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Alfred Russel Wallace

The Believer

Alfred Russel Wallace—the celebrated codiscoverer of evolution by natural selection—was a self-proclaimed skeptic of spiritualism before attending his first séance on July 22, 1865, at the home of his friend Lewis James Leslie (b. 1806) in Tunbridge Wells, Kent.¹ "Up to the time when I first became acquainted with the facts of Spiritualism," Wallace wrote in the opening pages of *Miracles and Modern Spiritualism*, "I was a confirmed philosophical sceptic. . . . I was so thorough and confirmed a materialist that I could not at that time find a place in my mind for the conception of spiritual existence, or for any other agencies in the universe than matter and force."² Like most men of science during the Victorian age, he did not believe that there was sufficient evidence available to confirm that spirits or psychic forces were real.³

This event in 1865, however, proved to be a transformative moment in Wallace's life, and his stance began to change. Over the course of the next year, he immersed himself in the study of the supernatural, becoming a vocal proponent of modern spiritualism.⁴ On November 22, 1866, Wallace wrote a letter to his friend the biologist Thomas Henry Huxley (1825–1895) about an exciting "new branch of anthropology" that he had been working on—the investigation of spirit phenomena. Wallace invited Huxley to join him on a Friday evening so that he too could witness the curious displays and perhaps contribute to this budding field of scientific inquiry.⁵ Huxley quickly rejected the invitation, stating, "I have half-a-dozen investigations of infinitely greater interest to me which any spare time I may have will be devoted." Wallace's exchange with Huxley foregrounds how difficult it was for proponents of spirit investigations to gain scientific credibility.

Wallace believed that if he could go from being a skeptic to a convert, so too could other men of science. Arguing that the key to achieving scientific legitimacy for spirit investigations was through the establishment of reliable witnesses and trustworthy evidence, he committed himself to that cause for the remainder of his life.⁷ As Janet Oppenheim argues, Wallace "was convinced that the testimony of his own sense, combined with the records of countless other investigators over the centuries, provided an adequate empirical base on which to establish the validity of spiritualism."⁸ To verify his belief, Wallace consciously borrowed observational techniques from anthropology—a science that relied quite heavily on credible witnessing.⁹ What it meant to observe something anthropologically, for Wallace, was not simply the physical act of looking at something; rather, it was a much more nuanced process of collecting, analyzing, and representing anthropological data.¹⁰ It is a way of knowing and understanding the world through a specialized framework—what Daniela Bleichmar calls "visual epistemology."¹¹

While much has been written on Wallace's inquiries into spirit phenomena, very little scholarship has taken seriously his remark about how his studies of spirits and psychic forces were a type of anthropology.¹² When connections are drawn between Wallace's twin interests in spiritualism and anthropology, it is usually to examine his research on extra-European conceptions of spiritualism.¹³ While there is no doubt that many of the practices that Wallace used in his spirit investigations were shared by other sciences, most notably physics and natural history, it is telling that he identified anthropology as being the best fit for developing his research program. It was fairly common during the middle of the nineteenth century for anthropologists to borrow techniques from the more established sciences. Physics, geology, and natural history provided a means to an end for achieving more authority within the larger scientific community. Nevertheless, when methods from the physical and natural sciences were employed in Wallace's spirit investigations, they were typically reframed along anthropological lines.

Wallace's aim of aligning his spirit investigations to the practices of British anthropology fed into larger disciplinary discussions about the

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construction of reliable anthropological data. Most notably, Wallace like many of his Victorian anthropological counterparts—grounded his research in a double commitment to firsthand observation and Baconian inductivism. His insistence on "fact-based," experiential knowledge echoed the disciplinary rhetoric of the physician and speech therapist James Hunt (1833–1869), who cofounded the Anthropological Society of London (ASL) in 1863, along with the orientalist, explorer, and military officer Richard Francis Burton (1821–1890).¹⁴ It is hardly surprising that many of the methods and theories that Wallace imposed on his studies of spirit phenomena included core aspects of Hunt's anthropological vision. After all, Wallace was conducting much of the research for *Miracles and Modern Spiritualism* while he was regularly attending ASL meetings during the height of the anthropological schism of the 1860s. His spirit investigations were written at a time when he was engrossed in the debates and discussions on how to build a new anthropological science in Britain.¹⁵

This was a key period in the disciplinary history of British anthropology, in which two rival groups of researchers were vying for control of the race sciences.¹⁶ On one side were the anthropologists led by Hunt, who, generally speaking, promoted a form of polygenesis that was grounded in biological determinism, and emphasized directly observable "facts" to support its suppositions. On the other side were the ethnologists led by Huxley at the Ethnological Society of London (ESL), who promoted a form of monogenesis that was grounded in a mixture of older Prichardian historicism and newer Darwinian evolutionary theory.¹⁷ During the course of this dispute—which raged between 1863 and 1871—both sides published several essays in the pages of their societies' journals on the scope of their respective research fields. Although both camps claimed to be doing distinct forms of scientific investigation, there were many overlapping topics, theories, and practices in their respective research programs.¹⁸ Even the membership lists of the two societies contained many of the same names. The focuses of anthropology and ethnology during this period were quite broad, and for the most part comprised any study that examined the cultural and physical aspects of human groups. Eventually, after several attempts to reconcile the grievance, an agreement was reached, and in 1871 the two societies merged to form the Royal Anthropological Institute of Great Britain and Ireland (RAI). This new learned body brought together the methods and theories of researchers from both camps.¹⁹

Underlying many of these disciplinary debates were discussions on how to observe something anthropologically or ethnologically, and this preoccupation maps onto Wallace's research into modern spiritualism. The ability to observe spirit phenomena as a credible witness was a central concern for Wallace. In many respects it underscores the primary objective of his Miracles and Modern Spiritualism. Like his peers at the ASL, who were striving for proper recognition within the British scientific world, Wallace, too, was fighting for the scientific legitimacy of his spirit investigations. Anthropology provided a tactical blueprint for achieving this status. If Wallace were to prove scientifically that humans transcended into spirits upon death, then anthropology was the ideal discipline to anchor his spirit investigations in. After all, figures such as Hunt purported that anthropology was the only discipline to examine all aspects of human life, and for Wallace that would include the afterlife.²⁰ By bringing spiritualism into anthropology, the discipline would be justly able to argue that it studied the "entirety" of human existence.

Alfred Russel Wallace and the Making of a Spiritualist and Anthropologist

Wallace was born in 1823 in the Welsh village of Llanbadoc near Usk in Monmouthshire. He was the eighth child of Mary Anne (1792–1868) and Thomas Wallace (1771–1843). His father had trained in law but never practiced, and had several unsuccessful businesses. At the age of five, Wallace and his family moved to Hertfordshire, where he attended Hertford Grammar School, until family financial difficulties forced him to withdraw at the age of fourteen.²¹ He spent the next few months living in London with his older brother John (1818–1895), who was a builder. While living in London, Wallace regularly visited the London Mechanics Institute (f. 1823), where he began reading a range of scientific works. It was also during this period that he was exposed to the political ideas of the Welsh social reformer Robert Owen (1771–1858). Early into his London stay, Wallace began attending political lectures at the Owenite Hall of Science near Tottenham Court.²² His participation in these political activities had a long-lasting impact on his beliefs, including his views on spiritualism.

Core to Owenism were communitarian values including universal suffrage, unconventional religious worship, cooperative labor, and moral

instruction. Owen himself became a believer of the spirit hypothesis in 1853 after attending séances with the American medium Maria B. Hayden, who is widely regarded as the first modern medium to practice professional spiritualism in England. Owen outlined his new spiritual beliefs in a pamphlet titled *The Future of the Human Race* (1854).²³ Wallace's later socialistic ideas about spiritualism were indebted to his early engagement with Owenism, and he championed a more utopian understanding of humanity in the afterlife. As we will see in due course, Wallace contended that through the spiritual evolutionary process, which began upon death, all spirits could achieve a form of enlightenment through moral education.²⁴

Eventually, Wallace left London in search of more stable employment opportunities. He spent nine months apprenticing as a watchmaker before moving to Kingston, Herefordshire, in 1839 to work for his other brother William (1809–1845), who owned a land-surveying business. Britain's railway industry was booming after the Tithe Commutation Act was passed in 1836, and there was plenty of work to be found as a surveyor. Under the tutelage of his brother, Wallace gained a broad practical skillset in drafting, mapping, mathematics, and architectural design and construction. This practical knowledge helped to establish Wallace as a credible and scientifically minded researcher, which would later serve him well in his career as a traveling naturalist and specimen collector. Moreover, these early experiences ultimately contributed to his reputation both as a respected anthropologist and ethnographer and as a reliable investigator of extraordinary phenomena at séances and other spiritualist performances.²⁵

Although it is reasonable to argue that Wallace's investigation of modern spiritualism encompassed far more than what is typically viewed as anthropological theory and practice, it remains rather telling that he framed his study of spirits and psychic forces as a "new branch of anthropology."²⁶ There was much overlap between the newly emerging disciplines during the middle of the nineteenth century, and to fully understand why Wallace viewed his research as a type of anthropology, as opposed to physics, biology, or natural history, it is necessary to map the core aspects of his spirit investigations against the key criteria for a study to be considered "anthropological" during the mid-Victorian period. These criteria can be synthesized in a rudimentary fashion as follows: first, it had to focus on humans (broadly construed); second, there should be some elements of historicism or evolutionism in it; third, it should use the Baconian method of induction; and fourth, it should be derived from experiential knowledge, based on directly observable "facts." Wallace's spirit investigations tick each of these boxes.²⁷

Wallace's double interests in spiritualism and anthropology developed over twenty-five years, and tracing this process allows for a more sophisticated understanding of Wallace's spirit investigations. Although he credited his first séance in 1865 as a transformative moment in redefining his views on spiritualism, Wallace had encountered what he believed to be supernatural phenomena much earlier in his life.28 For example, in 1843, while working as a surveyor in rural Wales, Wallace wrote a short ethnographic account on the local Welsh farmers, with considerable attention paid to their customs, habits, and traditional folkloric beliefs. He remarked, for instance, that the farmers were "exceedingly superstitious," and that "witches and wizards ... are firmly believed in, and their powers much dreaded."29 He also described other types of folkloric practices among the Welsh farming community. The "corpse candle," for instance, was an object for the customary ritual of carrying "a lighted candle, which is supposed to foretell death . . . from the house in which the person dies along the road where the coffin will be carried to the place of burial."30 The local farmers ascribed much symbolic supernatural meaning to this performance, and as Wallace recounted, the community often viewed its practice as a harbinger of further death. These early ethnographic experiences in Wales were significant for Wallace, sensitizing him to a belief in the potential existence of extraordinary phenomena, and enriching his knowledge of fieldwork methods. Moreover, they represented an important stepping-stone for him in recognizing the value of direct observation in the study of alleged supernaturalism. This high valuation of prima facie evidence would become a benchmark of Wallace's later writings on spirits and psychic forces.

Another of Wallace's early important experiences with extraordinary forces occurred in 1844, after he left his job as a surveyor to become a schoolteacher in Leicester. It was there that Wallace witnessed the curious effects of mesmerism during a lecture delivered by the renowned phrenologist and mesmerist Spencer Timothy Hall (1812–1885).³¹ The spectacles that he had observed intrigued him, and Wallace set about conducting some rudimentary experiments with mesmerism on his students. He later recalled in *Miracles and Modern Spiritualism* that he was able to influence some of his students using techniques similar to those employed by Hall in his lecture.³² These alleged positive results had a lasting impression on him, and,

as Martin Fichman has argued, Wallace's early research on mesmeric forces "predisposed him to remain open to claims relating to psychic phenomena." Nevertheless, he was a skeptic for the time being.³³ Other incidents, such as near-death experiences during his travels to both South America between 1848 and 1852 and the Malay Archipelago between 1854 and 1862, when he was working as a natural history specimen collector, further exposed Wallace to what he believed to be supernaturalism. For example, Wallace stated, "At least three times within the last twenty-five years I have had to face death as imminent or probable within a few hours, and what I felt on those occasions was at most a gentle melancholy at the thought of quitting this wonderful and beautiful earth to enter on a sleep which might know no waking. In a state of ordinary health I did not feel even this. I knew that the great problem of conscious existence was one beyond man's grasp, and this fact alone gave some hope that existence might be independent of the organized body."34 According to Wallace, nearly dying on these three occasions sensitized him to a feeling of a deeper existence beyond the mortal world—one that would be essential to his later "theory of spiritualism."35

It was also during Wallace's travels that the modern spiritualist movement arose. The first high-profile mediums were the American Fox sisters, Leah (1831–1890), Margaret (1833–1893), and Kate (1837–1892). In 1848, while the siblings were living with their parents in Hydesville, New York, the two younger sisters, Margaret and Kate, allegedly began communicating with spirits through rapping.³⁶ News of these spirit communications spread quickly across the United States, Britain, and continental Europe. Within a few years more mediums were coming to prominence through private and public performances. A proliferation of spiritualist literature was also being published, such as the Yorkshire Spiritual Telegraph, which was the first modern spiritualist periodical to be produced in Britain in 1855. Many popular lecturers on spiritualism and mediumship also toured North America and Europe during this period. For example, the young trance medium Cora L. V. Scott (1840-1923) was an early spiritualist to gain some notoriety by delivering public presentations to broad audiences during the early 1850s in the northeastern United States.³⁷ Around the same time, Hayden was building a devout audience in London. She was soon followed by another American medium to visit the British capital, Mrs. Roberts. Unlike Hayden, who was primarily known for producing spirit rapping during her performances, Roberts's specialty was table turning.³⁸ Thus, the British populace was being

introduced to a range of supposed extraordinary phenomena through these newly emerging spiritualist performers, and during the 1850s proponents of spiritualism were clearly on the ascent.³⁹ Wallace had been hearing about this social phenomenon while traveling abroad, and according to Fichman he was determined to investigate the matter himself upon returning to England.⁴⁰

While traveling through South America and the Malay Archipelago, Wallace further developed a strong interest in ethnography and ethnology. Like most European scientific travelers of the nineteenth century, Wallace immersed himself in travel literature, particularly accounts written by Europeans who had visited the same regions he did. Here Wallace was following a practice of informed reading that was an important preparatory exercise for journeys into relatively unknown lands.⁴¹ It provided travelers with essential information on the peoples, plants, animals, and landscapes they were going to confront abroad. This was especially useful for natural history collecting, which remained the main source of Wallace's income during the period. Knowledge of these works made it possible for someone such as Wallace to establish himself as a credible observer of natural history data.⁴² It was also through traveling that Wallace's intersecting interests in ethnography and spiritualism transformed. His cross-cultural encounters with Indigenous peoples exposed him to various forms of spiritualism that would later influence his spiritualist beliefs, and as Sherrie Lynne Lyons has argued, "Wallace's view of native people provides an important clue to his later conversion to the spiritualist hypothesis."43

For many early ethnologists, travel narratives provided a crucial source of data for their studies. These narratives contributed to a growing archive that made possible the verification, expansion, and correction of ethnographic knowledge. One's reputation as a reliable scientific traveler was based on the ability to either confirm the earlier observations of travelers who had visited the region or correct those reports based on newer information. In both cases, direct experience was essential to this process.⁴⁴ Being able to state that the data were acquired firsthand added greatly to one's truth-claims. Impartiality was also an essential element of this process, and in many respects the method of verifying ethnographic observations was closely linked to what Lorraine Daston and Peter Galison have termed "truth-to-nature objectivity," in which the accepted representation of a human group was a compilation of reports, or the archetype of a pattern within various

accounts.⁴⁵ When substantiating the trustworthiness of his observations of spirit phenomena, or those of other witnesses that he deemed credible, Wallace used similar ethnographic techniques. Although not explicitly mentioned in his writings, much of Wallace's analysis was influenced by the works of the German naturalist and traveler Alexander von Humboldt (1769–1859), who combined Baconian and Linnaean principles with his own ideas about how scientific travelers could systematically catalogue the natural world. Humboldt argued for a *physique du monde*—a universal science based on observational study, measurement, and experimentation.⁴⁶

The verification of direct observations through ethnographic methods was a core aspect of Wallace's later anthropological writings on spiritualism. These investigations were further enhanced by Wallace's knowledge of ethnological and anthropological theories. For instance, Wallace had read major ethnological works by the physicians James Cowles Prichard (1786–1848) and William Lawrence (1783–1867) while traveling throughout the world. Both men were foundational figures within the discipline, and outlined theoretical frameworks for studying human races.⁴⁷ Once Wallace returned to Britain in 1862, he joined the ESL, and when the ASL formed a year later, Wallace also began attending their meetings. This further immersed Wallace in discussions on how to do ethnological and anthropological research. His first major contribution to anthropological studies occurred in 1864 when he published what is widely considered to be the first anthropological work in Britain to apply Darwinian evolutionary mechanisms to the study of humans.⁴⁸ It was clear that in the early 1860s much of Wallace's scientific activities were grounded in ethnological and anthropological research. Thus, by the time Wallace attended his first séance in July 1865, he was primed for approaching the event as a skilled ethnographic observer. In many respects his later descriptions of his experiences at séances can be seen as a kind of ethnographic reporting, informed by his deep knowledge of ethnological and anthropological theories.

The "Theory of Spiritualism" and Evolutionism

Miracles and Modern Spiritualism contained three substantially reworked versions of essays that Wallace had produced between 1866 and 1874.⁴⁹ As he immersed himself in the modern spiritualist movement, his knowledge deepened, and he was able to incorporate even more information from his

readings of the extant spiritualist literature, and from his personal experiences at séances. Thus, the book represents the culmination and maturation of his early spirit investigations. In his book, Wallace recognized that the nature of his investigations meant that many of his readers would be skeptical of the genuineness of the phenomena he described, and he wrote, "Many of my readers will, no doubt, feel oppressed by the strange and apparently supernatural phenomena here brought before their notice. They will demand that, if indeed they are to be accepted as facts, it must be shown that they form a part of the system of the universe, or at least range themselves under some plausible hypothesis."50 It was for this reason that he carefully articulated a "theory of spiritualism."51 Through the conceptualization of his theory, Wallace believed that he was strengthening the scientific pronouncements of his research. Crucial to this process was grounding his spirit investigations in naturalistic laws, and providing conceivable explanations for psychic forces.⁵² This enabled Wallace to align his spiritualism with the core principles of scientific naturalism that were dominant during the period. It was a tactic that other ethnologists and anthropologists were using as they strove for recognition in the larger Victorian scientific scene. Wallace was following this approach. However, the version of scientific naturalism that he employed differed from the more biologically determined model of Hunt, and the Darwinian-inspired model of Huxley and other X Club members. Wallace was far less committed to hardline verificationist assumptions, allowing him to be more receptive to extraordinary phenomena, such as spirits and psychic forces. 53

At the crux of Wallace's theory was a fundamental principle that underlay all spiritualist phenomena—every human was made of two parts: the spirit and the material body. Wallace believed that the material body was the "machinery and instruments by means of which [humans] . . . act upon other beings and on matter," and the spirit "feels, and perceives, and thinks."³⁴ While the material body would eventually perish, the spirit was immortal. Once the spirit entered the afterlife, it began a developmental process, which Wallace termed "progression of the fittest."⁵⁵ It was a new form of human developmentalism that attempted to reconcile his evolutionary and anthropological ideas with his spiritualist ones. This merger of ideas firmly posited Wallace's spirit investigations in larger discussions on the epistemic limits of science and religion. Although many midcentury scientific naturalists were attempting to displace religion and remove it from

scientific studies, Wallace's position differed, and he saw the two spheres as being compatible so long as they were employed through a spiritualist framework. It was a much different approach from the two spheres model favored by other scientific naturalists such as Huxley, the philosopher of science Herbert Spencer (1820–1903), and the physicist and lecturer John Tyndall (1820–1893). Thus, Wallace's spirit investigations complicate our historical understanding of the relationship between science and religion, exposing the fluidity of the supposed boundaries.⁵⁶

Wallace wanted to map his theory of spiritualism onto his own evolutionary paradigm. The inclusion of evolutionism in ethnological and anthropological research was essential for many scientific naturalists during the 1860s and 1870s. Figures such as Huxley, who was president of the ESL during the 1860s; the archaeologist, entomologist, and politician John Lubbock (1834–1913), who was the first president of the RAI; and Edward Burnett Tylor, who is widely regarded as the founder of cultural anthropology and the first researcher in Britain to be appointed as reader in anthropology, all trumpeted the importance of evolutionary theories for the advancement of the discipline.⁵⁷ Wallace was part of this general movement in anthropology, and it was an underlying theme in his first major contribution to anthropological research: his 1864 article "On the Origin of Human Races and the Antiquity Man Deduced from the Theory of Natural Selection."58 Given that Wallace viewed the study of spirits and psychical forces as a type of anthropological pursuit, evolutionism also formed a key aspect of his strategy for ensuring that his spirit investigations gained acceptance within scientific circles.59

For Wallace, nondirectional evolutionary processes, guided by natural selection, may have accounted for human diversity when studying the living, but upon death a different sort of evolutionary process began that was directional and progressive. He wrote, "The organic world has been carried on to a high state of development, and has been ever kept in harmony with the forces of external nature, by the grand law of 'survival of the fittest' acting upon ever varying organisations. In the spiritual world, the law of the 'progression of the fittest' takes its place, and carries on in unbroken continuity."⁶⁰ According to Wallace the spirit was a mind without body that retained all the knowledge (both intellectual and moral) it had acquired during life, including the experiences, thoughts, feelings, and tastes of the former self. ⁶¹ With this knowledge the spirit could progress through successive stages toward the highest level of enlightenment. Spiritual growth was humanity's true purpose, and the influence of Wallace's early interests in Robert Owen's conception of moral education is clearly present in the framework.⁶² However, unlike Owenism, which was largely deistic, Wallace's spiritual framework was theistic, and as Fichman has observed, it "explicitly maintains that the Divine Being continues to sustain relations to His creation" even after death.⁶³ Because the spirit retained knowledge of its former self, Wallace argued, it was able to communicate with the living. How else would it be possible for spirits to verify their identities to living loved ones during séances?⁶⁴

Wallace's inclusion of a developmental model into his theory of spiritualism was an essential part of his aim to gain scientific legitimacy for his spirit investigations. Because it combined familiar aspects of Darwinian evolution with monogenesis and progressivism, his theory of spiritualism could be incorporated into larger ethnological and anthropological discussions about human evolution. However, it moved beyond these discussions to new ground, and unlike the standard forms of monogenesis (or even polygenesis, for that matter) it provided an alternative framework that accounted for the evolution not only of the living but also of the dead. Nevertheless, in order to support this spiritualist evolutionary paradigm, Wallace required data that proved the existence of spirits and psychic forces. This led him to emphasize "fact-based" knowledge and Baconian inductivism, further tying his spirit investigations to the techniques of ethnologists and anthropologists in the mid-Victorian period.

Direct Observation and "Fact-Based" Knowledge

When Hunt cofounded the ASL in 1863, he wanted anthropologists to distinguish themselves from ethnologists by prioritizing research that was based on direct observation and "fact-based" knowledge. One of the main criticisms that his opponents such as Huxley and Lubbock leveled at him was that it was unnecessary for there to be two disciplines that essentially studied the same materials. Hunt had to rationalize the formation of anthropology as distinctly different from ethnology. To substantiate the scientific criteria on which anthropologists based their analyses, he argued for the application of the Baconian method of induction.⁶⁵ Using Baconianism to strengthen the scientific pronouncements of a discipline was by no means

distinct to anthropology, and many emerging disciplines in the nineteenth century appealed to Baconian principles as a way of gaining scientific legitimacy within the larger community.⁶⁶ It was primarily a rhetorical strategy, in which the Baconian method of induction was championed as a means to knowledge. More often than not, though, its application was never fully implemented in research programs.⁶⁷

In the case of anthropology, Hunt asserted that Baconianism, with its emphasis on "facts," was the most reliable way to do scientific research. He wrote, "It has been solely the application of this [Baconian] method which has given such weight to our deliberations and our deductions. Loyalty to facts with regard to . . . anthropology brought us face to face with popular assumptions, and the contest has resulted in victory to those who used the right method."68 Under this model, Hunt strategically used the Baconian method of induction as the cornerstone of his anthropological framework. Observable "facts" such as anatomical and physiological data lay at the foundation of any good study of humans. There were three steps to using the Baconian method of induction. First, researchers were to collect materials and describe the facts. Second, they were to tabulate or classify the facts into three categories: a) instances where a specific characteristic was observed, b) instances where the characteristic was absent, and c) instances where a variation of the observed characteristic was present. Third, in light of what the tabulated materials demonstrated, researchers were to draw conclusions based on the data and determine which phenomena (physical or cultural) were connected to it, and which phenomena were not.

Even within the human sciences Hunt's emphasis on "fact-based" knowledge was not distinct, and despite his claims to the contrary, ethnologists such Prichard and Lawrence had been using the Baconian method in their research programs for several decades prior to the emergence of anthropology. The only difference was that Hunt explicitly identified its importance because he was attempting to legitimize his methodological approach as more rigorous than the practices of the researchers who preceded him.⁶⁹ Tylor also used a similar "fact-based" argument in the opening pages of his magnum opus, *Primitive Culture* (1871). Tylor was constructing an evolutionary model that traced the development of cultural attributes from what he believed to be the lowest stages of human societies to the most advanced. Because he was primarily working with nonphysical aspects of cultures, he argued that it was essential to stockpile his "facts," and show multiple examples of similar cultural phenomena. Such an approach would verify the trustworthiness of his evidence and support his suppositions. Tylor stated, "Should it seem to any readers that my attempt to reach this limit sometimes leads to the heaping up of too cumbrous detail, I would point out that the theoretical novelty as well as the practical importance of many of the issues raised make it most unadvisable to stint them of their full evidence."70

There is a similar sort of rhetoric in Wallace's *Miracles and Modern Spiritualism*. Like Hunt and Tylor, Wallace strategically argued that spirit investigations had to be grounded in firsthand knowledge and reliable "facts." It was one of the many ways that their anthropological research intersected. He placed great emphasis on direct observation: "In this manner only could all sources of error be eliminated, and a doctrine of such overwhelming importance be established as truth. I propose now to inquire whether such proof has been given, and whether the evidence is attainable by any one who may wish to investigate the subject in the only manner by which truth can be reached—by direct observation and experiment."⁷¹ Wallace's visual epistemology, to borrow the term from Bleichmar, began with firsthand experience, and for him seeing was knowing.⁷²

Direct observation was only part of establishing the credibility of one's investigations. A single observation could be fabricated, erroneous, or accidental. Therefore, it had to be compared to similar reports. Wallace wrote, "A single new and strange fact is, on its first announcement, often treated as a miracle, and not believed because it is contrary to the hitherto observed order of nature."⁷³ It was for this reason that Wallace insisted on finding multiple examples of similar accounts to verify the credibility of a single observation. Their aggregation was testament to genuine occurrences. If one of the "facts" from a collection of observations were proven to be real, the rest by extension would also be taken as factual. Thus, it was a circular verification process. Wallace argued, "If but one or two of them are proved to be real, the whole argument against the rest, of 'impossibility' and 'reversal of the laws of nature,' falls to the ground."⁷⁴

The influence of Baconianism is noticeable in other ways in Wallace's *Miracles and Modern Spiritualism*. As was the case with Hunt and others, Wallace organized his facts into groupings for analysis. For example, he sorted physical and mental spirit phenomena into different taxa. Each grouping included short descriptions to assist researchers in correctly identifying the types of phenomena that they were witnessing. Wallace believed

that he was articulating a system that allowed for more accurate observations and a clearer understanding of the different kinds of evidence available. If every spirit investigator used his system in their studies, it would create a standardized method, which in turn would make it easier to compare reports. The replication of results would also be possible under such a model, which added further authority to the method.⁷⁵

Under "physical phenomena types" Wallace included six categories: "simple physical phenomena," such as sounds being produced without a known source, or people being moved without any human agency involved; "chemical," where mediums could hold burning-hot objects without getting hurt; "direct writing and drawing," which included pencils and pens allegedly rising on their own; "musical phenomena," where instruments played without any human intervention; "spiritual forms," such as the appearance of ghosts, orbs, or specters; and finally "spirit photographs," which purported to include manifestations of spirits in them.⁷⁶ There were five types of "mental phenomena" described in Wallace's system, and they included "automatic writing," when mediums wrote information down involuntarily; "seeing or clairvoyance," such as premonitions or voice hearing; "trance speaking," when a medium communicated the thoughts or feelings of a spirit; "impersonation," which is closely linked to trance speaking, but is more about speaking or acting like the spirit; and finally "healing," such as a medium detecting an unknown illness in a person.77

Whereas physical phenomena did not require a medium to occur, mental phenomena did. It was for this reason that Wallace argued that mental phenomena were usually considered less evidential by skeptics of spiritualism. He wrote, "The purely mental phenomena are generally of no use as evidence to non-spiritualists, except in those few cases where rigid tests can be applied." Wallace continued by arguing that the two kinds cannot be separated so easily and that "they are so intimately connected with the physical series, and often so interwoven with them, that no one who has sufficient experience to satisfy him of the reality of the former, fails to see that the latter form part of the general system, and are dependent on the same agencies."⁷⁸ For Wallace, proving the existence of spirit forces meant using all forms of data, and seeing how the sum of the parts came together to show the reality of spiritualism.

Wallace's commitment to direct observation and "fact-based" knowledge was essential for establishing the credibility of his spirit investigations. Like Hunt and Tylor before him, he had to justify his "new branch of anthropology" as a legitimate scientific pursuit. It was not enough to have a comprehensive theory of spiritualism and a few examples of direct observations that purported to show genuine examples of spirit phenomena. Wallace asserted that proponents of spiritualism had to show that the sheer volume of credible witnesses collecting data on spirit forces was impossible to ignore, and therefore had to be taken seriously. He stated,

I maintain that the facts have now been proved, in the only way in which facts are capable of being proved—viz., by the concurrent testimony of honest, impartial, and careful observers. Most of the facts are capable of being tested by any earnest inquirer. They have withstood the ordeal of ridicule and of rigid scrutiny for twenty-six years, during which their adherents have year by year steadily increased, including men of every rank and station, of every class of mind, and of every degree of talent; while not a single individual who has yet devoted himself to a detailed examination of these facts, has denied their reality. These are characteristics of a new truth, not of a delusion or imposture. The facts therefore are proved.⁷⁹

In sum, the success of Wallace's methodological approach to achieving scientific legitimacy for his spirit investigations rested on the trustworthiness of his sources. The bulk of Wallace's *Miracles and Modern Spiritualism* is devoted to establishing the credibility of his eyewitnesses and the reality of the phenomena. Once again, ethnological and anthropological theories and methods were essential to this process.

Credible Witnessing in Wallace's Spirit Investigations

Ethnographic reports from the narratives of travelers were the modus operandi of ethnological and anthropological research during the nineteenth century. Because most practitioners never left the shores of Europe, they were reliant on travelers for their data. Narratives provided essential information on the peoples who inhabited the world, and the personal testimony of someone who had seen different races directly in situ always had more authority than secondhand descriptions based on a priori knowledge. Ethnographies of Europe used similar techniques—especially when verifying personal testimonies from historical periods. Thus, there was a long

tradition in both ethnology and anthropology of establishing the credibility of firsthand observers. Figures such as Prichard, Lawrence, Robert Gordon Latham (1812–1888), Hunt, and Tylor all worked tirelessly to prove the accuracy and trustworthiness of their sources.⁸⁰ Wallace was building on this tradition in his spirit investigations, and he had a broad knowledge of both ethnological and anthropological methods from his participation at both the ESL and ASL during the 1860s.⁸¹

There were several ways of establishing the reliability of a source in ethnology and anthropology. If the observer possessed comprehensive training in a field that was considered to be requisite to ethnology or anthropology, such as medicine or natural history, they were considered to be a credible witness. Similarly, if an observer had a sound knowledge of subjects such as law, physics, or philosophy, they were also deemed trustworthy because of their analytical and discerning mind. If multiple accounts contained analogous information on the same objects, topics, events, or peoples, they collectively reinforced the validity of one another. It was a sort of "collective empiricism"-to borrow a term from Daston and Galison.⁸² Any inconsistency that appeared within the dataset would be identified as atypical and subsequently removed. If a researcher could reinforce the claims of other observers through their own similar firsthand experiences, this added further credibility to an account. Finally, if multiple witnesses were present at the same incident and produced corresponding reports, they too were deemed trustworthy observers. We see examples of all of these modes of verification in Wallace's spiritualist writings.83

A reliance on personal testimonies to substantiate one's scientific suppositions was of course a tried and trusted method in most scientific disciplines. As Steven Shapin and Simon Schaffer have shown in their work, since the early modern period practitioners in various fields regularly appealed to different forms of collective empiricism to support their research activities.⁸⁴ However, Wallace gave particular credence to researchers working in the life sciences, because he believed that they were less predisposed to imposing set conditions onto the study of unexplained phenomena.⁸⁵ When it came to observing spirit activity, physicists could make important and valuable observations, but the analysis of these reports was left to scientists with more detailed understandings of the organic world. In a sense, we can think of this method as a two-part process. First, information had to be observed and recorded by credible witnesses. Second, the meaning of the phenomena that were witnessed in the reports had to be interpreted and explained by a researcher with a strong grounding in natural history and the human sciences. Because experiential knowledge of human societies was the backbone of ethnological and anthropological research, its practitioners were particularly well suited for synthesizing and interpreting evidentiary materials of these kinds. This approach to making sense of observational accounts, which Wallace was employing in his spiritualist writings, was a staple of early armchair-based anthropological research. Wallace saw himself as the quality controller of the data, weeding out any anomalous evidence, and highlighting examples that best supported his suppositions.⁸⁶

In Miracles and Modern Spiritualism, Wallace made a case for the credibility of his sources. He argued that despite the number of skeptics of spiritualism rising over a twenty-year period (between the 1850s and 1870s), the number of believers was still growing.⁸⁷ He asserted that the kinds of data, and the rigor of experimentation purporting to prove the existence of spirits and psychic forces, were improving, and much of this was the result of a general increase in the number and quality of reports that were produced by so-called respectable observers of spirit phenomena. Wallace stated, "I shall call chiefly persons connected with science, art, or literature, and whose intelligence and truthfulness in narrating their own observations are above suspicion; and I would particularly insist, that no objections of a general kind can have any weight against direct evidence to special facts, many of which are of such a nature that there is absolutely no choice between believing that they did occur, or imputing to all who declare they witnessed them, willful and purposeless falsehood."88 Wallace's avowal of the credibility of his sources was grounded in three key points: First, all of his witnesses were leaders in science, art, or literature, and therefore represented some of the greatest minds known. Second, the reports were directly observed, and were not based on a priori assumptions. Wallace argued that this meant they were stronger sources of evidence. Third, because the information was acquired through firsthand experience, all of the observations were founded in "fact-based" knowledge. As sources of data, Wallace believed they should be considered as of the highest caliber.

The pages of *Miracles and Modern Spiritualism* are littered with copious observations recorded by figures whom Wallace deemed credible witnesses of spirit phenomena. He was particularly favorable toward reports that described séances led by eminent mediums such as Kate Fox, Daniel Dunglas

Home (1833–1886), and Agnes Elisabeth Guppy (1838–1917). Each of these mediums was celebrated by spiritualists as possessing genuine psychic powers, and therefore attracted the attention of many high-profile spirit investigators (both skeptics and believers). There had been multiple attempts to detect fraudulent activities in the séances and performances of Fox, Home, and Guppy, yet according to Wallace, none of them had ever been caught cheating. This was why Wallace placed so much weight on the investigations that examined their alleged powers.

In the case of Fox, Wallace began by asserting that she was the first prominent medium of the modern spiritualist movement. Her powers were discovered at the age of nine, when she and her sisters allegedly communicated with spirits at their family home in New York state.⁸⁹ Since then, Fox's career had blossomed, and she traveled around North America and Europe performing for both private and public audiences. Wallace argued that for twenty-six years "sceptic after sceptic, committee after committee, endeavoured to discover 'the trick;' but if it was a trick this little girl baffled them all."⁹⁰ By claiming that Fox had confounded skeptics for nearly three decades, Wallace was attempting to establish the legitimacy of her powers, but he did not stop there, and he included the reports of prominent spirit investigators who had observed and confirmed her mediumistic abilities firsthand.

One of those investigators was the Scottish American social reformer Robert Dale Owen (1801–1877), who wrote two well-known works on spiritualism, *Footfalls on the Boundary of Another World* (1860), and *The Debatable Land between this World and the Next* (1871). Owen had extensive experience investigating spirit phenomena and mediums, and he gained a reputation as a leading expert in the field.⁹¹ Wallace recounted,

Mr. Owen had many sittings with Miss Fox for the purpose of test; and the precautions he took were extraordinary. He sat with her alone; he frequently changed the room without notice; he examined every article of furniture; he locked the doors and fastened them with strips of paper privately sealed; he held both the hands of the medium. Under these conditions various phenomena occurred, the most remarkable being the illumination of a piece of paper (which he had brought himself, cut of a peculiar size, and privately marked), showing a dark hand writing on the floor. The paper afterwards rose up on to the table with legible writing upon it, containing a promise which was subsequently verified.⁹²

Despite Owen's comprehensive experience in detecting fraud, and all of the safeguards in place during the experiments, Fox was still able to produce spirit phenomena. Wallace believed that her powers were legitimate, and Owen was a credible witness.

The Scottish publisher, naturalist, and anonymous author of the Vestiges of the Natural History of Creation (1844), Robert Chambers (1802–1871), also had the opportunity to investigate Fox's psychic abilities with Owen during a visit to the United States in 1860.93 Chambers had a keen interest in spiritualism, possessing a sound knowledge of the literature, and extensive experience attending séances during the 1850s. These factors strengthened the case for him being seen as a trustworthy observer.⁹⁴ Together Chambers and Owen conducted some tests on Fox to determine whether her psychic powers were genuine. Wallace described some of the safeguards that Chambers and Owen used during their tests with Fox to ensure that there was little opportunity for deceit. This included the use of gas lighting so that the room was fully visible during the tests, weighing down the séance table with a heavy steelyard so that it was too difficult to move manually without being detected, and insisting on Fox's hands being held over her head and not touching the table. Despite all of these precautions, Fox was allegedly able to produce remarkable psychic feats.95

Wallace observed that these control measures were similar to the ones used by the chemist and physicist Michael Faraday (1791-1867) during his investigations into table turning in 1853. After conducting experiments, Faraday proposed that the strange table movements that he witnessed during spiritualist performances were the result of "unconscious muscular action" on the part of séance sitters.⁹⁶ Therefore, spirit and psychic phenomena were not real. Wallace disregarded these conclusions because he believed that Faraday was not sufficiently versed in spiritualism, and had not attended enough séances to form a sound conclusion. However, that was not what was important to Wallace. What mattered was that the scientific community had approved of Faraday's experimental method. If it was good enough for him, then it was good enough for any researcher using it. By employing Faraday's methods in their investigation of Fox, Chambers and Owen were strengthening the veracity of their findings. They were also regular attendees of séances, and well versed in the spiritualist literature. Thus, they were far more reliable as witnesses, and their conclusions should be given more weight.97

As was the case with Fox, Daniel Dunglas Home's mediumistic powers were allegedly discovered at an early age, and by the middle of the nineteenth century he was one of the most widely known mediums in the world. Originally from Scotland, Home moved to the United States in the late 1830s to live with family in Connecticut. He returned to Britain in 1855, around the same time that prominent skeptics such as Faraday and the physician and zoologist William Benjamin Carpenter (1813–1885) were explicating the causes of spirit phenomena such as table turning through ideomotor responses (or unconscious reflexes).⁹⁸ While most Victorian mediums were fairly clumsy in their performances, and easily detected as frauds, Home was of a different caliber. His success was largely due to his ability to produce a broad range of extraordinary phenomena during séances in fairly good light. Arguments for unconscious muscular movements alone were insufficient in discrediting his alleged powers.⁹⁹

Spirit investigators regularly examined his amazing mediumistic acts in order to determine whether or not his psychic powers were genuine.¹⁰⁰ One of the notable investigators to study Home's powers was the Scottish physicist and mathematician Sir David Brewster (1781–1868). Wallace included excerpts of Brewster's observations from a sitting with Home, showing examples of unexplainable phenomena. Brewster wrote, "The table actually rose from the ground when no hand was upon it," and he continued by noting that "a small bell was laid down with its mouth upon the carpet, and it actually rang when nothing could have touched it."101 Although he was a skeptic of spirits and psychic forces, Brewster was unable to detect any fraud during his investigation of Home's mediumistic abilities. He was therefore left baffled by the events that he had witnessed. For Wallace, this sort of evidence was particularly valuable in establishing the legitimacy of spirit phenomena. If a skeptic such as Brewster, who had an extensive background in the physical sciences, was unable to detect any fraud, Home's powers must have been real. To add further credibility to Brewster's account, Wallace noted that the lawyer and politician Lord Henry Peter Brougham (1778–1868) was also present during Brewster's investigation, and he confirmed Brewster's report.¹⁰²

In an effort to assure his readers that Home was an honest and genuine medium, Wallace asserted that Home openly invited investigators to examine his powers, further showing that he had nothing to hide. Wallace remarked that the lawyer, journalist, and publisher Serjeant Edward William Cox (1809–1879) and the chemist and physicist William Crookes (1832–1819) both investigated Home's powers and detected no deceitfulness.¹⁰³ Both Cox and Crookes were reputable Victorian gentlemen, with backgrounds in law and science respectively. For Wallace, they were both credible witnesses. In each case, Cox and Crookes observed what appeared to be authentic spirit and psychic phenomena. For example, referring to Cox's experiments with Home, Wallace wrote, "Serjeant Cox, in his own house, has had a new accordion (purchased by himself that very day) play by itself, in his own hand, while Mr. Home was playing the piano. Mr. Home then took the accordion in his left hand, holding it with the keys downwards while playing the piano with his right hand, 'and it played beautifully in accompaniment to the piano, for at least a quarter of an hour."¹⁰⁴

Agnes Elisabeth Guppy was also discussed in Miracles and Modern Spiritualism.¹⁰⁵ Born in London in 1838, Guppy rose through the ranks of Victorian spiritualists during the late 1860s, and became renowned for producing spirit materializations at séances. As Alex Owen recounted, "Guppy perfected the production of spirit 'apports,' usually flowers or pretty gifts, which showered down on the surprised and delighted sitters."106 It was Wallace who had first discovered Guppy's psychic powers during a séance at his home on November 23, 1866. He soon arranged regular sittings with the young medium every Friday evening for nearly an entire year, so that he could repeat his tests and trace her development.¹⁰⁷ He wrote that on one occasion he secretly tested Guppy's mediumistic abilities by "attaching threads or thin strips of paper beneath the claws [of a table], so that they must be broken if any one attempted to raise the table with their feet-the only available means of doing so."108 Yet, despite this safeguard, the table still rose without any damage to the strips that Wallace had carefully placed beneath it. For Wallace, this was evidence in favor of genuine spirit phenomena. Wallace's tests using paper strips to determine whether Guppy or one of the other sitters were cheating during the séance was also recorded in his unpublished notebook in the entries for both November 30 and December 7, 1866. However, as his notes indicate, during his second experiment Wallace added further controls, and he wrote, "Beside the tissue paper under the table I had constructed a cylinder of hoops & brown paper within which the table was placed thus keeping dresses and feet away from it; yet it rose up as before. All this with sufficient light to see everything."109

Wallace's personal testimony is sprinkled throughout his book, and he included long excerpts of his observations from the many séances that he had

attended. In most cases these published descriptions match the information he recorded in his private séance notebook. This was a key component of his strategy for establishing himself as a credible witness of spirit phenomena. It demonstrated not only that he was familiar with the literature on modern spiritualism but that he also possessed direct experience engaging with psychic forces. The emphasis on experiential knowledge was essential for establishing himself as an expert. His examination of spirit phenomena at séances can be treated as a kind of ethnographic study, and much like how scientific explorers verified the trustworthiness of their ethnographic observations in travel narratives, through detailed discussions of their daily activities, Wallace was using a similar method in his writings. This process of outlining the details of an experiment transformed his readers into what Shapin and Schaffer have called "virtual witnesses," allowing them to acquire an almost firsthand knowledge of his investigations.¹¹⁰ It was therefore a core aspect of Wallace's "visual epistemology."¹¹¹

One example in Wallace's book is a description from his very first séance experience on July 22, 1865. He wrote,

Sat with my friend, his wife, and two daughters, at a large loo table, by daylight. In about half an hour some faint motions were perceived, and some faint taps heard. They gradually increased; the taps became very distinct, and the table moved considerably, obliging us all to shift our chairs. Then a curious vibratory motion of the table commenced, almost like the shivering of a living animal. I could feel it up to my elbows. These phenomena were variously repeated for two hours. On trying afterwards, we found the table could not be voluntarily moved in the same manner without a great exertion of force, and we could discover no possible way of producing the taps while our hands were upon the table.¹¹²

There are several important points to emphasize in this passage. To begin, Wallace states that the séance was conducted during the day, making the room fully visible so that any deceitful activity by the medium could feasibly have been seen. Moreover, he was not alone, and there were multiple witnesses observing the same phenomena. In addition, the spirit phenomena were repeated and sustained for a long enough period of time that it was possible for Wallace to carefully observe and take note of what he was witnessing. Finally, all of the objects involved in the séance were inspected immediately afterward to determine whether any trickery was possible. The inclusion of sensory detail, such as the "vibratory motion of the table," added a further layer of authenticity to Wallace's description, allowing for his readers to imagine the sensation on their own bodies.

Wallace continued to experiment with psychic forces, and he conducted repeated tests to determine whether or not he could consistently observe similar phenomena during séances. He stated,

On other occasions we tried the experiment of each person in succession leaving the table, and found that the phenomena continued the same as before, both taps and the table movement. Once I requested one after another to leave the table; the phenomena continued, but as the number of sitters diminished, with decreasing vigour, and just after the last person had drawn back leaving me alone at the table, there were two dull taps or blows, as with a fist on the pillar or foot of the table, the vibration of which I could feel as well as hear. No one present but myself could have made these and I certainly did not make them.¹¹³

Once again, we see that Wallace was not alone during the tests, and that there were other witnesses available to confirm his reports. By providing a step-by-step account of his experiments with table rapping, we see a further attempt by Wallace to demonstrate that he was a skilled spirit investigator, which reinforced his claim as being a credible witness.

It is also rather revealing to examine some of the examples of séance phenomena that were not included in Wallace's published accounts from *Miracles and Modern Spiritualism*, as they provide important insights into both his ethnographic "field practice" and commitment to documenting prima facie evidence. In a sense, it helps to reconstruct a "thick description" of Wallace's research methods during his investigations into spirit and psychic phenomena.¹¹⁴ What is surprising is that some of the most extraordinary displays, which he had observed during the height of his investigations of séances during the late 1860s, were omitted from his book. The reasons for these omissions are unclear, but nevertheless they offer an illuminating glimpse into the world of Victorian spiritualism, and the practices of investigators who studied spirit and psychic manifestations.

For example, we see some of Wallace's early ruminations in his private notebook about spirit and psychic entities and unseen forces. He wrote in his entry from July 22, 1865, that the recent results of his experiments with table

turning satisfied him that there was "an unknown power developed from the bodies of a member of persons, placed in connection by all when hands being on a table."¹¹⁵ His notebook also contains a diagram from these experiments that traces a wavelike pattern that the table allegedly followed as it traveled around the room (fig. 1.1). Wallace believed that these movements were caused by spirit interventions, and he wrote, "The movement of the table was almost always in curves as if turning on one of the claws, so as to give a progressive motion. This would be frequently reversed & sometimes regularly alternate so that the table would travel across the room thus."¹¹⁶

The function of this diagram was important for Wallace's visual epistemology, because it allowed him to visually record his impressions from the séance while they were still fresh in his mind, thereby enabling him to recreate the experience for future analysis.¹¹⁷ The entry also brings to life much of the embodied practice that Wallace used in his field-based approach to studying spiritualism, that is hidden or erased in the published accounts from his book.

Wallace's personal notebook on his spirit investigations is illuminating in other ways. Take, for instance, the series of séances that he participated in at the home of his friend Frederick Lokes Selous (1802–1892), in Regents Park, London. Wallace attended eight séances in total with the Selous family between March 26, 1867, and June 21, 1867. All of them were led by Guppy, and Wallace's descriptions from these events provide far more intimate knowledge of the inner workings of Victorian spiritualist performances than any of his published accounts contain. More importantly, they capture the voices of genuine believers of the spirit hypothesis, who are so often marginalized or censored in the reports of other scientific investigators from the Victorian period. For instance, Wallace's entry from May 29, 1867, recounts how Selous's daughter Florence (1850–1921) was miraculously levitated from her seat and placed on top of the table, much to the delight of the sitters. Wallace wrote, "Miss F. was three times placed on the table, once sitting, twice standing . . . [and] on all occasions silently and instantaneously." To complement these observations, Wallace included sensory information in his notebook, which allowed him to capture his physical impressions from

▶ Figure 1.1. This page from Wallace's personal notebook on spiritualism includes a small diagram that depicts a wavelike pattern that a table allegedly traveled along around a room during a séance that he attended on July 22, 1865. *Source*: Alfred Russel Wallace, Journal, July 22, 1865, p. 42, WCP5223.5749, Papers of Alfred Russel Wallace, Natural History Museum, London.

ustion. This would be frequely reversed & conclining regularly alternate so that the table would travel across the norm Thus MANN There is no doubt that the persons present could more the table as it moved , with then hands, but the precautions L'experiments proved this could not be always the case, two have thingne no right to suppose it was ever the case. The raps on the Ther hand we could "int the it all. They were swall chan aups as if made with a facy have mer. He as approach to theme could be made by tapping with the fuger nach under the table, but as all ar hands were upon the table with all our eyes constantly open I know certain They could with a leen done by any one present The result of these experiments is, that I am satisfied there is an an known power developed from the bries of a minuter of persons, placed a connection by all then hands being as a table. Aker.

the séance. He explained, for example, how "no noise or sound" was heard during these levitations, and that despite holding Florence's hand and feeling it the entire time as a control to keep her in her seat, she still ended up on the table—a feat that seemed to genuinely baffle the naturalist. Moreover, all of the attendees believed the levitations to be real products of spirit manipulations, thus further legitimizing the extraordinary phenomena on display through corroborating testimonies.¹¹⁸

One of the more impressive manifestations to occur regularly during the séances led by Guppy was the production of spirit apports—especially fresh flowers and ferns—which unexpectantly showered down on the sitters. Spirit apports eventually became the hallmark of Guppy's performances during the 1870s, attracting many Victorians to her commercial séances.¹¹⁹ Already in the late 1860s, however, these manifestations were considered remarkable, and they feature heavily in Wallace's notebook. For example, the flowers and ferns appearing at the séances Wallace was attending were covered with dew from the outdoors. He recorded in his notebook that "it was too wonderful to be credited yet it was palpably true, for the fresh dewy flowers and ferns could not have been concealed in a hot dry room for more than an hour had any one of the party tried to deceive the rest."¹²⁰

On another occasion in June 1867, Wallace imposed stricter controls during the séance to determine whether any trickery was responsible for producing the spirit apports. To strengthen the veracity of his investigation, he invited the chemist John Hall Gladstone (1827–1902) to act as a credible and scientifically minded corroborating witness to verify his report. Although they sat in "total darkness," during Guppy's performance, "matches and candles [were] ready" to strike and illuminate the room if any transgressions were sensed.¹²¹ Moreover, everyone at the table held hands as a means of limiting the other sitters from conspiring with the medium to produce fake manifestations. Despite these controls, Wallace recorded that "showers of flowers" fell onto the table, including "a fine waterlily." He remarked that the appearance of this particular flower was especially significant because "a lady at the table [who] said her name was Julia . . . had that day been to Covent Garden to try and get a waterlily and had failed." Guppy had no knowledge of this excursion, and yet of all the flowers that could have appeared during the séance, it was a waterlily that manifested. Wallace believed that it was too improbable for this occurrence to be mere coincidence, and he believed that an unseen power was at work.¹²²

Reflecting on Wallace's personal testimonies from his notebook, it would seem that he interpreted the majority of the manifestations that he had witnessed at the séances as real products of spirits and psychic forces. However, a skeptic could have maintained that his investigations were conducted under less-than-ideal conditions. More often than not, these séances were done under the cover of total darkness, providing an ideal environment for a clever trickster to manipulate the sitters' perceptions. There were also few controls in place, such as powder to cover the medium's hands, or bindings to limit her movements. The séance rooms were also rarely sealed to prevent others from entering the space once the lights were put out, and many of the sitters attending these séances were unknown to Wallace. Thus, they could easily have been colluding with Guppy to produce fake phenomena. As a source of evidence to legitimize spiritualism, it was flawed. Nevertheless, Wallace's notebook provides fascinating examples of the sorts of extraordinary phenomena that were fundamental to supporting his own belief in the spirit hypothesis, and it effectively captures both his commitment to prima facie evidence and his reliance on field-based ethnographic methods. All of these experiences informed, and were reflected in, his core arguments from Miracles and Modern Spiritualism.

Another type of evidence that Wallace placed great emphasis on in his spirit investigations was photographs. During the 1860s, figures such as Huxley and the polymath Francis Galton (1822–1911) were championing the value of photographic evidence for anthropological studies.¹²³ Wallace's application of this technology in his spirit investigations was following in the latest disciplinary trend. He viewed photographs as one of the most effective forms of evidence for supporting the legitimacy of the spirit hypothesis. Paintings and drawings were seen as subjective visual representations of spirits, because they were influenced by the inherent biases of artists. Photographs by contrast, were different, and according to Wallace they produced verisimilar depictions of spirits that were supposedly mediated through camera technologies.¹²⁴ Of course, skeptics argued that photographers manipulated plates all the time by adding fake spirits to them during the exposure process. However, Wallace stated that these forgeries could be caught, and in Miracles and Modern Spiritualism he outlined five precautionary measures for limiting the chance of deception. If these precautions were followed, spirit photographs could be given a primal status in the defense of the spirit hypothesis.

The first precaution required spirit investigators to have a sound knowledge

of both the materials required for producing plates and photographic processing. Wallace wrote, "If a person with a knowledge of photography takes his own glass plates, examines the camera used and all the accessories, and watches the whole process of taking a picture, then . . . it is a proof that some [spiritual] object was present."125 The second precaution considered whether the likeness of the spirit appearing in a photograph was similar to a deceased loved one, who "was totally unknown to the photographer."¹²⁶ If this was the case, then it was positive proof that the spirit in the image was real. How else would the photographer be able to forge the likeness of the spirit? For the third precaution, Wallace argued that if a spirit appeared in a photograph that was arranged by a sitter "who chooses his own position, attitude, and accompaniments," then it was also confirmation that the image was genuine. For the fourth precaution, Wallace focused on whether there was any evidence to suggest that the photographic plate had an image superimposed on it. He wrote, "If a figure appears draped in white, and partly behind the dark body of the sitter without in the least showing through, it is a proof that the white figure was there at the same time, because the dark parts of the negative are transparent, and any white picture in any way superimposed would show through."127 Finally, for the fifth precaution, Wallace stated that if a medium described a spirit before a photograph was taken, and its matching likeness appeared on a photographic plate afterward, then it was to be taken as proof that the captured image was the product of genuine spirit phenomena.¹²⁸

Wallace applied all of these precautions to a photographic session he held with the famous spirit photographer Frederick Hudson (b. 1812), in March of 1874.¹²⁹ Guppy was also present on this occasion, acting as a corresponding witness to the event. Three photographs were taken of Wallace, with each depicting a different spirit in them, and the details are described in *Miracles and Modern Spiritualism*. According to Wallace, he was present during the processing of the images, and he chose which poses to hold for the photographs. The spirit that appeared in the third image was particularly noteworthy because it was draped in white, and allegedly shared a likeness to Wallace's mother (see fig. 1.2). Before holding the session with Hudson, Wallace recounted that he had received "communication by raps to the

► Figure 1.2. An alleged spirit photograph of Alfred Russel Wallace and his mother captured by Frederick Hudson on March 14, 1874. *Source*: Georgiana Houghton, *Chronicles of the Photographs of Spiritual Beings* (London: E. W. Allen, 1882) between pages 224–25, plate 6, no. 49.



effect" that his mother would "appear on the plate if she could." Wallace was utterly convinced that the photograph of him and his mother was an authentic example of a spirit manifestation. He wrote, "Even if he [Hudson] had by some means obtained possession of all the photographs ever taken of my mother, they would not have been of the slightest use to him in the manufacture of these pictures. I see no escape from the conclusion that some spiritual being, acquainted with my mother's various aspects during life, produced these recognisable impressions on the plate."¹³⁰ Because the photograph seemed to pass all of Wallace's precautionary measures, he viewed it as a credible source of evidence for supporting the spirit hypothesis.

Wallace's aim of developing a "new branch of anthropology" that was devoted to spirit investigations fundamentally relied on his ability to establish the trustworthiness of his evidence. He followed a long tradition in ethnology and anthropology of relying on the accounts of firsthand observers to substantiate his suppositions. He took great care in showing his readers how the sources that he used in his book were highly credible. Most of the accounts that Wallace used were by prominent investigators who possessed both a strong knowledge of the literature on spiritualism, and extensive experience examining spirit phenomena at séances. He supported this information further with his own personal testimony from the séances that he had witnessed firsthand. With the so-called facts that he presented to his readers, Wallace hoped that he made a strong enough case for recognizing investigations of spirit phenomena as a genuine scientific pursuit that showed the reality of spirits and psychic forces.

Changing Anthropological Views and the Rise of Animism

With the publication of Tylor's *Primitive Culture* in 1871, anthropological interest in the study of religion grew. As the next chapter will explore in more detail, spiritualists became the subject of anthropological research, and they were characterized as practicing a "primitive" and "superstitious" form of belief that was indebted to an age when all humans saw the world as being inhabited by spirits—what Tylor called "animism."¹³¹ This was not the response that Wallace had been hoping for when he attempted to establish psychical research as a subfield of anthropology during the middle of the nineteenth century. He subsequently became a vocal critic of Tylor's work.¹³² In 1872 he published a scathing review of *Primitive Culture* in the

popular review journal the *Academy*. He accused Tylor of lacking theoretical sophistication, and of merely stockpiling ethnographic data without properly interpreting its significance. Wallace framed *Primitive Culture* as a laborious read that researchers were best to avoid.¹³³

What really agitated Wallace, though, was that Tylorian anthropology criticized the evidentiary foundation of spirit investigations—an apparent reliance on dubious personal testimonies. Tylorian anthropologists identified many factors that contributed to misperception when interpreting extraordinary phenomena. According to these anthropologists, most reports that professed to observe genuine spirit or psychic phenomena had not been properly vetted by investigators. Had they thoroughly considered the ways in which observers misinterpreted supernormal events, using animistic principles in their analysis, the evidence would most likely lead to a skeptical conclusion. Thus, Wallace's arguments and beliefs were based on a false understanding of the materials. The theory of spiritualism, as articulated by Wallace in *Miracles and Modern Spiritualism*, was incommensurable with Tylor's emerging anthropological paradigm, and debates over the existence of spirits and psychics continued.

Wallace's theories and practices drew on larger disciplinary discussions about how to do reliable ethnological and anthropological research during a period when the boundaries of the discipline were still being negotiated. Through careful consideration of the practices and theories that he used to legitimize his spirit investigations as a genuine scientific pursuit, an important story emerges about how nineteenth-century researchers constructed their truth-claims and became credible witnesses. This is particularly telling because spiritualism deals with nonconventional knowledge that runs counter to what has been deemed "proper" science.

Supernaturalism, as the word implies, violates the accepted laws of nature and undermines, for scientific naturalists, the basic premises of science. Believers in spirit phenomena and psychic forces had to work extra hard to prove the reliability of their evidence.¹³⁴ Yet, as Tylorian anthropologists argued, the personal testimonies of observers who had witnessed spirit activities were an insufficient benchmark for laying the foundation of a new science. Although Wallace's efforts ultimately failed to make spirits and psychic forces major areas of specialism in anthropological research, the methods and theories that he developed during this process took root elsewhere. With the formation of the SPR in 1882, spirit investigations gained

an organization backing that helped to foster studies into extraordinary phenomena, but the debates over the reality of the spirit hypothesis raged on. Over the next few decades, animism would become one of modern spiritualism's great adversaries in scientific forums, and anthropological figures such as Tylor, James George Frazer (1854–1941), and Edward Clodd its chief opponents.¹³⁵