The New Historical Method

III Millennium Physics

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Our Future is in History

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About the article

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Synopsis

The Italian physicist, Enrico Fermi, winner of the Nobel Prize for Physics in 1938, declared that if Ettore Majorana, with his intelligence, had wanted to disappear, no-one would ever have been able to solve the mystery.
So if, at a distance of some eighty years since that disappearance, we are still here discussing the case, we can only confirm the validity of Fermi's words.
Nevertheless, it is our wish to provide you with sufficient proof to solve the mystery.
History is the science of humans in time. My task as a historian is to support life. At this historic moment we are confronted with an urgent priority: survival of the human race on Earth.
What relationship exists between Ettore Majorana and a possible solution to the climate challenge?
Mysteries, like sleight of hand, lose their fascination when they are revealed. You will notice that this case does not confirm the rule.

1. Ettore Majorana: brief historical notes

He was born in Catania in 1906 into a family, whose members had already had the opportunity to make themselves publicly appreciated in Italy. His father, Fabio Massimo (1875-1934), engineer, at the age of nineteen, graduated first in engineering and then in physics and mathematics. He was inspector general of the Ministry of Telecommunications.

His uncle, Quirino Majorana (1871-1957), experimental physicist, was professor of physics at the University La Sapienza of Rome, at the School of Engineering of Torino (1916-1921) and the University of Bologna (1921-1934). In 1933 he opened the academic year at the University of Bologna with a lecture entitled, "New hypotheses and facts in the physics of the 20th century". He was also president of the Society of Italian Physicists. With his experiments he made an important contribution to the birth and development of telephony.

His grandfather, Salvatore Majorana Calatabiano (1825-1897), economist, was a member of parliament from the ninth to the thirteenth legislature period in the historic left-wing ranks, twice Minister of Agriculture, Industry and Commerce in the first and third Depretis government (1876-1879) and senator of the Realm of Italy in 1879.

Ettore showed a distinct and precocious aptitude for arithmetic. On finishing his classical studies he enrolled at the faculty of engineering in Rome.

It was thanks to his friend Emilio Segrè (Nobel Prize winner for physics in 1959), whom he met during his engineering studies, that he was introduced to Quantum Physics. In June 1927 Segrè was, in fact, present at a conference held by Enrico Fermi. He was struck by it and spoke about it to Ettore, with the result that the following year Ettore requested, and obtained, a transfer to the faculty of physics. In 1929 he graduated in theoretical physics under the direction of S.E. Enrico Fermi expounding on the thesis: "Quantum theory of radioactive nuclei", for which he received full marks.

In September 1926 the directorship of research at the Institute of Physics, was conferred on Fermi. The institute was located in 89A Via Panisperna in Rome. And so started the campaign of recruitment to collect the most excellent students.

"The Italian school of physics, with Galileo, was the first of its kind in the world. His condemnation by the Power of the era (the Church) did not hurt Galileo himself so much – he was sentenced to house arrest - but it destroyed the Galilean school; and for centuries physics moved beyond the Alps. It took exactly 300 years for the Italian school of physics to return to its ancient prime position; from 1633 (Galileo's conviction) to 1933 (date of Enrico Fermi's first important article at an international level, which launched the theory of weak interaction). And that occurred thanks to the far-sightedness of the Sicilian senator Orso Mario Corbino, himself also a physicist, who identified in Fermi, then twenty-five years old, the one who would achieve the leap in quality, which he had premeditated"[1].

In the summer of 1928 Fermi had the means to test Segrè and shortly afterwards confirm his admission to the group "the boys of Via Panisperna". Only a few weeks later Segrè spoke to Fermi about Majorana.

Their meeting is legendary.

At the time Fermi was working on a statistic model of the atom, which was later to be called "the Thomas-Fermi model". After a week of work using a Brunsviga, the most powerful calculating machine of the period, he was only able to obtain a few numerical values, grouped together in a table, which he submitted to Majorana.

[1] Interview with Prof. Erasmo Recami, 25 February 2015 curated by Edoardo D'Elia - https://www.rickdeckard.net/2015/02/24/il-caso-majorana-intervista-a-erasmo-recami/

This is how Amaldi, Italian physicist, he too a member of the group, described the episode: «Majorana listened with interest and, after having asked for some clarifications, he went away without disclosing either his thoughts or intentions. The day after, in the late morning, Majorana turned up at the institute again and asked to see the table. As soon as he had it in his hand, he pulled a piece of paper out of his pocket, on which he had written a similar table that he had calculated at home during the past twenty-four hours, transforming the Thomas-Fermi non-linear second order equation into an equation of Riccati, which he then integrated numerically. Comparing the two tables and confirming that they agreed perfectly, he said that the Fermi table was correct, and left the office and the Institute». Majorana had therefore not returned to verify if the table he had calculated in the last twenty-four hours, without the help of any calculators, was correct, but to verify that that of Fermi was precise[2].

No one knows how Fermi took this comparison personally but it's a fact that he admitted him to the group of "boys".

Ettore took part in various activities at the Institute, but soon his clear intellectual superiority, power and speed of calculation transformed his initial enthusiasm into an attitude of criticism.

«There was a profound difference between him and the group of boys of Via Panisperna: Fermi and the "boys" were searching whilst he was simply finding. For the former, science was a case of willpower, for the latter a matter of nature» wrote Leonardo Sciascia[3] in order to show that for Majorana physics was a fact as natural as breathing.

And so in contrast to the nickname "Pope", which the "boys" had given to Fermi, Majorana became the "Great Inquisitor".

He wasn't made to be part of, or form, a group, or even to pursue fame. He was interested in knowing how to do things. His objective was to understand the profound architecture of the world, to liberate matter from vain interpretations, the fruit of superficial knowledge. To do this he estranged himself from normal life and became completely united with his numbers. Pages and pages of calculations without a single cancellation, or almost. This is what one can see in his *Notebooks and Booklets*, preserved in the Domus Galilaeana Library of Pisa and published in 2006[4].

He wrote a great deal but when Fermi exhorted him to publish, he refused, withdrawing into himself. Between 1928 and 1932 he published only nine articles on nuclear and molecular physics in "Nuovo Cimento" – a famous specialist magazine published and edited by the Italian Physics Society – and in "Rendiconti", magazine of the Accademia dei Lincei. In 1930 he also wrote *The value of statistical laws in physics and the social sciences*[5] in which he asked himself the question whether one could apply the concepts of physics to social science. The article was only published in 1942, thanks to his friend, Giovanni Gentile junior, who wished it to be known that the late publication was due to «the extreme reticence of the author about opening up to others, that he had often also tried to persuade him to collect important works in a drawer»[6] For Majorana publishing was of little value (list of articles p. 18).

1932 was an important year for Majorana: in fact he allowed himself to be persuaded to go abroad. Thanks to a CNR (National Council for Research) grant, he spent seven months from January to August 1933 between Leipzig and Copenhagen. There he had the opportunity to meet Heisenberg in person and exchange ideas at length. Due to this relationship and inspired by mutual appreciation, he decided to publish a powerful article *Über die Kerntheorie* (About nuclear theory), in one of the most

[2] Amaldi, pp. IX-X.
[3] Sciascia, p. 30.
[4] S. Esposito and E. Recami (editors) *Appunti inediti di Fisica teorica (Unpublished notes of Theoretical Physics),* Zanichelli, 2006.
[5] *Scientia*, vol. 36, fascicle February-March 1942, pp. 58-66.
[6] Klein, p. 58.

important magazines of the time, the *Zeitschrift für Physik* (Magazine for Physics). In this article he corrected the Heisenberg model and integrated it with the new concept "The force of exchange" between protons and neutrons, which today is called "Majorana's force".

In October 1933 Heisenberg participated in the congress of Brussels dedicated to the structure of atomic nuclei, enthusiastically presenting Majorana's model of nuclear interaction. The international fame of the Sicilian physicist started to grow exponentially and with it arrived the first invitations from Yale, Cambridge and Moscow. Invitations which Majorana regularly declined.

On his return to Rome, Majorana began to withdraw completely, he almost became a hermit. He never went back to the laboratory in via Panisperna but worked unceasingly at home, in the family apartment in Rome in Viale Regina Margherita, refusing all visitors. It was only with his uncle, Quirino, that he maintained regular contact to discuss topics of experimental physics[7].

In 1934 Majorana's gastritis worsened, possibly due to the death of his father of cancer of the colon at the age of only fifty-nine. Something was worrying him deeply.

In 1936 Majorana started to feel better and was persuaded by his friend, Giovanni Gentile junior to consider the idea of teaching at University. His colleagues met this explosive announcement with great joy.

A teaching post in theoretical physics was instituted *ad hoc* at the University of Naples, and assigned to him without a competitive exam, "for high fame and unique expertise"[8], the same method that was used to assign a chair to Guglielmo Marconi"[9].

And so on 13 January 1938 Ettore Majorana held his inaugural university lecture on theoretical physics in front of five students. In his letters to his mother and his friend, Gentile, Majorana expressed satisfaction with Naples and teaching students but he continued to lead a completely isolated life.

2. The Disappearance

On 25 March, the day of the Annunciation, Ettore Majorana went to the faculty even though lessons had been suspended for the festivities. In the library he saw one of his students, Miss Gilda Senatore. He called her over and gave her a box full of notes, asking her to take care of it. «We'll talk about it later»[10], he told her.

That same evening he boarded a boat destined for Palermo. On the following day at 11.00 Professor Antonio Carrelli, director of the physics institute, received a telegram from Palermo in which Majorana told him not to be alarmed and said that he would receive a letter. At 14.00 Carrelli received the announced letter; Majorana had sent it from Naples the day before, a few hours before he boarded.

«*Naples, 25 March 1938 – XVI*

Dear Carrelli, I have made a decision which is now irreversible. There is not one grain of egoism in it, but I am aware of the trouble that my sudden disappearance may cause you and the students. Also for this I beg you to forgive me, but above all for having disappointed all the faith, the sincere friendship and the sympathy that you have shown me these last months. I further ask you to remember

[7] It seems that Professor Recami, custodian of Ettore's writings, had some documents that attest to the fact that there was an exchange of letters between the two, in which they spoke about a possible "machine" before 1938.
[8] Recami, pp. 209-210.
[9] 16 honorary degrees, 25 high ranking honours and 13 honorary citizenships were conferred on Marconi.
[10] Klein, p. 98.

me to all those whom I have met and come to appreciate at your institute, particularly Sciuti; I will preserve a kind memory of all these people, at least until 11 o'clock this evening and possibly also afterwards»[11].

On Sunday 27 March Carrelli received another message written on the Grand Hotel di Palermo's letter-headed paper.

«*Palermo 26 March, 1938 – XVI*

Dear Carrelli, I hope that you received the telegram and the letter together. The sea refused me and tomorrow I will return to Hotel Bologna, perhaps travelling with this same sheet of paper. I intend to give up teaching. Please don't take me for an Ibsenian girl because the case is different. I am available for further details»[12].

However, on Monday 28 March, Majorana did not, in fact, turn up at either the Institute or the hotel in Naples where he was living. Carrelli decided to notify the family and the authorities. A letter addressed to his family was found in his room:

«*Naples, 25 March 1938 – XVI*

I have only one wish: that you should not wear black. If you wish to bow to custom, then you may wear it, but do not wear any sign of mourning for longer than three days. Afterwards remember me in your hearts, and if you can, forgive me»[13].

Right from the start the hypothesis of suicide was unconvincing. The then chief of Police, Arturo Bocchini, said: «One finds the dead, it's only the living who can disappear». Not only was the body never found but Majorana perhaps had taken the trouble to take his passport with him[14]. In addition to this in the preceding weeks he had withdrawn all the money from his bank account and his salary from October to February, which, up to that moment, he had not bothered to collect[15].

For months the family put an announcement, with photograph, about Ettore's disappearance in *La Domenica del Corriere*. They also offered a reward of 30,000 lire to anyone who might be able to shed light on the disappearance.

[11]Recami, p. 204.
[12]Recami, p. 205.
[13]Recami, p. 204.
[14] Note on government headed paper, protocol no. 5691-A1, dated 1.4.1938, see page 11 and note no. 4 p. 11 in Recami, The Majorana Case (1.a Ed. 1986). However, on page 207 of the same book by Prof. Recami, Majorana's mother writes in a letter to Mussolini on 27 July 1938, "If my son should be abroad, I wish to draw it to your Excellency's attention that his passport (No. 194925) expires in August and will have to be renewed at some Consulate".
[15]Sciascia, p. 76.


Chi l'ha visto ?

Ettore Majorana, ordinario di fisica teorica all' Università di Napoli, è misteriosamente scomparso dagli ultimi di marzo. Di anni 31, alto metri 1,70, snello, con capelli neri, occhi scuri, una lunga cicatrice sul dorso di una mano. Chi ne sapesse qualcosa è pregato di scrivere al R. P. E. Mariannecci, Viale Regina Margherita 66 - Roma.

Announcement about Ettore's disappearance in "La Domenica del Corriere"[16]

But there was nothing – no news. Official searches were suspended at the end of summer 1939. A letter from the Vatican administrative office informed the family that there was no longer any reason to continue the search. Majorana's chair was assigned to Antonio Carrelli.

The documents relevant to these episodes – originating from the Ministry of the Interior at that time period, Department of General and Confidential Affairs – have now been consigned to the State Central Archive in Rome (series PS – 1939-A1, file/envelope 12)[17]

3. *The Hypotheses*

In the following years various hypotheses took hold: some claimed that Majorana had returned to Germany and put his knowledge at the service of the Third Reich and that he had then emigrated to Argentina during the second world war, as had many other supporters of the Nazi regime. Others thought that he had retired to a monastery in central or southern Italy to be cured of a serious illness[18] or a profound psychological crisis, perhaps aggravated by his supposed homosexuality. We know that at that time homosexuality was not only not tolerated, but also persecuted. Still others, such as the writer, Leonardo Sciascia, considered the event the personal drama of a genius who had foreseen too many things. Divided within himself between the knowledge that he would have to put his exceptional gifts at the service of the conscience and ethical responsibility of the scientist, who understood that in the wrong hands it could be used to destroy rather than guarantee the human race better life conditions, he decided to let it be believed that he was dead. Thus he exited from the scene and rebuilt a life for himself in anonymity.

[16] Source: https://it.wikipedia.org/wiki/Ettore_Majorana#/media/File: Annuncio_scomparsa_Majorana.jpg
[17] Note no. 3 p. 10 in Recami, *The Majorana Case* (1.a Ed. 1986).
[18] 20 January 1938 Ettore himself, on filling in the form 'State Register' at the University of Naples in his own hand wrote: "HEALTH STATUS: *rather delicate*". Note No. 5 p. 13 in Recami, *The Majorana Case* (1.a Ed. 1986).

4. The Case Reopens

On 1 April 2011 an article appeared in the national newspaper "La Repubblica" announcing that the public prosecutor's office had instructed the Carabinieri (military police) to verify the truth of some declarations made by an ex police inspector, who, in a television interview had claimed to have met Majorana in Buenos Aires, Argentina, in the years during the war[19]. The case, however, had already been reopened in 2008, after Francesco Fasani, a mechanic who had emigrated to Venezuela, declared in a Rai3 programme called "Chi l'ha visto" (Who has seen him?), that he had met Ettore Majorana in Valencia in 1955.

"On comparing the particulars of [author's note: *of the photos of Majorana and the presumed Majorana who was living in Valencia*] Majorana's physiognom (his forehead, nose, cheekbones, chin and ears) – wrote prosecutor Pierfilippo Laviani in the request to archive the case – it was found that they could be perfectly superimposed on those of his father."[20] At the beginning of 2015 the inquiry was archived with this sentence: "Between 1955 and 1959 Ettore Majorana lived in Venezuela under the name of Mr Bini."[21]

Interviewed by Edoardo D'Elia, Professor Erasmo Recami, physicist, lecturer at the University of Bergamo, and Majorana's official biographer declared: "With all due respect for the work of the Department of Scientific Investigations (RIS) of the Carabinieri of Rome and the Public Prosecutor, I must remind you that a chef or a sommelier bases his evaluation of a result on his own experience and intuition and not on facts provided by chemical or technical analyses. In view of my long experience (in 1970 I started to discover or collect the Majorana epistolary, documents, witness' statements, photographs: practically 90% of all serious documentation existing on the life and works of Ettore Majorana), I do not believe that Our Man is the same as the "old" Mr Bini of Caracas. In these last days I have seen that my conclusion is shared by the few true experts... So if archivation by the Prosecutor meant that Majorana had not been killed or kidnapped, the situation would become ridiculous. Tortuous hypotheses of this kind have only been put forth by those who are completely in the dark about certain facts, and gifted with a morbid fantasy. At that time (1938) no-one was interested in theoretical physicists..."

And he added: *"In any case, I don't believe that Majorana's disappearance was connected with fears of a future atom bomb; he could have contributed more to the cause alive, than dead or disappeared. If anything he could have had possible applications in mind that were even more revolutionary..."*[22]

Here we are then at the crux of the matter.

There exists a very different version of this story, supported by thousands of documents, collected and painstakingly catalogued in twenty-six files by Alfredo Ravelli, author of three books: "The Finger of God. Part One – the fact" (2013), "The Secret of Majorana: two men and a Machine" (2015) and "2006: Majorana was alive" (2017). Alfredo is the friend and relative of a man, Rolando Pelizza, to whom the documents refer. A man whose destiny is profoundly linked to that of Ettore Majorana.

The story that can be reconstructed from analysis of these documents is as follows.

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[19] Source: http://roma.repubblica.it/cronaca/2011/04/01/news/scomparsa_majorana-14378439/

[20] ANSA 4 February 2015 Source: https://www.panorama.it/news/cronaca/ettore-majorana-era-vivo-55-59/Ettore Majorana was alive between 1955 and 1959

[21] Source: http://www.lastampa.it/2015/02/04/italia/cronache/ettore-majorana-vivo-tra-il-e-il-si-trovava-in-venezuela-nF9NXY kBTsnYdcqWVWv7K/pagina.html

[22] Source: https://www.rickdeckard.net/2015/02/24/il-caso-majorana-intervista-a-erasmo-recami/

5. An Unusual Monk

It was 1 May 1958 when Rolando Pelizza, then twenty years of age, young entrepreneur, member of an industrious family from Brescia, well-known in the field of footwear, had a meeting which completely changed his life.

That day he took a consignment to an Italian monastery situated several kilometres from Chiari, the town where he lived and worked. A day, apparently like any other day, a consignment like many others.

In that place dedicated to silence and prayer, "one of the monks" engaged him in conversation. Very soon the conversation slipped into one of Rolando's nearest and dearest topics: numbers.

When it was time to say goodbye the "monk" gave Rolando a piece of paper and said: «Listen Rolando, you will find a mathematical question on this piece of paper. When you are at home during the next few days, see if you can solve it. If you manage it, find a way to let me have the solution. But don't let too much time go by!»

Rolando took the sheet and, while the others were busy saying goodbye and preparing for the imminent return journey, he analysed the problem and found the solution. «Actually, I have already solved the problem» he said, giving the sheet back to the "monk". He opened it and seeing that the result was correct, realised that Rolando was "his man".

He proposed that they should meet at the monastery periodically so that he could teach him, if Rolando so wished, the principles of a completely new mathematics and physics, the concepts of which were unknown to "common" science, even the most advanced.

Rolando accepted.

In February 1959, about a year after their first meeting, the "monk" revealed his identity to Rolando. An identity that Rolando had already guessed a long time before due to the outstanding instruction of atomic and nuclear physics, which he was receiving step by step.

Well, yes; that 'monk' was Ettore Majorana.

On 26 February 1964 the Master – as Rolando called the "monk" – wrote him a letter in which he announced that his education was now successfully completed: he had graduated with full marks both in physics and in mathematics! However, he put him on his guard:

« *[…] As you well know, what you have learned goes well beyond current knowledge; therefore do not compete with anybody, because they could discover you. Even if someone, knowing you, provokes you, you listen and pretend not to understand; I know well that this will be very difficult, but believe me: if, after you have heard what I am going to tell you, you accept the task of constructing the machine, you will have to do this and much more ... […]*»[23].

After the apprenticeship, a new phase then started: the realisation of a "machine".

Ettore had chosen that monastery because he had believed that the monks could help him in the practical realisation of the machine, but, after twenty years he'd had to reconsider. It needed an exceptional person of his own calibre: Rolando Pelizza.

[23]Ravelli, p. 38.

6. Rolando Pelizza

Despite the exorbitant economic investment, the risks and dangers of all kinds that he was going to confront, Rolando decided to construct the machine. He knew he was capable of doing it - Ettore was also certain of this – and, at the same time, he *had* to do it.

The machine would allow humanity to take an enormous step forward, not only technologically but also socially. All the same the risk that it could fall into the wrong hands and be used for the purpose of war was extremely high.

By means of periodic meetings and letters, delivered in great secret by the monks and people they trusted, Ettore guided Rolando in the construction of the machine.

In 1976 the first phase was completed: annihilation of matter. Imagine being able to make all the mountains of refuse in the world disappear in an instant. With this machine it is possible. But not only that.

A few years later, in 1981, the second phase was ready to be put into action: production of an unlimited quantity of energy at a cost of next to nothing. It does not require thousands of billions of elettronvolts as in the LHC, Geneva CERN particle accelerator. In fact the machine is activated by a battery capable of providing 40W power (at 12V tension), to supply 5 small motors and set off the initial impulse to the "spool".

Rolando dedicated his whole life to this project, gradually and with great resoluteness, going through the phases indicated by Ettore, and achieving them all.

In 1992 the third phase was up and running: transmutation of matter, the dream of all the alchemists.

In 2006 the fourth was ready: passage to other dimensions. A phase that opens the field to absolutely incredible applications, such as travelling to any moment in the past, teletransportation etc.

Many were the difficulties that Rolando had to face to keep faith with his commitment because, among other things, from 1976 onwards the secret services of the whole world – first and foremost the Americans – heard about the machine, and each, in its own way, dreamt of the possible uses it could be put to – far from Ettore and Rolando's wish of using it for the good of humanity.

For them the machine was, above all, an unequalled instrument of power: on the one hand as a weapon and on the other as an unlimited source of metals and precious materials.

But not only that, a real defamatory campaign was launched against Rolando and the machine by some of the media and the magistrature. The machine was defined "the death ray" and this in clear contradiction of the name by which Rolando referred to it – "the ray of life", because even then it was capable of producing energy at no cost and without any waste or residue.

7. *What is the relationship between Ettore Majorana and a possible solution to the climate challenge?*

Before asking ourselves this question, to which engineer Alessandrini will extensively reply in his speech, we should be asking: what relationship exists between Majorana and the climate?

Well, as far back as 1976 Ettore predicted that the planet would enter a phase of abnormal and excessive heating, which would start to cause serious trouble from 2022-2024 on. From that moment, that is in a few years time, the survival of the human race would be in serious peril.

It took more than forty years for traditional physics to come up with a scenario similar to the one predicted by Ettore. Physicist Sebastiano Serra, expert in the technical department of the Ministry of the Environment, of the protection of the territory and the sea The Ministry of the Environment and Protection of Land and Sea will talk to us about this. Carbon dioxide is increasing unabated. The latest figures show that in 2016 there was the biggest 'jump' in the increase of carbon dioxide and this has raised the concentration to a level never before reached in the last 800,000 years. This will lead to an 'injection' of heat that will provoke extremely rapid changes in the climate. That which is actually now partly happening.

Earth is about to become a place in which only cockroaches and other such animals, which have exoskeletons protecting them from ultraviolet radiation, can live.

Can it be supposed then that in his disappearance Ettore's far-sightedness went way beyond the imminent construction of the atom bomb? Can it be supposed that he had already intuitively seen the necessity for an extraordinary intervention to guarantee survival of humanity on Earth?

8. Proof

This version of the facts is supported by evidence. First and foremost through direct sources, which are extremely valuable for a historian: interviews with people who were directly involved in the events - either as participants or as witnesses, letters written by Ettore Majorana, photographs, videos that show the machine in action.

We learned this story from Rolando Pelizza's own lips – he will be eighty this year. He is a dynamic man, untiring worker, clear-minded and still very skilful in performing magic with numbers. We listened to his account, examining, among other things, the letters written by Ettore Majorana after 1938 and the photographs which portray him. Some of these photos are dated: 1976, 1986, 1996. On the back of this last one in particular, portraying Ettore – then ninety years old – next to Rolando – fifty-eight - we read the dedication: "Italy, 5 August 1996. To my old student – awaiting the forth phase. Affectionately, Ettore". That same day a video was also produced that showed the two of them walking inside the monastery. The video is public property and can be seen on www.majorana-pelizza.it[24].

[24] Site last consulted on 04.01.2018.

Photo of Ettore Majorana on 5 August 1996 with Rolando Pelizza

It is a shared opinion that it is very difficult to attribute ninety years of age to the man on the left (Ettore). Doctor Claudio Castoldi, specialist in gerontology and geriatrics, was asked if this phenomenon could be possible and if so could it be explained. This was his reply: "Scientifically speaking, it is impossible to say. It is a fact that there are some people whose biological age does not match their phenotype. That is to say, how one appears. These cases are observed clinically, there is no precise rule. One also has to consider the photographic aspect, by definition misleading. In a photo one does not notice a whole series of aspects that only the doctor can see. And I mean by this, the functional evaluation of some neurological factors that in time indicate a physiopathology, that is a middle way between the physiological and the pathological situation. There are some people who do not fall within this physiopathology. That is some individuals who are physically perfect. I mean to say that in a photograph you cannot see if the person has the tremors. Certainly a ninety-year old person, who looks sixty seems to me to be a very relevant exception. However, we all know, with normal common sense, that some people really do look years younger. Thirty years seems to me a bit much, but perhaps you can see the differences more in person than in a photo".

The handwriting of the dedication and the letters was therefore submitted to a graphological expertise. Doctor Sala Chantal, expert graphologist in the field of judiciary expertise, compared the letters and the original photographs, given to her by Professor Recami, with the photographs and the letters given to her by Rolando. In her graphological report dated 9 December 2016 we read:

"Majorana's handwriting has retained its characteristics, which are almost identical, even at a distance of 60 years. But the handwriting has clearly deteriorated: the writing has become a lot larger (probable sign that Majorana's sight had worsened); the motion has certainly slowed down, the flourishes are missing and the gestures fleeting in the later texts, both present in the earlier comparative scripts. Majorana's life spent in retreat, immersed in his studies, did not allow his handwriting to develop, as one would expect, and has remained faithful to the teachings in practice at the time of his disappearance (for example the rigidity with which that practice was followed, the calligraphic form);

loss of character in the strokes; accentuated angles; continuity lacerated by many gaps, joins and restarts; many signs of 'old age' are present in the script: contortions, hesitations, tremors". Doctor Sala concludes that "the hand-written letter of 5 August 1996, on the back of a photograph signed 'Ettore', was certainly written by the hand of Mr Ettore Majorana".

At the same time engineer Michele Vitiello, owner of the Studio Ingegneria Informatica Forense (the office of engineering and forensic informatics) of Brescia, expert of international fame in face comparisons, carried out a photographic anthropometric evaluation. As with Doctor Sala, he also received two batches of evidence; one batch of originals from Professor Recami, which he marked with the letter 'A', and one batch from Rolando, which he marked with the letter 'B'. First of all he verified that the 'unofficial' (B) photos had not been counterfeited or manipulated in any way. The result of this first analysis confirmed the authenticity of the evidence of batch B. Engineer Vitiello explains the type of analyses that he carried out like this: "the comparison of the faces of the two subjects, with the objective of asserting their possible identity, is based on the definition of discriminatory parameters which can be both physiometric and metric. The first are of a qualitative kind and are based on codification to render the interpretation less subjective, the second, on the other hand, are quantitative and thus generate numerical values: both are studied by anthropometric sciences."

"There are some particularly significant parts of the face to analyse, such as that located above the top of the nose, the most protruding point at the end of the nose, the inferior part of the lower jaw, the lower protruding part of the forehead, the highest point of the cranium, the most protruding point of the cheekbone. One anatomic structure which is highly discriminatory is the ear lobe. In fact it is called the 'fingerprint of the ear lobe', with a good 16 points to analyse".[25]

The result of the technical photographic report, dated 16 December 2016, states the following "The faces of the known subject in Evidence A and the faces of the unknown subject contained in Evidence B are attributable to the same subject, identified in the person of Mr Ettore Majorana".

There are numerous videos which prove the existence of the machine and show it in action. Rolando appointed engineer Vitiello to verify "the authenticity, or rather the presence of cuts or other manipulations, of the videos consigned, highlighting any possible anomalies discovered".

In the conclusions of the technical informatics report of 22 March 2017 we read: "[…] it is possible to confirm that the modifications effected on the videos are not relevant to the content but to the form, however, cuts and changes in velocity have been effected to render the video more concise. […] Examining the films it is possible to notice all the defects that characterise recordings carried out on videocassettes, for example the distortions of the images do not follow a precise pattern being absolutely random, a sign that the videos were actually recorded in the era and not in our days".

Then there are official letters, for example, the one dated 26 November 1976, by Professor Ezio Clementel, president of the National Committee for Nuclear Energy (CNEN), which lists in detail the evidence that Rolando had had to produce to show how the machine functioned. It also supplies the results of the experiments which were carried out.

And obviously the secret services. We have already briefly quoted American involvement, which was not the only one to be interested in the affair; it should be remembered that also the Italian and Belgian governments, the Vatican, and much later other countries were to be involved. Some 'secret' files put on the internet by *Wikileaks,* bear witness to the fact that, in 1976, the U.S. Secretary of State, Henry Kissinger, gave his approval in order for the United States to become involved in the proceedings. The documents can be seen on Rino Di Stefano's website.[26]

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[25] Rino Di Stefano, Article: *The elderly Majorana in a monastery: here are the photos of the new evidence* - www.rinodistefano.com

[26] What is "WikiLeaks"? Here is Wikipedia's definition. WikiLeaks is a non-profit organisation which receives secret documents anonymously. Thanks to a dropbox protected by a powerful encrypting system, secret documents (State,

9. In Summary

After his disappearance Ettore Majorana found refuge in a monastery in which he certainly lived, hidden and anonymously, from 1958 to 2006, or rather the years which can be reconstructed thanks to Rolando's narrative and the twenty-six files overflowing with documents collected and catalogued by Alfredo.

In this span of time, Ettore elaborated a new physics and a new mathematics very distant from the present day ones. Thanks to Rolando he succeeded in demonstrating the validity of his theories through the construction of a machine capable of annihilating, transforming and transporting matter, and producing energy at no cost. Furthermore, they tried to put this enormous possibility at the service of humanity, but were unfortunately misunderstood.

On 7 December 2001 Ettore wrote a letter to Rolando which he himself defined his spiritual testament. In it he relieved "his one and only true disciple and collaborator" from the obligation of maintaining the secret: "From the moment you feel it is opportune, you are free to use my name, to speak about our relationship, the texts and the photographs; if you do, I beg you to reveal the true motives that prompted me to distance myself from everything in 1938, in order to dedicate myself to my studies, in the hopes of arriving in time to be able to demonstrate to the scientific world that important alternatives without dangers do exist. […] Keep to yourself the final secret, where and how you met me, the place and the brothers who have always given me secret hospitality".

From Rolando, then, we will never learn the name of the monastery, but it should be said that many think that it is the Certosa di Serra San Bruno in Calabria, a Carthusian monastery in the province of Vibo Valentia[27].

The first to mention the name of this monastery was Leonardo Sciascia. It seems that he followed the tip-off of one of his journalist friends. Moreover, on 5 October 1984 Pope John Paul II mentioned in his speech, which was held while he was visiting the cloister, the past presence of illustrious personages, amongst whom was the physicist Ettore Majorana[28]. The news was immediately denied.[29]

The last news of Majorana, which we received from Rolando, goes back to the year 2006.[30]. A letter from the year 2000 addressed to Professor Recami particularly concerns the central discussion of this convention, which Francesco will talk about in his lecture after Dr Serra.

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military, industrial, financial) are uploaded to the website. WikiLeaks generally gets governmental or company documents from anonymous sources. The site is taken care of by journalists, activists, scientists. However, citizens from every part of the world can send (are invited to do so in fact) secret material "which brings to light non-ethical behaviour on the part of governments and companies". The majority of the staff of the site, as well as the founders of the project, remain anonymous. The objective of the organisation is to assure that informers are not persecuted for having divulged sensitive documents. The organisation states that it verifies the authenticity of the material before publishing it and preserves the anonymity of the informers and everyone implicated in the *news leak.*

[27] Curious assonance: Fasani claims to have seen Ettore in Valencia in Venezuela and the monastery is located in the vicinity of (Vibo) Valentia in Calabria.

[28] Information from the book "La Calabria di Wojtyla" (Wojtyla's Calabria) by Franco Bruno, Ed. Media&Books © 1996-2014, p. 235.

[29] "The news was also published in an article about Ettore on Monday 8 October 2002 in the *Corriere della Sera*. The monks denied it and also the Pope" Article: *Il mistero Majorana tra annunci e ipotesi (The Majorana Mystery -between news and hypotheses)* - www.rinodistefano.com

[30] Consult website www.majorana-pelizza.it section "Le Lettere" (The letters).

10. Our history comes from the future. Responsibility of the historian

We feel we have presented you with sufficient proof supporting the truth of the story of Ettore and Rolando.

With far less, or rather with a single document[31], the temporal powers of the Church of Rome in the West were legitimated. A document, which in 1440 Lorenzo Valla proved to be a clamorous fake, composed by that same Vatican secretarial office.

But let's return to the story of Ettore and Rolando, just as we have told it. Despite the numerous proofs, it remains today, for the media, for public opinion, therefore for most people, a *too controversial* version: in the photo Ettore seems to be *too* young for his stated age, the machine does things which are *too much* in the realm of science fiction, the letters, even if original in the handwriting – and despite all the expertise reports, one knows that handwriting can be faked – they aren't original in content, so, actually they weren't written by Ettore etc. And the machine: Where is it? Who has it? Bring it out! Let's see it. Use it!

One could argue infinitely because ultimately, as Dostoevsky said, "The real truth is always improbable".

We, Francesco and I, who have published a book together on the topic, the contents of which we have already presented in San Diego (California) and Vienna, and given the impulse so that this convention could take place, believe this story. The motives which encourage us to believe it are similar, and in part animated, for each of us, by our professions and individual vocations.

> For my part, I will explain why I, as a historian, have decided to support the truth of this version of the facts. From Francesco's talk you will understand the motives of the engineer.
>
> The starting point of my analysis is two questions:
>
> 1) What is the objective of the science of history? Answer: History as the science of man has as its objective the support of life.
>
> 2) Are there elements of supporting life in this case? The answer is yes.

Historical research is never objective. It is in reality a mediated experience and often subjective. Historians can be influenced by the social, cultural and economic structures in which they act and prompted by this conditioning they research, read and interpret the sources. Just like the quantum physicist who shows that the observer influences the experiment, it is the historian who conditions the result of the research, bringing to light one past rather than another.

Hence, the one who searches, finds. Historical reconstruction is initiated by an impulse that has its origin in the present.

Henri Poincaré – French mathematician, physicist and philosopher – maintained that every scientific discovery was sparked by a preliminary hypothesis. This affirmation by a physicist is in perfect agreement with the following by a historian: witnesses "do not speak unless one knows how to interrogate them […]. Every historical research presumes that, from the first steps on, the inquiry already has a direction.[…] In order for the springs to gush forth, the historian has to transform him/herself into a dowser; the facts are not objective phenomena, existing without the historian, but

[31] I refer to the so-called *Donatio Constantini ad Silvestrem/papam (donation of Constantin)*, seemingly issued by Emperor Constantin I (274 –337) and conserved in copy in the *Decree of Pseudo-Isidoro* (IX century). In the paleografiphic field the case is known as "the most scandalous historical falsification". The Constantin Donation was the document on which for centuries the Church of Rome founded its legitimation of temporal power in the west. In 1440 Lorenzo Valla denounced the falsehood of the document. In the light of linguistic analyses and historical discussion, he proved unequivocally that the act had been drawn up in the VIII century by that same papal office.

are the result of work and construction by the historian, creator of historical facts. […] Testimonies count for nothing without the interpretation of the historian. Historical facts do not transform into history except through the mediation of the explanation which the historian provides.[32]

This means that, starting with a question immersed in the present – such as how to solve the current climate problem and proceeding with the focus on the objective, that of sustaining the life of mankind on Earth – the historian sets off to search for those sources which are in resonance with the objective in view. If the objective changes, the result will be different.

Today survival of humanity on Earth is seriously endangered due to a sudden change in climate, caused by mankind himself.

This is my point of departure in the present.

Can Ettore and Rolando's story help life on Earth?

Yes

I read the available sources from this perspective.

This immediately calls to my mind two affirmations, previously cited, one from Professor Recami: "In any case, I don't believe that Majorana's disappearance was connected with fears of a future atom bomb; he could have contributed more to the cause alive, than dead or disappeared. *If anything he could have had possible applications in mind that were even more revolutionary*..."

And one from Ettore himself: "I beg you to reveal the true motives that prompted me to distance myself from everything in 1938, in order to dedicate myself to my studies, *in the hopes of arriving in time to be able to demonstrate to the scientific world that important alternatives without dangers do exist."*

Ettore saw the road that science had taken, a road down which the atom bomb was only a "timid" beginning. He therefore decided to disappear and use the great gift that life had given him – an explosive mixture of intellectual genius inspired by common sense and high moral values – to realise a system which would allow the production of free energy - a machine to be put to the service of humanity. But when this machine was officially presented, like the golden calf of the Hebrews, it awakened the greed of men and the dream of immeasurable material wealth rather than pursuit of the common good. With this it would have been possible to put an end not only to so much inequality which is the cause of so many wars, but also to the irresponsible exploitation of the planetary resources.

Seeing that this plan was not going to bring about the hoped for results and that humanity had taken the road to self-destruction, Ettore and Rolando developed the machine further so that it was able to make possible a true miracle, namely that which we need now: a unique and exceptional emergency intervention to solve the present climate imbalance.

Let's just hypothesise that for various reasons the machine cannot be used to solve the climate problem.

What does this story teach us?

That present-day science is on the wrong path. Ettore pushed well beyond the boundaries of 'the known world', until he understood the foundations of the Universe. He realised that the way things work is, at the very heart of the matter, simple. He succeeded in entering the 'intimacy' of matter, and, in that intimacy, it revealed to him all its simplicity and willingness to be gently guided. From this derived a physics which "makes peace" between science and spirituality, managing to fill the enormous gap that modern man has opened up between our two principal ways of perceiving reality.

[32] Bloch, preface of Jacques Le Goff pp. X-XI and XXVIII.

This is the Physics of the Third Millennium, compared to which present-day physics is less than its foundations.

"The problem of the destructive potentiality of the instruments of man is a problem as old as the hills. It was born with Prometheus when man started to control fire. It was a problem that Alfred Nobel felt when, having invented dynamite (which would alleviate the brachial effort of man, but could then become a weapon), he created the Nobel Prize, as a sort of atonement.[33]

Let us suppose that the machine is used and it pulls us out of this dead end into which we have irresponsibly brought ourselves.

Or suppose that it is not used and so we will find ourselves in the near future living the apocalyptic scenario which Ettore and our scientists have outlined.

In both cases it is of fundamental importance that humanity grows both morally and socially, inspired by values of solidarity and Love. This will be the central theme of Father Giovanni Bertzuzzi's treatise.

In a few days, on 27 January, the International Holocaust Remembrance Day will be celebrated, an international anniversary to commemorate the victims of the Holocaust. On that day all events will focus on remembering 15 million dead, among whom 5-6 million Jews.

How would it be if instead of concentrating on the victims, we honoured that part of humanity's history remembering the exemplary solidarity, unconditional and disinterested, of many people who – putting even their own lives at risk – gave hospitality, help and refuge to complete strangers, in order to pluck them from the coils of an unjustified and premature death?

Our future is in history because the future we wish for humanity and for this Planet, depends on the facts of the past which we bring to light and how we interpret them.

The responsibility is ours.

On Monday 13 November 2017, the magazine BioScience published the integral text of an appeal signed by 15,364 scientists, originating in 184 countries. Worried because greenhouse gas emissions in 2017 had started to increase again, after three years in which they had remained stable, they expressed themselves thus: "A drastic change in terrestrial resource management is needed to prevent the breakdown of the Earth's system, human beings included".[34]

Thomas Newsome, lecturer at the Australian University of Deakin, declared: "we have studied the developments of the last two decades, analysing official data, and soon it will be too late to reverse these dangerous tendencies".[35]

Il sera bientôt trop tard – soon it will be too late – that was the headline on the first page of the French newspaper *Le Monde*[36]. Therefore, if, with the means we have available today, we cannot bring about significant modifications, it seems that soon we will not be able to solve the climate problem: – we are at, or we have passed, the point of no return.

What is to be done?

[33] E. Recami, *Sciascia and Majorana. The problem of the Scientist's Responsibility,* in *Studio,* 3, Anno 110 (2014) p.410
[34]http://www.repubblica.it/ambiente/2017/11/13/news/documento_di_15000_scienziati_il_pianeta_in_crisi_si_cambi_ora_o_mai_piu_-181015393/
[35] http://www.corriere.it/esteri/17_novembre_13/ siamo-tempo-l-ambiente-47a58e26-c8b1-11e7-83f4-5d7185c8c90c.shtml
[36] 14 November 2017.

There are some theories according to which several possibilities co-exist at the same time[37]. Perhaps some of you have seen the film *Sliding Doors*, 1998, which deals with this theme in a cinematographic way.

What makes the difference, or rather that which allows one possibility to prevail over the others and become reality, is us, our thought, our ideas, our focalised attention.

Herbert Clark Hoover, who was President of the United States of America from 1929 to 1933, namely during the great depression of 1929, said: "The history of humanity, across its multiple forms of government, its revolutions, its wars […], could be written in terms of the rise and fall of ideas implanted in the minds of men".

The same concept, expressed differently and with more empathy, would sound like this:

The world is created by your dreams.
You dreamed of gigantic factories,
towering housing blocks, as many cars
as there are drops of water in this river.
Now you should start to realise that
in reality your dream is a nightmare.
For life to be able to continue,
you must teach your children
to dream a new dream.[38]

Indeed, with this convention, we wish to bring to your attention some elements which could contribute to constructing a new world. In fact we are telling you that Ettore Majorana, after his disappearance in 1938, or between 1958 and 2006, lived in a monastery where he dedicated his life to the elaboration of a completely new physics and mathematics. With Rolando's help he succeeded in putting into practice his theories through the construction of a machine capable of offering us a way out of the climate problem.

If a certain number of people – the so-called *critical mass*[39] – start to focus on this possibility then it can become reality.

Do you need proof in order to believe? Do you also need to see *in his hands the print of the nails, and put your finger into the print of the nails, and thrust your hand into his side?*

I do not think it will be possible.

But as you know, at certain moments in life, an act of faith is demanded of us.

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[37] I refer, for example, to the Copenhagen interpretation of the physicists Niels Bohr and Werner Heisenberg (1927) and to that of parallel universes, first proposed by Hugh Everett III of the University of Princeton (1957).

[38] Text attributed to Numi – shaman of Equador.

[39] "The concept of the "critical mass", which, in physics identifies the quantity of fissile material (uranium, plutonium) necessary to trigger a chain reaction, is used as an analogy by the new emerging culture to indicate a process of social change brought about by an active minority when it reaches a certain numerical level or intensity. […] The phenomenon of the "critical mass" has been scientifically studied by the name of "Maharishi Effect" in different experimental researches of vast dimensions carried out by the Maharishi International University (MIU) in Massachussets, USA" Treatise from *The critical mass and global change* by Nitamo Montecucco, extract from the book "Cultural Creatives", Xenia Edizioni, 2009.

The human race on Earth has reached the end of the line. What possibilities do we have?

One possibility is believing that this machine exists and that the circumstances most suited to its effective use for solving the climate problem will be put into practice. Whenever we chose to believe this possibility it is possible to do it without those proofs which our rational minds would like. It is possible, no, almost certain, that the media and official history will never publish this.

Ultimately, as philosopher Søren Kierkegaard (1813 – 1855) said, "there are two ways to fall into a trap. One is believing something that is not true; the other is refusing to believe in the truth".

Believing or not believing, deciding whether that which we are telling you today is real or pure fantasy, is a personal choice. And this choice, in one direction or the other, can only be made by an act of faith. No-one will tell you if the choice you have made is the right one. Only you can know that.

We have already made ours.

I wish to conclude my talk today with a poem by Christopher Logue[40].

Come to the edge.
We might fall.
Come to the edge.
It's too high!
COME TO THE EDGE!
And they came,
And he pushed,
And they flew.

11. ***Roberta Rio***

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[40] Poem written in 1968 by Christopher Logue (1926 – 2011) for a festival in honour of the 50th anniversary of the death of the French poet Guillaume Apollinaire.

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