.R. Peacocke

Peacocke's *Creation and the World of Science*, published in 1979, has been regarded as a major contribution in the area of natural theology. Building on his earlier work *Science and the Christian Experiment*, he sets out in the first part of the book, the developing scientific world view of 20th century physics and cosmology, man's emergence in the universe, and the mechanism of biological evolution. He discusses among many other matters, E.O. Wilson's *Sociobiology - The New Synthesis* and Richard Dawkins's *The Selfish Gene*, noting the latter's concept of 'the meme' as a unit of replication which may transmit cultural information in the same manner as the gene transmits biological information. He makes several references to Sir Julian Huxley and concisely summarises his view of progress 'as involving increased complexity, control over the environment, independence from the environment, individualisation, capacity for acquiring and organis­ising knowledge, for experiencing emotion, for exerting purpose, and for appreciating values'. Peacocke, like Huxley, appears to reject the notion of 'vitalism' as the mode of God's creative activity in evolution.

We have to recognise that the processes of evolution, both cosmic and biological, do not appear as directional and directed, as would be required by such a view, whether theis­tically 'vitalist' or theistically creationist. The processes of evolution, in fact, are sufficiently open-ended and involve such an element of 'trial and error', that Teilhard's descrip­tion of them as 'groping' ('tatonnement') seems far more appropriate (p.167).

He ends the first half of the book with a useful analysis of man's biological needs – his requirement to come to terms with his own death, with his finitude and with suffering, while at the same time striving to realise his potentialities, well aware of his inability to reach his highest aspirations, suggesting that 'Man is to himself an unfulfilled paradox' (p.183).

In the second half of the book, Peacocke attempts to demonstrate how Christianity can be re-interpreted to accommodate a scientific world view, and provide a satisfactory answer to the questions 'What is man for?' and 'What should men be striving to become?' He discusses various theological appraisals of man and indicates how the concepts of the fall, man's sin, and the incarnation can be reconciled with evolution. He deals with the possible relationship of God to the world in terms of immanence, transcendence and 'pan-en-theism'. He expresses the significance of the life, death and resurrection of Jesus in an interesting combination of scientific and theological language.

The combination of the evidence for Jesus' intimacy with God his Father, the identity he affirmed between his message of the Kingdom of God and his own presence among men, his authority and, above all, the events of his death and resurrection all serve to impel us to a recognition that in this man Jesus, at least (with no judgement about anyone else), we encounter a transcendent vector of God's immanence in all men which was so distinctive and intensive that new non-reducible concepts and language might well be required to express the uniqueness of what he was and did. I concur with using the word 'incarnation' (but with a small 'i') to denote the unique degree of God's transcendence that was personally immanent in that psychosomatic unity which was the man Jesus (p.231).

He also sees Jesus as indicating what God intends for individual men. 'In this sense Jesus is the definition of the divine end of man – he defines man not by his origins in the physical, biological and social world but in terms of what God intends him to become' (p.252). This 'deification' or 'divinisation' of man he attributes to the work of the Spirit and he goes on to quote in the New English Bible version, one of Drummond's favourite texts, "we all reflect as in a mirror the
splendour of the Lord; thus we are transfigured into his likeness, from splendour to splendour; such is the influence of the Lord who is Spirit" (II Corinthians 3. 17,18).

He goes on to discuss the question of ecology and man's relationship to the created environment drawing on material from current sources such as Barbara Ward and René Dubos, Only One Earth, the Club of Rome, United Nations agencies, the World Council of Churches (and incidentally the Society, Religion and Technology Project of the Church of Scotland), together with the views of biblical and process theologians such as Westerman and Barr, Derr and Cobb. In his final chapter, 'Creation and Hope', he identifies three movements in contemporary theology seriously concerned with the future.

(i) The theologians of hope, such as W. Pannenberg and J. Moltmann, principally from Germany and American Lutheran churches.

(ii) The 'Teilhardian' theologians who are developing the ideas of Teilhard de Chardin.

(iii) The process theologians, such as J.B. Cobb, who are following up the metaphysics of A.N. Whitehead (p.334).

He concludes that a doctrine of creation, developed in the light of the sciences is congruent with an understanding of hope grounded on 'the character as Love of the transcendent God who is immanently active in all events, most notably in the personal, and uniquely transparently in Jesus the Christ' He finally suggests that such a doctrine, when its implications and consequences are drawn out 'can provide man with a vision and hope in actual existence that no secular ideology can match in its depth and sensitivity to the various levels of man's needs and aspiration' (p.356).
The final writer selected in the 'Religious' group is Sir Bernard Lovell, the Astronomer Royal, who in his book, *In the Centre of Immensities* covers recent developments in thinking about the universe as a whole. He begins by pointing out that Quantum Theory and the Theory of Relativity have led to revolutionary changes in thinking, and encouraged a renewal of transcendentalism in contemporary concepts of the Universe. Current opinion inclines to accept a nebular theory for the origin of the planetary system, the sun seems likely to have been a condensation from the primeval gas cloud, and the solar system is by no means unique. 'A Universe in which there exists a multiplicity of planetary systems has become a common feature of contemporary astronomical thought, and there are many who believe that organisms may have developed in planetary systems other than the solar system'.

Discussing the question of the origin of life and the relevance of DNA he suggests that there is a vital gap in our knowledge as to the processes by which molecules in the early seas formed themselves into the complex molecules to make the transition from non-living to living material.

Profound problems, however, remain. The living cell translates its genetic code by a molecular process of almost inconceivable complexity - a microscopic machine of at least fifty macromolecular components which are themselves coded in DNA ... Attempts to prove that the structure of the code arose because of chemical affinities among certain amino acids have so far been negative. The alternative concept, that the choice of code was arbitrary and has been enriched throughout history by a series of random choices, is not a scientific explanation (p.65).

He goes on to say that the sequence of events from the solar nebula, through the barren Earth to the habitable atmosphere and the transition into life of inert matter 'presents formidable odds against the emergence of human life'. He then remarks on the strange circum-

46. Bernard Lovell, *In the Centre of Immensities* (London, 1979) p.25. Further references are given after quotations in the text.
stance that the brilliant discoveries in the astronomical and biological sciences which have revealed parallel universal mechanisms have not in fact helped to solve the problems of life's origins. 'On the contrary the revelation of the immense complexity and delicacy of the physical and biological systems has transformed the question into realms of ever greater difficulty'(p.65).

On the problem of the nature of the Universe itself, reviewing the discussions between the 'evolutionary' and 'steady state or continuous creation' theories he states that the overwhelming weight of theoretical and observational evidence is in favour of a universe which is expanding and is compatible with the general theory of relativity and concludes that 'it appears that the theory of the steady state is not viable' (p.99).

As to whether the universe will continue to expand indefinitely or collapse upon itself into another state of high density, Lovell suggests that it is reasonable to suppose that this question may be resolved by calculations on the density of matter at some future date. 'The most favoured value for parameters implies that we exist in an epoch at which about one tenth of the cycle has elapsed and the turning point to a contracting universe will be reached in another ten billion years' (p.108).

Lovell then goes on to say that the entire concept may be meaningless because time and space may have no meaning apart from the nature we attribute to them, and this represents not merely a limitation of human thought 'but a most remarkable and unsuspected entwinement of man with the actual existence of the Universe and of time and space' (p.110). This entwinement arises from consideration of the consequences of our observation of the universe as the microsecond point.

At $10^{-43}$ seconds from the beginning, before the space curvature becomes infinitely great, the language of modern physics loses
its meaning and we being to feel the force of the methaphysical argument of Kant, that it is possible to imagine nothing in space but impossible to imagine no space (pp. 114-115).

He then suggests that quantum theory and relativity form a partial synthesis only. 'The progressive penetration into the remote regions of time and space, and into the innermost structure of the atom have simultaneously revealed that neither theory enables us to comprehend the Universe' (p. 120). He looks to a further step to synthesize the theories or supersede them by revolutionary new concepts. He reminds his readers that when considering the profound problems of the presence of man in the Universe and the emergence of life on earth, descriptions in terms of nuclear physics and relativity are not explanations, and concludes: "We can apply the spectroscope to gain an understanding of the sunset; we can send the space probe to Venus, but we may never apprehend the method of the evening star' (p.159)

Comment

From this brief survey of some of recent literature on the relationship between science and religion and trends in evolutionary thinking, it would seem that Drummond's basic approach to evolution is still viable, and many of the questions he raises as to goal of evolution and the place of altruism in the evolutionary process are still under very active discussion. One development however, must be mentioned as potentially affecting some of Drummond's earlier arguments, and that is that it is no longer possible to talk of a sharp discontinuity between the inorganic and the organic. Birch and Cobb point out that until 1935 there appeared to be a wide gap between the chemist's largest molecule and the smallest living organism known to the biologist, but when in that year, W.M. Stanley isolated for the first time a virus in crystalline form, 'here was something that
exhibited properties of both the 'living' and the 'non-living'. They go on to show how further research has revealed a complexity of relationships in cellular life which leads to the conclusion that 'there is no clear dividing line between the animate and the inanimate'.

This was a possibility that Drummond appeared to recognise in his later writings, particularly in the chapter "Involution" in The Ascent of Man and is reflected in his comments on the chapter "Biogenesis" in Natural Law in the Spiritual World contained in the unpublished preface to the book, dated 1891, already referred to in Section IID of the thesis. The following further extract indicates his later position:

Modern science ... holds that though there must have been a day when Life first dawned upon the world, that first Life was probably neither plant nor animal, nor embryo, nor cell, but living protoplasm ... any suggestion of spiritual birth as isolated phenomenon or unrelated effect is to be taken with reserve. The processes of the spiritual life are as mysterious as those of the first dawn of Life, and as hidden from us ... Regeneration, in short, has much larger meanings and deeper relations than appear on the surface. It is both more divine and more human, more natural and more supernatural than is here represented.

Bearing these considerations in mind there would seem to be much in Drummond's work that should still be of positive value to those concerned with a practical spirituality, especially those with a strong cosmological overview in their make-up.

47. Birch and Cobb, pp. 91-92.
A MODELS OF SPIRITUALITY

Introduction

Having discussed Drummond's theological and scientific stances and recent developments in evolutionary thinking, and having suggested that there is little to discourage a modern reader from using his work as a basis for reflection on practical spiritual matters, it is now necessary to consider the likely appeal of his work to those of varying spiritual outlook through the identification and construction of a number of different models of spirituality. Final conclusions will then be drawn on the theme of the thesis as a whole.

The models originate from general observation of the present day religious scene and are illustrated by a brief selection of the views of one or two figures associated with each category. To some extent this must be a slightly artificial exercise, for there is naturally a considerable amount of cross-fertilisation of ideas and overlapping of interest throughout the whole field; but it is hoped that the models may serve as a further structure for the assessment of Drummond's work, and at the same time provide an indication of the wide and growing interest in spiritual matters in society today.

There would seem to be at least eight different emphases, which can be placed in four groups - the Evangelical and Charismatic - the Contemplative and Sacramental - the Experimental and Therapeutic - the Ecological and Cosmological. These can be summarised as follows:

(a) Evangelical spirituality is a matter of putting one's trust in the Lord Jesus, confessing one's sins, receiving the gift of the Spirit, walking in the way of the Spirit and seeking the guidance of the Lord through prayer and bible study in
the everyday activities of life. The Charismatic variation is one in which particular emphasis is placed on re-birth in the Spirit, speaking with tongues, the healing ministry, and spontaneity in worship and witness.

(b) Contemplative spirituality is a matter of developing an inner sense of awareness of the presence of God through the constructive use of silence and solitude which leads to a renewed sensitivity of the outer world of things and persons and appropriate responsive action. The Sacramental variation is one in which the practice of private prayer and meditation is coupled with frequent and attentive worship in the sacrament of Holy Communion, and a responsive engagement with the needs of the world.

(c) Experimental spirituality is a matter of ordering one's life and thought on principles of rigorous honesty and integrity, seeking by appropriate disciplines to fulfil one's perceived destiny as a spiritually self-conscious being. The Therapeutic variation is one in which wholeness is emphasised rather than holiness, and close attention is paid to the functioning of the mind and body with a view to coping with the stresses and strains of modern living.

(d) Ecological spirituality is a matter of relating positively and sensitively to the global environment, natural, human and spiritual, and adopting a reverential style of life which reflects this sensitivity. The Cosmological variation is one which takes note of the immensities of inner and outer space revealed by the electron microscope and the radio telescope, considers the problems of perception raised by new theories of time, energy and matter, and attempts to formulate a universal cosmology.
These models, which will now be examined in more detail, have been drawn from a Christian viewpoint, and are therefore limited to that perspective. Further models could no doubt be constructed from other religious and cultural standpoints, but this is considered to be beyond the scope of this thesis, which while hoping that Drummond's work may have some appeal to those of other faiths, is primarily concerned with the validity of his writing for those whose spiritual interest is expressed within a Christian context.

The Evangelical

The Evangelical model, which might be better styled 'Jesus centred', is a well charted path. Those who favour this approach are normally happy to confine themselves to Bible study, discussion and prayer along traditional evangelical lines. They are disturbed about theological and spiritual speculation. They find nourishment in selective commentaries written by trusted authorities in their own field, in the writings of noted evangelical preachers of the past such as Whitfield and Spurgeon, and in books and paper-backs which witness to the power of the Spirit to change lives in the present day. They value the discipline of a daily 'quiet time', a practice strongly commended by J.R.W. Stott, Rector Emeritus of All Souls Church, Langham Place, London, in his instruction for confirmation candidates.

If you want to make steady progress in the Christian Life,

1. Michael Green's essays in The Truth of God Incarnate (London, 1977), are a recent example.
nothing is more important than daily "quiet times" with God. You will never grow unless you make time for this. This is the resolute discipline of the Christian Life. First thing in the morning and last thing at night you have a sacred engagement with God. Persevere in it, and soon you will have formed a habit which nothing but illness can break. If these times of quiet waiting upon God are to be balanced, they will consist of Bible-reading and prayer - and in that order. First, let God speak to you through His word. Then speak back to God in prayer. It is like the swing of a pendulum. It is a two-way conversation.4

For many evangelicals, this 'quiet time' is not to be regarded as in any sense as a contemplative exercise. Bonhoeffer for example is emphatic about this. 'The period of personal meditation is to be devoted to the Scriptures, private prayer, and intercession, and it has no other purpose. There is no occasion here for spiritual experiments'.5 He is well aware, however, of the value of silence, 'As there are definite hours in the Christian's day for the word ... so the day also needs definite times of silence under the Word and the silence that comes out of the Word ... There is a wonderful power of clarification, purification and concentration upon the essential thing in being quiet'.6 He allows too for a measure of silent 'unphrased' prayer and warns that untoward inner experiences should not be taken too seriously. He discourages introspection and stresses that the wandering attention should be centred on the Word alone, or the people or events to which thoughts keep straying be calmly incorporated into prayer. His personal practice is well illustrated in a letter to friend, written from Tegel Prison in Berlin on 21st August, 1944.

Once more I have taken up the texts (Numbers 11.23; II Corinthians 1.20) and meditated upon them for a space. The key to everything is the "in him". All that we rightly expect from God and pray for is to be found in Jesus Christ. The God of Jesus Christ has nothing to do with all that we, in our human way, think he can and ought to do. We must persevere

in quiet meditation on the life, sayings, deeds, sufferings and death of Jesus in order to learn what God promises and what he fulfils.\textsuperscript{7}

A similar view is taken by the American Quaker, Richard Foster, whose book, \emph{Celebration of Discipline} is warmly commended by the late Canon David Watson, a much loved figure in Anglican evangelical circles. Foster refers to a wide range of Christian spiritual writers including Dietrich Bonhoeffer, and draws a clear distinction between Eastern and Christian meditative systems. 'Eastern meditation is an attempt to empty the mind; Christian meditation is an attempt to empty the mind in order to fill it. The two ideas are radically different ... Detachment is the final goal of Eastern religion ... Christian meditation goes far beyond the need for detachment ... we must go on to attachment. The detachment from the confusion all around us is in order to have a richer attachment to God and to other human beings'.\textsuperscript{8}

One further figure, who represented much of what is best in evangelical spirituality and who appeared to be of a similar temperament to Drummond, is Edward Wilson, who perished on the Great Ice Barrier of the Antarctic with Scott, Oates and Bowers on the return journey from the South Pole in March 1912. He was born in 1872, and during his early medical training at Cambridge University, he was actively involved in Mission work in Battersea. At that time, as prelude to each day's hard work, he paraphrased and annotated in his own language nearly the whole of the New Testament. His biographer, George Seaver comments.

The Quaker element, whether inherited or inherent, was strong in him, and his spiritual perceptions were too alive and aware to be permanently confined within the limits of any orthodoxy.


\textsuperscript{8} Richard Foster, \emph{Celebration of Discipline}, (London, 1980),
Thus every doctrine which the Church presented had to be hammered out on the anvil of his own personal experience before he accepted its validity. Then it entered into the fibres of his whole being as a living truth to be acted upon, as something that would shape character and determine conduct.9

Soon after qualifying in medicine, he was appointed junior surgeon and zoologist in the National Antarctic Expedition of 1901 with Captain Scott, and went on to organise and lead the subsequent expedition of 1910. He was a keen naturalist and artist, and enjoyed the hills and moors of Scotland, many of which he became familiar with during his work between the two expeditions as Field Observer for the Board of Agriculture's Commission on the Investigation of Grouse Disease. Like Drummond, Wilson was intensely interested in the question of evolution. In a letter to his wife to be, written from Norway in 1899, Wilson stated 'All my religious ideas are founded on the principle of evolution driven to its logical conclusion ... Love everything into which God has put life: and God made nothing dead. There is only less life in a stone than in a bud, and both have a life of their own, and both took their life from God'.10

Drummond, who encouraged men to seek the truth for themselves and not to be satisfied with doctrine in the form of ready made propositions, might well have approved, and it would have been interesting to know whether Natural Law in the Spiritual World or the Ascent of Man formed part of Wilson's library.

Drummond was certainly an evangelical at heart, and there would seem to be little doubt that much of his work is still likely to have a strong appeal to those of evangelical spirituality, with the possible exception of some of his speculative ideas which may appear to them to have little foundation in scripture.

10. Seaver, p.61
The Charismatic

No survey of current spirituality would be complete without a reference to the charismatic movement, which finds its expression both in a denominational structure within the Pentecostal churches and at the same time, as a widespread phenomenon which cuts completely across denominational boundaries. Many evangelicals would certainly consider themselves to be part of the movement, and there is a strong representation within the Roman Catholic Church. It manifests itself in a relaxed easy style of worship with maximum congregational participation, the laying on of hands for healing and resolution of personal problems, speaking in tongues, and an often uncritical evaluation of associated experiences such as 'slaying in the Spirit', many of which are deeply significant to those who enjoy them. The movement has been well documented by writers such as Walter J. Hollenweger, and Simon Tugwell. The established Churches tend to be less than enthusiastic. A recent report to the General Synod of the Church of England accepts that it is a distinctive movement but points out that the situation presents to many Christians a major dilemma. 'They recognise in charismatics a new quality of joy and release yet, with integrity they cannot accept much that the charismatic believes and does', The authors concur with those who feel that the Church of England stands to gain by holding on to what the movement has to offer including 'the hot-headed zealots it may throw up' and looks for 'much growth in true spirituality' to flow from it. Tugwell agrees that Pentecostalism cannot be accepted at its face value, but suggests that 'we can learn from it a way of spirituality and a mass of "case law" in spiritual

matters' and that we should see it as 'one of the many mystical movements of our age, one which has sprung up within christianity, and which offers a genuine possibility of renewal in the Spirit of Jesus Christ'. He goes on to argue that we must know how to cope with mysticism and that even when it arises within the church 'mysticism is not intrinsically christian; but it can be made christian'.

Evangelical links with the charismatic movement in England go back to the Keswick Convention of 1875, an organisation with which Drummond would have been familiar. It began as an annual gathering of Evangelical Christians for prayer, Bible study and addresses with the aim of 'the promotion of Practical Holiness', and arose partly in response to Moody and Sankey's Mission of 1874-75 in which Drummond played a significant role, especially with young people.

George Adam Smith, commenting on the Great Mission, points out that Spirit of God works among us in many other ways than by 'revivals' and church services, and suggests that 'the evangelical movement, which Messrs. Moody and Sankey did so much to reinforce, has required every iota of the influence of science to teach it tolerance, accuracy and fearlessness of facts, and all the strength of the Socialist movement to reawaken within it that sense of civic and economic duty, by which the older evangelicalism of Wilberforce, Chalmers and Shaftesbury was so nobly distinguished'. He goes on to confirm that Drummond did much to contribute to 'this wider evangelicalism'. It could be argued that the charismatic movement today could still benefit from Drummond's enquiring critical spirit.

14. Tugwell, p.94.
15. Adam Smith, p.93.
The Contemplative

Those who are drawn to the Contemplative model of spirituality are less likely to be attached to communal forms of worship than those of evangelical or charismatic temperament. They might not wish to be thought of as mystics, yet that term, used in its broad sense, is appropriate in their approach. Dean Inge stated that 'we cannot insist too strongly that the essence of mysticism - the mystical state in its purest form - is just prayer, "the elevation of the mind to God"'. Evelyn Underhill describes mysticism as 'the expression of the innate tendency of the human spirit towards complete harmony with the transcendental order, whatever be the theological formula under which that order is understood'. She goes on to suggest that the most highly developed branches of the human family have in common one peculiar characteristic, they tend to produce a curious and definite type of personality;

A type which refuses to be satisfied with that which other men call experience, and is inclined, in the words of its enemies, to "deny the world in order that it may find reality". We meet these persons in the east and west, in the ancient, mediaeval and modern worlds. Their one passion appears to be the prosecution of a certain spiritual and intangible quest: the finding of a "way out" or a "way back" to some desirable state in which alone they can satisfy their craving for absolute truth.

Both Inge and Underhill take pains to demonstrate that such persons are not necessarily impracticable dreamers. Inge points out that 'As a matter of fact, all the great mystics have been energetic and influential, and their business capacity is specially noted in a curiously large number of cases'. Similar sentiments are expressed by William Johnston in his recent survey of mysticism and religion

18. Mysticism, p.3.
The Inner Eye of Love, in which he makes the important point that mysticism is a profoundly human experience found in all cultures at all times, and is likely to be of cardinal importance in the decades which lie ahead. Thomas Merton, the American Trappist monk, whose untimely death during a visit to East Asia deprived the west of distinguished spiritual figure, writes of the special importance of contemplative orders.

It is the peculiar office of the monk in the modern world to keep alive the contemplative experience and to keep the way open for modern technological man to recover the integrity of his own inner depths ... We are witnessing the growth of a truly universal consciousness in the modern world. This universal consciousness may be a consciousness of transcendent freedom and vision, or it may simply be a vast blur of mechanised triviality and ethical cliche ... The monk is a man who has attained, or is about to attain, or seeks to attain, full realisation. He dwells in the centre of society as one who has attained realisation - he knows the score.21

There is of course a vast amount of literature on which one might draw to illustrate the elements of the contemplative experience of which he writes. Henri le Saux, writing under the name Abhishiktananda, stresses that the life of contemplation is not a special way of life reserved to a few individuals who are called to get away from the world. 'Each and every one is called to withdraw to the secret place of his heart, when the Spirit does not bid him perform some task in the service of God's creation'.22 It is an attitude stressed by those who follow the rule of the Taizé Community. Brother Roger, Prior of Taizé writes 'In every single one of us there is a place of solitude no human relationship can fill, not even the deepest love between two individuals ... There in your heart of hearts, in that place where

no two people are alike, Christ is waiting for you'. Henri Nouwen, whose book *Reaching Out* arose from a Seminar on Christian Spirituality at Yale Divinity School describes the spiritual life as 'a reaching out to our innermost self, to our fellow human beings and to our God' and suggests that a true spirituality increases alertness and awareness of the world outside and sensitivity to the needs of others.

Many however, who seek spiritual nourishment today, are reading with profit, earlier writings such as those of Julian of Norwich, and the anonymous work *The Cloud of Unknowing*, in the fourteenth century; and their successors, such as William Law in the eighteenth century. William Law's best known work, *A Serious Call to a Devout and Holy Life* was certainly known by Drummond, and Alexander Whyte, who was a friend and contemporary of Drummond, compiled in 1892, a short collection of William Law's mystical passages from sources other than *A Serious Call*, under the title *Characters and Characteristics of William Law, Non-Juror and Mystic*. Two short quotations from Law give an indication of the expectant attitude which can arise in the silence of contemplative prayer.

When therefore but the smallest instinct or desire of thy heart calls thee towards God and a newness of life, give it time and leave to speak; and take care thou refuse not Him that speaketh. For it is not an angel from Heaven that speaks to thee, but it is the eternal, speaking the Word of God in thy heart ...

Now all depends upon thy right submission and obedience to this speaking of God in thy soul. Stop, therefore, all self-activity, listen not to the suggestions of thy own reason,

run not on in thy own will, but be retired, silent, passive, and humbly attentive to this new risen light within thee.27

The author of the Cloud of Unknowing, who describes the essence of mystical prayer as 'a naked intent unto God without any other cause than Himself', 28 writes in similar vein in the less well known Letter of Private Direction.

Make sure that there is nothing left for your mind to get to work on except the bare reaching of your will towards God in the knowledge that he is as he is. Don't wrap that movement of the will in any particular thought about the nature of God as it is in itself or as it is revealed in any of his works. Just let God be as God is. Don't try to make him anything other than he is. Don't try to penetrate his nature by clever reasoning, but base everything on faith alone.29

The extent to which Drummond was familiar with this form of contemplative prayer is difficult to judge. There are passages in his last sermon in The Ideal Life and Other Addresses, 'How to know the Will of God', which are very similar in sentiment to those quoted from William Law, particularly those already included under the headings 'Belief in God as Spirit' and 'Inner Response' in Section V.B above. But at the same time, he writes in a letter quoted by Cuthbert Lennox, 'I can't pray long at once, but I think it is like lightning and doesn't take time'. 30 This would seem in line with the author of the Cloud of Unknowing's assertion 'that short prayer pierceth heaven', 31 but it may be wrong to read too much into this, and it is possible that his frequent advice on quiet resting in God or in Christ should be understood more in terms of adopting a quiet trustful attitude in general, rather than a specific spiritual discipline. Nevertheless, it is suggested that there is much in his writing that should appeal to the contemplative spirit.

27. Hobhouse, p.91.
The Sacramental

The Sacramental model is a form which can be recognised in the faces and attitudes of regular worshippers who find a deep sense of inner nourishment in the liturgy, but who might deny any claim to be thought of as spiritual persons. It is a form which leads to an almost unconscious sanctification and is perhaps most evident in congregations where there are frequent celebrations of the Eucharist, although as Evelyn Underhill observes in the chapter on 'The Eucharist in Presbyterianism' in her book Worship, 'In the old Scottish Church, the infrequent communion times had a deeply sacred and heart-searching quality'. Earlier in the same book she points out that in the fully developed liturgy, despite periodical lapses towards primitive conceptions and many bewildering divergences of practice 'the Christian can still find the same essential sources of worship, refreshment and inwardness'. She goes on to say.

Here the most naive worshipper finds an invitation to love and gratitude, and a focus for his devotion, which he can apprehend though never explain; and the contemplative find a door which opens upon the ineffable mystery of God. Those deep levels of our being which live unchanged under the flow of outward life, and of which we sometimes become aware - those levels where we thirst for God and apprehend Him, and know our truest selves to consist in a certain kinship with Him - these levels are reached and stirred by the movement of the Eucharist.

Dom Gregory Dix notes an early expression of the spiritual element in the Eucharist in his classic work The Shape of the Liturgy, where he quotes from Hippolytus On the Pascha, iii. 'For it was for this reason that the Word of God gave Himself wholly into a Body and was made Flesh, according to the phrase of the Gospel - that since we were not able to partake of Him as Word, we might partake of Him as Body, fitting our flesh for His spiritual Flesh and our spirit to His Spirit

33. Underhill, p.123.
so far as we can, that we might be established as likenesses of Christ ... and through the commingling with the Spirit your members might become members of the Body of Christ to be cherished in sanctity'. Gregory Dix comments 'I do not think that the modern communicant, or even theologian, really conceives the essence of the matter very differently'.

An important element in the sacramental approach to spirituality is the attentive and expectant use of silence beyond and within the liturgy. Bishop Michael Ramsay, writing in his short study on prayer Be still and know, states:

The ways in which meditation interpenetrates the praying of the Church and of the Christian are legion. A time of silence enables the Christian to share more deeply in the Church's sacramental worship ... By sharing in the Eucharist the Christian draws strength into his own time of silence, while the time of silence deepens what he brings and gives in the Eucharist.

Both elements can also be seen in the writings of St. John of the Cross. In the Dark Night of the Soul, commenting on the conduct to be observed during times of prayer and meditation, he states 'let the soul be quiet and at rest ... contenting themselves simply with directing their attention lovingly and calmly towards God; and all this without anxiety or effort, or desire to feel His presence'.

In the Song of the soul that is glad to know God by faith, the fruits of eucharistic contemplation are well expressed in poetic form.

The eternal source hides in the Living Bread
That we with life eternal may be fed
Though it be night.

Here to all creatures it is crying, hark!
That they should drink their fill though in the dark,
For it is night.

34. Dom Gregory Dix, The Shape of the Liturgy (London, 1945), p.188.
This living fount which is to me so dear
Within the bread of life I see it clear
Though it be night. 37

A second element in sacramental spirituality, if it is to be true to the Spirit of Christ, is the carrying through of spiritual awareness and sensitivity into ordinary life. John Macquarrie, who writes extensively on the eucharistic aspect of spirituality in his recent book Paths in Spirituality, gives his own personal testimony.

I could walk around Piccadilly Circus or Times Square for hours, among the garish scenes and the fevered crowds, and, left to myself, I doubt if I would ever have any sense of God or Christ in such places. But if I watch for a little hour in Christ's sacramental presence, exposed to the essence and concentrated fulness of his saving life and death and resurrection, then I hope I shall begin to acquire the kind of sensitivity that will enable me to recognise and respond to Christ in situations where his presence is not obvious. 38

The Eastern Church has maintained its own distinctive form of sacramental spirituality, in which a sense of numinosity experienced at the eucharist is seen to be part of a larger mystery involving man's participation in the divine energies in all areas of life. Father Kallistos Ware, in The Orthodox Way, writes 'the way of the sacraments and the way of inner prayer are not alternatives, but form a single unity ... the whole of the ascetic and mystical life is a deepening and realisation of our Eucharistic union with Christ the Saviour ... So his experience of Holy Communion extends over the whole range of his conscious life. It is above all through Communion that the Christian is made one with and in Christ, "christified", "ingodded", or "deified"'. 39 Similar sentiments are expressed by Vladimir Lossky in The Mystical Theology of the Eastern Church where he defines the sacramental life as 'an unceasing struggle for the acquisition of that grace which must transfigure nature ... a dynamic and shifting reality

which varies according to the fluctuations of the infirmities of the human will'. The sacraments, he suggests 'freely given to our nature, render us apt for the spiritual life in which the union of our persons with God is accomplished'. He quotes a powerful passage from St. Simeon the New Theologian which indicates the potential numinosity of that union.

Thou hast vouchsafed me, O Lord, that this corruptible temple - my human flesh - should be united to Thy holy flesh, that my blood should be mingled with Thine; and henceforth I am Thy transparent and translucent member ... I am transported out of myself, I see myself - O marvel - such as I am become. Fearful and at the same time ashamed of myself I venerate Thee and fear Thee, and I know not where to shelter nor how to use these new, dreadful and deified members.40

It must be admitted that Drummond never spoke of the sacrament of Holy Communion in this sort of language. He was not brought up in the tradition of frequent reception, but he certainly encouraged regular and attentive worship in church to find strength from God 'to do the work of life - which is the work of Christ', and in a sense regarded the whole of life as a sacrament. Those who follow a sacramental model of spirituality are perhaps less likely to find Drummond's writings as attractive as those of a more evangelical temperament; nevertheless, there are elements which should prove stimulating and enlightening, and encourage a de Caussade type of 'Sacrament of the Present Moment'.

The Experimental

The experimental form of spirituality is one in which both the physical and the mental aspects of the experience are given close attention and critically evaluated. Consideration may also be given

to a number of related questions such as, the spiritual practice and experience of the major world faiths; the importance of posture and breathing and the interaction between mind and body; and the intercessory and healing aspects of contemplative prayer.

This clearly is an enormous field and not one that can be dealt with in detail in this thesis. It is however, one which is growing in importance as the effect of modern communication facilitates the cross-fertilisation of cultures and disciplines and stimulates speculation and experiment. Discernment and critical evaluation are essential. William Johnston, Director of the Institute of Oriental Religions at Sophia University, Tokyo, identifies two important factors in the evolution of discernment, the dialogue between spirituality and modern psychology and the Christian dialogue with Buddhism. Ursula King in her book *Towards a New Mysticism*, in which she examines the thought of Teilhard de Chardin in relation to Asian religions, argues for the extension of inter-religious dialogue from specialists to lay people and the need for 'a new mysticism of action' based on the transformation of our own religious heritage. She states:

> Western people can learn a great deal from Eastern Religions; for example, the non-dogmatic experimental approach to the search for truth; the emphasis on finding the true self, a search which requires a recentring of one's inner being, a withdrawal of the senses from overactivity and distraction and, at its best, the exploring of a dimension of consciousness beyond ordinary consciousness ...

Wilfred Cantwell-Smith in his study *Towards a World Theology* identifies many of the problems and argues persuasively as a historian and a theologian for the critical 'study of humankind's religious life, a process in which 'expanded consciousness becomes enhanced self-consciousness and more critical self-consciousness'. He goes on to

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say that the emergence of critical self-consciousness 'is the major
transition through which the human race is perhaps now in a position
to be about to go. 43

The late Bishop David Brown who was Chairman of the British Coun-
cil of Churches Committee for Relations with Peoples of Other Faiths,
in his last book All Their Splendour, welcomes the many different wit-
nesses to the mystery of God which grow out of the diverse religious
experience of mankind, particularly out of prayer:

There is a harmony between the different descriptions of God's
being and nature that grow out of worship, rather than out
of speculation, which I can only explain on the supposition
that they describe the same living reality; and at the same
time there is an authentic freshness about each particular
description which comes from the particular circumstances in
which it is made. 44

On the practical question of posture, breathing and the adaptation
of Eastern forms of prayer and meditation, there is much current
literature and advice. William Johnston includes two chapters on
training for mysticism at the end of his book The Inner Eye of Love, 44
the editors of The Asian Journal of Thomas Merton include an Appendix
on the Buddhist practice of Mindfulness. 45 Detailed guidance can be
found in books such as Dechanet's Christian Yoga and Herbert Slade's
Exploration into Contemplative Prayer. 46  As an example of the fruits
of multi-disciplinary study, reference can be made to Sadhana a Way
to God, a book of practical meditative exercises, written by an Indian
Jesuit, Father Anthony de Mello, who was born in Bombay, studied
philosophy in Barcelona, theology in Poona, psychology in Chicago,
and spirituality in Rome. It has been reprinted seven times since

43. Wilfred Cantwell Smith, Towards a World Theology (London, 1981),
    pp.50, 59.
46. J-M Dechanet, Christian Yoga, translated by Roland Hindmarsh (Lon-
don, 1960), and Herbert Slade, Exploration into Contemplative
first publication in India in 1978 and has been well received in this
country. As an example of cross-cultural fertilisation it may be
of interest to note the establishment in Scotland of a Tibetan Buddhist
study and meditation centre at Eskdalemuir. It was founded by Chogyam
Trungpa who was forced to leave Tibet by the Chinese in 1959 and after
three years in India spent a further four years studying comparative
religion and psychology at Oxford University. He is referred to by
Thomas Merton as 'a genuine spiritual master', and is now teaching
at the University of Colorado.

Chogyam Trungpa's book, Cutting Through Spiritual Materialism
gives a current Buddhist view of compassion, which illustrates a
possible area of convergence with Christian thinking.

Compassion has nothing to do with achievement at all. It is
spacious and very generous. When a person develops real com-
passion, he is uncertain whether he is being generous to others
or to himself because compassion is environmental generosity,
without direction, without "for me" and without "for them".
... Love is associated with ugliness and pain and aggression
as well as with the beauty of the world; it is not the re-
creation of heaven. Love or compassion, the open path, is
associated with "what is". In order to develop love - univer-
sal love, cosmic love, whatever you would like to call it -
one must accept the whole situation of life as it is, both
the light and the dark, the good and the bad. One must open
oneself to life, communicate with it.

John Macquarrie, pointing out that one aspect of prayer is com-
passionate thinking, mentions that in Buddhist spirituality there is
a meditative practice known as Brahma-vihara which can be translated
as 'dwelling with reality'. The Buddhist monk directs his mind towards
the four corners of the earth with their teeming inhabitants with

47. Anthony de Mello, Sadhana, A Way to God, Gujarat Sahitya Prakash,
(Anand, India, 1978) described by Christopher Bryant SSJE as
'easily the best book about contemplative meditation that I have
come across'.
(New Fire, Summer 1981, Quarterly Journal of the Society of Saint
John the Evangelist.)
49. Chogyam Trungpa, Cutting Through Spiritual Materialism (Berkeley,
friendship, compassion, sympathy and equanimity. He relates this to Christian intercession, and while acknowledging theological and practical difficulties, suggests that as all our lives are bound together in a mysterious solidarity, prayer, as petition and intercession, 'helps to make the human reality porous to the divine reality'.

Drummond himself was undoubtedly sympathetic to the experimental outlook. It permeated his scientific thinking, and to a lesser extent his theology. He writes with discernment on human motivation and spiritual attitudes, but he does not appear to be aware of the detailed aspects of eastern spirituality, or if he was, he does not deal with it in his writings. He seldom discusses the mechanics of meditation or contemplation, but it is clear that his spiritual life was well rooted in a prayerful discipline.

The Therapeutic

In the therapeutic variation of spirituality there is a tendency to concentrate on the healing process and to be concerned with the question as to how religious experience, mysticism, contemplation, conversion and associated mental states and physical reactions are to be understood in scientific terms. It was an area of experiment that began to take formal shape in Drummond's time with the work of Starbuck and William James and has flourished ever since. Even more than in the case of the experimental model is careful discrimination necessary. Stimulated partly by the claims of Transcendent Meditation (TM), considerable attention has been drawn recently to the physiological effects of meditation, contemplation and relaxation, and their relationship to physical and mental health and well being. A survey

of research in this area has been conducted by Michael West and published in an article in the British Journal of Psychiatry. The First International Inter-Disciplinary Conference on Stress and Tension Control, sponsored by the American Association for the Advancement of Tension Control in conjunction with the West London Institute of Higher Education, took place in London in September 1979, and gives an indication of the many disciplines now interested in this field. The contributors included a Professor of Medicine, a Professor of Psychology, a Consultant Cardiologist, an eminent Physiologist, a Rheumatologist, a Physiotherapist, a Dental Surgeon, a Principal Lecturer in Health Education and an expert in Biofeedback and Stress Management.

The need for a Christian spirituality to be engaged in this whole area is strongly argued by John Robinson in his books Exploration into God and Truth is Two-Eyed, where he suggests there is a requirement to develop a 'secular mysticism' which recognises that there can be no return to a pre-secular, pre-scientific, 'sacral' culture and yet affirms that the 'one thing necessary' is 'at all costs to touch reality, to find the one beyond and within the many, the centred self beneath all the layers which the ego constructs'.

One of the most significant figures in this field is C.G. Jung, whose prolific writings, and especially his autobiography Memories, Dreams and Reflections, provide valuable material for study and reflection. His enquiring spirit is illustrated in a comment he makes about his own turbulent inner feelings at the outbreak of World War I, just after delivering a lecture to a British Medical Association

Congress in Aberdeen.

I was frequently so wrought up that I had to do certain yoga exercises in order to hold my emotions in check. But since it was my purpose to know what was going on within myself, I would do these exercises only until I had calmed myself enough to resume my work on the unconscious. As soon as I had the feeling that I was myself again, I abandoned this restraint upon the emotions and allowed the images and inner voices to speak afresh. 54

He had a positive attitude to Christianity and considered it of central importance to Western man, but suggested that it should 'be seen in a new light, in accordance with changes wrought by the contemporary spirit'. He refers to a vision of Christ on the cross which he experienced in 1939 after giving a seminar on the Spiritual Exercises of Ignatius Loyola which he found marvellously beautiful and yet profoundly shaking. 55 He gives strong testimony of his daily experience of the reality of Christ as the Divine Image within man, in a letter quoted at the end of the Appendix to Victor White's study God and the Unconscious. 56

Christopher Bryant, in his recent book Jung and the Christian Way has provided a valuable reassessment of Jung's position in relation to Christianity and to spiritual growth. He states that 'all his life Jung was concerned with knowing God, with the immediate intuitive awareness of God', 57 and he believes that Jung can do much to help the Christian today to become aware of the all-encompassing reality of God. Bryant describes the sanctifying process of contemplation in Jungian terms in a lengthy passage worth quoting in full.

The regular practice of prolonged waiting on God in contemplation slowly but surely transforms the individual. It is no easy process of change but is fraught with crises. For a

55. C.G. Jung, pp.200-201.
change in the seat of control within the personality takes place. The individual normally learns with much effort to control his unruly desires and impulses with the help of a consciously held ideal of behaviour. The passive, receptive attitude of mind required in contemplation draws psychic energy away from this policing force and so allows repressed feelings and urges to become conscious in the form of powerful temptations to doubt, anger, fear, sloth or erotic fancy. This is apt to be disconcerting for one intent on growing into closer union with God. What is required is a steadfastness which neither abandons itself to the lawless emotions and impulses nor tries to get rid of them, but rather clings on to God by faith. The individual who stands firm in the midst of this psychic storm discovers that it changes its character. A new centre of control within him seems to take charge of these powerful energies and they cease to be threatening. A process of growing integration is taking place within the personality around a new centre. 58

In relation to Drummond's thinking, two further points of reference are worth making. First, on the question of psychic evolution Jung asserts, 'just as the body has an anatomical prehistory of millions of years, so also does the psychic system. And just as the human body today represents in each of its parts the result of this evolution, and everywhere still shows traces of its earlier stages - so the same may be said of the psyche ... the psyche of the child in its preconscious state is anything but a tabula rasa'. Secondly on the meaning of life itself, he acknowledges that throughout his life he has been faced with the mystery of love. He refers to I Corinthians 13.7. 'Love "bears all things" and "endures all things" and continues 'These words say all there is to be said; nothing can be added to them. For we are in the deepest sense the victims and the instruments of cosmogonic "love"'. 59

It is difficult to be certain as to Drummond's interest in the basic questions raised in this section. Certainly, in his early paper Spiritual Diagnosis he pleads for a 'spiritual psychology', 60 in his address on the Contribution of Science to Christianity he sees 'mental

58. C. Bryant, pp.119-120.
59. C.G. Jung, pp. 320, 325.
60. SD-NE, p.194.
science as the science of the future', and in *The Ascent of Man* he suggests that 'telepathy is theoretically the next stage in the Evolution of Language'. During his visits to the United States in 1879, 1887 and 1893 he must have been aware of the growing influence of eastern forms of thought and the emergence of what William James termed 'The Religion of Healthy-Mindedness'. Mary Baker Eddy established her first school of Christian Science Mind-healing in Massachusetts in 1867. The Theosophical Society was formed in New York in 1875.

Drummond would not have regarded himself as a therapist except in the broadest sense of drawing men towards spiritual wholeness, though there is a case for considering his work in the mission 'enquiry room' and his time devoted to individual counselling as a distinctive form of therapy. Those at present involved in the therapeutic field may feel that Drummond's work is rather too outdated to be of value, apart from historical considerations, but it may be that some would find his views a useful counter to forms of universalism which give an inadequate place to Christianity or fail to recognise the importance of a Godward alignment of the will in the practice of meditation and contemplation.

**The Ecological**

The ecological aspect of spirituality is by no means a new phenomenon. Within the Christian tradition it has been strongly evident in the Franciscan movement and finds distinctive expression in the writings of Dr. Albert Schweitzer, whose ethic of 'Reverence for Life' embraces a form of mysticism based on deep knowledge of the New Testament, Christian mystical tradition, and Indian and Chinese thought,

61. CS-NE, p.175.
62. AM, p.234.
and found expression in a life of service in the mission hospital in Lambaréne. He summarises it in the Preface to the first edition of *The Decay and the Restoration of Civilisation*, where he writes:

The theory of the universe characterised by reverence for life is a type of mysticism arrived at by self-consistent thought when persisted in to its ultimate conclusion. Surrendering himself to the guidance of this mysticism man finds a meaning for his life in that he strives to accomplish his own spiritual and ethical self-fulfilment, and, simultaneously and in the same act, helps forward all the processes of spiritual and material progress which have to be actualised in the world.63

He regarded all life as sacred, stating that 'A man is truly ethical only when he obeys the compulsion to help all life which he is able to assist, and shrinks from injuring anything that lives ... Ethics are responsibility without limit towards all that lives'.64 At the same time, this was not a matter of blindly accepting a principle, but the result of 'inexorably truth-loving and recklessly courageous thought'.65 Like Drummond, Schweitzer stressed the need for deep and persistent personal reflection.

To think out to the end a theory of the universe which has been produced by thought - that is the only possible way of finding our bearings amid the confusion of the world of thought today ... Thus reflection, when pursued to the end, leads somewhere and somehow to a living mysticism, which is for all men everywhere a necessary element of thought ... Every being who calls himself a man is meant to develop into a real personality within a reflective theory of the universe which he has created for himself.66

Also like Drummond, he makes it clear that this reflective process, for the Christian enquirer, must be centred on the concept of the Kingdom of God, discipleship of Jesus, and openness to the Spirit in the hearts of men. One of Schweitzer's last essays is an Epilogue

written in 1949 for E.N. Mozley's *The Theology of Albert Schweitzer* for Christian Enquirers, where he states 'Nothing can be achieved without inwardness. The Spirit of God will only strive against the spirit of the world when it has won its victory over that spirit in our hearts'.

An ecological 'reverence for life' type of spirituality must now take account of an ever widening corpus of understanding of ecosphere and the threats posed to the future of mankind by population growth, industrialisation and urbanisation, resource depletion and pollution. The material facts are well documented through the work of the United Nations Conference on the Human Environment initiated in June 1972 and publications such as, *Only One Earth* by Barbara Ward and René Dubos, the reports to the Club of Rome, *The Limits to Growth*, and *Mankind at the Turning Point*, and more recently the Brandt Commission report, *North-South: A programme for survival*. The concern of the church at an international level has been well expressed in the 1979 Conference of the World Council of Churches *Faith Science and the Future* to which reference has already been made. The response by the individual at a practical and spiritual level has been considered by a number of independent thinkers. John V. Taylor has written a useful survey *Enough is Enough* in which he draws attention, among others to the writings of Barbara Ward, Charles Birch, Ivan Illich and E.F. Schumacher, and sees signs of hope in the emergence of groups of Christians and others committed to a new style of life, sensitive to the

needs of the environment and critical of the demands of the consumer society.

The title of E.F. Schumacher's book, Small is Beautiful has become a by-word in present day society. His ideas have found practical expression in the work of the Intermediate Technology Development Group which has helped design appropriate equipment for industrial and agricultural use in developing countries. Less attention has been paid as yet to his advocacy of the need for the growth of spiritual perception based on attentive awareness of the inner world of self and neighbour and the outer world of appearances. In the Epilogue of Small is Beautiful he makes the point that the problems of resource depletion, excessive consumption, pollution, violence and terrorism, can only be overcome by the development in man of the four Cardinal Virtues, - prudentia, justitia, fortitudo, and temperantia and a 'clear-eyed objectivity' which cannot be achieved and perfected 'except by an attitude of "silent contemplation" of reality, during which the egocentric interests of man are at least temporarily silenced'.

He works out this theme in greater detail in his book A Guide for the Perplexed which was published shortly after his death in 1977, where he draws parallels between the cultivation of 'Right Mindfulness' in contemporary Buddhism through developing the capacity of bare attention, and the prayer of 'naked intent' of The Cloud of Unknowing, and asserts that 'the modern experiment to live without religion has failed'.

Finally in this section, further reference must be made to Birch and Cobb's The liberation of life in which they link process theology with evolutionary thinking to formulate an ecological ethic of life

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Life aims at the realisation of value, that is rich experience or aliveness. In some measure it realises value in every living thing. But it aims beyond the realisation of trivial value for the realisation of richer experience. To this end it produces creatures in profligate abundance so that through the processes of selection some will emerge with greater intelligence and capacity for feeling. Life provides a specific purpose for each entity in each moment. It is the aim to achieve some optimum value in that instance. In this sense Life is very personal. The gift of Life to each living thing is tailored to its particular needs and possibilities. Life is the supreme instance of love.

They go on to work out the practical implications of this ethic in areas such as medical services, genetic engineering, growth and sustainability of world resources, rural and urban development.

Drummond was sensitive to the beauty of nature and to the underlying harmony of the created order as can be seen in his writings in general and in his journals during his visits to Africa and the New Hebrides in particular. But the conditions for the emergence of a full ecological spirituality were barely present, and it could be said that Drummond was much more concerned with the evangelisation of man than with the conservation of nature for him to be regarded as a real prototype of the 'spiritual ecologist'.

The Cosmological

If it has been acceptable to speak of an ecological spirituality, there can be little objection to the concept of a cosmological model. Again it can be asserted that it is no new phenomenon. In a sense it must be as old as the enquiring spirit of man. It finds expression in Christian culture in the Psalms, the book of Job, in the early chapters of the book of Genesis, in the prologue to St. John's gospel, and in the 'cosmic' passages in the epistles of St. Paul.

A cosmological viewpoint is probably a necessary element in any spirituality, but its importance will inevitably vary a great deal from person to person. Those who find it a relatively strong element can be considered as embracing a cosmological spirituality. Some might prefer to describe it as one which embraces them. It is a form of spirituality in which horizons have been vastly extended in outer and inner space by advances in radio astronomy, the electron microscope and in the speculative world of sub-atomic physics. Its perception of time has been modified by awareness of the vastness of the geological time scale, and the impact of the theory of relativity.

Einstein, writing on the development of religion, speaks of a third state of religious experience which he calls 'cosmic religious feeling'. He goes on to describe it as one in which:

The individual feels the nothingness of human desires and aims and the sublimity and marvellous order which reveal themselves both in nature and in the world of thought ... His religious feeling takes the form of a rapturous amazement at the harmony of natural law, which reveals an intelligence of such superiority, that compared with it, all the systematic thinking and acting of human beings is an utterly insignificant reflection.75

A more recent expression of a similar sentiment is to be found in Harold K. Schilling's book *The New Consciousness in Science and Religion* where he states 'Now that men have become keenly conscious of the depths in matter-energy, in space-time, in the processes of life, and especially those in the depths of the human psyche, they are again experiencing enchantment, wonder and awe in their encounter with nature and thus the "overwhelming sense of mystery" of which Roszak has spoken so eloquently'.76

Schilling, who is Emeritus Professor of Physics and Dean of the

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Graduate School, Pennsylvania State University, dedicates his book to his friends in a 'Science-and-Theology Discussion Group' in which he participated over a ten year period, and shows a very wide understanding of current theological and scientific issues, including process theology, as is clear from his readiness to speak of God as 'the great participant, with his creatures, in the affairs of nature-history, and this does not leave him unmoved or unchanged. Thus, just as the universe is becoming so is he'.

One of the most significant contributors to cosmological spirituality has been Pierre Teilhard de Chardin. Since his works began to be published after his death in 1955, he has been increasingly recognised as a man of remarkable stature. Julian Huxley writing in the preface to the book Letters from a Traveller has described him as a leading paleontologist with a consuming interest in the general problem of evolution 'whose ideas are exerting a powerful influence on thought, and are beginning to bring almost a rapprochment between biologists, theologians and philosophers'.

In an article written in Paris in October 1948, entitled 'The Directions and Conditions of the Future' he identifies three definitive tendencies in the development of the world of man, the continuous rise of social unification, the growth of technology and mechanisation, and the heightening of vision, partly by the increased power of our instruments, but more significantly by the growth of reflective consciousness. At the same time he stresses that men must learn to love one another in the act of growing closer. This may only be achieved by release of new forces of attraction 'linked at its root with the radiations of some ultimate Centre (at once transcendent and immanent)

77. Schilling, p.249.
... whose existence ... seems indispensable ... for the preservation of the will to advance'. In a further paper, written in Paris in April 1950 entitled 'On the probable coming of an ultra humanity' he states:

What is of extreme importance ... is what we should know what course to steer, and how we must spiritually conduct ourselves if we are to ensure that the totalitarian embrace which enfolds us will have the effect, not of de-humanising us through mechanisation, but (as seems possible) of super-humanising us by the intensification of our powers of understanding and love ... we see the appearance of a force of attraction coming from above which shows itself to be organically indispensable ... for the creation of an atmosphere enveloping Mankind in the process of totalisation, of psychic warmth and kindness without which Man's economic-technological grip upon the World can only crush souls together, without causing them to fuse and unite ... the greatest event in the history of the Earth, now taking place, may be the gradual discovery, by those with eyes to see, nor merely of Something, but of Someone at the peak created by the convergence of the evolving Universe upon itself.

The spiritual conduct required is admirably expressed in the two main sections of Le Milieu Divin - 'The Divinisation of our Activities' and 'The Divinisation of our Passivities'. This was his first major work, written at Tientsin in November 1926, but in a note added at the end of the book by the French editor when it was published in 1957, there is a reference to a final profession of faith written by Chardin in March 1955, the last month of his life, in which he confirmed that Le Milieu Divin 'is still exactly the same fundamental vision which I feel the need to set forth and share, in its mature form, for the last time'. His spiritual vision is well illustrated in a letter written in New York some six months before he died.

Pray for me to the Lord, that He may allow me to 'keep in form': I need to so badly if I am to persevere to the end in doing all I can to bring about the coming of His Kingdom

80. The Future of Man, pp.276-279.
as I see it in my dreams. I mean the 'implosive' encounter in the human consciousness of the 'ultra-human' and the 'Christic' impulses - or, as I often express it, of the Forward and the Upward. I am more and more convinced - judging from my own infinitesimal experience - that this process is indeed possible, and is actually in operation, and that it will psychologically transfigure the world of tomorrow. 82

There are certainly interesting correspondences between the thinking of Drummond and that of Teilhard de Chardin, but the subject deserves a much more thorough examination than can be given in this thesis. Both were men of vision whose religious insights were greatly affected by their scientific understanding. Both had a primary interest in the question of evolution of man and a passionate desire to communicate what they saw. Both had the gift of handling language in a poetic and original way in which scientific and theological terms were used in senses which perplexed and disturbed the orthodox, but delighted a wide and enthusiastic public. Natural Law in the Spiritual World is to some extent the equivalent of Le Milieu Divin; the Ascent of Man, the equivalent of The Phenomena of Man. At a superficial level an equation can be made between Drummond's 'Third Kingdom' and Chardin's 'Noosphere', and there are clearly strong similarities in their understanding of the direction and purpose of evolution as a whole, but there are also significant differences, especially in their eschatology, and there is little doubt that history is likely to judge Chardin to be a figure of greater stature. Nevertheless, Drummond must be considered as having made an important contribution to cosmological spirituality as such which deserves to be fully recognised.

82. Letters from a Traveller, p.353.
It was a pleasant surprise, on beginning the analysis of Drummond's work, to discover how frequently the words 'spiritual' and 'spirituality' occur in his writing. He affirmed the reality of the spiritual life, man's possession of a spiritual faculty and his need to exercise it, consistently from his plea for the development of a spiritual psychology in his earliest printed address "Spiritual Diagnosis", to the final chapter of the Ascent of Man in which he maintains that the whole purpose of evolution is the perfecting of the human race through a spiritual 'involution' of altruism and love. At the same time, it was encouraging to see that his approach to the question was by no means naive or simplistic, and that he adopted a critical open-ended view of the phenomenon of life, man's place in the scheme of evolution, and his relationship with God, within the limits imposed by an un-questioning faith in the existence of God, and his beneficial purposes for mankind revealed in Christ.

It was also encouraging to find, when studying recent developments in evolutionary thinking, that there are a significant number of authorities who acknowledge a religious element in their analysis, as well as those who, on the surface at least, appear to regard evolution and natural selection in materialistic or deterministic terms; and that the part played by altruism is very much a live issue in both groups. This has lead to a growing conviction that Drummond's insights in this area may be as important as those in the spiritual and evangelical fields.

When it came to the question of evaluating his spirituality it became clear that the term spirituality itself was more complex and difficult to define than had at first been assumed, and it seemed appropriate to examine the field by constructing a range of different
models. This has proved to be a stimulating discipline for the writer and has helped to consolidate his own understanding of the subject.

The overall impact of working through Drummond's writings and addresses, and studying the related material, has been to reinforce an initial sense of excitement, that here is a man who intuitively put his finger on some of the vital questions facing humanity, and more often than not 'got it right'. And if he did not, he usually pointed in the right direction. These questions include the direction of the whole evolutionary process, the relationship between the 'spiritual' and the 'natural', the appropriate response to the teachings of Jesus and writings of Paul, and the cosmological significance of the Christ figure for the Christian.

In his day, he was certainly regarded as a speaker, writer and thinker of some significance. That this significance has been largely forgotten may be due to a number of factors. Firstly, he did not produce a work of lasting merit in the narrower scientific sense. Secondly, within Scotland, he has been regarded by some as a theological lightweight, veering towards unsound, if not heretical opinions. And thirdly, there may have been a feeling that he was somewhat of an elitist who enjoyed many of the pleasures and the company of the upper echelons of society. The reality is difficult to assess, but it may well be that he should be regarded as one who helped to establish a positive relation between science and religion which others have followed; who foreshadowed certain elements of process theology; and who helped sow the seeds of an open-ended form of universal spirituality.

It remains now to draw final conclusions on the formal subject of the thesis 'The work of Henry Drummond as a basis for a practical spirituality'. In general, there would seem to be much in his writing
that should be of considerable interest to those who feel drawn to the spiritual life. Drummond was an effective evangelist, and there is no doubt that the strongest appeal is likely to be to those sympathetic to the evangelical and charismatic models of spirituality, although some may not feel too happy with his more speculative cosmological ideas, his critical approach to the Bible, and his remarks on 'parasitic' forms of salvation.

Those interested in the contemplative and sacramental models of spirituality may not find Drummond's writings quite so attractive. Nevertheless, there are elements that should prove stimulating and enlightening. Drummond has a sensitive understanding of the value of solitude and silence, the need to cultivate an attitude of awareness, and the importance of a healthy balance between the active and the passive in the spiritual life. Although he had some hard things to say about the sacramental practice of the Roman Catholic Church, particularly on the continent, he encouraged regular church attendance and was himself a devout and enthusiastic worshipper. His affirmation that 'true spirituality is to see the divinity in common things' and his general approach to the whole of life as a sacrament should appeal to many.

Those inclined towards the experimental and therapeutic models of spirituality should feel at home with much of Drummond's general orientation, not least his constant encouragement of the development of a critical open-ended attitude both in science and theology. He was familiar with the language of many disciplines and had a lifelong concern to promote the development of a spiritual psychology, and was sympathetic to the claims of parapsychology. He does not seem to have been particularly interested in techniques of meditation or in eastern spiritual disciplines, apart from a general sympathy with the higher
elements of Japanese and Chinese culture, but there are hints in his writings of a strong personal spiritual regime.

Those drawn to ecological and cosmological forms of spirituality should find much positive nourishment in Drummond's work. His keen sense of observation, and sympathy with the beauty of creation led him to a form of 'reverence for life', though it did not deter him from a love of fishing, which he described in a letter to Lord Aberdeen from the Restigouche Salmon Club in Quebec as his 'besetting sin'. While the full implications of population and industrial growth were not appreciated in Drummond's time, the seeds were there, and he was a firm advocate of social and civic action to improve conditions not only in Glasgow, but wherever men lived deprived and stunted lives. "The Programme of Christianity" and "The City without a Church" are as relevant today as when they were written. His stress on personal sanctification through a combination of social engagement and 'resting' in Christ should appeal to those of an ecological bent, and his wide vision of the whole scope and purpose of evolution in its cosmic setting should still stimulate those who seek a coherent view of the universe in the light of modern scientific discoveries.

Drummond himself was regarded by his contemporaries as a man of considerable spiritual stature whose personal qualities inspired the deepest affection. John Watson wrote 'After a lifetime's intimacy I do not remember my friend's failing. Without pride, without envy, without selfishness, without vanity, moved only by goodwill and spiritual ambitions, responsible ever to the touch of God and every noble impulse, faithful, fearless, magnanimous, Henry Drummond was the most perfect Christian I have known or expect to see this side of the grave'.

83. Adam Smith, p.421.
84. IL, pp. 41-42.
impression gained from a study of Drummond's work, and from his biographers is that there is much to substantiate these words, having made due allowance for a possible element of hagiography. Some present day readers may take a negative view of his appreciation of country pursuits and titled company, but his style of life was in no way out of the ordinary for those in academic and professional circles in Scotland, and due weight should be given to his social and evangelical concern at every level of society and to his unsparing willingness to give time to individuals who sought his advice and counsel.

Much of Drummond's work is still eminently readable. Unlike some of his contemporaries, his style is fresh and lively and many of his illustrations stimulating and provocative. Some allowance must be made for his over personification of Nature and his reading of human emotion into the animal and insect world, but this should not seriously detract from the potential impact of his argument. His work reflects his own distinctive spirituality which is firmly rooted in faith in Christ and the transforming grace of God and based on a life of prayer and study coupled with an active engagement in society. His special gift would appear to lie in his ability to draw from existing knowledge factors of evolutionary significance and set them out so as to suggest a new perspective and dimension to the whole theory, enabling the religious reader to gain new insights into his faith and the scientific reader to open his mind to spiritual possibilities. Certainly the present writer gained a great deal from the detailed study of his work, and feels that Drummond's position is particularly encouraging to those who see emerging a world-view which embraces the ecological process theology of Birch and Cobb, the world-theology of Cantwell Smith, the insights of Jung, the cosmic Christology of Teilhard de Chardin, and the spiritual explorations of writers such as Thomas Merton.

It is therefore the final conclusion of this thesis that Drummond's
work can serve as a valuable basis for developing a practical spirituality attuned to the realities of the present. It is also worthy of renewed attention by those with an interest in the historic roots of spirituality in Scotland, and by those involved in the study of the evolutionary process, and the place of altruism within it.

Let the last word be with Drummond himself, in a passage from the final pages of *The Ascent of Man*.

An ascending energy is in the universe, and the whole moves on with one mighty idea and anticipation. The aspiration in the human mind and heart is but the evolutionary tendency of the universe becoming conscious ... The Will behind Evolution is not dead; the heart beneath Nature is not stilled. Love not only was; it is; it moves, it spreads ... that prophet of the Kingdom of God was no less the spokesman of Nature who proclaimed that the end of Man is "that which we had from the beginning, that we love."
APPENDICES

APPENDIX I  WORKING PARTY DEFINITIONS OF SPIRITUALITY

The following definitions were written during a short time of silence together by members of a Working Party on Spirituality set up by Scottish Churches Council Community and Race Relations Group and the Leighton House Advisory Panel, and published in their report dated 1st December, 1977.

Spirituality is to discover, and consciously remain within relationship to, a life source which eases acceptance of self and others.

To open my being to the will and food of the Source, to listen to an inner and outer voice of guidance, and to try to understand what is required of me in the changes of life by aiming to develop objective will, so as to live as closely as possible in obedience to the divine will. In this I am sustained and animated by the Christian sacraments and the prompting of the Holy Spirit.

I believe that our experience of spirituality need not be limited by the sectarian, but can move with inspiration towards understanding man's true situation and that of all life on our planet. Through spirituality we may understand how we should live and find fulfilment in unfolding our potential.

The development of the deepest capacities in man in the triple direction of his relationships to self, to others and to God. As a Christian, I believe that this development is inspired and promoted by the indwelling of the Holy Spirit, and that the focal point of this for all men is the life and death and resurrection of Jesus Christ.

'Wholeness' - Awareness of God in and through everything. Without God nothing was made, nothing can exist, Spirituality must cover every side of nature - man, beasts and all creatures, insects and every form of tree and plant, Only in 'balance' can we wholly worship God.
Nothing is more important or too trivial,
All are of equal importance
The whole of life is worshipping God –
involve and retreat and quiet prayer.

Spirituality is an exploration
into what is involved in becoming human
in context of relationship with God
and with God incarnate in others,

An awareness of the true nature of self and environment,
and this awareness shows itself in increased sensitivity
and greater obedience to the Spirit of the Universe,
and this Spirit is itself sensed as Energy and Love.

An attempt to grow in sensitivity,
to self,
to others,
to non human creation
and to God
who is within and beyond this totality.

Spirituality is the faculty of the psyche or sub-conscious mind
which reveals unconscious knowledge which exists
and we speak of as God.

1) The conscious (or unconscious) conversation of the heart
with God (Abba, Father) very often on the topic of obedience.

2) The conscious (or unconscious) awareness of the presence
of the Communion of Saints. I think this includes corporate
and private worship.

3) The transparent direction and intention of the whole fabric
of one's living.

Spirituality is an awareness of the inner or within energy
of persons, which only exists because of a dynamic relationship
with an outside source of infinite personal energy –
however, in human experience,
this within energy can never be separated from the
forms in which it is incarnate.

An individual's spirituality could be defined
as the centre, core or essence of his being
in his relationship with God
(the centre and ground of all being)
and parallel to this
the spirituality of a religion might be defined
as its centre, core or essence,
which is expressed by various outward aspects of that religion,
such as its dogmas, its ethic, its liturgy, its art
and its mysticism.
Through prayer
we relate to God and to His creation.
Spirituality is what develops
as a result of this relationship;
that is the direction we take
in cultivating and maintaining the relationship,
and, in addition,
the strength and impetus
which help us to continue
in this way to and with God.

The energising of the human spirit by the Divine Spirit,
and search for ways of being open to that energy.
APPENDIX II  NOTES FOR A BIBLIOGRAPHY BY CUTHBERT LENNOX

The following Notes for a Bibliography are reproduced from Cuthbert Lennox, Henry Drummond, A Biographical Sketch with Bibliography, London, 1901.

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