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Medical semiotics; its influence on art, psychoanalysis and Sherlock Holmes

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Abstract

Semiotics is the analysis and interpretation of signs and the basis of medicine since antiquity. It is suggested that the growth of technology has led to the virtual eclipse of the clinical examination with consequent loss of skill, empathy and patient trust. This paper views the value of medical semiotics through the method of the 19th century Italian doctor, Giovanni Morelli, which has had a significant but little recognised impact on the early development of psychoanalysis, the detective novel and art connoisseurship. Semiotics and, specifically, the linguistic semiotics of Ferdinand Saussure have been influential in the fields of the visual arts, literature and the social sciences since the 20th century. With its roots in the medical treatises of antiquity, medical semiotics should again be brought to the forefront of medical practice.

Keywords

Morelli, psychoanalysis, Arthur Conan Doyle, Sherlock Holmes, Giovanni Morelli, Sigmund Freud, Morelli Method, Carlo Ginzberg

The medical men...deserve special mention for the reason they have had since Galen a logical tradition of their own...

American Philosopher and Semiotician,
Charles S Peirce, 1839–1914

One of the disturbing aspects of medicine over the past 40 or 50 years is the virtual jettisoning of a practice central to it for thousands of years. Technology and 'tests' have all but displaced the clinical examination based primarily on observation. Many factors could be cited for this but among the more prominent are the rise of science and technology, the drive for efficiency and certainty linked to litigation, sub-specialisation and increasing time constraints on

doctors. Nevertheless, it is a profound cause for regret that the founding principle of medical practice since Hippocratic times is being lost to generations of doctors with consequent loss of diagnostic skills, contributing to increasing costs and a deterioration of the unique relationship between doctor and patient. Is there any way we can preserve the value of the history and physical examination?

Recognition of these issues has propelled many Western medical schools, over the past 40 years, to

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include humanities in medical training in the hope that they will broaden doctors' outlook, increase diagnostic skills, communication and empathy. Humanities include, but are not limited to, the study and interpretation of a wide range of subjects: jurisprudence, ethics, the arts, comparative religions, aspects of the social sciences and semiotics.¹

Semiotics, the study of signs, gained influence in the 20th century when the linguistics of Ferdinand de Saussure (1857–1913) were applied to many disciplines from social anthropology to literature, the visual arts and medicine. While the introduction of humanities to medical training is to be welcomed, it is at the same time ironic that the profession should look *outside* itself, given that semiotics had its roots in medical treatises from antiquity. The interpretation of signs evolved over time from magic and the flight of birds as a sign of disease, to the medicine of the Greeks when signs were limited to those of a specific patient. Medicine in the wake of the natural sciences in the 17th century reduced signs even further to those that were measurable. While undoubtedly useful objectively to verify a clinical diagnosis, by the 20th century such an approach led inexorably to the neglect of less easily measured signs and to charges of 'inhumane' medicine and a crisis of patients' trust. Perhaps it is time therefore to re-evaluate and reintegrate less certain, less measurable signs into medical practice? Looking at medical doctors who did this might be a good place to begin as, for example, the Sieneese physician to Pope Urban VII, Guilio Mancini, Sigmund Freud, Joseph Bell and Arthur Conan Doyle. But pivotal to the spread of medical semiotics to art, psychoanalysis and the detective story was the Italian doctor Giovanni Morelli, better known today as the first 'scientific' connoisseur of art.

Giovanni Morelli (1816–1891)

Giovanni Morelli was born in Verona to a Protestant family and because of religious repression could not attend medical school in Italy. He received his medical training in Switzerland and Germany before returning to Italy during the Reunification (*Risorgimento*) of Italy in the 1860s. He never practised medicine although he did study comparative anatomy and was deeply influenced by the famous naturalist and taxonomist, Louis Agassiz (1807–1873), who spoke constantly of the importance of observation and comparison. He travelled extensively looking at the art collections of Germany, France and Italy and became involved in the politics of Italian Reunification. Subsequently, he was elected to the Senate in the newly independent Italy where he chaired a variety of commissions that strengthened Italian art collections and also wrote his

historically important contribution to art history about the Morelli method of connoisseurship.

The Morelli method and its importance

One of the many interesting aspects of Morelli was that he wrote about art under pseudonyms which he maintained for more than 40 years. His first writings on art were published in German in 1836 and 1839 under the pseudonym Nicholas Schäffer. The famous Morelli method was not published until he was nearly 60 years of age, in a series of papers in a German journal between 1874 and 1876. Later, in 1880 these were published as a book and translated into English in 1892 as *Italian Painters: Critical Studies of Their Works in the Borghese & Doria-Pamphili Galleries in Rome*. This was the first time that Morelli was identified as the author Ivan Lermiolieff, the Russian 'author' of *Italian Painters* from a fictitious place, Gorlaw, with a German 'translator' (also Morelli) called Johannes Schwartz.² This was followed in 1883 by *Italian Masters in German Galleries: A Critical Essay on the Italian Pictures in the Galleries of Munich, Dresden and Berlin* by the same author and translator. Morelli's particular interest in pseudonyms may have evolved from his family history. Sir Austen Henry Layard (1817–1894), a great friend and follower, related in the *Introduction* to the 1892 English translation of *Italian Painters* that, according to Morelli, his family was originally from Venice. When they fled to France in the early 16th century, to escape detection by the Inquisition, they adopted the name 'Morelli' from one of their servants.

Italian Painters was constructed as a dialogue between a young Russian tourist (Lermiolieff) and an elderly Italian (Morelli). During their conversation in the gallery, Morelli outlined his method which vehemently opposed prevailing academic art historical methods based on 'general impressions', theory and documents. In Volume 11 of *Italian Painters*,³ Morelli stated 'It is easy to aestheticise and philosophise about art without taking the slightest notice of the *works* of art'. He, on the other hand, placed an emphasis on the minute examination of paintings, much as one would examine a patient, looking for signs in areas that might be considered less important such as the hands, fingernails, ears. It was in these areas, Morelli speculated, that the artist would be more relaxed and free from the conventions of a contemporary school or tradition and thus would produce forms and shapes characteristic for that artist. These could be then used to differentiate the work of an artist from that of a copyist. What differentiated his method from contemporary art historical conventions was that he drew up an inventory of how depiction of the smaller parts of the anatomy

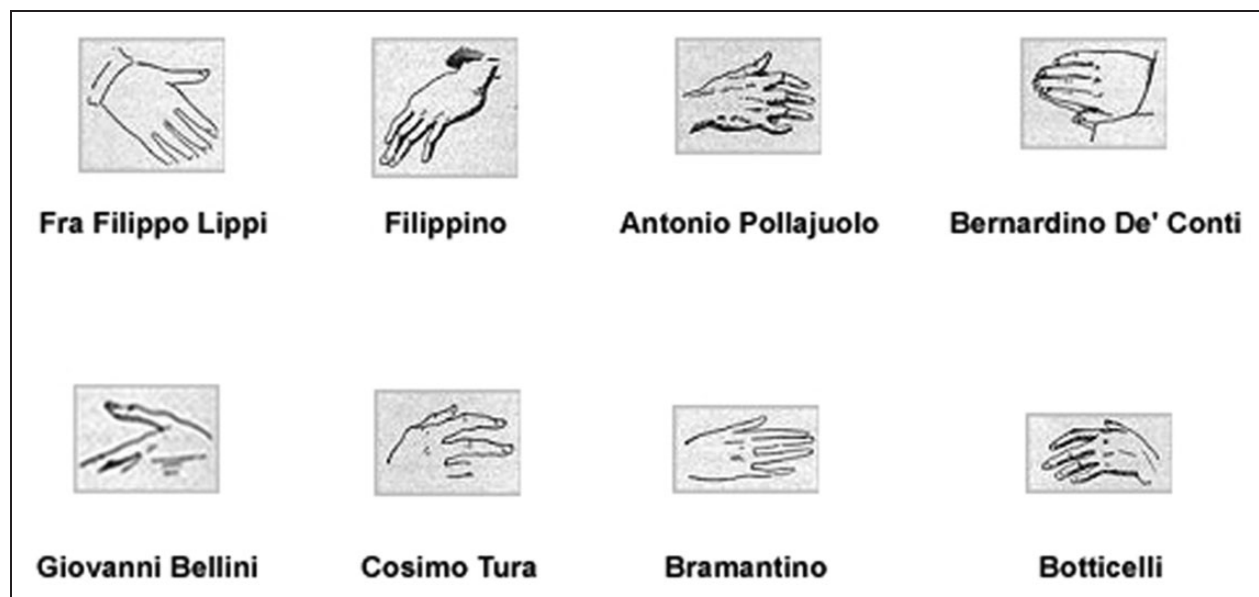


Figure 1. Hands from Giovanni Morelli's *Italian Painters* (1880).

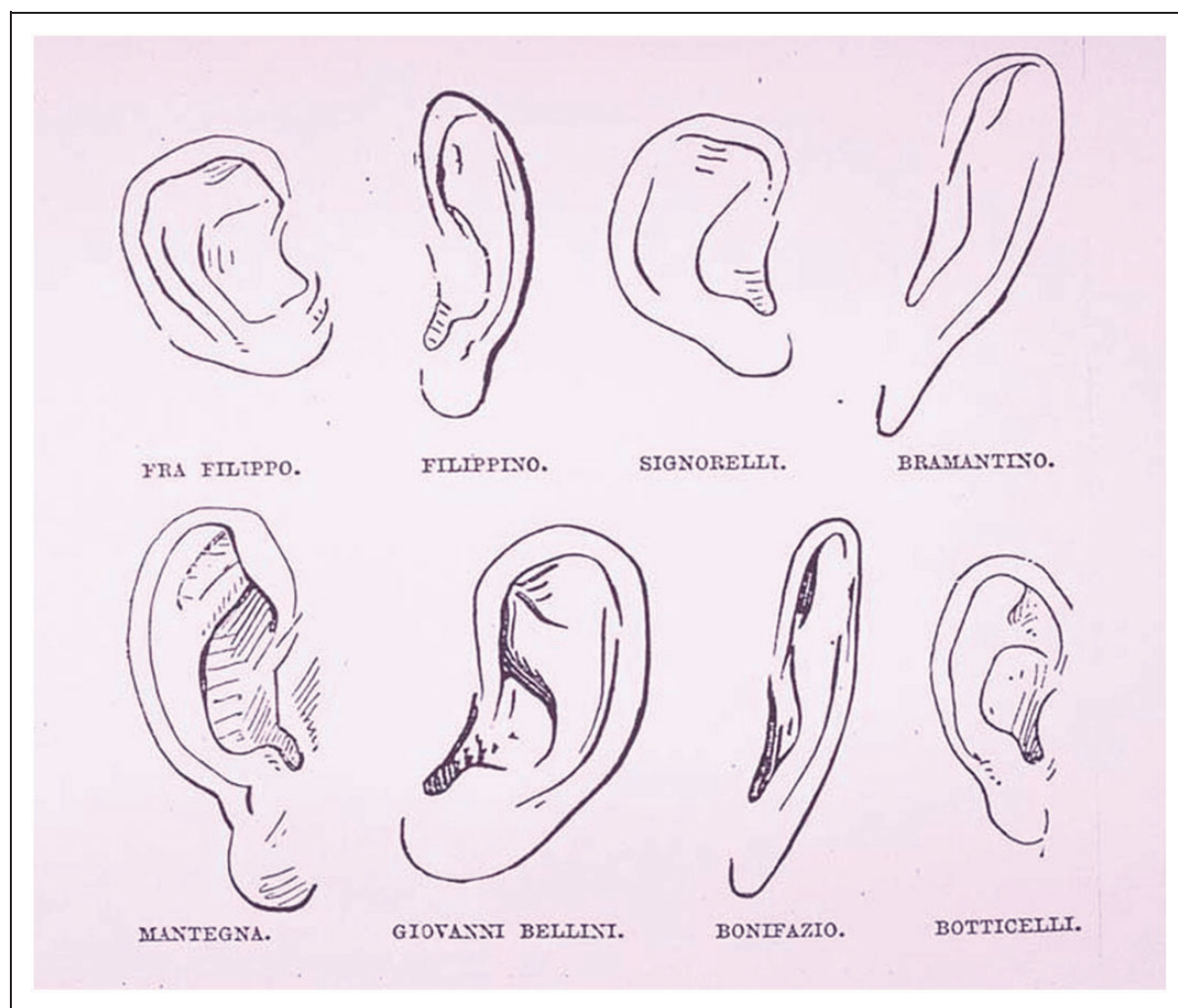


Figure 2. Ears from Giovanni Morelli's *Italian Painters* (1880).

could reveal the characteristic style of an artist (Figure 1, *Hands* and Figure 2, *Ears*):

For every painter has, so to speak, a type of hand and ear peculiar to himself.⁴

Except for the face, probably no part of the human body is more characteristic, individual, and expressive than the hand: to represent it satisfactorily has ever been one of the chief difficulties which artists have had...and one which only the greatest have been completely successful in overcoming.⁵

Although regarded as the first scientific connoisseur of art, Morelli was anticipated by another doctor, Guilio Mancini (1559–1630), in *Some Considerations Concerning Painting* (1619–1621) in which he also identified details that could authenticate the work of an artist from that of a copyist. However, Mancini did not devise a systematic method for such examination. Morelli admitted making mistakes yet his method made some spectacular re-attributions that have stood the test of time. A few examples will suffice.

Morelli showed that the *Magdalen*, attributed to Correggio in the gallery at Dresden, was a late 17th century copy while another, also in Dresden, believed to be a copy by Sassoferrato after Titian, was actually a lost Giorgione, *The Sleeping Venus*. He also demonstrated that ‘*Raphael’s Sketchbook*’ had been executed by Pintorricchio when Raphael was still an infant and that many ‘*Raphaels*’ and ‘*Leonardos*’ in Italian galleries were copies by Flemish artists studying in Italy. He also took issue with the first art historian, Giorgio Vasari (1511–1574), stating that Timoteo Viti, *not* Perugino, was the first master of Raphael. But Morelli’s method was not without contemporary critics, in particular the eminent art historian and director of the museum in Berlin, Wilhelm Bode (1845–1929). Layard stated in the Introduction to *Italian Painters* (1892) that Bode and others sometimes maliciously misrepresented Morelli and his method. Yet he admitted Morelli’s scathing contempt for art historians and museum curators, although pseudonymous, probably did not help his cause. More recently, while acknowledging his contribution to and neglect by art history, Richard Wollheim (1923–2003) questioned whether Morelli’s method stood up to recent developments in perceptual psychology.⁶ That the same configuration can look different in different contexts has been known to artists throughout time. Wollheim, however, used an example from experimental psychology that showed the effect of surroundings (an acute angle) on the perceived length of two parallel lines which appeared unequal but were the same. So Morelli’s method, Wollheim concluded, was more phenomenological and intuitive than he had

realised. For Wollheim, the strength and the weakness of his method lay in its narrow focus, namely his interest only in areas of a painting that related to his schema. He did not comment qualitatively on relationships between those areas and the overall work or its context. Yet, it can be argued that Morelli’s ideas were informed not only by the empiricism of medicine but also by the materialist approach of the physical sciences in the 19th century together with a concept of progression in art history laid down by Vasari. Art history and art practices have changed dramatically since Morelli’s time but how was his method taken up outside of art history in his time?

Sigmund Freud (1856–1939)

In the 1960s and 1970s, Morelli attracted the attention of some scholars because of his relationship to Freud and psychoanalysis. The source of this interest was a neglected section of Freud’s famous essay ‘*The Moses of Michelangelo*’ (1914), originally planned as part of the tomb for Pope Julius II, now in San Pietro in Vincoli, Rome, in which he writes

Long before I had any opportunity of hearing about psychoanalysis, I learned that a Russian art-connoisseur, Ivan Lermiolieff, had caused a revolution in the art galleries of Europe by questioning the authorship of many pictures, showing how to distinguish copies from originals with certainty... He achieved this by insisting attention should be diverted from the general impression and main features of a picture, by *laying stress on the significance of minor details*... It seems to me that his method of enquiry is closely related to the technique of psychoanalysis [author’s italics].

Apart from Freud’s interest, like Morelli’s, in what appeared to be insignificant details and signs, it is interesting that this essay was also published anonymously and only acknowledged later in Freud’s collected writings. The relationship between psychology and Morelli’s method of connoisseurship lay in the shared view that unconscious *small* gestures reveal more of character than conscious ones. Freud’s interest in Morelli was further confirmed by the fact that he had a copy of Volume 1 of Morelli’s book, published in Milan in 1897, which he bought there in 1898. It is now in the Freud Museum, London. On the strength of these connections, Carlo Ginzberg (1939–) suggested that Morelli had a special place in the history of psychoanalysis.⁷ Like Morelli’s method, Freud’s theory of psychoanalysis has also received criticism in the late 20th century because of its vagueness and the difficulty in evaluating it. But what of Morelli’s connection to Sherlock Holmes?

Arthur Conan Doyle (1859–1930)

In 1893 Arthur Conan Doyle published one of his immensely popular Sherlock Holmes series of detective stories in *The Strand Magazine* called 'The Adventure of the Cardboard Box'.⁸ Renowned for his acute observation of apparently unimportant details, the case involved an old lady, Miss Susan Cushing of Croyden, who received a box filled with coarse salt and two severed ears that had been posted from Belfast. The mystery was solved by Holmes' careful observation of such signs as the old lady's ears compared with those in the box, as well as the handwriting of the address, the string and the smell of the wrapping paper. Sounding very like Morelli, Holmes explained to Dr Watson how he had arrived at his conclusion that one of the ears belonged to a female relative of Miss Cushing (the other, he noted, belonged to a male):

As a medical man, you are aware, Watson, that there is no part of the human body which varies so much as the

human ear. . . In last year's *Anthropological Journal* you will find two short monographs from my pen upon the subject. . . on looking at Miss Cushing, I perceived that her ear corresponded exactly with the female ear which I had just inspected. . . the same shortening of the pinna, the same broad curve of the upper lobe, the same convolution of the inner cartilage. . . It was evident that the victim was a blood relation. . .

In the same issue a two-part article, 'Hands I' and 'Hands II' discussed the hands of famous men and women, signed by a 'Beckles Wilson' (Figure 3). Garibaldi's hands, for example, were described as 'both virile and nervous'. In spite of the eclecticism of articles in *The Strand*, perhaps we can speculate that 'Beckles Wilson' could be a pseudonym for Arthur Conan Doyle? Some months after the publication of 'The Cardboard Box', *The Strand* also published an unsigned article, 'Ears: a chapter on' (Figure 4). Could this be the one Holmes mentioned in the story mentioned above? The remarkable similarity between

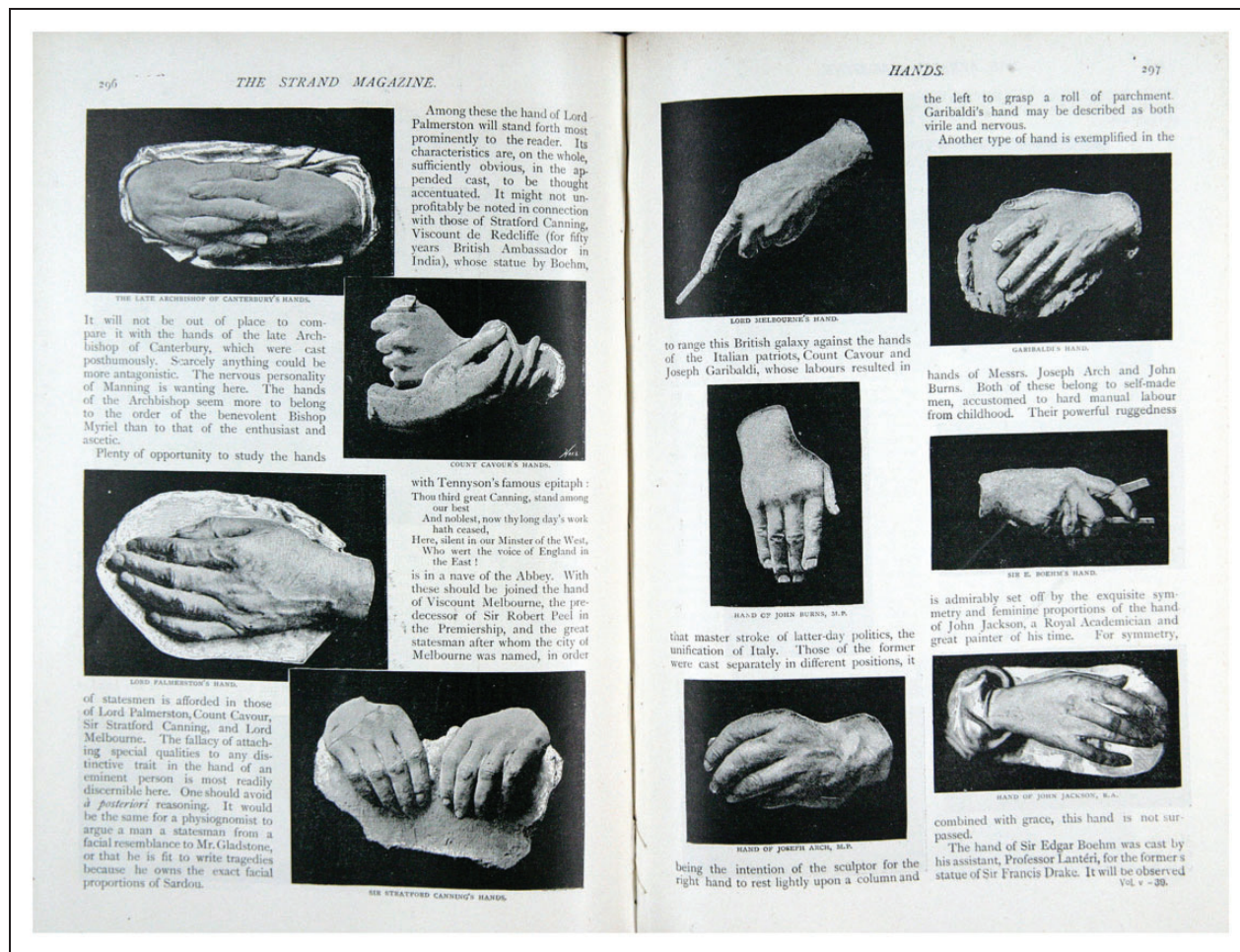


Figure 3. Beckles Wilson, 'Hands I', *The Strand Magazine* 1893; V, January–June.

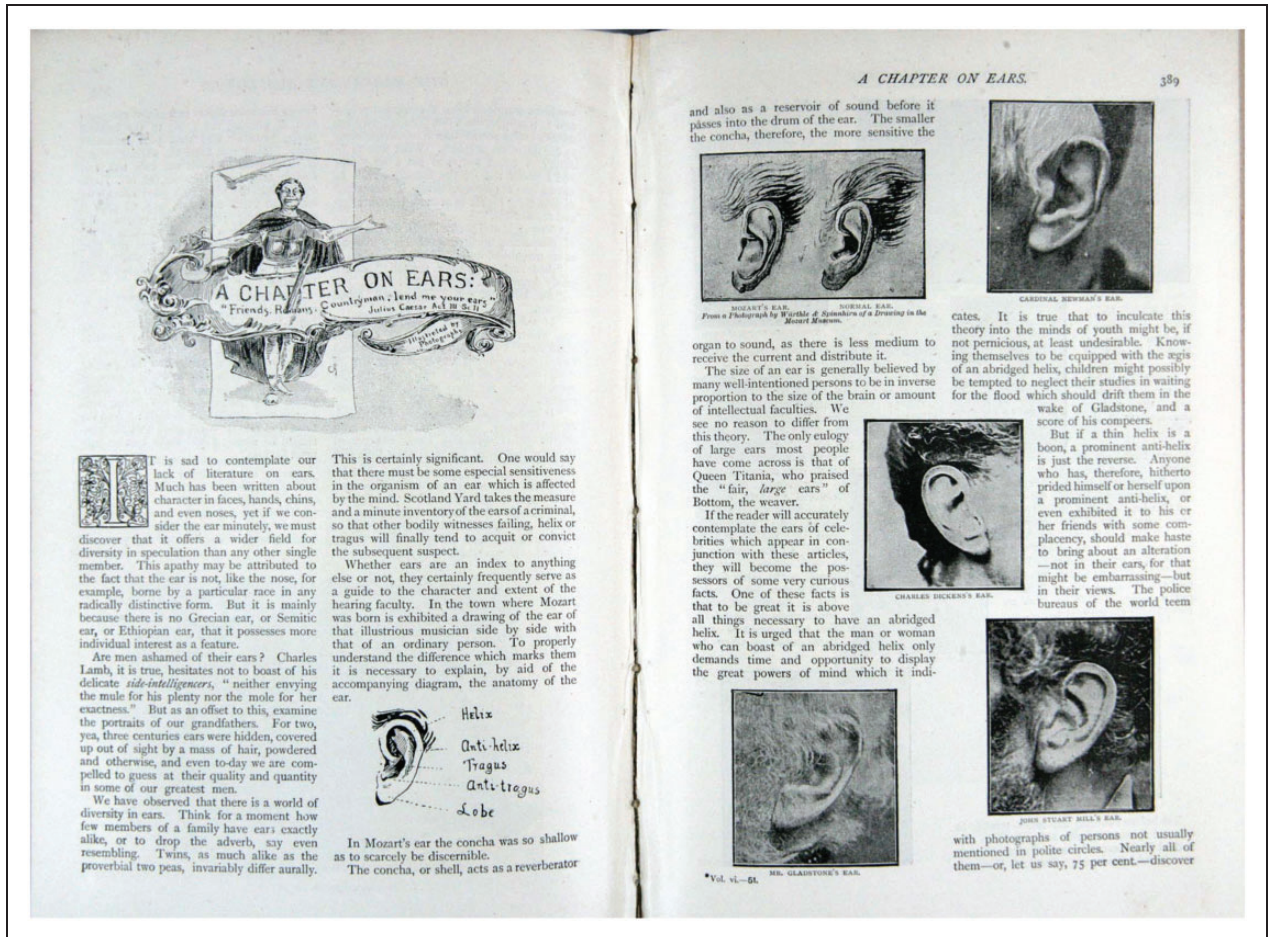


Figure 4. Anonymous, 'Ears: a chapter on', *The Strand Magazine* 1893; VI, July–December.

the narrative structure of the Sherlock Holmes stories and *Italian Painters* is also worth mentioning. In both, the narrator is less knowledgeable than the companion with whom he conducts a dialogue. Like the triad of Morelli, 'Lermiolieff' and 'the Italian', perhaps we can suggest another of Conan Doyle, 'Watson' and 'Holmes'? But what evidence is there that Conan Doyle knew of Morelli?

Conan Doyle was a practising doctor who had trained under Dr. Joseph Bell (1837–1911) at the Royal Infirmary, Edinburgh. The latter, renowned for his exceptional powers of observation and diagnosis, not only drew the analogy between crime detection and diagnosis of disease but also became Doyle's model for Sherlock Holmes acknowledged in a letter to Bell in 1892: 'It is most certainly to you that I owe Sherlock Holmes... I do not think that his analytical work is in the least an exaggeration of some effects which I have seen you produce in the outpatient ward'. Yet, it also seems possible, given the remarkable coincidence between *The Strand* articles on 'Hands' and

'Ears', and Holmes' pronouncements regarding the importance of small details (shared by Bell), that Conan Doyle would have been aware of Morelli's method. And this is where, perhaps, an Irish art connection may have been influential.

Henry Doyle (1827–1892), an uncle of Conan Doyle, and an artist, became the second Director of the National Gallery of Ireland in 1869 and continued there until his death in 1892. Apart from astute acquisitions (Rembrandt, Fra Angelico, Titian, Reynolds, Gainsborough, Poussin), Doyle also edited the National Gallery's catalogue in 1890. For this he used Layard's revision (1887) of the Kugler's *Manual of the History of Painting from the Time of Constantine the Great to the Present* (1837) which incorporated Morelli's ideas.¹⁰ It is also known that Henry Doyle and Morelli had met in London in 1887 from a letter by Morelli to Layard, now in the Layard papers at the British Museum. Conan Doyle's first Holmes story, 'A Study in Scarlet', was also published in 1887 and, although there were many sources for his stories,¹¹ it is

at least possible that he would have been aware of the first English translation of Morelli's work in 1883 through his uncle Henry Doyle.

In conclusion, the link between these three doctors working in different fields was their interest in, and exploitation of, signs. Since the dawn of time, man has communicated through signs in the form of prehistoric drawings, painting, sculpture, spoken and unspoken language, architecture, literature, music, religion and medicine. Through signs, we try to interpret the world and, in the case of medicine, patients and disease. Medical semiotics however, like all interpretation, is uncertain. From linguistic semiotics we learned that words are arbitrary sounds which stand in for meaning. Thus, the sign and its meaning are not the same because meaning has to be ascribed. Medical education concentrates on acquiring a specialised vocabulary of signs for interpretation. Yet we know that a sign alone does not lead to a diagnosis since context and experience often shape its interpretation. In an effort to be more 'scientific', medicine has increasingly adopted quantitative methods. However, even in science there are factors at play that rely on intuition, viewpoint and experience. Perhaps, it is time to place the anthropocentric, qualitative approach of medical semiotics that sustained medicine for centuries once more at the heart of the doctor-patient relationship? As Morelli, Freud and

Conan Doyle showed, the fragility of interpretive processes can be minimised with training and practice so that, like Holmes, one can say: 'I have trained myself to notice what I see'.

References and notes

1. USA National Endowment for the Humanities, 1965.
2. Morelli is a diminutive of 'Moro' meaning 'black'; Ivan Lermiolieff is an anagram of Morelli with a Russian ending; 'John Black'.
3. *Italian Painters*, Vol. 2, p. 443.
4. *Italian Painters*, Vol. 1, p. 76.
5. *Italian Painters*, Vol. 1, p. 76.
6. Wollheim R. Giovanni Morelli and the origins of scientific connoisseurship. In: *On art and the mind: essays and lectures*. London: Allen Lane, 1973, pp.177–201.
7. Ginzberg C. Morelli, Freud, and Sherlock Holmes. In: Eco U and Sebeok T (eds) *The sign of three: Dupin, Holmes, Peirce*. Bloomington and Indianapolis: Indiana University Press, 1983, pp.81–118.
8. *The Strand Magazine*, 1893, V, January–June.
9. *The Strand Magazine*, 1893, VI, July–December.
10. See Horowitz N for the influence of Edgar Allan Poe on Conan Doyle in 'The Body of the Detective Model: Charles S Peirce and Edgar Allen Poe', in *The sign of three*, 1983, pp. 179–197.
11. See note 9 to Ginzberg's article, 'Morelli, Freud, and Sherlock Holmes', *The sign of three*, 1983, p. 112.

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Sir George Frederic Still (1868–1941): A 'father' to many children

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