
Study in Fairies: Arthur Conan Doyle's Alternative Science and the Cottingley Fairy Photographs

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ABSTRACT

Arthur Conan Doyle's involvement in what amounted to a "case" revolving around the Cottingley Fairies, that is, the fact that he once published a number of photographs apparently featuring fairies, claiming they showed no evidence of forgery, has generally been considered by scholars to be simply an expression of Doyle's already-held belief in spiritualism. This article challenges this interpretation and examines the investigation of the fairy photographs as part of Doyle's development of alternative science. Comparing Doyle's method with those of psychical researchers of his time and with the philosophy of science proposed by Charles Sanders Peirce, and also looking at unpublished letters exchanged between Doyle and others involved in the case, this article argues that Doyle, combining psychical and spiritualist research methods, largely maintained his attitude as an investigator in search of truth, mediating among scientists, spiritualists, and the public. This article further suggests that, with reference to Peirce's arguments on God, Doyle might have "seen" fairies in the fifth fairy photograph as a result of his unique alternative science.

KEYWORDS Arthur Conan Doyle, the Cottingley Fairies, alternative science, spiritualism, psychical research, Charles Sanders Peirce

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Introduction

The study of British spiritualism of the late nineteenth and early twentieth centuries has increasingly identified a complex relationship between the natural sciences and observations of psychic phenomena of the period, following a different direction from earlier research trends, which had laid bare the socially and culturally subversive roles played by mediums and believers with reference to gender politics. As Christine Ferguson argues, “[n]ow the links between Victorian science and spiritualism are so well established as to be virtually truistic in the scholarship on the movement, second in ubiquity only to the assertions of spiritualism’s potential for feminist emancipation and gender subversion” (“Recent Scholarship” 19). She recognizes the importance of this approach over the woman-focused reading of the subject, for the 2000s’ intense preoccupation with spiritualism’s construction of femininity risked recapitulating the gender-based nature/culture dualism that historically excluded women from rationalist traditions and practices (“Recent Studies” 432-33). Richard Noakes’s pioneering book, *Physics and Psychics* (2019), for example, positions the scientific discourse on psychical phenomena as a central rather than peripheral area in the history of science. He demonstrates that psychic phenomena occupied an important place among the physical sciences of the late nineteenth and early twentieth centuries, and the interaction between science and psychic phenomena led to important changes in physical theory and experimental methods. This type of study reflects recent recognition in the historiography of sciences that the boundary between science and pseudo-science was blurrier than often thought. Researchers consider spiritualists who adopted empirical and experiential approaches to the spirit world to be agents constructing not pseudo-science but alternative science or even an independent scientific culture (Noakes, “The Sciences” 26-27).¹

In step with this research trend, studies on Arthur Conan Doyle have also pointed to Doyle’s relationship with such an alternative science. Doyle’s conversion to spiritualism in 1916 initially puzzled researchers who saw a contradiction

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¹ For further discussions that regard Victorian spiritualism/psychical research as more science rather than pseudo-science or beliefs, see, for example, Lamont; Luckhurst; and Noakes, “Spiritualism.”

between his rational detective fiction and his belief in “irrational” spiritualism. Later research, however, effectively placed his spiritualist beliefs in a contemporaneous context by noting Doyle’s longstanding interest in psychic phenomena (Kerr 216-18), marshaling evidence including his membership of the fledgling Society for the Psychical Research (SPR) before his conversion to spiritualism (218), and observing that his conversion coincided with the re-ascension of spiritualism to popularity after the mass deaths of World War I (Owen, “Borderland” 66-67). These studies rightly point out that the methods adopted by psychical study groups and spiritualists of the time were materialistic and aimed at creating a new science, and that Doyle did not entirely deviate from this. Anna Branford, in her discussion of the relationship between religion and science using Doyle’s case relating to fairy photographs, argues: “[b]eyond the striking discursive elements of the case, there is a more general sense in which Doyle’s approach to the fairy photographs might be understood as scientific, rather than religious, in nature” (97).

However, in attempting to go beyond pointing out the connection between Doyle and alternative science, previous studies have focused on the significance of Doyle’s interest in the psychic rather than on how novel Doyle’s practice was to alternative science. Prominent among these works are studies that relate Doyle’s belief in spiritualism to an imperialist perspective. Diana Barsham, for example, argues in *Arthur Conan Doyle and the Meaning of Masculinity* (2000) that the ardent spiritualist campaigner who also created the world’s most famous fictional detective embraced heterodox movements as a means of creating a newly revitalized imperial masculinity that seemed unattainable through conventional religious routes. Merrick Burrow, on the other hand, points out that Doyle’s Gothic narratives are distinct from the superstitions of uncivilized societies in an attempt to justify the existence of spirit as a verifiable entity (314), but Burrow also interrogates the scientific naturalism of the British Empire by signifying the way the foregrounded objects in the narratives move between naturalism and spiritualism (312-21). Although these arguments provide a complex view on the relationship between the supernatural and imperialism in Doyle’s writings and intellectual activities, they do not adequately clarify whether Doyle’s approach to the psychic could have any potential or novelty in the context of alternative science.

This article investigates some of the rich variations in alternative science in relation to Doyle’s spiritualist activities. For this purpose, we examine the case of the Cottingley Fairies, in which Doyle investigated multiple photographs apparently of fairies before releasing them to the public vouching for their veracity. Examining Doyle’s involvement in the case of the Cottingley Fairies is necessary because, as will be made clear later, the approach he took toward these photos differs in many

ways from the relatively uncritical stance he took toward his belief in spirits in his main spiritualist writings. To put things in perspective, this article will examine the methods of psychical research adopted by his contemporaries, as well as the scientific views of the logician Charles Sanders Peirce.² Peirce is seldom mentioned in spiritualism studies, unlike Frank Podmore, Fredric Myers, Edmund Gurney, William James, Oliver Lodge, and other scientists who played important roles in the early days of the SPR. However, Peirce scholars have long noted that he paid attention to psychical research, engaged vigorously in constructive criticism, and thus could be counted as a key figure in the early days of psychical research (Braude 203-04). Peirce is peculiar because eventually he did not become a member of the SPR and, while appreciating the society's aims, was critical of its methodology. This positionality is, as will be discussed later, compatible with his unique discussion about the reality of God and his claim to have perceived God's presence. As opposed to the SPR, which attempted to demonstrate, reproduce, and accumulate testimony, Peirce suggested that, in a meditative state, individuals become convinced of the existence of a metaphysical reality. In this sense, Peirce's ideas on scientific and religious themes are useful in assessing Doyle's characteristic method of testing fairy photography, which not only employs the SPR method but also shows unempirical conviction of the photograph's authenticity.

The first two sections will pave the way for our inquiry: first, an overview of the Cottingley Fairies, along with a discussion of the rigid views found in earlier research regarding the case; next, a look at the relationship between Peirce and psychical research, and a comparison between Peirce's thinking and Doyle's attitudes on the case. In sections three to five I will elaborate the thesis of my article and examine Doyle's method in the Cottingley Fairies by comparing it with the methods employed by the psychical researchers of his time and with Peirce's philosophy of science, as well as by studying unpublished letters exchanged between Doyle and others involved in the case. These arguments identify the realities of Doyle's alternative science, which cannot be reduced to mere belief, irrationality, or pseudo-science but should be taken as his attempt to explore the truth of the supernatural.

² Some studies have identified a link between Doyle and Peirce in terms of Sherlock Holmes's style of reasoning, which resembles abduction, a scientific method of reasoning proposed by Peirce (see Sebeok and Umiker-Sebeok; Shead). However, these studies were conducted in contexts unrelated to spiritualism or psychical research.

The Cottingley Fairies

The incident known as the Cottingley Fairies began with two photographs produced in 1917 by Elsie Wright, aged sixteen years, and Frances Griffiths, aged nine years, from Cottingley, a village in West Yorkshire, England, that apparently represented fairies (Figures 1 and 2). The fairies were made of paper and affixed vertically with hatpins. The girls, however, insisted that they were real fairies, meaning to play a joke on their parents and friends. Years later, Elsie's mother, Polly Wright, handed the photographs to a theosophist when attending a lecture at the Theosophical Society³ in Bradford,⁴ hoping to determine their authenticity (Cooper 56-58). The fairy photographs were subsequently forwarded to Edward Lewis Gardner, the president of the Blavatsky Lodge of the Theosophical Society in London, because he was known to be interested in examples of psychic photographs (Gardner, *Pictures* 17). News of them soon reached Doyle, who was writing an article on the belief in fairies in folklore. Doyle contacted Gardner, and together they commenced an investigation of the photographs. They consulted photographic experts and scientists on the photographs' authenticity and had the girls take more fairy photographs to ensure their repeatability. The girls produced three more fairy photographs using the same trick (Figures 3-5).⁵ After testing them, in November 1920, Doyle published an article on the first two photographs, giving a judiciously expressed but ultimately quite positive narrative of their authenticity in *The Strand* magazine's Christmas issue ("Fairies Photographed" 402-08). In the following year he published two more fairy photographs in *The Strand* ("Evidence" 199-206). Finally, in *The Coming of the Fairies* (1922) (hereafter referred to as *Coming*), Doyle detailed the whole course of his investigation, published all the fairy photographs, and invited reports and testimonies from theosophists and clairvoyants regarding their observations of fairies.

Previous studies have generally tended to place Doyle's attitude toward spirits in the context of the alternative sciences of his time or understand it as a response to the mass deaths of WWI. However, the Cottingley case, in which fairies are a point of contention, has been treated either as an expression of Doyle's credulity or as a justification for his spiritualist beliefs, with some exceptions such as Branford's study

³ The Theosophical Society was founded by Helena Blavatsky and Colonel Henry Steel Olcott in 1875 in New York City. In the occult movement, Blavatsky adopted ancient occult beliefs and effectively used the preceding spiritualism to propagate her "divine wisdom" (Oppenheim 163-64).

⁴ West Riding, a district of Bradford, was one of the centers of spiritualist activity (Owen, *Darkened* 21-22).

⁵ As for the fifth fairy photograph, however, Frances claimed that it was she who photographed the last one without any tricks and that it captured real fairies (Griffiths 58).

(see Introduction). No further significance of Doyle's involvement in the Cottingley case has been found in previous studies. Alex Owen notes that "[s]piritualism framed the Cottingley episode for Conan Doyle, was part of his motive for publicizing it, and made possible his ready acceptance of the fairies as authentic" ("Borderland" 68). Angela Fowler mentions the Cottingley Fairies as "the most famous example" of Doyle's psychic "facts" that do not hold up to scrutiny (459). Douglas Kerr also argues that the episode of the Cottingley Fairies is to be understood as a simple expression of Doyle's belief in spiritualism. He says, "[s]piritualism provided him with methodologies, explanations, and arguments that could be used to make the case for the fairies" (238). Catherine Wynne, in her discussion on Doyle and psychic photographs including the fairy photographs, argues that when judging them, Doyle adopted the opposite of Holmes's deductive method and ignored questionable points (388-89). Such studies commonly suggest that Doyle, who had already exhibited a belief in spirits, believed in fairies and the fairy photographs without demonstrating reasonable skepticism or following procedures that would be appropriate in an investigation of such a phenomenon.

However, Doyle's involvement in the case cannot simply be reduced to his previously held belief in spiritualism. Even if he wished to believe in fairies, he was careful about the representation of his belief in spiritualism at the time when he wrote about the fairy photographs. The following letter indicates the intricate circumstances. After Doyle submitted his article to *The Strand* for its Christmas issue in 1920, he traveled to Melbourne to undertake a lecture tour on spiritualism. In *The Wanderings of a Spiritualist* (1921), he reflects on this trip as a failure, saying, "I was welcome enough as an individual, but by no means so as an emissary, and both the Churches and the Materialists, in most unnatural combination, had done their best to make the soil stony for me" (88-89). The local press also reported that "the one thing clear is that Sir Conan Doyle's mission to Australia was a mournful and complete failure, and it has left him in a very exasperated state of mind" (qtd. in Jastrow 416). Doyle must have noticed this harsh reception. While on the tour, on October 7, 1920, he wrote a short letter to Gardner:

I feel as if I had prepared a long delay mine [the article on fairy photographs], run away and left you sitting on the top of it. I expect I shall hear the boom over here. I hope you won't be incommoded by the explosion. My work goes rarely well. The soil is parched and drinks it all in. Plenty of breezy opposition too. (Doyle, Letter to Gardner, 7 Oct. 1920)

In comparison with the first three sentences showing his expectation that the fairy photographs would attract controversy, Doyle felt that the “soil” had dried up, and he became deeply pessimistic regarding his spiritualist mission. He seemed to be acknowledging that his earlier books and lectures on ghosts and spirits could not bring his critics over to his way of thinking, as they were written for converted spiritualists. He then tried a more neutral stance, using fairies, which would evoke not the hackneyed subject of spiritualism but agents that were once human, such as ghosts and spirits.

**Doyle's
Alternative
Science**



Figure 1. Frances and the Fairies (*Coming* 31). All images courtesy of the Conan Doyle Estate.

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Figure 2. Elsie and the Gnome (*Coming* 39)



Figure 3. Frances and the Leaping Fairy (*Coming* 67)



Figure 4. Fairy Offering Posy of Hare-bells to Elsie (*Coming* 71)



Figure 5. Fairies and Their Sun-bath (*Coming* 73)

Peirce and the Psychological Studies

A logician and mathematician, Peirce was the founder of modern semiotics and pragmatism. Before discussing the relationship between him and the SPR, it is necessary to give an overview of influential ideas on scientific methodology that Peirce developed. This is because these ideas are fundamentally what connect him to the SPR. In "The Fixation of Belief," Peirce explicate four methods that people use to solidify their beliefs: tenacity, authority, *a priori* method, and science. Only the last, he argues, enables us to fix our beliefs permanently, whereas the others are controlled by individual will (250-54). Science here must begin with observed facts, which should be done socially, not solitarily, and error plays a central role (this is the so-called fallibilism) that makes us aware that there is a world out there that is independent of what we may think it to be when we are wrong. For this method, three basic modes of argumentation are necessary: abduction, induction, and deduction. In abduction, which Peirce calls hypothesis, we search for a hypothesis to explain a surprising phenomenon that deviates from an empirical formula. Such a hypothesis should be formed by using the regulative principle of the economy of research. Then we use deduction to extract everything that can be derived from that hypothesis and our other beliefs. Finally, using induction, we can test the hypothesis (de Waal 102-07).

Peirce's scientific methodology, as described above, fits the patterns of psychological and telepathy research published by Edmund Gurney, Frederic W. H. Myers, and Frank Podmore in the lengthy two-volume book *Phantasms of the Living* (1886). This book describes the phenomenon of a dying person appearing to another person who is far away. For this work, they collected a vast number of testimonials and conducted experiments to test the hypothesis that telepathy exists and deviates from the normal laws of nature. In fact, soon after the study was published, Peirce published a paper criticizing not the hypothesis of the existence of telepathy, but the inadequacy of the methods used. In "Criticism on *Phantasms of the Living*," Peirce lists eighteen reasons for the inaccuracy of the SPR methodology employed by Gurney, Myers, and Podmore. He states, for example, that the SPR methodology includes for consideration inaccurate testimony, the testimony of those who are not in good health, testimony that may be based on imagination, and testimony for which the credibility of the witness cannot be determined (74-81). In other words, Peirce, as a member of the scientific community, pushed for the scientific method to overcome errors and move toward truth by refining the SPR methods. Gurney thanked Peirce for his in-depth criticism and said, "some of Mr. Peirce's structures depend (as I shall hope to show) on distinct errors and

misconceptions, while others appear to me to be unreasonable and overstrained. On the other hand, he has pointed out some errors on my part; and in so doing, and generally in enabling me to make the present *apologia*, he has done me a valuable service” (Gurney 82). It seems clear that both the SPR members and Peirce were seeking to move psychical research forward as a science.

For Peirce, psychical research occupied an important place in his scientific theories. In an article published in *The Christian Register*, he says that a theory of the afterlife (a “future life” or “another life”), a popular subject of study for members of the SPR just as telepathy was, had not yet been validated, but it could be expected that further study would prove its existence (“Science” 373). It is important to note here that Peirce acknowledges that dealing with telepathy and other paranormal phenomena is necessarily beyond the scope of natural science in the narrow sense that ensures empirical and objective nature (Braude 211). Even though proving the existence of telepathy had nothing to do with the existing sciences, he thought that psychic researchers working in a scientific manner must eventually produce scientific results (Braude 217). He also expected that the mechanical philosophy of the universe that dominated the modern world should be replaced with spiritualist ones, saying, “[a]s well as I can read the signs of the times, the doom of necessitarian metaphysics [mechanical philosophy] is sealed. The world has done with it. It must now give place to more spiritualistic views” (Peirce, “Science” 373). Thus, Peirce expected psychical research to contribute to a broader science that would reform the prevailing mechanical worldview and support the quest for truth.

This broader science-oriented attitude was undoubtedly one that Doyle shared. The following quotation from *Coming* illustrates this well:

Victorian science would have left the world hard and clean and bare, like a landscape in the moon; but this science is in truth but a little light in the darkness, and outside that limited circle of definite knowledge we see the loom and shadow of gigantic and fantastic possibilities around us, throwing themselves continually across our consciousness in such ways that it is difficult to ignore them. . . . and that there may be upon its surface some very strange neighbours [fairies] who will open up inconceivable lines of science for our posterity, especially if it should be made easier for them, by sympathy or other help, to emerge from the deep and manifest upon the margin. (88-89)

Doyle clearly expects fairies to play the role of initiating us to a realm that was unreachable by the existing natural science. Positing the hypothesis that fairies exist, he hoped to break free from narrow-minded science. Forming an explanatory

hypothesis was, for Peirce, “the only logical operation which introduces any new idea” (Peirce, “Three Types” 106); it has played an important role in epoch-making discoveries such as Johannes Kepler’s discovery of the orbit of Mars. Likewise, the hypothesis that fairies exist was an expression of Doyle’s self-conception as a pioneer of science, not a simple expression of his belief in spirits.

The Scientific Method

In this section, we examine how Doyle’s means of investigating the fairy photographs was not a simple expression of faith in spiritualism but was rather resonant with the attempts of psychical studies to expand the realm of science. Contrary to previous scholarly views, this study attempts to reveal how his engagement with the fairy photographs differs from that of psychic photographs used to justify his belief in spiritualism.

When the Cottingley Fairies photographs caught Doyle’s eye, he was already writing an article for *The Strand’s* 1920 Christmas issue on fairy lore, based on numerous firsthand accounts. In *Coming*, Doyle, in spite of the general perception of a pre-existing belief on his part, did not declare that fairies existed. For him, the proposition that fairies exist was not something to be believed, but a hypothesis to be examined. He writes:

It is hard for the mind to grasp what the ultimate results may be if we have actually proved the existence upon the surface of this planet of a population which may be as numerous as the human race, which pursues its own strange life in its own strange way, and which is only separated from ourselves by some difference of vibrations. . . . This, however, is mere speculation and leads me to the fact that early in May 1920 I heard, in conversation with my friend Mr. Gow, the Editor of *Light*, that alleged photographs of fairies had been taken. (*Coming* 9-10)

In the letter, Doyle only speculates on the existence of different and unanticipated types of life after bringing witness testimony to bear. Using the type of thinking that Pierce termed abduction, Doyle sought a hypothesis that would explain the phenomenon of witnessing fairies, which seemed to deviate from empirical formulas.

In contrast to the commonly held view among scholars that the Cottingley Fairies photographs convinced Doyle of the existence of fairies (Kerr 241), it is unlikely that Doyle would have considered them alone as adequate to prove the

hypothesis. Similar to Peirce's contention that abduction should be followed by deduction and induction, Doyle also collected every possible specialist opinion and made an intensive investigation, aided by the theosophist, Edward Gardner, whom Doyle contacted after hearing that he possessed the fairy photographs. Doyle first asked the world-renowned physicist Oliver Lodge to judge the prints, a man whose spiritualist book⁶ had prompted Doyle to announce that he was a committed spiritualist (Kerr 218). Looking at the pictures, Lodge "refused to accept them at their face value and suggested the theory that the Californian Classical dancers had been taken and their picture superimposed upon a rural British background" (Doyle, *Coming* 18). However, Lodge did not entirely deny the possibility that the photographs were genuine. In a letter to Gardner, Lodge wrote:

I need hardly emphasize the fact that photographs are always completely dependent on human testimony, they are not really able to speak for themselves, for, though expert testimony about photographs is undoubtedly of value, the circumstances under which they were taken are essential to our knowledge. (Lodge, Letter to Gardner).

Lodge pointed out that any judgment would depend on testimony from those involved in producing the fairy photographs rather than from the photographs themselves. Following this advice, Doyle sent Gardner to Cottingley to interview the girls and their relatives.

This decision was exceptional among Doyle's narratives on spiritualism. Other spiritualist works of Doyle show that his attitude was based on a *a priori* belief in spirits rather than a rational concern with them. In his first spiritualist book, *The New Revelation* (1918), he explained the reason why he decided to be a spiritualist rather than a psychical researcher—the Great War:

But the War came, and when the War came it brought earnestness into all our souls and made us look more closely at our own beliefs and reassess their values. In the presence of an agonized world, hearing every day of the deaths of the flower of our race in the first promise of their unfulfilled youth, seeing around one the wives and mothers who had no clear conception whither their loved one had gone to, I seemed suddenly to see that this subject with which I had so long dallied was not merely a study of a force outside the rules of science, but

⁶ Lodge published *Raymond or Life and Death: With Examples of the Evidence for Survival of Memory and Affection After Death* (1916), in which he shared his experiences of receiving a message through a medium from his dead son, Raymond, who had been lost in the trenches during WWI.

that it was really something tremendous, a breaking down of the walls between two worlds, a direct undeniable message from beyond, a call of hope and of guidance to the human race at the time of its deepest affliction. (38-39)

As the quotation shows, Doyle decided to adopt psychical beliefs regardless of the absence of sufficient evidence. For him, giving hope to people who had experienced severe grief in losing members of their family, lovers, and friends was a consideration that came before questions of scientific explanation or sufficiency of evidence. Doyle also naively believed in the authenticity of spirit photographs. In the section titled "Spirit Photography" in his spiritualist work, *The Vital Message* (1919), he reproduces photographs without detailed information as conclusive evidence for the survival of a soul after death. He states, "which [one of the spirit photographs] is enough in itself to prove the whole case of survival to any reasonable mind" (*Vital Message* 158-59). This suggests that he considered psychical photographs as self-evident proof. Taking this over-trustfulness into account, it is evident that Doyle's investigation regarding the fairy photographs seems quite distinct from the issue of spirits.

Doyle's and Gardner's investigation and the basis of their evaluation clearly reflected the methods of the SPR. Using Gardner's report of his interview with Elsie, Frances, and their parents, Doyle stresses their honesty (*Coming* 70). He does the same for the numerous other witness testimonies he cited in *Coming*. He affirmed the informants' reliability, characterizing them as "very solid and practical and successful in the affairs of life" (99). As Lodge made Doyle and Gardner take testimony from those involved in the fairy photographs, testimony was highly weighted in the SPR research, which led the French philosopher Henri Bergson to assert that if concrete testimony "provides conviction," then the existence of telepathy can be considered conclusively substantiated, even if there are thousands of false illusions (Bergson 108). Regarding his subjective criterion of conviction, Bergson did not provide any clear conditions; psychical research at that time did not have an incontrovertible means of dealing with such witness testimony.⁷ Therefore, Doyle had no choice but to judge each witness's reliability by his own standards, even though one writer had accused him of just echoing the girls' statements that their photographs were not faked (*Coming* 59-60).

In line with Peirce's assertion that it was necessary to perform science socially,

⁷ This attitude is also shown in Gurney's remarks. In responding to Peirce's criticism of the SPR's method for their loose standards of testimony which they include for consideration, Gurney finally concludes that "I have expressly stated in *Phantasms of the Living*, that, though the book may reasonably be accepted as supplying a proof of Telepathy, the proof is not one which all candid minds are likely to accept" (Gurney 100).

not solitarily, Doyle and Gardner brought in photography experts to examine the photographs. At that time, many psychic photographs were produced using double exposure or double printing, and experts were better equipped than Doyle and Gardner to detect traces of this type of fakery. They consulted a number of experts in photography, including H. Snelling and the staff members of the photography company, Illingworth. Snelling was a photographer who ran a studio in Harrow. The manager of Illingworth, with whom Snelling had had a connection of over thirty years, referred to him as “the best man they [Illingworth] had, with every kind of practical photographic experience” (Gardner, Letter to Doyle, 12 July 1920). Gardner asked Snelling to examine the first two photographs twice, and Snelling stated twice that they were not forged, stating that the photographs were produced in a single exposure. Snelling not only denied the possibility of manipulation but also noted that the fairies were moving during the exposure time, unlike what was seen in other fake negatives and prints (Doyle, *Coming* 21; Gardner, *Pictures* 17-18). However, the representatives from Illingworth could not provide similar certainty. Although they did not detect any evidence of trickery, they also said that they could produce a similar negative via studio painting and modeling (Doyle, *Coming* 25).

Although the suspicions raised by Illingworth were not confirmed during Gardner’s field trip, Doyle was not satisfied with having only two photographs and hoped to test their repeatability by having the girls take more. This process reflects the SPR’s methodological recommendation, as urged by Edmund Gurney, that psychical research “needed a subject that appeared capable of precise, repeatable experimentation and verification” (Oppenheim 143). Doyle and Gardner provided the girls with new cameras and plates that were secretly marked to ensure that the girls could not substitute their own plates. Doyle and Gardner succeeded in acquiring three new fairy photographs from the girls by this means. The second series of the fairy photos seemed more convincing to the experts. Doyle and Gardner requested the same experts to examine the new photographs. Snelling offered a more positive opinion, especially regarding the fifth one in the overall series. According to Gardner, “Snelling without hesitation pronounced the three as bearing the same proofs of genuineness as the first two, declaring further that at any rate the ‘bower’ one [the fifth photograph] was utterly beyond any possibility of faking” (Doyle, *Coming* 68). Illingworth, which had questioned the genuineness of the first series, endorsed Snelling’s opinion this time (Doyle, *Coming* 68). Ultimately, this shows that Doyle’s investigation of the photographs followed many of the steps that Peirce and the SPR scientists set as important elements in the scientific method that could broaden the definition of science.

The Spiritualist Method

This section examines how Doyle's method, which had kept pace with the contemporaneous conception of science, eventually deviated from it. In particular, we focus on Doyle's use of psychic beliefs in the course of his investigations. By the term "spiritualist method," we do not intend to argue that Doyle employed *a priori* belief in spirits to judge psychical phenomena as he did when, as is mentioned in the previous section, he decided to believe in spiritualism regardless of the absence of sufficient evidence. This section contends that spiritualist remarks and beliefs were instrumental in furthering Doyle's investigation rather than, as previous studies have claimed, being the ultimate principle used to prove the veracity of the Cottingley Fairies photographs.

In spite of the investigation reported above, Doyle's investigation proceeded in line with the recommendations and opinions of his spiritualist colleagues, and his attempts to explain the situation from a spiritualist perspective gave the strongest impression of irrationality. For example, in a letter to Gardner dated July 5, 1920, two days after Doyle had asked Lodge for his opinion of the photographs, he also asked Kennett Styles, an authority on fairies, for his opinion. Doyle wrote that Styles was skeptical: "[Styles] was suspicious. 'If my surmises are correct,' he writes, 'one at least is a most patent fraud and I can almost tell you the studio it came from . . . the coiffures of the ladies are much too Parisian'" (Doyle, Letter to Gardner, 5 July 1920). In a letter to Gardner dated July 18, Doyle again reported that Styles was informed about the person who took the fairy photographs by his "control," or spirit guide, as follows.

My [Styles's] own control says it was taken by a fair man short, with his hair brushed back; he has a studio with a lot of cameras, some of which are "turned by a handle." He did not make it to sell Spiritualists a "pup," but did it to please the little girl in the picture who wrote fairy stories which he illustrated in this fashion. He is not a Spiritualist, but would laugh very much if anyone was taken in by it. He does not live near where we were, and the places is all different, i.e., the houses, instead of being in straight lines, are dropped about all over the place. Apparently he was not English. I should think it was either Denmark or Los Angeles by the description, which I give you for what it is worth. (Doyle, Letter to Gardner, 18 July 1920)

Here, Styles was reporting the results of a psychic vision through which he spoke with a spirit as a medium. Treating this statement as reliable would necessitate a

belief in spiritualism. However, Doyle included this report in *Coming*, telling us that this opinion was important to himself and Gardner, and that Gardner again asked Snelling to investigate the authenticity of the photos in response to Styles's criticisms (*Coming* 19-21).

Furthermore, in a letter to Gardner dated August 6, 1920, Doyle suggested that it would be necessary to ask an acquaintance with psychic powers to verify Elsie's abilities (Doyle, Letter to Gardner, 6 Aug. 1920). This plan apparently did not come to fruition, but Gardner's friend Geoffrey Hodson, a psychic, was sent to Cottingley to verify the girls' psychic powers. Hodson reported that he saw more fairies and little people than the girls did, describing a variety of fairies of different appearances and in different habitats. Although Frances testified that some of the fairies Hodson claimed to have seen were made up by herself and Elsie (Griffiths 65), this was not revealed until seventy years later. In *Coming*, Doyle describes Hodson, who appears in the book under the pseudonym "Mr. Sergeant," as "an honourable gentleman with neither the will to deceive nor any conceivable object in doing so" (*Coming* 75) and quotes his report verbatim in chapter five of the book. Thus, Doyle uncritically uses spiritualist psychic-based opinion as part of the verification process.

However, Doyle was well aware of the danger of disclosing these aspects of his process, knowing they would likely reduce the reliability and rationality of his own verification to the readers. In referring to the aforementioned message from Styles, Doyle writes, "This gentleman [Styles] had a spirit guide (I have no objection to the smile of the sceptic)" (*Coming* 19), indicating an expectation of being ridiculed. Furthermore, after he quoted the letter from Styles, Doyle says, "[a]ll this is, of course, quite non-evidential to the ordinary reader, but I am laying all the documents upon the table" (20). This statement also indicates that he anticipates the disapproval of non-spiritualist readers, and that these facts are only part of the steps taken by Doyle and his fellow investigators.

Doyle took this risk because the influence of spiritualists on their investigation would have been too much for Doyle and Gardner to ignore. It was not only non-spiritualists but also spiritualists who were interested in the Cottingley fairy photography, and for Doyle and Gardner, responding to criticism from spiritualists was an important part of the validation process. This is suggested by unpublished correspondence between Gardner and Barbara Mckenzie of the British College of Psychic Science Society. Gardner was asked by Mckenzie shortly after Doyle's initial contact, to send the photographs in question to paranormal photographer Fred Barlow (Mckenzie, Letter to Gardner). Subsequent correspondence between Barlow and Gardner ensued, and Barlow's initial assessment of the photographs was quite negative (Barlow, Letter to McKensie). However, when Barlow learned that

Gardner had already contacted some experts in photography and was continuing to investigate the matter, he expressed his appreciation and, after pointing out in more detail the questionable nature of the fairy pictures, concluded with the words, “[d]espite my criticism I have always found that in psychic matters ‘things are not always what they seem’ and it does not require a very wide stretch of imagination to conceive that little fairies may be actual materialisations and that one or both of the girls are sensitive” (Barlow, Letter to Gardner). At this point, spiritualists, upon becoming interested in the Cottingley Fairies photographs, criticized them vigorously. Doyle, needing to convince both non-spiritualists and spiritualists alike, proceeded with his investigation in reaction to spiritualist opinion even though this risked giving the impression that he was not actually conducting a process of scientific verification for non-spiritualist readers.

However, Doyle did not appear to believe that he could make unlimited spiritualist statements so long as he was making concessions to nonbelievers. He also took great care not to confuse his readers by intentionally changing unnecessary spiritualist assertions that convey the impression of *a priori* belief in the supernatural. Although he referred to the letters from spiritualists as “simply a collection of facts” (Doyle, *Coming* 3), some words and sentences were altered from the originals to reduce what he found unfavorable in their “common-sense” approach. In one letter, Gardner wrote, “Mrs. Wright, a few years back, came into touch with theosophical teachings and speaks of these as having ‘rescued her from atheism’” (Gardner, Letter to Doyle, 31 July 1920). However, Doyle changed the words “rescued her from atheism” to “done her good” (*Coming* 26). Additionally, in another place, Gardner originally wrote, “the children had played with fairies and elves in the woods near their village since babyhood” (Gardner, Letter to Doyle, 25 June 1920), but Doyle changed “had played” to “are said to have played” (*Coming* 16). These minor revisions suggest that Doyle was covering up statements of belief in God and *a priori* convictions of the existence of fairies to keep the attention of the non-spiritualist readers.

Thus, for Doyle, spiritualist terminology and knowledge were tools he could use to pursue verification and attempt explanations. In this respect, Doyle’s method deviates from the SPR’s and Peirce’s method of scientific inquiry, which was oriented solely toward explaining psychic phenomena scientifically without providing an explanation in spiritualist terms. However, this does not mean that Doyle’s investigation could be reduced to simply relying on the beliefs of spiritualism. Even if Doyle’s methods deviated from the existing methods of psychical research, he was still a researcher, not a believer, in the sense that he was using every possible method to test the hypothesis that fairies exist. In this process, the

narratives he developed were equally open to scientists, spiritualists, and the general reader, and in his work, he mediated among the three.

Not an Investigator Nor a Believer But a Seer

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As noted above, in verifying the fairy photographs, Doyle followed the methods used by the SPR, while at times instrumentally adopting explanations and methods from a spiritualist view, developing a unique approach to verification that deviated from the general SPR methodology. In this phase, Doyle did not assert the existence of fairies, or the authenticity of the fairy photos based on *a priori* beliefs, maintaining his attitude of being an investigator in search of truth.

This section would like to focus on the moment when Doyle dropped his investigatory attitude, namely, when he expressed his definite belief, especially in the fifth photograph, a moment that previous studies have largely ignored. This exceptional moment arrived in Doyle's comments on the second series of the photos (Figures 3-5), taken by Elsie and Frances in 1920:

Any doubts which had remained in my mind as to honesty were completely overcome, for it was clear that these pictures, specially the one of the fairies in the bush [the fifth fairy photograph, Figure 5], were altogether beyond the possibility of fake. (Doyle, *Coming* 66)

This particular statement appears to impede Doyle's cautious stance as an investigator. Strangely, Doyle declared that the photographs were not fake but did not provide supportive reasons. It is also evident that Doyle somehow placed special value on the fifth photograph as a guarantee of genuineness, but again no clue was given as to why he considered it special.

It would be, however, somewhat hasty to conclude that only his faith as a spiritualist made him naively consider these photographs to be genuine; it has already been shown that while he was a believer in spiritualism, he was also clearly an investigator of the fairy photographs. Rather than concluding that Doyle's engagement with the photographs was ultimately an irrational conviction, the following argument, unlike the empirical arguments we have already set forth, suggests a possible affinity between Doyle's conviction, especially regarding the fifth photograph, and Peirce's thinking, which applied abduction to the realm of religion to prove the existence of God.

Unlike the SPR, which attempted to verify supernatural phenomena through demonstrability, reproducibility, and the accumulation of testimony, Peirce claimed

that individuals become convinced of the existence of a metaphysical reality, or God, through reflection and contemplation in a meditative state. He elaborated his view in his most enigmatic article, "A Neglected Argument for the Reality of God" (1908). In this paper, Peirce defines God as "Really [sic] creator of all three Universes of Experience" (311). The first universe of experience is the universe of Ideas, filled with "airy-nothingness" that exists only in the mind. The second is the "Brute Actuality of things and facts," knowledge of which is acquired immediately in reaction to actual things and events. The third comprises "everything whose being consists in active power to establish connections between different objects" (312). The reality of God is confirmed through the process of "Pure Play," or more specifically, "musement." Play is a "lively exercise of one's powers," and Pure Play has no rules apart from the law of liberty and no purpose but recreation. It includes musement, which refers to "considering some wonder in one of the Universes, or some connection between two of the three, with speculation concerning its cause" (313). Peirce proposed that the course of musement inevitably leads to the hypothesis that these universes have God, which is independent of them all.

Unlike his arguments on scientific inquiry, which seek to verify hypotheses through deduction and induction, this religious hypothesis is supported in an introspective way. Peirce states:

So, continuing the counsels that had been asked of me, I should say, "Enter your skiff of Musement, push off into the lake of thought, and leave the breath of heaven to swell your sail. With your eyes open, awake to what is about or within you, and open conversation with yourself; for such is all meditation." It is, however, not a conversation in words alone, but is illustrated, like a lecture, with diagrams and with experiments. (315)

This quotation shows that musement is not a shared logical or empirical method of reasoning but a private process that uses images as well as words. Leon Niemoczynski, a scholar of the religious aspects of Peircean philosophy, argues that "musement is a form of abductive inquiry that may begin not just passively or gently in a lingering thought provoked by the natural world, but also when one's settled beliefs and habits are struck by some sublime phenomenon of nature in a manner of existential shock and force" (Niemoczynski 88). Therefore, musement is a process that enables sublime or metaphysical reality to be confirmed as a result of an introspective conversation within oneself, such as meditation.

Peirce's own perceptual experience is an important factor in this discussion of God's reality. Regarding Niemoczynski's words "struck by some sublime

phenomenon of nature,” Peirce’s writings show that Peirce himself had been struck by such a phenomenon before he took to considering God as the real creator of all three universes of experience. In a letter to a clergyman, Peirce explains the mystical experience he had in 1882. Although he had been a believer in Christianity, he had not attended any church service due to his inability to reconcile his notion of common sense and evidence with the propositions of the creed. On April 24, 1882, however, he felt compelled to go to church and wandered about not knowing where to go. When he arrived at St. Thomas, he “seemed to receive the direct permission of the Master to come.” Furthermore, “when the instant came, I found myself carried up to the altar rail, almost without my own volition.” He concludes, “I have never before been mystical; but now I am” (qtd. in Brent 209-10). He later commented on the importance of this experience: “If on the other hand, a man has had no religious experience, then any religion not an affectation is as yet impossible for him; and the only worthy course is to wait quietly till such experience comes. No amount of speculation can take the place of experience” (qtd. in Brent 210; Peirce, “Vitality” 353). He also claims that “one cannot logically infer the existence of God; one can only know Him by direct perception” (Peirce, “Appendix A” 431). Thus, Peirce insisted that one can acquire knowledge of God’s existence through the abductive inquiry (musement) of Christianity, which left him in limbo between belief and logical thinking, finally enabling him to experience the “direct permission” from God. In other words, his personal experience and a sense that “God is here” allowed him to take a leap in his reasoning.

Although Peirce’s belief in God is not to be equated with Doyle’s belief in fairies, the process by which Doyle became convinced that the last photograph was authentic could be seen as a similar experience. In light of Peirce’s discussion above, Doyle’s process of gathering testimonies, interviewing witnesses, and investigating the photographs is relevant to musement, which enabled him to finally “see” fairies in the final photograph in the same way that Peirce perceived God. This inferential argument is based on the fact that the fairy figure on the left-hand side of the fifth photograph (Figure 5) is indistinct, whereas the other fairy figures are clearly visible. The reason why the relatively fuzzy fairy is considered remarkable is that such an idea fits better with the image of fairies in the witness testimonies that Doyle collected and cited in *Coming*. In chapter six, written before Doyle heard the news of the fairy photographs, he described the experience of a spiritualist, “Dr. Vanstone,” presenting a letter from him:

I have been distinctly aware of minute intelligent beings in connection with the evolution of plant forces, particularly in certain localities; for instance, in

Ecclesbourne Glen. Pond life yields to me the largest and best sense of fairy life, and not the floral world. I may be only clothing my subjective consciousness with unreal objective imaginations, but they are real to me as sentient, intelligent beings, able to communicate with us in varying distinctness. (*Coming* 98)

Doyle says that Vanstone’s “experiences are on the borderland between what is objective and what is sensed without being actually seen” (98). Doyle also provided testimony from Eva Longbottom, who had been blind from birth. Explaining various kinds of fairies, she claimed she had seen many fairies with her “mind’s eyes,” which Doyle viewed as the equivalent of being a “clairvoyant” (118-19).

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These descriptions suggest that fairies should not be understood as tangible or solid beings in the same manner as other natural beings. Instead, the descriptions of fairies possibly made Doyle consider the blurrier images in the last photograph to be more authentic and convincing than the clear, sharp fairy images in the other four.⁸ As is noted, Peirce finally perceived the existence of God as a result of his musing over the question of God’s reality. If we apply Peirce’s argument and the episode about God to Doyle’s experience, it would not be entirely irrelevant to argue that the whole process of musement, gathering testimonies and investigating the other fairy photographs, enabled Doyle to finally “see” fairies in the last photograph. Therefore, we can presume that the fairy investigator who hypothesized that fairies exist became the “fairy-seer” who confirmed that fairies are there. Rather than believing in fairies, Doyle might have finally “seen” fairies in the last photograph. In this sense, *Coming* is not only Doyle’s report on and finding of fairies but also the testimony of his own fairy sighting.

Conclusion

The alternative science that Doyle demonstrated through his investigation of the Cottingley Fairies photographs had some distinguishing features: the scientific method, the spiritualist method, and his conviction as a seer.

The first characteristic of Doyle’s alternative science exhibits an empirical and quantitative method, similar to that employed by the SPR at the time; Doyle sought the opinions of photographic experts and authorities in natural sciences to identify questionable aspects of the photographs and sent Gardner to interview

⁸ As Catherine Wynne points out, the second edition of *The Coming of the Fairies* (1928) contains additional eight fairy photographs, which “are ambiguous, ill-defined and ultimately lack the finesse of the Cottingley pictures” (Wynne 391). This information also suggests that Doyle may have come to recognize the unclear fairy figures as more authentic.

the girls and their parents. Doyle also had the girls take more photos of the fairies, taking care to ensure that they could not tamper with the plates provided. He did not rush to conclusions but rather took cautious steps.

The spiritualist method is the second feature of Doyle's alternative science. Doyle conducted a series of investigations and verifications in response to doubts raised in discussions with spiritualists (which included a claimed consultation with a spirit). He also used a clairvoyant to verify, to the satisfaction of spiritualists, the ability of the girls to see fairies. Even after applying these methods, Doyle did not conclude that the fairy photographs were authentic but continued to take the scientific method, which Peirce argued was necessary to broaden science. Moreover, in opening these practices to readers, Doyle deftly avoided expressions in Gardner's report that presupposed the existence of fairies and gods, and he was careful not to unnecessarily distance himself from non-spiritualist readers. Therefore, his alternative science should be seen as an effort to explore the unknown world by combining the methods of contemporary psychical researchers and spiritualists.

As a result of this process, Doyle became convinced of the existence of fairies, just as Peirce was convinced of the existence of God. Doyle's categorical certainty, especially concerning the fifth fairy photograph, seemed to deviate from his alternative science. However, rather than being an expression of *a priori* belief, the conviction can be understood as the result of a unique style of scientific inquiry, or musement, as Peirce called it. Hence, without using any psychic power or spiritualist faith, at the end of the investigative process Doyle "saw" fairies in the photographs. This is one answer to the question of how evidence of psychic phenomena could convince researchers, the question that Bergson and the SPR failed to present in clear terms. Thus, Doyle's alternative science regarding the Cottingley Fairies was not simply an arbitrary practice to justify his belief in spiritualism but an attempt to prove the existence of fairies by pushing the limits of the SPR in his own way and echoing Peircean arguments on God. Hence, even though *The Coming of the Fairies* represents a logical leap in Doyle's reasoning, this leap shows how he was faithful to the limitations of the contemporaneous scientific investigation of psychic phenomena and suggests the possibility of developing an alternative science.

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