LETTERS TO THE EDITOR

Supporting Israel

LIKE TODAY'S RAPIDLY shifting sands of the Middle East, the factors—laid out so beautifully in Heshey Zelcer's seminal article, "Who Will Support the State of Israel?"¹—that have been in place for the last several decades are rapidly eroding in front of our very eyes.

One may reasonably make the argument that these factors have almost entirely been washed away in a sea of moral ambiguity and cultural relativism, which are endemic to 21st-century American culture. It is quite difficult for many Americans to even be able to acknowledge that Iran is an evil regime, or that evil even exists in the world. It is equally difficult for them to even utter a value judgement.²

And most Jews, who have been so eager and willing to assimilate into the welcoming and nourishing soil of this great nation, have rapidly adopted many of these cultural mores. Many Jews, with the exception of most in the Orthodox and modern-Orthodox communities, have traded in the religion of Judaism for that of liberalism, long ago, and have willfully blinded themselves to the immediate threat that this nuclear deal with Iran may cause to their Israeli brothers and sisters.³

This past summer, a dramatic sea change occurred. Many of us who are active in the pro-Israel political community witnessed, with an increasing sense of horror, the way that the Obama administration handled the negotiations with Iran. We watched as the highest office in the land enthusiastically promoted a deal that, without a doubt, emboldened the Islamic Republic, the number one threat in the region to Israel, to the Middle East, and arguably to the world. We watched, again, as the President made an end run around the Constitution,4 and went

¹ *Hakirah*, Vol. 19 <http://www.ha kirah.org/Vol19Zelcer.pdf>.

² In fact, most Americans, when making a value judgement, qualify it by saying, "I don't want to make a value judgement but...."

³ I regret to add that for many, or perhaps most American Jews, the cultural distance has become so great, that they no longer consider the Jewish residents of Israel their "brothers and sisters." They choose to identify with a "community of choice" rather than that of

[&]quot;ascription." For example, a close relative of mine identifies herself not as a Jew, but as an intellectual, a writer, and an atheist.

⁴ The Constitution specifically calls for a vote of 2/3 of the Senate to ratify a treaty. This deal, which has huge international implications for generations to come, cannot be regarded as anything short of a treaty.

directly to the United Nations Security Council⁵ to have the deal enshrined in international law, and managed to make a show of getting the deal through Congress, while it was filibustered, and a vote was never even allowed to take place.

We watched and some of us, but far too few of us, acted.

This deal, the Joint Comprehensive Plan of Acton (JCPOA), undoubtedly makes the Middle East an infinitely more dangerous neighborhood in which to live.

Equally horrifying was the fact that the American Jewish community was blatantly (and quite loudly) divided over this issue, and that, although most polls showed that well over half of the American public were against the Iranian nuclear deal,⁶ many American Jews were actually in the forefront of the movement to back the JCPOA.

Many organizations, such as J Street and Americans for Peace Now, have allowed themselves to be used as a shill by the Obama administration, and were out in full force advocating for the deal. An astounding example of this was a series of ads placed in newspapers around the country, with the Hebrew words *Todah Rabah* (thank you

⁶ For example, the Pew Research Center, on September 8th, 2015, found that just 21 percent of the American public very much) to individual Members of Congress who voted to endorse this outrageously generous Iranian nuclear deal. In this ad, Members of Congress were specifically named, depending on which area of the country they were from, and singled out for gratitude. These were paid for by a new 501C4 organization, with the ironic name of "No Nukes for Iran Project."

It was so difficult to watch how many American Jewish Members of Congress loudly professed their sacrosanct love of Israel, while stating how gut-wrenchingly difficult and profoundly personal the decision on the Iranian deal was, while lending their signatures to this horrible deal—a deal that will have disastrous implications for the people of Israel, and throughout the world for generations to come.⁷

They must have known it had dire implications, or it would not have posed such a moral dilemma for them to lend their signatures to it. If, in fact, the deal was able to get rid of the Iranian nuclear threat, as its proponents had vociferously argued, it should not have posed any such moral dilemma.

The fact that the United States

⁵ Foreign Policy, July 15th 2015. "Obama Turns to U.N. to Outmaneuver Congress," John Hudson and Colum Lynch. .

approve of the agreement. <http://www.people-press.org/2015/ 09/08/support-for-iran-nuclear-agreement-falls/>. There seemed to be a marked decline of support, the more the American public found out about the details of the agreement.

⁷ Take for example, Rep. Debbie Wasserman Schultz's remarks on *Meet the Press.*

had led the way in international negotiations together with the other members of the P5 plus 1 countries (Russia, China, France, Britain and Germany), to forge a deal that will enable the Iranians to have a nuclear bomb if they just wait 10 to 15 years, clearly demonstrates that Israel can no longer rely on American support for Israel.

First of all, there should be absolutely no doubt that the JCPOA is inimical to Israel's long-term survival. What is 10 to 15 years in the life of a nation? It is but a blink of an eye. In a matter of months, upon "Implementation Day," Iranian assets that had been frozen will be released, giving the Iranian economy an immediate boost of more than 100 billion dollars. Beyond that, the international sanctions that have been in place since 1996, when the Iran Libya Sanctions Act (ILSA) was passed, will be lifted, giving the Iranian economy a huge boost.

The 3.4 billion dollars in foreign aid that Israel gets annually pales in comparison to these staggering numbers.⁸

The Tehran Imam Khomeini International Airport is bustling, and Iran is planning to expand the airport with a \$2.8b project.⁹ This is primarily due to the excessive greed of European companies, hungry to do business with the oil-rich Islamic Republic which has a population of 77.45 million consumers, eager to purchase modern products.

It should be noted that there is a clause within the JCPOA that states that any business contract that is signed when the sanctions are lifted can endure if sanctions are re-imposed, and that the mere act of reimposing sanctions gives Iran grounds to withdraw for the entire deal (so much for the Obama administration's much vaunted talk of "snap back sanctions").

Approximately \$30 billion of Iran's economy goes towards its military and paramilitary operations.¹⁰ We are talking about a staggering influx of money that will go to the Iranian Revolutionary Guard Corps, and to operations such as Hamas, Hezbollah, Islamic Jihad, the Yemenis Houtis, and to Bashir Assad's Syria. Iran has long been known as the Central bank of operations for all of these, and many other such terrorist groups.

On July 15th, the day after announcing that the P5 plus 1 and Iran have reached an agreement, President Obama held a White House Press Conference in which he was asked a question about

⁸ Most of which comes back into the American economy for defense spending ⁹ Airport-technology.com, September 28, 2015. "French firms in talks to build second terminal at Iran's Imam Khomeini Airport" http://www.airport-technology.com/news/news french-firms-in-talks-to-build-secondterminal-at-irans-imam-khomeini-

airport-4679885>.

¹⁰ Politifact, April 9th 2015. Jon Greenberg. .

whether Iran will use money it receives from sanctions relief towards funding terror, and his response was: 'I think it is a mistake to characterize our belief that they will just spend it on daycare centers, and roads, and paying down debt.''¹¹ In other words, with a quick turn of the phrase, the President was utterly dismissive of the quite serious concerns about arming some of the world's most nefarious groups, which are dedicated to murdering civilians, and most particularly Jewish and Israeli lives.

We witnessed the farcical nature of this deal when Iran collected its own samples of soil from Parchin, a military site long suspected as a location where the Iranians were working on the weaponization of the nuclear project.¹² If the International Atomic Energy Administration (IAEA) would yield such a critical aspect of the inspections, when the capacity for deception is so great, why would the United States, and the other P5 plus 1 nations, let alone the IAEA, allow for such a process?

Could it be the same capacity that enabled the Red Cross to visit Theresienstadt in June of 1944 and be taken in by the "beautification project" that the Nazis had made before the visit? The words of Jonathan Swift come to mind, "There are none so blind as those who will not see. The most deluded people are those who choose to ignore what they already know."¹³

And where was the outcry from the Jewish community when this was taking shape?

This summer, while all of this was still very much in play, and a few of us were working quite vociferously to stop the Iranian nuclear deal in any way we could, I spoke to a good friend who works for the national combined United Jewish Appeal-Federation. I asked if we could possibly organize a massive rally in Washington, reminiscent of what was done in the days of the Soviet Jewry movement, and that friend regretfully told me "No…The American Jewish community is much too divided over this issue."

There are many lessons to be learned from this painful summer of 2015. It certainly demonstrates that the "powers that be" within the organized Jewish community in America did much too little, and much too late. This is a lesson that we had thought our people had learned, at a very painful price, in the 1930s and 1940s.

During World War II, many in

site at Parchin." Jim Sciutto and Deir-

¹¹ White House, July 15th 2015. "Press Conference by the President." https://www.whitehouse.gov/thepress-office/2015/07/15/press-conference-president

¹² CNN, August 5th, 2015. "Iran attempting to clean up suspected nuclear

dre Walsh. <http://www.cnn.com/ 2015/08/05/politics/iran-nuclear-siteparchin/>.

¹³ David Wyman, "Abandonment of the Jews."

the American Jewish community argued that the most important thing we could do was "trust in the powers that be" and defeat Hitler "through the war effort."¹⁴

"Never again" is an easy slogan to say. However, actually acting upon it has proven to be as difficult for the majority of Jews living in America in 2015 as it was for the Jews living in America in 1939.

In fact, I have much more sympathy for the American Jewish community of the 1930s and '40s than for those living in 2015. Most Jews in the 1930s were relatively new immigrants to the United States, and were a bit "green." Many of them did not have the secular education we have. They spoke English with a Yiddish or European accent. They did not feel comfortable lobbying the halls of Congress.

Today, most of us do not have such an excuse. A significant number of Jews living in America have college and post-graduate educations. Not only should we feel comfortable walking the halls of Congress, but many of us occupy the offices of Congress and other branches of our government.

However, the fact that many of our people have been blessed to have received quality educations might be part of the problem. Our universities have become hotbeds of anti-Semitism and of anti-Zionism.

Some of this stems from the way

that Middle Eastern Studies programs have been taught. In order to understand this phenomenon, we have to go back to 1965, during the height of the Cold War, when folks in Washington rightfully understood that some of our American students were woefully ill-equipped to compete with the Soviet threat because they lacked a knowledge of foreign languages and cultures.

Congress therefore passed Title VI of the Higher Education Act.¹⁵ The purpose of this act was to establish various regional studies departments, i.e. African Studies, Asian Studies, Latin Studies, Soviet Studies and Middle Eastern Studies at several of our nation's college campuses. The original intent of this legislation was to establish a generation of well-educated university graduates who could compete with the Soviet threat, to help to serve our national security interests.

However, the original legislative intent of this bill was turned on its head in 1978 with the publication of a single book. The book, entitled "Orientalism," was a simple, single factor treatise, written by Edward Said, the late professor of English and Comparative Literature at Columbia University.

"Orientalism" cemented a revolution that had been brewing on the college campuses since the radical years of the 1960s. Said's argument was essentially built upon the popular post-colonial narrative, saying

vices" http://www2.ed.gov/about/offices/list/ope/iegps/history.html

¹⁴ Et al.

¹⁵ U.S. Department of Education, "International Education Programs Ser-

that the domination of much of the third world by America and the European powers had left a negative influence on the natives of these lands and cultures, and is the source of America's resentment.¹⁶

Said's However, contention went so far as to say that no one can speak with any authority or any authenticity about the field of Middle East Studies, unless he is a native of the region. That means excellent scholars like Bernard Lewis and Efraim Karsh have been thrown by the wayside. Only scholars with thorough anti-Israel and anti-Semitic agendas, such as Rashid Khalidi¹⁷ and Joseph Mossad¹⁸ of Columbia University, Hatem Bazian¹⁹ of University of California at Berkeley, and John Esposito 20 of Georgetown University, have dominated the teachings of our Middle Eastern Studies programs, ever since Said's treatise originally appeared.

What happens within these classrooms is nothing short of an intellectual travesty that turns schol-

arship into a form of mere propaganda, as a paltry substitute for a good, solid education. For example, at Berkeley, Hatem Bazian is the director of that university's "Islamophobia and Research Documentation Project." He is also the founder of the radical groups "Students for Justice in Palestine" and "American Muslims for Palestine."

Bazian, a lecturer at Berkeley's Title VI–funded Near Eastern Studies Center, recently hosted a seminar for students featuring Omar Barghouti, co-founder of the BDS movement (the movement to boycott, divest from, and sanction the State of Israel).²¹ These professors, and the majority of others who teach in most of our taxpayerfunded Title VI programs, are proponents of the BDS movement.

Irrespective of the sort of gross human rights violations that occur all around the globe, from the slaughter of 250,000 lives in an internecine Muslim war in Syria, to the hanging of homosexuals, dissidents and bloggers in Iran, to the stoning of women who have been

Hatem Bazian," November 5, 2011, http://www.campus-watch.org/article/id/11850

²¹ "Berkeley, Bazian, and Barghouti Promote BDS," FrontPageMagazine.com By: Cinnamon Stillwell, September 30, 2015 http://www. frontpagemag.com/fpm/260280/ berkeley-bazian-and-barghouti-promote-bds-cinnamon-stillwell>.

¹⁶ Said, Edward. "Orientalism," 1978, Random House, Inc. New York, NY.
¹⁷ *inFocus*, "Rashid Khalidi, Campus Watch, & Middle East Studies," Cinnamon Stillwell, Winter 2008 <http://www.meforum.org/2411/rashid-khalidi-campus-watch-middleeast-studies>.

¹⁸ FrongPageMagazine.com, "Will Columbia Tenure Joseph Massad?" Winfield Meyers, April 15, 2009 http://www.meforum.org/2122/willcolumbia-tenure-joseph-massad

¹⁹ Fight Hatred Blog, "Profiles in Hate:

²⁰ "John Esposito: Defending Radical Islam," http://www.investigativeproject.org/documents/misc/304.pdf

raped in Saudi Arabia, or the wanton murder of all but the most radical Sunni men and the sexual enslavement of women by the Islamic State, our nation's college campuses have singled out one and only one state for moral opprobrium—the State of Israel.

Parents of many college students have complained to me that when they try to speak to their college-aged children about the Israeli perspective, they are usually shot down. Why would these students believe what their mother or father has to say about the matter, when their professors, the "experts," are teaching them something altogether different?

What is even more egregious is that, according to Title VI of the Higher Education Opportunity Act, in order for our nation's Title VI programs to receive funding, they are required to conduct teacher-training workshops for teachers of students from kindergarten through 12th grade. That means there is a trickledown propaganda effect to some of our nation's most vulnerable and impressionable youngsters.

We at EMET have examined some of the materials that have been passed out to the teachers in these outreach centers, and what our nation's youngsters have been learning is a steady diet of anti-Israel propaganda. For example, Audrey Shabbas,' "The Arab World Studies Notebook," which is put out by AWAIR: The Arab Word and Islamic Resources and School Services and the Middle East Policy Council. The entire book is replete with strong anti-Israel bias.

Take, for example, the poem "Identity Card" by Mahmoud Darwish, which students are encouraged to memorize, a segment of which reads:

Record! I am an Arab You have stolen the orchards of my ancestors And the land which I cultivated Along with my children And you left nothing for us Except for these rocks So will the State take them As it has been said?!

This poem, unfortunately, is not an aberration. It is, rather, emblematic of the sort of unbalanced and politically biased one-sided education that many of America's students have been exposed to, even before they arrive on the college campus.

Is it any wonder that college campuses have become hostile environments for Jewish students? According to the AMCHA Initiative, during the 2014-2015 academic year, swastikas had been found scrawled on walls of more than 30 campuses. ²² Many college campuses around the United States have demonstrations, which include "Israel Apartheid Walls," "reenactments," where students dress up as

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				tive.org/sv	vastika-tracker/>.

Israeli soldiers who are "brutalizing" students dressed up as Palestinians, "mock checkpoints," and more.

Many Jewish students who lack a strong background in Judaism have become ashamed of their Jewish identity. It is no wonder that Natan Sharansky warned approximately ten years ago that US Jewry is in danger of "Jews of silence." He noted then that "90% of Jewish students are not willing to stand up for Israel," and "in America, Jews feel very comfortable," he said, "but there are islands of anti-Semitism the American college campus."²³

And I am not only concerned about the America Jewish community. I am concerned about the average American students, who graduate from these fine, ivy-covered campuses, and later on become thought leaders in journalism or policy makers in our government.

No wonder there is such an erosion of support for the State of Israel in those segments of the American Jewish community that have not received a solid Jewish education, and who lack a strong sense of Jewish identity and of the history of what our people have gone through within the last century.

It is therefore incumbent upon us, the fraction of a fraction of American Jews who have a strong sense of Jewish identity, who have a knowledge of Jewish history or at least of the dramatic events our people went through within the last century, and a strong commitment to the continuation of the modern State of Israel which was resurrected within our ancient Jewish homeland, and feel comfortable enough in both the Jewish and secular worlds, to be able to make the case for Israel in the halls of Congress and the administration.

Sarah N. Stern Founder and President, EMET Endowment for Middle East Truth

IT IS WITH GREAT INTEREST that I read the recent issue of Hakirah Vol. 19. I also enjoyed reading your article on support for the State of Israel. Your account of Haredi attitudes did not include serious theological obstacles they would have to overcome in order to support the Zionist state. These obstacles do not seem to go away as I discovered last year when my book on Jewish opposition to Zionism was published in Israel and I did a book tour there. Even the subtitle given to the Hebrew edition was telling, A History of Continuing Struggle. This is an aspect of Jewish attitudes to Zionism and Israel that deserves attention, particularly in a scholarly journal of this caliber.

Wishing you further success with *Hakirah*.

Yakov M. Rabkin Professor of History University of Montreal

²³ 'Columbia Unbecoming' A Wake-Up Call for 'Jews of Silence,' Israel National News, February 8, 2005 http://www.israelnationalnews.com/News/News.aspx/76575#. Vh1pmPlViko

Heshey Zelcer Responds:

I thank Sarah Stern for her kind words. She adds much detail and pathos to the problems we face in winning the public relations battle on behalf of the State of Israel. Ms. Stern and EMET deserve our unqualified praise and support.

I agree with Professor Rabkin that certain *haredim* have theological obstacles that "do not seem to go away." It is for this very reason that the article appealed, not to all haredim, but to the vast majority of them, described as "Practical Haredim," who are concerned for the safety of our brothers and sisters in Israel, who love to visit our country, but who have not yet openly identified with it. It is easier to motivate those who appreciate the State of Israel than to change the mind of the small minority who, unfortunately, are not pro-Israel.

Silk Screen Sefer Torah

THE ARTICLE BY Yisrael Kleinhendler which discusses the halakhic ramifications of a silk screen Sefer Torah is both informative and enjoyable, but it must be classed as an attempt to "give 150 arguments for the claim that a *sheretz* is pure." This is in no way meant to be a criticism of the author, as the ability to give such arguments is a requirement for membership in the Sanhedrin (Sanhedrin 17a). However, the sheretz remains a sheretz. That is to say, there are times when even the most powerful deductive reasoning cannot overcome the force of *pshuto shel mikra* (as opposed to a kabala m'Sinai regarding the meaning of a word or phrase, which can indeed override its plain meaning).

The author cites a number of poskim, including some of the greatest of earlier generations, who argued that printing is a form of writing. He then lists the objections that were raised against them, and shows how the method he describes meets those objections. I suggest, though, that beyond the specific objections that were raised, the primary reason their opinion was not accepted is simply that the overwhelming majority of people consider writing and printing to be two different activities. And the mitzva is to "write" a Sefer Torah, as stated in Devarim 31:19, "...write for yourselves this song...." While deduction, based on the principle that "the Torah is not written in excerpts" (Rambam, Hil. Tefilin, Mezuzot, v'Sefer Torah, 7:1), can lead to the conclusion that "this song" means "the entire Sefer Torah which contains this song," it cannot obscure the difference between writing and printing.

To belabor the point a bit more, consider the following social experiment: Show randomly selected people video clips of a *sofer* silkscreening a Sefer Torah, a person scribbling notes with a pen, a *sofer* writing a Sefer Torah in the usual way, an artist using a 3-inch-wide paint brush to sign his name in the corner of a larger-than-life mural, someone else using a computer printer, a baker squeezing icing onto a cake to form the words "Mazal Tov!" and another person using a rubber stamp. Ask each subject to identify those video clips that show someone writing. Without a doubt, almost everyone will identify as writing all of those cases—and only those cases—in which the letters are formed one at a time.

> David Hoffman Jerusalem

Yisrael Kleinhendler responds:

I thank David Hoffman for taking interest in my article, and I would like to respond to the points he made.

David equates permitting a silk screen Sefer Torah to purifying a sheretz. I find this comparison to be inappropriate. In addition to Rabbi Yitzchak Abadi approving silk screen Sifrei Torah, many other prominent halachic authorities permitted its use as well. These include Rabbi Shlomo Yitzchak Zilberman, Rabbi Chaim Kreiswirth, Rabbi Tuvia Goldstein, Rabbi Chaim Pinchas Scheinberg, Rabbi Zalman Nechemia Goldberg, and Rabbi Dovid Feinstein, to name a few. Is it being suggested that they actually purified the *sheretz*?

Regarding *pshuto shel mikrah*, there is no contradiction. The Torah says, "write" and this is writing. The early *acharonim* considered their method of "printing" to be writing as well. Also we do not *pasken* halachos based on *pshuto shel mikrah* or social experiments. Rather we follow the interpretation of *chazal*, and the rules they laid out for us in regard to *psak halachah*. The Tzedukim *paskened* halachos based on *pshuto* *shel mikrah.* That's why they wore tefillin on their hands and between their eyes (*Megillah* 24b).

"Ι David writes, suggest, though, that beyond the specific objections that were raised, the primary reason their opinion was not accepted is simply that the overwhelming majority of people consider writing and printing to be two different activities." The quote, "overwhelming majority," seems to be a bit of an overstatement, as the majority of acharonim actually permitted the printing press Sefer Torah. Also, what's the basis to suggest that those who objected to the process stated one reason but really meant another? Is there a source or other evidence to support this thesis? I would like to reiterate that the silk screen process is not similar to the printing press process, even though they are both coined "printing."

Finally, I don't understand how the above-mentioned Rambam is relevant to our topic.

Responsa of R. Shimon Duran

IN HIS ARTICLE in *Hakirah* Vol.19, Samuel Morell outlines the dispute between R. Duran and the Rivash over the use of *neter* by women washing their hair prior to use of the mikveh. In part, the dispute hangs on whether *neter* and *qalida* are identical or whether they are two distinct materials as R. Duran argues in permitting use of the latter. In support of his argument it appears that R. Duran feels that *qal-ida* merely causes hair to become wavy whereas *neter* causes detachment which may subsequently interfere with direct contact with water in the *mikveh*.

It is interesting to note that modern chemistry, based on Mendeleef's Periodic Table, assigns the symbol "Na," based on the Latin *natrium*, to the element Sodium, and "K," based on the Latin *kalium*, to the element Potassium. The Latin is clearly based on the Arabic/Hebrew. This has significance insofar as soaps made with sodium hydroxide (hard soaps) are distinctly more aggressive from those made with potassium hydroxide (soft soaps), lending some credence to R. Duran's argument.

> David Cymerman Toronto

The Jewish Calendar

I ENJOYED THE ESSAY "A Statistical Analysis of the Conjunction of Tishrei," *Hakirah* Vol. 19, very much, as the Jewish calendar is my special area of interest.

Still there is a serious flaw in the reasoning, which makes the thesis of the article, in my opinion, moot.

In short: the data on 400 years of conjunction are too small of a sampling to be statistically meaningful. I explain:

On page 229 the authors write, "Because the Molad of a month is based on a calculation that repeatedly adds the same number, it seems intuitively reasonable that it is equally likely that the Molad of Tishrei would occur in any day of the week." This is certainly true, but only because 29/6/793 and 7/0/0 (the length of a week) have no common denominator. If the length between 2 Molad would be, say, 28/0/0, every Rosh Chodesh would be on the same day of the week.

The next sentence, "However, because of the fluctuation of the inter-conjunction time from month to month, it is by no means obvious how the actual conjunction times are distributed among the days of the week," needs to be more closely examined.

This fluctuation, as you know from Fig. 1 on page 228, has 2 components: a fluctuation from month to month, and a fluctuation from cycle to cycle, each cycle varying in length from 13 to 16 months.

I will show you now that a 400year period of data is giving you only a maximum of 4.76 good data which is statistically insufficient.

If, for argument's sake, all the cycles were of the same length and their length would be 13 months, then it would take 12 years to have the same pattern of monthly time differences for a Tishrei-to-Tishrei stretch again. This gives to 33 similar 12 month patterns (and similar Tishreis) in a 400-year time frame.

If you divide this by the 7 days of the week, this gives you 4.76 samplings of Monday, same for Tuesday, Wednesday etc.

If all the cycles are of the same length of 16 months, it would take 15 years to have the same pattern of monthly time differences for a Tishrei-to-Tishrei stretch again, or about 27 similar 12 months pattern (and similar Tishreis) in a 400-year period. If again you divide 27 by the 7 days of the week, you have 3.8 good data for Monday, Tuesday, Wednesday etc.

In reality, since these cycles continuously change their length, you cannot really compare one 12month Tishrei-to-Tishrei period to another, and any statistically valuable information can be gleaned only if you are dealing with a much larger number of years.

Your own data prove my argument without any doubt: in the 70year period from 1946 to 2015, the Sundays are lagging behind by 10%, in the 400-year period the Sundays are ahead by 17%.

I am actually surprised that you hoped to see any differences between the different days of the week. There is no causal or mathematical connection at all between the inter-conjunction time of any month and the days of the week, as there is really no astronomical meaning to a 7-day week.

Yehuda Rosenblatt Toronto

IT IS MY OPINION that the statistical issue discussed in the article of Epstein, Wilamowsky, Dickman, and Weiss, *Hakirah*, Summer 2015, is not a genuine statistical issue and therefore the statistical method that they used to analyze their data is inappropriate. The fundamental concepts of the theory of statistics are "universe" and "random sample." The former is defined as a set of similar objects (or individuals) where each one of these belongs to exactly one of several well-defined categories. The proportions of objects in the various categories are assumed to be unknown, and the goal of the statistical investigator is to draw an inference about these proportions, such as estimating their numerical values. A common example of such a universe is a population of voters who are categorized as favoring particular candidates up for election, where the polling statisticians want to determine the unknown proportions of voters favoring the various candidates. This is done by selecting a random sample of individuals, that is, voters, and using the observed proportions favoring the candidates to draw inferences about the true proportions. In general, statistical theory is concerned with the drawing of inferences about an unknown characteristic of a universe on the basis of a random sample. In the article of Epstein et al, the universe is never precisely defined and the so-called sample is not a random sample.

The objects in the implicit universe in the paper are a set of years, and the "categories" to which the years belong are the seven days of the week in which the Tishrei conjunctions fall. (By analogy to the voting example, the years and days represent the voters and their preferred candidates, respectively.) The article reports the values of the corresponding seven proportions for the years 1700–2099. While referring to these years as a sample, the

authors have not specified the "universe" from which the sample is taken.

The universe must be either finite or infinite, that is, must consist of either a finite set of years containing the given four centuries, or, if not, must consist of an infinite set of years containing the four centuries. In the case of a finite universe, the categories to which the years belong and their proportions can be determined by the same algorithm as that used to calculate those for the four centuries. Therefore the proportions of the categories in the universe are effectively known, and so there is no need for sampling and using statistical methods. In the case of an infinite universe, for example, the set of all years starting with 1700, it is mathematically impossible to draw a finite sample at random. To illustrate this, suppose that we wish to draw a finite random sample from this universe, for example, a sample of one year. Let there be a number p between 0 and 1 representing the probability of drawing the year 1700 (or any other particular year). If the sample is random, then every other year must have the same probability p of being selected. It follows from the axioms of probability that the probability of randomly selecting either 1700 or 1701 is 2 times p, and of selecting 1700, 1701, or 1702 is 3 times p. By extension the probability of selecting at least one of a given set of nyears is np. Since n is arbitrary, it may be taken to be as large as desired, so that if we take it so large that *np* exceeds 1, then it cannot

represent a genuine probability because the sum of the probabilities of all items in a universe cannot exceed 1.

The conclusion is: If the universe consists of a finite number of years, then the proportions are effectively known and the data should not be analyzed by statistical methods. If it consists of an infinite number of years, then it is impossible, under the laws of probability, to draw a random sample. In either case the terms in the article, "probability," Uniform distribution," and "likely," are meaningless.

The following comment is unrelated to the previous discussion and concerns an error in the application of the chi-square test. It will be understood by those with some knowledge of basic statistics, and is included here only because it is my opinion that a technical error published in a journal as influential as Hakirah, if uncorrected, can tarnish the integrity of the journal. Appendix 2 reports the p-value of 0.054 for the chi-square statistic. The null hypothesis is that the proportions are equal, and the alternative is that they are not all equal. In conventional statistical practice the null hypothesis is rejected if the p-value is 0.05 or less, and according to others, 0.01 or less; otherwise it is accepted. Since the p-value here, namely, 0.054, is larger than 0.05, the null hypothesis cannot be rejected, and so one is left with the conclusion that we must accept the null hypothesis of equal proportions (uniform distribution). The authors' claim that "there is less

than 6% chance that the data is Uniformly Distributed" is meaningless.

Simeon M. Berman Emeritus Professor of Mathematics at the Courant Institute of Mathematical Sciences, New York University, New York

The authors respond:

We thank Prof. Berman and Yehuda Rosenblatt for their technical comments on our article "A Statistical Analysis of the Conjunction of the Time of Tishrei." Both letters expressed concern about our "sample" of 400 consecutive years of data, i.e., 1700–2099. The latter objected that we "overstated" the number of data points because

In short: the data on 400 years of conjunction are too small of a sampling to be statistically meaningful.

The former critiqued that:

While referring to these years as a sample, the authors have not specified the "universe" from which the sample is taken... In either case the terms in the article, "probability," "uniform distribution," and "likely," are meaningless.

and added,

In conventional statistical practice the null hypothesis is rejected if the p-value is 0.05 or less, and according to others, 0.01 or less; otherwise it is accepted. Since the p-value here, namely, 0.054, is larger than 0.05, the null hypothesis cannot be rejected, and so one is left with the conclusion that we must accept the null hypothesis of equal proportions (uniform distribution). The authors' claim that "there is less than 6% chance that the data is Uniformly Distributed" is meaningless.

We begin by pointing out that the word "sample" appears in our paper only once on p. 235 (Appendix 2). Our paper is not a rigorous Mathematical proof of Rambam's position but rather an attempt to understand how Rambam could possibly have come with his "novel" and unattributed explanation of "Lo ADU Rosh"? We do not ascribe to Rambam any statistical knowledge of techniques unknown in the 12th century, but do know that Rambam was an expert in calculating molads and True Conjunctions. We therefore assume that in formulating his theory he would have analyzed recent data of both of these values in his time. That is exactly what we did when we initially looked at the most recent 70 years of data (we picked the starting point to coincide with Mandlebaum's initial cycle, Figure 1). What we found, supported Rambam's assertion for DU but not necessarily for ADU. (Interestingly, see Adjler's article in this current Hakirah edition which provides evidence that the A of ADU was not in the original formulation of the fixed calendar). Had Rambam seen similar results for a modest review of data from his era (it would have taken him far longer to do these calculations) he would undoubtedly have expanded the

number of years in his study to see if the trend held up. That is exactly what we did. We chose 400 years because it was the most readily available data. The 400-year results supported every point Rambam made. Our suggestion is then that absent any other rationally offered explanation of Rambam's position had his data in any way resembled our data (we have no proof that it did but have no reason to assume it didn't) it would offer a logically sound underpinning for his assertion. All this was said in the paper without resorting to any statistical

testing or sampling.

With respect to our

- use of X² in Appendix 2 while the set of years chosen may not be technically random, we have no reason to believe that they are not representative of the situation at the time of Rambam.
- use of 6% the choice of the α = 0.10 is not uncommon.

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