

## For this is your wisdom...

Baruch Sterman

When I was first starting out in college, I took an introductory course in physics taught by a young graduate student named Ed Schweber. At the end of the year, Ed took me for cup of coffee and told me that I ought to major in physics. He thought I would make a good physicist, provided that I drop the one limitation which would stand in my way – namely the fact that I was religious. I took just half of Ed's advice; I became a physicist, but without abandoning religion. Ed's words continued to echo in my ears, ringing out a challenge and a question: could one take both science and religion seriously?

For more than twenty years I have tried to do exactly that, and I am by no means alone. I have had the honor of meeting great scientists including engineers, professors, and Nobel laureates, and have found that there is not necessarily any correlation between the measure of scientific achievement and knowledge, and religious commitment and faith. This observation is borne out by a recent survey in the magazine *Nature*, which found that 40% of American scientists believe in God.

There is however, a broad gamut of possible attitudes that a religious scientist can adopt, ranging from stringent compartmentalization to harmonious integration. When scientific theories lead to conflict with religious dogma, some scientists may choose a disconnected approach, leaving their religious beliefs at the door when entering the lab. To paraphrase Ben Gurion, they pursue science as if there is no religion, and religion as if there is no science. Others may find this intellectually dishonest and will try to find ways of smoothing the friction between faith and theory, either by rejecting the problematic hypothesis on scientific grounds or by attempting to show that religious dogma can after all abide this particular scientific claim.

As far as Orthodox Judaism is concerned, what, if any, are the boundaries of legitimate interaction with science? When push comes to shove and scientific theory conflicts with Jewish doctrine, what is the Orthodox scientist to do? The answer, of course, depends on whom you ask. The Lubavitcher Rebbe, for example, was of the opinion that in any conflict between science and Judaism, one must surrender one's scientific belief in favor of the accepted Jewish position. This assertion was made with regards to a very well established scientific theory in conflict with a relatively minor halachic principle. Jewish law maintains that one is permitted to kill certain types of lice on the Sabbath because they are spontaneously generated. Although most halachic authorities reinterpret the sources in such a way that modern biologists can live with them, the Rebbe is adamant that "the words of the Torah are always authoritative." (as quoted in B'Ohr Hatorah, Vol. 6, 1988, (Hebrew) p. 33)

Modern Orthodox Judaism as a whole has taken a positive position regarding *Torah uMadda* in general, and has clearly determined where its allegiances lie. Yet Rav Aharon Lichtenstein, perhaps the foremost contemporary modern Orthodoxy thinker and spokesman for *Torah uMadda* writes:

But surely we do hold that if, indeed, at some point and at some level, faith and reason, *Torah uMadda*, collide, then it is *Torah haketuva veHamesura*, text and tradition, which prevails. This is, of course, frankly illiberal... [regarding the] series of postulates of liberalism, the foremost being that there is no authority, moral or intellectual, higher than one's rational perception.

Rav Lichtenstein, following the nineteenth century theologian Cardinal Newman, rejects that liberal position. Yet despite his "illiberalism," Rav Lichtenstein is nonetheless quite flexible about the possibility of minimizing the discord.

Confronted by evident contradiction, one would of course initially strive to ascertain whether it is apparent or real: to determine, on the one hand, whether indeed the methodology of *Madda* does inevitably lead to a given conclusion and, on the other, whether the received content of *Torah* can be interpreted or reinterpreted so as to avert a collision.

Rav Lichtenstein goes on to explain that this reinterpretation may take one of several forms, ranging from narrow focus on a particular term, to explaining certain texts as allegorical (as Maimonides often does), and even allowing for the contention that the Biblical text "intended to convey a moral and spiritual, but not necessarily historical and scientific, truth." ( *Torah uMadda: Congruence, Confluence and Conflict*, - published in a compendium of Rav Lichtenstein's articles by Yeshivat Har Etzion, p. 6.)

The notion that in the face of ultimately irreconcilable conflict one must abandon reason in favor of faith, however, is not universally accepted by traditional Jewish thinkers. Ibn Ezra, for example, champions the value of logic and reason on religious grounds. In the introduction to his medieval commentary on the Bible he writes:

For common sense is the foundation, and the Torah was not given to one who has no intelligence, and the mediator [lit. angel] between man and his God is the mind.

Gersonides, in his 14<sup>th</sup> century work *Wars of the Lord*, explicitly states that Torah and reason cannot be in opposition:

If reason causes to affirm doctrines that are incompatible with the literal sense of Scripture, we are not prohibited by the Torah to pronounce the truth on these matters, for reason is not incompatible with the true understanding of the Torah. (Page 98 in Feldman's translation)

This claim that our ability to think and draw logical conclusions from data was given to us by God forms the basis of Jewish law that expects the application of principles and deduction of rules by judges and scholars, and sees Torah study as a religious imperative. The religious person's starting point in his quest for scientific knowledge is not undiluted rationality nor is it a matter of following Thomas Huxley's advice to give up every preconceived notion and, "follow humbly wherever and to whatever abyss nature leads." The Orthodox Jew first and foremost, is committed to the halacha, and legal systems can operate within their own parameters, independent of scientific theories. Secondly, there is a strong predilection towards the word of God as accepted by tradition and, one must "follow humbly" and yield to that tradition unless absolutely convinced otherwise.

Practically, the broad elasticity for reinterpretation of the Jewish sources that Rav Lichtenstein mentions, would likely whittle away to virtually nil the chances of finding an indisputable conflict. On the other hand, conceptually Rav Lichtenstein's position and that of the Lubavitcher Rebbe have something fundamental in common. If an incontrovertible disagreement between scientific fact and Jewish dogma were to be encountered, both would agree that the religious individual is required to reject reason and rely on faith. What does that fundamental principle say about the nature of the relationship between Judaism and reason? Is it based on the idea that the regnant scientific position must necessarily be wrong and that one day our knowledge will improve to the point where the disagreement will go away? Is it based on the idea that human reason is inherently inadequate and that there are some things we will never be able to understand? Is God testing our faith in Him by deliberately leading our reason into a conflict with His word? I do not know the answers to these questions.

Despite the possibility of conflict between religion and science, Jewish tradition has not adopted a hostile or derogatory posture towards scientific inquiry; in fact, the opposite is true. The Talmud (Shabbat 85a) relates

Rabbi Shmuel bar Nachmani said in the name of Rav Yochanan: How do I know that it is a commandment to calculate the seasons and the constellations (i.e. to study astronomy)? Because it is written, "for this is your wisdom and understanding in the eyes of the nations." (Deut. 4:6) What knowledge and understanding is evident to the eyes of the nations? This implies calculating the seasons and constellations.

According to this view we are commanded to study science, as we are commanded to study the Torah. Ultimate harmony flows from the belief that truth is holistic, and all routes eventually lead to it. One who is confident that God's word is truth is free to pursue a scientific course, confident that ultimately their paths will converge. These essays are a result of the musings of someone who would like to believe in that harmony. My goal is to try to understand science and to try to understand Torah, without apologetics and without pretense, as both are dear to me. And yet I sometimes wonder what would happen in the event of irreconcilable conflict, just as I wonder whether that eventuality could even theoretically occur?