

Annie Besant: “The Seer and the Scientist have met”¹

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Annie Besant c.1897

Introduction

Annie Besant’s personality is much too rich and complex to be summed up in a couple of words. However, my biographical research has led me to think that she was first and foremost an intellectual and a scientist, in the way she envisioned, explored and questioned the Universe, including in its spiritual dimension.

Annie Besant’s life was just one long quest for Truth. Didn’t she end her essay *Why I Became a Theosophist* on these famous words: “I ask no other epitaph on my tomb but: “SHE TRIED TO FOLLOW TRUTH.””²?

I think she became conscious of her quest for Truth at the time of the intense spiritual crisis she went through during her disastrous marriage, and she spent the rest of her life trying to solve it. From then on, the Truth she sought was a scientific one, that could account for the nature of the

¹ Lecture delivered at the 37th European Congress – 30 July to 3 August – Paris, France

² BESANT, Annie. *Why I Became a Theosophist*. London: Freethought Publishing Co, 1889

Universe and of Man, and that excluded the supernatural, understood by Annie Besant as anything going against natural laws, known or as yet unknown. This is one of the reasons why she rejected the Bible, for she could no longer believe in what she considered as a supernatural revelation.

However, Annie Besant worshipped Truth, and even as a proclaimed Atheist, she expressed her scientific beliefs in terms of faith. Annie Besant's faith in Science was such that she believed even ethics could be based on scientific laws; that there existed a natural order which logically dictated duty, and that evil could eventually be eliminated.

Knowing this, I'll explore with you today the reasons why Annie Besant recalled that as soon as she read *The Secret Doctrine*, she believed "the very Truth was found". Why, to her, Theosophy, as defined by Madame Blavatsky, was perfectly compatible with a scientific view of the universe, for Annie Besant never abdicated reason for emotion or pure mysticism.

Annie Besant's education: Ellen Marryat

Annie Besant was lucky — but was it luck or destiny? — in that very early she met people and circumstances that enabled her to develop her intellectual abilities, as well as a scientific curiosity that went much further than what the Victorian society then allowed to a young lower middle class girl. The first influential person she thus met was Ellen Marryat, a wealthy single woman in her forties, who decided to educate little Annie, who then spent five years at her place, in Dorset.

In her autobiography³, Annie Besant recalls at length the education she got at the hands of Ellen Marryat, an intelligent, well read and cultured woman. Contrary to most Victorian teachers, she did not believe in the virtue of learning lessons by rote, and she encouraged Annie and her few pupils to be creative. Most importantly, she taught boys and girls exactly the same: all of them were taught Latin, French, German, History and Geography, and all of them had to do some needlework while she read aloud to them. This explains why Annie Besant later was unimpressed by male authority and never believed women were intellectually inferior.

However, when Annie reached sixteen, she found herself in a dead-end. In the early 1860s, higher education still was an exclusive male preserve in Britain, so, if she wished to go on with her studies, Annie had no other choice but to do so by herself. Aware of this, Ellen Marryat taught her how to study alone, in a well organised and structured manner. Twenty years later, Annie Besant still expressed her utmost gratitude to her in her autobiography: "No word of mine can tell how much I owe her, not only of knowledge, but of that love of knowledge which has remained with me, ever since as a constant spur to study."

Annie Besant's self-education

Annie Besant's married life proved terribly frustrating from an intellectual point of view. She found herself at a loss among the wives of the teachers of Cheltenham College, where her husband taught mathematics. In a sarcastic way, she recalls, in her autobiography those

... ladies who talked to me only about babies and servants—troubles of which I knew nothing and which bored me unutterably—and who were as uninterested in all that had filled my life, in theology, in politics, in science, as I was uninterested in the discussions on the housemaid's young man and on the cook's extravagance in using "butter, when dripping would have done perfectly well, my dear".

In her autobiography, Annie Besant recalls at length the path that led her to lose her Christian faith. The religious doubts she had first experienced just before her marriage reappeared all the

³ MACKAY, Carole Hanbery, ed. BESANT, Annie. *Autobiographical Sketches* (1885). Broadview Press Ltd, 2009

stronger when her little girl fell dangerously ill. However, Annie Besant's spiritual crisis also was fed by her renewed interest in science. What happened was that Dr Winterbotham, their family practitioner, seeing how depressed Annie Besant was, decided to lend her some of his scientific books to get her mind off theological broodings. Needless to say, this completely backfired, for Annie Besant then decided to put all Christian beliefs to the scientific test: "I resolved to take Christianity as it had been taught in the Churches, and carefully and thoroughly examine its dogmas one by one, so that I should never again say "I believe" where I had not proved", meaning proved in what she considered as a scientific way. As she was still unable to make a difference between religion and spirituality, she doubted the latter because of the dogmas of the former.

Annie Besant had to work for a living after she separated from her husband. She first became a writer for a free-thinker named Thomas Scott. The essays she penned then confirmed how much she loved studying and doing research. There were very few places where a Victorian woman could study, to the notable exception of the Reading Room of the the British Library, within the British Museum. Not only had women access to the catalogue (except for a few so-called obscene books), but the Reading Room also was an intellectual meeting and debating place. Annie Besant thus joined a prestigious line of female thinkers who made the best of such an opportunity, from George Eliot to Virginia Woolf.⁴ She spent days there, reading Spinoza, Darwin, John Stuart Mill or Auguste Comte.

Annie Besant went on with such reading and researching after she joined the National Secular Society, for she had to review many scientific books for the *National Reformer*, the NSS paper. She also translated German scientific essays into English, such as Ludwig Büchner's *Force and Matter* (1855). Indeed, spreading scientific knowledge was part of the fight the NSS led against religious dogmatism and superstition. The NSS had even called their London headquarters the Hall of Science. Very soon, Annie Besant became one the most influential NSS lecturers as well as one of their vice-presidents, so she had to keep track of all contemporary scientific discoveries and theories.

***Annie Besant's studies for a Science Degree at University College, London*⁵**

Nevertheless, Annie Besant was not self-taught by personal choice. So when University College, London opened their degrees to women on equal terms with men in 1878, she immediately decided to matriculate. I here agree with Manon Gozard, who said in her Master dissertation that Annie Besant's decision was part of « her unceasing quest for answers to her questions about the world and human beings. »

In order to be allowed to attend degree courses at UCL, Annie Besant had to pass exams in five subjects, including Mathematics, and at least one in science. She was tutored by Dr. Edward B. Aveling, a Professor of Anatomy at King's College, London, as well as a secularist and a socialist. Annie Besant matriculated just after she lost custody of her daughter, and she recalls in her autobiography: « I found it the very greatest relief to turn to algebra, geometry, and physics, and forget the harassing legal struggles in wrestling with formulae and problems ». Beyond this, getting a Science degree would also give more legitimacy to her scientific assertions as a Secularist and a woman.

⁴ See HOBBERMAN, Ruth. "Women in the British Museum Reading Room during the Late-Nineteenth and Early-Twentieth Centuries: From Quasi- to Counterpublic". *Feminist Studies*, Vol. 28, No. 3 (Autumn, 2002), pp. 489-512

⁵ See GOZARD, Manon. *Annie Besant (1847-1933)'s Emblematic Struggle to obtain a University Degree in London in the mid-1880s*. Unpublished Master dissertation, University of Paris-Sorbonne, Paris IV, 2012

Annie Besant easily passed the exams and matriculated in 1879. She decided to study for a science degree and she registered to as many classes as she could in the London colleges. Manon Gozard noticed that Annie Besant was most anxious to put her as yet only theoretical knowledge to the test, and took quite a number of experimental science classes, some in very practical fields. Annie Besant studied Sound, Light, and Heat, as well as Electricity and Magnetism at Birbeck College; but also Biology, Animal Physiology, Botany, and Mathematics in various other institutions. This very comprehensive list shows a scientific curiosity that went way beyond a mere wish to graduate.

Annie Besant proved a brilliant student. At the end of her first year, she got First Class certificates in such demanding scientific subjects as Chemistry, Mathematics, Magnetism and Electricity, Botany, Biology, and Sound, Light and Heat. Manon Gozard found out that the Botany exam of 1881, included five subjects: vegetal histology, morphology, and physiology, systematic botany, and the structural and physiological characters of the principal Natural order of the vegetal kingdom. Annie Besant took this six-hour-long evaluation on paper, followed by a six-hour-long practical examination, and she got a First Certificate that was the only one among second-year students of botany in the whole of Britain that year.

Unfortunately, during her third year, UCL authorities, fearing for their reputation, decided to prevent Annie Besant from graduating. She was banned from some classes, including botany classes. The Lady Superintendent of UCL, to whom Annie Besant complained, just told her: 'there is some prejudice against you.'

Annie Besant managed to summon an Extraordinary General Meeting. Over one hundred people attended, including the influential Pr. Thomas Huxley, who had fiercely supported Darwin and coined the word « agnostic ». Yet, even *he* approved the Council's resolution to exclude Annie Besant. No precise reason was officially given, but it may easily be inferred that it had to do with her publicly defending women's right of access to information on contraception during a notorious trial a few years before, following which she had published her own well-researched essay on birth control⁶. Clearly, UCL feared Annie Besant's notoriety would taint the reputation of the institution, as well as that of their other female students, hardly any of whom supported her.

Annie Besant's science teaching⁷

Although Annie Besant could never take a Science degree in 1883, she had become a qualified teacher as early as 1880, when she had passed advanced certificates at the South Kensington examinations. Annie Besant taught science classes for eight years at the Hall of Science of the NSS, to students who prepared for those very same South Kensington exams. She taught weekly classes of up to thirty students, in such topics as Elementary Animal Physiology, Advanced Chemistry, Sound, Light, and Heat, or Electricity and Magnetism. She also published short text books on the topics she taught.

Annie Besant's students' results prove what an excellent Science teacher she was. In June 1881, the *National Reformer* proudly announced that among her fourteen students in Elementary Physiology, two had obtained a First Class certificate. The following year, out of the nine students to whom she taught Sound, Light, and Heat, eight also got a First-Class certificate.

⁶ BESANT, Annie. *The Law of Population: Its Consequences and Its Bearing upon Human Conduct and Morals*. London: Freethought Publishing Co, 1877

⁷ See GOZARD, Manon. *Annie Besant (1847-1933)'s Emblematic Struggle to obtain a University Degree in London in the mid-1880s*. Unpublished Master dissertation, University of Paris-Sorbonne, Paris IV, 2012

Context: the Victorian spiritual crisis and science

Now that we've established that Annie Besant truly was a scientist, we still need to understand how she managed to reconcile Science and Spirituality.

First of all, we have to realize that she was far from being the only Victorian who suffered from the agony of religious doubt in view of contemporary scientific discoveries and theories. At the beginning the 19th Century, most British people still considered that faith and science agreed. Oxford and Cambridge were Anglican universities, and up to half of their students went on to become clergymen. So were their science teachers, who taught "natural theology", that is God's work in this world, as observed by reason and experience, as opposed to the theology revealed by the Bible.⁸

Nevertheless, from the 1830s, the Victorians began to wonder about evolution and natural laws. Geologist Charles Lyell published his *Principles of Geology* in 1833, in which he explained that landscapes had been mostly formed by slow natural processes, such as erosion, that were still at work; and he concluded that the Earth was much older than what could be inferred from Genesis when read literally. Another geologist, Robert Chambers, published *Vestiges of the Natural History of Creation* in 1844, which proved a best seller (Prince Albert read it aloud to Queen Victoria when she was pregnant). Chambers developed a theory of "transmutation", according to which everything, from the Solar system to Man, had evolved from older forms. Chambers, however, still believed in divine intervention, which he called the First Cause, at the origin of the whole process. Henceforward, to most Victorians the question no longer was: "do organisms evolve?", but "How and why do they evolve?".

So, contrary to a contemporary myth, Charles Darwin's *On the Origin of Species* was not a complete revelation. Darwin, who was turned into a secular prophet, was actually part of a large field of research. Darwin had defined his theory as early as the 1830s, and he only decided to publish it when young Alfred Russel Wallace foolishly sent him a manuscript showing he had come to the same conclusion. *On the Origin of Species* was much discussed, but it was not as subversive as it was later considered to be. Indeed, Darwin only dealt with the origin of *species*, not of *life*, so he had not killed God, just pushed him further back, the way Chambers had before him. Darwin talked of the evolution of Man twelve years later only, in *The Descent of Man*. Once again, the essay was much discussed, but some reactionary debates and cartoons hide the fact that majority of Darwin's readers accepted his conclusions, to his own surprise. This is the reason why far from being a Pariah, Darwin was buried at Westminster Abbey when he died in 1882, close to Isaac Newton.

Annie Besant, who read Darwin very early, immediately believed in his theory of evolution. By then, however, only the most Evangelical still read Genesis literally, and they were a small minority. Most late Victorian Christians considered the Bible as the symbol of a spiritual truth compatible with the latest scientific discoveries.

Indeed, one should keep a critical distance with Positivist historians, who insist on some intellectual and scientific Victorian figures' spiritual crises. Many Victorians were worried by the diminishing importance of religious faith in their society, and they discussed this at length, but those who completely lost their faith, such as Annie Besant, remained a small minority and were quite unrepresentative. University professors Frank M. Turner⁹ and Timothy Larsen¹⁰ both show in

⁸ See CLAVIER, Paul. *Qu'est-ce que la théologie naturelle*. Paris: Librairie philosophique J. Vrin, 2004

⁹ TURNER, Frank M. *Contesting Cultural Authority. Essays in Victorian Intellectual Life*. Cambridge UP, 1993

¹⁰ LARSEN, Timothy. *Crisis of Doubt: Honest Faith in Nineteenth-Century England*. Oxford UP, 2006

their studies that, contrary to a positivist historical vision, many Victorian agnostic later experienced a “re-conversion”¹¹, either to Christianity, or, like Annie Besant, to another form of spirituality. Anyway, was she really an Atheist from 1874 to 1889?

Annie Besant’s immanentist atheism

At first read, Annie Besant seemed to conform to the definition of the scientific atheist. She remembers, in her second autobiography, published four years after she converted to Theosophy:

The over-mastering sway which Science was beginning to exercise over me drove me to seek for the explanation of all problems of life and mind at the hands of the biologist and the chemist. They had done so much, explained so much, could they not explain all?

Nevertheless, she sounds much more qualified in her 1875 essay *On the Nature and the Existence of God*. Her conclusion actually corresponds agnosticism, as first defined by Thomas Huxley in 1869. Like him, Annie Besant only asserts that Man cannot know anything about God, including if He exists or not: “We have reached a region into which we cannot penetrate; here all human faculties fail us; we bow our heads on 'the threshold of the unknown.” Annie Besant fiercely rejects the anthropomorphic view of God, but in this essay her definition of matter partakes of vitalism, even of immanentism: “Thus we identify substance with the all-comprehending and vivifying force of nature [...]. The Deity becomes identified with nature, co-extensive with the universe, but the God of the orthodox no longer exists.” Her conclusion goes way beyond mere scientific or philosophical materialism. She develops instead a form of transcendentalism, that she expresses in an almost mystical way, in which Science appears as a new spirituality: “Study nature's laws, conform to them, work in harmony with them, and work becomes a prayer and a thanksgiving, an adoration of the universal wisdom, and a true obedience to the universal law.”

It’s not surprising then, that, as early as 1882, seven years before Anne Besant’s conversion, Madame Blavatsky should write in *The Theosophist*:

Another lady orator, of deservedly great fame, both for eloquence and learning—the good Mrs. Annie Besant—without believing in controlling spirits, or for that matter in her own spirit, yet speaks and writes such sensible and wise things, that we might almost say that one of her speeches or chapters contains more matter to benefit humanity than would equip a modern trance-speaker for an entire oratorical career.

Annie Besant’s exploration of the fringes of Victorian science

Annie Besant soon wondered about the limits of Victorian scientific knowledge, and she rejected all dogma, including Scientific dogma, as she so forcefully expressed it in 1889, when she explained her conversion: « Refusal to believe until proof is given is a rational position; denial of all outside of our own limited experience is absurd. »¹²

From the 1880s, Annie Besant explored supranatural phenomena, but always from a rigorously scientific point of view. She sums up this stage of her quest for Truth in her second autobiography¹³, and recalls her frustration:

Fact after fact came hurtling in upon me, demanding explanation I was incompetent to give. I studied the obscurer sides of consciousness, dreams, hallucinations, illusions, insanity. [...] I added Spiritualism to my studies, experimenting privately [...]. I read a variety of books, but could find little in them that

¹¹ Carole Hanbery Mackay’s phrase

¹² in *Why I Became a Theosophist*

¹³ See BESANT, Annie. *My Autobiography*. London: T. Fisher Unwin, 1893

satisfied me. I experimented in various ways suggested in them, and got some (to me) curious results. I finally convinced myself that there was some hidden thing, some hidden power, and resolved to seek until I found.

So the reasons why Annie Besant eventually converted to Theosophy were actually part of the very same scientific questioning that led to her loss of Christian faith fifteen years before. Reading her second autobiography, one realizes that there was no real sudden mystical revelation. It's as an intellectual and a scientist that Annie Besant converted to Theosophy.

Theosophy as Annie Besant's way to bridge Science and Spirituality¹⁴

When Annie Besant's friend, the famous journalist and spiritualist W.T. Stead received a copy of Madame Blavatsky's *The Secret Doctrine* to review in his *Pall Mall Gazette* in May 1889, he entrusted Besant with it, because he knew of her exploration of the fringes of Victorian science¹⁵. She recalls what happened in her second autobiography:

Home I carried my burden, and sat me down to read. As I turned over page after page the interest became absorbing; but how familiar it seemed; how my mind leapt forward to presage the conclusions, how natural it was, how coherent, how subtle, and yet how intelligible.

True to herself, however, Annie Besant immediately put this first impression to the test of her scientific intellect, although she acknowledged how powerful her intuition had been: "The effect was partially illusory in one sense, in that they all had to be slowly unravelled later, the brain gradually assimilating that which the swift intuition had grasped as truth." To Annie Besant, any true definition of the nature of the Universe had to be grounded in scientifically proved principles, such as natural laws, causality, and evolution.

In *Isis Unveiled*¹⁶, Madame Blavatsky had described "Science and Theology" as "two conflicting Titans", between whom the Victorians were crushed to the point of losing belief in man's spiritual dimension; but to her, the Ancient Wisdom, as studied and promoted by Theosophists, could meet the challenge of modern science, and *Isis Unveiled* was subtitled "A Master-Key to the Mysteries of Ancient and Modern Science and Theology" (my italics).

Blavatsky was very clear about evolution: "modern science insists upon the doctrine of evolution; so do human reason and the "secret doctrine". She accepted Darwin's theory, but she rejected T.H. Huxley's belief that all life had originated in matter. To her, as to Annie Besant, evolution need not imply materialism, but immanentism, and Annie Besant soon also came to believe that God gradually unfolded Himself through time in an evolutionary process Victorian Science had partly discovered.

Annie Besant also came to the conclusion that evolution meant that Man was developing natural powers as yet unknown to Science. This view of evolution is the reason why she accepted Blavatsky's teachings about the Mahatmas, and the occult powers they used to watch over humanity from Tibet and to pass on the Ancient Wisdom. To Annie Besant, the Mahatmas were not supernatural beings, but highly evolved spiritual ones. As for the law of Karma, to Annie

¹⁴ See BEVIR, Mark. "The West Turns Eastward: Madame Blavatsky and the Transformation of the Occult Tradition." *Journal of the American Academy of Religion*, 62. 3 (1994): 747-767 et "Annie Besant's Quest for Truth: Christianity, Secularism and New Age Thought." *The Journal of Ecclesiastical History* 50.1 (1999): 62-93

¹⁵ See STEAD, W.T. 'Character Sketch: Mrs Annie Besant', *Review of Reviews*. vol. IV, October, 1891, pp.349-367

¹⁶ BLAVATSKY, H.P. *Isis Unveiled: A Master-Key to the Mysteries of Ancient and Modern Science and Theology*. W. J. Bouton, 1877

Besant, it was the logical spiritual extension of the law of cause and effect, once she had accepted the principle of reincarnation

Theosophy as defined in *The Secret Doctrine* heavily relied on ancient Eastern texts such as the Upanishad. However, Annie Besant realised that unlike the Bible, these sacred texts were not meant to be considered as supernatural revelations, but as the teachings of adepts, whom she viewed as part of the natural order.

As for phenomena, to Annie Besant, they did not go against the laws of nature, but used powers that scientists did not yet know how to explain. She says in her second autobiography:

... constantly [Madame Blavatsky] would remind us that there was no such thing as "miracle"; that all the phenomena she had produced were worked by virtue of a knowledge of nature deeper than that of average people, and by the force of a well-trained mind and will.

To her, therefore, Theosophy not only incorporated contemporary scientific discoveries such as evolution, but it also went beyond to reveal the metaphysical explanation of these observations which had so puzzled and frustrated her before. This is the reason why, Annie Besant, the intellectual scientist, recalls that, discovering *The Secret Doctrine*: "I was dazzled, blinded by the light in which disjointed facts were seen as parts of a mighty whole, and all my puzzles, riddles, problems, seemed to disappear."

"The seer and the scientist have met"

In 1907, the year Annie Besant was first elected President of the International Theosophical Society, she gave a series of lectures in London that can be considered as her manifesto. This makes it all the more important when she asserts:

H.P.B. [...] did not give a body of teachings to be swallowed, to be taken on authority, to be accepted by what is called faith; but a body of verifiable teachings, facts to be examined over again, facts to be experimented on, to be carefully studied, as the scientific man studies the part of the world he knows.

In those 1907 lectures, Annie Besant deplored the fact that the Society's third object — To investigate unexplained laws of nature and the powers latent in Man — had been neglected, and she called for a renewed focus on that part of Theosophy's mission:

Therefore I would claim for the Society its place as a seeker after new knowledge, [...] it seems to me that it is a duty of the Theosophical Society, not only to deal with the facts that others have verified, but to carry on researches by properly qualified persons among its own members; to utilise its magnificent theories, its knowledge—for they are more than theories.

Yet, Annie Besant still made it very clear in this lecture: "There is nothing miraculous or supernatural, but everything is the orderly product of Nature working along definite lines", and she insisted on a scientific point of view and method:

You must try, in all psychical research, in all weighing of observation of phenomena, to cultivate the purely scientific spirit, indifferent save to the truth and the accuracy of the results, [...]; not seeking for facts to verify a doctrine already believed in, but seeking for facts in order to draw conclusions from them as to the laws and truths of the unseen world.

By then, her view of Science had come to incorporate Ancient and Eastern science. As early as 1898, in a series of conferences entitled *Evolution of Life and Form*¹⁷, Annie Besant gave a clear

¹⁷ BESANT, Annie. *Evolution of Life and Form*. London & Benares: Theosophical Publishing Society, 1900 (1898)

definition of the difference between ancient and modern sciences, both of which she had already considerably explored¹⁸:

The fundamental difference between ancient and modern science is that [...] The first studies life, and sees in forms the expressions of life. The second studies forms, and tries, by the process of induction, to find out if there be an underlying principle by which the multiplicity of forms may be explained. The first works from above downwards, the second from below upwards, and in that very fact is the promise of a meeting place where the two will join hand in hand.

In this conference, Annie Besant called for “the ultimate union” of Ancient and Modern, Eastern and Western sciences, so as to revive on a solid, scientific basis “the olden times [when] Religion and Science were wedded together, and there was no discord between the intelligence and the spirit”. As a leading Theosophist and a scientist, Annie Besant considered this one of her most important missions. To her, the bridge between Science and Spirituality had been broken, with: “religion on the one side suspicious of science in its progress; science on the other hand apt to be proudly contemptuous of religious claims.”

Annie Besant then described the ancient type of scientist, whom she clearly considered as an ideal that she herself hoped to emulate, and whose method of investigation she used:

he has to study life, not form; and for such study he must evolve himself, the life that is within him, for only life can measure life, only life can respond to the vibrations of the living; his work is to unfold himself, to bring out of the depths of his own nature the divine powers that lie hidden therein, not in the senses but in the Self. His investigations can only be carried on by means of these powers.

Annie Besant developed a method of investigation based on yoga and meditation, so as to induce astral travels and clairvoyance, and she put it into practice with Charles W. Leadbeater. The result led to two major essays: *Thought-Forms*, first published in 1901¹⁹, and most importantly here, *Occult Chemistry*, subtitled “A Series of Clairvoyant Observations on the Chemical Elements”, first published in 1908. According to E.P. Sinnett, who revised the essay in 1919²⁰, some of Besant and Leadbeater’s clairvoyant discoveries were validated by those of Russian chemist Dimitri Mendeleef, who had devised the periodic table, of Marie Curie, and of Sir William Crookes. I’m not competent to verify Sinnett’s claims about Mendeleef and Curie, but Crookes himself was favourably impressed by *Occult Chemistry*. He was a highly respected British chemist and physicist, and a member of the Royal Society. He had discovered thallium in 1861, then helium in 1895, and he worked on uranium and radioactivity. Crookes believed science had a duty to study unexplained phenomena, so he had joined the Society for Psychical Research, becoming its president in the 1890s, as well as the Theosophical Society itself.

In 1989, B. Alan Wallace published *Choosing Reality: A Contemplative View of Physics and the Mind*, based on his PhD²¹. Almost one century after Annie Besant, he too called for a way “to transcend the split between science and religion by seeking parallels between insights in modern physics and in mysticism”. The method of scientific investigation he advocated is strikingly similar to Besant and Leadbeater’s, for he too looked to the East: “Other cultures, such as those of classical India and Tibet, have devised alternate approaches entailing the refinement of human consciousness as a means of empirically investigating physical reality”.

¹⁸ see also BESANT, Annie. « Materialism undermined by Science », a lecture given in Calcutta in 1895

¹⁹ BESANT, Annie and Charles W. LEADBEATER. *Thought-Forms*. Adyar: Theosophical Publishing House, 1901

²⁰ BESANT, Annie and Charles W. LEADBEATER. *Occult Chemistry: A Series of Clairvoyant Observations on the Chemical Elements*: London: Theosophical Publishing House (Revised Edition edited by A.P. Sinnett, 1919) (1908)

²¹ WALLACE, Alan B. *Choosing Reality: A Contemplative View of Physics and the Mind*. Boston: Shambala, 1989

The following quote, from Annie Besant's 1898 conference *Evolution of Life and Form*, proves how well-read in contemporary science she was:

it is very significant that some of the greatest problems of modern science are now turning on the nature of the atom, and that scientists are asking, what is it? Is it matter or force? Is it a particle or a vortex? Never will that question be answered with certainty until man has developed in himself the power to respond to the life that thrills in the atom [...]

She even was a visionary (from a Western point of view, that is), anticipating modern and quantum physics when she wrote, as early as 1898: "everything depends on vibration. [...] The universe is made up of vibrations". (Albert Einstein's general theory of relativity that inaugurated modern physics was first published in 1915, and quantum physics developed in the 1920s). Her questionings and conclusions still proved valid almost one century later, when they were taken up by quantum physicist Fritjof Capra in *The Tao of Physics*, first published in 1975, and subtitled "An exploration of the Parallels between Modern Physics and Eastern Mysticism"²².

To me, in the same visionary way, Annie Besant even anticipated the discovery of the double helix of DNA by over fifty years, when she wrote, still in 1898, in *Evolution of Life and Form*:

I have read in an ancient book of a mountain — which is the emblem of stability, of an axis round which everything is to revolve — thrown into a mighty ocean; and I have read of a great serpent turned round that mountain in spiral coils; on the one side the Suras are pulling and on the other side the Asuras are equally busy. Between the two — the positive and negative of modern science— Evolution is started and the serpent spiral begins to turn and turn round that axis.

Conclusion

So, Annie Besant herself retrospectively appears as the seer, when she writes in 1898 of: "the seer, who, looking at the ocean of matter, described pictorially what the eyes of the spirit beheld there". However, far from rejecting "the dry scientific statement of the modern thinker", as she put it, she considered that in such instances: "The seer and the scientist have met." I'd say that they met *in* Annie Besant, who personified through her life and her quest for Truth the bridge between science and spirituality.

²² CAPRA, Fritjof, *The Tao of Physics: An Exploration of the Parallels between Modern Physics and Eastern Mysticism*. Boston: Shambala, 2000 (1975)