Somali calendar

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The **Somali calendar** (Somali: *Soomaali tiro ammin*) is based on both the solar and lunar calendar systems. The calendar was used by farmers and herders to determine the weather and seasons, it helped them in their needs. The Somali solar calendar is known as ***Amin-tiris*** or ***Shin-tiris*** while the lunar calendar was known as ***Dayax-tiris***.

Somali solar year

The Somali solar year, which is a tropical year in fact, corresponds to the cycle of the seasons. It is based on the weekly cycle and upon the sun, and it is organized into four seasons, twelve months, and 52 weeks plus one day or 365 days. The New Year, which is characterized by a festival called Dabshid falls on or around July 20, in the Gregorian calendar. Other periodic cycles are derived from the weekly cycle in order to create a calendar year and to extend the timekeeping system beyond. As a result, various time units are established. This extended system is based on the number of seven.

Linguistics

If calendar is defined as grouping of days for conveniently keeping track of prioritized human activities, the proto Eastern Cushitcs had apparently practiced that idea according to the linguistic accounts. The Cushitic terms '**Tiro**' (count, reckon, number) and '**Ammin**' (hour, period), which make up the Somali term for 'calendar', are themselves several millennia-old for they came from proto Eastern Cushitic language. Tiro is a cognate word from the modern Eastern Cushitics notably the Macro-Somali, Afar, Oromo, Konso, Gawada, and Gobeze. Similarly, the word 'ammin' or '**Amman**' is shared by Macro-Somali, Oromo, Konso and Hadiya. The fact that the common ancestors of the Eastern Cushitics, who lived about six thousand years ago, used these terms indicates that they had to have a way to keep track of the time and a kind of calendar.

As another sign for this early, developed reckoning system, the Proto Cushitic had generally shared most of the numerals including the higher ones such as '**Kun**' (a thousand) and '**Shii**' (a thousand or ten thousand). For instance, '**tamin**' (ten) of Beja in north eastern Sudan, '**shii**' of Agaw in north central Ethiopia, and Kuma of Iraqwa in north central Tanzania, are the **toman**, **shii** and **kun** in the Somali. As these four groups represent the Northern, Central, Southern, and
Eastern Cushitic respectively, the Somalis are the most easterly group of all Cushitics, who had begun to split 7,000 years ago. This interpretation is supported by a commonality between ancient Somalis and Egyptians. The Somali solar year consists of 365 days, which is similar to the ancient Egyptian calendar. Historians have observed a great deal of cultural and commercial links between the ancient Somalis and their Egyptian counterparts.

These ancient peoples are even believed to be descended from common ancestry, at least partially. 11 As a result, cognates appear in astronomical terms as unequivocally shown by the key words in the following table.

Somali-Egyptian astronomical cognates

Somali	Egyptian	Arabic	English
Qorrax/Qorrah	Ra'a	Shams	Sun
Dayax/Dayah	Ya'ah	Qamar	Moon
Jer	Ter	Waqti, Sa'aah	Hour, period
Manta, Malin	Manta	Nahar, Yawm	Today, Day
Cawo or Caawa	Khawo	Layl	Night, Tonight

In addition to few other terms, such as month and year, these words were the core of calendar language of ancient societies around the world. On the bases of this shared background, it is highly probable that a common heritage had involved the foundations of the two calendar systems, the Somali and the Egyptian. Even with this possibility of common heritage, the Somali calendar appears to have developed indigenously.

Archaeology

The antiquity and the originality of the Somali calendar is further supported by the belief that the ancient Eastern Cushitics, to which the Somalis belong, developed a sophisticated calendar based on detailed astronomical knowledge by the first millennium BCE (Before Common Era). Researchers have studied the archeo-astronomical nature of two megalithic sites on the southwest part of **Lake Turkana**, northwest of present Kenya.

The two megalithic sites are locally known as **Namoratunga**, meaning stone people. Researchers have observed that one of the sites has an alignment of 19 basalt pillars seven of which are non-randomly oriented toward certain stars and constellations that are used by modern Eastern Cushitics ‘to calculate an accurate calendar’.

In addition to this field research, modern archeo-astronomical measures have been used in the study. It has found that the pre-historic Cushitics had been using an accurate, complex calendar system based on astronomical calculation at least twenty-three centuries ago.

Namoratunga is located on the southern fringe of a region that was the ancestral home of pre-historic Somalis. The Macro-Somali groups of **Rendille**, **Elmolo**, **Daasanac** (Galab) and **Arbore** who have been in the area approximately three thousand years are still located very near to these archaeological sites. About four centuries ago when the **Turkana** and **Samburu** peoples expanded to the southern part of the lake, they came into contact with these Macro Somali groups, while more Somalis were due east of them. More importantly, the ancient Somalis are known to be 'demolithic' (people of stone), who have been associated with tireless building of megaliths. This is shown by the tens of thousands of pre-Islamic-built cairns scattered throughout the Somali inhabited territories. The Cairns are known to the Somalis as **Taallo Tiirriyaat** (Monuments of Tiirri), or Arro-Weelo graves in some localities. **Arro-weelo**, literally meaning ***ruler of the entire land***, refers to a legendary queen in the **Tiirri** Era. **Tirri** was a powerful, ancient Somali tribe occupying the half of the country including Harar uplands. The term ***tiir*** itself means ***pillar*****,** so ***tirri*** means ***pillar people***.

During this same time, another major Somali tribe, **Madalle**, was creating elaborate stone monuments in the far South (Jubba-Galana region: the vast land southeast of Lake Turkana to the Kismayo-Malindi coast). In addition to other complex earth works, such as flat dams, limestone built wells and ruined towns on the coast, the building of the Taallos is attributed to the Madalle-led ancient Somali communities in the region. ***Madalle*** literally means ***people of congregation***, which also refers to power and hard work. Observations of bodies in cairns indicate similar burial practices indicating that they were built by same people.17 However, as they were basically intended to be funeral, they are not related to astronomical phenomena as far as can be discerned.

The evidence suggests that one of the two calendars, **Somali** and **Namoratunga**, was the forerunner of the other because of a number of aspects: the Macro Somali groups had been the inhabitants of the region, during what linguistic historians now refer to as the '**Omo-Tana**' era of Macro-Somali; the Somalis have the most detailed calendar among the Eastern Cushitics; they are builders of megalithic monuments or cairns; the timekeeping system based on 'seven' in the Somali culture is also found in **Namoratunga**, indicating **Namoratunga's** connection to the seven-based calendar system that produced the Somali calendar. The two systems, therefore, must be originated from a common cultural aspect or one of them must be derived from the other.

Traditions

A timekeeping unit based on a week also indicates the antiquity of the calendar. The idea was introduced to different cultures in the world at different times. However, this concept was not common among the ancient or even Pre-European-colonies of the world. The focus of the calendar of many of them was the **lunar month,** not the week.

That was not the case for ancient Somalis. Ancient Somalis gave special importance to the usage of the week in daily life. The present names of the week days in the Somali are Islamic (Arabic), but there is a sign for existence of week usage before the advent of Islam. Some traditional games retain what seem to be abandoned names, such as **Biito, Hellelebi, Laaqshow, Tuux** and **Taax**, for the pre-Islamic weekdays. Besides these week-day names, other seven names were assigned to the timing of days in the week such as **Manta** (today), **Berri** (tomorrow), **Saadambe** (after-tomorrow), **Saakuun** (after after-tomorrow), **Shaley** (yesterday), **Dorraad** (before-yesterday) and **Dorraad-Horteed** (before before-yesterday). Moreover, less Islamized Macro-Somali member groups have preserved the pre-Islamic week, such as **Rendille** community whose homeland remains immediately northeast of **Namoratunga** sites.

This indigenous week represents the **pastoralist** version that can be expected from ancient Somalis, and it is further evidence for the existence of pre-Islamic calendar. The seven-day week owes its origin to a reverence for the number seven in the religion of the prophets, the monotheistic messengers such as Noah and Abraham. For instance, seven days, seven heavens and seven earths, are found in the divine religions. In fact, as far as we know, the Israelites were the only people who were using a seven-day week prior to Christianity. All traditional societies, be they African, Asian, Middle Eastern or European, including Greeks and Romans, were using other intervals, that is from 4 to 10 days, or were counting months rather than days.

The Babylonians attached significance to the number seven, and as a result, to the days of lunation that are multiplies of seven. The reason for this honor is unknown; however, it could have originated from previous divine beliefs, namely from the Prophet Noah's religious heritage.

The pre-Islamic Somalis, and other Eastern Cushitics, believed in a God named '**Waaq**' or '**Eebe**', who is considered the same as Allah or God in Islam and in the other monotheistic beliefs. It is clear that this heritage had come to the ancient Somalis in pre-historic times. Their calendar was, however, constructed for economical purposes rather than ideological concerns, another sign of its pre-Islamic characteristics. Despite the Babylonian beliefs in the sacredness of the number seven, and Egyptian and later Persian calendars based on 12 months of 30 days plus five days, no calendar in the world has been organized like the Somali solar calendar. This idea could have come from the Egyptians, Babylonians or even Persians; however, there is no evidence for this observation. It remains very clear that the Somali's unique organization and method of calculation was undoubtedly developed in Somalia.

The nature of **Dabshid** celebration also supports the calendar's existence in prehistoric times. The festival activities, that take one to three days depending on the local customs, contain both Islamic and Non-Islamic aspects. The activities include: building a huge fire; slaughtering animals, mostly goats; playing various games; singing obsolescent songs; and reciting Islamic prayers. The inclusion of non-Islamic customs in the present-day festivities suggests an attempt to preserve some of its pre-Islamic characteristics.

Heavenly-related customs also shed more light on this issue. In this regard, **Dirir**, **Ayaan** and **Xiddig**, have become strong icons in the general culture. Some economic or life events, such as one's fortune or birth, are marked by the movement of certain stars. The extended, common personal and place names by these terms across the nation reflect the deep rooted-ness of these customs. Although some of these customs are not permitted in the Islamic faith, their persistence within the Islamic culture shows their importance in the daily life of pre-Islamic society, which in turn indicates the age of the calendar.

In Records

Finally, evidence in the Islamic era appears to show how old calendar foundations have been transformed into the present, remarkably functioning Somali calendar. In his study in **1340's** about the history of **Awdal**, the medieval state in western and northern parts of historical Somalia and some related areas, Al-Umari of Cairo states that in the land of **Zayla**' (Awdal) "they cultivate two times annually by seasonal rains … ***The rainfall for the winter*** is called '**Bil**' and ***rainfall for the 'summer***' is called '**Karam**' in the language of the people of **Zayla**' [Awdali Somalis]."21

The author's description about seasons generally corresponds to the local seasons in historical **Awdal** where **Karan** or **Karam** is an important rainy season at the beginning of the year. The second half of the year is called '**Bilo Dirir**', (**Bil** = month; **Bilo** = months). It appears that the historian was referring, in one-way or another, to these still used terms, **Karan** and **Bil**. This indicates that the ancient Somali solar calendar was very similar to the one they use today.

Structure

Besides the weekly cycle, there are four other major cycles in the system: the **50-day cycle**, which is ***7 weeks + 1 day***; the **yearly cycle** which is ***7 x 50 days plus 15 days***; the **seven-year cycle** which is ***7 x 365 or 2,555 days long***; and the **49-year cycle** which is ***7 x 7 years in length***. All these time units share the number of **seven** or weekly cycle. Every unit is named after its first day, which is also **the last day of yearly and 50-day cycles**.

The first 50 days of the Somali Calendar Year of **2007-2008**, in the Gregorian system, are from **Saturday July 21, 2007, to Saturday Sep. 8, 2007**. The same pattern applies to the first and the last days of the year, *while the first day of the year* is **Saturday, July 21, 2007**, *the last day of the year* is **Saturday, July 19, 2008**, because this calendar is based on the summer solstices. Thus, the time units used in this year are ***50-day intervals and 365-day intervals***, and the *name of this year is* ***Saturday***. These time units are carefully and systematically enumerated day by day and period by period where practice and redundancy have resulted in sophistication and accuracy.

Year length

Since the yearly cycle depends on the ***50-day and the weekly cycles***, these three cycles are primary units of the system. Its length is determined by them. Let us take our ***Saturday year of 2007-2008*** as an example: ***the first 50 days of this year are also called Saturday period***. Consequently, **the next 50 days are Sunday period**. The remaining periods of the cycles follow the weekdays order. But, *the total of the days in the cycles are 350 or 50 weeks.* So that, in order to organize a year, and to allow the succeeding years to follow the order, two weeks and one day must be added to this number which results in 365 days. The following chart shows what we have said in words.

The Months, Days and Seasons of the Somali Calendar

The Months & The Seasons

Seasons	Months	Days	1st Day of the Month	Gregorian Date
Hagaa, 13 weeks:	Karan	31	Karan 1	July 20
	Habar-ari	30	Habar-ari 1	August 20
	Diracgood	30	Diracgood 1	September 19
Deyr, 13 weeks:	Deyrweyn	31	Deyrweyn 1	October 19
	Ximir	30	Ximir 1	November 19
	Xays	30	Xays 1	December 19
Jilal, 13 weeks:	Lixkor	31	Lixkor 1	January 18
	Toddob	30	Toddob 1	February 18
	Aminla	30	Aminla 1	March 20
Gu', 13 weeks + 1:	Fushade	31	Fushade 1	April 19
	Gu'soore	30	Gu'soore 1	May 20
	Samuulad	31	Samuulad 1	June 19

The Days of the Week

Somali Days	Gregorian Days
Soo Roga	Saturday
Koobin	Sunday
Lammin	Monday
Lamatoke	Tuesday
Koodaar	Wednesday
Hakisa	Thursday
Hakisa-Bile	Friday

The beginning of the first season does not exactly fall on **‘Dabshid’**, the **1st day of the New Year**. Instead, it follows the Gregorian calendar closely in that. The beginnings of the seasons usually fall in the first weeks of July, October, January and April respectively, while the *New Year is around July 20*. Despite the fact that the beginnings of the four seasons do not correspond to the beginnings of the New Year and the other months, the two parts are perceived as having a standardized correlation. The disparity is only about two weeks. Additionally, the New Year and Lixkor, the first month of the second dry season, begin when the land becomes completely dry and all types of livestock are due to go to the well. Therefore, apart from this insignificant regress, the adopted months of the year systematically correspond to the seasons.

In fact, the meanings of names for the seasons and the months describe the periodic nature of the names themselves. They represent fundamental human needs expressed in practical timekeeping patterns rather than ideological concerns. With the exception of **Deyr**, the meanings of names of other seasons are not known with certainty because of terminological obsolescence.

Nevertheless, these names are meant to convey the nature of the seasons for which they stand. For example, **Xagaa** means ‘***a partially windy and warm, dry season***;’ **Jiilaal** means ‘***a partially cold, very dry season***;’ while **Gu'** means ‘***sufficient rainfall’***. **Deyr**, which is derived from the term **‘dayro’** (unfavorable condition), means here ‘***less rainfall’,*** in contrast to the Gu' season. The meanings of all months are known as shown in the following table.

Astronomy

Although the lunar and solar calendar systems operate separately, they are astronomically interconnected and share many similarities. That is because some periods from both systems are identified by moon stations (**Manaasil** or **Fadhiga Dayaxa**) which are characterized by *certain stars* (**Xiddigo**) or *constellations* (group of stars - **Urur**).

Seasons and lunar cycles

Because the lunar month consists of 28 days plus one or two days, there are at least 28 visible lunation over four weeks. Moon station or conjunction is observed nightly as the moon sets with a star or constellation. Consequently, the date of a certain day can be figured out by the position of the moon in the horizon. The star or constellation that set with the moon in each of the four weeks of every month is also identified with each of the four seasons in a year. Here, every week in the month corresponds to one quarter of the year.

Configurations associated with the seasons

1. **Xagaa** (summer) is marked by **Naaf** group: ***Naaf Cadde*** (white naaf), ***Naaf Madobe*** (black naaf), ***Afqoys, Kuxdin Hore, Kuxdin Dambe, Dirir****-day* (semi-dirir), and ***Dirir***.

2. **Deyr** (autumn) is marked by **Dalalle** group: ***Garbo, Gudban, Lib Casse, Hor Dameer, Hor Cadde, Mareega-Dheer,*** *and* ***Bah.***

3. **Jiilaal** (winter) is marked by **Faraci** group: ***Faraci, Listaan, Lixo*** (the six), ***Cadcad, Saco*** (the cows), ***Nujusi,*** *and* ***Afa-gaal*** *or* ***Naasa-Gaal*** (camel's breasts)

4. **Gu'** (spring) is marked by **Cirir** group: ***Faruuryo, Jid Gabarre, Jid Gacanle, Jid-Dhiriqle*** *or* ***Dheregle, Rab Hore, Gog Madobe,*** *and* ***Rab Dambe***.

Some of the seasons have more than one name. **Naasa-gaal**, for instance, are also known as **Wadaamogoo** – *cutting the buckets (of drawing the water from the well)*.

These 28 configurations are not only used for timekeeping and weather forecasting, they include extended stars that are used as horizon-marking devices. Apart from being held in high regard by the culture, these horizon-marking devices serve as essential directional guides for nightly journey both by land and sea.

Determining Dirir

By the Somali standard method of calculation, the year has two divisions. *The first half of the year is called* **Bilo Dabshid** (Months of Dabshid). In this division, the length of the months is calculated by counting the days from **Dabshid**, the New Year. *The second half is called* **Bilo Dirir** (months of Dirir). **Dirir** is a star that is identified with **Spica**, in the European astronomy, which is used by both the two Somali calendars to interconnect some of their operations in a particular conjunction. As a result, the conjunction is astrologically calculable and observable by the lulation or *average time for one lunar phase cycle.* The occurrence of the star rising with a particular moon phase is also called **Dirir**. Thus, **Dirir** is a monthly conjunction in which the lunar phase changes but its position in the sky is held constant.

The dates of **Dirir** in solar months are of not much concern because almost everything is held constant. The **Dirir** months in the *lunar system* naturally shift, but a **Dirir** date in a given month is one of three particular days, depending on the length of the month, **29 or 30 days**, so it is almost held constant. For this reason, *the first **Dirir***, **Lixkor**, *falls on the 21st, 20th, or 19th of the lunar month*, *forcing each **Dirir** to occur two days later than the preceding one in the next month*. For example, suppose that **Lixkor** *falls on the 20th of seventh lunar month*, **Rajab**; *the next **Dirir***, **Toddob**, *will take place on the 18th of the following month*, **Sha'baan**; *while the sixth **Dirir***, **Samuulaad**, *will fall on the 10th of twelfth month*, **Dul-Hijjah**.

The event standardizes the beginning and the length of the solar month as well as designates the rainfall periods in the second half of the year. Right after the conjunction, there is usually rain or at least a sign of rain, depending on the fasal or season. Further, this lunisolar interconnection permits a layman to observe the **Dirir** in night. *Since the lunar year is approximately ten days shorter than the solar year*, the lunar year annually begins about ten days earlier than the last year's correspondence date. For this reason, the beginning of the lunar year and other important dates can also be estimated by ordinary observers. This gives them another way of calculating the correspondences between the two systems. Although **Dirir** *lasts for six months*, a nominal **Dirir**, **Dirir-Sagaar**, is recognized to satisfy the rule of 'seven'. **Dirir-Sagaa**r occurs prior to the *eve of* **Dabshid**, which shows its lack of **Dirir** requirements. Some say that it is not **Dirir**, but part of **Samuulad**.

References

"orthodox" Muslims in Somalia disapproved of the Dabshid feast (Barile, La colonizzazione fascista, p.128) *[1] at Google Books

- Said M-Shidad Hussein, *The Somali Calendar: An Ancient, Accurate Timekeeping System*.*Somali calendar *at Wardheer.startlogic.com*