

## EINSTEIN'S GOD

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Bulletin quotations:

Religious thought is “an attempt to find an out where there is no door.” --A. Einstein,  
*Encyclopedia Americana*

“Einstein had no belief in the Church, but did not think that religious faith was a sign of stupidity, nor unbelief a sign of intelligence.” --Max Born, Physicist and Friend

“...there are yet people who say there is no God. But what really makes me angry is that they quote me for support of such views.” --David Ben-Gurion quoting A. Einstein

### Main Talk:

Albert Einstein was the most famous of the 20<sup>th</sup> century scientists. His fame spilled over into many of the great ponderables including God. A Texas fundamentalist Christian friend saw my book, “Einstein, Life and Times” by Ronald W. Clark. He just had to share his Einstein story. It was the one about the schoolboy Einstein putting down his atheist teacher regarding the existence of God. You may have heard a version. That Einstein-teacher debate never happened. But the existence of the story exemplifies how Einstein’s name is used and abused, sometimes by both sides of the same issue, to lend credibility.

Einstein spent his entire life pondering a few big questions. Be comfortable that neither his Special Theory nor his Theory of Relativity nor his debates with the Quantum Mechanics folks will be a part of the presentation this morning. There might be a reference or two in that direction merely to reinforce an adjacent spiritual point.

When delving into the God of another, it seems prudent to stick to what he said and wrote. So much of what I offer this morning will be quoting Einstein himself. I’ll spare you the words,

quote and unquote, to avoid distraction. If in doubt via the context, please assume the words are Einstein's. Each of us might consider what words we would use to describe our own perspective on the word God.

A background reminder: Albert was born German in Ulm of non-religious Jewish parents. His father, an unsuccessful small business entrepreneur, moved his family from failure to failure from Ulm to Bavaria to Switzerland to Northern Italy. The young Einstein's German Catholic Bavarian school greatly influence his future outlook on both the German people and religion.

Einstein said by twelve he had attained "a deep religiosity" the result of what he called "the traditional education-machine." Always sensitive to beauty, abnormally sensitive to music, Einstein was deeply impressed by the splendid trappings of Bavarian Catholicism. He continues, "Through the reading of popular scientific books I soon...concluded that much of the stories in the Bible could not be true. The consequence was a positively fanatic orgy of free-thinking coupled with the impression that youth is intentionally being deceived by the state through lies; it was a crushing impression. Suspicion against every kind of authority grew out of this experience, a skeptical attitude towards the convictions which were alive in any specific social environment—an attitude which has never again left me..."

His desperate need to find order in a chaotic world may possibly be rooted in his non-religious Jewish background. Abba Eban, Israeli ambassador to the U.S. at the time of Einstein's death, commented, "the Hebrew intellect has been obsessed for centuries by the concept of order and harmony in the universal design. The search for laws hitherto unknown which govern cosmic forces; the doctrine of a relative harmony in nature; the idea of a calculable relationship

between matter and energy.” The long line of Jewish physicists in the last two centuries gives support to Eban’s words. The young Einstein picked up science where religion appeared to leave off. Later he was to see both as necessary if one were to see reality in the round. Brooding on the “lies” he had been told in the Luitpold school, Einstein decided on the work to which he would be willing to devote everything and sacrifice anything with a steely determination which separated him from other men. “I’m not much with people and I’m not a family man. I want my peace (to think). I want to know how God created this world...I want to know His thoughts, the rest are details.”

Why Physics? He writes “Living matter and clarity are quite opposites—they run away from one another.” The same feeling, that “biological procedures cannot be expressed in mathematical formulas,” gave him a lifelong skepticism of medicine and it tended to concentrate all his interests on non-biological subjects. As a sidebar, speculate on what might have happened to biology in the 20th century if Einstein had decided to run his genius towards the animate rather than in the inanimate world.

Einstein’s God appears to be not the word “God” of most other people. When he wrote of religion, as he often did, he tended to adopt the belief of Alice’s Red Queen that “words mean what you want them to mean.” And clothe with different names what to ordinary people, including most Jews, looked like a variant of simple agnosticism. Replying in 1929 to New York’s Rabbi Goldstein, he said he believed “in Spinoza’s God who reveals himself in the harmony of all that exists, not in a God who concerns himself with the fate and actions of men.” David Ben-Gurion’s reported Einstein’s response to him as “even he, with his great formula

about energy and mass, agreed that there must be something behind the energy.” But much of Einstein’s writing gives the impression of a belief in a God even more intangible and impersonal than some sort of a celestial machine minder running the universe with undisputable authority and expert touch. Instead, Einstein’s God seems to be the physical world itself that he perceived as a marvelous structure operating at the atomic level as a beautifully fine watch, and at the stellar level with the majesty of a cyclotron. Maybe this was belief enough for him. It grew early and rooted deep. Only later was it dignified by the title cosmic religion, adding respectability to the views of a man who did not believe in life after death and who felt that if virtue paid off, this was the result of cause and effect rather than celestial reward. Einstein’s God thus stood for an orderly system which could be discovered by those who had the courage, the imagination, and the persistence to go searching for them. And he began that task in his early teens. For the rest of his life everything else was to seem almost trivial by comparison. And trivial applied to all things mundane ranging from the clothes on his back, food in his belly, to interpersonal relationships with family and non-intellectual contacts. “You are quite right about my bad memory for personal things...It’s really quite astounding. Something for psychoanalysts—if there really are such people.” He did have a well-developed sense of humor.

Fog surrounds his departure from school prior to receiving his diploma. Possibly sickness, possibly expulsion, as recorded states “your presence in the class is disruptive and affects the other students.” His reputation in later years as a peace-loving, kindly, and gentle eccentric contrasted with the precocious, almost insolent youth of early manhood. Einstein was the boy

who knew not merely which monkey wrench to throw in the works but also how best to throw it. His years there contributed greatly to who he was—they had made him detest German discipline yet taught him the virtues of self-discipline, of concentration, of dedication to an ideal, of an attitude which can be described either as firm or as relentless, according to taste.

But what of his Jewish background? As far as the Jewish faith is concerned, the boy had little to renounce. While Einstein, the Zionist speaker of adult life, had an intense feeling for Jewish culture, a dedication to preservation of the Jewish people, and a deep respect for the Jewish intellectual tradition, his feelings for the faith itself rarely went beyond kindly tolerance and the belief that it did no more harm than other revealed religions. “At the time I should certainly not have understood how one could have got out of Jewishness.”

An Einstein letter from 1921 stressed denomination was unimportant, although for a Jew to embrace another faith was a symbolic action, indicating that he wished to cut himself off from his own people. “I myself belong to no denomination and consider myself a faithful Jew,” he went on. “In how far we Jews should consider ourselves as a race or a nation respectively, in how far we form a social community by tradition only, on this subject I have not arrived at a decisive judgment. It suffices that we form a social body of people which stands out more or less distinctly from the rest of humanity, and the reality of which is not doubted by anyone.”

In later life, an Einstein friend wrote, “Einstein told me that Hermann Struck, the etcher, had tried to interest him in the Bible and the Jewish religion, but he had refused to be drawn in. “I

don't really know enough about my religious feelings," he said..."I have always known exactly what I should do, and I feel satisfied with that."

German nationality was different. A 15-year-old renouncing his birth country appears slightly bizarre. He then completed his degree in Switzerland where the documents indicate he was stateless but the "son of German parents." This hatred of Germany was an early indicator of an attitude that had a trace of paranoia. He aspired to and eventually acquired Swiss citizenship.

While in Switzerland, he gained a passion for sailing that never deserted him thereafter. His friend Bertrand Russell wrote, "Personal matters never occupied more than odd nooks and crannies in his thoughts." As Einstein saw it, other men allowed themselves to become implicated in the human predicament, dealing with the trivia of life or swept off course by the normal passions. He avoided such as energy-wasting complications. He felt an intuitive sympathy with human beings in the mass; but when it came to individuals—and he included himself—he found little time or sympathy or understanding to spare. Einstein decided to answer a call quite compelling, enjoyed the satisfaction from his work as great as most enjoy anything else.

While working at the patent office in Zurich and looking for an opportunity to join an institute deeply engrossed in theoretical physics, Einstein was well known as an "unbeliever" yet had never officially renounced his faith. In a letter by the wife of a fellow scientist and close friend regarding an Einstein opportunity in Prague, she writes "they did not want 'a foreigner.'" However [my husband] maintains that the trouble is not that Einstein is a "foreigner" but that he is an unbeliever. Now Einstein is as unpractical as a child in cases like this, and [my husband]

finally got it out of him...that on the application form he put down that he was an unbeliever but did not say that he had not left the church.” The author’s husband was Friedrich Adler, who, in 1916, shot the Prime Minister of Austria point blank and was condemned to death for murder. His sentence was commuted to 18 months, the shortest time ever served for assassinating a prime minister, possibly related to Adler’s critical study of relativity.

With fame came exposure to all sorts of individuals trying to gain Einstein’s attention. His son-in-law documents this distraction with “...there comes the fools and the prophets, who sprout, like mushrooms...This one writes that he has finally discovered the essence of sleep. That one writes that he has found the only correct way to lower the price of coal. Another one has invented new senses, since the old five senses are no longer sufficient for man’s use. Some rolled various aspects together into one packet like the author of “Spiritism: The Hidden Secret in Einstein’s Theory of Relativity” for whom Hebrew words, the “uranium cubic diatonal” (whatever that may be), and mystic numbers contributed to the secret.” Spiritism or not, Einstein was rarely swayed.

Outside of physics, Pacifism and Zionism did capture Einstein’s attention. He lent his famous name to both as well as his time to deliver lectures as fund raisers for each. It is of value here to spend a little time with Einstein in these two areas as both relate to his self-image, his internal conflicts, and his spiritual values, which most include in conjunction with their personal God.

Einstein returned to his hated Germany in 1914, just months before Germany invaded Belgium. Lured by the opportunity to work with so many leading physicists of the day and financed by various German public and private sources, he was supported by the very people he was condemning. Professor Jens of the Tübingen University states that Einstein “knew that the sumptuous bed in which he lay swarmed with bugs.” He exhibited a surprising ability to prevent his left hand from knowing what his right hand was doing. His uncompromising pacifism of his earlier years looked askance upon his colleagues of the German scientific establishment who lent their talents to German armament with hardly a murmur of dissent. Only Einstein refused to take part. A Zurich friend reported that, “Einstein divides (the university intellectuals) into two very clear classes, the mathematicians and the pure sciences who are tolerant; and the historians and art faculties which stir up the nationalist passions.” He saw in them what he called the typical German characteristic of marching to the band. Einstein’s counter, that he called the “Manifesto for Europeans” promoting abandonment of nationalism for internationalism, garnered only four signatures. Its words have impact even today. “Technology has shrunk the world...today the nations of the great European peninsula seem to jostle one another much as once did the (crowded) city-states... Travel is so widespread, international supply and demand so interwoven, that Europe...the whole world—is even now a single unit.” 1914! In 1915, “men seek some idiotic fiction in the name of which they can face one another. Once it was religion. Now it is the state.” Einstein once declared that “a human being who considers spiritual values as supreme must be a pacifist.” Followed by his statement that, in time of war, he would “unconditionally refuse war service, direct or indirect, and would try to persuade my friends to take the same stand, regardless of how the

cause of the war should be judged.” Not long afterwards he was persuading his friends to do just the opposite.

His pacifism reversed to militaristic encouragement of Britain, France, and the U.S. after he found it necessary to flee Hitler’s Germany for America in 1933. “A strange breed of pacifist, you will probably say of me!” when asked to address a 1938 world peace congress. “But I cannot shut my eyes to realities. It is no exaggeration to say that the British, and to some extent, the French pacifists are largely responsible for the desperate situation today because they prevented energetic measures from being taken at a time when it would have been relatively easy to adopt them.” Then, “that this deplorable retrogression in the life of nations can be reversed only by paying a heavy price in human life.” A few months later, he wrote Roosevelt advising research toward nuclear bombs then, writing again, to accelerate that effort when he felt resources devoted were inadequate. In his later years, he returned to a much compromised pacifist position and expressed regret for those letters.

On the Zionist side, he did retain an anti-nationalist outlook while supporting the concept of a safe haven for the Jewish people. His letters to Zionist leadership emphasized that negotiated accommodation, understanding with the Arabs and not maximum immigration should be the prime political objective. Force was wholly unacceptable on behalf of either party and could only have long-term negative consequences. He was quoted as saying “He would not remain associated with the Zionist movement unless it tried to make peace with the Arabs in deed as well as in word...The Jews should form committees with the Arab peasants and workers, and not try to negotiate only with the leaders.”

Returning to the more obviously spiritual, during a mid-life illness a friend asked if he feared death “No. I feel myself so much a part of all life that I am not in the least concerned with the beginning or the end of the concrete existence of any particular person in this unending stream.” Continuing, she asked, “Do you believe absolutely everything can be expressed scientifically?” “Yes,” Einstein replied, “It would be possible, but it would make no sense. It would be description without meaning—as if you described a Beethoven symphony as a variation of sound wave pressure.”

Einstein spoke often of God although frequently it was merely to make a point. Mathematical frustration resulted in his words, “I have broken little ground in gravitation theory and by so doing have run the risk of being placed in a madhouse.” Emphasized by, “Our Jehovah no longer needs to send down a rain of pitch and sulfur; he has turned modern and automatically devised this activity (for me).” Along similar lines, “Who knows, perhaps He is a little malicious.”

Toward the end of his life, after dinner with a friend, a box of candy was being passed around and Einstein took merely a deep sniff. “You see, that’s all my doctor allows me to do,” he said. “The devil has put a penalty on all things we enjoy in life. Either we suffer in our health, or we suffer in our soul, or we get fat.” The friend asked him why it was the devil and not God who had imposed the penalty. “What’s the difference?” he answered. Then as the true physicist / mathematician he explained, “One has a plus in front and the other a minus.”

One of Einstein's most famous God quotes, said many ways, is frequently taken out of context of Quantum Mechanics where answers are in probability rather than specifics. Einstein believed to his dying day that nature and physics were based upon discoverable absolutes. In a 1926 letter to Max Born, he writes, "Quantum mechanics is certainly imposing. But an inner voice tells me that it is not yet the real thing. The theory says a lot, but does not really bring us any closer to the secret of the Old One. I, at any rate, am convinced that He does not throw dice...God didn't play the game that way. Everything is determined...Human beings, vegetables, or cosmic dust." His simplified phrase for this skepticism targeted at Quantum Mechanics was that "God does not throw dice."

As with all famous persona, unverifiable little stories crop up for humor or to enforce some agenda. A girl graduate, failing to recognize him, voiced surprise the he should still be studying physics with the words: "I finished physics when I was 25!" Another is Einstein, out of time with his fellow musicians at an amateur recital, was chided, "Einstein, can't you count?" Like most Einstein stories including the God references, they circulate in a variety of versions. Einstein responds to an inconsistency with a previous paper of his, "Can I help it if the dear God will not take account of what I said in my last publication?" Another version of the same has Einstein exclaiming "Do you really propose that I should start an argument with the Lord because He has not made the world in accord with the opinions I have expressed?"

To some extent the differences between Einstein and more conventional believers are semantic, a point brought out in his "Religion and Science" article which occupied the entire front page of the New York Times Magazine in 1931. "Everything that men do or think," it

began, “concerns the satisfaction of needs they feel or the escape from pain.” Einstein went on to outline three states of religious development, starting with the religion of fear that moved primitive peoples, and which in due course became the moral religion whose driving force was social feelings. This in turn could become the “cosmic religious sense...which recognizes neither dogmas nor God made in man’s image. He then put the key to his ideas in two sentences. “I assert that the cosmic religious experience is the strongest and noblest driving force behind scientific research.” And, as a corollary, “the only deeply religious people of our largely materialistic (existence) are the earnest men of research.” The responses surrounded the obvious fact that the word “religion” had a different meaning for Einstein than for most people. Bishop Dr. Fulton Sheen stated that the Times had degraded itself by publishing the article in which Einstein described “the sheerest kind of stupidity and nonsense.” He asked where would anyone lay down his life for the Milky Way, and concluded: “There is only one fault with his cosmical religion: he put an extra letter in the word—the letter ‘s.’”

Einstein responded to New York’s Rabbi Goldstein’s question, “Do you believe in God?” with “I believe in Spinoza’s God who reveals himself in the orderly harmony of what exists, not in a God who concerns himself with fates and actions of human beings.” Years later Einstein expanded upon this with “I can understand your aversion to the use of the term ‘religion’ to describe an emotional and psychological attitude which shows itself most clearly in Spinoza. But I have not found a better expression than ‘religious’ for the trust in the rational nature of reality that is, at least to a certain extent, accessible to human reason.”

My reading of Einstein's words with my own background and biases is that he was merely hinting tentatively at the belief which he held in common with many scientists who distrusted revealed religions and did not see that a future life was an essential for ethical behavior in this one; the belief that much if not all of both science and religion concerned complementary but separate aspects of human affairs.

His faithful writing to close friends makes it possible to glean how he regarded religion toward the end of his life. "I have read...your timely remarks...that science in itself is by no means a moral leader and the something is needed that you call religion. I must confess, however, that in my opinion the main problem begins here. Without a remarkable change in the traditions concerning moral values, nothing can be achieved. The old religions are, in my opinion, no longer influential and there is no general formula which can bring about moral revival." And he continues to a friend in Paris, "I miss no occasion to try to make the people aware of the great possibilities offered by Gandhi's method, which gives strength to the minority of morally and intellectually dependent people."

**His life presents a series of unexpected contradictions. The Patent Office official had been hoisted to academic life. The hater of all things German had been tempted to Berlin. The man who wanted a quiet life had in 1919 become the most famous scientist in the world. The pacifist had been forced to support armed resistance, and the man who regarded all war as murder had helped push the buttons that killed 120,000 people at a time. Now there was to come a final twist. In 1952, Albert Einstein, the man who had always decried force, was**

**invited to become the president of Israel, the state which had successfully staked out its frontiers by force of arms and was defending them against all comers. His greatest concern was how to refuse without embarrassing Abba Eban, Israel's ambassador to the U.S., which he adroitly did.**

**As he dotted his "i's" and crossed his "t's" of his scientific beliefs during the last year of his life, so did he recapitulate his religious convictions. He stated, "If I were not a Jew I would be a Quaker." To another he said, "I cannot accept any concept of God based on the fear of life or the fear of death or blind faith. I cannot prove to you that there is no personal God, but if I were to speak to Him I would be a liar." As to what one could believe in, the answer was simple enough. "I believe in the brotherhood of man and the uniqueness of the individual. But if you ask me to prove what I believe, I can't...There comes a point where the mind takes a higher plane of knowledge, but can never prove how it got there. All great discoveries have involved such a leap."**

**Einstein's God seems to be this amazing universe and life we live within it. There is much there in the words of Einstein for me. Is there something there in the words of Einstein for you?**

**--30--**

Extra Clark Reference: On Pacifism--His transition away from pacifism began in late 1932 shortly before he left Berlin for the United States. In response to a disarmament proposal by the French, Einstein agreed with an international police force adding that it should be armed with "truly effective weapons." Nine months later, as a temporary resident of Belgium, he would renounce his earlier conviction that force was never justified and, in the words of his former colleagues, he lined himself up with those who would "save European civilization by means of fire bombs, poison gas, and bacteria"; announcing without a flicker, like the cool customer he was, that the change was not in himself but in the European situation, and that nonviolence was no longer enough. The essence of his argument during this period was that after pacifism had been tucked away for awhile in order to deal with an aggressive Germany, it could be pulled from the drawer and worn once again, a garment for fine days when all was set fair.

With the coming of The Bomb, in capital letters, a change came about within the scientific community as to whether scientists should meddle in areas of human affairs that ranged from religion through issues with political ramifications. When Max von Laue, who Einstein said was his closest German friend, told him in 1933 "that scientists should observe silence in political matters, i.e. human affairs of the broader sense" he was forced to reply that he did not share the view. From regarding scientists as a group almost aloof from the world, Einstein began to consider them first as having responsibilities and rights on a level with the rest of men, and finally as a group whose exceptional position demanded the

exercise of exceptional responsibilities. His evolution of that line of thinking culminated in his address at the Nobel anniversary dinner in New York in December, 1945. "We physicists are not politicians, nor has it ever been our wish to meddle in political affairs," he said. "However, we happen to know a few things that the politicians do not know, and we feel it our duty to speak up and remind those in responsible positions that there can be no escape into indifference; that there is no time left for petty bargaining and procrastination."