

## What Tyndall read: provenance, contents and significance of the Proby Bequest in the Carlow County Council Library

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**SUMMARY** We give a preliminary description of the provenance and contents of the library that the Tyndalls kept in Hind Head House, in Surrey, and the path it followed to end up in the Carlow County Council Library. For the provenance we draw from unpublished personal accounts and from public aspects of the Tyndall family history, specially from Louisa's side. The contents of the library comprises about 143 items, between books and pamphlets, which we mention individually, giving in some cases details of the connection between Tyndall and the author of the book. With regard to the significance of the library, we observe that most of the books were British or American editions of Tyndall's own work, or gifts to Tyndall from other authors who followed on his work, specially with regard to applications of his microbiological findings. We conclude that perhaps Tyndall's library had more the character of a trophy display-case than a working resource. This would contribute to explain some of the prominent absences in the library—texts from Darwin, or Lucretius, which influenced him profoundly. Buying academic books, when he had them readily available in numerous institutions, might not have been one of Tyndall's strongest habits, but a look at his home library is nonetheless revealing of Tyndall's inquisitive and sensitive mind, and of the roots of his personal thinking.

### INTRODUCTION

The Carlow County Council Library houses in the office area in the first floor a simple modern bookcase full of nineteenth century science and other books, many of which are editions of John Tyndall's works. The shelves are rather precariously labelled 'Proby Bequest', and an etching of Tyndall in the shape of a postcard-size woodcut inside the press tells us that this is related in some way to the great Victorian Carlow physicist. Details of this and other items were first reported in the *Carlow Nationalist*.<sup>1</sup> In this paper we trace the provenance of the 'Proby Bequest', catalogue its contents and relate the selection of books found therein to ideas, works and events in Tyndall's life.

### JOCELYN PROBY (1900-1993)

The donor whose name the bequest bears was Jocelyn Campbell Patrick Proby, well known in the professional world of osteopathy.<sup>2</sup> He was the fifth child of Colonel Douglas James Proby (1856-1931) and Lady Margaret Frances Hely Hutchinson (d. 1937).<sup>3</sup> Jocelyn had four sibs; Granby Proby (1883-1947), Claude Richard Hamilton (1885-1901), Betty Alice Adeline Proby, and Richard George Proby (baronet). Jocelyn's father was born Douglas James

Hamilton, but for reasons of inheritance had changed his family name. Douglas parents were Claud Hamilton (1813-1884) and Elizabeth Emma Proby (d. 1900), who married on 7 August 1844, and in addition to Claud they had Louisa Charlotte Hamilton (1845-1940), Emma Frances Hamilton (d. 1924) and Mary Stuart Hamilton (d. 1939). Louisa Charlotte was the wife of John Tyndall, and this establishes the connection between Jocelyn Proby, donor of the bequest, and John Tyndall. They were related through John's wife Louisa Charlotte. It also suggests a reason for the change of surname, from Hamilton to Proby, perhaps in order to preserve the name and titles of his father-in-law, if they were inherited through the male line. Louisa was 25 years younger than John, who was 56 years of age when he married. They had no children, John died accidentally, and Louisa outlived him remaining a widow for 47 years.<sup>4</sup>

### PROVENANCE

Having established who Proby was, and his connection to Tyndall, we will now explain the physical journey of the books; where were they initially stored, when and how the donation to Carlow Library was arranged. In the first place we ought to say that the books and other items at Hind Head House, in Haslemere, Surrey—the Tyndall's last home—legitimately belonged to Mr. Proby, who had it in his power to dispose of them at will. We know that in 1976 he donated to the Royal Society of London (RS) three oil canvases; a portrait of Tyndall in his old age, by John McClure Hamilton (1893-1894), another Tyndall portrait, this time from 1877, by V. Zypponfeld, and another portrait of Mrs. Tyndall by the same artist, also dated 1877.<sup>5</sup> We have also found in the Library of the RS 43 books donated by Jocelyn Proby.

Two of the authors of this paper, McMillan and Nevin, were principals in obtaining this collection for Carlow, appealing to Mr. Proby's generosity. In addition, they also secured a donation of the books recovered from Tyndall's climbing lodge in Bel Alp, Switzerland, by the late Mr. Eric Wiseman, who was a great friend and Tyndall enthusiast. Other material and artefacts were also recovered from the Royal Institution of Great Britain where Tyndall worked, and locally from family and friends of Tyndall's family.<sup>6</sup>

**The Eric Wiseman Donation** The books from Tyndall's Alpine home in Switzerland were recovered by Mr. Eric Wiseman<sup>7</sup> who travelled there specifically for the purpose of obtaining material from the house when it was being sold. He was unable to physically transport more than the books, a series of 'infusion tubes' and some meteorological equipment. Mr. Wiseman left behind in the lodge Tyndall's climbing equipment; boots, ropes and other climbing essentials such as his Alpenstock. According to Mr. Wiseman, a mountain stream could be diverted to flow through the house and he believed—and Tyndall's correspondence with Huxley confirms—that Tyndall as a legendary mountain man took baths on the freezing water. The books gathered by Mr. Wiseman form part of the

collection in Carlow Library and are clearly distinguished from the other books by the handwritten inscription they bear behind the front cover, as follows;

This book formerly the property of Professor John Tyndall was recovered from the Tyndall's summer home Alp Lusgen, above Bel Alp, Canton Valais, Switzerland, in 1963 by Eric Wiseman.

Wiseman was in a long correspondence with McMillan in the 1970s and eventually made his contribution in September 1978.<sup>7</sup> Mr. Wiseman came to Carlow to deliver a lecture on his adventures in Alp Lusgen in 1963, which was later delivered in other locations around the county,<sup>8</sup> and he contributed a chapter to the Royal Dublin Society's (RDS) 250<sup>th</sup> Anniversary Publication 'John Tyndall: Essays on a Natural Philosopher'<sup>9</sup> that was planned in its entirety and edited by Norman McMillan in draft, who recruited Professor 'Bill' W.H. Brock, the respected historian of science, to lead the final editorial team which included Mr. McMillan and the Science Officer of the RDS Mr. Charles Mollan. Wiseman's chapter was entitled 'John Tyndall: Scientific Work and Social Life in the Alps'. The background to Wiseman's retrieval of this material was therein explained which came from Sir Richard Proby, Bart, paternal uncle of Jocelyn Proby.

**The 'Proby Bequest': Recovery mission** Louisa Tyndall died at her home in Hind Head,<sup>10</sup> aged 95, and we do not know any details of the fate of the contents of the house until the 1970s, when the Tyndall Committee in Carlow (Nevin and McMillan led this aspect of the Committee's work) who were in correspondence with Mr. Jocelyn Proby, discovered very late that he was retiring from his Osteopath practice in Arklow, Co. Wicklow to move to Warmington House, Warmington, Peterborough, Cambridgeshire. A trip to Arklow was necessary that very night as McMillan and Nevin found that Proby was leaving the next day for England. Travelling after work, they arrived to Arklow at about 8pm, to find from Mr. Proby that a librarian/representative from the Royal Society of London (RS) had been there the day previous. Mr. Proby was upset that the RS had cherry-picked the books taking the most valuable, inscribed by Darwin, Carlyle, Huxley and others that had been presented to Tyndall by his personal friends. Proby told McMillan and Nevin, that had he known Carlow would have kept the collection together he would have donated them to Tyndall's home county. The books he explained were all labelled by Mrs Tyndall herself and the Hind Head library had been carefully kept in the same order as when left by John Tyndall after his death in 1893. As a member of the family of Mrs. Tyndall, that night Mr. Proby spoke of the accidental poisoning of Tyndall and said that serious police investigations had ascertained this was indeed a tragic accident. The police enquiry was routine in a case of accidental death where there are reasonably large sums of money involved, and Tyndall had died accidentally leaving behind more than £15,000 and two houses. John was alive after the poisoning and explained the circumstances of the mixing up of the medicine and embrocation by his wife. His own father was there to transcribe statements on the event used in the subsequent inquest. He promised to try and find this historic document after the

move but this was never sent on. The conversation that night was of necessity rather fraught and lasted less than an hour because of the urgency of packing household goods for the move next day.

Once these books were secured by McMillan and Nevin, they were in their entirety donated to the Carlow County Library. A local company Braun Ireland was approached by McMillan and agreed to provide the funding for the bookcase to house the Proby books, but also museum cases to house the various Tyndall memorabilia, papers and scientific equipment obtained by the Tyndall Committee. Two of these museum cases designed by Nevin stood at the entrance of the County Library for many years, while three others were in the library of the Regional Technical College. Eventually the five cases with their contents were donated by the Tyndall Committee (legal owners of these donations and the books) to the County Museum along with a series of twenty plus beautiful water colours of scenes from the whole of Ireland painted by James Flack that were part of the Tyndall-Dargan travelling exhibition. The details of much of this local activity by the Tyndall Committee are in two scrapbooks that are part of the County Carlow Tyndall library. The most important cuttings explaining some of the provenance of these collections. The various books and artefacts collected by the Tyndall Committee led by Joe Feeley, Nevin and McMillan were donated formally to the nation through Brendan Daly TD, Minister for State at the Department of Labour in a ceremony reported in the Nationalist in 1981.<sup>11</sup> These items now are all safely in the hands of the Curator of the Carlow Museum.

Efforts were made subsequently to recover the books that were moved to London, and a formal approach to the RS was made to this effect by the then Irish Minister for Education Mr John Wilson TD, but this was unsuccessful. It is believed that Wilson subsequently appealed to the RS for the return of the Proby books. Dr McMillan travelled to London to discuss the matter with the Librarian of the Royal Society in the early 1980s and was informed the books had all joined the general collection of the RS so could not therefore be identified.

The books donated to Carlow by Mr. Eric Wiseman came after the donation of Mr. J. Proby, but were joined to the County Library collection and remain in the same book-case as the Proby Bequest.

### CONTENTS AND SIGNIFICANCE

What follows is a list of the books at some stage owned by Tyndall that were found either in Bel Alp (Wiseman Donation to Carlow), in Hind Head House (Proby Bequest I to Carlow), or Proby Bequest II, (Proby to RS).

**Wiseman Donation: identified by hand-written inscription, dated and signed by donor.**

There are seven titles under this category, all by Tyndall himself, as follows.

Tyndall, J. 1899 *Fragments of Science* (three volumes, two copies), Longmans, London. *Heat as a mode of motion. Six lectures on Light, delivered in America, 1872-1873*, (three copies) Longmans, London, 1875. *Michael Faraday as a discoverer* Longmans, London 1877. *Hours of exercise in the Alps* Longmans, London 1906. *The forms of water in clouds & rivers, ice & glaciers*. Longmans, London 1892. *Glaciers of the Alps*. Longmans, London 1896.

All of the above are late editions of Tyndall's earlier publications, some of them dating even after his death, and obviously gathered by Louisa. They include both British and American editions.

**Proby Bequest I (Carlow)** This comprises 93 titles, presented below under different categories. We also add brief comments in some cases, to show the reason why those titles are there, and what they meant to Tyndall. The titles could refer to books or pamphlets, and the order given here does not reflect the order in which they are found on the shelves in Carlow. Several titles, specially the works of Tyndall himself, exist in numerous copies, but when this occurs we have mentioned them only once. To reflect possible influences, within each category the books are ordered by date of publication when possible.

### **Alpinism & Travel**

Anonymous volume in the bilingual (German-French) collection; *Villes et regions d'art de la Suisse. Brigue et le Haut Valais*.

G. Mayr 1863 *Travelling and orographic map of Tyrol*. Munchen, verlag von Julius Grubert.

Piazzini Smith 1879 *A poor man's photography at the Great Pyramid in the year 1865*. Henry Greenwood, London. Tyndall had had charming first-hand accounts of Egypt and its antiquities in his correspondence with T. H. Huxley.

John Tyndall 1896 *Hours of exercise in the Alps*. Appleton & Co., New York.

F. O. Wolf et A. Ceresole n.d. *Valais et Chamonix*. Orel Fussli, Zurich.

### **Biography**

B. W. Greenfield 1843 *Genealogy of the family of Tyndale*. Privately printed by John Bowyer and Son, London.

Bence Jones 1871 *The Royal Institution, its founders and its first professors*. Longmans, London.

J. H. Gladstone 1872 *Michael Faraday*. MacMillan & Co., London.

John Stuart Mill 1873 *Autobiography*. Longmans, London.

Martha Somerville 1873 *Personal recollections from early life to old age of Mary Somerville, with selections of her correspondence*. John Murray, London. Perhaps we see here the influence of Louisa, who must have felt great sympathy for Somerville, a great scientist in her own right.

Thomas Carlyle 1873 *A supplement to the life of Friedrich Schiller, with an examination of his works*. Chapman and Hall, London. Carlyle was a great personal friend of Tyndall, who looked after him when he was in ill health.

Anonymous 1882 *A memoir of Hector Tyndale (1821-1880)*. Philadelphia.

Lady Claud Hamilton (translator) 1885 *Louis Pasteur: His life and labours, by his son-in-law*. Longmans, London. Pasteur was a good friend of Tyndall as both were on the same side in the anti-spontaneous-generation debate in the 1860s and 1870s. Louis Paster died in 1895.

Percy Faraday Frankland and Mrs. Percy Frankland 1898 *Pasteur*. Cassell and Co. London. With dedication from the author to Mrs. Tyndall. The authors were another case of close collaboration between husband and wife, in this case Mr. and Mrs Frankland. Percy's father was an outstanding chemist and had been a very close childhood friend of John Tyndall's, having travelled together to Marburg. Father and son quarrelled often.

"Un Ignorant" n.d. *M. Pasteur: Histoire d'un savant*. (9<sup>th</sup> edition). Hetzel et Cie Editeurs Paris.

### **Medicine, Pathology, Microbiology**

George Maclwain 1838 *Medicine and Surgery one inductive science*. S. Highley, London. We are not aware that in 1838 Tyndall was particularly interested in medicine or surgery.

Julius Jeffreys 1843 *Views on the statics of the human chest*. Longmans, London.

Benjamin Brodie 1851 *Physiological researches*. Longman & Co., London. With hand-written dedication.

George Wilson 1855 *Researches on colour blindness with a supplement on the dangers attending the present system of railway and marine coloured signals*. Sutherland and Knox, Edinburgh. Tyndall advised Trinity House and the House of Commons on the optimal way of conveying signals from light-houses and fog-horns to shipping. With hand-written dedication from the author.

Gilbert W. Child 1869 *Essays on physiological subjects*. Longmans, London.

Leonard W. Sedgwick 1869 A report on the parasitic theory of disease. Reprinted from the *Transactions of the Association of medical graduates*, London.

Joseph Lister 1870 *Remarks on a case of compound dislocation of the ankle with other injuries., illustrating the antiseptic system of treatment*. Edmonston and Douglas, Edinburgh.

Noel Hartley 1873 Atmospheric life germs. A reprint from *Quarterly Journal of Science*, April 1873.

W.H. Dallinger 1873 Researches on the life history of a cercomonad. Lessons in Biogenesis. *Monthly microscopical journal* August.

J. M. Scudder 1874 *Specific diagnosis: a study of disease with special reference to the administration of remedies*. Lockwood & Co. Cincinnati US. Tyndall stood at the historic boundary where many aspects of medicine were beginning to unfold as deeply rooted in science, thus contributing to the unified view of nature, including man, that was at the base of Victorian scientific naturalism.

Benjamin T. Moore 1875 *On the influence of temperature during childbirth and on the right management of the puerperal state*. Emily Faithfull, London.

J. Lister Llewellyn 1875 The effects of the antiseptic treatment upon the general salubrity of surgical hospitals. *British Medical journal*, 25 December. With Tyndall, Huxley and Pasteur, Lister was one of the main contributors to the spontaneous generation debate in Britain. As opposed to Tyndall or Huxley, he was medically qualified, which was important at the time since the initial applications to medicine were spearheaded by him.

Moigno, L'Abbe 1878 *Microbes organises. Leur role dans la fermentation, la putrefaction et la contagion. Memoires de MM. Tyndall and Pasteur*. Gauthier-Villiers, Paris. L'Abbe Moigno was an outstanding French Catholic authority who tried quite successfully to accommodate the new findings of science within the framework of Catholic dogma. He was also deeply involved in worldly affairs, and was the official translator of Tyndall into French, and there is an abundant record of correspondence between the two men. Tyndall was not always happy with Moigno's translation work. They also corresponded about more philosophical and religious matters, especially after 1874.

Grant Allen 1879 *The Colour-sense, its origin and development: An essay on comparative physiology*. Trubner & Co., London.

Robert Lewins 1880 *Life and Mind: The basis of modern medicine*. Watts and Co., London.

Hilgard Tyndale 1882 *Home and climatic treatment of pulmonary consumption, on the basis of modern doctrines*. Bermingham & Co. New York.

J. Burnet Yeo 1882 *The contagiousness of pulmonary consumption and its antiseptic treatment*. J. & A. Churchill, London.

Watson Cheyne 1882 *Antiseptic surgery: Principles, practice, history and results*. Smyth, Elder & Co., London.

Michael Quain 1886 *The healing art in its history and prophetic aspects*. The Harveian Oration. Longmans, London.

Richardson B. W. 1887 The Health of Nations. Reprinted from *Saturday Review*. Oct 29.

Thomas Clarke 1888 *A gauntlet to the theologian and scientist*. Frederick Norgate, London.

Armand Ruffer 1890 The phagocytes of the alimentary canal. *Quarterly Journal of Microscopical science*, February.

G. A. Heron 1890 *Evidences of the communicability of consumption*. Longmans Green & Co. London. With handwritten dedication.

R. Russell 1891 *The spread of influenza: its supposed relations to atmospheric conditions*. Edward Stanford, London.

Rollo Russell 1892 *Epidemics, plagues and fevers: Their causes and prevention*. Edward Stanford, London.

H. Charlton Bastian n.d. *Epidemic and specific contagious diseases: Considerations on their nature, and mode of origin*. With a hand-written dedication from the author. Bastian became embroiled in a bitter public discussion with Tyndall and Huxley on the “germ theory of disease”, Bastian advocating a form of spontaneous generation. The discussion was conducted in The Times.

Wolfe, A. n.d. *The correlation of Zymotic diseases*.

Daniel Henry Cullimore n.d. *Consumption as a contagious disease*. Bailiere, Tindall & Co. London.

J. Lister Llewellyn 1912 *Miner's nistagmus: Its causes and prevention*. The Colliery Guardian Company, London.

### **Natural Religion, Christianity, Spiritualism**

David Hume n.d. *Dialogues concerning natural religion*. Thomas Scott, London.

J. B. Mozley 1865 *Eight lectures on miracles*. Rivingtons, London. Mozley wrote and preached on miracles in the belief that Darwin's *The Origin* undermined the supernatural. Miracles bothered Tyndall, as well as the effect of prayer, and he went on to contradict them armed with the scientific method. In the case of *séances*, he was able to call the medium's bluff, and he proposed hygiene and public health as the best antidote against public calamities such as plagues affecting humans or farm animals. But he never explored seriously the miracles of Christ or his resurrection.

John Robert Seeley 1869 *Ecce Homo: A survey of the life and work of Jesus Christ*. MacMillan & Co., London. An interesting and well-meaning read that would have taught Tyndall that



some aspects of humanity are beyond the full grasp and explanation of science, something he would have happily agreed with.

John Stuart Mill 1874 *Nature, the utility of religion and theism*. Longmans, London.

“Alpha” 1874 *Religion and science: The letters of “Alpha” on the influence of spirit upon imponderable actienic molecular substances and the life forces of mind and matter*. Alfred Mudge and Son, Boston. With hand-written dedication from the author.

Lermontoff, Michael 1875 *The Demon*. Trubner and Co, London.

Asa Gray 1880 *Natural Science and Religion: Two lectures delivered to the Theological School of Yale College*. Charles Scribner’s Sons, New York. For a period of time, Asa Gray was one of Darwin’s favourite enemies.

John Wood 1882 *Ancient astronomy, modern science and sacred cosmology*. Partridge & Co. London.

Rowland G. Hazard 1883 *Man a creative first cause*. Houghton and Mifflin, Boston and Cambridge.

John S. Farmer 1881 *A new basis for the belief in immortality*. E. W. Allen, London.

Edward Clifford 1891 *Broadlands as it was*. Lindsey & Co. For private circulation only. With hand-written dedication to “dear Tyndall from Edward Clifford.” We assume him to be the author. Broadlands was the country home of Lord and Lady Mount-Temple, where in January 1876 a séance took place where the poet John Ruskin—whose lover Rose La Touch had recently died—had been invited, and where he allegedly made contact with Rose’s spirit, a direct confirmation for the poet of the continuation of life after death.<sup>13</sup> Ruskin had earlier engaged Tyndall in a long controversy in *The Reader* about the theory of glaciers.<sup>14</sup>

Order of the Temple, 1925 *The Constitution, statutes, laws and regulations of the Great Priory of Ireland*. Obviously deposited in the library by Louisa or other relative. Heavily underlined.

### **Natural Science including Botany, Zoology and Geology**

William Gregory 1851 *Letters on animal magnetism*. Taylor, Walton and Maberley, London. In his early career as a physicist, Tyndall was interested in magnetism.

Thomas Henry Huxley 1858 *Theory of the vertebrate skull*. From *Proceedings of the Royal Society*, November 18, 1858. In this paper, Huxley confronted Richard Owen for the first time in scientific grounds. Owen was by far the more senior, but, at least by Huxley’s own reckoning, he lost the debate. Tyndall and Huxley were very close friends, at least judging by their extensive correspondence, and it is a little surprising not to find more Huxley titles in the library.

G. Poulett Scropp 1862 *Volcanoes, the character of their phenomena*. Longmans, London.

William Thomson 1874 *Typhoid Fever*. George Robertson, Melbourne.

J. Norman Lockyer 1873 *The Spectroscope and its applications*. MacMillan, London.

M. Le Chanoine 1874 *Theory of the glaciers of Savoy, with additions by P. C. Tait, John Ruskin and George Forbes*. MacMillan, London.

John Gordon Drysdale 1874 *The protoplasmic theory of life*. Bailliere, Tindall and Co., London, Paris and Madrid. In keeping with the material continuum between the inorganic, the organic and the living that was becoming increasingly evident, it had been proposed the existence of the protoplasm, an undifferentiated form of life from which all forms derive, which was the basis of all 'vital properties' and which was believed to constitute the cellular cytoplasm. This book is a review of the struggles of the cellular theory to free itself from the erroneous concept of the protoplasm.

Charles Bland Radcliffe 1876 *Vital motion as a mode of physical motion*. McMillan & Co. London. John Tyndall had proposed heat as a form of motion, and in the bid to unify nature and the laws of physics, it was tempting to see life as yet another form of motion of atoms and molecules.

M. Berean. 1878. *The missing link discovered. A key to the mysteries of the fall of man*. William Tegg & Co., London.

John Lubbock 1882 *Ants, bees and wasps*. Kegan Paul, London. Lubbock was another member of the X Club.

Percy Faraday Frankland 1893 *Our secret friends and foes*. Society for promoting Christian knowledge. London and New York. With dedication to Prof. Tyndall by author.

Percy Frankland 1903 *Bacteria in daily life*. Longmans, London.

### **Poetry and Literature**

Goethe 1808 *Faust*. Tubingen. This is the oldest book in the library, written in old-character German. Of a convenient pocket-size, it bears the marks of having been carried around quite a lot, although it appears to have been bought by Tyndall second hand, as it is signed by Tyndall 1849, after the signature of the first owner, dated 1808.

Henry Wadsworth Longfellow 1864 *Tales of a wayside inn*. Routledge and Son, London.

Henry Wadsworth Longfellow n.d. *Evangeline*.

Harriet Eleanor Hamilton King 1869 *Aspromonte and other poems*. MacMillan and Co. London.

Robert Norwood n.d. *The Lady of the Sonnets*. McClelland, Goodchild and Stewart, Toronto. With handwritten dedication.

### **Philosophy, Psychology, Mind, Education**

George Wilson 1856 *The gateways of knowledge*. MacMillan and Co., Cambridge.

E. L. Youmans 1867 *The culture demanded by modern life; the claims of scientific education*. Appleton and Co. New York. This is Youman's summary of the views on the subject by many authors, including John Tyndall. In brief, as quoted from J. S. Mill, "scientific education, apart from professional objects, is but a preparation for judging rightly of man, and of his requirements and interests."

Alex Melville Bell 1867 *Visible speech: The science of universal alphabetic. Self-interpretig physiological letters for the writing of all languages in one alphabet*. Shimpkin, Marshall and Co, London. With dedication from the author.

Johann Gottlieb Fichte 1867 *The characteristics of the present age*. John Chapman, London. Fichte (1762-1814) developed a transcendental idealism which he called *Wissenschaftslehre*, or doctrine of scientific knowledge, grounded in the bare concept of subjectivity, the "pure I". His system attempted to explain the philosophy of science, ethics, philosophy of law, and philosophy of religion.

Johann Gottlieb Fichte 1867 *The vocation of the scholar*. John Chapman, London.

John Stuart Mill 1872 *An examination of Sir William Hamilton's philosophy*. Longmans, London.

John Stuart Mill 1872 *System of logic*. Longmans, London. Mill (1806-1873) developed on the Empiricism of Hume, Berkeley and Locke and the Utilitarianism of Bentham.

H. C. Carey 1872 *The unity of law; as exhibited by the relations of physical, social, mental and moral science*. Henry Carey Baird, Philadelphia. This book reflects a strong stream in Anglo-Saxon philosophy of considering "moral science" as deriving from natural forces, thus being reducible to physics and chemistry.

Eliza Youman, 1872 *An essay on the culture of the observing powers of children, especially in its connection with the study of botany*. Henry S. King, London.

W. H. Collins 1872 *Perspective or the art of drawing what one sees*. Longmans, London.

Alfred Smith 1875 *The mind of man, being a natural system of mental philosophy*. George Bell and sons, London.

Malcolm Guthrie 1882 *On Mr. Spencer's unification of knowledge*. Trubner & Co., London.

### **Physics and Chemistry**

Dionysius Lardner 1869. *Handbook of natural philosophy: Optics*. James Walton, London.

John Tyndall 1870 *Researches on diamagnetism and magnetocrystallic action*. Longmans, London.

John Tyndall 1872 *Contributions to molecular physics in the domain of radiant heat*. Longmans, London. "Molecular physics" sounds decidedly advanced by at least 50 years.

Helmholtz H., 1873 *Popular lectures on scientific subjects*. With an introduction by Professor Tyndall. Longmans, London.

Robert Routledge 1881 *A popular history of science*. George Routledge and son, London.

John A. Newlands 1884 *The discovery of the periodic law and the relations among the atomic weights*. E. & F. Spon, London and New York. Newlands, together with Mendeleev and others (circa 1869) was one of the discoverers of the concept of the periodicity of elemental chemical properties as a function of atomic weight. This work, together the work of Tyndall's friend Edward Frankland on the theory of chemical valence were beginning to show the more rigorous quantitative side of chemistry, and the possibilities of synthetic chemistry. Frederick Wohler had synthesised the first organic compound, urea, in 1828, starting from inorganic compounds. Undoubtedly this was of fundamental importance in developing Tyndall's views on the reach and unicity of science.

John Tyndall 1896 *Sound*. Appleton & Co. New York.

John Tyndall 1896 *The forms of water*. Appleton & Co., New York.

John Tyndall 1896 *Fragments of science* (three volumes). Appleton & Co., New York. The last three volumes are posthumous editions and represent Tyndall's penetration of the American science book market.

### **Politics**

Augustus Granville Stapleton 1866 *Intervention and non-intervention: or the foreign policy of Great Britain*. John Murray, London. Tyndall became very interested in politics, and was decidedly a Unionist and anti-Gladston in his Irish policies.

### Various subjects

Oliver Wendell Holmes 1867 *The autocrat of the breakfast table*. Alexander Strahan Publishers, London. Presented to John Tyndall by his friend Herbert Spencer.

Paget J. (Sir) 1871 *The Hunterian Oration*. Longmans, London. With hand-written dedication.

Edward Tregear 1885 *The Aryan Maori*. Wellington.

### PROBY BEQUEST II (ROYAL SOCIETY)

Books not by Tyndall;

R. Clausius 1867 *The mechanical theory of heat, with its applications to the steam-engine and to the physical properties of bodies*. Translated from the German, in part, by J. Tyndall, with a contribution by T. Archer Hirst, and an introduction by J. Tyndall.

Henry S. Boase 1882 *A few words on evolution and creation: a thesis maintaining that the world was not made of matter by the development of one potency, but by that of innumerable specific powers*. London; Dundee: John Leng.

Walter Jerrold, 1893 *Michael Faraday: man of science*. London: S.W. Partridge, 1893

### THE SIGNIFICANCE OF TYNDALL'S HOME LIBRARY

In addition to the above, the shelves containing the Proby Bequest in Carlow also contain a copy of Friday's 1974 microfiche Catalogue of Tyndall's correspondence,<sup>12</sup> some 6,700 items kept in the Archives of the Royal Institution, Abermarle St. London. This catalogue is very useful because it contains informative summaries of every letter. It was donated to Carlow by Professor W. H. Brock. It is our intention to further the research initiated here with a more detailed exploration of the correspondence with the authors mentioned above.

Perhaps the great absentee in Tyndall's library is Charles Darwin. No copy of *The Origin* or *The Descent*, or any other Darwin work can be found, neither in Carlow or, after very careful investigations, in the library of the Royal Society, where, according to the memory of the last conversation between one of us (NMCM) with Mr. Proby, the "Darwin books" went. It is not impossible that these books never existed, since several attempts to find them, including one this year (see Acknowledgements) have failed to shed any light on their existence. In this regard, and even if the books are eventually found, we should note that the bond of friendship between Darwin and Tyndall was not very strong, certainly nothing to compare with the bond between Tyndall and Huxley, or between Tyndall and Hooker, or between Darwin and Hooker or Huxley, all of which left behind hundreds of letters filled with expressions of affection. In the Darwin correspondence, there are only 30 letters extant between Darwin and Tyndall, mostly short, polite and a little dull. The origin of species and its intricacies was not Tyndall's concern in any detail, while it obsessed Darwin. Tyndall, perhaps drawing from aesthetic experiences in the Alps, deliberately left a door open to the human spirit, and he would have hesitated, no less than Huxley, to call himself a 'naturalist'.

But there are other authors remarkable for their absence. Epicurus, Lucretius, the classic atomists from whom he drew so heavily for his Belfast Address of 1874 are not in his library. Galileo or Kant with their theory of the formation of the Universe are also absent. The Bible,

any Bible, Protestant or Catholic, which was the centre and negative inspiration of much of his writing, or magisterial documents from the Church, are not there either. Did Tyndall know of the early German works on textual criticism, or, closer to home, of John Henry Newman, who wrote abundantly on education, on science and religion and on the correct interpretation of Scripture, all topics that were dear to him? There is no extant correspondence between the two men. L'Abbe Moigno seems to have been the extent of his information on Catholic doctrine. Religion was clearly an important topic for Tyndall, as it was for Huxley, and their language in their correspondence, and probably also in their speech, was heavily loaded with Old Testament quotes. These absences, if genuine, tell us at least about Tyndall's working habits. He did not read professional matters at home so much, he had ample access to journals and technical books at the Royal Institution, the Royal Society, the Athenaeum, the gentlemen's clubs, the universities. A lot of what Tyndall read with a professional interest must have been kept in his office in these institutions. Perhaps books for his personal use were not among his habitual purchases. In fact, many of the books that we see from the library in Hind Head House were gifts to Tyndall from the authors, or editions of his own works, and only in few instances were they his own choice. If we look at Tyndall's home library more as a trophy display-case rather than a working resource—and Louisa would have been inclined to keep it that way—the absences mentioned above are more easily understood.

### ACKNOWLEDGEMENTS

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### NOTES AND REFERENCES

1 *Carlow Nationalist* January 6, 1978, p.19. *Items for Museum*. This included a copy of the etching of John Tyndall (1885) produced by his nephew Caleb W. Tyndall who was a resident of Bagenalstown. This find was reported in front page story earlier in the year under headline 'Big Find of Tyndall belongings'.

2 The *Irish Times* obituary, 13 January 1993 p.15.

3 Charles Mosley (editor) 1999 *Burke's Peerage and Baronetage*, 106<sup>th</sup> edition, 2 volumes (Crans, Switzerland: Burke's Peerage (Genealogical Books) Vol. 1, p5.

4 The *London Times* Obituary, 20 August 1940, p9.

5 The donation to the RS by Mr Proby of 43 Tyndall books plus four paintings is mentioned in the *Year Book of the Royal Society* 1975, Report of Council, pp 310-311.

6 *Carlow Nationalist*, January 1978 article 'More about scientist John Tyndall' details request sent by Mr M. O'Raihall, County Librarian to Mr Eric Wiseman on possibilities of donation of Tyndall books from Bel Alp. and *Carlow Nationalist*, September 29, 1978, p17. Tyndall artefacts come to nation.

7 *Carlow Nationalist*, May 12, 1978, p3. Reports in article entitled 'Tyndall books to be housed in Carlow College' donation of books by Eric Wiseman to County Carlow. Also, Ceremony donating Wiseman collection to nation is reported in *Carlow RTC Newsletter* November 1978 via Dr John Wilson TD, Minister for Education.

8 Details of Mr Wiseman's Irish lecture tour, *Tyndall in the Alps*, Carlow RTC (2 Oct. 1978); DIT (4 Oct 1978); Athlone (5 October 1978); Sligo (9 Oct 1978) and Galway RTC (11 Oct. 1978) lecture leaflet in scrapbook.

9 Brock W. H, MacMillan N. and Mollan C., 1979 *John Tyndall, natural philosopher*. Royal Dublin Society.

10 W. H. Brock, 'Tyndall, John (1820–1893)', *Oxford Dictionary of National Biography*, Oxford University Press, 2004; online edn, Oct 2006 [<http://www.oxforddnb.com/view/article/27948>, accessed 22 July 2011].

11 For Louisa Tyndall's custodianship of her husband's papers, and her project to produce his biography, see Granville Proby's foreword to Eve and Creasey's 1945 *The life and work of John Tyndall*. MacMillan, London.

12 Friday, J., McLeod, R. M. And Shepherd, P., 1974 *John Tyndall, Natural Philosopher 1820-1893 Catalogue of correspondence, journals and collected papers*. Mansell, Microfiche edition.

13 O'Gorman, Francis 2009 Ruskin, sience and the miracles of life. *The Review of English Studies*, new series, **61**: 249, 270-288.

14 A most interesting study of the effects of the 're-discovery' of the Alps by British mid-Victorian scientists, and for the relations between Tyndall, Ruskin and Forbes, can be seen in Sawyer, Paul I., 1981 Ruskin and Tyndall: the poetry of matter and the poetry of spirit. *Annals of the New York Academy of Sciences*, **360**: 218-246.