

Kitzur Taarich Yisroel

The

DATE LINE

in

HALACHA

A halachic guide to the laws of the Date Line

Condensed from *Sefer Taarich Yisroel*

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Exposition of the Baal Hamaor's opinion by Dr. Ken Trabert

Maps

Is there a Halachic Date Line?

Every map of the world has a very clear zigzag line running vertically through the Pacific Ocean between Hawaii and Japan called the International Date Line. This date line is the arbitrary longitudinal line 180 degrees from Greenwich, England, that has been accepted by world convention just over 100 years ago to be the place on Earth where the day changes.⁹ Where the 180th meridian cuts through a landmass, international convention has determined that the line be drawn around country borders. This was done to avoid the inconvenience of dividing a single country into two different days.

In order to establish the criteria to determine the date line's halachic location, we must first explain the concept itself, its necessity, and the ramifications thereof.

The Concept of a Date Line

The concept of a date line can be somewhat confusing and difficult to grasp. A graphic description might be the best place to start. Suppose you are standing in New York at 6 AM on Monday. At that moment we know that the time in Israel is seven hours later, making local Israel time 1 PM. Looking six time zones to the east of Israel, to Taiwan, the local time will be 7 PM on Monday. When it is 6 AM in New York, it is 1 PM in Israel, and 7 PM in Taiwan. That would make local time in Taiwan thirteen hours ahead of New York.

As we study a map of the world, we find that as we move our finger to the right in an eastward direction, each time zone which measures 15 longitudinal degrees, adds one hour to the local time. Moving across the Pacific Ocean to California, we will pass over approximately 1/3 of the world or 120 degrees. Since we add one hour for each 15

⁹ *Encyclopedia Britannica* 15 ed. Vol. 18:414h notes that international time zones were established in 1884.

degrees to the east, local time in California should be eight hours ahead of Taiwan. If so, then at 7 PM on Monday in Taiwan, it must be 3 AM Tuesday in California, i.e. 21 hours ahead of New York.

If we finish our study by moving our finger to the east across the United States, then at 3 AM on Tuesday in California it is 5 AM in Chicago, and 6 AM Tuesday at our starting point in New York. But that cannot be, for we began our study of the map in New York at 6 AM on Monday! In short we have shown that at 6 AM Monday in New York, it is 1 PM Monday in Israel, 7 PM Monday in Taiwan, 3 AM Tuesday in California, which should be 6 AM Tuesday in New York. Evidently, somewhere on the map, the day of the week had to change. The result is that what we claimed to be 3 AM on Tuesday in California, is in fact 3 AM on Monday. In other words, California time is 3 hours behind New York, rather than 21 hours ahead of it.

Having demonstrated that there is a point on Earth where the day must change, how do we go about determining that point's location? In the late 19th century, the international community agreed on a convenient place in the middle of the Pacific Ocean. This sparsely inhabited area that separates continents, specifically, the 180th meridian, is approximately four hours east of Taiwan. This zigzag line on our maps that is near the 180th meridian is known as The International Date Line.

The mechanism whereby the date changes at the International Date Line (IDL) can be described as follows. The world is divided into 24 time zones and each time zone measures 15 longitudinal degrees. The time zone that begins at the IDL, at the 180th meridian, that extends 15 degrees westward to the 165E meridian will be referred to as time zone no. 1. Time zone no. 2 spans the distance between the longitudes of 165E to 150E. As we continue westward all the way around the globe, we reach time zone no. 24, which covers the distance between the 165W meridian and the 180th meridian (the International Date Line).

When it is midnight on Sunday at the IDL, the date west of the date line is

pushed forward to Monday. Hence, at time zone no. 1 it is the first hour (12:00 AM or 00:00 military time) of the day Monday. The date has not been changed yet for the other 23 time zones on the world, where it is still Sunday. Hence, at time zone no. 2, it is 11 PM on Sunday, and the day will change only when midnight reaches that time zone. At time zone no. 24, it is 1 AM Sunday. Monday will not reach time zone no. 24 for another 23 hours. Hence, to one standing just east of the IDL in time zone 24, it is 1:00 AM Sunday, while to one standing just west of the IDL, it is 12:00 AM Monday. Time zone no. 24 is 23 hours behind time zone no. 1, not one hour ahead of it.

The Date Line in Halacha

The very first mitzva that we received as a nation was that of the Jewish calendar¹⁰. Knowledge of the proper day and date is essential to the performance of many mitzvos of the Torah. *“Let there be lights in the firmament of the heavens to separate between the day and the night; and they shall be for signs, and for festivals, and for days and years.”*¹¹ It is obvious that any aspect of so basic a tenet of the Torah as the calendar, should be discernable from the halachic literature available to us. Where then do we begin our search?

Scientifically speaking, a day is the time it takes the earth to make one complete rotation on its axis. Since to the observer on Earth the opposite seems to take place, for illustrative purposes we will take the liberty of referring to the sun as figuratively revolving around the Earth as it moves from east to west in the sky.

Unlike the secular date which begins at midnight, the halachic day begins at sunset, with the day following the night. Hence, sunset on Sunday evening is the beginning of Monday. As sunset continues from east to west, a new day is ushered in at each successive point on Earth. While a circle may have no beginning or end, in order

¹⁰ Shmos Ch. 12

¹¹ Breishis 1:15

for a day to change to the next day, there must be a starting point. Without a starting point, i.e. a date line, we reach the logical impossibility of it being 6 AM Monday and 6 AM Tuesday in New York at the same time.

The halachic date line is thus defined as the point on the globe where the day begins at sunset. When sunset reaches that point, the date is pushed forward. Sunset on Sunday night at the halachic date line is the beginning of Monday. For the 23 time zones¹² to the east of that point it is still Sunday. As the sunset travels westward, more and more of the earth is ushering in Monday until, when sunset reaches the final mile just east of the halachic date line, it is Monday in the entire world except for this final mile. As soon as sunset reaches the date line, the date is pushed forward to Tuesday.

Consequently, one who crosses the date line from east to west would be moving ahead one day, while one who crosses the date line from west to east would be moving back to an earlier day.

Baal Hamaor

The Baal Hamaor, a contemporary of The Rambam and Raavad, is the first early authority to touch upon the concept of the date line. In order to explain a difficult passage in the Gemara Rosh Hashana 20b regarding the laws of Kiddush Hachodesh he uses a tradition that he heard from his teachers that refers to *Ktzei Hamizrach*, the eastern edge of the world. His explanation makes sense only if there is an international date line 90 degrees east of Jerusalem.¹³

¹² Technically, halacha does not recognize time zones. Time changes on a continuum. I have taken the liberty of using the time zone analogy to make the concept easier to grasp.

¹³ See Appendix for a full explanation of the Ba'al Hamaor. The Chazon Ish in *Kuntres Yud Ches Shaos* (printed in *Sefer Chazon Ish Orach Chaim* 64) cites at least eight rishonim who support the position of the Ba'al Hamaor. Among them Ran, Ritva, and Rabbi Yehuda Halevi in *The Kuzari* (ma'amar 2 ch. 19-20).

Jerusalem is located approximately 15 miles east of the 35E meridian.¹⁴ The point 90 degrees east of Jerusalem at the 125.2E meridian, cuts through Siberia, China, the Philippines, and Australia. Korea, Japan and most of Australia, fall to the east of the Baal Hamaor's date line but west of the International Date Line.

By identifying the halachic date line as a point other than the International Date Line, we are presented with a serious halachic challenge. If halacha did not recognize the date change that took place at the IDL, the ramifications are enormous. In the 55 degree area between the Baal Hamaor's date line (125.2E) and the International Date Line (180), the day that world convention considers Sunday, is in reality the Baal Hamaor's halachic Shabbos. Consequently, according to this view, Shabbos would be observed on the Japanese or Korean Sunday¹⁵.

Chazon Ish

The Chazon Ish states that since the Baal Hamaor is a Rishon, supported by many other Rishonim and disputed by none, his opinion is decisive.¹⁶ However, he interprets the Baal Hamaor in a slightly different manner than explained above. He opines that while the date line is undoubtedly at the *Ktzei Hamizrach*, six hours east of Jerusalem, it cannot cut through a landmass.¹⁷ This is because it is inconceivable that for

¹⁴ The 35th meridian cuts through Haifa. The longitude of Jerusalem is 35.2E.

¹⁵ *Taarich Yisroel* 1:3 lists the following acharonim who concur with this opinion: *Pnei Yehoshua*, *Pnei Moshe on Yerushami*, *Aruch Lener*, *Shoel Umaishiv*, Rav Y.M. Shapiro (Tchortkover Rav), Rav Chaim Brisker, among others.

¹⁶ The Chazon Ish does quote the Raavad who disagrees with the Ba'al Hamaor. The Chazon Ish nevertheless claims that the disagreement was limited to the particular interpretation of the Gemara. The Raavad does not disagree with the principle of a date line at *Ktzei Hamizrach*.

¹⁷ The Chazon Ish bases this interpretation of the Ba'al Hamaor on Sefer Yesod Olam who was a student of the Rosh. He argues that a date line that cuts a single landmass is absurd, for if a single land mass could be divided into two days, the result would be that for two neighbors living side by side, one would be observing Shabbos while the other would not. This, claims

one person the day would be Friday, and for his neighbor next door it would be Shabbos. The Chazon Ish therefore posits the *Ktzei Hamizrach* to be the eastern coast of Asia, approximately 90 degrees east of Jerusalem. However, where the land protrudes beyond 90 degrees, the date line protrudes with it along the coastline. The only place that we do draw a straight line along the 90th meridian east of Jerusalem, is in the ocean. Islands to the east of 125.2E are beyond the date line.

Accordingly, Korea, Siberia, and the eastern portion of China, are not considered east of the date line even though they are beyond the 90 degree point (125E). Since they are attached to the landmass of Asia that falls to the west of the date line, these three countries are considered to be west of the date line. Eastern Australia likewise would be considered west of the date line, because part of the land mass of Australia is to the west. Japan on the other hand, which is an island located east of the 125E longitude line and not attached to mainland Asia would be considered east of the date line. In short, Shabbos would be observed on Saturday in Korea and Australia, but on Sunday in Japan.

A point of interest that relates to the Chazon Ish's opinion concerns the status of the ocean along the Asian and Australian coast. Since the coastline is the date line, it would be forbidden on Sunday to travel on the ocean or to even go swimming at the beach of Asia or Australia east of 125E. Points east of the coastline are beyond the date line, i.e. it is Shabbos in the ocean along the coast of eastern Australia on the local

the *Yesod Olam* is ridiculous. The Chazon Ish therefore introduces the concept of *greira*, literally dragged or pulled along with it. Land east of 90E attached to the mainland is dragged along with the mainland and is considered part of it. See *Taarich Yisroel* 1:5-7 for a full discussion of this *shita*. *Taarich Yisroel* 1:8 discusses the arguments against this concept. See also *Taarich Yisroel* 2:11 where he cites *Sefer Vayeshev Moshe* as disagreeing with the *greira* concept. In chapter 1 note 43, *Taarich Yisroel* quotes Rav Y.S. Eliashiv and Rav Moshe Feinstein among others who disagree with this concept as well.

Sunday.¹⁸

One additional concern is the status of air space in the area that is east of the Baal Hamaor's date line but west of the Chazon Ish's. The logic behind the Chazon Ish's extension of the date line beyond 125E is that a single land mass cannot be split into two different days. Air space however is not contingent to the land mass; hence different halachos may apply. There are differing opinions whether or not air space follows the halachos of the land below. If we assume that air space is independent of land, then according to the Chazon Ish, it may be prohibited to fly from the eastern part of Australia westward on Sunday. Although it is considered Sunday on the land below, it may very well be considered Shabbos in the air space, for the air space is east of the 125th meridian and not connected to the land mass.¹⁹

Rav Yechiel Michel Tukatzinsky

The Chazon Ish published this opinion in a lengthy study on the subject entitled *Kuntres Yud Ches Shaos* which appears in his sefer on *Orach Chaim*, as a response to an article written by Rav Yechiel Michel Tukatzinsky, who took a totally different

¹⁸ *Taarich Yisroel* ch. 1 note 38 quotes Rav Chaim Kanievisky who claims that it would be forbidden for one who is standing in the water along the coast of Australia on Sunday, to pass an object to one on land. For the one standing in water, it is Shabbos. *Taarich Yisroel* ch. 1 note 38* also quotes Rav Y.S. Eliashiv who understands the coastline according to the Chazon Ish to extend to the depth of the ocean where one can still stand. Rav Eliashiv however does not support this shita. See footnote 22.

¹⁹ *Taarich Yisroel* ch. 1 notes 29* and 40 discusses this topic at some length. Rav Isser Zalman Meltzer, Rav Moshe Feinstein, and Rav Chaim Pinchos Scheinberg feel that the air space has the same halacha as the land below. Rav Yechiel Michel Tukatzinsky and *Sefer Moadim Uzemanim* indicate that the air space is not dependent on the laws of the land below. This machlokes has far reaching effects in other matters related to time. One example – Is it still Shabbos in an airplane when sunset took place on the land below while the sun can still be seen from the airplane.

approach to the date line issue.²⁰ Rav Tukatzinsky held that we view Jerusalem as being the center of the world . Although a circle has no beginning or end, if we are to talk of east and west, we must have a reference point from where to start. Jerusalem is that point. Hence, the beginning of day one took place half way around the world, or twelve hours east of Jerusalem. The date line would therefore be situated 180 degrees east of Jerusalem, at the 145.2W meridian. Rav Tukatzinsky's date line falls in the Pacific Ocean east of Hawaii.²¹ Accordingly, Shabbos would be observed on Saturday in Japan²².

²⁰ Rav Tukatzinsky's opinion is found in *Sefer Hayomam B'kadur Ha'aretz*. This opinion is further supported by Rav Shmuel Mohliver and Rav Yosef Eliyahu Henkin. See *Taarich Yisroel* 1:9 for a full discussion of this shita. Rav Tukatzinsky bases his opinion on Rishonim as well. He argues that the Baal Hamaor can be understood to be consistent with his opinion, although he does admit that it is a bit stretched.

²¹ A fascinating philosophic explanation of the views of the Chazon Ish and Rav Tukatzinsky has been offered by Dr. Eliezer Ehrenpreis. There is a machlokes in the Gemara Rosh Hashana 10b whether the world was created in Nisan or in Tishrei. Nisan, the onset of spring, when the flowers begin to blossom, the landscape is regaining its color, and the animals awake from their state of hibernation, represents a world in a fresh state of infancy and newness. Tishrei, the end of summer and the beginning of fall, represents a verdant world in its full state of maturity. The machlokes can be understood to be a disagreement whether the world was created in a state of infancy or maturity. When it is noon in Jerusalem, the sun is setting over China 6 hours east. The Chazon Ish who claims that the day begins when it is sunset in China sees the beginning of the day as the point when it is noon in Jerusalem, the time of the mature day. Rav Tukatzinsky's position however would seem to hold that the day begins when it is sunset 180 degrees east of Jerusalem, the corresponding time of sunrise in Jerusalem, when the day is new and in its state of infancy. Dr. Ehrenpreis related this explanation to Rav Moshe Feinstein zt"l, and it met with his warm approval.

²² *Taarich Yisroel* 1:9 cites the following poskim who agree with Rav Tukatzinsky's opinion: Rav Shmuel Mohliver, Rav Yosef Eliyahu Henkin, Rav Yisroel Zev Gustman, and Rav Eliashiv. In chapter 2 note 3, Rav Shlomo Zalman Auerbach is quoted as having been extremely reluctant to issue a psak that was not in accordance with the Chazon Ish, as he held the Chazon Ish to be the expert in this field. However after having heard that Rav Moshe Feinstein agreed with the

The 35 degree area between Rav Tukatzinsky's date line and the International Date Line, (from the 180th meridian eastward to 145W), is relatively unpopulated. From a practical standpoint, we can usually use the International Date Line as the line where the day changes. There are two states however that are affected by this position; Hawaii and most of Alaska. These areas fall east of the International Date Line but west of Rav Tukatzinsky's halachic date line. Consequently, when one travels from California to Hawaii, Rav Tukatzinsky's date line is crossed. Therefore, if one left California on Wednesday, upon landing in Hawaii several hours later the day changed en route to Thursday. The local Hawaiians however, who use the International Date Line as their reference point, consider the day to still be Wednesday, since during the above mentioned trip, the International Date Line was not crossed. Wednesday in Hawaii is the halachic Thursday according to Rav Tukatzinsky. Hence, Shabbos would have to be observed on the Hawaiian Friday. The local Saturday would be the halachic Sunday.

While Rav Tukatzinsky issued this psak as it relates to Hawaii, he is reluctant to come to the same conclusion regarding Alaska. Although most of Alaska does in fact fall in this 35 degree area between the above mentioned date lines, which would result in its having a different halachic day than that practiced by the general population, since Alaska is connected to mainland Canada, one could argue that it is to be considered as part of greater Canada. By adopting the concept of *gereira*²³ that the Chazon Ish introduced, which states that the date line cannot cut through a solid landmass, Alaska would be pulled to the east and would follow the same day of the week as does the Western Hemisphere.²⁴

position of Rav Tukatzinsky, Rav Shlomo Zalman Auerbach said that this opinion is the one to follow.

²³ See footnote 17 above.

²⁴It should be noted, that there are a number of poskim who adopt the view of Rav Tukatzinsky, but do not agree with the *gereira* concept. Hence according to them, most of the state of Alaska would observe Shabbos on Friday.

The Chazon Ish took strong exception to Rav Tukatzinsky's opinion. He could not understand how Rav Tukatzinsky ignores the opinion of so many Rishonim and issues a psak based on his own logic. For although this opinion seems to make perfect sense, one cannot base halacha on logic when it conflicts with the view of Rishonim.²⁵

Rav Isser Zalman Meltzer

Rav Isser Zalman Meltzer and Rav Zvi Pesach Frank claim that there is no halachic date line at all.²⁶ Since this issue of paramount importance is not even discussed in the Gemara, the Rambam or Shulchan Aruch, there is evidently no particular halachic date line. We therefore follow the day that the people of a particular location believe to be the proper day of the week.²⁷ For all intents and purposes, since world convention adopted the International Date Line, this opinion would adopt the International Date Line as the halachic one as well.

They base this psak on their drawing conclusions from indirect references to the date line issue mentioned in the Radvaz regarding the question that the Gemara in Shabbos 69b raises with regard to one who is lost in the desert and forgot which day is Shabbos. After a lengthy discussion, the Gemara concludes that one is to count six days

²⁵ *Taarich Yisroel* ch. 1 note 9 quotes Rav Tukatzinsky as stating that the Baal Hamaor's shita as understood by the Chazon Ish and others, has no basis in the Gemara and that he finds it bizarre. The Chazon Ish vehemently protests Rav Tukatzinsky's strong words, calling it *elbon shel Torah*, dishonor of the Torah.

During World War II, when many Jews found themselves in Japan, Rav Tukatzinsky's opinion was accepted by a number of poskim including the Chief Rabbinate of Israel. The Chazon Ish fought vehemently against this psak, in the belief that Rav Tukatzinsky was making a grave error in contradiction to the opinion of all rishonim.

²⁶ See *Taarich Yisroel* 1:11. Also see note 68 where he elaborates on this opinion.

²⁷ See *Encyclopedia Talmudis* vol 22 page 673. This opinion was first formulated by Rav Moshe Chaim Rimini in his sefer *Mochor Chodesh* printed in 1794.

and rest on the seventh.²⁸ Shabbos is determined by one's personal count of seven days.²⁹ In the event that the one who was lost in the desert comes upon a city that observes Shabbos on a day other than the one he was counting, he must adopt their Shabbos, as he becomes subservient or tofel to them. He keeps the local Shabbos. Following this logic, one who crosses the date line must keep the Shabbos of the local inhabitants regardless of his personal count.

Rav Isser Zalman goes on to claim that the strong evidence cited earlier in support of the Baal Hamaor was said in a theoretical vein only; the Baal Hamaor never meant to issue a psak halacha based on his understanding of the Gemara in Rosh Hashana. However, this argument is not at all convincing since the Baal Hamaor very clearly states that this opinion is to be followed lehalacha³⁰.

Rav Yonasan Shteif

Rav Yonasan Shteif³¹, claims that the date line is determined by tradition; the

²⁸ Each day is to be treated as safek and one must refrain from melacha wherever possible. On the seventh day which he considers Shabbos, Kiddush is said and one must refrain from all melachos, even d'rabanen laws. See Shulchan Aruch Orach Chaim 344.

²⁹ There are two opinions in the Gemara. Rav Huna holds that we count six days and rest on the seventh because we view the question from a *kibriyaso shel olam* perspective; we follow the days of the world. Since Shabbos was the seventh day of creation, we keep Shabbos on the seventh day from the time that one starts his count as well. Chiya bar Rav is of the opinion that the person lost in the desert must keep the very next day as Shabbos, and each subsequent seventh day is to be considered Shabbos. Shabbos is determined by the count of Adam Harishon. Adam was created on Friday, so his very first full day was Shabbos. The halacha follows the opinion of Rav Huna, *kibriyaso shel olam*.

³⁰ *Taarich Yisroel* 1:12 claims that this opinion of Rav Isser Zalman is based on a misunderstanding of the Radvaz. The Radvaz himself notes that the location of the date line is discussed by rishonim, and the Radvaz does not hint to any disagreement with their position. Hence we can readily see that the Radvaz holds that there is a specific date line, unlike the opinion of Rav Isser Zalman.

³¹ *Taarich Yisroel* 1:11 note 63 cites *Sefer Limudei Hashem* Breishis 156

tradition that each country follows. Saturday in Japan is Saturday, because that is the way it's always been. The day of the week considered Saturday in Japan would therefore be our Shabbos as we assume that this has been the tradition since time immemorial. We would therefore follow the day of the local population.

This position however does raise some very interesting questions regarding the proper day of the week to be observed in Alaska. The United States purchased Alaska from Russia in 1867. Until that year, Alaska followed the day of the week of Russia, the day observed west of the date line. The day of the week changed to the United States' day subsequent to this purchase. If the tradition until 1867 had been that Alaska is west of the date line, then a political change in the map cannot change the day of the week. Rav Shteif therefore holds that Shabbos in Alaska is on the Alaskan Friday.

Sefer Yisroel Vehazmanim notes that there were other countries that changed the day of the week to satisfy political considerations. He reports that in 1846 the Philippines changed the day of the week from east of the date line to west of it. The *Yaavetz* reports that a day change took place in India as a result of European conquerors who brought the day of the week with them from their point of origin³². These historical facts raise serious problems for those who live in the countries that experienced political day changes, according to the view of Rav Yonasan Shteif.³³

Sefer Ha'ibur

There is an opinion that indicates that the *Tibur Haaretz*, or the center of the world, is located 23.5³⁴ or 24³⁵ degrees to the east of Jerusalem. Using this as our starting point, this opinion follows the logic of the Baal Hamaor who claimed that the date line

³²*Taarich Yisroel*. 1 note 37 .See also *Encyclopedia Talmudis* vol. 22 page 674 footnote 36.

³³ For a full discussion on Alaska see *Taarich Yisroel* 1:15-16.

³⁴*Taarich Yisroel* 1:10 in the name of Rabbi Avraham Bar Chiya (11th century) in *Sefer Haibur*.

³⁵ This is based on the Rambam who states that *Tibur Haaretz* is 24 degrees east of Jerusalem. See ch. 1 note 56 where this opinion is disputed.

is 6 hours east of the starting point. Accordingly, the date line would be either 113.5 or 114 degrees east of Jerusalem.³⁶

Rav Dovid Shapiro

Rav Dovid Shapiro in his *Sefer Bnei Zion* quotes a Medrash that states that when the Sun first appeared in the sky, it was at the beginning of the fourth hour of the day in Jerusalem.³⁷ Hence, the sun first appeared 45 degrees east of Jerusalem.³⁸ Sunset, the start of the new day, which took place at that very moment in time six hours east of that point, was nine hours east of Jerusalem, a point 135 degrees east of Jerusalem, or the equivalent of 170E longitude on our maps.³⁹ Rav Shapiro continues to argue, that there is a discussion in halacha whether the day begins at sunset, Shekias Hachama, or at nightfall, Tzeis Hakochavim. All poskim agree with this latter position. Tzeis Hakochavim follows Shekias Hachama by the amount of time that it takes the sky to

³⁶ It is interesting to note that this dateline, at the 149E meridian would fall between two cities with major Jewish populations. Melbourne, Australia is at 145E while Sydney is at 151 E.

³⁷ Rav Dovid Shapiro understands the date line to be determined by the very first sunset that took place over the world at the time of creation. Similarly, *Sefer Yesod Olam* considers the first appearance of the Sun in determining the location of the date line, although he reaches a different conclusion. *Sefer Yesod Olam* accepts the Ba'al Hamaor's date line, but he wishes to understand the origin of this shita in terms of Creation. He claims that the sun first appeared over the Pacific Ocean 90 degrees east of *Ktzei Hamizrach* so that the very first rays of daybreak shone over *Ktzei Hamizrach*, the place where man would ultimately settle. According to this view, the sun first appeared 180 degrees east of Jerusalem. However, when studying the text of the Ba'al Hamaor, no reference is made that there is a link between Creation and the date line location. The Ba'al Hamaor seems to feel that the date line is merely the Torah's geographic starting point of the world.

³⁸ This is also the opinion of Rav Hai Gaon and The Sheloh.

³⁹ See *Ta'arich Yisroel* 1:10 and note 57. The Chazon Ish cites this opinion but discounts it, claiming that the date line has no relationship to the placement of the luminaries in the sky at the time of creation.

darken so that three stars are visible, when the Sun's inclination to the horizon is increased by approximately eight degrees. Tzeis Hakochavim is therefore approximately eight degrees east of Shekias Hachama. Hence, the very first Tzeis Hakochavim took place at a point very close to the 178E longitude, remarkably close (within two degrees) to the International Date Line. This incredible coincidence he feels is a strong support for his position, in that Hashem led the world convention to choose a point so close to the Torah date line.

Rav Yonah Merzbach

Rav Yonah Merzbach (former Rosh Yeshiva of Yeshivas Kol Torah and editor of *Encyclopedia Talmudis*) argues that we take the easternmost point of the Asian continent, at the very tip of Siberia, and draw a line straight down the coinciding longitude. The Bering Strait separates the East and West. Rav Merzbach's date line is close to 170W, approximately ten degrees east of the International Date Line, and 25 degrees west of Rav Tukatzinsky's.⁴⁰

Summary

It should be noted, that although these last four opinions are generally not prescribed by today's poskim, they all nevertheless use the Baal Hamaor as their basis for deciding the location of the date line. The only issue on which they argue with him is where to start counting the 90 degrees.

In practice the poskim have narrowed the decision *halacha lema'aseh* to four positions:

⁴⁰ *Taarich Yisroel* 1:11

1. The date line is 90 degrees east of Jerusalem.⁴¹
2. The date line is 90 degrees east of Jerusalem but land connected to the mainland is to also be considered west of the date line.⁴²
3. The date line is 180 degrees east of Jerusalem.⁴³
4. The date line is that which is accepted by world convention.⁴⁴

⁴¹ See *Taarich Yisroel* 1:3 for a listing of poskim who agree with this view. Refer to footnote 16 above.

⁴² *Taarich Yisroel* ch. 2 note 4 quotes Rav Shmuel Birenbaum, Rosh Yeshiva of the Mir Yeshiva who reported that when he was a student in the Mir Yeshiva in Kobe, Japan during World War II, the yeshiva observed Shabbos on Sunday. The weekday Tefila was said on Saturday and a bracha was said when they wore tefilin. However, the students of the yeshiva did refrain from doing melacha on Saturday.

⁴³ This view is shared by Rav Y.E. Henkin, Rav Shmuel Mohliver, Rav Moshe Feinstein, Rav S.Z. Auerbach, Rav Yisroel Gustman, and yibadel lechaim Rav Yosef Sholom Eliashiv.

⁴⁴ This view is shared by Rav Zvi Pesach Frank, Rav Isser Zalman Meltzer and some earlier poskim.

2

Living Beyond the Date Line

Despite our delineation of the various opinions of the poskim, we still have some ways to go before we can apply the halacha in practice. With the conclusions reached above, we can now draw a gray area,⁴⁵ spanning $\frac{1}{4}$ of the globe, from 125E to 145W, that can be divided into three sectors. They are:

Sector 1 - Points east of 125E and are west of 145W. Countries found in this sector include Japan, Korea, New Zealand, Australia, eastern China, and Siberia. The Baal Hamaor opines that this area lies east of the date line. According to the opinions of Rav Tukatzinsky and others noted in the first chapter of this book, this area is located west of the date line.

Sector 2- Points east of 125E that are not connected to a landmass, that protrude west of 125E, and that are west of the International Date Line. Countries found in this sector include Japan, New Zealand, and many of the islands of the Philippines. According to the Chazon Ish this sector lies east of the date line. Rav Tukatzinsky and Rav Isser Zalman Meltzer consider this area to lie west of the date line.

Sector 3- Points east of the International Date Line but west of 145W. The only frequently visited places in this sector are Hawaii and the western portion of Alaska. According to all opinions except for that of Rav Tukatzinsky, this area lies east of the date line. ⁴⁶

⁴⁵ Gray in terms of there being differing halachic opinions.

⁴⁶ *Taarich Yisroel* 1:15-17 goes through the many opinions regarding Alaska. Rav Tukatzinsky claims that although we do draw a straight line 180 degrees east of Jerusalem, the line does curve around the coast of Alaska. Rav Shmuel Mohliver and Rav Yonasan Shteif disagree. *Taarich Yisroel* 1:12 quotes *Mor Uketzia* that holds that if we follow the shita that there is no absolute date line, travelers who reach Alaska from Canada would keep Shabbos on the same

It would be presumptuous to attempt to resolve the issues that gedolim of the last hundred years have found to be elusive. Even the most formidable of poskim who have reached conclusions of their own are wary of challenging positions held by the greatest expert in this area of halacha, the Chazon Ish. This is especially true insofar as mitzvos d'oraisa i.e. Shabbos and Yom Kippur are concerned.

Diametrically opposed views

The Chazon Ish was firm and uncompromising in his position. He instructed the students of Yeshivas Mir to observe Shabbos on the day that was considered Sunday in Japan, and to eat on the day that according to the calendar in Japan was considered to be Yom Kippur. The Chazon Ish considered those living in Japan who observed Shabbos on Saturday to be in error, as their original determination of the days of the week was based on erroneous information.

Rav Tukatzinsky on the other hand was also just as firm in his decision to advise the visitors to Japan to observe Shabbos on the Japanese Saturday, and to fast on the day that the Jews in Japan considered to be Yom Kippur.

Both the Chazon Ish and Rav Tukatzinsky felt that anyone following the other's position was violating Torah laws which carried the most serious onesh of sekila and kares.

Most contemporary poskim, when presented with opinions of Torah giants that are diametrically opposed, are reluctant to take a firm position.⁴⁷ The Chazon Ish was held by all in the highest esteem as the undeniable expert in the field of the date line.

day as Canada, while those who reach it from Asia would keep the same day as Asia. This view is cited in *Shearim Metzuyonim Behalacha* 72 as well.

⁴⁷ *Taarich Yisroel* 2:4 quotes Rav Meir Soloveichik as saying in the name of his father, The Brisker Rov, that although in principle he sees the opinion of the Ba'al Hamaor as being the dominant one, he is reluctant to issue a psak in an area of halacha on which even Rav Yitzchok Elchonon would not decide.

This issue however was an area of uncharted waters and when the question was posed to the Gedolim of Eretz Yisroel in 1941 regarding when to observe Yom Kippur, most poskim did not side with the Chazon Ish.⁴⁸ The problem of taking a firm position is further exacerbated by other issues that following the decision of the Chazon Ish raise. When the well learned Talmudic scholars of the Mir Yeshiva violate the sanctity of Shabbos in the presence of the residents of Japan who never heard of the Chazon Ish but who had always observed Shabbos on Saturday, the sanctity of Shabbos is seriously compromised.

Compromise Solution

Some poskim have therefore proposed that because of our inability to make a ruling in matters that the greatest poskim have not come to a consensus, we have no choice but to adopt the more stringent position. These poskim recommend observing Shabbos on both Saturday and Sunday in all locations where the day of the week is uncertain. Other poskim have suggested that Shabbos be observed on Saturday but that one refrain from violating Shabbos on Sunday. Others propose that one refrain from *melachos d'oraisa* only.⁴⁹ Others prefer that Shabbos be observed on Sunday but that one refrain from *melacha* on Saturday.⁵⁰

⁴⁸ *Taarich Yisroel* 2:10 quotes *Sefer Vayashev Moshe* who states that when there is a conflict between the minority who are greater and the majority who may be of lesser greatness, that the psak follows the majority. He cites the Shach who states this rule. Furthermore, in chapter 2 note 4, *Taarich Yisroel* says that even in cases where the majority disagree with the minority but for different reasons, we often follow the majority nonetheless.

⁴⁹ *Taarich Yisroel* 2:12-16 cites a machlokes between the Magen Avraham and Taz regarding the question of Safek Shabbos; must one refrain from *melacha d'rabanen* or not. The Taz claims that we treat this *d'rabanen* like all other laws *d'rabanen* in which case we rule leniently. The Magen Avraham disagrees.

⁵⁰ *Taarich Yisroel* 2:9 cites all the varying opinions. See *Taarich Yisroel* ch. 1 note 53 and ch. 2 note 21 in which the opinion of Rav Eliashiv is cited.

Each position leads to its own set of complexities. Even the cautious approach that some suggest, to keep Shabbos or at least a modified Shabbos on both Saturday and Sunday, can cause great confusion as different groups observe Shabbos differently on certain days. A resident of a country who has always observed Shabbos on Saturday, who sees a fellow Shomer Shabbos Jew wearing tefilin on Shabbos (Saturday), will feel that this tefilin wearer is not properly keeping Shabbos, is not showing respect for the day, and from a certain perspective his actions are in a way showing actual contempt of Shabbos, Zilzul Shabbos.

On the other hand, one who keeps Shabbos for two days, not knowing with certainty which day is really Shabbos, is faced with the dilemma of which Shmoneh Esrei to say. If one says the Shabbos Shmoneh Esrei on a weekday, or the weekday Shmoneh Esrei on Shabbos, the tefila obligation is not fulfilled.

Let us therefore attempt to address some of the questions the cautious compromise solution raises, and analyze its effects on the halachos of Zilzul Shabbos, Tefila, Musaf, Tefilin, Sefiras Haomer and Yom Kippur.

Zilzul Shabbos

Zilzul Shabbos, showing contempt for the sanctity of Shabbos, is a matter of grave concern. Chazal have taken great measures to avoid situations that could lead to Zilzul Shabbos, even in cases where by following the letter of the law, the sanctity of Shabbos is not at all violated.⁵¹

According to the opinion that Sunday in Japan is considered Shabbos, and that

⁵¹An example offered by Rav Vosner in *Shevet Halevi* concerns our observance of the second day of Yom Tov. Today we have the calendar of Hillel, hence we clearly know which day is the real day of Yom Tov. Chazal nevertheless ruled that we say the Yom Tov tefila and we recite all the brochos of Yom Tov such as Kiddush and Musaf on Yom Tov Sheni, despite the fact that saying these brochos at the improper time violate the Torah laws of bracha levatala, for they felt that otherwise we would come to belittle Yom Tov Sheni.

Saturday would be considered a weekday (Chazon Ish), tefilin would be worn on Saturday and the weekday tefila would be said. If one behaves in such a manner in front of other Jews who are of the opinion that Shabbos is to be observed on Saturday, (as is the generally accepted custom among the populace), then the sanctity of Shabbos in Japan would be diminished. People who are less versed in halacha might come to draw their own conclusions based on the behavior of those ostensibly better educated in Jewish law.

Rav Simcha Zelig Riger⁵² therefore suggested that on the day considered Shabbos by the local population, one must keep all the laws of Shabbos, i.e. refraining from all melacha, d'oraisa and d'rabanen, recite Kiddush, and the Shabbos tefila. The other day, the day observed because of the *safek*⁵³ should be treated as a weekday, i.e. tefilin are worn⁵⁴, the weekday tefila is said, and Kiddush is not. However, one must refrain from all melacha.⁵⁵ This opinion is adopted by Rav Vosner in *Shevet Halevi*, and is the position recommended by the author of *Taarich Yisroel* (with minor revisions as to the order of tefilos as will be explained shortly).

The above however poses another difficulty. One who says the weekday tefila on Shabbos, or Shabbos tefila on a weekday, does not fulfill his obligation. By advising travelers to Japan to say the Shabbos tefila on Saturday so as not to confuse the Jews living in Japan, and avoid the problem of Zilzul Shabbos, we have created a new, and

⁵² Rav Simcha Zelig was the dayan in Brisk when Rav Chaim Soloveichik was the Rav.

⁵³In Japan, Saturday would be the main Shabbos, Sunday is the day observed because of safek. In Hawaii, Saturday would be the main Shabbos while Friday is the day to be observed because of safek.

⁵⁴ When donning the tefilin, no bracha is said. Additionally, one should make his wearing of the tefilin conditional on his obligation to wear them. A *tnai* should be said before putting them on, as explained in the next section of this chapter.

⁵⁵ *Taarich Yisroel* 2:7 discusses at length the issues of Zilzul Shabbos. See also *Taarich Yisroel* 2:3 where the opinions of Rav S.Z. Riger and Rav Vosner in *Shevet Halevi* are greatly influenced by the concern for Zilzul Shabbos.

possibly more serious sha'ailo.

Sefer Yisroel Vehazemanim addresses this issue by offering a novel approach. He recommends that the weekday tefila be said on both days, Saturday and Sunday, but that the following phrase be added before the conclusion of the bracha of *Shma Koleinu*: “*Elokeinu v’elokei avoseinu, r’tzeh viminuchaseinu..... ki atoh mekadesh hashabos veshomea Tefilas amecha Yisroel berachamim.*” In theory, all nineteen brochos of Shmoneh Esrei should be said on Shabbos, provided that a mention of Shabbos be included within the tefila. Chazal however felt that saying all nineteen brochos plus an addition for Shabbos would be too long to say on Shabbos. They therefore ruled that only seven brachos be said; the three opening brachos, the three closing ones, and a seventh bracha in the middle dedicated to Shabbos. It is for this reason that the normal Shabbos tefila does not include the thirteen middle brachos that deal with our personal requests. However in case of *safek*, *Yisroel Vehazemanim* rules that we may say the thirteen middle brochos that are normally said on weekdays, and add a mention of Shabbos; this would satisfy the obligation of both the weekday tefila as well as the Shabbos tefila. In this way one did in fact fulfill his obligation.⁵⁶

This suggestion however is only a partial solution. *Yisroel Vehazemanim*'s recommendation cannot be applied to Musaf. Since it is Shabbos specific, we do not have the option of saying a weekday tefila with mention of Musaf. And if it would be said on a weekday, one encounters the serious problem of bracha levatala. *Yisroel Vehazemanim* therefore admits that since we have no choice in this matter, Musaf should not be said at all.

But this solution leaves much to be desired. *Yisroel Vehazemanim* is proposing that Musaf can never be said in Japan. While a convincing argument can be made to support this position, poskim find this difficult to recommend.

The author of *Taarich Yisroel* has therefore developed an interesting alternative

⁵⁶ *Taarich Yisroel* 2:19

solution. There are times, when it is impossible to daven verbally, that many poskim advise that bedieved, tefila be said mentally, with *hirhur*. For example, if a person is too ill to say the words of tefila, he may daven with *hirhur*. In our case too, which would be considered bedieved, it is certainly advisable to daven Musaf with *hirhur*.⁵⁷

Tefilin

Since Tefilin are not worn on Shabbos, wearing them in a situation where it is the custom that they not be worn, creates a problem of Zilzul Shabbos. The performance of an ostensibly forbidden action in the presence of others who observe Shabbos, is a contempt of Shabbos, the permissibility of the action notwithstanding. However, it is only forbidden to wear tefilin on Shabbos if one intends to fulfill the mitzva of tefilin but not if one wears it for some other purpose.⁵⁸ In our discussion above, since we are treating both days as a *safek*, we can in fact wear tefilin on both days provided that we make the donning of tefilin conditional on our obligation to wear them. For example, on Chol Hamoed, when the obligation to wear tefilin is questionable, the *Mishna Berura* suggests that the tefilin be worn but that the following *t'nai* be said before donning them: "If I am obligated to wear tefilin, then my wearing of them is for the purpose of the performance of the mitzva. If on the other hand it is not obligatory, then I am not wearing them for the purpose of the mitzva". Therefore, in our case, tefilin should be worn on both days without a bracha, and that the *tnai* or condition suggested by the *Mishna Berura* with regard to Chol Hamoed be said prior to donning them. Needless to

⁵⁷ *Taarich Yisroel* ibid who cites as support for this position the *Pri Megadim* as quoted by the *Mishna Berura* 94:21.

⁵⁸ The classic case referred to in halacha with regard to one who wears tefilin for purposes other than fulfilling the mitzva, is where one finds tefilin on Shabbos in a public domain that offer the tefilin no protection from being desecrated. In order to remove the tefilin from that place, one must wear them until he reaches a place where they can be safely placed, for on Shabbos one may not carry them to safety (Eruvin 95).

say, the tefilin should be worn in the privacy of one's home so as not to raise questions of Zilzul Shabbos and possibly compromise the sanctity of the day for others.⁵⁹

Sefiras Haomer

If a person is uncertain of which is the proper day of the sefira, because he is uncertain on which side of the date line he is located, he may choose to treat both days as a *safek*. It would then seem logical to count both days. At first glance it would appear that there is no harm in counting an extra day.

Tshuvos Dvar Avraham however opines that nothing is accomplished by counting an extra day in cases of uncertainty. He argues that when one is in doubt and counts both days, (e.g. by saying "Today is day number five" and moments later saying "Today is day number six"), he clearly indicates that he is uncertain of the correct day. Knowing the proper day to be counted is the entire crux of counting Sefira.⁶⁰ A questionable count is no count at all. In such a case, no count should be said altogether.

On the other hand, *Taarich Yisroel* suggests that one who is in a place with an uncertain date, should count the day that the locals consider to be the proper day, and then afterwards count the day in question *misafek*. He reasons as follows. In the first place, the position adopted above with regard to Shabbos, considers the day of the week accepted by the local population as the primary day. The other day (i.e. Sunday in Japan or Friday in Hawaii) is observed only in a minor way. Hence, we could certainly rely on this position with regard to the counting of Sefiras Haomer. Secondly, *Dvar Avraham* himself cites the Ran and Baal Hamaor who claim that one may count both days in cases of *safek*. And lastly, even *Dvar Avraham* says that one can count two days

⁵⁹ *Taarich Yisroel* 2:18

⁶⁰ *Taarich Yisroel* 2:20 and in note 58 cites the opinions of the *Avnei Nezer* and *Arugas Habosem* who concur with *Dvar Avraham*.

misafek without a bracha. Hence, *Taarich Yisroel* rules that both Sefiros be counted⁶¹; the first with a bracha should be the day that the local population follows, and the second count is that of the day in question.⁶²

Yom Kippur

As we explained in our introduction, the date line question as it relates to Yom Kippur was the springboard for much of the discussion on the topic. Even though we have listed many poskim who feel that one should be stringent and keep two days Shabbos in cases of *safek d'oraisa*, it is difficult to demand that one keeps two days Yom Kippur as this may lead to situations of danger to life, *Pikuach Nefesh*.⁶³

The author of *Taarich Yisroel* therefore proposes that the approach to the *safek* of Yom Kippur be treated in the same way as we dealt with Shabbos. The day that the local population considers to be the day of Yom Kippur must be kept as Yom Kippur. On the other day, which is the *safek* day⁶⁴, one must refrain from all melacha. However, with regard to fasting, only if one is absolutely certain that he would not be putting himself into any danger whatsoever, may he fast on the *safek* day. Even so, it is

⁶¹ *Taarich Yisroel* 2:20 suggests that when one counts both days because of uncertainty of the correct day, that he say the following *tnai* before the count. "If the first count is correct then let the first count be considered the fulfillment of my mitzva of Sefiras Haomer, but if the second count is the correct one, then let that day be considered my fulfillment of the mitzva of Sefira".

⁶² *Taarich Yisroel* 2:20-25.

⁶³ It is interesting to note, that when the Chazon Ish stood alone against Rav Tukatzinsky and the other poskim during the famous question regarding Yom Kippur 5702, the Brisker Rav who was in basic agreement with the Chazon Ish, did not publicly support him, for fear that some may be stringent and fast 2 days, thereby putting themselves at risk. See *Pe'er Hador* chapter 24.

⁶⁴ The *safek* day in areas west of the International Date Line but east of the halachic date line (i.e. Japan) is the day following what is considered to be Yom Kippur. In areas east of the IDL but west of the Halachic date line (i.e. Hawaii), the *safek* day is the day prior to what is considered to be Yom Kippur.

preferable for one who feels strong enough to fast on both days, to eat only less than the *shiur* to avoid any questions of *pikuach nefesh*. If one finds that even this recommended practice is too difficult to follow, one may rely on those who rule leniently and not fast at all on the *safek* day⁶⁵.

⁶⁵ *Taarich Yisroel* 2:17.

3

Crossing the Date Line

Up to this point, we have dealt with the halachic definitions of the date line, and how that impacts upon the inhabitants of those parts of the world affected thereby. This chapter is devoted to the halachic ramifications resulting from crossing the date line.

A non-stop flight from New York to Taiwan leaves that New York at noon on Sunday arrives in Taiwan fifteen hours later at 3 AM Monday New York time which is Monday 4 PM local time. Eleven time zones have been crossed. As one travels from east to west, each time zone crossed moves the clock back one hour. The apparent movement of the sun vis-a-vis the traveler is therefore only four hours ($15-11=4$). All fifteen hours of this flight took place during daylight.

Rav Tukatzinsky's date line was crossed approximately seven hours into the flight, the International Date Line was crossed about three hours later, while the Baal Hamaor's and Chazon Ish's date line was crossed less than one hour before landing. Hence, local time in Taiwan upon landing is 4 PM on Monday rather than 4 PM on Sunday. Upon deplaning it is time for Monday Mincha. How does one compensate for Sunday's Mincha and Maariv, as well as Monday's Shacharis?

If Sunday was a fast day, when may one eat? Does the fast end when the day/date changes midday? Or must one wait until nightfall? Since the plane landed in Taiwan on a Monday afternoon, and Monday was not a fast day, may our traveler eat even though he saw no sunset?

On the return flight, a common departure time from Taiwan is 10 AM. The Baal Hamaor's date line is crossed about one hour into flight, the International Date Line about five hours after takeoff, and Rav Tukatzinsky's at about eight hours into the flight. One who leaves Taiwan at 10 AM on Monday (Sunday 9 PM in New York) will arrive in New York 13 hours later at 10 AM Monday. However since the direction of

this flight is eastward, in these thirteen hours one flies through a sunset and second Monday morning sunrise. Having davened Shacharis on Monday morning before leaving Taiwan, must one daven Shacharis again upon arrival in New York? Must one daven Mincha again on Monday afternoon in New York after having said Mincha on the plane on Monday afternoon? Must one don tefilin a second time? If the Monday that one left Taiwan was a fast day, may one eat as soon as he sees darkness? Must one fast again when the sun rises for our traveler's second Monday?

If one left Taiwan on Friday morning traveling eastward, did Shabbos begin for him when the sun set? Assuming that Shabbos did begin, what happens when he crosses the date line and Friday night becomes Thursday night? Is Shabbos over?

In order to gain an understanding as to how crossing the date line affects each area of halacha, we must first clearly define the precise criteria within specific categories of mitzvos that obligate the performance of each mitzva, and apply our findings accordingly.

Shabbos

Shabbos is clearly determined by location, i.e. the place that one finds himself when Shabbos begins.⁶⁶ Shabbos is on the seventh day of the week anywhere in the world, the week being defined as the seventh day of the seven day cycle beginning from the time of creation. It is not at all dependent on a person's personal count of seven sunrises and sunsets.

The poskim deal with two basic problems; how one is to behave if he crosses the date line during Shabbos to a place where it is no longer Shabbos, or the opposite, when he crosses the date line from where it is no longer Shabbos to where it still is. When one crosses on Shabbos to a place where it no longer Shabbos, is the day cut short, and can one stop observing Shabbos in the middle of the day? On the other hand, when going

⁶⁶ *Taarich Yisroel* 4:4-5

from a place where it is no longer Shabbos to a place where it is still Shabbos, must he observe Shabbos again? Must one refrain from melacha on this second Shabbos, and must one say Kiddush even after having just recited the Havdala?

With regard to the former question- can Shabbos be cut off midstream- *Sefer Eretz Zvi*⁶⁷ is of the opinion that an individual has a personal obligation to complete the full 24 hours of Shabbos even if he now finds himself in a place that is no longer observing Shabbos.⁶⁸

The Chazon Ish on the other hand feels that Shabbos is determined by location only. Hence, if one crosses the date line on Shabbos, from a place that is still observing Shabbos to a place where Shabbos ended, then this person's Shabbos ended early. This latter opinion is supported by *Bezel Hachochma*, Rav Ben Zion Abba Shaul, Rav Chaim Pinchos Scheinberg and Rav Chaim Kanievsky⁶⁹. Rav Kanievsky however cautions, that one must do all in his power to refrain from cutting his Shabbos short, except in case of great necessity.

Regarding the latter question- do we so to speak turn the clock back- where one who has already completed his 24 hours of Shabbos flies to an area where Shabbos is still being observed,⁷⁰ since Shabbos is determined by the day of the week, one must refrain from melacha when one reenters his second Shabbos. Location determines the advent of Shabbos.⁷¹

⁶⁷ *Sefer Eretz Zvi* was written by Rav A.Z. Frommer, a Rosh Yeshiva in Yeshivas Chachmei Lublin.

⁶⁸ *Taarich Yisroel* 5:3. *Sefer Yisroel Vehazemanim* notes that this opinion was also held by the *Imrei Emes* and *Sefer Be'er Moshe*.

⁶⁹ *Taarich Yisroel* 5:9

⁷⁰ One who flies from Hong Kong to New York on Sunday, can very often find himself in the position whereby he crosses the date line before nightfall. In that case, Sunday becomes Saturday and one has just reentered Shabbos.

⁷¹ *Taarich Yisroel* reports that Rav Gustman advised passengers whose flight path takes them into a part of the world where Shabbos is being observed, that the traveler remove muktza

With regard to the obligation of reciting Kiddush when one reenters Shabbos, we find differing opinions among contemporary poskim. Rav Gustman and Rav Scheinberg are of the opinion that Kiddush should not be recited again. Rav Eliashiv on the other hand feels that one who reenters Shabbos by crossing the date line must recite Kiddush.⁷²

Poskim raise a related question regarding the permissibility taking a flight which will bring a person into a situation whereby he reenters Shabbos. May one schedule a flight that leaves Taiwan at 10 AM on Friday and arrives in New York at 10 AM on Friday? At some point during the flight, depending on the season, the plane flies into the night before crossing the date line. When nightfall arrives, it is Friday night. Several hours later, as the date line is crossed, the day of the week reverts back to Thursday. Friday night (Shabbos) becomes Thursday night.

There are a number of poskim who do not permit taking this flight. The objections raised are twofold. *Minchas Yitzchok* argues that flying a plane on Shabbos should be forbidden for the same reason that the Chasam Sofer objected to riding in a train. The Chasam Sofer bases his objection to riding a train on the Ramban in Parshas Emor. The Ramban says that an integral part of observing Shabbos requires one to rest on Shabbos. This obligation to rest is a halacha separate from the many halachos that call for refraining from doing melacha. He learns this from the positive command of *Tishbos*. When riding on a train that moves from side to side, one cannot rest as if he were at home, and one is unable to truly enjoy Oneg Shabbos. In essence, riding a train is not in the spirit of the day.⁷³ *Minchas Yitzchok* equates the discomfort of having to

from his pockets until the plane reaches a point where it is clearly no longer Shabbos. *Taarich Yisroel* ch. 21 note 21 points out that one who is on a plane while flying over an area that is observing Shabbos, must take the necessary precautions to avoid using the plane's bathroom facilities during that period. The bathroom lights go on automatically when the door is shut. In the event that one must use the facilities, one may ask a non Jew to open the bathroom door. See *Taarich Yisroel* for an in depth explanation of this issue.

⁷² *Taarich Yisroel* ch. 4 note 7.

⁷³ *Taarich Yisroel* 21:2.

fasten seat belts when riding through turbulence in today's modern planes, to a bumpy train ride to which the Chasam Sofer refers.

The second objection raised, is whether the flight should be disallowed because it may violate the laws of Techum Shabbos. There is an unresolved question in the Gemara whether the laws of techum apply to space above ten tefachim. If this unresolved question would be limited to d'rabanan law, a lenient position may be adopted. However, when one travels beyond the twelve mil (approximately eight miles) limit, according to many, the techum question enters the d'oraisa arena. Normally, the stringent position is adopted in unresolved d'oraisa questions.⁷⁴

Taarich Yisroel proves that this latter question of techum is not a valid objection to the Friday flight. The twelve mil limit for techum d'oraisa does not apply to trips over a carmelis. And since the entire Shabbos portion of the flight takes place over the ocean, a carmelis, the techum question can be no more than a d'rabanan issue.⁷⁵ Furthermore, since flying home to join one's family for Shabbos is certainly considered to be a trip for the purpose of a mitzva, we may take the lenient position regarding techum.⁷⁶

To counter the argument raised by *Minchas Yitzchok*, *Taarich Yisroel* goes to great lengths to prove that riding in a bumpy train is not a violation of the *Tishbos* command. *Tishbos* is limited to actions which are related to melacha.⁷⁷

Rav Gustman, Rav Eliashiv and Rav Scheinberg⁷⁸ all permit one's taking the

⁷⁴ *Taarich Yisroel* 21:2 who cites this argument in the name of *Tshuvos Maishiv Sholom*. This question is discussed in *Taarich Yisroel* 21:3 in the name of *Tzitz Eliezer*.

⁷⁵ The entire Shabbos portion is flown over the ocean. Even if the date line is not reached until the plane reaches the land over Alaska, we have already shown that Alaska is considered east of the date line. Furthermore, the vastly uninhabited land over which the plane does fly is also considered a carmelis.

⁷⁶ *Taarich Yisroel* 21:3

⁷⁷ *Taarich Yisroel* 21:3-11 proves that even the Chasam Sofer would not necessarily object to the Friday flight.

⁷⁸ *Taarich Yisroel* 21:15

flight in order to be home for Shabbos with one's family.⁷⁹

Matzo, Shofar, Megila

Performance of other mitzvos effected by the calendar, i.e. eating matzo on the 15th night of Nisan, blowing Shofar on the first day of Tishri, or reading the Megila on Purim, are not treated in the same manner as Shabbos. In the case of Matzo or Shofar,

⁷⁹ When one takes the Friday flight, great attention must be paid to the times of sunset, nightfall, sunrise, and when the date line is crossed, for purposes of knowing when and what to daven as well. The following is an approximate illustration of a flight pattern from Korea to New York during November when the night portion of the flight is relatively long. The plane leaves Korea at 10 A.M. on Friday morning. At four hours after takeoff, sunset is seen. The plane's location is at 160E. Nightfall comes about 30 minutes later at 165E. The International Date Line is reached 30 minutes later when the plane reaches the 172E meridian (the date line zigzags in the North Pacific). One hour later, at about 6-1/2 hours into the flight, the Alaskan coast is reached. One hour later, 7-1/2 hours after takeoff, Rav Tukatzinsky's date line of 145W is crossed.

From the time that sunset occurs until the crossing the 145W meridian (approximately 3-1/2 hours), one must refrain from melacha. In the summer months, this period is considerably shortened.

With regard to Tefila, it is suggested that the reader first read the section of this chapter that pertains to the order of tefilos when crossing the date line. Having read that section, we can apply the rules as they pertain to Tefila as follows. If Maariv is said between hours 5 and 7-1/2, that is between nightfall and the crossing of the date line, the Shabbos Maariv would be said. That would present a serious problem for the traveler when he returns to New York on Friday morning. For when he goes to shul on Friday night, he cannot say Maariv again, having already said a Shabbos Maariv on the plane, according to the view of Rav Roth. Nor will the compromise option that is suggested regarding Tefila later in this chapter satisfy this condition, because a Tefilas nedava cannot be said on Shabbos. It is therefore recommended that one delay davening Marriv until after the date line is crossed. At that point it will be his second Thursday night. A tefilas nedava is in order as explained in the compromise option. One can then daven the Shabbos Maariv on Friday night in New York without any problems.

once the mitzva specific to that date is performed, it need not be performed again until the next cycle of its obligation. While this definition of date related mitzvos is not universal, it is certainly accepted by the majority of opinions.⁸⁰

The difference between Shabbos and Matzo can best be illustrated as follows. Suppose the first day of Pesach falls on a Shabbos. On Friday night, a person just west of the date line ate matzo and made Kiddush. At the conclusion of Shabbos immediately after nightfall on Saturday night, he flies eastward, over the date line into Friday night. While one must refrain from doing melacha again because one now finds himself in a location in which Shabbos is being observed, this traveler need not eat matzo again because the mitzva had already been performed the night before. This person already fulfilled his annual obligation to eat matzo this Pesach, and the fact that Pesach has somehow reappeared, does not form a new obligation for Matzo. Matzo is a personal mitzva, to be performed once a year on the 15th night of Nisan. It is not at all dependent on location. Shabbos on the other hand, is determined only by the day of the week dependent upon one's location, not the calendar date.

Chanuka

The lighting of Chanuka candles is a mitzva performed on an annual cycle, similar to the above mentioned mitzvos of Matzo, Shofar, and Megila. Chanuka, however has one distinctive character. The mitzva calls for one to light candles on each night of eight nights starting on the 25th day of Kislev. Hence, all days following the first

⁸⁰ *Taarich Yisroel* 4:4-5. One important dissenting view is that of Rav S.Z. Auerbach. He felt that Matzo is determined by the day, not date. He held that if one fulfilled the obligation of matzo and subsequently the day repeat itself, one must eat matzo again. Furthermore, Rav Auerbach held that as far as Tefila is concerned, if the day is repeated that the Tefila need not be repeated. In this case he agrees with the opinion of Rav Roth as we shall discuss shortly. These two positions are difficult to reconcile as they seemingly are in conflict.

day are not date specific.⁸¹ We simply add one candle on each subsequent night.⁸² Therefore, if one crossed the date line in an eastward direction, from Taiwan to New York, although one experiences a new night which would obligate one to light candles again, it would also call for the addition of one candle, as this is the performance of the next night's mitzva, even though the date has actually moved backwards.

Carrying this argument through to its logical conclusion, the traveler from Taiwan to New York is actually observing a different night of Chanuka than New Yorkers. Consequently, Chanuka ends on the 7th day of Chanuka in New York for this traveler, for he has already lit candles on eight nights.

On the other hand, a trip in the opposite direction, from New York to Taiwan, whereby a day is actually lost in transit, would necessitate the traveler to observe Chanuka for only seven days.⁸³

This view is adopted by Rav Y.S. Eliashiv.⁸⁴ Rav Eliashiv feels that Chanuka is not date specific and an additional day of Chanuka begins at one's personal experiencing a new nightfall. Rav Eliashiv however states, that the number of candles that one actually lights is to be consistent with the number of days being observed by the local population.⁸⁵ With regard to lighting candles on the 8th day of Chanuka in

⁸¹ We do not say that candle number 1 is on 25 Kislev, candle number 2 on 26 Kislev, etc. For the number of days of Kislev changes. If Kislev is 29 days, then the 6th night of Chanuka is on 1 Teves, whereas if Kislev has 30 days, then the 6th night of Chanuka is on 30 Kislev. See *Taarich Yisroel* ch. 22 note 40.

⁸² By adding a candle, we mean that one is celebrating the next day of Chanuka. Technically, one can perform the mitzva of candle lighting with a single candle on each night. Our minhag of *mehadrin min hamehadrin* calls for the addition of candles on each night.

⁸³ Lighting candles on the following night is not possible, as it is no longer Chanuka.

⁸⁴*Taarich Yisroel* 22:23. *Bezel Hachochma* concurs with this opinion.

⁸⁵Since the main mitzva of lighting Chanuka candles is only one candle each night, and the additional candles are a form of *hidur mitzva*, to proclaim the greatness of the miracle by declaring publicly which night it actually is for those who view the candles, if the local

New York, *Bezel Hachochma* states that even though for this traveler Chanuka ended a day earlier, he must nevertheless light candles because of *chashad*, lest anyone suspect that this person is not observing the mitzva of candle lighting.⁸⁶

Rav Chaim Kanievsky and Rav Scheinberg however take a different approach to the mitzva of Chanuka.⁸⁷ They see it as being date specific, similar to Matzo and Shofar. They therefore feel that one who travels in an eastward direction moving the date backwards, does not have to light candles again when he arrives in New York if he already lit candles for that night in Taiwan.⁸⁸ Conversely, one who travels in a westward direction, thereby losing a day as the date is pushed forward, lights the number of candles that the local population lights. Chanuka is determined by location, so in effect a day is lost. This person would light candles on only seven nights that year.⁸⁹

population is observing a number different than the traveler, lighting a different number of candles than recognized by the locals, will cause confusion. Rav Eliashiv draws a parallel between this case and one who has only two candles on the third night. In this case almost all poskim agree that one should light only one candle, as the lighting of an additional candle in this case is not a *hidur*. Lighting two candles on the third night would only cause confusion. Although *Taarich Yisroel* 22:24 notes a dissenting view, most poskim say that the mitzva of mehadrin calls for one to light the appropriate number of candles that those who observe them can relate to.

⁸⁶*Taarich Yisroel* 22:26. In 22:28, *Taarich Yisroel* proves that no bracha should be made when one lights for purposes of *chashad* only.

⁸⁷*Taarich Yisroel* 22:27-30

⁸⁸*Taarich Yisroel* 22:28 notes that Rav Chaim Kanievsky did say that possibly because of *chashad* one should light the candles in New York.

⁸⁹*Taarich Yisroel* 22:1-18 discusses in great detail the question of whether or not a traveler must light candles at all if his wife lights candles at home. The *Sfas Emes* questions whether the mitzva of candle lighting is a mitzva on the individual (similar to Lulav), or on the household (similar to Mezuzah). Our minhag is for a traveler to light candles even if his wife lights at home.

Bris Mila, Pidyon Haben, Bar Mitzva

At first glance, it would seem that Mila, Pidyon Haben, and Bar Mitzva, would not be determined by the world date. Since a Bris is performed when the boy is eight days old, crossing the date line does not make a seven-day old boy, eight days old. The same applies to the counting of thirty days for Pidyon Haben or thirteen complete years for Bar Mitzva.

The above is the position of Rav Bezalel Stern in *Bezel Hachochma*.⁹⁰ Rav Stern opines that mitzvos that are dependent on the calendar such as Shofar, Lulav and Matzo are effected by the date change of crossing the date line. Mitzvos that are dependent on a person's age, i.e. the sum of the sunrises and sunsets that this individual has experienced, are not.

Bezel Hachochma offers the following hypothetical argument to support his opinion.⁹¹ Halacha requires that the parshiyos of tefilin must be written in a specific order.⁹² The writing of the parsha of *Shma* must precede the writing of the parsha of *Vehaya*. Suppose a sofer in China wrote the parsha of *Shma* on a Monday, and then flew to New York that very afternoon. When he crossed the date line during this flight, the calendar day moved back from Monday to Sunday. After crossing the date line the sofer writes the parsha of *Vehaya*. Could one possibly argue that the writing of *Vehaya* on Sunday preceded the writing of *Shma* on Monday? Rav Stern therefore concludes that mitzvos that are dependent on the individual cannot be affected by the calendar date.

A second question discussed at length in *Taarich Yisroel* 22:19-22 pertains to the question of whether it is preferable for the traveler to light candles in his hotel room where the room is rented specifically to him, or in a restaurant where the candles can be seen by others, and there is greater *pirsumei nisa*.

⁹⁰ *Taarich Yisroel* 12:9 quotes this view regarding Bar Mitzva. In 14:1-2 this same view is quoted with regard to bris mila. This opinion is supported by Rav Chaim Pinchos Scheinberg and *Tshuvos Beis Avi*.

⁹¹ *Taarich Yisroel* ch. 12 note 25.

⁹² *Shulchan Aruch Orach Chaim* 32:1.

Rav Yechezkel Roth in *Emek Hateshuva* offers a dissenting view.⁹³ Rav Roth quotes a Yerushalmi which discusses the halachic ramifications of a minor girl's third birthday. For example, prior to that date, one who has illicit marital relations with her, does not incur the Torah's prescribed penalty. Afterwards he would. However, if her birthday takes place in the month of Adar, and Beis Din then decreed that a month be added to the year thereby making it a leap year, the aforementioned act committed during the extra month, would still be considered happening prior to her third birthday. Her position as a three year old has been reversed. *Sefer Yemei Nechemia* makes the same argument for a boy who turns thirteen during Adar. Although he may have been considered a *gadol*, an adult, for 29 days of Adar, if Beis Din decreed a leap year, his status for the prior 29 days has just changed from *gadol* to *katan*.⁹⁴ In short we see that the clock can be turned back.

To counter this argument, Rav Scheinberg claims that there is a significant difference between the case of the leap year and our case of crossing the date line.⁹⁵ Where the Beis Din decrees a leap year, there is a date change in the world and all calendars are set back. There is so to speak a physical change in the world which would change the status of a *gadol* to a *katan*. Crossing the date line on the other hand is a very individual matter. Rav Scheinberg therefore holds that with regard to Bris Mila and Pidyon Haben, the time is determined by one's personal count and not the date.

⁹³ *Taarich Yisroel* 12:4 cites this view with regard to Bar Mitzva. In 14:3 this same view is quoted regarding Bris Mila.

⁹⁴ *Taarich Yisroel* 13:8-9 notes that there is a machlokes regarding moving the clock back. The Rosh is of the opinion that when Beis Din made a leap year that the effect of the leap year is not retroactive to the beginning of the month. The change is only effective *mikan u'lehabo*, from now on. Other poskim seem to disagree.

⁹⁵ *Taarich Yisroel* 12:11.

Rav Chaim Kanievsky in principle⁹⁶ is in agreement with the view of Rav Roth with regard to the time of Bris Mila and Pidyon Haben. He holds that a baby born on a Monday who crossed the date line in a westerly direction (thereby losing a day as the date is pushed forward), would have his Bris on the following Monday rather than on Tuesday. The determinant for Bris is the date, not the personal day count.⁹⁷

Rav Eliashiv is of the opinion that the determining factors for the timing of the three halachos of Bris Mila, Pidyon Haben, and Bar Mitzva, are not necessarily consistent. While Bris and Pidyon Haben are determined by the personal count, Bar Mitzva is different. Bar Mitzva is an anniversary date of when a boy becomes 13. It is not a count of the number of days since his birth. Since each year has a different number of days, the day count is irrelevant. Rav Eliashiv therefore holds that although Bris Mila and Pidyon Haben are determined by the person's actual age, the time of the Bar Mitzva is decided by the date.⁹⁸

The net result of the above can be summarized as follows. *Bezel Hachochma* and Rav Scheinberg feel that the eight days of Bris Mila, thirty days of Pidyon Haben, and thirteen full years until Bar Mitzva, are determined by the person's actual age, as these milestones reflect the individual's having reached a certain stage in life. Crossing the date line will have no effect on these days. So a child born on a Monday who crosses the date line from New York to China before his Bris, must wait until he has seen seven

⁹⁶ Rav Kanievsky is of the opinion that a date cannot be pushed backward to make a *gadol* into a *katan*. He nevertheless holds that the date determines the times of Bris, Pidyon Haben, and Bar Mitzva..

⁹⁷ *Taarich Yisroel* 15:14. See also *Taarich Yisroel* 15:3 where Rav Chaim Kanievsky is quoted as saying with regard to Bris Mila "*sh'mo gorem*" - the name of the day is the determining factor. See also ch. 14 note 2.

⁹⁸ *Taarich Yisroel* 12:17-19

sunsets. Hence the Bris will take place on Tuesday in China.⁹⁹

Rav Chaim Kanievsky on the other hand feels that these mitzvos are date specific. A child born on a Monday who travels from New York to China before his Bris, must have his Bris on Monday in China. The same would apply to the timing of his Pidyon Haben and Bar Mitzva.

Rav Eliashiv's opinion is that although the time of a Bris Mila or Pidyon Haben are determined by the personal day count of the child, with regard to Bar Mitzva, the date is the factor that sets the time of the event.

Shiva Nekiym

With regard to a woman counting the seven clean days before immersing in the mikva, everyone¹⁰⁰ agrees that the determinant is the personal count. This is because the Torah says regarding this count, *vesafra lah*, she must count to herself. Hence a woman who made her hefsek tahara on Monday afternoon, would immerse herself in the mikva on the following Monday night after nightfall- Tzeis Hakochavim. If she made her hefsek tahara in New York on Monday and traveled to Taiwan during the week of Shiva Nekiym, thereby crossing the date line en route, she may not immerse herself in the Mikva until Tuesday night in Taiwan.¹⁰¹

The poskim query whether these seven days are seven 24-hour periods, or merely the witnessing of seven sunsets. A woman flies from New York to Europe during the Shiva Nekiym. At the time of immersion at Tzeis Hakochavim on day number seven in Europe, it is still daylight in New York (her point of origin). Some

⁹⁹ It is interesting to note that twins who travel from New York to China, one traveling via the Pacific (thereby crossing the date line), and the other traveling to China via the Atlantic, will have their Bris Mila on two different days.

¹⁰⁰ *Taarich Yisroel* 15:3 cites Rav Chaim Kanievsky as being uncertain about this psak.

¹⁰¹ *Taarich Yisroel* 15:4

poskim¹⁰² feel that she must wait until the time of Tzeis in New York to immerse herself in the Mikva. However, the great majority of poskim¹⁰³ conclude that she may immerse herself at the time of Tzeis wherever she is located.

Shivas Y'mei Aveilus

The rules of Shivas Y'mei Aveilus follow the same rules as stated above with regard to Shiva Nekiyim. The count of seven days of mourning is a personal one. The calendar date has absolutely no effect on it. Hence, a person whose first day of *Aveilus* fell on a Monday in New York, who then crossed the date line in a westerly direction (e.g. to Taiwan),¹⁰⁴ would conclude the Shiva on the following Monday morning in Taiwan. Conversely, one who sat Shiva in Taiwan on a Monday, and who then crossed the date line in an easterly direction (e.g. to New York), would conclude the Shiva on the following Shabbos morning.¹⁰⁵

Vestos

The halacha demands that a woman must anticipate her monthly cycle in order to assure the prevention of transgressing the laws of Niddah. Some women have very regular cycles and can accurately anticipate the day and sometimes even the hour when their cycle will commence. Since most women however have an irregular cycle, the halacha prescribes that they anticipate their cycle on three days of each month. The three days are referred to as *Vest Hachodesh*- the calendar date of her last period, *Vest*

¹⁰² *Taarich Yisroel* 15:7 quotes *Sefer Divrei Sholom* that holds this view.

¹⁰³ *Taarich Yisroel* 15:9-11 quotes *Minchas Yitzchok*, *Shevet Halevi*, *Beer Moshe*, and Rav Chaim Pinchos Scheinberg among others who support this view.

¹⁰⁴ One may not travel during aveilus except in cases of extenuating circumstances.

¹⁰⁵ *Taarich Yisroel* 17:11-13. Interestingly, *Taarich Yisroel* 17:13 does cite the opinion of Rav Chaim Kanievsky who opines that shiva is also determined by the calendar date, and crossing the date line would have an effect on it. However, Rav Kanievsky is a minority view in this matter.

Haflaga- the interval since her last period, and *Ona Beinonis*- the average interval which is either 30 or 31 days since the last period.

If her cycle began on the 10th day of Kislev, then the woman must anticipate the cycle on the 10th day of the following month, Teves. Since this *Vest Hachodesh* is date specific, crossing the date line has a very definite effect on when to anticipate her next period, i.e. she must anticipate the *Vest Hachodesh* on the 10th of Teves wherever she is. Although she may have lost a day during the month by crossing the date line, the calendar date is the only controlling factor.¹⁰⁶

Some illustrated examples would be appropriate. If a woman crossed the date line on the day of her *vest*, in an east-west direction, (e.g. from New York to Taiwan), she might completely miss the day that she must anticipate her period. A plane that leaves New York at midnight on Sunday, arrives in Taiwan early Tuesday morning. If her *Vest Hachodesh* fell out on Monday, she would have no *Vest Hachodesh* that month.¹⁰⁷ On the other hand, if she flew in a west-east direction on the day of the *Vest Hachodesh*, she would keep two days that month. If the date repeats itself, then *Vest Hachodesh* being date sensitive, repeats itself as well.¹⁰⁸

The *Vest Haflaga* interval is a personal count. If the interval between her previous cycle was 28 days, then she must count her personal 28 days to predict when her next period will commence. Consequently, crossing the date line has no effect whatsoever. The woman is only required to count sunsets.¹⁰⁹

¹⁰⁶ *Taarich Yisroel* 16:8

¹⁰⁷ The vest is one *ona*, a 12 hour time slot during which the woman anticipates her period. The *ona* can be either a daytime one (from sunrise to sunset) or a nighttime *ona* (from sunset to sunrise). If the *ona* during which she anticipates her period was for example on a Monday, and she left New York on the Sunday night prior to that Monday, then she will miss her *ona*; for the entire flight takes place at night, and she will not arrive in Hong Kong until the sunrise of Tuesday.

¹⁰⁸ *Taarich Yisroel* 16:11

¹⁰⁹ *Taarich Yisroel* 16:12

The *Ona Beinonis*, is for all intents and purposes a variation of the *Vest Haflaga* interval cycle.¹¹⁰ It therefore has the same halachos as the *Vest Haflaga*, and crossing the date line has no effect on the *Ona Beinonis*.

Tefila

Tefila presents a traveler with the most common dilemmas. Must one daven a second time if the day repeats itself? Is Tefila day or date sensitive?

Since one must daven three times a day, the question raised among poskim is how to define the day of Tefila. The daily obligation to daven can be understood to be the same as an annual obligation to eat matzo. Once a person has performed the mitzva on a particular day, the obligation of the next day's Tefila does not commence until the next cycle, which in this case is the next day. The question among poskim however is how to define the next day. There are two diametrically opposing views in this matter.¹¹¹

The opinion of Rav Stern is that the obligation for a new tefila is to be determined by each person's personal day, i.e. every sunrise and sunset that one experiences forms a new personal obligation for Tefila. Therefore, if one experiences two sunrises on the same day of the week, he must daven Shacharis twice on that day¹¹². *Sefer Lehoros Nosan* expands on this idea.¹¹³ He feels that laws are given to man in a way that the common person understands. To obligate one to become a calendar expert in order to know

¹¹⁰ *Taarich Yisroel* 16:13.

¹¹¹ The poskim that have committed these views to writing are Rav Betzael Stern in his *Sefer Bezel Hachochma*, and Rav Yechezkel Roth in *Emek Hateshuva*. Although each of these opinions is shared by other poskim, we will refer to the opinions as those of Rav Stern and Rav Roth. The opinions expressed are consistent with those mentioned above regarding our analysis of the halachos of Bris and Bar Mitzva.

¹¹² *Taarich Yisroel* 4:2. This is also the opinion of Rav Y.S. Eliashiv.

¹¹³ *Taarich Yisroel* 4:16.

when to daven is inconceivable. To bolster his position, he notes that the obligation to daven each day is learned from the pasuk “*U’beirach es Lachmecha*”, one must pray for daily sustenance.¹¹⁴ This is a personal day, not a calendar day.

Rav Roth on the other hand sees Tefila as a mitzva to be performed only once each day. Just as Matzo has a time cycle of once a year, Tefila has a time cycle of once a day. He therefore holds that if one experiences two sunrises on the same day of the week, there is an obligation of only one tefila.¹¹⁵

On the other hand, if one crosses the date line in an east-west direction, (thereby pushing the day forward), their positions are switched. Rav Roth who holds that the trigger to obligate Tefila is the daily obligation, posits that since the day has changed a new Tefila obligation has been created.¹¹⁶ Rav Stern, who is of the opinion that no new tefila is required unless one experiences a new sunrise or sunset, claims that a tefila

¹¹⁴ *Taarich Yisroel* 4:8.

¹¹⁵ *Taarich Yisroel* 4:8-10. Rav Dovid Feinstein (in the name of his father), Rav Chaim Pinchos Scheinberg, Rav Chaim Kanievsky, and Rav Shlomo Zalman Auerbach (as cited above in footnote 78) agree with this position of Rav Roth.

¹¹⁶ An interesting approach to the above machlokes suggested by Dr. Eliezer Ehrenpreis is to predicate it upon the machlokes cited above in note 30 regarding one lost in the desert. The Gemara states that the underlying principle of whether one lost in the desert and forgot which day is Shabbos keeps Shabbos on day number one or on day number seven, is based on the idea of whether we view cases of doubt from the vantage point of *kibriyaso shel olam* or *kibriyaso shel adam*. Chiya bar Rav, who says that the lost person keeps Shabbos on the first day that he becomes aware, views time from the perspective of *kibriyaso shel adam*, and Adam’s first day was Shabbos. Rav Huna says that the lost traveler keeps day number seven as Shabbos, because we view time from the perspective of *kibriyaso shel olam*. Shabbos was the seventh day from creation. We could apply this same principle in theory only to the above machlokes-whether we claim that Tefila is to be determined by the personal day of the week (Rav Stern) or the world day of the week (Rav Roth). Paranthetically, the halacha follows Rav Huna, *kibriyaso shel olam*. This however can have no effect on the actual application to our case halacha lemaaseh.

obligation is not formed by this date line crossing.

The Compromise Option

Taarich Yisroel proposes a unique compromise position. As previously mentioned, Rav Stern holds that the trigger for new Tefila is the experience of a new sunrise or sunset. Rav Roth on the other hand states that once one has davened on a particular day of the week, no new tefila is required regardless of whether the day happens again. Even so, Rav Roth would agree that one may add a tefilas nedava, a voluntary tefila. If so, where we have a machlokes whether or not a new tefila is required, one should say a tefilas nedava as prescribed by the Shulchan Aruch in cases of doubt. And whereas under normal conditions a tefilas nedava requires the inclusion of a personal request in *Shma Koleinu* or before the conclusion of the tefila, it is not necessary here. When saying a tefilas nedava in the case of doubt, one has only to make the following condition: “If I have not fulfilled my tefila obligation then may the following tefila be a tefilas chova, an obligatory one. If I have already fulfilled my obligation to daven, then may the following tefila be a tefilas nedava, a voluntary one”.¹¹⁷

Rosh Chodesh, Hallel, Musaf

Rosh Chodesh presents us with a new set of questions as they relate to Hallel and Musaf. Consider the following. One travels from New York to Taiwan on the Sunday morning preceding Rosh Chodesh. He arrives in Taiwan on Monday (Rosh Chodesh) afternoon, in time to daven Mincha. When he davens, he must naturally include *Yaaleh Veyavo*.¹¹⁸

¹¹⁷ *Taarich Yisroel* 4:15,20 cites the *Mishne Berura* 107:2 who requires that this condition be said prior to the *Tefilas Nedava*.

¹¹⁸ Rav Roth claims this is an obligatory Tefila, while *Taarich Yisroel* holds that this Tefila should be said as a *Tefilas Nedava* preceded by the above mentioned condition.

The date line was not crossed until some time in the afternoon. Both Rav Stern and Rav Roth would agree that since he did not daven Mincha for that day, he must daven upon arrival in Taiwan (Rav Stern considers it the Mincha for the day that he left New York, while Rav Roth holds it is Mincha of the following day). Nevertheless Rav Stern would agree that the traveler must say Hallel and Musaf for Rosh Chodesh on that afternoon, as Rosh Chodesh is determined by the date.

A similar flight in the opposite direction, as Rosh Chodesh repeats itself when the date line is crossed, results in the following. Rav Roth would not require that Hallel and Musaf be repeated. Rav Stern, in addition to requiring one to repeat the daily tefilos, would require the repetition of both Hallel and Musaf. The compromise solution as suggested by *Taarich Yisroel* would recommend that Hallel be said without a bracha, and that Musaf be said with *hirhur* only.

Birchos Hashachar

Birchos Hashachar are in a class of their own. Chazal required recital of the Birchos Hashachar when one rises in the morning, and receives his soul anew, to give praise and thanks as if he were created anew. Obviously, when one arises with a new sunrise regardless of the day of the week, he must offer this praise and thanks to Hashem. Furthermore, the Tur states that the morning brachos are actually Birchos Hanehenin. Just as one must make a Birchas Hanehenin in order permit the deriving of pleasure from a particular food, so too may one not derive the general pleasure of living before saying the Birchos Hashachar. The personal new day is therefore what rules¹¹⁹.

Birchos Pesukei Dezimra and Birchos Krias Shma

Unfortunately, the aforementioned compromise solution cannot be offered with

¹¹⁹ *Taarich Yisroel* 4:17. This is the opinion of Rav Scheinberg and Rav Chaim Kanievsky. Rav Roth in a letter to the author of *Taarich Yisroel* voiced a dissenting view.

regard to Birchos Pesukei Dezimra and Birchos Krias Shma, as there is no *nedava* option. These brachos may only be recited once a day, and an unnecessary recital of these brachos constitute a bracha levatala. When one experiences a second sunrise on a particular day, although Rav Stern will hold that a new sunrise is the catalyst for Tefila and Birchos Krias Shma, Rav Roth would hold that the recital of a new set of Birchos Krias Shma is unnecessary, and constitute a bracha levatala.

Taarich Yisroel again offers a solution that can satisfy both opinions. In our discussion of how one can daven Musaf on a day that is *safek* Shabbos, we prescribed the advice that poskim offer in cases of *safek*, *tefila behirhur*, to daven mentally rather than verbally.¹²⁰ Here too, one can say these brachos mentally. There is of course no objection to say the actual Tehilim section of Pesukei Dezimra verbally.

Krias Shma

Krias Shma can be understood to fall into yet another category of time obligations. The requirement of Krias Shma is prescribed by the Torah to be *beshochbecha u'vekumecha*, when you go to sleep and when you wake up. The time to sleep and arise are clearly determined by the position of the sun. Hence all would agree that the obligation of Krias Shma is determined by sunrise and sunset¹²¹.

Tefilin

There is a disagreement among the poskim whether Tefilin is a daily obligation or not. If we assume that Tefilin is a daily mitzva like Tefila, the aforementioned argument between Rav Stern and Rav Roth would apply. Rav Stern would require one to don tefilin each time he sees a new sunrise, as that triggers a new obligation. Rav Roth would hold that once tefilin are donned in its time cycle, there cannot be a second

¹²⁰ *Taarich Yisroel* 3:5

¹²¹ *Taarich Yisroel* 4:5

requirement. However, since all agree that tefilin may be worn many times daily, *Taarich Yisroel* suggests that one should don tefilin whenever one is in doubt whether or not a new obligation is established. The bracha on tefilin is to be said each time tefilin are worn, even if the daily obligation to wear them has already been performed (provided that there was *hesech hada'as* between the two times that the tefilin are worn). Hence, when travelling in a westerly direction such that a new sunrise is not seen (e.g. New York to Taiwan), tefilin are donned during daylight hours with a bracha after the date line is crossed (assuming of course that crossing the date line took place during daylight hours when tefilin are normally worn). When it is crossed in an easterly direction, tefilin are worn after one sees a new sunrise regardless of whether the mitzva had already been performed on that day of the week already.

Other poskim hold that the obligation to wear tefilin is not a daily one, but rather tefilin are to be worn all the time. Consequently, crossing the date line or witnessing a new sunrise would have no effect whatsoever on the person's requirement to don tefilin.¹²²

Sefiras Haomer

The mitzva of counting Sefiras Haomer begins on the second night of Pesach for 49 consecutive nights. If one forgets to count for an entire day he may no longer continue counting with a bracha. When one crosses the date line in a westerly direction (from New York to Taiwan), a day is lost in flight. Since it is a calendar day only, he will not lose the opportunity to complete Sefiras Haomer with a bracha. The count of the following day should be said immediately upon crossing the date line. The Sefira count is resumed on the following night with a bracha by counting the day that the local population does.¹²³ On the other hand, when crossing the date line in an easterly

¹²² *Taarich Yisroel* 4:8-9 discusses the matter of the obligation of Tefilin at length.

¹²³ If one departs New York on Sunday night, after counting the Sefira for Monday, upon arrival in Hong Kong on Tuesday morning, he counts the Tuesday count without a bracha. It is

direction, (and the day of the week repeats itself), the traveler would repeat the count of the previous night without a bracha, and will continue subsequently to count the same count as the local population with a bracha.¹²⁴

We should note that there is an opinion that Sefiras Haomer is determined by one's personal count of days, not the world date. It claims that the mitzva of *usefartem lachem* is identical to the *vesafra lah* of Shiva Nekiyim insofar as they are both counts of personal days. If so, a traveler from New York to Taiwan would lose a day in flight, as one's personal count falls out of sync with the rest of the community, this individual would celebrate Shavuos a day later than the rest of the community. Conversely, one who traveled in an easterly direction from Taiwan to New York, would actually gain a day, and Shavuos would be celebrated a day earlier for this traveler.¹²⁵

It should be pointed out that this is a minority opinion. Virtually all poskim disagree.¹²⁶

like one who forgot to count Sefira at night and must count the sefira during the following day without a bracha. Having counted the Monday Sefira on Sunday night, and the Tuesday Sefira on Tuesday morning, he may continue to count on Tuesday night with a bracha.

It should be noted that there are a number of poskim who suggest that one refrain from crossing the date line during Sefira wherever possible, to avoid encountering these difficult questions.

¹²⁴ *Taarich Yisroel* 2:29-33

¹²⁵ *Taarich Yisroel* 24:13 quotes a source that if one follows this opinion, and Shavuos would be celebrated on 5 Sivan, then the words "*Zman Matan Toraseinu*" would not be said because the Torah was not given on 5 Sivan. See note 10.

¹²⁶ *Taarich Yisroel* 24:12 cites this opinion from the *Sefer Kovetz Yagdil Torah* which is also quoted in *Sefer Shitos Kav Hataarich Bekadur Haaretz* p. 808. *Taarich Yisroel* proves at length that this interpretation is without basis. All poskim who quote this pasuk, cite it in a totally different context. They claim that the personal aspect of *lachem* is limited to the question of whether one must personally count, or whether it is sufficient to hear the count from the Shaliach Tzibbur. See *Taarich Yisroel* 24:15-24 for a long list of those poskim. Among them *Bezel Hachochma*, Rav Eliashiv, Rav Scheinberg, Rav Chaim Kanievsky, Rav Dovid Feinstein, and many others. See

Fast Days

The Gemara states that “any fast that did not see a nightfall is not a fast”,¹²⁷ i.e. a fast does not end until nightfall. If one flies eastward, from the U.S. to Israel on a fast day, one need not wait until the fast is over in New York, for the nightfall in Israel marks the end of the fast.¹²⁸

On the other hand, what would the halacha be in the case where one flies eastward and crosses the date line in the middle of the day, (e.g. and 10 Teves became 9 Teves)? May one begin eating even though he has not seen a sunset, since he now finds himself in a place where it is not a fast day? Or must the person fast on the following day as well, when 10 Teves reappears?

Concerning the former question, Rav Chaim Pinchas Scheinberg and *Yisroel Vehazemanim* opine, that one may eat as soon as he crossed the date line from 10 Teves to 9 Teves. There can be no obligation to fast on a non fast day.¹²⁹ Rav Eliashiv and Rav Chaim Kanievsky disagree.¹³⁰ They feel that once a fast is begun, it cannot be terminated prematurely,¹³¹ because one cannot renege on the initial Kabalas

also note 15 where *Taarich Yisroel* quotes Rav Sternbuch’s *Tshuvos Vehanhagos* in which he differentiates between Sefira counting and celebrating Shavuos. He claims that it is possible to maintain that one’s personal Sefira count does not have to coincide with the day celebrated as Shavuos in his location. This view, however, is not shared by most poskim. As stated above, the vast majority of poskim rule that the count is determined by location and not the personal count.

¹²⁷ Taanis 12a. Although the Gemara’s term is *shak’a alav chama*, which is usually interpreted as sunset, the rishonim as cited by Shulchan Aruch 562:1 say that the fast does not end until nightfall.

¹²⁸ *Taarich Yisroel* 20:1. In note 3, *Tshuvos Yaskil Avdi* offers a dissenting view.

¹²⁹ *Taarich Yisroel* 20:9

¹³⁰ *Taarich Yisroel* 20:18

¹³¹ It is interesting to note, that in this manner, a fast is more stringent than Shabbos. We learned earlier, that most poskim, including Rav Chaim Kanievsky hold that Shabbos does end prematurely when crossing the date line.

Hataanis.¹³²

Regarding the latter question, all would agree that one must fast on the second 10 Teves as well. Although fast days are date sensitive, they are not like e.g. Matzo and Shofar. For in the case of Matzo and Shofar, when one eats the matzo or heard the shofar, the mitzva has been completed. In the case of fast days however, the completion does not occur until sunset. And since the calendar changed from 10 Teves to 9 Teves before sunset, there was never a completion of the fast. It must therefore be performed again when 10 Teves reappears the next morning.

If however one crossed the date line after sunset, having completed the fast on the first appearance of 10 Teves, one need not fast the following day. This would obviously be identical to Matzo and Shofar.¹³³

When flying westward on the fast day, and 10 Teves becomes 11 Teves, the aforementioned machlokes would apply. Rav Scheinberg and *Yisroel Vehazemanim* would permit one to break the fast midday, while Rav Eliashiv and Rav Chaim Kanievsky would hold that one must wait until sunset.¹³⁴

¹³² A suggestion to accommodate both views is offered by *Taarich Yisroel*. If the entire reason that the fast cannot be cut prematurely is because of Kabalas Taanis, let the traveler make a condition at the beginning of the fast that he is not accepting the fast upon himself on a non fast day. However, both Rav Eliashiv and Rav Kanievsky rejected this suggestion as they maintain that one cannot make a conditional Kabalas Taanis.

¹³³ *Taarich Yisroel* 20:22. There is a fascinating twist to the above situation if our example was Yom Kippur rather than 10 Teves. Yom Kippur would certainly follow the rules that apply to Shabbos. We have pointed out that everyone agrees that when Shabbos reappears, one must observe Shabbos again. It follows that when Yom Kippur reappears, one must refrain from melacha as well. But as mentioned above, if one fulfilled the mitzva of fasting, the fast need not be repeated, then we could theoretically have a Yom Kippur where one may eat but must nevertheless refrain from melacha. *Taarich Yisroel* 20:24-26 discusses this scenario at length and concludes that one must also fast on the second appearance of Yom Kippur.

¹³⁴ *Taarich Yisroel* 20:18

4

Conclusions

The Date Line Location

When issuing halachic decisions regarding the location of the halachic date line, most contemporary poskim consider the following four opinions:

- a. Baal Hamaor : Six hours or 90 degrees east of Jerusalem. This line is a straight vertical line at the 125.2E meridian.
- b. Chazon Ish: Accepts the Baal Hamaor's position in principle, but makes exceptions where the 125.2E meridian cuts through a land mass. There, the date line conforms to the coastline.
- c. Rav Tukatzinsky: 180 degrees east of Jerusalem at the 144.8W meridian. The western portion of Alaska is nevertheless open for discussion.
- d. Rav Isser Zalman Meltzer: There is no absolute date line

Living Beyond the Date Line

With regard to the proper behavior when living in places that fall into a questionable area, the author of *Taarich Yisroel* recommends following the opinion of Rav Simcha Zelig Riger, the Brisker dayan, and Rav Vosner in his *Sefer Shevet Halevi*, namely, that the day that is accepted by the general population is the primary day to follow, while the other day¹³⁵ is to be treated as the *safek* day.¹³⁶

Crossing the Date Line

Mitzvos, affected by crossing the date line, can be classified as follows:

- a. Date sensitive mitzvos- Shabbos, Matzo, Shofar, Megila.
- b. Day sensitive mitzvos- The Niddah's seven day count of *Shiva Nekiyim*, seven days of *Aveilus*.
- c. Mitzvos effected by the advent of sunrise and/or sunset only- Birchos Hashachar, Krias Shma.
- d. Mitzvos on which there is a disagreement among poskim whether they are day or date sensitive- Tefila, Mila, Pidyon Haben, Bar Mitzva.

When trying to formulate a practical guide for a traveler considering the many opinions on the various date line questions, we can design a simple grid for each country and for the specific mitzva in question, with any number of combinations and

¹³⁵ Sunday in Japan, or Friday in Hawaii.

¹³⁶ The questionable areas span the globe from the 125E meridian to the 145W meridian. In Japan and New Zealand, Saturday is the primary day which is treated as Shabbos for all matters including Tefila and Kiddush. Sunday is the Safek day during which one must refrain from melacha. In Hawaii, Saturday is the primary day, while Friday is the safek day. Although Korea and Australia do fall between the above mentioned longitudes, the common practice is to observe Shabbos on Saturday only. Although there are authorities that commend the practice of observing the safek day as well, this is not the opinion of most poskim. See footnote 138 below.

possibilities along the coordinates of this grid. The variables would be the opinions regarding the location of the date line, and how one views crossing the date line. If one obtains a clear psak as to which date line to accept, and a clear psak as to which of the opinions to follow regarding Tefila and crossing the date line, one must merely plot out his travel itinerary and apply the rules accordingly.

Consider the following. A psak which takes into account the views of the Chazon Ish regarding the date line location, and Rav Betzael Stern regarding crossing the date line would read as follows:

When flying from New York to Japan, the date line is not crossed, and therefore no new tefila is required. On the return trip however, one must daven when a new sunrise or sunset is experienced. If the traveler stayed in Japan over Shabbos, Saturday should be treated as a weekday. Shabbos is to be observed on Sunday. Should the return trip include a stopover in Hawaii, by crossing the International Dateline between Japan and Hawaii, the Chazon Ish's day is brought back into sync with that which is accepted by world convention. Shabbos in Hawaii is on Saturday.

The same question for a trip to Korea would read quite differently, since according to the Chazon Ish the halachic date line is crossed in this case. While there would be no difference in this case regarding Tefila, as crossing the date line has no effect on the Tefila obligation, Shabbos would be observed on Saturday unlike Japan.

When we alter the variables, by for instance substituting the opinion of Rav Stern with that of Rav Roth, a new set of halachos of a tefila pattern emerges. When one travels from Japan to New York one need not daven again, since the date line was not crossed to trigger the obligation for a new tefila even though he did see a new sunrise. On the trip to Korea, a new tefila is required even if no sunrise was witnessed because crossing the date line is what sets the requirement for Tefila. On the return from Korea, because the date line was crossed and the day is set back, even though sunset and sunrise were seen, a second tefila for that same day is not required.

If we substitute Rav Tukatzinsky for the Chazon Ish in the above example, Japan

would be treated in the same manner as Korea. On the other hand, when flying from Japan to Hawaii, since the International Date Line is crossed but Rav Tukatzinsky's date line is not crossed until one has passed Hawaii, a stopover in Hawaii over Shabbos would require one to observe Shabbos on Friday. When returning to New York, Rav Tukatzinsky's date line is crossed, and his day falls into line with that of the world convention.

Rarely will one get a clear psak. And without one, it is almost impossible to navigate these waters. Most Rabbonim are hesitant to offer a psak when there is such a variance of views amongst poskim of our own day.¹³⁷

It is therefore impossible to issue a single dimensional psak when the greatest poskim are reluctant to offer firm decisions. It is equally difficult to shy away from

¹³⁷ Refer to footnote 48 above where we cited Rav Yitzchok Elchonon's uncertainty. Furthermore, as we review the many shitos cited throughout this book, we find an incredible variance of views among contemporary poskim. Following is a small sampling:

- a. Rav Moshe Feinstein sided with the position of Rav Roth regarding Tefila when crossing the date line. Tefila is determined by the world day, not the personal day. He leaned toward the view of Rav Tukatzinsky regarding the position of the date line. He was however cautious to follow the Chazon Ish's date line in d'oraisa questions.
- b. Rav S.Z. Auerbach held a view very similar to that of Rav Moshe. (Rav Auerbach had a unique *shita* with regard to Matzo as mentioned above in the discussion on that topic)
- c. Rav Chaim Kanievsky sided with Rav Roth's opinion regarding Tefila, and Bar Mitzva when crossing the date line. He held like the Chazon Ish regarding the position of the date line.
- d. Rav Scheinberg also held like Rav Roth regarding Tefila, but disagreed with him regarding Mila.
- e. Bezel Hachochma held that Tefila, Mila, and similar mitzvos are determined by one's experiencing new sunrises and sunsets.
- f. Rav Eliashiv holds like Bezel Hachochma regarding Tefila, and follows Rav Tukatzinsky's *shita* regarding the location of the date line. He however states that one must refrain from melachos d'oraisa on the day considered to be Shabbos by the Ba'al Hamaor.

offering direction in matters that affect the lives of so many. The situation begs for direction. We wish to therefore propose a set of guidelines that were formulated based on discussions with numerous poskim, which the traveler should be able to follow without much difficulty.

The Date Line

1. Most contemporary poskim follow the opinion of Rav Tukatzinsky with regard to the location of the date line. They hold that the halachic date line is at the 145.2W meridian, 180 degrees from Jerusalem. However, the opinion of the Baal Hamaor must be carefully considered when dealing with d'oraisa questions.
2. When considering the opinion of the Baal Hamaor, we will follow the interpretation of the Chazon Ish. We will regard Korea and Australia west of the date line even though they are beyond the 125E meridian.¹³⁸
3. Most of Alaska is technically west of Rav Tukatzinsky's date line. Nevertheless, Rav Tukatzinsky considered all of Alaska to be east of the date line by applying the Chazon Ish's *gereira* principle. Most who follow Rav Tukatzinsky's date line, draw a straight line at the 145W meridian, and consider the portion of Alaska west of this point to be west of the date line.

¹³⁸ Although we have shown that many poskim do not agree with the Chazon Ish's *greira* principle, we must nevertheless treat Australia in this manner. The Australian Jewish community is over 200 years old and has always observed Shabbos on Saturday. According to all opinions except for those that follow the strict interpretation of the Ba'al Hamaor, Australia is west of the date line. Furthermore, see *Iggeros Moshe Orach Chaim* IV No. 17 which states clearly that Klal Yisroel as a community cannot err. He strongly chastises the questioner for attempting to challenge an accepted practice. See also *Encyclopedia Talmudis* vol 22 p. 675 where Rav A. Kalatzkin in *Sefer Chibas Kodesh* states that "*raglei chasidav yishmor*" those that observe Shabbos with sincerity will certainly not err. Nevertheless, *Taarich Yisroel* 2:14-16 cites a number of poskim who suggest that one refrain from melacha d'oraisa on Sunday in Australia.

Shabbos

4. Shabbos is observed on Saturday in Japan. Kiddush is recited and one refrains from all melacha (d'oraisa and d'rabanan) on this day.
5. On Sunday in Japan, one should refrain from melacha d'oraisa (and where possible even d'rabanan).
6. Although many poskim recommended that the Shabbos tefilos be said on Saturday, *Sefer Taarich Yisroel* suggests that a hybrid tefila be said. One should say the weekday *Shemone Esrei* with the following addition prior to the conclusion of the bracha of *shema koleinu*: "*Elokeinu veilokei avoseinu rtzeh viminuchaseinu.....ki ata mekadesh hashabos veshomea Tefilas amecha Yisroel berachamim*". In this manner we can satisfy all opinions regarding this *safeik*.
7. When saying Musaf, the name of Hashem in the bracha portion (i.e. at the opening and closing sentences of the bracha) should be said *behirhur*, mentally, so as to avoid the possibility of *Bracha Levatala*.
8. If one feels that the above suggestions might be confusing, the opinion that the regular Shabbos tefila and Musaf be said may certainly be followed.
9. Tefilin are worn on both Saturday and Sunday without a bracha. On Saturday, the tefilin must be worn in the privacy of one's home. The following *tnai* should be said before donning the tefilin on both days. "If today is a day on which tefilin must be worn, then I am putting them on for the sake of the mitzva. If today is a day on which tefilin must not be worn, then my donning of them should not be for the sake of performing the mitzva., but rather as the wearing of an adornment".
10. One must take every precaution not to leave the impression that Saturday may not be Shabbos .
11. In Hawaii, Shabbos is to be observed on Saturday. One should refrain from all *melachos*, d'oraisa and d'rabanan, and recite Kiddush. All the halachos mentioned above regarding Japan's Saturday, apply to Hawaii's Saturday as well.

12. Friday is *safek* Shabbos . One should refrain from melacha d'oraisa, and if at all possible, from melacha d'rabanan.
13. The order of Tefilos on Saturday are the same as the order of Tefilos on Saturday in Japan. See rules 6-8 above.
14. Tefilin are worn on both Friday and Saturday in Hawaii without a bracha. On Saturday, the tefilin must be worn in the privacy of one's home. The *tnai* mentioned above in paragraph 9 should be said on both days.
15. The western portion of Alaska (all points west of 145W) carry the same halachos as Hawaii.¹³⁹

Crossing the Date Line

16. If one flew from a place where it was Shabbos to a place where it is no longer Shabbos (i.e. by crossing the date line in a westward direction, whereby Saturday becomes Sunday), according to most poskim one may do melacha as soon as the date line is crossed. However, one who flies from a place where it is not Shabbos, to a place where it is Shabbos (i.e. by crossing the date line in an eastward direction whereby Sunday becomes Saturday), he has reentered Shabbos and must refrain from melacha.
17. If one has a good reason¹⁴⁰, one may take a flight on Friday morning from the Far East to the U.S. even though during a small part of the flight he will enter into Shabbos. Before that time , one should be careful to remove Muktzta items from his pocket. He must also try to avoid using the bathroom facilities on the plane during the brief period of Shabbos, lest he run into a question of lights going on and off when the door is opened and closed.

¹³⁹ While Rav Tukatzinsky felt that Alaska is more lenient than Hawaii and may be treated as east of the date line, most poskim who follow the 145W date line do not agree with Rav Tukatzinsky on this point.

¹⁴⁰ Spending Shabbos at home with one's family is considered one such good reason.

18. On this Friday flight, one should not daven Maariv until crossing the 145W date line. At that point a weekday Maariv should be said as a *nedava* for it is his second Thursday night. Krias Shma must be said. The brachos of Krias Shma, however, should be said *behirhur*.

Date Sensitive Mitzvos

19. One who performed date sensitive mitzvos (e.g. Matzo, Shofar, Succa, Megila), and then crossed the date line in an easterly direction, setting the calendar back a day, need not repeat the performance of these mitzvos.
20. One who crossed the date line in a westerly direction must do the mitzva even if the obligation started in midday, e.g. Rosh Chodesh wherein the obligation of Hallel and Musaf start as soon as the date line is crossed.
21. *Vest Hachodesh*, the date of the month on which a woman anticipates her menstrual cycle, is determined by the date. Crossing the date line moves the date forward or backward. Therefore, crossing the date line does impact the time of her *Vest Hachodesh*.

Day Sensitive Mitzvos

22. The following mitzvos are day sensitive and crossing the date line has no effect on them. Bris Mila, Pidyon Haben, *Vest Haflaga*, and *Ona Beinonis*. These mitzvos involve personal day counts. Crossing the date line has no effect on them. Sunrise and sunset are what determine one's personal day.
23. Therefore, a child born on a Monday, who crosses the date line in a westward direction before his Bris (New York to Taiwan), would be circumcised on the Tuesday west of the date line in Taiwan.
24. Similarly, a woman that crosses the date line during the *Shiva Nekiyim*, must count seven sunsets before she may go to the Mikva. Therefore, if a *Hefsek Tahara* was done on a Monday before sunset in New York, and she then crossed the date line in a

westward direction, she must immerse herself in the Mikva on Tuesday night in Taiwan.

25. The converse of the above would be true if the date line is crossed in an eastward direction (Taiwan to New York). A child born on a Monday in Taiwan who crosses the date line prior to his Bris in New York, would be circumcised on Sunday in New York. Similarly, a woman who made a *Hefsek Tahara* on Monday before sunset in Taiwan, may immerse herself in the Mikva on Sunday night in New York.
26. With regard to bar mitzva, we have shown that Rav Eliashiv differentiates between Bris Mila and Bar Mitzva. We therefore recommend that the *chumra* position be taken in both cases. A child who loses a day if he travels in a westerly direction, or one who gains a day when traveling in an easterly direction, should wait the extra day before we consider him to be a *Gadol*. However, the boy must wear tefilin on the earlier day as well.

Tefila

27. When crossing the date line from west to east, we recommend the compromise *shita* that takes the views of *Bezel Hachochma* and Rav Roth into account as explained in detail in the preceding chapter. Where there is a question whether or not a new Tefila is required, one should say the tefila, but have *kavana* that it should be a *Tefilas Nedava* if the tefila is in fact not required. Prior to saying the tefilas nedava one should state the following: "If I have not fulfilled my Tefila obligation, then may the following tefila be a *Tefilas Chova*, an obligatory tefila. If I have already fulfilled my obligation, then may the following tefila be a tefilas nedava, a voluntary tefila."
28. When one is uncertain whether or not to don tefilin, they should be donned with a bracha. This rule does not apply to cases where tefilin are worn on days that are *safek Shabbos*.
29. Krias Shma and Birchos Hashachar must be said upon experiencing a new

sunrise.¹⁴¹

30. When crossing the date line from west to east, we recommend that the brachos of *Baruch Sheamar*, *Yishtabach*, and *Birchos Krias Shma* should be said mentally, with *hirhur*, and not verbally. The actual *Tehillim* of *Pesukei Dezimra* must naturally be said verbally.
31. When crossing the date line from east to west and no new sunrise or sunset has been seen during the trip, a new tefila should be said after crossing the date line. One should however have *kavana* that this tefila is a *nedava* since the obligation is questionable, and say the above mentioned condition. Tefilin should be worn with a bracha on this new day even though no new sunrise or sunset was seen.

Fast Days

32. Crossing the date line on a fast day in a westerly direction, would result in the fast being cut off in midday. Since there is a machlokes whether or not one may end the fast as the date line is crossed, where possible, one should be more stringent and continue fasting. Where it causes difficulty, one may rely on the lenient opinions and may eat as soon as he crosses the date line. One who feels that he must eat but would nevertheless like to satisfy all opinions in this matter, should eat less than a *shiur*.
33. Crossing the date line in an easterly direction during daylight hours, would result in the day being pushed back to the day prior to the fast day. To satisfy the opinions of the poskim who rule that one may not end his fast until nightfall, one should be more stringent and fast until nightfall. Where this poses difficulty, one may rely on the lenient opinion and end the fast as soon as the date line is crossed. Preferably, one should eat less than a *shiur* in the prescribed time. However, in all cases, one

¹⁴¹ Although we have seen that Rav Roth is a dissenting view regarding *Birchos Hashachar*, Rav Chaim Kanievsky and Rav Chaim P. Scheinberg feel that even though sunrise is not the trigger to obligate a new *Tefilas shacharis*, it does obligate one to say the *Birchos Hashachar*.

must fast on the following day when the fast day reappears.

34. If in the above case, one crossed the date line after nightfall, since the fast has already been completed, one does not have to fast on the following day. In this case it is similar to Matzo and Shofar. However, when the traveler reaches his destination and finds the community in the middle of a fast day, he must fast along with them so as not to set himself apart from the *Tzibbur*.

Sefiras Haomer

35. When one is in an area during Sefira where the day of the week is in question, one must count both days; the first count should be the count held by the general population, the second count that of the *safek* day. When one returns home he may resume the normal count.

Yom Kippur

36. If one spends Yom Kippur in a place where the date is uncertain (e.g. Japan or Hawaii) one must fast on the day held to be Yom Kippur by the general population of that location. If one feels strong enough to fast a second day with absolute certainty that his health will not be compromised, then he should fast on the *safek* day. In the case of Japan, the *safek* day is the day following Yom Kippur, while in the case of Hawaii, the *safek* day is the one prior to Yom Kippur. If his health will be compromised, he should try to fast by eating less than a *shiur* in the prescribed time. If he finds this suggestion to be too difficult, then he may rely on the poskim that permit eating on the *safek* day.

Applications in Practice

New York to Japan

A typical flight that leaves New York on Sunday at 1 PM arrives in Japan at 3 PM on

Monday, local time. Rav Tukatzinsky's date line as well as the International Date Line are crossed. During this flight, one does not experience a sunset. If one davened Mincha in New York on Sunday, upon arrival in Japan on what seems to be that same afternoon, having seen no sunset or sunrise one should say a tefilas nedava, preceded by saying the condition as mentioned above.¹⁴² Tefilin should be worn again with a bracha.

If the day that one left New York was Erev Rosh Chodesh, and the arrival day is Rosh Chodesh, upon crossing the date line one must include *Ya'aleh Veyavo* in the tefilas nedava, and say Hallel and Musaf.

If this trip took place during Sefiras Haomer, when crossing the date line in a westward direction, the date is pushed forward midday, and one so to speak loses a day. However, since the entire day is not lost, one should count the appropriate day without a bracha as soon as the date line is crossed. When nightfall comes, one may resume counting with a bracha. Assume that Sunday was the 10th day of the Omer and the trip began on Sunday afternoon. When he arrives on Monday afternoon in Japan, it is the 11th day of the Omer. He must count day number 11 that afternoon without a bracha. On Monday night one may resume counting day number 12 with a bracha.

If one left New York on a fast day, for example Asara Beteves, as the date line is crossed, the date is pushed forward from 10 Teves to 11 Teves. Although some poskim are of the opinion that the fast is over, it is preferable to try to follow all opinions and fast until nightfall. If this is too difficult, one should at least try to eat less than a *shiur* in the prescribed time. If this is also too difficult, one may rely on the poskim who permit one to break the fast as soon as the date line is crossed.

A common flight from Japan to New York leaves Japan on Monday morning at

¹⁴² Following the opinion of Rav Roth, a new date triggers a new obligation for Tefila. Bezev Hachochma argues that no new Tefila would be required as one did not witness a personal new day. We therefore recommend the compromise option of Tefilas nedava.

10 AM and arrives in New York on Monday morning at 10 AM By leaving at 10 AM one has an opportunity to daven only Shacharis. As the traveler flies eastward, he will experience a sunset several hours into the flight. Mincha should be said before seeing sunset and Maariv must be said after dark.¹⁴³ When the sun rises again several hours later, Birchos Hashachar must be said and tefilin must be donned with a bracha. Pesukei Dezimra are said, but the brachos of Pesukei Dezimra, as well as Birchos Krias Shma should be said mentally. A tefilas nedava should be said.¹⁴⁴

If one left Japan on 10 Teves and flew into 9 Teves, according to some poskim one may eat when crossing the date line, as he is now in a place where there is no obligation to fast. Others feel that once a fast begins, it may not be cut short midstream. It is preferable to follow this opinion and to continue the fast until nightfall. Nevertheless, since the fast was never completed satisfactorily on the 10th day of Teves, one must fast when he sees sunrise on the following morning, his second 10 Teves.

If one must stay in Japan over Shabbos, since we are dealing with the most stringent laws of the Torah, one should observe both Saturday and Sunday to satisfy all opinions.¹⁴⁵ If one finds this too difficult, we advise the traveler to observe the complete

¹⁴³ An interesting question is hereby raised. According to the opinion of Rav Roth, we face the following dilemma. When one travels eastward, setting the day back, the tefilos that have already been said for that day need not be repeated. In the case where a traveler leaves Hong Kong on Monday afternoon when it is time for mincha, and will arrive in New York on Monday afternoon with enough time to daven mincha, must he daven in Hong Kong when the opportunity to daven Mincha presents itself, or should he wait until he arrives in New York, where davening with a minyan is available. *Taarich Yisroel* 4:23-24 studies this issue at some length and concludes that one must daven during the first Mincha opportunity.

¹⁴⁴ Rav Roth is of the opinion that when a day repeats itself a new Tefila is not required. Bezel Hachochma argues that the new personal day is the obligator for a new Tefila. We therefore recommend a Tefilas nedava as a compromise. Birchos Hashachar and Krias Shma however, must be said, as these are clearly determined by one's personal day (although we did note above that Rav Roth alone offers a dissenting view with regard to Birchos Hashachar).

¹⁴⁵ Ideally one should try to keep both days completely, d'oraisa and d'rabanen laws.

Shabbos on Saturday, and refrain from at least melacha d'oraisa on Sunday. On Saturday the weekday tefila with the addition of *Rtzeh* etc. is to be said. Musaf should be said *behirhur*, mentally. Tefilin must be worn without a bracha in the privacy of one's home, and the *tnai* must be said. On Sunday the weekday tefila is said (preferably with the addition of "*Rtzeh* etc." as well) and tefilin are worn again without a bracha and the *tnai* should be said. Havdala is not recited until Sunday night.

New York to Korea and Australia

Korea and Australia are considered west of the date line according to Rav Tukatzinsky as well as the Chazon Ish. Therefore a flight to these locations entails crossing the date line. The order of tefila is identical to that mentioned above regarding a flight to Japan.

One who stays in Korea or Australia for Shabbos, keeps Shabbos on Saturday only. One may consider Sunday to be a weekday. However, there are a number of people who live in Australia who do not venture out to sea or go swimming on Sunday, because according to the Chazon Ish, the coastline is the date line, and while it may be Sunday on the land, it is Shabbos in the ocean. If one wishes to be stringent, and refrain from Melacha in Korea and in Australia on Sunday in areas east of the 125th meridian, it is certainly considered praiseworthy.

On the return trip, the date line is crossed causing a day to repeat itself. The schedule of tefilos are the same as mentioned above regarding the Japan to New York trip.

New York to Hawaii

On this trip, Rav Tukatzinsky's date line is crossed. Therefore when one travels to Hawaii, the same rules that apply to the flight to Japan would apply here as well.

If one stays in Hawaii over the weekend, the same halachos that apply to the Japanese Saturday apply to the Hawaiian Saturday. Regarding the *safek* day, which is Friday, the same halachos that apply to Sunday in Japan, would apply to Friday in Hawaii.

Israel or Europe to the Far East

When traveling to the Far East from Israel or Europe, in most cases the date line is not crossed. However care must be taken when traveling to Japan, to refrain from at least *melachos d'oraisa* on the Japanese Sunday, (and if possible *melachos d'rabanen* as well) and to follow our recommendations for the order of Tefilos on Saturday and Sunday.

Applications of the Halachos of Shiva, Mila, Pidyon Haben, Bar Mitzva

In all of the above cases, mitzvos which are dependent on personal counts, such as seven days of Shiva, the seven clean days of a Niddah, eight days for Mila, thirty days of Pidyon Haben, the day of the week or date are not the deciding factors. One's personal count is all that matters. Some applications of these rules follow.

If one started to sit Shiva in New York on Tuesday, and then traveled (due to extraneous circumstances) to Taiwan during Shiva, the Shiva period would end on Tuesday morning in Taiwan, rather than on Monday morning had he stayed in New York. Similarly, if one started his seven days of Shiva in Taiwan on Tuesday, and flew to New York during Shiva, then he would rise from Shiva on Sunday morning in New York, having experienced seven personal days from the time that he started his Shiva.

The rules for Mila and Pidyon Haben can be summarized as follows. Bris Mila would not be performed on a boy born on Tuesday in New York, until the following Wednesday in Taiwan, if the child traveled in a westerly direction, thereby crossing the

date line. Conversely, the Bris for a boy born on a Monday in Taiwan, who subsequently crossed the date line in an easterly direction to New York, would take place on the following Sunday in New York.

With regard to Bar Mitzva, a boy who crosses the date line in a westerly direction, on a trip from New York to Taiwan, should wait the extra day before considering himself to be Bar Mitzva. Similarly, if the trip is taken in the opposite direction, from Taiwan to New York, whereby the date is turned back and the boy gains a personal day, he should also wait until the following day, to the date of his birthday, before considering himself to be a *gadol*.

An Exposition of the Baal Hamaor's Shita as it relates to the Date Line by Dr. Ken Trabert

The Baal Hamaor received from his teachers an explanation of a difficult section of the Gemara in Rosh Hashana 20b, which deals with the criteria for establishing a new month in the Jewish calendar. The Baal Hamaor does not specifically mention a date line but the explanation of the Gemara which he offers and which we will attempt to describe below makes sense only if the concept of a date line is part of the tradition that he received.

The Baal Hamaor takes it as a given that the moon cannot be seen by anyone anywhere on Earth for a period of 24 hours following the molad (the instant when the moon passes the sun in the sky), because the position of the moon in the sky is then too close to the sun. The Gemara states before a new month can be declared as a result of the appearance of a new moon, two conditions must be met.

1. " There must be a night and a day from the new".
2. " The molad falls before noon or the molad falls after noon".

These conditions which are the criteria for establishing a new month, are called by the Gemara the Sod Haibur.

The Baal Hamaor understands condition number 1 to mean that before a day can be declared Rosh Hashana (or the first of any month), the entire first day of the new month, the 24 hour period of the night followed by day, must occur after the molad. In other words, the first day of the month must take place entirely during the time of the new moon. However, this 24 hour period of the first day of the month, whereby the day is followed by the night, does not

necessarily have to be according to Jerusalem time. If there is a single location on Earth which experienced a night and day after the molad in its local time zone, then a new month can be declared on that day of the week in Jerusalem.

Condition number 2 means that if the molad falls any time after noon according to Jerusalem time, then the new moon cannot be seen on that day of the week anywhere on Earth. However, if the molad falls just one chelek (a chelek is $3\frac{1}{3}$ seconds and is a unit of measure in the Jewish calendar) before noon in Jerusalem, then it is possible for the moon to be visible somewhere on Earth that same day of the week based on local time in that location. For the moon to be visible, it is necessary for 24 hours to have passed since the molad as explained above because of the moon's proximity to the Sun. Hence, if the molad fell before noon in Jerusalem, there is a place on Earth which could have seen a night followed by the day that took place after the molad.

The Baal Hamaor offers the following illustration to make his point. It is assumed that at any given locality the day begins at 6:00 PM. The Baal Hamaor states that local time for those living at *Ktzeh Hamizrach*, the eastern edge of the Asian Continent 90 degrees east of Jerusalem (or 270 degrees west of Jerusalem) is 18 hours behind that of Jerusalem. Hence, if the molad were to fall just one chelek before noon in Jerusalem on Shabbos, then the molad would be at one chelek before 6:00 PM on Friday afternoon at *Ktzeh Hamizrach*. It would therefore be possible for the new moon to be seen 24 hours after the molad at *Ktzeh Hamizrach* just before the end of their Shabbos at one chelek before 6:00 PM. The entire Shabbos at *Ktzeh Hamizrach*, night followed by day, would fall after the molad and be entirely during the time of the new moon. The two criteria required to declare Rosh Hashana would be met. Rosh Hashana (or Rosh Chodesh) could therefore be declared in Jerusalem on Shabbos. If however, the molad fell after noon in Jerusalem, then the new moon could not be seen there until after Shabbos already began at *Ktzeh Hamizrach*; a full night of the new

moon would not happen until the following night. Hence Shabbos cannot be declared Rosh Hashana in Jerusalem.

The Baal Hamaor's explanation can only be understood if there is a date line separating the days between those just west of 90 degrees east of Jerusalem, and those just east of 270 degrees west of Jerusalem. Although the Baal Hamaor never specifically calls this point the date line, it is clear from his understanding of the Gemara, that the date must change at that point. For if the date changed at for example 89 degrees east of Jerusalem, both criteria of the Gemara could theoretically be met if the molad were any time before 12:04 PM Jerusalem time (the sun moves one degree in the sky during a four minute period). Thus when it is one chelek before 6 PM Friday at 89 degrees east of Jerusalem with the date line at 89 degrees east of Jerusalem, then it would be one chelek before 12:04 PM Shabbos in Jerusalem. Then all of Shabbos at 89 degrees east of Jerusalem with an international date line there would be after the molad. Similarly, if the date line would be at 91 degrees east of Jerusalem, then the molad criterion would be 11:56 AM in Jerusalem. Since the Gemara uses noon in Jerusalem as the critical time of the molad as its criterion, then the date change must take place precisely ninety degrees east of Jerusalem.

We are faced with difficulties with regard to the above explanation of the Baal Hamaor.

The Mishna in Rosh Hashana 2:6-7 clearly shows that the new month was declared by Beis Din on the basis of two witnesses who saw the new moon in Eretz Yisroel. However, in the illustration of the Baal Hamaor the new moon was seen on Shabbos only by those at Kzteh Hamizrach approximately 6,000 miles away from Jerusalem. The new moon was not seen in Jerusalem until Sunday. How could the Beis Din declare Rosh Hashana on Shabbos on the basis of witnesses?

The Baal Hamaor himself says that the preferred method of declaring Rosh Chodesh in the early generations was done on the basis of witnesses. If that was not feasible then Beis Din used the criteria of the Sod Haibur without witnesses to declare Rosh Chodesh. That is if the molads fell before noon then that day became the first of the month. When witnesses were used they were rejected if they said they saw the new moon within 24 hours of the molad. Then the new month was not declared in Jerusalem on the same day the molad fell, whether or not the molad fell before noon, because witnesses could not have seen the new moon during that same day in Eretz Yisroel.

A question then arises. Why does the Gemara consider these criteria so important?

Rav Saadya Gaon quoted in Otzar Hageonim, Rosh Hashana 20b and Rabeinu Bachya in his commentary on the Torah, Parshas Bo, claim that the procedure for declaring a new month based on the testimony of witnesses was begun by Antigonus Ish Socho who lived approximately 100 years after the building of the second Beis Hamikdash. Before that time Beis Din relied on calculations only to decide when Rosh Chodesh would take place. According to this opinion, the main use of the Gemara's criteria was prior to the time of Antigonus Ish Socho when the testimony of witnesses was not used. In addition, these criteria became important after Jews were driven from Eretz Yisroel when it was no longer feasible to use witnesses. Hillel Hakaton then established the Jewish calendar. According to the Baal Hamaor he relied on elements of the Sod Haibur. Hence the *Sod Haibur* has important implications for the Jewish calendar.

Perhaps it should be pointed out that under special circumstances it is just possible to sometimes see the new moon at the end of Shabbos in Eretz Yisroel in the example of the Baal Hamaor contrary to expectations. There are two types of molad of the moon, one is the true molad and the other is an average. The

true molad is the actual instant when the center of the moon passes the center of the sun in the dome of the sky. The length of time it takes for the moon to go from one passage by the sun to the next passage by the sun a month later is variable. Sometimes the moon returns early and sometimes it return late. Over the decades the period of the moon's return oscillates about an average, which is the average length of the month, from one average molad to the next. Rabbi Gamliel in the Gemara Rosh Hashana 25a says that he has a tradition from his forefathers that the average length of the month which is the time from one avrage molad to the next, is 29-1/2 days, 2/3 hour and 73 chalakim. According to the tradition (see Tosafos Rosh Hashana 8a-b) the first average molad of creation fell at 8:00 AM Friday morning, the 6th day of creation of the world, which was the day that Adam Harishon was created. In our calendar the year of creation is year One, and Adam Harishon was created on the 6th day of creation which was the first day of the month of Tishrei of year Two. The average molad falls exactly 29-1/2 days, 2/3 hour and 73 chalakim after this first molad for each succeeding month, month after month, continuing until our time in the year 5759 and beyond. The molad announced in Shul is the average molad not the true one.

If it is the average molad that falls just before noon in Jerusalem, then it is just possible to see sometimes the new moon that same day in Jerusalem. But if it is the true molad that falls just before noon in Jerusalem, then it is impossible to see the new moon that same day in Jerusalem. The Baal Hamaor does not explicitly say which molad he is using. Rashi, however, explains the Gemara differently than the Baal Hamaor. He says when the molad falls before noon in Eretz Yisroel, then the new moon can be seen in Eretz Yisroel that same day, but when the molad falls after noon in Eretz Yisroel, than the new moon can not be seen that same day in Eretz Yisroel. Rashi's explanation requires that the molad referred to in the Gemara be the average molad.

In order to justify these statements about the true and average molad let us estimate how the true molad and the actual visibility of the new moon fits with the noon criterion of the Gemara using the average molad. According to Ibn Ezra, Parshas Bo, and the Sh'aalos Vteshuvos Tashbatz, vol 1, no. 103, the true molad can be up to approximately 14 hours before or after the average molad. A similar difference was found in our times by Rabbi Dr. Hugo Mandelbaum in "*The Problem of Molad Tohu*", Proceedings of the Association of Orthodox Jewish Scientist's III-IV 1976 pages 65-84.

Consider the case when the average molad falls just before noon in Jerusalem. Add to the six hours that there are from noon to the end of the day in Jerusalem, the 14 hours that the true molad can be earlier than the average molad, and we have 20 hours from a possible true molad to the end of the day in Jerusalem. The position of the moon in the dome of the sky separates from that of the sun approximately $\frac{1}{2}$ degree each hour. Hence in the 20 hour span, the moon can separate from the sun by as much as 10 degrees. The Rambam in Kiddush Hachodesh 17:3-4 gives criteria for when one can see the new moon in Eretz Yisroel. He states that in the evening in Eretz Yisroel under certain circumstances, it is possible to see the new moon after it moves from the sun 10 degrees. But when their separation along their lines of motion in the dome of the sky is less than 10 degrees, then in general for all year around in Eretz Yisroel it is not possible to see the new moon in the evening. The criterion of the average molad falling just before noon is consistent with the most rare possibility of actually seeing the new moon in Eretz Yisroel that same day.

The criterion of the molad falling before noon in Jerusalem is also the same criterion used to determine Rosh Hashana in the Jewish calendar established by Hillel Hakatan. According to Rashi, not like the Baal Hamaor, this same criterion of the Gemara Rosh Hashana, was used by Beis Din to check witnesses in order to declare a new month. Thus, if the average molad fell after

noon then witnesses were rejected if they said they saw the new moon before the end of the day. Rashi's analysis depends upon the difference of the true and average molad as we have described.

Rambam's criteria can also be compared to the Baal Hamaor's criteria for seeing the new moon. Rambam reports that if the moon and the sun are separated from each other by 15 degrees or more along their line of motions then in the spring the new moon can be seen readily throughout Eretz Yisroel (Kiddush Hachodesh 17:3-4). If the true molad were earlier than the average molad by even just 10 hours (not even the maximum of 14 hours) and the average molad were 20 hours (not even 24 hours) before sunset, then the moon should be about 15 degrees from the sun at evening. Hence, according to Rambam, in this case 20 hours after the average molad, the new moon could be seen in the evening in the spring throughout Eretz Yisroel. It would seem that this type of case is not rare (see Rabbi Dr. Hugo Mandelbaum loc. cit.). An example of an uncommon case was found by Rabbi Raphael of Hanover for the month of Sivan in the year 1598 when the new moon could be seen 12 hours after the average molad and 18 hours after the true molad according to Rambam's criteria (see for this and other cases Rabbi Raphael of Hanover, comments on Kiddush Hachodesh chapter 17, to be found in *Sefer Halikutim* in the back of the Frankel edition of the Rambam's Mishna Torah). The Baal Hamaor mentions, as before, if witnesses say they saw the new moon within 24 hours of the molad, they are rejected. This type analysis which worked well in Rashi's explanation does not seem to work well with the Baal Hamaor.

There are two answers that might be given to this puzzle. One answer is that perhaps the Baal Hamaor is actually working with the true molad, even though from the overall context he seems to be speaking about the average molad. (Of course according to the Baal Hamaor, the location of the date line remains the same whichever molad is used).

According to Rambam's criteria the new moon can be seen even as early as 18 hours after the true molad. Nevertheless, it is hard to see the new moon within 24 hours of the true molad because the crescent of the moon is very thin and it is close to the light of the sun. Whereas the moon can be much further from the sun within 24 hours of the average molad in many cases so its crescent would appear larger and it would not be as close to light of the sun. Then sometimes within 24 hours of the average molad, the new moon could be seen obviously by everybody. Therefore the true molad criterion would appear to be a more reasonable standard to use to check witnesses.

Another answer can be given to this puzzle. The Rambam's criteria for seeing the new moon are for a time about 1/3 of an hour after sunset, as he says at the end of chapter 14 in Kiddush Hachodesh. The Baal Hamaor's criteria are for the instant just before sunset. This can be seen from the fact that the Baal Hamaor said that the day changes for *Ktzei Hamizrach*, who are 18 hours behind Eretz Yisroel, when it is noon in Eretz Yisroel. Then the day changes at *Ktzei Hamizrach* at 6 PM which is the time for sunset there.

The Baal Hamaor is saying that the new moon can not be seen the instant before sunset if this time is less than 24 hours after the molad (meaning here the average molad). It is easier to see the new moon 1/3 hour after sunset when the horizon is darker than at the time of sunset, so Rambam's criteria are less stringent than the Baal Hamaor's. The Baal Hamaor is not involved with the possibility of seeing the new moon after sunset when it is easier to see the new moon because the day changes with sunset. He is only concerned about seeing the new moon before the day has ended, which occurs at sunset in the tradition of the Sod Haibur.

When the Baal Hamaor said that the witnesses were rejected if they said they saw the new moon within 24 hours of the molad he is referring to his cases by sunset. That is witnesses were rejected if they said they saw the new moon

during the day or at sunset within a time period of 24 hours of the molad. But witnesses were not rejected if they said they saw the new moon 1/3 of an hour after sunset even if it were less than 24 hours from the molad. At this time the new moon definitely might possibly be seen throughout Eretz Yisroel and sometimes it could even be obviously seen by everybody. The Baal Hamaor is saying that by sunset it is not possible to see the new moon unless it is approximately 38 hours after the true molad when the moon can be as much as 20 degrees away from the sun. Perhaps this explanation resolves our puzzle.

There is not a problem fitting Rashi's understanding of the Sod Haibur of the Gemara with Rambam's criteria because it is assumed that Rashi accepts the standard that the day changes a certain time after sunset, which is the Torah's standard. Rambam's criteria, as has been described, also are set for after sunset which is the usual time for seeing the new moon. So Rashi's criteria are compatible with seeing the new moon after sunset but before the beginning of the next day. The language of the Gemara Rosh Hashana 20b is that: If the molad occurs before noon then the moon can be seen close to sunset and if the molad falls after noon then the moon can not be seen close to sunset. Rashi interprets close to sunset to mean a little after sunset in Eretz Yisroel while the Baal Hamaor interprets close to sunset to mean at sunset itself at Kzteh Hamizrach. It is also clear from the above discussion that the criteria of the Sod Haibur are for the impossibility of seeing the new moon according to both Rashi and the Baal Hamaor. Neither say when one can definitely see the new moon.

Let us now turn to another difficulty that can be raised about the Baal Hamaor's explanation of the Gemara Rosh Hashana 20b. Why does he use criteria which are based on seeing the new moon anywhere on Earth? Shouldn't the concern be only for seeing the new moon in Eretz Yisrael? The following novel idea may be suggested as a possible explanation. The Pirkei D'Rabi Eliezer in chapter 8 states that the Sod Haibur, was given by Hashem to Adam

Harishon in Gan Eden. This Sod Haibur was passed down to the Avos but was lost when Bnei Yisrael were in Egypt. According to Pirkei D'rabi Eliezer it was subsequently re-taught to Moshe Rabeinu and Aharon Hakohen in Egypt. The fact that the Sod Haibur was taught to Adam Harishon in Gan Eden explains why the whole earth was used to see the new moon. Adam Harishon would have based his clock and criteria in Israel where he lived, but since there were no countries or borders at that time, the entire world was then the place for seeing the new moon. The seeing of the new moon was therefore not restricted to Eretz Yisrael. Apparently this same tradition was re-taught to Moshe Rabeinu and Aharon Hakohen.

An additional related novel idea might also be mentioned. According to the Sforno (Breishis 6:13 and 22:8) there were no seasons before the mabul. That is, the duration of daylight was equal to the duration of night everywhere all year around. The, the beginning of the next day was sunset at 6 PM all year around everywhere on earth. This same criterion was included in the tradition of the Sod haibur given to the Baal Hamaor.

Independent of the fact that there were no seasons before the mabul, it also could be that then the moon was regular in its motions. That is with many revolutions of the moon the true molad point in time would coincide always with the average molad point in time. Hence no distinction between the molads was made in the explanation that the Baal Hamaor received from his teachers. Thus the Baal Hamaor does not mention explicitly which molad he is using.

The Gemara in Sanhedrin 38b says that the day Adam Harishon was created consisted of twelve hours. But the Gemara in Avoda Zarah 8a seems to differ with the Sforno that there were no seasons before the mabul. The Gemara says that Adam Harishon saw the days were getting shorter and that he might be plunged into perpetual night. Then, Adam Harishon brought sacrifices for a week and saw that the days started to get longer. He realized that this was the

way of nature. Since he only became concerned a week before the days became longer, maybe the shortening of the days he observed was much less than the shortening we see in our time. Since by him it was only a small effect there were no seasons and the sunset was still close to 6 PM throughout

Perhaps a final comment should be made. The Sod Haibur and the establishment of the Jewish calendar are based on deeper considerations than simple calculations. Furthermore, today the true understanding of the Sod Haibur has been lost. Hence the above exposition does not in any way explain the Sod Haibur.

Acknowledgements

The author wishes to thank Rabbi Yisroel Taplin and Mr. Zolly Tropper for their many suggestions and improvements of this exposition. In addition he thanks Rabbi Yehuda Herskowitz and Rabbi Nosson Klugman for careful review of the manuscript. Any mistakes of analysis of course are the responsibility of the author. In addition he would like to acknowledge all of the help of his learning partners in this topic, Rabbi Avraham Glatzer, Mr. Yisroel Moshe Blackstein, and Rabbi Zalman Hillel Fendel. Also he would like to express his gratitude to Rabbi Shmuel Kamenetsky for advice and general review of the manuscript. And finally he is appreciative of several stimulating and formative discussions with Rabbi Yisroel Belsky and thanks him for his guidance and review of the manuscript.