

Handout—Selections from
Sanctification of the New Moon —
A Treatise of Maimonides' Mishneh Torah

Maimonides*

4938 (\Rightarrow 1178 C.E.)

Source *Sanctification of the New Moon*. Translated from the Hebrew by Solomon Gandz; supplemented, introduced, and edited by Julian Obermann; with an astronomical commentary by Otto Neugebauer. Yale Judaica Series, Volume 11, New Haven: Yale University Press, 1956.

Positive Commandment Number 153

The commandment requiring that the Court alone should sanctify the new moons and ascertain by calculation the beginning of the years and months, as it is written: *This month shall be unto you the beginning of months; it shall be the first month of the year to you* (Exod. 12:2).

Shabbat Example

As Maimonides explains, when the Court used to determine the day on which the new month would begin, it would examine witnesses who thought they had observed the new moon at its proper time. For one seventh of the months, on average, the proper time for the new moon to appear would be on the Sabbath in the evening (near the transition between Friday and Saturday).

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For these months, a potential witness needed to know whether or not the Law required him to appear before the Court. Maimonides provides clear guidelines, redundantly presenting material on the laws of Shabbat that he surely covers in complete detail elsewhere in his Mishneh Torah.

Witnesses who observed the new moon were obliged to go to court and testify even on a Sabbath; . . . (Sanctification, Chapter 3, Paragraph 2). . . .

If a witness who had observed the new moon [an observing witness] on the night of the Sabbath was sick, he was allowed to ride an ass or to be carried on a litter. If the witnesses [observing and certifying witnesses] were afraid of enemies who might be lurking for them on the road, they were allowed to take along weapons; and if it was a long journey, they were allowed to carry along food.

Even if the new moon had been so large that it must have been observed quite generally, the witnesses might not say: “Just as we have observed it, so must many other people have observed it, and there is thus no need for us to violate the Sabbath.” For the law prescribed that whoever had observed the new moon and was qualified to testify, was in duty bound to violate the Sabbath . . . (Sanctification, Chapter 3, Paragraph 4).

Note how Maimonides, compactly and indirectly, teaches what the Sabbath violations are and gives answers to practical, immediate questions the witnesses might ask.

Enrichment Example

Maimonides has also included redundant material whose purpose I can only characterize as ‘enrichment.’ For example, consider his exposition of who is responsible for determining New Moon Day.

The authority over the observation of the new crescent was given not to everyone—as is the case with the Sabbath day, with respect to which everyone counts six days and rests on the seventh day—but only to the court. The day sanctified and proclaimed by the court as the beginning of the month was New Moon Day.

For it is said: *This month shall be unto you* (Exod. 12:2), that is to say, accepting or rejecting evidence concerning this matter is put into your hands (Sanctification, Chapter 1, Paragraph 5).

With just a few redundant phrases, Maimonides has set a reader up to think about questions like, ‘What could have been God’s purpose in specifying individual responsibility for determining Sabbath Days, and collective responsibility for determining New Moon Days?’

Summary In his Mishneh Torah Maimonides has made the Oral Law accessible to the average educated Jew by using clear, precise writing, by presenting the complete Oral Law, by organizing the Law according to the 613 Mitzvot, and by providing redundant material for local completeness and enrichment.

Title Page of Sanctification.

As indicated, Treatise titles and Mitzvah (Commandment) summaries play an important role in guiding a reader to the appropriate Treatise of the Mishneh Torah. So consider the Title Page of Sanctification.

LAWS CONCERNING THE SANCTIFICATION
OF THE NEW MOON
Comprising One Commandment
to wit:

To ascertain by calculation and to establish by proclamation
the day on which each month of the year is to begin.

An exposition of this commandment is contained
in the following chapters.

Here Maimonides concisely summarizes the contents of the Treatise and informally restates the Commandment that the Treatise expounds. Again he puts the idea of calculation up front; we’ll guess why soon.

1 First Paragraph of Sanctification.

In the following rendition of the translation of the first paragraph of Sanctification, indentation and font changes have been used to indicate different categories of statements.

The months of the year are lunar months,

as it is said:

(This is) the burnt offering of every new moon (throughout the months of the year) (Num. 28:14),

and it is also said:

This month shall be unto you the beginning of months (Exod. 12:2).

With reference to this latter verse the Sages have said:

The Lord showed the form of the new moon
unto Moses in a prophetic vision and said unto him,
When thou dost see the moon in such a shape
thou shalt sanctify it.

With respect to the years, however, we reckon according to solar years;

for it is said:

Heed the month of the ripening ears [...] (Deut. 16:1).

What Maimonides himself compactly states in this first, introductory paragraph of the first chapter of his exposition of the Laws of Sanctification of the New Moon, is the basic feature of the Jewish Calendar—that the Jewish Calendar is Lunar-Solar, having lunar months and solar years. Also basic to this introductory paragraph, Maimonides includes the main Sources of the *halakhah* of Sanctification: the three Torah verses whose pertinent phrases he quotes.

Note that the Torah verse ‘associated’ with this Mitzvah (in Maimonides’ List of the 613 Mitzvot) is not the first verse quoted, but the second, and that other Torah verses in addition to the associated verse are allowed to contribute to the *halakhah* of this Mitzvah, even if some of these verses also happen to be associated with another Mitzvah. So, at the very beginning, Maimonides tells us God’s basic requirements for this Mitzvah and presents the Torah verses that generate these requirements. This is a natural way to start.

2 Second Paragraph of Sanctification

In this paragraph Maimonides expands on the major consequence of God’s lunar month-solar year specification. This paragraph differs from the first one in that, except for one scriptural quote, everything else is what Maimonides

is saying. (Looking back, it was when I read this paragraph for the first time that I really began to appreciate Maimonides' genius.)

By how much does the solar year exceed the lunar year? By approximately 11 days. Therefore, whenever this excess accumulates to about 30 days, or a little more or less, one month is added and the particular year is made to consist of 13 months, and this is the so-called embolismic (intercalated) year. For the year could not consist of twelve months plus so-and-so many days, **since it is said: *throughout the months of the year*** (Num. 28:14), which implies that we should count the year by months and not by days.

Maimonides' masterful use of the words: *approximately*, *about*, or *a little more or less*, and *so-and-so many* (which have exact counterparts in the Hebrew) allow him to express the basic idea of regularly adding an extra month to the year to account for differences in lunar-solar year lengths, and to introduce the numerical values: about 11 excess days per year, 12 or 13 months per year, and about 30 days per month, in a low pressure way, so that non-arithmetically-inclined readers can understand the basic idea without being distracted by a perceived need to do arithmetic or to memorize numbers.

3 Third Paragraph of Sanctification

Having introduced God's fundamental requirement and its major consequence, Maimonides now goes on to tell a reader just enough about the regular monthly motion of the moon for the reader to understand the basic *halakhah* (here procedure) that determined the first day of the new month: (Before reading this passage, remember that the night of the 30th [24 hour] day occurs *before* the daylight hours of that day.)

Each month the moon disappears and becomes invisible for about two days, or somewhat more or less—for about one day at the end of the old month, before it reaches its conjunction with the sun, and for about one day after its conjunction with the sun. Then it reappears in the evening in the west, and this night, on which it becomes visible in the west after its disappearance, is the beginning of the month. From this day on 29 days were counted,

and if the new crescent appeared on the night of the 30th day, this 30th day was the first day of the new month. If, however, it did not appear on that night, the 30th day would belong to the old month and the 31th day would be the first day of the new month. And no matter whether the moon did or did not appear in the night of the 31st day, no attention was paid to it, for the lunar month never lasts longer than thirty days.

4 Fourth Paragraph of Sanctification

The fourth paragraph of Sanctification appears to be a teaching paragraph. Maimonides slows down, and, while defining some new technical terms, repeats, and thereby reinforces, previously presented information.

If the moon appeared on the night of the 30th day, so that the old month consisted of 29 days, this month was called a defective month; if, however, the moon did not appear on the night of the 30th day, so that the old month consisted of 30 days, it was called an embolismic (or intercalated) month, or a full month. If the moon appeared on the night of the 30th day, it was said that the moon had appeared in its “proper time”; if, however, it appeared on the night of the 31st day, and not on the night of the 30th, it was said that the moon had appeared on the night of the embolismic day.

5 Fifth Paragraph of Sanctification

The fifth paragraph of Sanctification has already been quoted and discussed (on page 2). In it Maimonides states that the Court has primary authority over the observation of the new crescent, contrasts this to the case of the Sabbath day, and quotes the Torah verse that implies this authority.

6 Sixth Paragraph of Sanctification

In this paragraph Maimonides builds on the foundation he has prepared about the primacy of the Court using calculation, while conforming to the requirement to use observation.

Just as the astronomers who discern the positions and motions of the stars engage in calculation, so the Jewish court, too, used to study and investigate and perform mathematical operations, in order to find out whether or not it would be possible for the new crescent to be visible in its “proper time,” which is the night of the 30th day. If the members of the court found that the new moon might be visible, they were obliged to be in attendance at the court house for the whole 30th day and be on the watch for the arrival of witnesses. If witnesses did arrive, they were duly examined and tested, and if their testimony appeared trustworthy, this day was sanctified as New Moon Day. If the new crescent did not appear and no witnesses arrived, this day was counted as the 30th day of the old month, which thus became an embolismic month. If, however, the members of the court found by calculation that the new moon could not possibly be seen, they were not obliged to be in attendance on the 30th day or to wait for the arrival of witnesses. If witnesses nonetheless did appear and testified that they had seen the new crescent, it was certain that they were false witnesses, or that a phenomenon resembling the new moon had been seen by them through the clouds, while in reality it was not the new crescent at all.

We see that this paragraph includes many redundancies. These redundancies illustrate Maimonides’ skill as a teacher.

The first ‘new’ concept, which Maimonides has prepared us for by having previously stated a few times that the Court used to do calculations, is his stating the purpose of the Court doing calculations—‘to find out whether or not it would be possible for the new crescent to be visible in its proper time’. This statement also sets us up to think about what could prevent such visibility, if the calculations showed that visibility would be possible. Then, the following clause: ‘... the new moon *might* be visible’ continues to guide our thoughts in this direction. Next we see that the appropriate calculations are not enough—witnesses must have *observed* the new crescent in its proper time and the Court must have examined and tested the witnesses.

At this point Maimonides has presented the essence of the documented *halakhah* concerning the determination of New Moon Day:
if the Court receives reliable testimony that the new crescent had been observed in its proper time,

then the Court makes the 30th day New Moon Day;

if not,

then, by default, the Court makes the 31st day New Moon Day.

Maimonides has also primed attentive readers to discover the basic flaw in the documented algorithm that implements this requirement, namely, that a sequence of poor visibility days at the critical times over a few months could cause an eventual declared New Moon Day to occur noticeably after the day on which the new crescent first appears (later in Sanctification Maimonides presents an example that explicitly illustrates this problem; at this point he has just guided his readers to discover it for themselves).

We can also see how the Court's not needing to be in session on the 30th day if its members had determined by calculation that the new crescent could not be visible in its proper time, would help fix this flaw. People see what they expect to see, and potential witnesses would expect to see the new crescent if the Court were in session. Furthermore, since "the Court would . . . entertain them [potential witnesses] liberally with bountiful meals so that people would make it a habit to come", witnesses would be highly motivated to see what the Court expected them to see.

Conclusions

I've tried, in presenting and discussing these samples from Sanctification, to show how I came to feel as I do about Maimonides—his genius, his scholarship, his teaching techniques, and his faith-based but reasoned morality. How did I arrive at my opinion of Maimonides' morality? Maimonides found that the documented, God-specified, Sage-implemented procedure for determining the first day of the new month was flawed. His faith told him that this could not have been the case. He then reasoned that if the Court could have calculated the potential visibility of the new crescent, the documented *halakhah* would have functioned effectively most of the time (the sources seem to allow for occasional corrections). He determined that non-Jewish savants had presented mathematically correct methods of calculating the potential visibility of the new crescent, and reasoned that since these methods exist, they must have been used by the Court and the record of their use lost. Furthermore, he presents these (complicated) methods in a way that a motivated reader can understand. So, we have my picture of Maimonides: a genius, a scholar, a teacher, and a moral person.