Note on Charles Richet's "La Suggestion Mentale et le Calcul des Probabilités" (1884)

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Abstract—In 1884 French physiologist Charles Richet published an article on "mental suggestion" in the *Revue philosophique de la France et de l'étrangere* that is an early classic of experimental parapsychology. This work is generally remembered for the use of statistical evaluation of ESP experiments. Nonetheless, Richet discussed other issues as well that are generally neglected. This included reanalyses of previously published thought-transference studies, and discussions of topics such as the place of mental suggestion in science, study participants, and the relationship of mediumship to the unconscious mind. Furthermore, in this paper Richet wrote about a variety of issues related to ESP such as its various features, targets, motor automatisms, its unconscious nature, and theoretical issues.

Keywords: Charles Richet—mental suggestion—ESP—French psychical research—mediumship

A historian of psychology referred to an 1884 attempt "to make mental suggestion a scientific subject by the use of probability calculations ..." (Carroy, 2004:226). This was a reference to one of the most important nineteenth century reports of experimental ESP tests. Published by French physiologist, physician, and psychical researcher Charles Richet (1884), the paper was entitled, "La Suggestion Mentale et le Calcul des Probabilités." It appeared in the December 1884 issue of the *Revue philosophique de la France et de l'étrangere*, a journal that published later several examples of "sleep" induced at a distance, such as the famous work of Pierre Janet (1886a,b) and the observations of others (e.g., Beaunis, 1886; Dufay, 1888).

Richet defined mental suggestion in the paper as the "influence that an individual's thought exerts over a specific sense, without an appreciable exterior phenomenon on our senses, over the thought of a nearby individual" (Richet, 1884:615, this, and other translations, are mine). The term mental suggestion was widely used in France to mean the active sending of thoughts, images, and other effects including commands to induce trance at a distance (for overviews see Ochorowicz, 1887/1891; Plas, 2000:87–109).

Richet's paper received both sympathetic (Gurney, 1884) and unsympathetic (Franklin, 1885) contemporary commentaries. Later discussions on the statistical aspects of the paper include those of historians (Hacking, 1988:438–439) and parapsychologists. Among the latter, J. B. Rhine said that Richet deserved "credit for the first use of the mathematics of chance in evaluating results of telepathy tests ..." (Rhine, 1947:16). Jahn and Dunne (1987) affirmed that Richet's statistical approach "strongly influenced the subsequent analytical strategies" (Jahn and Dunne 1987:41) of parapsychology and other disciplines. In this note I briefly discuss additional and generally neglected contributions of Richet in his 1884 paper.

Reanalyses of Previous Thought-Transference Experiments

In addition to the statistical analyses of his own data, Richet's work presents an early example of the statistical reanalyses of previously published experimental studies (pp. 633–634). For example, in some trials of thought-transference studies published by the Society for Psychical Research (Barrett et al., 1882) it was found that there were five consecutive hits. Richet argued that there was one chance in 52 to select the proper card from a deck of playing cards. The successful guessing of a second card was associated with a "probability ... of $1/52 \times 1/52$... and, in consequence, to state exactly five times the suit of a card, the probability is ... 1/16.680.235 ..." (p. 633). This, Richet believed, showed that chance did not account for the results.

Regarding other tests in the same report in which eight hits were reported to occur, Richet stated that the probability was " $1/52^8 = 1/7$ 164 938 643 456" (p. 634). In Richet's view this was equivalent to selecting the single black ball from the remaining 7,164,938,643,455 white balls in an urn.

Targets

Richet not only used playing cards to test for mental suggestion. He also utilized "photographs of paintings, of statues, of antique objects, of scenes, of diverse topics" (p. 635). Richet commented that the photographs "certainly strike the imagination in a way that is more powerful than a simple playing card" (p. 635). There were also tests in which hidden objects and letters served as targets.

Mental Suggestion and the Unconscious

Richet believed that mental suggestion acted on the "unconscious faculties of intelligence" (p. 639). The person receiving the message was not aware of the fact. But such information could manifest through weak unconscious movements. This is what led him to use the dowsing rod and table tilting, as discussed below.

Motor Automatisms

In addition to guessing tasks, Richet used motor automatisms to obtain responses from his participants. He reported tests in which the response was produced through movements produced by table turning. To accomplish this Richet had the persons on the table (designated as C, D, and E) sitting with their backs to two individuals, who sat on a separate table with a board displaying the alphabet. An electric battery was connected to a bell and to the legs of a table so that when any leg was raised the bell would ring. Two other participants were designated as A and B. The person designated as A moved his finger along the alphabet and, when the bell rang (meaning that one of the table's legs rose), B wrote down the letter where the finger was resting. This took place without the table tilters knowing the identity of the letter. Some "quick and repeated movements indicated that the word or the phrase were finished" (p. 653).

To the surprise of C, D, and E, "the word had a meaning, the phrase had a significance" (p. 653). In some tests someone asked for a specific name or reply. Many responses had letters that were either before or after the correct letter in terms of their position in the alphabet and that had the same number of letters, responses that Richet tried to quantify.

Tests were also done using dowsing rods. In one group of tests several pictures representing objects, animals, and persons were placed on a table. Someone concentrated on a picture, while another tried to select the picture using the rod and its movements as responses. The rod was also used in other places and for other tasks, such as trying to find objects placed on a shelf in Richet's library.

Features of Mental Suggestion

Richet noticed the faculty was "very capricious, wandering, uncertain" (p. 616). It manifested "in different degrees with different individuals" (p. 616). Richet referred both to target displacement and declines in the subject's performance. The displacements seemed to be related to consistent confusions of one target for another.

Participants

Good results were obtained with adults "in good health, not hypnotized, nor hypnotizable ..." (p. 632). Most of his tests were done with "non sensitive persons, such as my friends and myself ..." (p. 632). Richet tested himself repeatedly. He posited that two participants in his studies, Mlle. B. and Mme H., were "very sensitive to magnetism" (p. 635), meaning that they were hypnotizable. These individuals were said to have obtained in some tests 22 hits out of 54 trials, where mean chance expectation was 10.

Tests performed with table tilting were done with five of Richet's childhood friends. They were described as educated and intelligent, and lacking in mystical tendencies. Two of them, Gaston Fourier and Henri Ferrari, were said to be

mediums. While Richet and the others could not cause the table to move, his two friends could. It should be pointed out that both Fournier and Ferrari participated in many of the above mentioned tests which Richet said were conducted with non-sensitive persons.

Explanation of Mental Suggestion

Richet said that, regarding the explanation of mental suggestion: "Theory, explanation, is currently quite impossible" (p. 618). Nonetheless, while acknowledging that the process behind such phenomena was an unknown one, he speculated. Richet mentioned the possible existence of a force emitted by an agent, "such that the vibration of the thought of an individual influences the vibration of the thought of a nearby individual" (p. 617).

He further wrote that if a candle could "produce a very clear light at night at 200 meters from us, it seems absurd that at three or four meters of distance cerebral activity shows no action on close-by objects" (p. 668).

Mental Suggestion and Science

From the beginning of the paper Richet let his readers know of the controversial and improbable nature of mental suggestion. He said that the topic at hand was different from the "facts commonly admitted by science" (p. 609). The results of mental suggestion tests are "improbable facts; but their improbability is entirely relative; in the sense that none of them contradict the known facts, acquired by science" (p. 615).

In addition to warning his readers about the incredible nature of the phenomena, he cautioned them to keep in mind the "insufficience and impotence of current science" (p. 609) both to explain many facts of nature as well as mental suggestion.

Mediums

On a different topic, Richet also discussed mediums in terms of the unconscious mind. "In reality," he wrote, "all the intelligent manifestations attributed to the spirits are due to an individual that is unconscious and active at the same time" (p. 650). But such individual (the medium) was not aware of this.

Richet speculated that these persons were in a state of hemisomnambulism in which part of the brain accomplishes some operations, produces thoughts, receives perceptions without the awareness of the *self*. The consciousness of this individual persists in its apparent integrity: all the very complicated operations are accomplished outside of consciousness, without the voluntary conscious self apparently feeling any modification (p. 650).

In this view a medium was a person showing "partial unconsciousness, a faculty by which part of its intelligence, of her memory, of her will, operates out of consciousness ..." (pp. 650–651).

Concluding Remarks

Although Richet published several influential discussions throughout his career about mental suggestion, and what he later called lucidity and the sixth sense (e.g., Richet, 1888, 1889, n.d.), his 1884 paper is still considered a classic of early experimental parapsychology. Clearly, Richet had more to offer in this paper than card guessing tests and statistical analyses, the latter being of considerable importance. He presented information about reanalyses, targets, motor responses to targets, features of mental suggestion, and participants' characteristics, and speculated that mental suggestion acted unconsciously, and that it may be related to the emission of unspecified vibrations.

Richet's views of vibrations were consistent with ideas of human radiations to explain ESP, ideas that preceded and that were discussed around the time he was writing (Alvarado, 2006). Richet continued discussing these ideas in later years. As he wrote in the late 1920s: "The sixth sense is that one which gives us knowledge of a vibration of reality, a vibration which our normal senses are unable to perceive" (Richet, n.d.:224).

The involvement of non-conscious levels of the mind in telepathy and mediumship was an idea that started being discussed during the nineteenth century by writers with different conceptions about these hidden levels of the mind. Some had postulated that table-tilters produced the movement with their own hands but without their own awareness (e.g., Chevreul, 1854/1992), and that genuine (and veridical) mediumistic phenomena could take place thanks to unconscious reflex actions of the brain (Rogers, 1853/1856). Earlier in 1884 before Richet's paper was published, there were discussions in publications of the Society for Psychical Research on both the subconscious aspects of motor automatisms and telepathy (Barrett et al., 1884; Myers, 1884). Richet (1886) himself discussed the topic two years later, but his discussions were never as detailed or attentive to the concept of a self-reflective subconscious mind as those of Myers (1884, 1885).

Richet's paper is not only a testament to his creative talents, but also provides us with a fascinating view of concepts and methodology that were developed further in later years.

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