

Two new methods for analysing the disappearance of Ettore Majorana

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Abstract: The disappearance of Ettore Majorana (EM) in March 1938 has been the subject of many biographical reconstructions, some of them plausible, others improbable but none has been totally convincing in solving the mystery surrounding the physicist's disappearance. Here we will explore in depth the world of EM with the help of recent medical and historical material for our investigation. In our research we will examine the original and unpublished documented *oral history* of the Majorana family who mistakenly was never considered capable of either creating the secrets surrounding EM or hiding them. From a medical point of view we have used one of the recent theories on autism to study the personality of the physicist. As in other mathematical geniuses, chess players, physicists and musicians of the short century we will show that it is quite conceivable that EM had Asperger's syndrome.

Keywords: Ettore Majorana, Majorana Family, Oral history, Collective memory, Autism, Asperger's syndrome.

1. The recourse to *oral history*

Oral history has existed ever since man wanted to pass on his stories to another, from one generation to the next but we must exert care when using it. The use of oral history came back into vogue in America in the 1930s and in Europe towards the end of the 1960s. Whilst working as a director for TV documentaries with a group of highly professional journalists, directors and historians I employed this oral history method. The work primarily consisted of two documentaries coinciding with the 30th anniversary of the end of the World War II in Italy in 1943-1945 (Bermani 1999).

Due to the difficult and sensitive nature of the subject we were working on, and to the fact that we were using the oral history of ordinary people, we had to use great care in finding reliable sources. There was the possibility that our work could be manipulated and the difficulty in creating a finished result that had continuity and homogeneity without the addition of comments or a speaker. The experience in fact, proved to be intense but short lived. This kind of documentary which featured eye witness accounts of ordinary people was not received particularly favourably by our peers and so the production was limited to just a few documentaries and then our group of journalists and directors was subsequently dissolved.

No longer with work but with this experience fresh in mind, it was a perfect opportunity to turn my attention to the oral history of the family members of my late uncle Ettore Majorana (EM) and of the mystery surrounding his disappearance shortly before the outbreak of World War II. I was already aware that the accounts of the story surrounding EM that had appeared in the mainstream press at the time were very different from the oral history that the family was able to recall. As in all oral history the accounts given by the family members had to be double checked just as any source of information needs to be examined carefully by the historian. In the case of EM there was a tangled web of information and false leads that I hoped, through the use of oral history of the family members, the truth could be brought to light and a reconstruction of the events concerning EM's disappearance made possible.

1.1. Sometimes oral history is supported by written documents

In the Majorana family everyone knew that Oliviero Savini Nicci (OSN), husband of Elvira, the sixth daughter of Senator Salvatore Majorana Calatabiano, had played a relevant role in the events which followed the disappearance of EM. I would like to remark that OSN came into this story in an article of mine only in December 2011, more than seventy two years after the disappearance of EM (Roncoroni 2011).

In that article I began to investigate the mystery surrounding EM and shed more light on the Majorana family. Through the oral history of the Majorana family I will attempt to separate the false leads from true leads, the wheat from the chaff. To use as much and as well as possible, the razor of Occam. One thing we can be sure of is that this has all the characteristics of a typically Italian mystery.

It came to light that in the first months of 1940 OSN had asked those members of the family close to him for news about his cousin Ettore. "The events concerning Ettore concluded in a totally unexpected way." He had said. These short but revealing few words urged for further investigation. Why was it that the version of events recalled by the family were so different from those printed in the press and in the media at the time? One of the members of the family who had heard OSN pronounce these words told me that he had sounded irritated like someone who had to repeat the same words on other occasions but it wasn't possible to say more than he had without possibly offending the discretion of the family.

That short phrase "The events concerning Ettore concluded in a totally unexpected way" suggests that the family could never have imagined the life of a person of such genius with such a love for life, who had enjoyed and should have continued to enjoy the love and affection of his family would have ended in the way it did. Reflecting more on this I started to believe that this was a contradiction in the official version and, what is more, these few words were backed up by documentary proof in public and private institutions and religious and non-religious bodies alike. Despite the fact that this documented material was known of and readily available it had been systematically misrepresented or often just simply ignored.

I refer to:

1. The end of the Police search (search bulletin and border control) in mid-1939;
2. The dismissal of EM from his teaching post by the National Education Ministry at the end of 1939;
3. The letter of 22nd September 1939 announcing the creation of a research grant dedicated to the memory of the late EM, deceased, sent by the father of the Jesuit council of the Lombardo-Veneto region to Ettore's brother Salvatore;
4. The condolence letter sent by the Vatican to the Majorana family in March 1940 in which the family is asked to accept the tragic end that EM had met and to give up searching for him;
5. In a profile of EM written by his friend and colleague Giovanni Gentile Jr. for the Treccani encyclopaedia in which he liberally uses the remote past "was" in his description and in a previously unpublished posthumous article by permission of the entire Majorana family between 1941 and 1942 (Roncoroni 2012);
6. And finally in the Necrology article "Ettore Majorana, The man who decided to go missing" forming the central thesis of my book. The article by Giuseppe Majorana, who was then the head of the family, was the first and only article written by a family member at the time. In the article which was deliberately ignored, he testifies that the other members in the family knew that the story of EM had been concluded in 1939 but that no one had wanted to confirm this explicitly (Roncoroni 2013).

1.2 Sometimes an oral story can lead to a complete revisal of the official version of events

From the version of events in the memoirs of Amaldi it is a well-known fact that the group of researchers working in Via Panisperna were actively urging EM to participate in the competition for the teaching post in theoretical physics (Amaldi 1966). To make matters even more complicated in assessing the validity of this version, there are also the offers of congratulations and thanks from EM's brothers sent to Amaldi. However what was said by the extended family of EM demonstrated that his friends and colleagues had never proposed EM to enter the competition for the teaching role but in fact it had been his uncle, the physicist Quirino Majorana, "alone" who had insisted on EM's involvement in the teaching competition which ultimately led to EM obtaining the post. It is known there were bitter recriminations in the family against Quirino for his involvement after the disappearance of EM. The information relating to this version of events was collected over a period of years from a variety of sources that include Ettore Majorana's brother Salvatore, the family of Quirino and Mario Savini Nicci on behalf of his father OSN and has been confirmed in documented correspondence included in the book and also in the oral memory and the diaries of OSN (Roncoroni

2013). The last and most relevant entries in his diary refer to meetings held between OSN and Antonio Carrelli in July 1938 to discuss the competition for the teaching post. This part of the story was to form the second and conclusive part of the previously mentioned article about the role Savini Nicci had in the EM story but was never published. The article would have helped in understanding the necessity to take into account the internal logic of EM's family and so understand better the biography of EM and at the same time to reinterpret the internal dynamic of the group of researchers in Via Panisperna and critically reconsider the accounts given regarding EM by his principal exponents.

1.3 Sometimes oral history that was not considered important at the time, when re-examined can reveal new interpretations and be validated through documents

Taking a wider view, I would like to consider another extraordinary piece of oral history. That of the reappearance of EM between the period of 28 March 1938 and September 1939. This is disruptive because with a razor it eliminates all possibility of the disappearance abroad, an interpretation of events that has lasted for more than seventy years and in its place permits a reconstruction of Ettore's disappearance and his rediscovery on Italian soil.

This takes us to the Cilento area not far from Naples where in the two villages of Perdifumo and Celle di Bulgheria various witnesses claim to have seen EM. The curiously symbolically named village of Perdifumo (literally translated "losing smoke") is the place from where one of the most important families of the village, the Farzati, got in touch with the Majorana family to inform them that they had seen a man who they believed to be Ettore Majorana. EM's brothers together with a Sicilian farmer Don Ignazio go to the Farzati home and remain there for thirty days. Every day they leave the house early to go on the search for EM and discretely return late in the evening. But the quiet of the small sleepy village is suddenly disrupted when the brothers' suspicious comings and goings trigger a full scale search by the police accompanied by tracker dogs.

The pieces of information given by the Farzati family and those of Ettore's brothers that I collected are reliable but less revealing and convincing than those of the local people and shepherds and farmers but none of which could be backed up by any documented material. That is until just a few months ago when I found a phonogram from the Chief of Police at the police headquarters of Salerno. It registered the words "Two tracker dogs sent to investigate the disappearance of Professor Ettore Majorana".

Unfortunately there is no geographical reference to Perdifumo or Celle but the phonogram undeniably represents a solid piece of evidence from which a hypothetical reconstruction can be constructed using the historical memory of the Farzati family, of the Majorana family and of the local Cilento population. So this was how events had gone; after receiving news of the sighting of EM by the Farzati family the brothers had gone to look for their brother. It begs the question for what other reason would they have remained an entire month in such a small forgotten place? Ettore would have been foraging for food and protecting himself until the time came that it was necessary to go

on the run. Then at this point the police dogs are brought in for the search. Initially they go to the area around Perdifumo and then travel further south to another village in the Cilento, Celle di Bulgheria. The Police chief Arturo Bocchini was involved in the search. He hoped to gain credit for what he imagined would be a successful outcome of the operation. But it wasn't.

At the end of October 1938 there was a sighting of EM further south near Catanzaro. This is again from the entry in the diary of Oliviero Savini Nicci and might well be another part of the escape and is most certainly another part of this research.

2. The autism hypothesis: Asperger's syndrome

The family oral history does not report about any reliable medical diagnosis (if any) on EM's health before his disappearance.

The most significant comment comes in a letter from his brother Salvatore to another cousin dated 5th June 1938 but only published in 2013 in which he is more explicit, although he does not come to any clear conclusion about the behaviour of EM.

In any case illness is to be excluded because if there have been any preceding signs of Nevraesthesia, melancholy however is not present. The Nevraesthesia cannot cause suicide without delirious ideas which have no precedent in Ettore. It is also true that his habitual surroundings and especially his family are a counter indicator for Nevraesthenism almost to the point of being toxic for such a pathology. For that reason we can only hope for the best (Roncoroni 2013, p. 248).

Nevraesthesia is a term no longer used in current medical terminology but in the past was used to indicate a weakness of the nervous system characterized by an inexplicable loss of strength accompanied by nervousness, anxiety, depression, headache, gastrointestinal disturbance, insomnia and sexual disturbances; all symptoms which are not explained by constitutional causes. Some of these symptoms did actually afflict Ettore.

Before I found the letter I read a number of biographies on musicians, chess players, mathematicians, physicists and other famous precocious geniuses such as Gould, Fisher, Nash, Dirac. I also studied works on autism by Fitzgerald (2004), Baron-Cohen (1997), Attwood (2006) and the Italian Asperger group and so arrived to hypothesize that also EM could have suffered from a mild and particular form of autism. In order to answer to the questions "who are the patients suffering from Asperger syndrome?" and "how do they behave?" I considered the case of EM and I compared it to those who have been diagnosed with Asperger syndrome (AS) when they were still alive. As a result my hypothesis became more reliable so that EM's behaviour appeared more understandable than previously described.

In fact although some of the problems attributed to Ettore were considered in the context of Nevraesthesia at least two of his most significant personal characteristics cannot be explained by the diagnosis of his brother Salvatore. I refer to his precocious mathematical capacity and his difficulty in relating to the world outside him and especially with women. These two characteristics alone would confirm that Ettore

suffered from AS. We can sense his difficulty in relating to the world around him just by looking at the few photos that exist of him including his photo identity card where you can see that he is looking away from the lens. The difficulty to relate to the outside world is also in his difficulty to express his real emotional state, in the absence of sentimental relationships throughout his life and for his obsessive interest in physics and numbers. There is also a rigidity in interpersonal relationships which is strictly connected with his incapacity to understand limits in social hierarchy whether academic or in the family.

2.1. Characteristics of Asperger patients

Often those suffering from Asperger syndrome have innate talents which distinguish them from others. An intelligence well above the average and a creativity and originality of thought within a chosen field and an ability to “think outside the box”. Honest and naive at the same time, they have a strong work ethics, are perfectionist, precise and are good at identifying errors. They enjoy to live in silence and solitude and consequently have great difficulty in socializing. A person with Asperger syndrome can also be reliable, persistent and with an attention for detail, and at the same time they can be objective and speak frankly. They can also have a strong sense of social justice and a marked originality in “problem solving”. Any commitment they undertake is carried through to its conclusion. It is not difficult to recognize in EM these qualities of a person with Asperger syndrome but it is also possible to recognize Ettore in the problems that a person suffering from Asperger syndrome has to face. The difficulty they have to work in a team, to confront change such as a promotion with managerial responsibilities.

The Asperger syndrome hypothesis requires that every part of the various documented moments of EM’s life be examined carefully so that a simpler and logical explanation of his clinical pathology can be demonstrated.

With this in mind it is useful to take a look at the biographies of just three geniuses out of the many that exist to see in what way they were similar to EM. For example the American chess player Paul Morphy (1837-1884) who retired at just 22 years old at the peak of his career and fell into a state of paranoia which afflicted him for the rest of his life (Maurensig 2013). Or that of the more recent English mathematician Simon Norton (1952-) who at a young age and having made his most important discoveries left public life to live a tramp-like existence but free and independent in the cellar at the family home (Masters 2011). Or also of the American mathematician William James Sidis (1898-1944), considered to this day to be the most intelligent man to have ever existed. He graduated with honours at 16 and taught three science subjects but then retired into anonymity and was arrested and put into a psychiatric institute at his father’s request (Brask 2011).

These examples show that the fractured lives of the young, suffering geniuses not only become stranger to themselves but also distance them from their own families. The family, in fact, is a major factor in the pathology and our understanding of it. It can be unable or unwilling to understand or relate to the fraught personality of the genius and resort to what we can consider is a cold Anglo Saxon detachment.

Such a cold detached “Anglo Saxon” behaviour in an Italian family is difficult to imagine even more so if the family in question is a Southern Italy family from Sicily with the peculiarities of the Majorana family. So sad an ending to life as experienced by those geniuses described above, for Ettore Majorana would have been considered unimaginable.

2.2. One example of Asperger behaviour in EM

There is a particular and well known episode in EM’s life that, if considered in the light of the hypothesis that EM suffered from AS, appears much more logical. EM on the day he was to leave Naples and the last day that we have any news of his movements gave one of his female students a folder containing documents. The contents of these documents is unknown and this fact can be blamed on a lack of professionalism and ethics on the part of the person or persons who came into possession of them. The resulting mystery surrounding these documents has resulted in a fog of fantasy, and suspicion. With two cuts of the razor we can eliminate the fantasy and the suspicion.

It is possible to imagine that having decided irrevocably to leave his teaching post, EM, with a strong ethical sense as in all Asperger people, would have handed over his final lessons to his six students and in that way concluded his commitment to himself, with society and with the six students. What was handed over to the student, I believe, was purely and solely material relating to the course and nothing else. This episode, so full of personal significance, becomes easier to explain when seen in a psychological context but incredibly our new hypothesis has only managed to reignite the discussion with more wild speculation and fantasy.

To solve a mystery it is important not to have an abundance of superfluous arguments. In the case of EM the difficulty lies in trying to understand the mind of EM which is both illogical and deceptive and has up to now only helped to generate a series of false interpretations with symbolic significance whether it be of a sociological, political or scientific nature.

In conclusion there are just two threads to follow to solve this case. The irrevocable decision of Ettore Majorana, the man who decided to go missing, to distance himself from the family and the world and the role played by the Majorana family with the support and covering by public and private institutions both religious and non-religious, with no other scenario but Italy.

Bibliography

- Amaldi E. (1966) (a cura di). *La vita e l’opera di Ettore Majorana*. Roma: Accademia Nazionale dei Lincei.
- Attwood T. (2006). *Guida alla sindrome di Asperger. Diagnosi e caratteristiche evolutive*. Trento: Erickson.
- Baron-Cohen S. (1997). *L’autismo e la lettura della mente*. Roma: Astrolabio.

- Bermani C. (1999) (a cura di). *Introduzione alla storia orale*. Roma: Odradek.
- Brask M. (2011). *William Sidis' perfekte liv*. Copenhagen: Politikens Forlag.
- Fitzgerald M. (2004). *Autism and Creativity. Is there a link between autism in men and exceptional ability?* New York, Brunner Routledge.
- Masters A. (2011). *The Genius in my Basement. The Biography of a Happy Man*. London: Fourth Estate.
- Maurensig P. (2013). *L'arcangelo degli scacchi. Vita segreta di Paul Morphy*. Milano: Mondadori.
- Roncoroni S. (2011). "Il promemoria 'Tunisi'. Un nuovo tassello del caso Majorana". *Il Nuovo Saggiatore*, 27 (5-6), pp. 58-68.
- Roncoroni S. (2012). "Genesi dell'articolo postumo di Ettore Majorana 'Il valore delle leggi statistiche nella fisica e nelle scienze sociali'". *Nuova Storia Contemporanea*, 16 (2), pp. 105-144.
- Roncoroni S. (2013). *Ettore Majorana, lo scomparso e la decisione irrevocabile*. Roma: Editori Riuniti.