

## History of the Otago Institute for the Arts and Sciences

The history of science, properly so-called, in Otago goes back a long way — to Banks in 1770, the Forsters in 1773, Archibald Menzies in 1791 with his huge collection of local mosses and ferns, Edward Shortland in 1843-4, Sir David Monro, Tuckett's companion in 1844, Lyell in 1847-9, Mantell in 1848-54, John Buchanan, the botanist, in 1849, Lauder Lindsay in 1861-3 who collected no fewer than 610 species of plants round about Dunedin, and, of course, James Hector, briefly provincial geologist and the veritable father of New Zealand science, in 1864-5.

Admittedly, all these people were not merely amateurs, in the best sense of the term. They were also transients, few of whom spent very long here and certainly did not stay here and become part of the local intellectual scene or play any part in developing science among the rising Otago populace. That they necessarily left to the settlers themselves - once they found their feet and some degree of leisure.

Oddly enough, the earliest 'improving society' in Dunedin was founded in 1851, just three years after the establishment of what was to have been 'a settlement for Scotland' but for various reasons came to be as much English as Scotch — was indeed saved from near extinction by the timely intervention of a couple of high-minded Anglicans.

That body, the 'Mechanics Institute' — the brain-child of Thomas Burns, James Macandrew, John McGlashan and William Cargill — nonetheless owed what success it enjoyed to the patronage of the practical 'working man', for whom, indeed, it was primarily and indeed necessarily intended. Even so, its survival depended upon its amalgamation in April 1859 with the new Athenaeum which, according to Macandrew, its president, long ran the gauntlet of 'shallow-minded would-be aristocrats', i.e. the rising bourgeoisie of the town.

In the event, it was not until 1864 — with the formation of the Acclimatization Society under Hector as provisional chairman and C.P. Clifford as manager — that there appeared something like a scientific body in Otago — if, that is, we may describe as scientific their

avowed and highly popular aim to replace the indigenous flora and fauna of the district with exotic species, chiefly from 'Home'. The fact remains, however, that it too aroused very little interest among the upper echelons of the new society, the business men, the occasional medical man, the civil engineers and geologists who came in increasing numbers after 1861 to make their homes— and their fortunes — in Otago. An anonymous plea in September 1866 — by W.N.Blair, a newly arrived Scottish engineer — for the establishment of a "philosophical society" having for its purpose the development of the natural resources of the province fell on even deafer ears.

All this, perhaps, was understandable enough given the emergent state of society in this remotest corner of the Empire where every energy had as yet to be devoted to getting started and digging in. Even so, there was an element of intellectual snobbery in it. As J.S.Webb, the first secretary of the Otago Institute, remarked at one of its early meetings, there were still a great many persons in Dunedin who looked upon the pursuit of any department of natural history as a frivolous pursuit for adults.

All the same, things were moving and perhaps the details should be spelt out here since they explain a good deal that might not otherwise be understood. In January 1862 Lauder Lindsay argued the need for a local museum — and a university. In the meantime— as has been suggested — Hector gathered together the nucleus of a collection of the natural history of the province. A few months later, in December, he staged a small exhibition— whereupon the provincial government voted a sum of £400 towards the cost of a temporary museum to be attached to its geology department.

In 1863, a group of Dunedin business men — T.B. Gillies, R.B.Martin, James Rattray, W.H.Reynolds, John and Edward Cargill, Arthur Beverly and J.S.Webb as secretary and Dr Eccles as chairman embarked on an even more ambitious scheme — a New Zealand exhibition in which Hector's collection— and Buchanan's — was to form the centre piece. It need hardly be added that the event was a roaring success, a real precursor of things to come.

The next stage could hardly have been postponed much longer. The earliest learned societies in New Zealand, the Nelson Philosophical Society founded in 1842 and the Wellington Philosophical Society founded in 1851 with the support of Sir George Grey were

clearly premature as was perhaps also Haast's Philosophical Institute of Canterbury of 1862. By contrast the Auckland Philosophical Institute established a year or two later by the renegade T.B. Gillies enjoyed an immediate success.

This latter event, however, was soon overshadowed by another — the calling into being by an act of the General Assembly, 1867, of the New Zealand Institute, the future Royal Society of New Zealand, a federal body in keeping with the political tendency of the times, which entered on life on 4 August 1868 under the presiding genius of its first manager, the former director of the Otago Geological Survey and now the director of the Geological Survey - the indefatigable Hector.

All this, of course, could hardly be ignored, at least for very long. After all, Otago was still the economic and intellectual centre of the colony. On 3 July 1869 the Otago Daily Times thus carried an advertisement inviting 'gentlemen' desirous of co-operating in the formation of a society — and this is worth stressing — for the promotion of Art, Science, Literature and Philosophy in this province to attend a meeting to be held at the Athenaeum 'today'.

Surprisingly enough, especially given the shortness of the notice, the response was very gratifying. A later estimate put the number of those present at eighty, among them E.B.Cargill, W.D.Murison, J.Rattray, R.Gillies, J.S.Webb, James Smith, J.Millar, M.P.C., J.Bathgate, S.Hawthorne, J.H.Harris, Dr Eccles, G.B.Barton, A.Chetham Strode, J.T.Thomson, St.John Branigan, R.Oliver, A.Beverly, E.Quick, W.M.Hodgkins, G.Matthews, the Rev D.M.Stuart and Mr Justice Ward, chairman.

Forming a new institution is, of course, one thing. Deciding how it should be organized and what it might do once started is quite another. The first was simple enough. Every person who joined before 1 September would be entitled to become an original member — a sort of 'old identity'. Anyone seeking to join thereafter was to be proposed in writing at any meeting of the Society and elected by ballot — on payment of one guinea for the year then current. One might also become a life member on payment of ten guineas in lieu of future annual subscriptions - which perhaps suggests the average age of those involved or likely to be involved. Non-residents might be elected honorary members by the unanimous vote of any

meeting of the Society 'in acknowledgment of their contributions to Art, Science, or Literature in general, without payment of any fees.

The rest of the rules governing the conduct of meetings and the make-up of the governing body or Council of the Society may be passed over here. These remain substantially the same as they are now. The only remaining problem — and it was one of some moment — was whether or not to affiliate with the New Zealand Institute. Various die-hards thought not. Many local people were still sore at Hector's failure to produce an easily accessible account of his journeys around Otago. Others balked at the proviso in the Institute's constitution that the central body should have the power in certain circumstances to take possession of the property of any regional Institute. Ultra-provincialists in turn rejected the very idea of union with 'Wellington'. As John Bathgate put it: 'Why must we be tacked on to Wellington? We are going to have a University, we already have a museum, why send our richest specimens and maps to Wellington where they will not be seen by the great body of our people?' Why indeed!

The enthusiasts for amalgamation naturally saw no difficulty. Nothing need be sent to Wellington beyond the £50 annual subscription — which would be no hardship given Otago's wealth. The local Institute would moreover be entitled to submit papers for publication in the *Transactions* and to nominate a Governor. Mr Justice Ward thought that it would be a positive advantage to have the invaluable services of Dr Hector in supervising the development of any laboratory or museum which 'might be entrusted to us', and, secondly, a share of any sum placed on the colonial estimates for the purposes of the New Zealand Institute - a glittering prospect which was in fact never to be realized.

In the face of all this, the ultra-provincialists naturally lost. As Justice Ward argued — and the argument seemed unanswerable — co-operation was now essential. The efforts of people like observers of the weather would be utterly wasted if there were no central body to collate the information and make it generally available. In any case, it would be very wrong in such a small country as New Zealand to encourage the formation of too many societies. As he went on to say: 'In all probability the most useful work that at the moment lies before the New

Zealand Institute is the compilation of a complete natural history of this colony and to that history the Institute of each province should contribute a chapter.'

And so the deed was done. After some bland assurances by Hector a meeting on 24 September 1869 agreed over Macandrew's and [Sir] Robert Stout's strenuous objections to seek immediate incorporation with Wellington. In this way, after several months' debate, the Otago Institute was finally launched on 19 October 1869 — with a complement of 79 original members — as a fully fledged affiliate of the New Zealand Institute, fully seven years before the province itself capitulated to the sovereign authority of central government.

As was perhaps only natural the new body began rather uncertainly. Its first public meeting on 26 August 1869 was to the obvious embarrassment of the speaker, Judge Ward, rather more largely attended by the 'blue ladies, presumably the blue rinse set, than was anticipated or thought natural or desirable. Happily the lecture — on ancient and modern science — was turgid enough to ensure that there would be no similar invasion for at least some time to come.

The real difficulty, however, was not so easily cured. The members of the new society were for the most part amateurs, mere collectors of things, Bathgate of moths and butterflies, Webb and Murison of plants, chiefly flax, Peter Thomson — a very notable and indeed learned amateur — of almost everything. But together they produced a wide variety of quite interesting papers — on the contents of rock pools along the Otago coast, on local bird life, notably kiwi caught near Dunedin, on the disappearance of whales from New Zealand waters, on the swallowing of stones by seals as ballast prior to migration, on two —abortive — attempts to introduce Scottish salmon into New Zealand rivers, on the possible discovery of New Zealand by the Arabs, on methods of teaching geometry in New Zealand schools, on the influence of the moon on the weather, on alluvial deposits and glacial action on the goldfields of Otago, on economising the current of large rivers for town water supplies, mill power and gold sluicing— with a sort of marine screw attached to a boom or bridge or barge— on the development of railways in Victoria, on the mechanics and mechanical economy of railways in general, on a smokeless and self-feeding closed furnace to a design well ahead of its time.

Some contributions were in their way quite learned, occasionally perhaps above the heads of most of the audience. Among these we may perhaps list various contributions by G.M.Thomson, a new member, on exotic plants which had recently reached Otago and become naturalized, three by W.N.Blair on the building materials of Otago, and a series by Henry Skey on a wide variety of astronomical and other subjects, notably aeronautics, in one of which the speaker came close to seeing the essential principles behind sustained flight — all very interesting in their way but inclined to be off-putting — hence a scheme before very long to engage the interest of the wider public by a series of popular lectures of a more general kind — on literature, politics and the like — the first and not the last effort to escape the toils of what was already regarded in some circles as an all-enveloping preoccupation with 'pure science'.

There was, however, to be no escape. After 1874, on the appointment of Captain F.W.Hutton as secretary of the Institute, curator of the Museum, and lecturer in natural science in the University, later professor, matters took an even more serious turn. If the fare became more and more technical, more genuinely scientific to the virtual exclusion of almost everything else, it was largely his doing. After June 1877 when the Institute finally moved into its new home — where it still meets — he seized every opportunity to display some new find or gift of zoological significance — starfishes, plates of baleen, moa remains, tertiary molluscs, earthworms, crabs, sea anemones — to expatiate on some broad subject like the geological formations of New Zealand, one meeting after another, almost without pause for breath, his obvious object to emphasize the true function of the Institute, that is the pursuit of science in all its branches - which for him largely meant biology.

That tendency was if anything strengthened — it might almost be said set in concrete — on the arrival in 1880 of Thomas Jeffery Parker, Hutton's successor. An Institute man from the start, its secretary and president by turns almost to his life's end, he was like Hutton before him a very frequent and indeed essential contributor to its meetings. In October 1880 he thus gave a demonstration of modern histological methods with the aid of no fewer than twelve separate microscopes. In February 1881 he read a note on a new species of *Holothuria* which he had found in the Otago harbour. In September he described the skeleton of a supposedly

extinct bird, the notornis, with the aid of his own masterly drawings. In the same year he also discussed a new method of preserving cartilaginous 'skeletons' and soft animal structures which he had recently perfected.

As might well be supposed, Parker was an expert organizer of conversaziones. A superb delineator — he had no peer in this field in the southern hemisphere — he produced for the delectation of his audiences miraculous drawings of comb-jellies, corals, jelly fish, skeletons of newts, skates, trout, blue sharks. Admittedly some of his exhibits were inclined to be a little grisly for some tastes — skeletons of turtles, of cows, of fin whales, along with seals', horses', human hearts, injected and dried, even human brains prepared by his glycerine process.

A staunch Darwinian — a former pupil and disciple of Huxley — he naturally used his Museum — or should one rather say the Otago University Museum as it then was — as a veritable teaching tool. In a paper read before the Institute in June 1885 he laid it down that the main thing which distinguished such a place from a mere collection of curiosities was 'arrangement'. In a scientific museum the object was to place like things with like — to lay out minerals, shells, birds, etc. etc. each by themselves, the individual members of each group displayed according to some rational standard of classification. In this way the visitor was compelled to see the objects exhibited in a definite order and was thus led to compare not only object with object but also group with group — on strictly evolutionary principles as 'the central and universally recognized doctrine of biology'.

In the last resort, perhaps, Parker's chief contribution to the intellectual life of the Institute lay in his regular rehearsal before that body of his major contributions to the literature, not merely in the Transactions of the New Zealand Institute but in those of the Royal Society of London — on the venous system of the skate, on the skeleton of a notornis found by a rabbit on the east side of Lake Te Anau, on the auditory organ in the red cod, on the anatomy and embryology of a shark, Scymnus lichia, on the gravid uterus of a viviparous dog-fish — which did much to establish his growing reputation beyond these shores — on the rostrum of the local species of *Palinurus* which, as he observed, was in some way connected with other species of the same genus in Tasmania and South Africa and undoubtedly suggested a strong argument in favour of Hutton's theory of an antarctic continent from

which the great land masses were originally stocked — shades of Gondwanaland long before Waegener's theory of continental drift finally emerged.

I should perhaps mislead you if you were to gather from all this that the Institute was a sort of closed shop, an offshoot of the Fernhill Club — even though this was in some ways true enough. As I have said, it sponsored all manner of popular lectures — all numerous attended — notably by G.M.Thomson on chemistry, and in particular a whole series of lectures by T.M.Hocken on the history of New Zealand from Marsden down to recent times. It also enlivened — and enlightened — the public mind on various controversial issues.

It is true that some of the papers involved were rather inconsequential— like Webb's attempted disproof of Hutton's calculations on the mechanical principles involved in the sailing flight of albatrosses or Stout's attack on Hawthorne's — the rector of Otago Boys' High School's — contribution on the union of capital and labour or J.T.Thomson's rather bare-faced attempt to locate the origins of the Polynesians in Malaysia and ultimately India, evidence for which he had lifted from an article in the Journal of the Indian Archipelago, without acknowledgement - which, of course, is not to say that they were entirely without interest or serious intent.

It is also true that on occasion the argument became rather more heated, even bitter, than it need have been. In 1874, for example, there was a marvellous set-to — in which Hutton was to the fore — on Hector's allegedly erroneous, not to say utterly incompetent, computation of the longitude of Wellington which did much to embitter relations between Otago and Wellington. In 1875 there was another rumpus involving Hutton and McKay over the date of the Ahuriri formation in Hawkes Bay which eventually drew in geologists all over the country.

And then there was the question of the date of the extinction of the moa and how it had come about — whether, as Haast argued, before the coming of the Maori who indeed knew nothing of such a bird, or, as he later argued, by a race of people, moa-hunters, probably Polynesian in origin, who hunted it down and finally exterminated it — all of which various members of the Otago Institute, notably Murison, Purdie and Gillies who naturally knew about these things, seriously contested.

In the end, as was perhaps inevitable, the debate became rather more general and indeed envenomed, the coup de grace eventually being delivered by McKay, one of Haast's workmen, who argued with great cogency the identity of the moa-hunters and the Maori who between them killed off the moa — after which they were obliged to eat shell-fish, hence the vast quantities of shell littering various Otago beaches — a suggestion brilliantly confirmed by later Otago Institute researchers, notably David Teviotdale, Leslie Lockerbie and H.D.Skinner.

All in all, it was a quite extraordinary row which Hutton in his customary manner put an end to with his epoch-making excavation of Maori cooking places at the mouth of the Shag river and at Bushy Park which established beyond any reasonable doubt that the Maori had indeed hunted the moa to extinction and that at no late date. But without doubt it soured relations not merely between Hutton and Haast but the Otago Institute and the Canterbury Philosophical Society and Hector as the head of the New Zealand Institute.

All this, of course, was as nothing compared with another more significant row which first surfaced - at Nelson and Wellington - in 1869 on Darwin's theory which, as one critic put it, a trifle unjustly, certainly without much real understanding of its essential point, 'entitled apes to put in a detestable claim to cousinship with Man.' Even if the theory of 'evolution' might be admitted in the case of the lower orders — which had not so far been genuinely established — it certainly could not be extended to include man who was a special creation, made in the image of God himself.

It may well be that various members of the Otago Institute had read Darwin and perhaps understood him though there is no evidence of either proposition. If so, they chose to remain silent. G.M. Thomson and in particular Hutton, by contrast, were certainly unorthodox in their views on the matter but both were devout churchmen, one a Presbyterian elder, the other an Anglican sidesman, who undoubtedly saw no particular reason at that stage to declare themselves, at least not in a public forum.

But clearly the issue had to be faced at some time. The wonder indeed is that nothing had been said about it years earlier. Hutton, of course, had been an early convert to Darwinism — away back in 1860 — though he did not agree with all of it. In his view the modifications which various species of animals and plants had undergone must be attributed to the direct

will of God. It was indeed difficult to conceive how a being totally ignorant of its own structure or conditions of life could modify itself so as to adapt not merely itself but its progeny to new forms and conditions of life. All the same, the theory provided a really good foundation for understanding much that was otherwise inexplicable.

Even so, his position, after a great deal of field work all over New Zealand, was dramatic enough. In a notable article in 1872 he argued that the distribution of struthious birds, the emu, the ostrich, the cassowary, the moa and the kiwi, showed that South America, New Zealand, Australia and perhaps South Africa had all been connected at some remote period. After a period of subsidence, a new continent came into being, stretching an unknown distance to Lord Howe, New Caledonia and into Polynesia though not as far as Hawaii.

That continent then subsided and New Zealand was reduced for a long time to a number of islands upon which the moa managed to eke out an existence. The land then rose again and assumed the form of a large island disconnected from Polynesia. That, too, eventually subsided in the newer Pliocene when the geography of this part of the world assumed very much its present form. All this from the distribution of flightless birds. But the fossil evidence was no less suggestive. In sum it indicated that since the Jurassic period there had been no fewer than three principal upheavals in New Zealand.

The argument, of course, was very Darwinian — at least it said nothing about what God might or might not have done and was presumably still doing. In the end, however, the inevitable explosion was sparked off in 1876 by Robert Gillies, an elder at Knox church, who ventured to give a popular lecture not on Darwin's ideas but those of Ernst Haeckel on the pedigree of man as set out in a recent book in which the learned author traced in terms that everyone could understand the human journey from protoplasm to amoebae, down to the stage when man-like apes were developed.

As the speaker hastened to add, it was not a theory he could accept. It did not explain the origin of life. The jump from worms to the ascidians — sea-squirts — was too great. In fact the leap between the invertebrates and the vertebrates was almost inconceivable. The separation of the sexes was not explained. The differentiation of larynx and brain, the

beginning of articulate speech, of language and ideas must remain shrouded in mystery. In essence the theory was unproven and indeed might well remain so.

In retrospect it was perhaps not an altogether honest effort. As he said later his only aim had been merely to excite interest in the Institute — though I think he intended rather more than that. At any rate he at last lured Hutton out into the open, indeed virtually forced him to declare himself in an extempore speech of great length printed in full in the Otago Daily Times — something it would not think of doing these days —in which he brought the argument back to Darwin, the great original, and his theory of descent.

As might have been expected Hutton did not mince words. The simple fact was that the so-called theory was a seminal idea which was irresistible. It was indeed impossible for anyone who had read the evidence to reject it — or to avoid its implications. In his view, indeed, if one accepted the theory— and he could not see how one could do otherwise —one would also have to accept with it that man was descended from the beasts, The simple fact was that man was more like an ape than a bat was like any of the lower animals. On the other hand, as he conceded, there was no proof that the mind of man was immediately developed from the beasts. That was a question which must remain open.

The immediate response to all this might perhaps have been expected. The Rev. Professor Salmond fairly exploded— he was, he said, open to proof but he was now more strongly confirmed in his opinions than ever. In his view it was the height of folly to air such an absurd theory, to create doubt in the minds of good Christian people. Bishop Nevill for his part did not think any clearly marked out passage from one species to another had been established. God might well have thought it best to proceed on a gradual scale, superadding to various species some faculty or attribute others did not have.

In a subsequent very reasonable statement he came down rather more positively against the theory as resting on imaginary causes. In his opinion there was in fact no alternative to the concept of the direct creation of primordial types. Where modifications had allegedly occurred these were plainly the work of an intelligent author, that is of God, still working in His world. He did not, of course, go as far as Professor Salmond in declaring evolution, particularly as applied to man, and the Christian message to be irreconcilable. It might perhaps

be accepted if limited to the lower forms of animal and vegetable life but since man was made in the image of God, man must be like God himself, unchanged and unchanging.

It was perhaps a brave attempt to rescue something from the wreckage. If so, it proved only partially successful. Admittedly very few of the existing membership actually resigned — among them Professor Salmond and Dr Stuart, the minister of Knox Church and Chancellor of the University. A few more, like C.E.Arthur, stayed on, protesting till the end — notably on the occasion of the 25th anniversary of the publication of Darwin's masterpiece when, perhaps ill-advisedly, the Council saw fit to send the author a congratulatory telegram.

The fact remains, however, that after 1876 no member of the Institute could be unaware of the principles of Darwinism and their bearing on everything the Institute finally stood for. In short, whether one regarded the theory of descent, the fact of evolution, as the blackest form of materialism or concluded with Hutton and Parker that intelligent opposition to Darwin's ideas was practically impossible, there could now be no going back. In short the age of innocence when members of the local Institute might expect to dabble in natural science without risk to their spiritual convictions was over. After 1876 and certainly after Parker's appearance on the scene, the prevailing ethos of that body was essentially Darwinian.

In its first ten years or so, then, the Institute established itself as a learned society of some standing and certainly influence. Admittedly, there was still much in its regular proceedings which can only be described as amateurish or popular in tone and intention. The range of subjects dealt with was, moreover, very wide — far more so than is the case today — much of it properly speaking not scientific but certainly of broad general interest. The fact of the matter, of course, is that even scientists in those days were interested in art and gladly listened to W.M.Hodgkins. They also happily turned out to hear papers on John Stuart Mill, Chaucer or Tennyson, on land questions, on Greek theatre, on the "science" of political economy, on fire-walking in Fiji, on Maori artifacts at Purakaunui or Warrington — as well as on scientific matters. In brief there was still in these years something for everyone.

Naturally enough, perhaps, the pendulum occasionally swung a bit far in the scientific direction. In an odd outburst — about 1910 — Professor Benham, Parker's successor after his tragically early death in 1897 — declared that if he had anything to do with it, he would allow

the botanists and the zoologists merely to lay their papers on the table where they would be simply taken as read. It's not altogether clear why he should have taken such a stand given the endless contributions of people like Augustus Hamilton and in particular T.M.Hocken who always drew large crowds to hear his latest paper.

And certainly no one could complain of lack of entertainment when Professor Park of the Mining School entered the lists in favour of some new theory of his, notably in 1909-10 when he argued for a major ice age in New Zealand in which glaciers descended into the sea all round the South Island and much of the North — all of which produced a first class rumpus within the Institute that spilled over into the columns of the Otago Daily Times until the editor of the day was moved to call a halt to proceedings.

But the Institute was, of course, always much more than a talk shop. Right from its inception in 1869 it took an active interest in the protection of the region's natural heritage — of alpine flora in the Mount Cook region from the ravages of sheep — of birds of various kinds from the onslaught of newly introduced predators, notably the weka, then a condemned species, the notornis in the Te Anau district, the once abundant bell birds and tuis of the West Coast — but not shags in or near trout streams, harriers in or near the habitat of rare birds — of tuatara, of whales along the Otago coast, of the oyster beds in Foveaux Strait — all with more than passing success. The subsequent setting aside of havens in various kinds of habitat, — swamps, river beds, virgin bush, lakes, lagoons— and in particular the setting aside of reserves on Resolution Island and in the fjords of the West Coast, the establishment of sanctuaries on Resolution Island and in Fiordland was largely due to the energetic advocacy of the Institute.

In 1910 the Institute also pursued with great energy the wanton slaughter of penguins and elephant seals in the southern islands of New Zealand and finally got the operation closed down. In the same way it protested — with success — against the re-leasing of the Auckland Islands to Australian interests for whaling purposes. Perhaps more significant still it also played a crucial role in securing the appointment of Leonard Cockayne to survey the virgin forests of the North Island and in due course, as Government Botanist, to further his epoch-making studies of the ecology of the native plants of New Zealand.

And so it went on year by year, In 1924, for example, it protested against the possible introduction of exotic birds in Tongariro National Park. In 1929 it mounted a campaign to preserve Maupoutahi Pa off Purakaunui, In 1930 following an address by J.E.Holloway on the alarming increase in the depredations of rabbits, stoats and weasels and deer, H.D. Skinner persuaded Council to set up a committee to deal with matters involving scenic, historic and scientific reserves and wild life generally. In 1937 he also launched a campaign to have the albatrosses at Tairaroa Head protected and to set aside the Signal Station there as a bird sanctuary. It is perhaps not too much to say that the protection of native birds was one of the liveliest and indeed one of the most successful and worthwhile subjects of interest in the whole history of the Institute. And I need not remind you of its crucial role in the 'Save Manapouri' campaign. The list goes on and on.

That, of course, was far from the end of it. It was G.M.Thomson in his capacity as secretary of the Institute who secured the establishment of a fish hatchery and marine laboratory at Portobello which he subsequently managed virtually at his own expense with odd ends of string and second hand brown paper. Then, too, the Institute took a lively interest in the activities of the local Astronomical Society which it eventually took over as a section or constituent body. In the same way it played a major and indeed crucial role in the establishment of the Otago Museum on the so-called Chinese Gardens on Great King Street. In the beginning — on Hutton's insistence — it contributed no less than a third of its income to the purchase of books for its library. On 5 June 1876 the relationship became even closer when the Institute under Bishop Nevill, its then president, moved into the new building where it has effectively remained ever since.

In point of fact that relationship might have become even closer. As Hutton complained to the Royal Commission on Universities in 1880, the University had long been unable to fund the Museum as it deserved. It had in consequence been reduced to the status of a mere natural history collection for the instruction of students. Hutton and Parker did their best to keep it open to the public but under Benham the Museum was eventually closed in the mornings to obviate any interruption of classes — and it remained so closed until he retired, very reluctantly, in 1936 at the age of 75.

After that, things moved fast. As curator of the ethnographic collections virtually since his return from Gallipoli - where he won the D.C.M. — and then the University of Cambridge, H.D. Skinner had already built up the ethnographic collections of the museum — with the unstinted support of Mr Wili Fels, another member of the Institute. One of his chief acquisitions was, of course, Mataatua, a splendid Maori house which he rescued from imminent destruction and refurbished as a centre piece in his collection of Polynesian artifacts. In any event, in 1934, as newly appointed director, he took matters a step further when in his usual dramatic manner he chipped off the word University over the main door of the Museum — just as the Chancellor, Dr Cameron happened along.

In due course, at a meeting in May of that year, the Museum Management Committee and a deputation from the Otago Institute, headed by Skinner, met and agreed to unite under some such title as the Otago Institute and Museum or the Royal Society and Museum. As it turned out there were serious legal difficulties in the way of the proposal, not least the status of the Hocken Library — then situated in the Museum — and of the Museum itself. A lesser man might then have given up but on 15 March 1935 Skinner announced the receipt of an anonymous gift of £500 and the promise of another £500 by the end of the month — obviously from Fels — on the strength of which he approached the Dunedin Savings Bank for a loan of £4000 which presumably would cover the cost of the building. Happily for the Institute and the Museum the bank turned him down. The blood still runs cold at the sheer audacity of the plan.

But that was not the end of the matter. For H.D. had long been making yet another plan. In December 1933, as curator of the ethnological collections and secretary of the Institute he raised a question which is again before us, namely the relationship between various kindred societies in the city and the Otago Institute and in particular the future development of what was the premier scientific body in the province. In the following March he reported that affiliation with a number of these bodies might be possible if certain inducements were offered. All this, of course, was merely an opening salvo. In April 1934 in a well advertised presidential address, [Sir] Charles Hercus — whom H.D. had fastened on as a front man in the campaign — noted that the Institute was not in a healthy state. Its membership was now only

143, the result largely of the war and the subsequent depression. It had nonetheless done a great deal over the years. It had, among other things, given £250 to the Portobello Marine Station — this apart from Thomson's time and effort — £400 to the Beverly-Begg Observatory — which we are now informed it owns and is financially liable for — organized and equipped the 1923 expedition to the Chathams, contributed towards the cost of the Wili Fels wing of the Museum, and given £600 to the parent body to help towards the cost of the Transactions. Since 1920, it had also given £1000 to the University Library — over the years a further sum of £2000. It had nonetheless attracted little civic interest or support, all of which contrasted most unfavourably with the success achieved by the Auckland Institute and Museum with its 643 members and large local support.

In Hercus's view, it was possible that the Institute had concentrated overmuch on scientific research, something, as I have said, Benham had been saying for years. The Council had in any event reviewed the situation and decided that more effort must be devoted to the field of public education, especially among the young. What was called for was a 20 years' plan — the Institute was not well enough endowed to move faster — to provide improved visual aids, public demonstration facilities, practical laboratory work and in particular much superior lecture room facilities.

A few weeks later Hercus could report real progress. The Carnegie Foundation had donated the latest cinema equipment and a library of educational films. The Institute itself had meanwhile collected £1100 towards the cost of the project and would shortly call for more funds. When the project was complete, the Institute would thus be able to offer facilities for meetings and the like to bodies with aims similar to its own. In this way it would help to dispel the popular belief that the museum was a rather dead place.

For the rest, the Institute should not forget to cultivate all the muses — art, music, philosophy — whose traditional home had long been centred in the Museum. If all this were done, the original objectives of the founders of the Institute and of the Museum would at last be realized. I need hardly pursue the sequel here, the eventual building as part of the centennial project of a lecture theatre named after Hutton — with the aid of a liberal

donation from the Institute — now unhappily swallowed up in the current alterations in favour of this larger if rather less convenient auditorium.

One last thing and I shall be finished. As members of this body at least will be aware, the society now faces something of a crisis of identity, In its first ten years or so the Otago Institute had established itself as a highly respectable learned institution formally linked with half a dozen others in the country at large and with the New Zealand Institute — an umbrella body without members of its own which, taken as a whole, drew together the major scientific and intellectual fire-power of the country.

It is perhaps common knowledge that the relationship between Otago and Wellington in particular was never cordial, particularly while Hector was at the helm. As early as 1884 Parker pressed for various constitutional changes - the establishment in particular of a Board of Governors, one Governor to be elected by the affiliated societies, each of which would pay a quarter of its income annually to the central body.

Increasing discontent with Hector's management led in 1903 to the repeal of the 1867 act and the substitution of a new act in which the federal principle was rather more clearly set out. That body was now to consist of the eight existing regional Institutes and such others as might be incorporated in accordance with the new rules and be administered by a 'fit person' to be known as the president of the Society. In the next few years under Hutton's guidance the new body was re-shaped and re-vitalized and 'new vigour... infused into dry bones.'

Unhappily, this phase did not last long. The years before the war and during it had proved hard. Attempts to secure increased government funding fell on deaf ears — but, of course, we all recognize that particular syndrome. In due course it became necessary to call on the various local institutes to cover the shortfall. All of which seemed to strengthen the individual institutes, to make them indispensable. if nothing else as sources of needful cash — there being no other.

The writing, however, was already on the wall and the hand that wielded the pen was none other than that of G.M.Thomson, a founding member of the Otago Institute and for many years one of its leading lights— which indeed he remained until the end of his very long and productive scientific career.

On the face of it, perhaps, his scheme for a fellowship of 20 members, then 40, awarded for distinction in science seemed modest enough, even belated, and certainly the initial appointees were all distinguished scientists, several of them Otago men long prominent in the management of the affairs of the central body. The fact of the matter, however, is that the change transformed the old Institute — in two chief ways. In the first place it led to a new and increasing emphasis within the Institute as a whole on science pure and simple at the expense of cognate disciplines, notably art, literature and philosophy which so often provided the staple fare at the monthly meetings of the constituent provincial bodies.

The other change was essentially constitutional in character but in the long run perhaps rather more significant. The old New Zealand Institute in Wellington, as I have said, had no individual members, only a series of semi-independent local "branches". The establishment of the fellowship — whether or not this was envisaged or understood at the time — provided the central body with an independent membership of its own and one which inevitably packed a pretty powerful administrative punch.

If anything, this tendency was strengthened in 1931 when Thomson, now a very elderly man, went on to propose that there should be a National Research Council divided into two groups — in the first physics, chemistry, geology and mathematics, in the second biology, medicine and all other 'sciences' including, perhaps out of deference to H.D. Skinner of the Otago Institute, anthropology which, frankly, I still can't bring myself to accept as a true 'science' in the strict sense of that term.

This, of course, was not the end of it. There had long been a desire on the part of some members of the New Zealand Institute to bring the name into line with that obtaining in other parts of the Empire and at the same time remove the ambiguity arising from the fact that there were other institutes in New Zealand with functions analogous to those of the New Zealand Institute. The subsequent act incorporating the change inevitably provoked a great deal of discussion, at times angry debate. But in spite of local objections, notably on the part of Sir Robert Stout, the new name was agreed to, on 20 November 1934. The old Otago Institute thus became the Royal Society of New Zealand Otago Branch, then after a slight hiccup, the Otago Branch of the Royal Society of New Zealand — still a fee paying member of

the federal body but with greatly reduced influence, much of what influence the branches formerly enjoyed having effectively passed to the Academy, the fellows.

The new act passed last year has carried the process a stage further. Under it the Society is now a unitary body centred in Wellington which has members of various sorts — individuals, affiliated scientific societies — chemical, geological and scores of others — and regional constituent committees appointed by the Society during its good pleasure — that is to say leaves, twigs, but no branches — hence the revival of the original name of this body which it seems to me is at least defensible since the word Institute exactly describes its nature and function, namely an organization founded for a particular purpose, such as the promotion of education, the arts and science. It is certainly not a name we shall have to change in the event of the country going republican, if that should ever happen.

A more serious issue in the changed climate is what the Otago Institute should now aim to do. In its original report the Panel reserved to the revamped Society the right to determine whether a particular body should be granted 'constituent' status, in reaching which decision regard would be had to the degree of conformity between the objects of the applicant group and its own. It even suggested that each aspirant constituent society should purge its rolls so as to exclude individuals who were not properly scientists— i.e duly qualified in some recognized discipline — which suggests that the new Society feels uncomfortable about admitting unqualified members to its ranks or allowing any affiliated or constituent society to do so. And this remains a problem. The constitution of the old Otago branch, the revived Institute, lays it down that the objects of the Society shall be the promotion of Science, History and Philosophy. On the face of it, this is not really a problem as long as we confine ourselves to the history of science, the philosophical principles underlying science and the practice of science though frankly this is not what I think the founding fathers of the Otago Institute really had in mind nor is it genuinely spelt out in the aims of the new Royal Society of New Zealand. But I take it that we need not concern ourselves overmuch about that. Who is to know or care if we occasionally sponsor activities not strictly scientific in content.

The more immediate difficulty is where we go from here. I have a suspicion that the authors of the Act envisaged making off with all our members and their subscriptions — in

which case the old "branches" would simply have dropped off, ceased to exist. That has not happened yet but it remains a possibility. And that I think would be unfortunate since the field for scientific activity in the regions remains as open as ever it did. To put matters more directly, in the early days of its existence, the academic members of the University were nearly all Institute men. That is, they took their responsibilities to the wider public very seriously. That it seems to me is no longer the case. A modern fellow very often may well have no interest in the activities of his local 'branch', much less choose to be a member of it — which seems to me a serious weakness. The Otago Institute, of course, still very largely depends on the active goodwill and support of academics in the relevant disciplines. It also needs the interest and support of the public, of everyone interested in its activities and ideals. Both indeed are essential if the Institute is to continue its mediatory role in scientific issues.

As matters stand this newly liberated body now faces a somewhat uncertain future. It is in great need of new members and a rather stronger financial base if it is to remain effective and meet its obligations. It might, of course, be argued that it would not greatly matter if the Institute did go down, if in the end it lost all its members to the Royal Society of New Zealand. It has had a good innings, it has served its purpose. If it has a history, it need not have a future. Times have changed. What the Institute used to do has now been totally absorbed by individual scientific bodies, the affiliated societies, the Royal Society of New Zealand and the University which on the face of it is increasingly indifferent to what happens outside its walls. But there is already evidence that we are still needed. The revamped Society in Wellington still feels the need of some provincial support which the Otago Institute for its part is well qualified to provide. For the rest — or so it seems to me — it must still aim to meet the wider intellectual interests of the public, just as Sir Charles Hercus suggested it should away back in 1934.

In the meantime, I am sceptical enough to wonder whether the new Society will in fact prosper, whether, that is, it can really prosper without the sort of solid provincial support offered by the old branches. My guess is that the scene will need to be re-visited before very long in which case the Otago Institute should be ready to shoulder whatever responsibilities might yet fall to it.

G.S.Parsonson,

25 March 1997