

**Christopher Jon Bjerknes**

*THE MANUFACTURE AND SALE*  
**OF**  
**SAINT EINSTEIN**

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# **TABLE OF CONTENTS:**

<b><u>1 EINSTEIN DISCOVERS HIS RACIST CALLING</u></b> .....	
<u>1.1 Introduction</u> .....	
<u>1.2 The Manufacture and Sale of St. Einstein</u> .....	
<u>1.2.1 Promoting the “Cult” of Einstein</u> .....	
<u>1.2.2 The “Jewish Press” Sanctifies a Fellow Jew</u> .....	
<u>1.3 In a Racist Era</u> .....	
<b><u>2 THE DESTRUCTIVE IMPACT OF RACIST JEWISH TRIBALISM</u></b> .....	
<u>2.1 Introduction</u> .....	
<u>2.2 Do Not Blaspheme the “Jewish Saint”</u> .....	
<u>2.3 Harvard University Asks a Forbidden Question</u> .....	
<u>2.4 Americans React to the Invasion of Eastern European Jews</u> .....	
<u>2.4.1 Jewish Disloyalty</u> .....	
<u>2.4.2 In Answer to the “Jewish Question”</u> .....	
<b><u>3 ROTHSCHILD, REX IVDÆORVM</u></b> .....	
<u>3.1 Introduction</u> .....	
<u>3.2 Jewish Messianic Supremacism</u> .....	
<u>3.3 The “Eastern Question” and the World Wars</u> .....	
<u>3.3.1 Dönmeħ Crypto-Jews, The Turkish Empire and Palestine</u> .....	
<u>3.3.2 The World Wars—A Jewish Antidote to Jewish Assimilation</u> .....	
<u>3.4 Rothschild Warmongering</u> .....	
<u>3.4.1 Inter-Jewish Racism</u> .....	
<u>3.4.1.1 Rothschild Power and Influence Leads to Unbearable Jewish Arrogance</u> .....	
<u>3.4.1.2 Jewish Intolerance and Mass Murder of Gentiles</u> .....	
<u>3.4.2 The Messiah Myth</u> .....	
<u>3.5 Jewish Dogmatism and Control of the Press Stifles Debate</u> .....	
<u>3.5.1 Advertising Einstein in the English Speaking World</u> .....	

[3.5.2 Reaction to the Unprecedented Einstein Promotion](#) . . . . .

[3.5.3 The Berlin Philharmonic—The Response in Germany](#) . . . . .

[3.5.4 Jewish Hypocrisy and Double Standards](#) . . . . .

[3.6 The Messiah Rothschilds’ War on the Gentiles—and the Jews](#) . . . . .

**[4 EINSTEIN THE RACIST COWARD](#)** . . . . .

[4.1 Introduction](#) . . . . .

[4.2 The Power of Jewish Tribalism Inhibits the Progress of Science and Deliberately Promotes “Racial” Discord](#) . . . . .

[4.3 A Jew is Not Allowed to Speak Out Against a Jew](#) . . . . .

[4.4 The Bad Nauheim Debate](#) . . . . .

[4.4.1 Einstein Desires a “Race” War Which Will Exterminate the European Esau](#) . . . . .

[4.4.2 Genocidal Judaism—Pruning the Branches of the Human Family Tree](#) . . . . .

[4.4.3 Crypto-Jews](#) . . . . .

[4.4.4 The Gentiles Must be Exterminated Lest God Cut Off the Jews](#) . . . . .

[4.4.5 Jewish Dualism and Human Sacrifice—Evil is Good](#) . . . . .

[4.4.6 Gentiles are Destined to Slave for the Jews, Then the Slaves Will be Exterminated](#) . . . . .

[4.4.7 Lenard Sickens of Einstein’s Libels](#) . . . . .

[4.4.8 Let the Debate Begin](#) . . . . .

[4.4.8.1 Einstein Disappoints—“Albertus Maximus” is a Laughingstock](#) . . . . .

[4.4.8.2 Contemporary Accounts of the Bad Nauheim Debate](#) . . . . .

[4.5 Einstein the Genocidal Racist](#) . . . . .

[4.6 Racist Jewish Hypocrisy, Intimidation and Censorship](#) . . . . .

[4.7 Einstein’s Trip to America](#) . . . . .

[4.7.1 Einstein Faces Criticism in America](#) . . . . .

[4.7.1.1 Einstein Hides from Reuterdahl’s Challenge to Debate](#) . . . . .

[4.7.1.2 Cowardly Einstein Caught in a Lie](#) . . . . .

4.7.1.3 Reuterdahl Pursues Einstein, Who Continues to Run . . . . .

4.7.2 Einstein All Hype . . . . .

4.8 Assassination Plots . . . . .

4.9 Wolff Crying, Dirty Tricks, Censorship, Smear Campaigns and  
Anonymous Threats in the Name of Einstein . . . . .

**5 THE PROTOCOLS OF THE LEARNED ELDERS OF ZION** . . . . .

5.1 Introduction . . . . .

5.2 *The Protocols of the Learned Elders of Zion* . . . . .

5.3 Did Anyone Believe that the *Protocols* were Genuine? . . . . .

5.3.1 Human Sacrifice and the Plan to Discredit Gentile  
Government—Fulfilled . . . . .

5.3.2 The World Awakens to the “Jewish Peril” . . . . .

5.3.3 America Becomes the “New Jerusalem” . . . . .

5.3.4 “The Jewish Peril” . . . . .

5.3.5 The Inhumanity of the Bolsheviks . . . . .

5.4 International Zionist and Communist Intimidation . . . . .

5.4.1 Suppression of Free Speech . . . . .

5.4.2 Jewish Terrorism . . . . .

5.5 Attempts to Prove the *Protocols* Inauthentic . . . . .

5.5.1 Why Did Henry Ford Criticize the Jews? . . . . .

5.5.2 Controlled Opposition and “The Trust” . . . . .

5.5.3 The Sinking of the “Peace Ship” . . . . .

5.5.4 Ford Comes Under Attack—The War Against Pacifism . . . . .

5.5.5 Zionists Proscribe Free Speech . . . . .

5.5.6 President Woodrow Wilson Becomes a Zionist Dictator . . . . .

5.6 Why Did the Zionists Trouble the Jews? . . . . .

5.6.1 The Zionist Myth of the Extinction of the “Jewish Race” Through  
Philo-Semitism and Assimilation . . . . .

5.6.2 The Zionists Set the Stage for the Second World War. . . and the  
Third . . . . .

[5.7 Henry Ford for President](#) . . . . .

[5.8 The “Jewish Mission”](#) . . . . .

[5.9 Jewish Bankers Destroy Russia and Finance Adolf Hitler](#) . . . . .

[5.10 The Holocaust as a Zionist Eugenics Program for the Jewish “Remnant”:  
Zionist Nazis Use Natural and Artificial Selection to Strengthen the Genetic  
Stock of Jews Destined for Forced Deportation to Palestine](#) . . . . .

[5.11 Zionist Lies](#) . . . . .

[5.12 Zionists Declare that Anti-Semitism is the Salvation of the “Jewish  
Race”](#) . . . . .

[5.13 Communist Jews in America](#) . . . . .

[5.14 The Attempted Assassination of Henry Ford](#) . . . . .

[5.15 How the Zionists Blackmailed President Wilson](#) . . . . .

[5.15.1 Before the War, the Zionists Plan a Peace Conference After the  
War—to be Led by a Zionist Like Woodrow Wilson](#) . . . . .

[5.15.2 “Colonel” Edward Mandell House](#) . . . . .

[5.15.3 The Balfour Declaration—\*QUID PRO QUO\*](#) . . . . .

[5.16 A Newspaper History of Zionist Intrigues During the First World War,  
which Proves that Jewish Bankers Betrayed Germany](#) . . . . .

[5.17 The Germans’ Side of the First World War](#) . . . . .

**[6 ZIONISM IS RACISM](#)** . . . . .

[6.1 Introduction](#) . . . . .

[6.2 Political Zionism is a Form of Racism](#) . . . . .

[6.3 Most Jews Opposed Zionism](#) . . . . .

[6.4 The Brotherhood of Anti-Semites and Zionists](#) . . . . .

[6.5 Albert Einstein Becomes a Cheerleader for Racist Zionism](#) . . . . .

[6.5.1 While Zionists and Sycophants Hailed Einstein, Most Scientists  
Rejected Him and “His” Theories](#) . . . . .

[6.5.2 Hypocritical and Cowardly Einstein Plays the “Race Card” and  
Cripples Scientific Progress](#) . . . . .

[6.5.3 What is Good for Goose is not Good for the Goyim](#) . . . . .

[6.5.3.1 Supremacist and Segregationist Jewish “Neo-Messianism”](#) . . .

[6.5.3.2 It is Alright for Jews to Claim that “Einstein’s Theories” are “Jewish”, but Goyim Dare Not Say It](#) . . . . .

**[7 NAZISM IS ZIONISM](#)** . . . . .

[7.1 Introduction](#) . . . . .

[7.2 \*Blut und Boden\*—A Jewish Ideal](#) . . . . .

[7.3 Zionism is Built on Lies and Hatred](#) . . . . .

[7.4 The Hypocritical Vilification of Caligula—Ancient Jewish Historians are not Credible](#) . . . . .

[7.5 All the Best Zionists are Anti-Semites](#) . . . . .

[7.5.1 Nazism is a Stalking Horse for Zionism and Communism](#) . . . . .

[7.5.2 Hitler and Goebbels Reveal Their True Motives at War’s End](#) . . . . .

[7.5.3 Zionists and Communists Delight in Massive Human Sacrifices to the Jewish Messianic Cause](#) . . . . .

[7.5.4 Einstein Lulls Jews into Complacency—The Zionist Trap](#) . . . . .

[7.5.4.1 Depressions Make for Fertile Ground for Anti-Semitic Zionist Dictators](#) . . . . .

[7.5.4.2 Einstein a Subtle Hitler Apologist](#) . . . . .

[7.5.5 Einstein’s Seething Racist Hatred and Rabid Nationalism](#) . . . . .

[7.5.6 The Final Solution of the Jewish Question is Zionism, but the Final Solution of the German Question is Extermination](#) . . . . .

[7.6 The Carrot and the Stick](#) . . . . .

[7.7 British Zionists, in Collaboration with Nazi Zionists, in Collaboration with Palestinian Zionists, Ensured that the Jews of Continental Europe Would Find No Sanctuary Before the War Ended](#) . . . . .

[7.8 Documented Collaboration Between the Palestinian Zionists and the Zionist Nazis](#) . . . . .

**[8 HOW THE JEWS MADE THE BRITISH INTO ZIONISTS](#)** . . . . .

- [8.1 Introduction](#) .....
- [8.2 The Rothschilds and Disraeli Lead the British Down the Garden Path to Palestine](#) .....
- [8.3 Jews Provoke Perpetual War](#) .....
- [8.4 Jewish World Government—A Prophetic Desire](#) .....
- [8.5 Puritans and Protestants Serve Jewish Interests](#) .....
- [8.6 The Planned Apocalypse](#) .....
- [8.7 Cabalistic Jews Calling Themselves Christian Condition the British to Assist in Their Own Demise—Rothschild Makes an Open Bid to Become the Messiah](#) .....
- [8.7.1 The “British-Israel” Deceit](#) .....
- [8.7.2 For Centuries, England is Flooded with Warmongering Zionist Propaganda](#) .....
- [8.7.3 As a Good Cabalist Jew, David Hartley Conditions Christians to Welcome Martyrdom for the Sake of the Jews](#) .....
- [8.7.3.1 Jewish Revolutionaries and Napoleon the Messiah Emancipate the Jews](#) .....
- [8.7.3.2 Hitler Accomplishes for the Zionists What Napoleon Could Not](#) .....
- [8.7.3.3 Zionists Develop a Strategy Which Culminates in the Nazis and the Holocaust as Means to Attain the “Jewish State”](#) .....

## **9 THE PRIORITY MYTH** .....

- [9.1 Introduction](#) .....
- [9.2 Opinions of Einstein and “His” Work](#) .....
- [9.3 The Æther](#) .....
- [9.4 The So-Called “Lorentz Transformation”](#) .....
- [9.4.1 Woldemar Voigt’s Space-Time Transformation](#) .....
- [9.4.2 Length Contraction](#) .....
- [9.4.2.1 Dynamic Length Contraction](#) .....
- [9.4.2.2 Kinematic Length Contraction](#) .....

	<a href="#"><u>9.4.3 Time Dilatation</u></a>	.....
	<a href="#"><u>9.4.4 The Final Form of the Transformation</u></a>	.....
	<a href="#"><u>9.4.5 Einstein’s Fudge</u></a>	.....
	<a href="#"><u>9.4.6 Einstein Begged the Question</u></a>	.....
	<a href="#"><u>9.5 The “Two Postulates”</u></a>	.....
	<a href="#"><u>9.5.1 The “Principle of Relativity”</u></a>	.....
	<a href="#"><u>9.5.2 The “Light Postulate”</u></a>	.....
	<a href="#"><u>9.6 Relative Simultaneity</u></a>	.....
	<a href="#"><u>9.6.1 Isotropic Light Speed</u></a>	.....
	<a href="#"><u>9.6.2 The “Aarau Question”</u></a>	.....
	<a href="#"><u>9.6.3 Light Signals and Clock Synchronization</u></a>	.....
	<a href="#"><u>9.7 Conclusion</u></a>	.....
<b>10</b>	<b><a href="#"><u>“SPACE-TIME” OR IS IT “TIME-SPACE”?</u></a></b>	.....
	<a href="#"><u>10.1 Introduction</u></a>	.....
	<a href="#"><u>10.2 The Ancients and “Space-Time”</u></a>	.....
	<a href="#"><u>10.3 Einstein and “Space-Time”</u></a>	.....
<b>11</b>	<b><a href="#"><u>HILBERT’S PROOFS PROVE HILBERT’S PRIORITY</u></a></b>	.....
	<a href="#"><u>11.1 Introduction</u></a>	.....
	<a href="#"><u>11.2 Corry, Renn and Stachel’s Baseless Historical Revisionism</u></a>	.....
	<a href="#"><u>11.3 Historical Background and the Correspondence</u></a>	.....
	<a href="#"><u>11.4 Hilbert’s Proofs Prove Hilbert’s Priority</u></a>	.....
	<a href="#"><u>11.5 A Question of Character</u></a>	.....
	<a href="#"><u>11.6 A Question of Ability</u></a>	.....
	<a href="#"><u>11.7 Conclusion</u></a>	.....
<b>12</b>	<b><a href="#"><u>GERBER’S FORMULA</u></a></b>	.....
	<a href="#"><u>12.1 Introduction</u></a>	.....
	<a href="#"><u>12.2 How Fast Does Gravity Go?</u></a>	.....



12.3 Gerber’s Formula was Well-Known	.....
12.4 Einstein’s Fudge	.....
12.5 Who Was Paul Gerber?	.....
12.6 Conclusion	.....
<b>13 SOLDNER’S PREDICTION</b>	<b>.....</b>
13.1 Introduction	.....
13.2 Soldner’s Hypothesis and Solution	.....
13.3 Einstein Knew the Newtonian Prediction	.....
13.4 Soldner’s Formulation	.....
13.5 Conclusion	.....
<b>14 THE PRINCIPLE OF EQUIVALENCE, ETC.</b>	<b>.....</b>
14.1 Introduction	.....
14.2 Eötvös’ Experimental Fact and Planck’s Proposition	.....
14.3 Kinertia’s Elevator is Einstein’s Happiest Thought	.....
14.4 Dynamism	.....
14.5 Mach’s Principle	.....
14.6 The Rubber Sheet Analogy	.....
14.7 Reference Frames and Covariance	.....
14.8 Conclusion	.....
<b>15 “THEORY OF RELATIVITY” OR “PSEUDORELATIVISM”?</b>	<b>.....</b>
15.1 Introduction	.....
15.2 The “Theory of Relativity” is an Absolutist Theory	.....
<b>16 <math>E = m c^2</math></b>	<b>.....</b>
16.1 Introduction	.....
16.2 The “Quantity of Motion”—Momentum, <i>Vis Viva</i> and Kinetic Energy	..
16.3 The Atom as a Source of Energy and Explosive Force	.....

<u>16.4 The Inertia of Energy</u> .....	
<u>16.5 The Einsteins' Energy Fudge</u> .....	
<u>16.6 Hero Worship</u> .....	
<u>16.7 Conclusion</u> .....	
<b><u>17 EINSTEIN'S <i>MODUS OPERANDI</i></u></b> .....	
<u>17.1 Introduction</u> .....	
<u>17.2 "Mach's" Principle of Logical Economy</u> .....	
<u>17.3 Einstein's Fallacies of <i>Petitio Principii</i></u> .....	
<u>17.4 Conclusion</u> .....	
<b><u>18 MILEVA EINSTEIN-MARITY</u></b> .....	
<u>18.1 Introduction</u> .....	
<u>18.2 Witness Accounts and the Evidence</u> .....	
<u>18.3 Prophets of the Prize</u> .....	
<u>18.4 Conclusion</u> .....	
<b><u>19 ALBERT EINSTEIN'S NOBEL PRIZE</u></b> .....	
<u>19.1 Introduction</u> .....	
<u>19.2 The Nobel Foundation Directorate Learns that Einstein is a Plagiarist</u> . . .	
<u>19.3 "The Thomson-Einstein Theory" Makes a Convenient Excuse</u> .....	
<u>19.4 The Origins of the Law of the Photo-Electric Effect</u> .....	
<u>19.5 Einstein's Nobel Prize was Undeserved</u> .....	
<u>19.6 Einstein Breaks the Rules</u> .....	
<u>19.7 Conclusion</u> .....	<u>1</u>
<b><u>NOTES</u></b> .....	<b><u>1</u></b>

## **18 MILEVA EINSTEIN-MARITY**

*Mileva Marić and Albert Einstein married in 1903. They had already spent many years working together on Lorentz' theory of relativity. In 1905, the Einsteins published their first paper on the Poincaré-Lorentz theory of relativity.*

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“We have recently completed a very important work, which will make my husband world-famous.”—MILEVA EINSTEIN-MARITY

“The author of these articles—an unknown person at that time, was a bureaucrat at the Patent Office in Bern, Einstein-Marity (Marity—the maiden name of his wife, which by Swiss custom is added to the husband's family name).”—ABRAM JOFFE

“How happy and proud I will be, when we two together have victoriously led our work on relative motion to an end!”—ALBERT EINSTEIN

### **18.1 Introduction**

There is abundant evidence that Mileva Marić, Albert Einstein's first wife, collaborated with Albert on the production and publication of their most famous papers of 1905, and may even have been the sole author of those works.

### **18.2 Witness Accounts and the Evidence**

In 1905, several articles bearing the name of Albert Einstein appeared in a German physics journal, *Annalen der Physik*. The most fateful among these was a paper entitled “*Zur Elektrodynamik bewegter Körper; von A. Einstein*”, Einstein's supposedly breakthrough paper on the “principle of relativity”. Though it was perhaps submitted as coauthored by Mileva Einstein-Marity and Albert Einstein, or solely by Mileva Einstein-Marity, as some scholars believe,<sup>3530</sup> Albert's name appeared in the journal as the exclusive author of their works.<sup>3531</sup>

Abram Fedorovich Joffe (Ioffe) recounts that the papers were signed “Einstein-Marity”. “Marity” is a variant of the Serbian “Marić”, Mileva's maiden name. Joffe, who had seen the original 1905 manuscript, is on record as stating,

“For Physics, and especially for the Physics of my generation—that of Einstein's contemporaries, Einstein's entrance into the arena of science is unforgettable. In 1905, three articles appeared in the ‘Annalen der Physik’,

which began three very important branches of 20<sup>th</sup> Century Physics. Those were the theory of Brownian movement, the theory of the photoelectric effect and the theory of relativity. The author of these articles—an unknown person at that time, was a bureaucrat at the Patent Office in Bern, Einstein-Marity (Marity—the maiden name of his wife, which by Swiss custom is added to the husband’s family name).”

“Для физиков же, и в особенности для физиков моего поколения — современников Эйнштейна, незабываемо появление Эйнштейна на арене науки. В 1905 г. в «Анналах физики» появилось три статьи, положившие начало трём наиболее актуальным направлениям физики XX века. Это были: теория броуновского движения, фотонная теория света и теория относительности. Автор их — неизвестный до тех пор чиновник патентного бюро в Берне Эйнштейн-Марити (Марити — фамилия его жены, которая по швейцарскому обычаю прибавляется к фамилии мужа).”<sup>3532</sup>

There is an obvious contradiction between Joffe’s statement that the author of three famous papers in *Annalen der Physik* in 1905 was an unknown patent clerk, and Joffe’s statement that the author of these works was “Einstein-Marity”. Albert Einstein is not known to have ever gone by the *Allianzname* “Einstein-Marity”. Mileva Marić did go by the *Allianzname* “Einstein-Marity”<sup>3533</sup> and Abram Joffe was aware of this fact. Abram Fedorovich Joffe did not title his obituary “In Remembrance of Albert Einstein-Marity”, but rather “In Remembrance of Albert Einstein” and Joffe is not known to have ever referred to Albert Einstein as “Einstein-Marity”, nor is he ever known to have used the *Allianzname* “Einstein-Marity” other than to identify the author of the 1905 papers.

We cannot examine Joffe’s statements in a vacuum, but rather we must take into account the well-known and vicious attacks that have been made against Einstein’s critics, which have had a chilling effect on criticism of Einstein and the exposure of facts which are detrimental to Albert Einstein’s image. Joffe may have felt inhibited from more openly stating that Mileva Marić was the true author of the 1905 papers published in *Annalen der Physik* under Albert Einstein’s name. No one has yet offered an explanation as to why Joffe identified the author of the papers as “Einstein-Marity” other than as attempt to identify the true author of the papers as Mileva Marić. We must also take into account the fact that the Einsteins themselves often referred to their working collaboration, as did many others. The Einsteins’ private correspondence was not available to Joffe and it proves that Mileva and Albert were collaborators. The fact that these various independent accounts point to the same conclusion is not coincidental. Therefore, barring the appearance of conclusive evidence to the contrary, it is safe to say that Joffe meant to disclose the fact that Mileva was the true author of the papers, when Joffe stated that the author of the works was “Einstein-Marity”.

Joffe knew that Mileva went by the *Allianzname* Einstein-Marity and that he, Joffe, could subtly disclose the fact that she was the true author, or a co-author, of

the paper, without risking the fanatical wrath and retaliation which has so often followed the disclosure of facts unfavorable to Einstein's image. Such subtleties were common practice in the Soviet Union, where the government imposed harsh penalties on dissidents. Fanatics in the Physics community and the international press have viciously attacked Einstein's critics. The situation has been described as the "Einstein terror",<sup>3534</sup> which terrorism was openly acknowledged by Einstein's advocates.<sup>3535</sup> Stjepan Mohorovičić received anonymous threats when he criticized Einstein, and the progress of his career was impeded.<sup>3536</sup> Ernst Gehrcke's career advancement was also impeded after he called attention to Albert Einstein's plagiarism and irrationality.<sup>3537</sup> Albert Einstein publicly defamed Gehrcke, Lenard and others.<sup>3538</sup> The international press and press agencies echoed Einstein's lies around the world, and refused to publish Gehrcke's and Lenard's responses.<sup>3539</sup> The terrorist and censorship tactics used against Einstein's critics are typical Zionist behavior. Zionists have perpetrated countless assassinations, both character and bodily assassinations. The State of Israel officially sanctions and commits murder. Numerous Jewish organizations regularly defame their opponents. Zionists and Jewish organizations have criminalized speech, which refutes their lies, in several nations. They seek universal criminal statutes proscribing speech that would contradict their mandated official opinions on historical, religious and political matters.

One must assume that the submitted works were signed. Since Joffe stated that the author was "Einstein-Marity", it is logical to conclude that the papers were signed "Einstein-Marity". Daniil Semenovich Danin explicitly stated that the papers were "signed Einstein-Marity". Prof. Dr. Margarete Maurer has argued that Danin may well have discussed the matter with Joffe.<sup>3540</sup>

In 1962, Daniil Semenovich Danin expressly stated,

"The unsuccessful teacher, who, in search of a reasonable income, had become a third class engineering expert in the Swiss Patent Office, this yet completely unknown theoretician in 1905 published three articles in the same volume of the famous 'Annalen der Physik' signed 'Einstein-Marity' (or Marić—which was his first wife's family name)."

"Невезучий школьный учитель, в поисках сносного заработка ставший инженером-экспертом третьего класса в Швейцарском бюро патентов, еще никому не ведомый теоретик опубликовал в 1905 году в одном и том же томе знаменитых «Анналов физики» три статьи за подписью Эйнштейн-Марити (или Марич—это была фамилия его первой жены)."<sup>3541</sup>

If "Einstein-Marity" refers to a sole person, that person is Mileva Einstein-Marić, not Albert Einstein.

Desanka Trbuhović-Gjurić's interpretation of the facts are found in her book, *Im Schatten Albert Einsteins, Das tragische Leben der Mileva Einstein-Marić, (In the Shadow of Albert Einstein, The Tragic Life of Mileva Einstein-Maric)*, in which she

discusses Mileva's rôle in the development of the special theory of relativity, and states, *inter alia*,

“The distinguished Russian physicist [\*\*\*] Abraham F. Joffe (1880-1960), pointed out in his ‘In Remembrance of Albert Einstein’, that Einstein’s three epochal articles in Volume 17 of ‘Annalen der Physik’ of 1905 were originally signed ‘Einstein-Marić’. Joffe had seen the originals as assistant to Röntgen, who belonged to the Board of the ‘Annalen’, which had examined submitted contributions for editorial purposes. Röntgen showed his *summa cum laude* student this work, and Joffe thereby came face to face with the manuscripts, which are no longer available today.”

“Der hervorragende russische Physiker [\*\*\*] Abraham F. Joffe (1880-1960), machte in seinen «Erinnerung an Albert Einstein» darauf aufmerksam, dass die drei epochemachenden Artikel Einsteins im Band XVII der «Annalen der Physik» von 1905 im Original mit «Einstein-Marić» gezeichnet waren. Joffe hatte die Originale als Assistent von Röntgen gesehen, der dem Kuratorium der «Annalen» angehörte, das die bei der Redaktion eingereichten Beiträge zu begutachten hatte. Zu dieser Arbeit zog Röntgen seinen *summa cum laude*-Schüler Joffe bei, der auf diese Weise die heute nicht mehr greifbaren Manuskripte zu Gesicht bekam.”<sup>3542</sup>

Wilhelm Conrad Röntgen was one of the referees of the Einsteins’ 1905 paper on the electrodynamics of moving bodies, which reiterate Lorentz’ equations and FitzGerald’s contraction hypothesis, as if unprecedented ideas. Abram Joffe was Röntgen’s assistant until 1906. Joffe wrote in 1960,

“Therefore Röntgen suggested to me that when I defended my doctoral dissertation in May of 1905, that I ought to discuss what one could now look upon as the prehistory of the theory of relativity: the Lorentz-equations and the hypothesis of FitzGerald. And then he asked me a question, ‘Do you believe that there are spheres which are flattened when they move? Can you confirm the fact that such electrons will forever remain a part of Physics?’—I answered, ‘Yes, I am convinced that they exist, only we don’t yet know everything about them. Consequently, we must study them further.’

When I defended my dissertation, something remarkable happened. The dean gave the welcoming address in Latin, which I did not understand. The only thing I could fathom was that my defense had gone well, because the speech ended with a handshake. But when I met Röntgen in the laboratory, he was indignant at the cold response I had given to the dean’s speech. It turned out that the faculty had awarded me the degree of ‘*summa cum laude*’—‘with the highest praise possible’—for the first time in 20 years. This degree awarded me the right to give lectures. It was to be expected that I would have been overwhelmed with joy—and I did not know at that time that there were four levels of evaluation and I had received the highest. For

a long time Röntgen refused to believe that I had not known of the rankings of the evaluation levels when I was presenting my defense. Afterwards, he reminded me of this incident, ‘You are really a ridiculous person.’

In August of 1906, I traveled to Russia and witnessed the intelligentsia leaving the revolution with my own eyes. Given my Marxist convictions, I felt that at such a time I did not have the right to only concern myself with Physics far away from my homeland in Munich. I wrote Röntgen that I would not return and that my conscience would not allow me to leave the homeland while the reactionaries triumphed.<sup>3543</sup>

Given that Joffe was familiar with Lorentz’ work and the Lorentz transformation at least as early as May of 1905, he must have known that the Einsteins were plagiarists. The Einsteins’ paper was not submitted until at least 30 June 1905 (perhaps much later), and was not published until 26 September 1905, and it is possible that substantial changes were made after the paper was submitted. Joffe, like Röntgen, also must have had an intense interest in the Poincaré-Lorentz special theory of relativity and would have been eager to have studied the Einsteins’ paper. Röntgen also must have known that the Einsteins were plagiarists, and as a referee of their paper, he was guilty of complicity in their plagiarism, as were Paul Drude and Max Planck—one wonders if these men even participated in the fraud from the beginning.

Joffe knew that his statement that the papers were authored by Einstein-Marity would be noticed. Though Joffe’s statement superficially indicates that it was Albert who went by the name of “Einstein-Marity”, such a claim, and the parenthetical explanation it compelled, were extraordinary—an express contradiction—and are belied by the fact that Mileva, not Albert, went by the name of “Einstein-Marity” and Joffe knew it. Joffe was probably, as imperceptibly as his conscience would allow, disclosing to the world that Albert was not the author; or, not the sole author of the works in question.

Joffe’s statements appeared fifty years after he had read the 1905 papers. It stuck with him all those many years that the papers were indelibly signed “Einstein-Marity”—the manuscripts have long ago disappeared. Joffe titled his obituary “In Remembrance of Albert Einstein”, not “In Remembrance of Albert Einstein-Marity” and Joffe does not refer to “Einstein-Marity” other than in the context of the 1905 papers. The contradiction between Joffe’s claim that the author of the works was Einstein-Marity, which was Mileva’s name, and Joffe’s claim that the author was a male patent clerk have not been explained other than by the fact that Mileva was the author, or coauthor of the papers.

Though some try to examine Joffe’s statement, and all the other specific facts, individually and in a vacuum, Joffe’s statement must be examined in light of the many facts which prove that Mileva and Albert worked together on the theory of relativity. There is no coincidence in the fact that, unbeknownst to Joffe, Mileva and Albert had discussed their working collaboration on Lorentz’ theory in their private correspondence. It is not a coincidence, nor an irrelevant fact, that Albert discussed his collaboration with Mileva with Alexander Moszkowski. It cannot be ignored that

these isolated facts are consistent, and prove individually and collectively that Mileva was at least the coauthor of the 1905 papers the Einsteins published in *Annalen der Physik*.

How could Joffe have known that Mileva Marić went by the name of Einstein-Marity, if the name had not appeared on the 1905 papers and why would he tie that name to the 1905 papers? Joffe could not have known that Albert went by the name of “Einstein-Marity”, because Albert Einstein never did. Perhaps, Mileva introduced herself to Joffe as the “Einstein-Marity” who had written and signed the papers. Joffe recorded his attempts to discuss the 1905 papers with their author—a fact I pointed out in 2002, which others have since adopted,

“I did not come to know Albert Einstein, until I met him in Berlin. [\*\*\*] I wanted very much to talk to Einstein [\*\*\*] and visited him in Zurich together with my friend Wagner. But we did not find him home, so we did not have a chance to talk, and his wife told us that, according to his own words, he is only a civil servant in the patent office, and he has no serious thoughts about science, much less about experiments.”<sup>3544</sup>

Joffe states that he wanted to visit Albert in Zurich, but met with Mileva and gave up on meeting Albert; but did he, in fact, travel to Zurich to meet Mileva? Why would Joffe, upon meeting with Mileva, simply have abandoned his quest to meet Albert? After all, Joffe and Wagner went out of their way to visit him in Zurich. Why not make any further effort to find him? Would it have been so difficult to have found Albert at the patent office, or the local bar? Joffe does not state that Albert was “out of town”, but was merely “not home”.

Why weren’t Joffe and Wagner shocked by Mileva’s comments? Did Mileva have all the answers to their questions? Why, after having read the original papers of 1905, and likely other published articles, would Joffe have accepted Mileva’s account that Albert was a nothing? Was Mileva really something? Would not the natural reaction to Mileva’s statements have been, “Then, who wrote the papers?” Or, did Joffe already know? Perhaps, Joffe wanted to confront both Mileva and Albert with the fact that their papers were unoriginal. He knew Lorentz’ theory and FitzGerald’s hypothesis and was pursuing Lorentz’ theory before the Einsteins’ plagiarized Lorentz’ work. Perhaps, Albert was hiding from Joffe and Wagner. The only thing certain is that Joffe’s story, as he told it, makes no sense, other than as odd images, which stuck with Joffe for many, many years and were fundamental to his vision of Einstein and Marić.

There is no Swiss custom by which the husband automatically adds his wife’s maiden name to his, and even if there were, neither Albert nor Mileva were Swiss. Albert Einstein never signed his name “Einstein-Marity”. Swiss law permits the male, the female, or both, to use a double last name, but this must be declared before the marriage, and it was Mileva, not Albert, who opted for the last name “Einstein-Marity”. A married person may use the hyphenated *Allianzname* in everyday use, but it was Mileva who went by “Einstein-Marity”, not Albert. Albert signed his marriage records simply “Einstein”. Mileva’s death notice reads “Einstein-Marity”.



Joffe, who had handled the original manuscripts, recounts that,

“The author of these articles [\*\*\*] was [\*\*\*] Einstein-Marity”.

It was perhaps subtly amusing to Joffe to point out that Albert’s wife had written, or coauthored, the *Annalen* papers. There is apparently no other plausible reason for Joffe to have made this allusion. Even if Joffe had encountered Mileva’s name “Einstein-Marity” elsewhere, perhaps when they first met, there is no grounds for his associating it with the author of the work of 1905 and only with the work of 1905, other than the name’s having appeared on the work.

Why did Albert’s name appear in the published papers, but not Mileva’s? Did Mileva lose her nerve in the end and ask not to be named as the author of the unoriginal works? Did Mileva have moral objections to the plagiarism? Were the works submitted as coauthored works, but the couple was persuaded that it would be better to have a male name in print? Was there a printing error? Why, after fifty years, would Joffe come out with the disclosure that the papers were submitted by “Einstein-Marity”? Why did that fact nag him for fifty years, and why did he feel compelled to publicly express it, after Albert Einstein had died?

An early Einstein biographer, Alexander Moszkowski, wrote in 1921,

“[Einstein] found consolation in the fact that he preserved a certain independence, which meant the more to him as his instinct for freedom led him to discover the essential things in himself. Thus, earlier, too, during his studies at Zürich he had carried on his work in theoretical physics at home, almost entirely apart from the lectures at the Polytechnic plunging himself into the writings of Kirchhoff, Helmholtz, Hertz, Boltzmann, and Drude. Disregarding chronological order, we must here mention that he found a partner in these studies who was working in a similar direction, a Southern Slavonic student, whom he married in the year 1903. This union was dissolved after a number of years. Later he found the ideal of domestic happiness at the side of a woman whose grace is matched by her intelligence, Else Einstein, his cousin, whom he married in Berlin.”<sup>3545</sup>

“Ihm verblieb als Trost die Wahrung einer gewissen Selbständigkeit, wie ihn ja sein Freiheitsinstinkt durchweg dazu anhielt, das Wesentliche in sich selbst zu suchen. So hatte er auch zuvor während seiner Züricher Studien die theoretische Physik fast durchweg nicht im Anschluß an die Vorlesungen im Polytechnikum, sondern in häuslicher Arbeit betrieben, mit Versenkung in die Werke von Kirchhoff, Helmholtz, Hertz, Boltzmann und Drude. Außerhalb der chronologischen Ordnung erwähnen wir, daß er für diese Studien eine in gleicher Linie strebende Partnerin fand, eine südslawische Studentin, die er im Jahre 1903 heiratete. Diese Ehe wurde nach einer Reihe von Jahren getrennt. Er fand später an der Seite seiner ebenso anmutigen wie intelligenten Kusine Else Einstein, mit der er sich in Berlin vermählte, das Ideal häuslichen Glückes.”<sup>3546</sup>

On 3 April 1921, *The New York Times* quoted Chaim Weizmann,

“When [Einstein] was called ‘a poet in science’ the definition was a good one. He seems more an intuitive physicist, however. He is not an experimental physicist, and although he is able to detect fallacies in the conceptions of physical science, he must turn his general outlines of theory over to some one else to work out.”<sup>3547</sup>

Einstein told Leopold Infeld, “I am really more of a philosopher than a physicist.”<sup>3548</sup> It is well-established that Einstein had relied upon collaborators to accomplish the mathematical work for which he would sometimes take sole credit. Einstein admitted to Peter A. Bucky that he relied upon experts to do his mathematical work,

“[E]ven after I became well-known I many times made use of experts to assist me in complicated calculations in order to prove certain physics problems. Also, I have always strongly believed that one should not burden his mind with formulae when one can go to a textbook and look them up. I have done that, too, on many occasions.”<sup>3549</sup>

Einstein collaborated with Mileva Marić, Jacob Laub, Walter Ritz, Ludwig Hopf, Otto Stern, Marcel Grossmann, Michele Besso, Adriaan Fokker, and Wander de Haas. He had copied the formulae of Lorentz, Poincaré, Wien, Gerber, and countless others, without an attribution.

Einstein biographer Peter Micheltore interviewed the Einsteins’ son Hans Albert Einstein and wrote that,

“[Mileva Maric] was as good at mathematics as Marcel [Grossmann] and she, too, helped in the weekend coaching sessions. [\*\*\*] She tried to bring a sense of order into Albert’s life, too. The mathematics instruction was only part of it. [\*\*\*] Mileva helped him solve certain mathematical problems, but nobody could assist with the creative work, the flow of fresh ideas. [\*\*\*] Mileva checked the article again and again, then mailed it. [\*\*\*] Einstein’s mathematics failed him. The problem was too complex for Mileva. He called on Marcel Grossmann [\*\*\*] It was a year later, when Einstein hit a snag in his research, that he went to Switzerland to visit Mileva and the boys.”<sup>3550</sup>

There is an apparent contradiction in Micheltore’s statement, in that he stated that Mileva Marić was as good a mathematician as Marcel Grossmann, then claimed that Grossmann was able to solve a problem Marić could not. This related not to ability, but to training. Grossmann had specialized in non-Euclidean geometry, and Marić had not. Einstein plagiarized the work of both his wife Mileva Marić and his friend Marcel Grossmann.

Albert Einstein was not a mathematically minded person. Einstein confessed to Abraham Pais,

“I am not a mathematician.”<sup>3551</sup>

Albert Einstein also stated,

“Since the mathematicians have attacked the relativity theory, I myself no longer understand it anymore.”<sup>3552</sup>

Anton Reiser (Rudolf Kayser) records that, while Albert Einstein was studying,

“He showed very little love for [the] study [of mathematics], which seemed to him rather limitless in relation to other sciences. No one could stir him to visit the mathematical seminars.”<sup>3553</sup>

While still a child, Albert’s parents and teachers suspected that he was mentally retarded.<sup>3554</sup> Abraham Pais tells a revealing story of one of Albert Einstein’s blunders.<sup>3555</sup>

We have direct evidence from Albert’s own pen that the work on relativity theory was a collaboration between Mileva and him,

“How happy and proud I will be, when we two together have victoriously led our work on relative motion to an end!”

“Wie glücklich und stolz werde ich sein, wenn wir beide zusammen unsere Arbeit über die Relativbewegung siegreich zu Ende geführt haben!”<sup>3556</sup>

This letter from Albert to Mileva came between two relevant others; one *circa* 10 August 1899, in which Albert discusses the electrodynamics of moving bodies in “empty space”; and another dated 28 December 1901, in which Albert pleads with Mileva to agree to a collaboration in marriage on their scientific work.

Albert’s plea of 1901 is made in the express context of Lorentz’ and Drude’s writings on the “electrodynamics of moving bodies”—which is the very title of the Einsteins’ 1905 paper on the theory of relativity. After the publication of the 1905 article, Albert Einstein repeatedly stated that he had taken the light postulate of special relativity from Lorentz’ theory,<sup>3557</sup> and professed that the Lorentz transformation is the “real basis” of the special theory of relativity.<sup>3558</sup> Lorentz<sup>3559</sup> had published the Lorentz transformation in near modern form in 1899 (Joseph Larmor published the modern transformation in 1900<sup>3560</sup>). Albert Einstein had studied Lorentz’ work from the age of 16 as a student in 1895.<sup>3561</sup> Drude featured Lorentz’ theories in Drude’s famous book of 1900 *Lehrbuch der Optik*. Albert Einstein owned a copy of Drude’s book, which featured Lorentz’ theories.<sup>3562</sup> Albert wrote to Mileva in this context,

“As my dear wife, we will want to engage in a quite diligent scientific collaboration, so that we don’t become old Philistines, isn’t it so?”

“Bis Du mein liebe Weiberl bist, wollen wir recht eifrig zusammen wissenschaftlich arbeiten, daß wir keine alten Philistersleut werden, gellst.”<sup>3563</sup>

This letter referred directly to a collaboration that would ultimately lead to the publication of the Einsteins’ paper on the special theory of relativity in 1905.

Evan Harris Walker, who argued that Mileva was co-author, or sole author, of the 1905 papers, quoted some of Albert’s statements as found in the *The Collected Papers of Albert Einstein*, and bear in mind that the vast majority of Mileva’s letters to Albert were destroyed long ago, with there being no more likely reasons for their destruction than to hide her contributions to their works and the fact that the works were largely unoriginal,

“I find statements in 13 of [Albert’s] 43 letters to [Mileva] that refer to her research or to an ongoing collaborative effort—for example, in document 74, ‘another method which has similarities with yours.’

In document 75, Albert writes: ‘I am also looking forward very much to our new work. You must now continue with your investigation.’ In document 79, he says, ‘we will send it to Wiedermann’s *Annalen*.’ In document 96, he refers to ‘our investigations’; in document 101, to ‘our theory of molecular forces.’ In document 107, he tells her: ‘Prof. Weber is very nice to me. . . . I gave him our paper.’”<sup>3564</sup>

Though some have suggested that Albert was condescending to Mileva by referring to the works as “theirs”; it is far more likely, from a sociological point of view, that the opposite occurred, and Albert was Mileva’s lackey, fetching notes for her. In order to spare Albert’s male ego, and in order to further Albert’s career, Mileva perhaps referred to the work as “theirs”—just as female nurses have been observed to instruct male doctors on the diagnosis and viable treatment for a patient, only to have the male doctor then pretend to that patient, and in front of the nurse, that the ideas were his—even to lecture the female nurse with her own words. It does not seem plausible, most especially not in that era, that Albert would call the work joint if it were not—and it was absolutely against Albert’s nature to award due credit to others, unless forced to do so. Albert professed,

“Man usually avoids attributing cleverness to somebody else—unless it is an enemy.”

Albert lacked the mathematical skills and intellectual abilities needed to have written the 1905 paper alone. Mileva was exceptionally bright, and all indications are that those who knew her throughout her life found her the more intelligent one of the pair. She had the needed intellectual prowess to have written the 1905 paper on the principle of relativity. Given the many blunders in the paper, it is safe to assume that neither one of them was a superlative mathematician, nor logician. It also appears that publication of the paper may have been rushed—perhaps the couple had

corresponded with Poincaré and he had informed them of his results, and when he would publish them.

Mileva and Albert had coauthored papers before<sup>3565</sup> and Albert had assumed credit for that which Mileva had accomplished without him.<sup>3566</sup> Senta Troemel-Ploetz presented a thorough account of Albert's appropriation of Mileva's work and of Mileva's acquiescence.<sup>3567</sup> Troemel-Ploetz' insights into the cultural barriers Marić faced, and the reasons for Marić's lack of success at the ETH, form a persuasive argument that Mileva was discriminated against, and faced other enormous challenges, which must be taken into account when comparing Mileva's accomplishments with those of her *fellow* students.

Mileva Marić was the more likely one of the couple to have reviewed the English language literature for the reviews published under Albert's name in the *Beiblätter zu den Annalen der Physik* and *Fortschritte der Physik*. Einstein published 21 reviews in the *Beiblätter* in 1905.<sup>3568</sup> Mileva could speak English and Albert could not. R. S. Shankland recounts that,

“[Albert Einstein] told me that when he came to the United States that year [1921], he did not know a word of English. On the trip he picked up some by ear. He told me, ‘I am the acoustic type; I learn by ear and give by word. When I read I hear the words. Writing is difficult, and I communicate this way very badly.’ He added that he never really felt sure of the spelling of any English word. He told me that he even hated to write his *Autobiographical Notes* in German.”<sup>3569</sup>

*The Chicago Tribune* reported on 3 April 1921 on page 6 that,

“[Albert Einstein] does not speak English and answered through an interpreter.”

*The New York Times Book Review and Magazine* on 1 May 1921 published an interview with Albert Einstein and his second wife, and Dan Arnauld recorded that Einstein's second wife interrupted the interview and was concerned by Albert's inability to speak English,

“‘Maybe I can help you,’ she said kindly. ‘I speak English, and I can interpret for him.’ The interview up to that point had been in German.”

Albert Einstein wrote to Michele Besso in 1914,

“I am studying English (with Wohlend), slowly but thoroughly.”<sup>3570</sup>

Apparently, the lessons did not take. Mileva had the ability to have read the important English and Slavic works of Gibbs, Larmor, Smoluchowski, Varičak, etc., which the couple copied.

Albert would often simply agree with whomever he had last spoken,<sup>3571</sup> and it is

likely that he was little more than a mere parrot. Upon meeting with colleagues, he would often grill them for information on their theories, seemingly soaking it all in to repeat it later as if the ideas were his own.

Numerous eyewitnesses (literally) described Albert Einstein's vacant childlike eyes and childlike behavior and naïveté.<sup>3572</sup> For example, when Albert Einstein arrived in America in 1921, *The New York Times*, (3 April 1921), described Einstein on the front page:

“Under a high, broad forehead are large and luminous eyes, almost childlike in their simplicity and unworldliness.”

Charles Nordmann, who chauffeured Albert Einstein around France, sarcastically described him as a vacant-eyed simian clod.<sup>3573</sup> Nordmann sarcastically ranked him with Newton, Des Cartes or *Henri Poincaré*—from whom Einstein had copied the principle of relativity.<sup>3574</sup> Like Rabelais and Voltaire before him, Nordmann lavished sarcastic praise on the new hero and derided him in ways which would elude the unsophisticated, but which were clear to those knowledgeable of the facts. Nordmann was careful not to be too blunt, for he wished to advocate the theory of relativity, and it was politically expedient for him to ride on Einstein's coat tails, but Nordmann never failed to get his digs in. Charles Nordmann wrote,

“Einstein is big (he is about 1 m 76), with large shoulders and the back only very slightly bent. His head, the head where the world of science has been re-created, immediately attracts and fixes the attention. His skull is clearly, and to an extraordinary degree, brachycephalic, great in breadth and receding towards the nape of the neck without exceeding the vertical. Here is an illustration which brings to nought the old assurances of the phrenologists and of certain biologists, according to which genius is the prerogative of the dolichocephales. The skull of Einstein reminds me, above all else, of that of Renan, who was also a brachycephale. As with Renan the forehead is huge; its breadth exceptional, its spherical form striking one more than its height. A few horizontal folds cross this moving face which is sometimes cut, at moments of concentration or thought, by two deep vertical furrows which raise his eyebrows.

His complexion is smooth, unpolished, of a certain duskiess, bright. A small moustache, dark and very short, decorates a sensual mouth, very red, fairly large, whose corners gradually rise in a smooth and permanent smile. The nose, of simple shape, is slightly aquiline.

Under his eyebrows, whose lines seem to converge towards the middle of his forehead, appear two very deep eyes whose grave and melancholy expression contrast with the smile of this pagan mouth. The expression is usually distant, as though fixed on infinity, at times slightly clouded over. This gives his general expression a touch of inspiration and of sadness which accentuates once again the creases produced by reflection and which, almost linking with his eyelids, lengthen his eyes, as though with a touch of *kohl*.

Very black hair, flecked with silver, unkempt, falls in curls towards the nape of his neck and his ears, after having been brought straight up, like a frozen wave, above his forehead.

Above all, the impression is one of disconcerting youth, strongly romantic, and at certain moments evoking in me the irrepressible idea of a young Beethoven, on which meditation had already left its mark, and who had once been beautiful. And then, suddenly, laughter breaks out and one sees a student. Thus appeared to us the man who has plumbed with his mind, deeper than any before him, the astonishing depths of the mysterious universe.”<sup>3575</sup>

Certain anecdotal accounts paint Albert Einstein in a bad light. Upon refusing to brush his teeth, Einstein allegedly proclaimed that, “pigs’ bristles can drill through diamond, so how should my teeth stand up to them?”<sup>3576</sup> Explaining why he didn’t wear a hat in the rain, he asserted that hair dries faster than hats, and irritably asserted that such was obvious. It apparently eluded him that the objective was, in the first place, to keep the hair dry. Explaining why he didn’t wear socks, Einstein commented, “When I was young I found out that the big toe always ends up by making a hole in the sock. So I stopped wearing socks”<sup>3577</sup> and “What use are socks? They only produce holes.”<sup>3578</sup> Felix Klein told Wolfgang Pauli that Einstein wrote to him that Klein’s paper<sup>3579</sup> delighted him like a child given a bar of chocolate by his mommy.<sup>3580</sup> *The New York Times* reported on 6 November 1927 on page 22 that Einstein forgot his bags in the waiting room when boarding a train in Gare de l’Est. *The New York Times* reported on 13 July 1924 on page 22 in an article entitled, “Einstein Counted Wrong”, that Einstein counted the change a street car conductor had given him:

“After counting it hurriedly, Einstein insisted that the conductor had made a mistake. The latter recounted the change deliberately, explaining to Herr Einstein that it was correct, and then turned to the next passenger with a shrug of his shoulders and the remark:

‘His arithmetic is weak.’”

Einstein’s private physician Prof. Janos Plesch wrote,

“Einstein never took any exercise beyond a short walk when he felt like it (which wasn’t often, because he has no sense of direction, and therefore would seldom venture far afield), and whatever he got sailing his boat, though that was sometimes quite arduous—not the sailing exactly, but the rowing home of the heavy yacht in the evening calm when there wasn’t a breath of air to stretch the sails.”<sup>3581</sup>

Peter A. Bucky recounted many such anecdotes and told of how Albert Einstein had decided to live in one room as opposed to four so that the next time he lost a button from his shirt it would be easier to find.<sup>3582</sup>

Albert Einstein was taken in by a con man named Otto Reiman, who convinced Einstein that he could describe a person after blindly touching a sample of his or her handwriting.<sup>3583</sup> Many physicists including Albert Einstein, A. E. Dolbear and Sir Oliver Lodge, believed in telepathy; but Einstein was perhaps the only one to find proof of it in the fact that we humans do not have skins as thick as an elephant's hide.<sup>3584</sup> Albert Einstein was taken in by the psychic Roman Ostoja and attended a séance with Upton Sinclair.<sup>3585</sup> Einstein wrote a preface for the Thomas edition of Upton Sinclair's book on telepathy, *Mental Radio*,<sup>3586</sup> in which Einstein—"the greatest mind in the world"<sup>3587</sup>—asked that psychologists seriously consider Sinclair's findings.

Elsa Einstein was Albert Einstein's second wife and his cousin and they were related by blood through both her mother and father. The inbred Einsteins were as arrogant as they were ridiculous. Denis Brian wrote in his book *Einstein: A Life*,

"The Sinclairs arranged for Einstein to meet some of their distinguished writer friends for dinner at the exclusive Town House in Los Angeles. When Einstein arrived, he somehow missed the cloakroom and appeared in the dining room wearing a 'humble' black overcoat and a much-worn hat. In what might have been a scene from a Chaplin film, he removed his overcoat, 'folded it neatly, and laid it on the floor in a vacant corner and set the hat on top of it. Then he was ready to meet the literary elite of Southern California.' There was even something Chaplinesque in the way Einstein flirted with the attractive women, while Elsa—"my old lady" he called her—was at his elbow.

Elsa confirmed Mrs. Sinclair's view of her as a dutiful and utterly devoted German hausfrau during a discussion about God. Einstein had stated his belief in God, but not a personal God—a distinction which Mrs. Sinclair didn't get. She replied, 'Surely the personality of God must include all other personalities.' Afterwards, Elsa gently admonished Mrs. Sinclair for arguing with Albert, adding, 'You know, my husband has the greatest mind in the world.' 'Yes, I know,' said Mrs. Sinclair, 'but surely he doesn't know everything!'"<sup>3588</sup>

Though Roman Ostoja was unable to conjure up a ghost for Albert Einstein, the media were able to put America into a trance-like state of adulation. Brian continued,

"Back in his gift-strewn cottage Einstein found tangible evidence that 'America was prepared to go mad over him.' A millionairess gave Caltech \$10,000 for the privilege of meeting him."<sup>3589</sup>

Peter Michelmore tells a story of how Einstein dropped his saliva saturated cigar butt into the dust, then unashamedly picked up the gritty stub and shoved it back into his mouth defiantly declaring, "I don't care a straw for germs."<sup>3590</sup> R. S. Shankland records that Einstein,



“apparently put his cigarette into his coat pocket, and as we took off our coats he had a small conflagration in his.”<sup>3591</sup>

Einstein wasn't too handy around the house,<sup>3592</sup> and seemingly had a difficult time conceptualizing geometric problems. In a joke perhaps first told of Ampère, it was said that Einstein insisted that two holes be bored through his front door, one larger than the other, so that both the large cat, *and the small cat*, could pass through the door.<sup>3593</sup> This anecdote is significant, because it is a historical indication of the low esteem in which some of the people who had met Einstein held his intelligence.

After meeting Einstein, Max von Laue found it difficult to believe that Einstein had written the 1905 paper,

“[T]he young man who met me made such an unexpected impression on me, that I did not believe him to be capable of being the father of the theory of relativity.”

“[D]er junge Mann, der mir entgegen kam, machte mir einen so unerwarteten Eindruck, daß ich nicht glaubte, er könne der Vater der Relativitätstheorie sein.”<sup>3594</sup>

Minkowski, who had been Einstein's professor, found it difficult to believe that “lazy” Einstein had written the 1905 paper. Minkowski did not think Einstein capable of it.<sup>3595</sup> Minkowski thought that Einstein was a poor mathematician.<sup>3596</sup> According to both Heaviside and Born, Minkowski anticipated Einstein.<sup>3597</sup> Max Born wrote in his autobiography,

“I went to Cologne, met Minkowski and heard his celebrated lecture ‘Space and Time’, delivered on 21 September 1908. Outside the circle of physicists and mathematicians, Minkowski's contribution to relativity is hardly known. Yet it is upon his work that the imposing structures of modern field theories have been built. He discovered the formal equivalence of the three space coordinates and the time variable, and developed the transformation theory in this four-dimensional universe. He told me later that it came to him as a great shock when Einstein published his paper in which the equivalence of the different local times of observers moving relative to each other was pronounced; for he had reached the same conclusions independently but did not publish them because he wished first to work out the mathematical structure in all its splendour. He never made a priority claim and always gave Einstein his full share in the great discovery. After having heard Minkowski speak about his ideas, my mind was made up at once. I would go to Göttingen and to help him in his work.”<sup>3598</sup>

On 2 February 1920, Albert Einstein wrote a letter to Paul Ehrenfest in which Einstein made obvious blunders in his arithmetic,

“I have received the 10000 marks.<sup>[1]</sup> The accounting now looks like this: 16500 marks is what the grand piano costs, 239 marks is the cost of packing, delivery to the train station, and export permit. Remainder is 111 marks,<sup>[2]</sup> which is consequently being applied toward the violins.<sup>[3]»<sup>3599</sup></sup>

Ehrenfests response to Einstein of 8 February 1920 is telling and hints that he knew that Einstein was incompetent beyond mere questions of finances,

“We had a great laugh today about your brilliant miscalculation. You write the following, verbatim:

‘I have received the 10000 marks. The acct. looks like this: 16500 marks is what the grand piano costs, 239 marks is the cost of packing, delivery —. Remainder is 111 marks, which is consequently being applied toward the violins’<sup>[4]</sup> —

God said, ‘Let Einstein be’ and all was skew!—A nice non-Euclidity in the series of numbers!!—After this exercise, I understand perfectly why destitution [*Dallessicität*] is your normal state!<sup>[5]»<sup>3600</sup></sup>

Einstein, himself, described his goals, strengths and limitations in an essay dated 18 September 1896,

“They are, most of all, my individual inclination for abstract and mathematical thinking, lack of imagination and of practical sense.”<sup>3601</sup>

Einstein later found himself in deeper waters and wrote to Paul Hertz on 22 August 1915,

“You do not have the faintest idea what I had to go through as a mathematical ignoramus before coming into this harbor.”<sup>3602</sup>

Albert Einstein wrote to Felix Klein, on 26 March 1917, and confessed that,

“As I have never done non-Euclidean geometry, the more obvious elliptic geometry had escaped me when I was writing my last paper.”<sup>3603</sup>

Einstein often tried to justify his enormous difficulties in school<sup>3604</sup> and his ignorance by admitting that he had thought mathematics unimportant and thought that formulas and facts need not be memorized because one can simply look them up in text books.<sup>3605</sup>

Dr. Tilman Sauer stated,

“[Hilbert] would soon [. . .] pinpoint flaws in Einstein’s rather pedestrian way of dealing with the mathematics of his gravitation theory.”<sup>3606</sup>

It is well-established that Einstein had relied upon collaborators to accomplish

the mathematical work for which he would sometimes take sole credit. Einstein admitted to Peter A. Bucky that he relied upon experts to do his mathematical work,

“[E]ven after I became well-known I many times made use of experts to assist me in complicated calculations in order to prove certain physics problems. Also, I have always strongly believed that one should not burden his mind with formulae when one can go to a textbook and look them up. I have done that, too, on many occasions.”<sup>3607</sup>

Einstein hid from the many accusations that his theory was metaphysical nonsense—an inconsistent jumble of fallacies of *Petitio Principii*—nothing but an excuse to plagiarize. A meeting had been arranged to discuss Vaihinger’s theory of fictions in 1920, and Einstein pledged that he would attend this meeting. Knowing that Einstein would be devoured in a debate over his mathematical fictions, which confused induction with deduction, Wertheimer and Ehrenfest helped Einstein fabricate an excuse to miss the meeting he had agreed to attend. Einstein was proven a liar.<sup>3608</sup> He also hid from many other criticisms, and Einstein refused to answer T. J. J. See’s many charges of plagiarism,<sup>3609</sup> and refused to debate Reuterdahl or to answer his many charges of plagiarism.<sup>3610</sup> Einstein hid from the French Academy of Sciences.<sup>3611</sup> Einstein hid from Cardinal O’Connell.<sup>3612</sup> Einstein hid from Dayton C. Miller’s falsification of the special theory of relativity.<sup>3613</sup> Einstein hid from Cartmel.<sup>3614</sup> Miller hammered Einstein in the press over the course of many years. *The New York Times Index* list several articles in which Miller’s and William B. Cartmels’ falsifications of the special theory of relativity are discussed. Einstein and Lorentz were very worried by Miller’s results and could not find fault with them.<sup>3615</sup> Einstein told R. S. Shankland not to perform an experiment which might falsify the special theory of relativity,

“[Einstein] again said that more experiments were not necessary, and results such as Synge might find would be ‘irrelevant.’ [Einstein] told me not to do any experiments of this kind.”<sup>3616</sup>

Einstein knew he was caught at the Arbeitsgemeinschaft deutscher Naturforscher meeting in the Berlin Philharmonic, and wanted to run away from Germany. Einstein desired to hide from the Bad Nauheim debate at which he had threatened to devour his opponents,<sup>3617</sup> then Einstein—after being talked into appearing and after much hype promoting the event which attracted thousand of visitors—then Einstein, when losing the debate, ran away during the lunch break and again wanted to run away from Germany. Einstein prospered from hype and had no legitimacy as a supposed “genius”. The press rescued him again and again, while he hid. Einstein was unable to defend his theories in the light of strict scrutiny.

### 18.3 Prophets of the Prize

Is there any evidence that Albert Einstein wrote unoriginal works as a pattern? By

1905, before the appearance of the Einsteins' first paper on the principle of relativity, Albert Einstein had already exhibited a penchant for plagiarism.<sup>3618</sup> His early papers were thoroughly unoriginal. Einstein derived these papers from the works of Gibbs and Boltzmann, without giving them their due credit.

The Einsteins' "miraculous year" of 1905 is most notable for three papers on the photo-electric effect, Brownian motion and special relativity. However, the Einsteins' plagiarized their 1905 paper on the theory of Brownian motion from Gouy, Nernst, Smoluchowski, Sutherland and Bachelier, among others.<sup>3619</sup> The Einsteins' 1905 paper on the photo-electric effect was derived from the works of Newton, Maxwell, Boltzmann, Hertz, Hallwachs, Wien, Planck, Lenard, Rayleigh, Stark, and many others.<sup>3620</sup> And the Einsteins plagiarized their paper on the principle of relativity chiefly from Poincaré and Lorentz.

Though the law of the photo-electric effect was mentioned as grounds for the award of Albert Einstein's Nobel Prize, Nobel Prizes were meant to be awarded for scientific discoveries and the Nobel Prize was also awarded to the *experimentalists* Lenard and Millikan—as was more appropriate than the award to Einstein for deriving a law, which award violated many of the fundamental rules of the prize.

The Einsteins' 1905 paper on the photo-electric effect was better referenced than were their papers on Brownian motion and the electrodynamics of moving bodies. This may have been at Max Planck's insistence, because he had accomplished much of the work which led to the Einsteins' paper, and Max Planck had considerable influence at *Annalen der Physik*. The 1905 paper on the principle of relativity wanted for a single reference. The Einsteins simply copied the then famous papers of noted scientists. They acted like a teenager, who opens an encyclopedia article, changes a few words and copies the rest, then submits the finished forgery as his own term paper.

But was it Albert who was fitting the formulæ others had published before him into a new dress to call his own, or was it his brilliant wife Mileva? Albert's supposed genius diminished after his divorce from Mileva in 1919. Why would that be so? He died in 1955, and produced nothing extraordinarily significant after his divorce, in my opinion, and who were closest to Albert have agreed.

After winning the Nobel Prize in 1922, Albert paid his former wife the money which he had won in the prize, but why? Why pay Mileva the winnings? Albert was not overly generous in the support of his family. Peter Michelmores argues that Albert paid Mileva the monies in order to protect the funds from his reckless second wife, but Michelmores notes that in the exchange from one currency to another *half of the value of the prize was lost*—hardly an action taken to preserve value.<sup>3621</sup> Evan Harris Walker stresses this fact and notes the pains Albert took to conceal the transfer of the winnings to Mileva.<sup>3622</sup>

Why did the Nobel Committee not award Einstein the Nobel Prize for his work on relativity theory? It is supposedly unclear, but many parts of the puzzle present an image of political motivation, and not merit, being the impetus behind Einstein's award. All who were familiar with the facts knew that Einstein did not originate the major concepts behind relativity theory. Nobel Prize judge Sven Hedin told Irving Wallace that Nobel Prize laureate Phillip Lenard had informed the Nobel Prize

judges that the theory of relativity,

“was not actually a discovery, had never been proved, and was valueless.”<sup>3623</sup>

Professor Oskar Edvard Westin, of Stockholm, informed the Nobel Foundation Directorate of the unoriginality of Einstein’s work, its metaphysical delusions, and of the accusations of plagiarism outstanding against Einstein, some of which Einstein never denied. Prof. Westin published a very important article in the *Nya Dagligt Allehanda* on 22 October 1922 leveling these charges at Einstein and calling him a dishonest investigator and a plagiarist, undeserving of the Nobel Prize premium.<sup>3624</sup>

Some ten years prior to the award, Wilhelm Wien had recommended that the Nobel Prize be given to both Hendrik Antoon Lorentz and Albert Einstein in 1912, on the grounds that,

“While Lorentz must be considered as the first to have found the mathematical content of the relativity principle, Einstein succeeded in reducing it to a simple principle. One should therefore assess the merits of both investigators as being comparable.”<sup>3625</sup>

However, Einstein’s share by all rights belonged to Poincaré, who died in 1912, and it would have been in exceedingly bad taste to have exploited his death in order to award the Nobel Prize to Einstein; and Boscovich, Voigt, FitzGerald and Larmor had rights to Lorentz’ share. Wien knew Poincaré’s work well, and, thus, knew that Einstein had done little but parrot Poincaré.<sup>3626</sup>

Wien, in recommending Lorentz and Einstein for the special theory, effectively disclosed that Einstein held no priority for it, as everyone knew that Poincaré stated the principle of relativity long before Einstein, and Lorentz had published the mathematical formalisms of the theory before the Einsteins copied them without an attribution. Ernst Gehrcke<sup>3627</sup> demonstrated that Paul Gerber had anticipated the general theory of relativity, as had Johann Georg von Soldner, making a Nobel Prize for that theory impossible. It is clear that the Nobel Committee simply manufactured an excuse to award the then celebrity, Albert Einstein, a prize, merely mentioning the photo-electric effect, for which Einstein held no priority, as a possible excuse.

Robert A. Millikan had argued that Einstein’s formulation of the law of the photo-electric effect was untenable. Millikan changed his position when Einstein’s Nobel Prize award was attacked on this basis, but cited no experimental basis for his change of view. Millikan was then himself awarded the Nobel Prize in 1923. Millikan’s integrity has been questioned by numerous sources.<sup>3628</sup>

Could the Nobel Prize monies Albert paid to Mileva have been “hush money”? Though the payment was made pursuant to a divorce agreement, would not a divorce agreement typically stipulate that the male was indebted to the female and must pay her regardless of the means by which the money was obtained? Mileva had children to feed, Albert’s children. When the divorce agreement was reached, it was far from certain that Albert would ever win the Nobel Prize. Why would Mileva risk the future of her children?

Why would they reach an agreement which stipulated that the monies be paid if and only if Albert might someday win the Nobel Prize?<sup>3629</sup> Could the agreement have related not to the responsibilities of marriage, but to potential monetary gain derived from Mileva's efforts? Is it possible that if it were Mileva's work, and that work paid off, Albert would pay her off, and then only to keep her silent? Could it have been Mileva's way of saying, "Hey, if you ever get any serious money out of my work, I deserve the money, because it was my work!"

Mileva once hinted to Albert that she was contemplating publishing her memoirs. Albert told her to stay silent, and may have intimated that he, an innocent idiot, would suffer less than she, the incorrigible plagiarist, from any public disclosures. That is but one of many plausible interpretations of Albert's words, which were nebulous in the sense that threats often are.<sup>3630</sup> Albert believed,

"If A equals success, then the formula is A equals X plus Y plus Z. X is work. Y is play. Z is keep your mouth shut."<sup>3631</sup>

Why didn't Mileva come forward with the fact that she was the one who had written the work, if in fact she had? Did Albert buy Mileva's silence? Even if he had, was there more to hold Mileva back from exposing Albert than the desperate need for monies?

Albert would have been able to prove to the world that the theory was largely unoriginal when *Annalen der Physik* first published the 1905 paper, which merely condensed the works of Lange, Voigt, Hertz, FitzGerald, Larmor, Cohn, Langevin, Lorentz and Poincaré. What would Mileva have stood to gain by revealing that Albert had taken credit for her work, when she herself had merely repeated what others had already published? Neither of the Einsteins, not Albert, not Mileva, "thought God thought's", as popular myth now holds. They read scientists' papers and books, rewrote them, and attached their name to what was not theirs.

Had anyone ever repeated what Albert Einstein had earlier published, and then claimed priority for thoughts which Albert had first published? Would Albert have tolerated such misbehavior? He was aggressive in response to challenges to his priority and the issue of priority was very important to him.<sup>3632</sup> Albert stated that it is wrong not to give credit where credit is due,

"That, alas, is vanity. You find it in so many scientists. You know, it has always hurt me to think that Galileo did not acknowledge the work of Kepler."<sup>3633</sup>

When one thief steals a stolen purse from another thief, then offers to split the purse, what option does either thief have but to keep silent and spend the money? Mileva knew that she had written the work for which Albert took credit. Albert knew that Mileva had copied the ideas, examples, explanations, equations and phrases, from Lange, Voigt, Hertz, FitzGerald, Larmor, Cohn, Langevin, Lorentz and Poincaré. In such a scenario, what else could Mileva have done? What else would have been in her self-interest, other than to keep silent and collect the Nobel Prize

winnings?

Mileva had hoped that Albert would rise to fame and she would lead a charmed life with her famous husband,

“We have recently completed a very important work, which will make my husband world-famous.”

“Vor kurzem haben wir ein sehr bedeutendes Werk vollendet, das meinen Mann weltberühmt machen wird.”<sup>3634</sup>

Serbian women had little chance at fame in those times, other than as ornaments attached to their husbands’ arms. Nikola Tesla, a Serbian genius born in Croatia, was unfairly treated in the West. What chance did Mileva stand?

Albert was cruel to Mileva. He may have destroyed her self-confidence. Albert once demanded in writing that Mileva obey his cruel and degrading orders in a letter which can only be described as shocking and revolting.<sup>3635</sup> If Mileva had hoped that Albert would someday acknowledge her, she was mistaken. Albert, a misogynist, degraded her in a letter to Michele Besso,

“We men are deplorable, dependent creatures. But compared with these women, every one of us is king, for he stands more or less on his own two feet, not constantly waiting for something outside of himself to cling to. They, however, always wait for someone to come along who will use them as he sees fit. If this does not happen, they simply fall to pieces.”<sup>3636</sup>

It is probable that Marić believed that her only hope for fame and fortune was to build up Albert and use him for her ends. Albert did not have strong morals. Albert was certainly fit for the rôle as cohort to plagiarism.

There are allegations that Albert Einstein may have beaten his first wife Mileva Marić and their children.<sup>3637</sup> Einstein’s son, Hans Albert Einstein, stated,

“Oh, he beat me up, just like anyone else would do.”<sup>3638</sup>

Albert Einstein cruelly abandoned Mileva Marić during her pregnancy with their first child Lieserl. The fate of this poor child, who vanished from the record early in life, is to this day a mystery.<sup>3639</sup>

Brutality was nothing new to Albert Einstein. As a child, Albert Einstein physically abused his sister Maja, and physically attacked his violin instructor. Maja Winteler-Einstein wrote in her biography of her brother Albert,

“The usually calm small boy had inherited from grandfather Koch a tendency toward violent temper tantrums. At such moments his face would turn completely yellow, the tip of his nose snow-white, and he was no longer in control of himself. On one such occasion he grabbed a chair and struck at his teacher, who was so frightened that she ran away terrified and was never seen

again. Another time he threw a large bowling ball at his little sister's head; a third time he used a child's hoe to knock a hole in her head."<sup>3640</sup>

There are many accounts which portray Einstein as incontinent. According to some accounts, Einstein was perhaps even a foul-mouthed<sup>3641</sup> syphilitic, who contracted the disease from his many encounters with prostitutes<sup>3642</sup>—he was by his own admission on 23 December 1918 an incestuous adulterer. Einstein stated,

"It is correct that I committed adultery. I have been living together with my cousin, Elsa Einstein, divorced Löwenthal, for about 4 1/2 years and have been continuing these intimate relations since then."<sup>3643</sup>

Albert Einstein was a blood relative with his second wife Elsa Einstein through both his mother and his father.<sup>3644</sup> Einstein felt that he had the option to choose between a marriage with his cousin Elsa, or one of her young daughters, whom he also aggressively pursued, much to her disgust.<sup>3645</sup> Dismayed, Ilse Einstein wrote to Georg Nicolai about Albert Einstein's sexual advances toward her,

"I have never wished nor felt the least desire to be close to [Albert Einstein] physically. This is otherwise in his case—recently at least.—He himself even admitted to me once how difficult it is for him to keep himself in check."<sup>3646</sup>

Dennis Overbye tells the story of Ilse Einstein's letter to Georg Nicolai of 22 May 1918 in which she complains of Albert Einstein's sexual advances towards her. Albert Einstein was conducting an incestuous and adulterous relationship with her mother Elsa Einstein at the time. Overbye states that Wolf Zuelzer preserved the letter,

"despite pressure from Margot Einstein, Helen Dukas, and lawyers representing the Einstein estate to surrender it or destroy it. The tale, an example of the difficulties scholars have faced in telling the Einstein story, is preserved in Zuelzer's correspondence in the American Heritage archive at the University of Wyoming."<sup>3647</sup>

Marrying his cousin Else Einstein enabled Albert Einstein to have her and her daughters. Albert Einstein referred to his wife and cousin Elsa Einstein and her two daughters as his "small harem". Einstein wrote to Max Born, in an undated letter thought to have been written sometime between 24 June 1918 and 2 August 1918,

"We are well, and the small harem eat well and are thriving."<sup>3648</sup>

Philipp Frank wrote,

"Einstein's wife Elsa died in 1936. [\*\*\*] Of Einstein's two stepdaughters, one died after leaving Germany; the other, Margot, a talented sculptress, was



divorced from her husband and now lives mostly with Einstein in Princeton.”<sup>3649</sup>

Even this might not have been enough for Albert Einstein. There are reasons to believe he had an affair with Elsa Einstein’s sister, Paula, another of Albert Einstein’s cousins.<sup>3650</sup> Einstein’s son, Hans Albert Einstein, believed that his father was also having an affair with his secretary Helen Dukas.<sup>3651</sup>

The facts present Einstein as an odd being who was sadistically cruel to his family. Should his perversions be considered the benefit of his genius, and a sacrifice he made for the good of mankind? Was their suppression from public view an indication that the popular image of the “great man” is a well-nurtured myth? Might there be other myths about the man, or truths which have been covered up?

#### **18.4 Conclusion**

Did Albert Einstein have no choice but to copy what others had published before him? Was he of sub-average intelligence?<sup>3652</sup> Given that this issue is controversial, I’ll give Albert the benefit of the doubt and regard the 1905 paper on the principle of relativity as a coauthored work. However, that which was new in the paper, the “relativistic” equations for aberration and the Doppler-Fizeau Effect, were likely derived by Mileva Marić, the superior mathematician of the two.<sup>3653</sup> If the Einsteins had properly referenced their work, and claimed priority only for that which was new in the paper, one wonders if Mileva, who had far more character than Albert—she cared for their children while he abandoned them—would have insisted that her rôle be acknowledged.

**3520.** G. G. Stokes, “On the Aberration of Light”, *Philosophical Magazine*, Series 3, Volume 27, (1845), pp. 9-15; reprinted in *Mathematical and Physical Papers*, In Five Volumes, Volume 1, Cambridge University Press, (1880-1905), p. 134; **and** “On Fresnel’s Theory of the Aberration of Light”, *Philosophical Magazine*, Series 3, Volume 28, (1846), pp. 76-81. **See also:** F. Fresnel, *Annales de Chimie et de Physique*, Series 2, Volume 9, (1818), pp. 57-66.

**3521.** A. A. Michelson, “The relative motion of the Earth and the Luminiferous ether”, *American Journal of Science*, Volume 22, (1881), pp. 128-129. **See also:** G. F. Barker, *An Account of Progress in Physics and Chemistry in the Year 1881*, from the Smithsonian Report for 1881, Government Printing Office, Washington, (1883), pp. 29-30. **See also:** A. A. Michelson and E. W. Morley, “On the Relative Motion of the Earth and the Luminiferous Ether”, *American Journal of Science*, Volume 34, (1887), p. 333. **See also:** A. A. Michelson, *Studies in Optics*, University of Chicago Press, Chicago, (1928), pp. 156-166. Michelson also asserted that there could be no theory of electrodynamics, sans an æther. **See:** S. Goldberg, *Understanding Relativity*, Birkhäuser, Boston, Basel, Stuttgart, (1984), p. 259.

**3522.** *Physics Today*, Volume 35, Number 8, (August, 1982), p. 46.

**3523.** A. Einstein, translated by A. Beck, “On the Development of our Views Concerning the Nature and Constitution of Radiation”, *The Collected Papers of Albert Einstein*, Volume 2, Document 60, Princeton University Press, (1989), pp. 379-394, at 383.

**3524.** R. S. Shankland, “The Michelson-Morley Experiment”, *Scientific American*, Volume 211, Number 5, (1964), pp. 107-114, at 114.

**3525.** R. S. Shankland, “Conversations with Albert Einstein”, *American Journal of Physics*, Volume 31, Number 1, (January, 1963), pp. 47-57; **and** “Conversations with Albert Einstein”, *American Journal of Physics*, Volume 41, Number 1, (1973), pp. 895-901; **and** “Comment on ‘Conversations with Albert Einstein. II’”, *American Journal of Physics*, Volume 43, Number 5, (May, 1975), p. 464; **and** “Michelson-Morley Experiment”, *American Journal of Physics*, Volume 32, Number 1, (January, 1964), pp. 16-35; **and** “The Michelson-Morley Experiment”, *Scientific American*, Volume 211, Number 5, (1964), pp. 107-114.

**3526.** A. Henderson, A. W. Hobbs, J. W. Lasley, Jr., *The Theory of Relativity*, University of North Carolina Press, Oxford University Press, (1924), pp. 5-9. H. Reichenbach, *The Philosophy of Space and Time*, Dover, USA, (1958), pp. 195-202.

**3527.** R. S. Shankland, “Conversations with Albert Einstein”, *American Journal of Physics*, Volume 31, Number 1, (January, 1963), pp. 47-57, at 54.

**3528.** The first quote is from the first edition, E. F. Taylor and J. A. Wheeler, *Spacetime Physics*, W. H. Freeman and Company, San Francisco, London, (1966), p. 14; **and** those which follow after are from E. F. Taylor and J. A. Wheeler, *Spacetime Physics*, Second Edition, W. H. Freeman and Company, New York, (1992), p. 86.

**3529.** M. Zackheim, *Einstein’s Daughter, The Search for Lieserl*, Riverhead Books, New York, (1999). This work provides numerous insights into Mileva’s and Albert’s lives. **See also:** G. J. Whitrow, *Einstein, the Man and His Achievement*, Dover, New York, (1973), pp. 21-22.

**3530.** D. Trbuhović-Gjurić, *Im Schatten Albert Einsteins, Das tragische Leben der Mileva Einstein-Marić*, Paul Haupt, Bern, (1983). **See also:** D. Krstic, Matica Srpska (Novi Sad), Collected Papers. *Natural Sciences*, Volume 40, (1971), p. 190, note 2; **and** “The Wishes of Dr. Einstein”, *Dnevnik* (Novi Sad), Volume 28, Number 9963, (1974), p. 9; **and** “The Education of Mileva Marić-Einstein, the First Woman Theoretical Physicist, at the Royal Classical High School in Zagreb at the End of the 19<sup>th</sup> Century”, *Collected Papers on History of Education* (Zagreb), Volume 9, (1975), p. 111; **and** “The First Woman

Theoretical Physicist”, *Dnevnik* (Novi Sad), Volume 30, VIII/21, (1976); **and** *Mileva and Albert Einstein: Love and Joint Scientific Work*, Diodakta, (1976); and D. Krstic, “Mileva Einstein-Marić”, in E. R. Einstein, *Hans Albert Einstein: Reminiscences of His Life and Our Life Together*, Appendix A, Iowa Institute of Hydraulic Research, University of Iowa, Iowa City, Iowa, (1991), pp. 85-99, 111-112. **See also:** T. Pappas, *Mathematical Scandals*, Wide World Publishing/Tetra, San Carlos, California, (1997), pp. 121-129. **See also:** M. Maurer, “Weil nicht sein kann, was nicht sein darf. . . ‘DIE ELTERN’ ODER ‘DER VATER’ DER RELATIVITÄTSTHEORIE? Zum Streit über den Anteil von Mileva Marić an der Entstehung der Relativitätstheorie”, *PCnews*, Number 48 (Nummer 48), Volume 11 (Jahrgang 11), Part 3 (Heft 3), Vienna, (June, 1996), pp. 20-27; reprinted from *Dokumentation des 18. Bundesweiten Kongresses von Frauen in Naturwissenschaft und Technik vom 28.-31.*, Birgit Kanngießer, Bremen, (May, 1992), not dated, pp. 276-295; an earlier version appeared, co-authored by P. Seibert, *Wechselwirkung*, Volume 14, Number 54, Aachen, (April, 1992), pp. 50-52 (Part 1); Volume 14, Number 55, (June, 1992), pp. 51-53 (Part 2). URL:

<http://rli.at/Seiten/kooperat/maric1.htm>

**See also:** E. H. Walker, “Did Einstein Espouse his Spouses Ideas?”, *Physics Today*, Volume 42, Number 2, (February, 1989), pp. 9, 11; **and** “Mileva Marić’s Relativistic Role”, *Physics Today*, Volume 44, Number 2, (February, 1991), pp. 122-124; **and** “Ms. Einstein”, *AAAS [American Association for the Advancement of Science] Annual Meeting Abstracts for 1990*, (February 15-20, 1990), p. 141; **and** “Ms. Einstein”, *The Baltimore Sun*, (30 March 1990), p. 11A. **See also:** S. Troemel-Ploetz, “Mileva Einstein-Marić: The Woman Who did Einstein’s Mathematics”, *Women’s Studies International Forum*, Volume 13, Number 5, (1990), pp. 415-432; *Index on Censorship*, Volume 19, Number 9, (October, 1990), pp. 33-36. **See also:** A. Pais, *Subtle is the Lord*, Oxford University Press, New York, (1982), p. 47. **See also:** W. Sullivan, “Einstein Letters Tell of Anguished Love Affair”, *The New York Times*, (3 May 1987), pp. 1, 38. **See also:** “Did Einstein’s Wife Contribute to His Theories?”, *The New York Times*, (27 March 1990), Section C, p. 5. **See also:** S. L. Garfinkel, “First Wife’s Role in Einstein’s Work Debated”, *The Christian Science Monitor*, (27 February 1990), p. 13. **See also:** D. Overbye, “Einstein in Love”, *Time*, Volume 135, Number 18, (30 April 1990), p. 108; **and** *Einstein in Love: A Scientific Romance*, Viking, New York, (2000). **See also:** “Was the First Mrs Einstein a Genius, too?”, *New Scientist*, Number 1706, (3 March 1990), p. 25. **See also:** A. Gabor, *Einstein’s Wife: Work and Marriage in the Lives of Five Great Twentieth-Century Women*, Viking, New York, (1995). **See also:** J. Haag, “Einstein-Marić, Mileva”, *Women in World History: A Biographical Encyclopedia*, Volume 5, Yorkin Publications, (2000), pp. 77-81. **See also:** M. Zackheim, *Einstein’s Daughter: The Search for Lieserl*, Riverhead Books, Penguin Putnam, New York, (1999). **See also:** Television Documentary, *Einstein’s Wife: The Life of Mileva Maric-Einstein*, URL:

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**For counter-argument, see:** J. Stachel, “Albert Einstein and Mileva Marić: A Collaboration that Failed to Develop”, found in *Creative Couples in the Sciences*, Rutgers University Press, New Brunswick, New Jersey, (1996), pp. 207-219; **and** Stachel’s reply to Walker, *Physics Today*, Volume 42, Number 2, (February, 1989), pp. 11, 13. **See also:** A. Fölsing, “Keine ‘Mutter der Relativitätstheorie’”, *Die Zeit*, Number 47, (16 November 1990), p. 94. **See also:** A. Pais, *Einstein Lived Here*, Oxford University Press, New York,

(1994), pp. 14-16.

**For the Einstein's correspondence**, see: J. Stachel, Editor, *The Collected Papers of Albert Einstein*, Volume 1, Princeton University Press, (1987); English translations by A. Beck, *The Collected Papers of Albert Einstein*, Volume 1, Princeton University Press, (1987). **See also:** J. Renn and R. Schulmann, Editors, *Albert Einstein/Mileva Maric: The Love Letters*, Princeton University Press, (1992). **See also:** M. Popović, *In Albert's Shadow: The Life and Letters of Mileva Maric, Einstein's First Wife*, The Johns Hopkins University Press, (2003).

**3531.** T. Pappas, *Mathematical Scandals*, Wide World Publishing/Tetra, San Carlos, California, (1997), pp. 121-129. **See also:** D. Truhović-Gjurić, *Im Schatten Albert Einsteins, Das tragische Leben der Mileva Einstein-Marić*, 5<sup>th</sup> Ed., Verlag Paul Haupt, Bern-Stuttgart-Wien, (1993), p. 97. **See also:** A. Pais, *Subtle is the Lord*, Oxford University Press, New York, (1982), p. 47; **and** *Einstein Lived Here*, Oxford University Press, New York, (1994), pp. 14-16. **See also:** J. Stachel, Ed., *The Collected Papers of Albert Einstein*, Volume 1, Princeton University Press, (1987), pp. 282 and 330, letters from Albert to Mileva, "How happy and proud I will be, when we two together have victoriously led our work on relative motion to an end!" "Wie glücklich und stolz werde ich sein, wenn wir beide zusammen unsere Arbeit über die Relativbewegung siegreich zu Ende geführt haben!" and "As my dear wife, we will want to engage in a quite diligent scientific collaboration, so that we don't become old Philistines, isn't it so?" "Bis Du mein liebe Weiberl bist, wollen wir recht eifrig zusammen wissenschaftlich arbeiten, daß wir keine alten Philistersleut werden, gellst."

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