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Mileva Einstein-Marić: The Woman Who Did Einstein's Mathematics Senta Troemel-Ploetz, Ph.D.

Recently I saw a sticker on a car which read: <u>Einstein was a vegetarian—think about it</u>! I thought there should be a counter sticker: <u>Einstein let his wife and children starve—think about that</u>!

Whether we are interested in the young Einstein or the older or the old Einstein, we are interested from our perspective to answer certain questions. A vegetarian might give a different description of Einstein than a physicist, a lawyer so biography of Einstein would be different from a feminist's, Einstein's first wife would have had to write a very different biography from Einstein's second wife. All of these biographies could be adequate, that is correct descriptions of Einstein, each bringing out different aspects of his life. No biography can do more than that.

As a feminist, I am interested in certain aspects of Einstein's life that have been largely neglected in the existent biographical literature. This is not surprising. If it were otherwise—if all the male biographers of men would ask about who made the success of those men possible, who gave the ideas, who did the work, or who cooked the meals and fed the children—then feminism would not be necessary. Since, however, the achievement as well as the work of women is still systematically ignored by male biographers, my purpose here is to ask some questions that have been neglected and to deal with some aspects of Einstein's early life that have been covered, if not covered—up.

My source is a book with which you may not be familiar because it exists only in Serbo-Croatian and in German and significantly has not been translated into English, although it has reached its fourth printing in German. It is called: Im Schatten Albert Einsteins: Das Tragische Leben der Mileva Einstein-Marič (In the shadow of Albert Einstein: The tragic life of Mileva Einstein-

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Marić), and appeared in 1983 with Paul Haupt in Berne, Switzerland.

This book is listed in the bibliography of Volume I of the Collected Papers of Albert Einstein (Princeton U.P., 1987), although none of its content has found entrance into it, the editors of the Collected Papers cannot find any evidence that Mileva Einstein-Maric's role was more than "a sounding board for Einstein's ideas." (p. XXXIX) Since Volume I of the Collected Papers ends in 1902 and Einstein got married in January, 1903, it would have been plausible that we might find more reference to Mileva Einstein-Maric in Volume II of the Collected Papers which deals with the most creative time in Einstein's life. This time coincides with the time he was married to and lived with Mileva Einstein-Maric: January 1903-July 1914. Apparently this is not the case. (Private communication, Stachel).

Since the most important person during Einstein's creative part of his life is also invisible in other works on Einstein, it is not only necessary to give her historical visibility, but also to ask why she is so persistently ignored. A spontaneous answer to this question could be that she does not fit the Einstein MYTH just as the three children he had with her do not fit this myth: Albert Einstein had a daughter born out of wedlock in January 1902—soon after her birth, she is never mentioned again—and two sons born 1904 and 1910. The younger one turned psychotic when he was 19 and from then on needed constant care.

In a very popular German Einstein biography by Johannes Wickert, which appeared in the Rowohlt series of biographies including Galileo, Darwin, Edison, Kopernikus, Planck, Heisenberg, etc., there are two paragraphs in which Mileva Einstein-Maric occurs, but at least we read that Einstein spent seven happy years in Bern (Wickert, p. 19) and Einstein is quoted as having said, "All in all,

Mileva is an unusual woman," (taken from Carl Seelig's biography). There follows one concluding sentence: "Why this marriage did not last as a partnership for their whole life, remains unexplained." (Wickert, p. 19)

And to give one US example—in <u>Albert Einstein: The Human Side—New Glimpses</u> from his Archives, Princeton UP, 1979, there is not a single letter written to either his first wife or his children—not even a single letter or text in which their names are mentioned. Einstein's second wife is at least mentioned once in a text as <u>his wife</u> (p.43 of the German edition <u>Albert Einstein: Briefe</u>) so that the unknowing reader is led to believe that there was only one wife.

I cannot give an analysis here of how these works eradicate Einstein's first wife, although it is most interesting to me as a linguist. In fact, a linguistic analysis could show how she is doubly eradicated: by not being mentioned or, if she is mentioned, by passing her off as an unattractive Slavic peasant girl, when she was neither unattractive nor from peasant parents. She was, however, of Slavic descent, and Einstein biographers such as Clark may have been more than subtly racist in their description.

It would also be interesting to pursue by what linguistic mechanisms the Einstein myth is being constructed in these works and to look at the economical and political reasons for why it will be further constructed.

Perhaps you can observe for yourself during this symposium how the myth will be furthered, confirmed and constructed, and why deconstructions have little prospect to have a voice that carries.

I will now tell you about Mileva Einstein-Marić, to undo the general silencing of her memory and to at least make her possible scientific contribution more visible.

Mileva Einstein-Maric was the women of whom Albert Einstein said, she solves

all my mathematical problems. This is common knowledge at the ETH in Zurich, the Swiss Federal Institute of Technology where Mileva Einstein-Maric and Albert Einstein studied together, both entering in 1896, where they took almost the same courses, wrote their final thesis for the "Diplom" in the same area, heat conduction, and where they took their final examination in 1900.

Mileva Einstein-Mariċ was the woman who, with Paul Habicht, constructed a machine for measuring small electrical currents by way of multiplication. "It took a long time, not only because she had so much to do, but also because of her thoroughness and perfectionism," writes Trbuhoviċ-Gjuriċ. "She had already distinguished herself in the physics lab in Zurich. When both she and Habicht were satisfied with their result, they left it to Albert Einstein, as a patent expert, to describe the apparatus. (Trbuhoviċ-Gjuriċ, 1983: 65). Einstein had the apparatus patented under the name Einstein-Habicht (Patent No. 35693).

"When one of the Habicht brothers asked Mileva Einstein-Maric why she had not given her own name in the application for the patent, she answered: What for, we are both only ONE STONE (=Einstein)." (Trbuhovic-Gjuric, 1983: 65)

Not giving the full name, however, had different results for the woman and the man because a last name is usually associated with a man. Mileva Einstein-Mariċ lost her authorship entirely and it was automatically bestowed on her husband. Therefore the question why she didn't give her own name instead of her full name was correctly formulated: Einstein in Einstein-Habicht meant Albert Einstein. Soon after they were married, Einstein profited from the Swiss law about names which forced women to put their husband's name first in their double names and which, incidentally, was only changed in 1988.

It was the patent under the name <u>Einstein-Habicht</u>, plus the absence of any protest about the misrepresentation of authorship, which made it easy for

Einstein to then publish two articles on the method in his name, thus appropriating all of his wife's work as his own: he published an article in his name in the <u>Annalen der Physik</u> in 1907, entitled "Eine neue elektrostatische Methode zur Messung kleiner Elektrizitätsmengen" and then he gave a detailed description of this method in an article, again using his name only, in the <u>Physikalische Zeitschrift</u>, No. 7, 1908.

Mileva Einstein-Marič was the woman to whom Albert Einstein wrote in September 1900, that was almost immediately after the final examination, "Ich freu mich auch sehr auf unsere neuen Arbeiten. Du mußt jetzt Deine Untersuchung fortsetzen-wie stolz werd ich sein, wenn ich gar vielleicht ein kleines Dokterlin zum Schatz hab & selbst noch ein ganz gewöhnlicher Mensch bin!" (Collected Papers, p. 260)

("I am also looking forward to our new papers/articles. You have to continue your thesis now--how proud I will be when I have a little Ph.D. as a lover while I myself will still be a quite ordinary human.")

In a letter before this one, we read: "Zur Untersuchung des Thomsoneffekts hab ich wieder zu einer andern Methode meine Zuflucht genommen, die eine gewisse Ahnlichkeit mit der Deinen zur Bestimmung der Abh. von \underline{k} von T hat k welche eine solche Untersuchung auch voraussetzt. Wenn wir nur gleich morgen anfangen könnten!" (Collected Papers, p. 258)

("For the work on the Thomson effect I took refuge to still another method which has a certain similarity with yours...and which also presupposes your investigation. If only we could start tomorrow!")

In a letter of October 3, 1900, he is again referring to their common work on capillarity which they will send to the <u>Annalen</u> if it would turn out to be successful. Here we find the following statement, "Wie glücklich bin ich, daß

ich in Dir eine ebenbürtige Kreatur gefunden habe, die gleich kräftig und selbständig ist wie ich selbst!" (Collected Papers, p. 267)

("How happy I am to have found in you an equal creature who is equally strong and independent as I am.")

In a letter of March, 1901, Albert Einstein writes: "How happy and proud I will be when the two of us together will have brought our work on relative motion to a successful end. If I look at other people, I realize what I have in you."
"Wie glücklich und stolz werde ich sein, wenn wir beide zusammen unsere Arbeit über die Relativbewegung siegreich zu Ende geführt haben! Wenn ich so andre Leute sehe, da kommt mirs so recht, was an Dir ist!" (Collected Papers, p. 282)

In a letter of April, 1901, he is talking about "our research" and "our papers," referring to what was published under only his name as "Folgerungen aus den Capillaritätserscheinungen" in <u>Annalen der Physik</u> 4 (1901). (<u>Collected Papers</u>, p. 285)

In a letter of May, 1901, he is referring to the same paper again by "our paper" and says "If only we had a chance soon to continue together on that beautiful road." (Collected Papers, p. 300)

In a later letter of the same month he writes: "Think how beautiful it will be when we are able again to work together without any disturbance and interference from outside! Your present sorrows will be brilliantly replaced by sheer pleasure and our days will pass quietly without any hectic." (Collected Papers, p. 304)

Albert Einstein's wish should come true even though the time was not so quiet and unhectic for Mileva Einstein-Marić. Their collaboration became even more intensive beginning in 1903, when they got married. Whereas before, they had to spend some time apart, they now had uninterrupted time together.

Mileva Einstein-Maric was the woman whose name according to Trbuhovic-Gjuric was on three original manuscripts sent to the Annalen der Physik which were published in Vol XVII, 1905. These three papers were written in Berne and included "Elektrodynamik bewegter Körper" which contains the special theory of relativity and "Einen die Erzeugung und Verwandlung des Lichtes betreffenden heuristischen Gesichtspunkt" for which he later received the Nobel Prize. Abraham F. Joffee, the famous Russian physicist, who was then an assistant to Röntgen (a member of the editorial team that examined the articles sent to Annalen der Physik for publication) wrote in his Erinnerungen an Albert Einstein that the original manuscripts for these two and also for a third paper were signed Einstein-Maric. (Trbuhovic-Gjuric, 1983: 97). Would the male editors have dropped the name of a male co-author, or that of a woman who was not the author's wife? Would not a male co-author have protested against his name being dropped in the publication and would he not have asked for some form of reparation? The manuscripts, together with all the notes for these three papers, are no longer The New York Times of February 15, 1944, wrote about the manuscript of the theory of relativity that Albert Einstein "had destroyed the original after the theory had been published in 1905. A \$11,500,000 reward was promised to the person who could bring the original manuscript to the Library of Congress." (Trbuhovic-Gjuric, 1983: 72) It is perhaps impossible now to show the extent of Mileva Einstein-Maric's contribution and that of Albert Einstein. But there are voices and counter-voices:

Albert Einstein's friend, David Reichenstein: "It is strange how fruitful that short period of his life was. Not only his special theory of relativity but a lot of other basic papers bear the date 1905." (Trbuhović-Gjurić, 1983: 158)

Leopold Infeld, one of his biographers, remarked on "the irony of fate and

the external contradictions" in Albert Einstein's life: "His most important scientific work he wrote as a little civil servant in the Patent Office in Bern." (Trbuhoviè-Gjuriè, 1983: 158)

Peter Michelmore, who had much information from Albert Einstein, remarked:
"Mileva helped him solve certain mathematical problems. (Trbuhoviè-Gjuriè, 1983:
72) She was with him in Bern and helped him when he was having such a hard time with the theory of relativity." (Trbuhoviè-Gjuriè, 1983: 74)

Hermann Minkowsky, a great mathematician and a former professor of Albert Einstein, who knew him well and was his friend, is said to have remarked to Max Born: "This was a big surprise to me because Einstein was quite a lazybones and wasn't at all interested in mathematics."

Bogdanovich, a mathematician in the Ministry of `Education in Belgrade, who was well acquainted with Mileva Einstein-Maric, is reported to have said that she had always known that Mileva Einstein-Maric had helped her husband a great deal, especially with the mathematical foundation of his theory, but Mileva Einstein-Maric had always avoided talking about it. (Trbuhovic-Gjuric, 1983: 164)

Mileva Einstein-Mariċ told her father during a visit by Albert Einstein and herself in 1905: "A short while ago we finished a very important work which will make my husband world-famous" (Trbuhoviè-Gjuriċ, 1983: 75).

Mileva Einstein-Maric was the woman to whom Albert Einstein travelled after receiving the Nobel Prize in 1922, to bring her the full amount of the Nobel Prize money. It is a long trip from Oslo to Zurich. Einstein at this point had been separated from his wife for eight years, had lived with another woman during those eight years, he had been divorced and remarried for three years. However, he travelled to Zurich and gave the full amount of the Nobel Prize to his first wife.

There are many interpretations possible, of course. Perhaps he only gave the money to his first wife because for eight years he had hardly supported her and the two children at all financially. Perhaps the Nobel Prize meant nothing to him. After all, in 1932, when he had to write a curriculum vitae for the German Academy of National Scientists in Halle, he forgot to list the Nobel Prize among his academic honors. (Albert Einstein: Briefe, p. 14)

The Collected Papers of Einstein, Vol. 1, suggest a different reason. I was amazed to read there that Mileva Einstein-Marić was given the Nobel Prize money in accordance with the divorce agreement. I asked myself whether the divorce agreement of 1919 anticipated Einstein's Nobel Prize of 1922. Dr. Stachel, private communication, Feb. 24, 1989, assured me that it did. But now I keep asking myself why such a divorce agreement could be made in 1919 in the Switzerland that I know from having lived there for nearly ten years. Could I have gotten such a divorce agreement in 1986 even though, as a university professor, I was much more privileged than Mileva Einstein-Maric. In 1919, she was a housewife taking in students as roomers and giving private lessons to feed herself and her children. And I keep asking myself why such a divorce agreement should have been made if there had not been any concrete basis for it. Perhaps we will actually see this wondrous divorce agreement in one of the 30 volumes of the Collected Papers. Till then let us assume that he was giving her private recognition for her contribution which he had not given her publicly. By then, he must have been aware of how much he owed her mathematical genius; his own genius was on the decline and he did not achieve anything comparable after what is defined as his "creative outburst of 1905." Again and again people remarked on the fact that none of his later work, after the age of 26, surpassed or even reached the same level of his earlier research.

Since his second wife was chosen for different reasons ("I'm glad my 2nd wife doesn't understand anything about science because my first wife did") he needed at various points someone "to solve his mathematical problems." He chose students or friends: "I encountered mathematical difficulties which I cannot conquer. I beg you for help, as I am apparently going crazy" (Trbuhović-Gjurić, 1983: 96) he wrote to his friend Marcel Grossmann who then helped him.

In 1920, he wrote to Paul Ehrenfest as follows: ..."I did not make any progress in the general theory of relativity....Also on the question of electrons I didn't come up with anything. Is it my hardened brain or is the breakthrough really that distant?" (Trbuhoviè-Gjuriè, 1983: p. 155)

Mileva Einstein-Marić was also the woman who came to Zurich as a brilliant student from Serbo-Croatia (where she had attended--with special permission and great success--elite male schools as the only girl) in order to study in Zurich at the Polytechnikum (ETH). She had to take a special entrance exam which, of course, she passed. Albert Einstein had failed one year earlier (Wickert, p. 11). She worked enthusiastically on her thesis but received only a 4.0. Albert Einstein, who later said that he had had no interest in the topic of his thesis (Collected Papers, p. 244), which was similar to hers, received a 4.5. Before the finals in 1900, just at the time when both Einstein and Einstein-Marić were writing their "Diplomarbeiten" and preparing for their finals, friends of Mileva Einstein-Marić thought that Albert Einstein was exploiting her too much.

pregnant, and failed again. Both times, she was the only woman taking the finals and the only student to fail. After the exam, from the middle of 1900 to the middle of 1902, a very difficult time began for both of them. Albert Einstein could not get any of the positions he applied for, although he tried again and

again. His parents objected to Mileva Einstein-Marič as a person, and to the planned marriage. She had to have his child out of wedlock and presumably give it up for adoption (Jan. 1902).

But they keep working together a Sept. 1900: "Ich freu mich auch sehr auf unsere neuen Arbeiten" writes Albert Einstein to her. Albert Einstein handed in his dissertation in 1901; he later withdrew it.

8 Jan-19 Mar 1901: "Wir leben und arbeiten wie früher" writes Mileva Einstein-Marić to a friend (Dok. 87, p. 275) (We are living and studying as before--meaning as students). Her thesis, which she wanted to work into a doctoral dissertation (Dok. 64 and Dok. 75) is lost. After retaking the exam in 1901, she left the ETH without graduating, to go home and have her child.

The important thing is never to stop asking questions, Einstein is said to have said.

Some of my questions are: Would we know Einstein-Marić today as a prominent scientist if she had not married Einstein? Why did she—once married—no longer pursue her own scientific interests? Why did she not defend herself against the appropriation of her creativity and work by her husband? Could she have defended herself against the mental exploitation in marriage if she had wanted to?

"We are only one stone."

"We finished a very important work which will make \underline{my} husband famous."

If her modesty kept her from insisting on public acknowledgement, what kept Albert Einstein from giving her credit in public. Why did his recognition of her work remain private, e.g., he told Mileva Einstein-Maric's father: "I didn't marry your daughter because of the money but because I love her, because I need her, because we are both one. Everything I have done and accomplished I owe to Mileva. She is my genial source of inspiration, my protective angel against sins

in life and even more so in science. Without her I would not have started my work let alone finished it." (Trbuhoviè-Gjuriè, 1983: 76) Why did he not put down her name on the patent application? Why did he not give her name as a coauthor on "our paper"? (Einstein, 1901) The answer is that it was then quite normal for men to appropriate women's work and to take credit for it. Einstein was a very normal man.

Even in the U.S. today this mechanism is by no means obsolete: Reskin (1978) states: "Possibly the best situation for a female scientist is marriage to a professional in another discipline. Her marital status would facilitate her social and professional integration, and the disciplinary difference would reduce the chance of her husband's receiving credit for her research contributions." (Reskin, 1978: 17)

The politics of patriarchy is such that the work of many women is appropriated by men and that questions about the contribution of women are not being asked. The politics of collecting and passing on knowledge is such that men collect knowledge on questions of interest to them, on their achievements and successes. Knowledge about women is not in the center of academic interest, it is not even on the margin of academic interest. The power to define what is of interest rests mainly with men. The power to decide what questions deserve funding rests mainly with men.

Therefore, I am not surprised to find nothing whatsoever on Mileva Einstein-Maric in Vol. II of the <u>Collected Papers of Albert Einstein</u>. No questions were asked about her. If only a fraction of the money that goes into the endeavors to construct Einstein's success were given to research on his first wife's collaboration, we would know more.

But Einstein-biographers, Einstein-researchers and other scientists do not

ask certain questions and so I do not find answers to my questions:

Why was Mileva Einstein-Marić not called to Zurich, Prag, Berlin, Princeton, Pasadena, to teach?

Why did she only get the money of the Nobel Prize but was not named winner together Einstein?

Why do we not know anything about her thesis, not even the title, why is it lost, why do we not know anything about her dissertation to which Albert Einstein referred to again and again, why it is lost?

As things stand, letters of Mileva Einstein-Maric and Albert Einstein between 1897-1938 are still being held, books not being published because of "legal impediments." Possibly more light will be thrown in the future on the scientific side of this partnership. We might yet see the contribution of Mileva Einstein-Maric to the theory of relativity enter the history of the field.

I am also interested, however, in the life of Mileva Einstein-Marić, the life that could not be lived by her and the life she was forced to live.

Why was the relationship with Albert Einstein fatal for Mileva Einstein-Maric?

Why did it destroy all her promise, her aspirations, her dreams?

Why did she not ask for recognition for herself but was happy and content with her husband's success?

Why did the marriage between Mileva Einstein-Maric and Albert Einstein secure world fame for the man and not even a university teaching job for the woman?

Mileva Einstein-Marič is also the woman whose marriage to Albert Einstein changed the quality of her life in an irrevocable way. Not only did her scientific career come to an end before it could even start, but also her

independent life as an individual ended and was prescribed as soon as she married Albert Einstein. Now she was foremost a wife and a mother, that is a caretaker of the needs of others. This sapped her energies, eroded her creativity and physical strength. She was responsible for the household, and when the first child was born (May, 1904), her work load increased. At the same time, she did scientific work with Paul Habicht and for Albert Einstein.

When they moved to Zurich, she took in student lodgers, who ate and lived with them, to secure more financial independence.

Mileva Einstein-Marić worked beyond her physical power. When her brother studied in Zurich, he became her baby sitter and allowed her time to check her husband's computations.

Two memories of visitors to their apartment from that time:

A student of Albert Einstein reports coming to his apartment. "The door was open, the steps and the hallway were wet from cleaning, and his wife, after all this work, was standing in the kitchen cooking the midday meal with her sleeves rolled up." (Trbuhoviè-Gjuriè, 1983: 87)

A mathematician of the University of Zagreb recalled that Albert Einstein every now and then helped his wife doing the household chores because he felt sorry that after her housework was done, she had to do his mathematical problems till way past midnight. (Trbuhoviè-Gjuriè, 1983: 87)

But Mileva Einstein-Mariċ did not tire and was happy about her husband's success. She wrote to her friend Helene on September 3, 1909: "My husband is at a congress of German natural scientists in Salzburg at the moment where he is to give a talk. He is considered among the first German speaking physicists now. I am very happy about his successes because he really deserves them."

(Trbuhoviċ-Gjuriċ, 1983: 87)



But the birth of their second son, July 1910, meant even more work. She had already given up all her personal interests. Her health was deteriorating. A doctor predicted she was ruining her health and suggested that Albert Einstein should earn a bit more money. From then on, Mileva Einstein-Maric's contribution to the mathematical work of her husband dimminished (Trbuhovic-Gjuric, 1983: 89). Albert Einstein began to ask advanced students and friends for help. Her life now included taking care of two children, of moves to Prag, Zurich, Berlin, and when Albert Einstein did not join her and the children in Switzerland (where she had gone in July, 1914, for summer holidays, but told her to stay because of the outbreak of WWI), she was responsible for the 10 and 4-year old boys by herself. She had no income. Albert Einstein did not send money regularly and in sufficient amounts. She was too proud to ask her family for help. Also, her children were not supposed to know that there was no money to pay for the lodging house or for their clothes. She goes hungry. She wants to give music lessons but cannot leave the children alone. She finally asks a friend, who had to promise utter discretion, for a loan. When Albert Einstein eventually sent money, she could rent an apartment. He promised to take care of his family. She starts to give private lessons in mathematics and Italian. She sends birthday gifts to Albert Einstein in Berlin. One year after she had left Berlin, Albert Einstein came to Zurich. He gave no answers to his wife's and his older son's questions about his plans for the future of the family. When back in Berlin, he again sent money irregularly and, due to devaluation, it was worth less and less. Mileva Einstein-Mariċ refused help from friends. She heard that Albert Einstein had moved in with his cousin, who loved luxury and fame, and fitted his present stage of life as a famous physicist. Mileva Einstein-Maric still hoped for his return. Common friends of the Einsteins in Zurich stood by her side, advised him against a divorce and reminded him of his responsibility to the family he had founded, his responsibility as a father. He asked his wife for a divorce.

Mileva Einstein-Marić became sick and was in hospitals. The divorce was on Feb. 14, 1919. The older son (15 years) turned away from his father.

In 1929 the younger son, now 19, became psychotic. From now on, Mileva Einstein-Maric had to take care of him, taking him to doctors, paying for the enormous psychiatric expenses because he was in and out of the Burghölzli, a psychiatric hospital in Zurich, and especially dealing with the outbursts in which he destroyed furniture, tried to strangle her, wrote of his hate to his father whose fault it was, so he thought, that he had lost his mind.

Albert Einstein stopped talking about his first marriage. His money came irregularly. Mileva Einstein-Marić taught physics in a secondary school. Her son needed a constant male caretaker. He complained about constant ear aches. He had schizophrenic breaks. Mileva Einstein-Marić could not help her son. Having him at home took all of her last strength.

Mileva Einstein-Maric's health deteriorated further, and so now, at times, she lifted the veil of her proud silence and talked with friends about the fact that Albert Einstein did not care about his sick son. A friend, Dr. Ada Broch, reminds Albert Einstein in a letter of his responsibility and asks him to send money. Mileva Einstein-Maric visits her son in the Burghölzli, in walking across town in snow and ice, she breaks her leg, has to stay in hospital and feels death coming on. She is worried what will become of her son, by himself, with his father and brother far off in the U.S.

In May, 1948, the schizophrenic son had another attack. Mileva Einstein-Maric breaks down and is taken to a clinic. She is paralyzed on the left. She wants to visit her son in the Burghölzli and keeps ringing the bell. The bell is

turned off. She loses consciousness. Her son visits her daily before her death. The day before her death, she regained full consciousness. She died on August 4, 1948, at the age of 73.

Around that time, Albert Einstein uttered the much quoted sentence: "Only a life lived for others is worth living."

After Mileva Einstein-Marič had died, her son lived more than 17 years alone in the Burghölzli, fulfilling her deepest fears. In the announcement of his death, his mother's name is not mentioned; he is simply the son of Prof. Albert Einstein, a father who had not lived with him since he was four years old and who did not take care of him or even come to see him when he was ill.

The exploitation of Mileva Einstein-Marić by her husband is tragic. Still the pattern of exploitation of women, the psychological and physical exploitation, we can recognize today. The Stanford Gifted Child Study that followed gifted children with an I.Q. in the genius range discovered that there was no correlation in young women between their high I.Q. and the jobs they were doing ten years after being in the gifted program: they were housewives, secretaries and nurses.

Mileva Einstein-Marić certainly was an exceptionally gifted woman whose creativity was used by her husband and later exhausted by leaving her alone with her children in the struggle for sheer survival.

The important thing is not to stop asking questions.

Albert Einstein spared himself some essential questions, e.g.

Who is to take care of his own children?

Who is to take care of his mentally sick adult son?

Who is at least financially responsible for his own children if he does not physically take care of them?

It is obviously not sufficient not to stop asking questions. One has to ask the right questions. A beginning in this direction is being made, for instance, by Harris Walker, who recently asked in <u>Physics Today</u>: did Einstein espouse his wife's ideas?

And in case we can't agree what the right questions are, there are some questions that are clearly more relevant than others; you have to decide what questions move you, what questions you want answered by the Einstein authorities, whether he was a vegetarian or whether he appropriated his wife's ideas or whether he neglected his wife and his children. I have given here some of the questions that are of interest to me.

vg

2/9/90