



Partners In Torah
San Diego-Los Angeles-Venutra

Take home Dvar Torah

Behaalotcha

תשפ"ד

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Hello, Welcome!

Partners In Torah is a community-wide, independent and inclusive adult education program focusing on understanding Jewish relevancy to our lives by studying text most interesting to each participant.

Through one-on-one discussion for 1 hour each week, friendships are forged between mentors and mentees.

Partners in Torah has proven to be effective at reclaiming the rich legacy of wisdom, inspiration, and guidance for many who have, until now, lacked access.

Thank you for joining us!

Please encourage friends to join you in participating so that we may grow together as a community.

This week's Torah reading begins with Hashem instructing Aharon, the High Priest, on how to light the Menorah as part of the daily Tabernacle service. When lighting the *Menorah*, Aharon had to position both the three wicks on the right and the three wicks on the left to face the center wick (as shown in the picture). Each day at sundown, he would light the *Menorah*, and the candles would burn throughout the night. Here is the actual commandment (Numbers 8:1,2):

(א) וַיְדַבֵּר יְדֹדָד אֶל מֹשֶׁה לֵאמֹר :
(ב) דַּבֵּר אֶל אַהֲרֹן וְאָמַרְתָּ אֵלָיו בְּהַעֲלֹתְךָ אֶת הַנֵּרוֹת אֶל מוּל פְּנֵי הַמְּנוֹרָה וְאִירוּ שִׁבְעַת הַנֵּרוֹת :



1) Hashem spoke to Moshe saying, 2) “Speak to Aharon and say to him: ‘When you kindle the lamps, toward the face of the Menorah shall **the seven** lamps cast their light.’”

There is an obvious question on this verse. Because the commandment relates to the three wicks on the right and on left of the *Menorah*, viz, its central arm, should it not have said, “shall **the six** lamps cast their light,” instead of *the seven*?

Rabbeinu Bachya (1255-1340) answers:

ועל דרך השכל המנורה בשבעה נרותיה תרמוז לתורה הנקראת אור שנאמר (משלי ו, כג) כי נר מצוה ותורה אור, והיא כוללת שבע חכמות ועל כן היו נרותיה שבעה

A logical approach would be that the Menorah and its seven candles hint to the Torah, which is called light, and the Torah includes the seven fields of wisdom. Therefore, there were seven branches.

Rabbi Yonasan Eibeshutz (1690-1764) in his work *Yaaros Dvash* elaborates on the concept presented by Rabbeinu Bachya.

ספר יערות דבש - חלק שני - דרוש ז

ונראה כי שבעה נרות הם שבעה חכמות, כי ידוע כי חכמה היא מכונה בשם נר, חכמת אדם תאיר פניו, ושבעה נרות הם חכמת חיזונים, ונר מערבי היא חכמת תורתינו הקדושה, שכינה במערב, וכל החכמות משתלשלות מתורתינו ומשם מקורם ושמה ישובו, כי כולם הם נערות המשרתות את המלכה, כמ"ש הרמב"ם [אגרות הרמב"ם פאר הדור סמ"א] שהם לרקחות ולטבחות, וכולם צריכים לתורתנו, כאשר הארכתי בזה וחברתי ספר מיוחד, ועל זה אדני הספר הטבעו, כי כל החכמות הם פרפראות וצורך לתורתנו, כאשר חכמת גימטריא שהיא חכמת המדידה ונכלל בה חכמת המספר ותשבורת ואלגעברא, צריך מאוד למדידת עגלה ערופה ומדידת ערי לויים ומקלט ותחומי ערים

It would appear that the seven candles refer to the seven branches of wisdom. It is known that wisdom is referred to as "a candle" as it says, "A man's wisdom lights up his face" (Ecclesiastes 8:1), and the Menorah's seven arms represent the seven external fields of wisdom. The western candle (the central arm of the Menorah is called the "ner maaravi," the western candle) represents the wisdom of the Holy Torah. All the external fields of wisdom are sourced in the Torah; they emanate from the Torah, and it is to the Torah that they return. They are all like maidens who serve the queen, as Maimonides says, "they are cooks and bakers." They all require our Torah, as I explained at length in a special book that I wrote on this very topic; all the external fields of wisdom are like condiments because they are necessary to explain and

properly execute the laws of the Torah. For example, geometry, the wisdom of measuring, which includes addition, multiplication, and algebra, were essential for measuring the distances from the surrounding cities to the corpse found on the road (עגלה ערופה), and for measuring the Levite cities, the cities of refuge and the maximum distance one is permitted to travel out of a city on Shabbat.

It was accepted as a simple fact that the great Rabbis of the Sanhedrin - the high court - and subsequently, the great Torah Scholars of every generation, knew all the branches of external wisdom as part of their Torah knowledge. They did not need to study those subjects independently; they were able to learn and master all the other areas of wisdom through their deep and comprehensive Torah knowledge.

Nachmanides writes in his preface to the Torah,

רמב"ן על בראשית פרק א פסוק א

אם כן כל הנאמר בנבואה ממעשה מרכבה ומעשה בראשית והמקובל בהם לחכמים תולדות עם ארבע הכתות שבתחוננים כח המחצבים וכח צמת האדמה ונפש התנועה והנפש המדברת, בכלם נאמר למשה רבינו בריאתם וכחותם ומהותם ומעשיהם ואפיסת הנפסדים מהם, והכל נכתב בתורה בפירוש או ברמז

Everything that was told to Moshe in prophesy about Hashem's Heavenly Chariot and the process of creation, information that was known to the Sages, the secrets of the four levels of creations- the inanimate, the plants that grow, the breathing animals who move around, and the soul of the human being - a speaking creature - all of them were taught to Moshe; their creation, their properties, their essence and capabilities, and what will bring about their demise, everything was written in the Torah either explicitly or secretly.

ושלמה המלך שנתן לו אלהים החכמה והמדע הכל מן התורה הי' לו וממנה למד עד סוף כל התולדות ואפי' כחות העשבים וסגולתם עד שכתב בהם שכתוב בה אפילו ספר רפואות וכענין שכתוב וידבר על העצים מן הארז אשר בלבנון ועד האזוב אשר ייוצא בקיר

And King Solomon, to whom Hashem gave great wisdom and knowledge, everything was from the Torah, from it (the Torah) he learned everything until he knew the properties of all the grasses and their medicinal benefits, and based on that knowledge he wrote the book of remedies, as it says, (Kings 1, 5:13) “And he wrote books about the trees of Lebanon and the hyssop that comes out of the wall.”

Our Sages teach us that Yosef built the great Egyptian Pyramids. Built with granite blocks weighing up to 80 tons each, it is a mystery how the massive blocks were moved and set into place. Apparently, Yosef was privy to laws of mechanics that we don't know today.

Similarly, it is a mystery how the stones were cut so evenly. In the Egyptian catacombs each stone is perfectly square and butts up perfectly against the next stone. What implement did they use to cut into the bedrock? There exists today no cutting tool large enough to cut stones as straight and perfect as those are cut.

When you take the tunnel tour of the Western wall in Jerusalem, you will come to stones that measure 40 meters long by a meter high and a meter thick. There doesn't exist a crane today that can lift a stone of that great size and massive weight. How was it placed into the wall? It is also perfectly rectangular. How did they cut it? Truly amazing.

They had knowledge then that we lack today. This knowledge came from the Torah, which was written by the Creator of the world and Who knows all the physical properties of everything that He created. He taught this information to His beloved children.

When Yosef interpreted the Pharoah's dream informing him of an impending seven-year famine, Pharoah and his court did not know how to preserve the bounty that would precede the famine. Yosef taught him the secret, to mix in a small amount of the dirt it grew in, and it will

preserve the wheat. Again, we see that Yosef had access to secret information that the other nations did not have. These secrets were handed down from Adam to Noah to Avraham to his children and grandchildren.

This is what the Sefer HaKuzari teaches us.

ספר הכוזרי - מאמר ראשון

אל הפילוסופים אין לבוא בטענות הואיל והם אנשים שלא קבלו חכמה או דת בירשה שהרי הם יונים ויון הוא מבני יפת יושבי הצפון ואלו החכמה הבאה בירשה מאדם הראשון זאת אומרת החכמה המחזקת על ידי הענין האלוהי עברה מאדם רק אל זרעו של שם שהוא בחיר בני נח ומאז לא פסקה ולעולם לא תפסק מבחירי אנוש אלה אשר ליונים לא הגיעה אליהם החכמה כי אם לאחר שנצחו את האמות אשר נלחמו בהם כי אז העתקה החכמה אליהם מן הפרסים אשר קבלוה מן הכשדים רק אז קמו הפילוסופים המפרסמים במלכות ההיא ועוד מיום עבר המלכות לרומא לא קם בין היונים אף פילוסוף מפרסם יחיד

You can't have any complaints to the philosophers (about their erroneous ideas) because these are not the people who inherited wisdom. The Greeks are the descendants of Yefet who lived in the north, whereas wisdom – I mean spiritual wisdom - came as an inheritance from Adam to the descendant of Shem, Noah's choice son, and from there it has never ceased to exist in the Jewish nation. Whereas wisdom only came to the Greeks after they conquered the other nations, and then, the wisdom came to them from the Persians who learned it from the Kasdians (who learned it from the Jews). It was only then that their philosophers became famous in that kingdom, but from the day that the Romans took them over there isn't a single Greek philosopher who has gained fame.

Today's world assumes that modern science was "invented" by the Greeks and then passed down to, or stolen by, the Romans. We see from the *Sefer HaKuzari* that the source of true wisdom lies only with

the Jewish people, as it was given to descendants of Shem. Whatever information the other nations knew they learned from us.

The *Yaaros Dvas* continues to list many other fields of wisdom and how they were necessary for the proper understanding and fulfillment of the Torah:

Astronomy – the system of the movement of the sun, the moon, and the planets.

This science was essential to calculate the Jewish calendar, which is based on a lunar cycle. The Sages had the exact length of a lunar month, as stated in the Talmud. The Midrash tells us that Hashem told Moshe, “Until now, the calculation of the new moon was known only by Me; but from now on, it is in your hands.”

ויאמר ה' אל משה ואל אהרן בארץ מצרים לאמר, מהו לאמר אמר מכאן ואילך הרי
הם מסורים לכם

Hashem gave Moshe the exact length of a solar month, and that exact number has been used since then to calculate the months and years in the Jewish calendar. A Jewish month begins and ends with the first and last light of the moon; hence, this is the length of a Jewish calendar month.

Rabban Gamliel tells us in Tractate Rosh Hashana (25a).

אמר להם רבן גמליאל כך מקובלני מבית אבי אבא אין חדושה של לבנה פחותה
מעשרים ותשעה יום ומחצה ושני שלישי שעה ושבעים ושלושה חלקים

This is the information that I received from my grandfather's house. A new moon will not appear earlier than 29 ½ days, 2/3 of an hour (720 of 1080), and 73 parts of an hour.

The Sages divide an hour into 1,080 parts. (Maimonides explains that this number was chosen because it is divisible by 1,2, 3, 4, 5, 6, 8, 9, and 10.) The 44 minutes represents 793 parts of an hour; thus, the

exact length of a lunar month is **29.530594** days, or, 29.5 days, 44 minutes and 2.8 seconds. Since a lunar month is roughly 29 and a half days, and a month must have whole days, the two half days add up to a whole day, and every other month has 30 days. To keep the calendar in sync, moreover, a specific Hebrew month may alternate between 29 and 30 days. A Google query “*how long is a lunar month?*” yielded this answer: *The Moon's synodic period (the length of a lunar month) is **29.53059** days – or 29 days, 12 hours, 44 minutes, and 2.8 seconds.* Does this number look familiar? This is a clear, irrefutable proof that the Torah is from Sinai.

Astrology – the influence of the celestial beings on the world.

The Sages teach us that Hashem sends His blessing into the world through the stars and celestial beings. This is what made people into idol worshippers. In days of old, when idol worship was prevalent (the Sages have since eliminated the inclination for the idol worship of ancient times such that we have no clue how difficult it was), people could actually see into the heavens and determine which star was the source of what blessing. They would then worship the star that bestowed the blessing that they desired, in an effort to bring to themselves the blessing emanating from that star. The idol was merely a gimmick to help the worshipper focus his thoughts on the star. The Sages needed to be knowledgeable in this science to deal with idol worshippers.

Medicine – How the human body works, and what influences it.

Numerous places in Jewish law deal with the court’s assessment of damages or if one died from the blow delivered by the defendant. Before a person received lashes, he had to be evaluated to determine how many lashes he could handle. As we learn through the Talmud, we

are astounded to see the depth and breadth of the Sages' knowledge of medical matters.

Biology – the science of living organisms.

The Sages needed to know the various species of plants to know which may be planted together and which constitute כלאים (*a proscribed mixture*). The Sages needed to know at what distances prohibited mixtures nourish from one another and become forbidden. The Talmud has the names of many different plants, and the Sages clearly know the nature of each one and what family of plants it belonged to.

These are just a few examples of the applications of these sciences, to Jewish law. The Vilna Gaon is known to have said,

כפי שיחסר לאדם ידיעת שערי החכמות, לעומת זה יחסר לו מאה ידות בחכמת התורה הקדושה, כי התורה והחכמה צמודים יחד.

To the degree that a person is missing knowledge in the external sciences, commensurate to that he will be missing a hundred-fold in the wisdom of the Torah, for the Torah and science are one unit.

After informing us that Aharon precisely followed these lighting instructions, the Torah reminds us that the Menorah had to be fashioned out of a single gold ingot instead of from various connected smaller pieces.

The next verse (Numbers 8:4) informs us:

(ד) וְזֶה מַעֲשֵׂה הַמִּנְרָה מִקְשָׁה זָהָב עַד יִרְכָּה עַד פְּרֻחָהּ מִקְשָׁה הוּא כַּמְרָאָה אֲשֶׁר הִרְאָה יְדוּד אֶת מֹשֶׁה כִּן עָשָׂה אֶת הַמִּנְרָה

4) This is the workmanship of the Menorah, hammered-out gold, from its base to its flowers it is hammered out; according to the vision that Hashem showed Moshe, so did he make the Menorah.

Since the instructions are only for lighting the Menorah why does the Torah stop to teach us here about its fabrication? This is to symbolize that the Torah and the sciences comprise one unit.

The *Yaaros Dvash* points out an essential and profound difference between the external wisdom learned by the Sages through the Torah and conventional science.

The scientific method starts by assuming nothing conclusive about the topic, and through *objective* experimentation or observation, determines the properties of the matter from which we base our conclusions. There are nonetheless many “iffy” components to this “method.” Is the experimenter truly objective? Are the experiments sufficient to prove the conclusions drawn from them? Are the conclusions in fact logical?

This joke illustrates this point.

A scientist wanted to figure out how far a frog would jump without all four of its legs. So, he placed the frog on the table and yelled “jump!” at the frog, which jumped eight inches. He took off one leg, and again yelled, “jump!” This time the frog jumped only six inches. He took off a second leg and yelled, “Jump!” This time the frog managed to jump only four inches. He took off a third leg, yelled “Jump!” and this time, the frog barely managed to jump two inches. He then removed the last leg, and when he yelled “Jump!” the frog just sat there. He yelled again at the frog, and, again, it didn’t move. The scientist concluded, “a frog with no legs becomes totally deaf.”

Of course, this is an exaggeration. But if the conclusion is off by even a little, it is incorrect and can have disastrous ramifications. So often we hear where science has had to reverse its position on a matter, or recall a drug or medicine, based on new or better evidence that has

come to light. The judge can only judge based on the information before him, and that may be deficient. We have all heard of cases where science has deemed something safe, only to find out later that it had dire side effects.

Conversely, the information passed on to the Sages through the Torah is not based on experimentation or observation (which is subject to error); it is pure and true, given straight from the Creator of all matter, and the Master of all scientific principles. There can be no error in this wisdom.

The Yaaros Dvash shows us this essential difference in a passage in the Talmud (Shabbat 22b).

מחוץ לפרוכת העדות יערוך וכי לאורה הוא צריך והלא כל ארבעים שנה שהלכו בני ישראל במדבר לא הלכו אלא לאורו אלא עדות היא לבאי עולם שהשכינה שורה בישראל מאי עדות אמר רב זו נר מערבי שנותן בה שמן כמדת חברותיה וממנה היה מדליק ובה היה מסיים

*He shall set the candles outside **the curtain of testimony**. (Why did they need to light the Menorah?) Did they need its light? Forty years the Jewish nation traveled in the wilderness with the light that Hashem provided them (The burning torch at night). Rather, the Menorah was testimony to the entire world that Hashem's Shechina dwells with us. How so? Rav explained: This refers to the center candle of the Menorah, which held the same amount of oil as the other candles. The High Priest would put into it the same amount of oil as the others, but miraculously, this candle would continue to burn throughout the day until sunset when it was once again time to kindle the other candles. The Kohen would light all the other candles from the center one, extinguish it, clean it out and replenish it, and then relight it.*

The idea that the Kohen Gadol started from the center lamp and concluded with the center lamp indicates that the center lamp, the

Torah, is the source of all the other lights - sciences, and, ultimately, they all return to the Torah to help us understand the Torah.

The oil placed into the candles represents the investigation and observation required for all the other wisdoms. They are prone to error, whereas the middle candle, which represents the Torah's wisdom, requires no investigations or observations. After its oil has been consumed, it continues to burn without any oil.

So why does this candle require oil to begin with? Answers the Yaaros Dvash, because only one who has mastered the rigors of logic and scholarship is worthy of becoming endowed with the wisdom through the Torah. Hashem gives wisdom to the wise. Only a person who has honed his mind to think critically and correctly is worthy of having Hashem's wisdom placed into his mind. In this way, the Sages knew far more about science than even the greatest scientists, who had to figure it out for themselves. Moreover, the Sages were erudite in all areas of science, whereas a scientist can be knowledgeable in only one or two areas.

There is a plethora of examples that show the Sages to be way ahead of the current scientific theory prevalent at their times. Here are but a few interesting ones.

When Hashem said (Genesis 1:9) "Let the waters under the heaven be gathered to one place and let the dry land appear. And it was so," the understanding is that there was only one continent. Indeed, the Zohar states this explicitly. "One single continent come out of the water, and from it seven continents were formed." It wasn't until 1915 that a German geologist Lothar Wegener published his book "*The Origin of Continents and Oceans*" that proved indeed that, the continents were at one point one and, through continental drift, separated into the seven continents on our maps.

The Talmud teaches us that there are three partners in the creation of every person: father, mother, and Hashem. The father and mother provide the physical receptacle, the child, and Hashem provides the soul. Science has confirmed the equal partnership of mother and father with the discovery of the 23 chromosomes in the male seed and the 23 chromosomes in the mother's egg, which combine upon conception to create a fetus with 46 chromosomes.

The great Aristotle understood conception like planting a seed in the ground. Just as the ground serves as the substrate in which a planted seed receives what it needs to grow into a tree, so, too, the mother provides the substrate in which the "planted" seed of the man grows into a child.

For the longest time, people thought that the surface of the earth was flat, whereas the Sages knew from the get-go that the earth was round.

When the greatest number of stars that could be seen was about 600, the Sages in the Talmud (Berachot 32b) told us that there are 1,064,340,000,000,000,000 stars in the universe. This number is comparable to what modern science with all its sophisticated instruments for looking into the sky, tell us today.

These are but a few of many examples of statements made by the Sages about phenomena that we observe today, that were ahead of their times by millennia.

Rabbi Yonasan Eibshutz, author of the Yaaros Dvash who I quoted above, was the chief Rabbi of the Lorraine Province in Germany. Once, the Duke of the province decided that it was time to banish all the Jews

from his province, and he issued a proclamation to that effect. Rabbi Yonasan set out to meet with the duke to try to get him to rescind his harsh decree.

After reading the decree word by word, the Duke asked Rabbi Yonasan, “Rabbi, how many words were there in the declaration that I just read?”

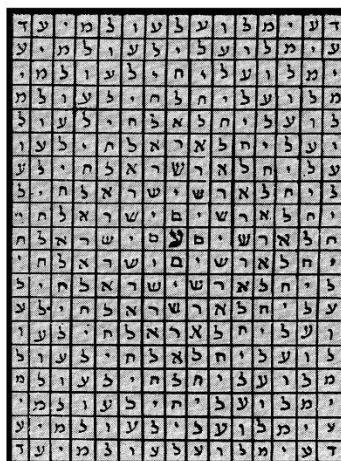
Without batting an eyelash, Rabbi Yonasan responded, “17 your highness, the same as the number of letters in the sentence, עם ישראל חי לעולמי עד – *the Jewish nation will live forever and ever.*”

A sly smile came over the duke’s face, and he asked the Rabbi, “How many Jews are there in my Province?”

The Rabbi responded, “45760, your Highness.”

“I’ll tell you what,” said the duke, “If you can write that verse on a piece of paper the size of my hand, 45760 times within an hour’s time, I will rescind my decree.”

Rabbi Yonasan smiled and returned to the Duke’s palace less than an hour later with the following small piece of paper.



Six months later, the duke pulled up in his carriage to Rabbi Yonasan’s house carrying the paper yelling “45760 times! You did it!”

Here is a clear example of how the Rabbis were gifted with knowledge of all the sciences. The formula he applied was Pascal's triangle.

This is what is meant when the Sages tell us in Pirkei Avot (5:22),

כב) בַּן בַּג בַּג אָמַר, הִפְדָּה בָּהּ וְהִפְדָּה בָּהּ, דְּכֻלָּא בָּהּ

Ben Bag Bag says, "Toil in it (the Torah) and toil in it some more, for everything is in it."

It is one of the perquisites that Hashem gifts to His Torah Scholars. How fortunate we are to have been chosen to receive Hashem's magnificent Torah, which is complete in every way. How fortunate we are to have the opportunity to learn Hashem's amazing Torah at Partners every week. Each one of us is one in a million. Let us embrace Hashem's Torah and learn as much of its incredible wisdom as possible.