Hebrew names of the planets

Shay Zucker

Department of Geophysics and Planetary Sciences,
Raymond and Beverly Sackler Faculty of Exact Sciences,
Tel Aviv University, Ramat Aviv, Tel Aviv 69978, Israel
email: shayz@post.tau.ac.il

Abstract. I review in this paper the basic Hebrew planetary terminology. To complete the picture I accompany it with some historical and cultural context, and compare it to the planetary terminology in Arabic, the most widely spoken Semitic language.

Keywords. history and philosophy of astronomy

1. Introduction

As part of the International Year of Astronomy activities in Israel, a public competition was announced, whereby the public was invited to propose Hebrew names for the planets Uranus and Neptune. All the other major planets have Hebrew names, dating back even to biblical times. On the other hand, Uranus and Neptune, which were discovered at times when Hebrew was not considered a living language, are simply termed ‘Uranus’ and ‘Neptune’.

In this contribution, I will review the origins of the Hebrew names of the planets and their context, as well as some related notation. Appropriate historical consideration of the Hebrew language cannot ignore related languages, and thus I will also review the relevant Arabic notation.

2. Historical and linguistic background

A thorough account of Hebrew origins and history is definitely beyond the scope of this contribution, so I will give here a very brief description, with only the very broad details, accounting for the major developments in the history of Hebrew.

Hebrew is a member of the Semitic languages family. The most widely spoken Semitic language today is Arabic, followed by Amharic, Tigrinya, and then Hebrew, usually considered the historic language of the Jews. Other important Semitic languages that played an important role in the history of the Middle East were Akkadian, Assyrian, Babylonian and Aramaic, most of them are now considered dead languages.

Between the 10th and the 4th century BCE, classical Hebrew flourished in ancient Israel as a spoken language. This was the language in which the bible was written. During the Hellenistic and Roman periods one finds the next phase of Hebrew – Talmudic Hebrew, between the 3rd century BCE and the 4th century CE. After this period, Hebrew ceased being a spoken language, and its use was generally confined to liturgical purposes and philosophical and scientific writings. This is Medieval Hebrew.

During the late 18th century, as part of the Enlightenment movement, Hebrew was revived as a journalistic and literary language. This tendency culminated in the 19th century in the work of Eliezer Ben Yehuda, who aimed to revive Hebrew as a mother tongue, as part of the Zionist ideology. Nowadays modern Hebrew is one of the two official...
languages in Israel (the other is Arabic), and most of Israel’s 7 million citizens speak it (Sáenz-Badillos 1993).

Modern Hebrew still has to rely on borrowing vocabulary from other languages, mainly European languages, and the process of adopting new words is constantly on-going. The Academy of the Hebrew Language is an official Israeli institute, one of whose directives is the development of current Hebrew vocabulary (Fellman 1974). The acceptance of the new vocabulary by the general public is usually a very slow process, which is not always successful.

3. Astronomy and Judaism

Astral beliefs were prevalent among the nations that surrounded the ancient Israelites. The Mesopotamian religions were completely astral, where each deity had a specific astronomical manifestation, and the motion of heavenly bodies was considered a practical means of the gods to communicate with Man. The Jews oscillated among adopting characteristics of the surrounding beliefs of the Canaanites, the Phoenicians and their likes, the strong Assyrian influence from Mesopotamia, and their own unique monotheistic culture (Ness 1990, McKay 1973).

In this context, the main use of astronomy was for calendrical purposes, using methods developed by the Mesopotamians. However, astrology in its simplest form also infiltrated strongly to Jewish culture.

During the middle ages, Jews participated in the Islamic astronomical endeavor, and many renowned Arab medieval astronomers were Jews, such as Masha’allah Ibn Athari, Maimonides, Levi Ben Gershom, etc.

4. Astronomical Terms

In what follows I will review the main planetary terminology, as well as basic astronomical terms, in Hebrew and in Arabic. I will present the words in the alphabet each language uses today, and I’ll use English spelling as an approximate pronunciation guide. I preferred not to use a formal phonetic alphabet as the target readers of this publication are not necessarily linguists. I give the modern pronunciation of the Hebrew words, which is strongly influenced by European languages, and is probably extremely different from the original pronunciation in ancient times.

4.1. Star, Planet

The Hebrew word for star is הָבָל (kakhav), while planet is referred to as a ‘walking star’ – הָבָל לְכָה (balekha). Curiously, Arabic uses the same root to refer to planet – كَوْكَب (kawkab), while the word for star is نَجْم (najm) or نَجْم (najma). The common root for the Hebrew star and the Arab planet probably originates from the Akkadian word ‘kakkabu’ for star.

4.2. Constellation

Originally Hebrew used the word מְזָל (mazal) for the zodiacal constellations. In modern Hebrew, this word means ‘luck’, probably hinting at the astrological context of the word. This context is also related to the expression ‘worshippers of stars and constellations’: עֲלֵיִם מְזָלִים וּמֱזָלוֹת (ovdei kakhvim umazalot), a derogative name for pagans. The word probably originates from Akkadian, where ‘manzaltu’ means the place, or the home of the gods. This meaning is probably related to the Arab word مَزِيل (manzil), which means a home, a dwelling, but also refers to a part of the Qur’an.
4.3. Earth

The Hebrew word for Earth is אֶרֶץ (eretz), and despite the similar sound, it is probably not related to the English word. Instead, it is definitely related to the Arab word أَرْض (ard). In both languages the word also means ‘land’, ‘ground’ and ‘country’. Another hint to the ancient origins of the word is its appearance in the first sentence of the Bible.

4.4. Sun

The Sun is called שֵׁמֶש (shemes) in Hebrew and شَمْس (shams) in Arabic. The similarity is obvious, and it goes back even to Mesopotamian mythology, where Shamash is the sun god. An alternative Hebrew name, with Talmudic origins, is חַמָּה (khamma), meaning ‘the hot one’. The Sun is considered one of the two luminaries whom God created on the fourth day of Creation. This year, on April 8th, Jews held ברכה העה (birkat hakhamah). This is a rare ceremony which Jews celebrate every 28 years, when, according to an old tradition, the sun returns to its location and configuration at the moment of its creation.

4.5. Moon

The principal Hebrew notation for the Moon is יַרְאֵך (yareakh), while in Arabic it is قَمْر (qamar). Obviously, the Moon is also mentioned in the story of the Creation, where it is termed ‘the lesser light’. An alternative biblical name which is also used in modern literary Hebrew is לוֹנָה (levana), meaning ‘the white one’.

The word לְנוֹת is also related to the word לֶון (=yerakh), meaning ‘month’. Another term for the Moon is שָאָר (sahar), which is closely related to the Arab words شَبْر (shahr) meaning ‘month’, and شَهْر (sahehra) meaning ‘evening’. Another interesting relation is between the principal Hebrew word for ‘month’ – חֹדֶשׁ (khodesh), which has the same root as the word חוֹדֶשׁ (khadash), with the meaning ‘new’, probably because of the relation to the new moon.

The Moon has a central role in both Jewish and Muslim worship. The Hebrew calendar (originally Mesopotamian) is lunar-solar, while the Hijri calendar is completely lunar. A possible relic of the pagan Moon worship exists in Judaism in the form of the Benediction over the New Moon. The blessing is said outside the synagogue, in the light of the waxing moon. Therefore, it is written in large letters, with a special large font, termed ‘moon benediction letters’ – אֲוֹתִיֹת קִדְעָשׁ לְנָה (otiyot kidush levana), in order to ease the reading. It can sometimes be found written on the wall of the synagogue or on a marble plate.

4.6. Mercury

Mercury is called in Hebrew כֹּכַב חַמָּה (kokhav khamma), i.e., the Sun’s star. Sometimes it is simply referred to as כֹּכַב (kokhav) – ‘star’, with a similar usage by the Assyro-Babylonians, who called it simply ‘kakkabu’. I am not familiar with an etymology to explain the Arab name – عَطَارْد (utared), which is also used in Turkish and the other Turkic languages.
4.7. Venus

Venus has several Hebrew notations. The one most commonly used is נגה (nogah). The equivalent Arab word is ذورا (zuhra). Both the Hebrew and the Arab terms carry the meaning of ‘brightness’, ‘shine’. It seems that in Hebrew, at least, there is a mix-up in the terminology between the planet Venus and the zodiacal light (Gandz 1970).

Other speculated biblical terms for Venus include אֵלֶּחֶט הַשָּׁכָר (=ayelet hashakhar) and חֵלֶל בֶּן שָׁכָר (heilel ben shakhar). This last expression refers to the Canaanite myth of Heilel, the son of the dawn god (Shakhar, which is also the Hebrew word for dawn - שָׁכָר), who rebelled against ‘Elion’, the chief god, and was expelled from heaven as punishment – a Canaanite version of the myth of Lucifer. In this context, it is interesting to see that the Hebrew word for ‘dawn’, and the Arab word – فَجْر (fajr), are both built by different roots who carry a similar meaning of ‘liberation’, ‘discharge’, ‘turning loose’.

4.8. Mars

The name for Mars is מָדִים (ma’dim), with a pretty obvious etymology – it simply means ‘reddenning’. On the other hand, the Arab word is مَرْرِكَ (mirrikh), and I have not found any plausible etymology for this name. The possibility that it relates to the Babylonian god Marduk, is somewhat dubious, since Marduk is already associated with the planet Jupiter. Another possibility is that it is some kind of a mispronunciation of the name ‘Mars’.

4.9. Jupiter

Jupiter’s Hebrew name is צדֵק (tzedek), whose usual meaning is ‘justice’. The Arab name is المُشتَرِ (almushtari), which means ‘the buyer’ or ‘the owner’. A possible hint to a relation between these two seemingly different etymologies is mentioned in one tradition, according to which Jupiter shined all night during Abraham’s fight with Chedarlaomer, king of Elam. In the biblical text it is not mentioned, but it is mentioned that ‘Malkitzedek’ (מלכיתְצֶדֶק), king of Shalem (=Jerusalem) blessed Abraham. It is said that Malkitzedek is a priest of the god ‘El Elion’, who was described in an Ugaritic text as ‘buyer (owner?) of the heaven and earth’.

4.10. Saturn

The current Hebrew name of Saturn is שבָּטַי (shabtay), and one can easily hear an allusion to שבת – Shabbat, the holy day of rest, saturday. This name appears first in the Talmud. It seems that at some point during the Talmud period the Jews adopted the planetary week, where Saturn rules saturday, and thus the Hebrew name actually means ‘saturday’s planet’ There is one appearance in the Bible of another name, with unclear vocalization: קָיַמְנָו, which may read ‘kayun’, or ‘kiwan’ (Schiaparelli 1905). The source is probably Akkadian, where ‘kayamanu’ means ‘the steady one’, which is similar to Hebrew קַיָם (qayam) – ‘exists’, or Arabic كُون (kawn) – ‘existence’. A relic to this ancient word exists in modern Persian, where Saturn is named ‘kayvon’. It may well be that the name was chosen to refer to the fact that Saturn is the most ‘stable’ planet, i.e., it changes its position relatively slowly. As for the Arab name – ذوخ (zukhal), I suggest its meaning may be related to the same root in Hebrew, where it means ‘to crawl’, ‘to advance very slowly’.

https://doi.org/10.1017/51743921311002432 Published online by Cambridge University Press
5. Summary

I have introduced in the previous paragraphs the basic planetary terminology in Hebrew and in Arabic. One can clearly see that contrary to the western planet naming scheme, which names all the planets after Roman gods, the Semitic ones are not as systematic. Each name of a planet carries its own unique story. The stories behind the names tell us of a distant past, the past of Mesopotamia and the Middle East, the ‘cradle of civilization’ (as some scholars call this area), with spicy scents of the Bible and very ancient lore. Astronomy certainly played a central role in those early civilizations, in the time keeping techniques and in the myths. It is interesting to see whether the names that will be elected for Uranus and Neptune in Israel this year will gain public acceptance among speakers of modern Hebrew, thus forming a continuing bridge to the beginning of Man’s fascination by the stars and planets.

References
Fellman, J. 1974, *Linguistics*, 120, 95