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THEORY OF CALENDRIC MOTOR SLIP

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Abstract

The history of man's ever-changing calendars is explored and thought to be rooted in cosmic motor slip. By modeling the standard light year as a rotating magnetic field and the lunar light year as a rotating armature I calculate a calendric motor slip for the earth of 1.5%. It is theorized that actual lunar light year is spinning at a slightly slower speed than the earth's far magnetic field, thus the lunar light year never fully catches up to the standard light year. The rotational speed will never catch the magnetic speed and we electrical engineers call this difference as motor slip. In the far magnetic field, this slip is occurring every year and calendars are man's attempt to catch up in time to the rotating magnetic far field. In a sense, time really is slipping away. Thankfully, calendars exist so that we can make up time. Time is not absolute and relative difference in calendars is attributed to earth's far electromagnetic rotational speed and mechanical speed of the earth and its moon. Electro relativity is introduced and the correlation of time, space and electrical frequency discussed.

Keywords and phrases: Gregorian calendar, Julian calendar, light year, lunar calendar, motor slip.

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1. Introduction

In the most punctual of cave dweller occasions, people determined time by watching the times of light and darkness that substituted constantly. The sun light-based day is viewed as the most sinusoidal type of the schedule. The subsequent fundamental kind of schedule was the arbitrary schedule, which was created by tallying the quantity of days again and again, either towards infinity or in a cycle. In any case, there were a few issues with the arbitrary schedule. Right off the bat, farmers of early civic establishments could not compute the ideal time to plant their harvests. Crop planting is a task that is firmly connected to the seasons, and the arbitrary schedule did not depend on the lengths of seasons. Subsequently, people started to watch the sun's passage through a fixed point, and this method was the antecedent of the solar calendar. Schedules that depended on lunar and stellar cycles were likewise utilized in the period of antiquity [1].

2. Early Historical Calendars

One of the main logical schedules was the Egyptian schedule. As indicated by this schedule, a year contained a year, and every month had precisely 30 days. The months were additionally isolated into three weeks, with every week enduring 10 days. Later on, the Babylonian calendar was created, and it was a lunisolar schedule. The years in this calendar were comprised of 12 lunar months, and every month would start when another bow moon showed up. The Greeks utilized a schedule that was fundamentally the same as the Babylonian calendar [2]. The principal Roman calendar was made by Romulus, and it had 10 months in a year, with every month enduring 30 or 31 days. The Romans had various schedules, and the most eminent one was the Julian calendar. The Jewish calendar was another early kind of calendar, and it contained no epagomenal days. The seventh day was called Sabbath.

3. The Lunar Calendar

A few human advancements made calendars that pursued two things - the periods of the moon, and the seasons around them. Lunar stages (or lunations) form what we today call synodic months (month originating from the Germanic word for moon) - and there are approximately 12 synodic months in a sun-based year - which, in itself, is strikingly like our ordinary year, with a distinction of around 20 minutes [3]. In any case, individuals could begin estimating patterns in the sky, by watching the stars, the sun and the moon. This was done for the most part through the unaided eye, and the lunar calendar was developed along these lines.

4. The Julian Calendar

The Julian calendar was presented in 45 BC by Julius Caesar. In spite of the fact that it had a year, a considerable lot of its months were shorter than the months in the modern calendar. Accordingly, one Julian year just comprised of 355 days. Before Julius Caesar's changes, the year started on the 31st of March. A jump month with 23 or 24 days was additionally made to keep the schedule appropriately lined up with the cycle of seasons. The Roman schedule additionally had a common cycle of weeks that is like the modern cycle, however every week comprised of eight days. Julius Caesar made various changes to the old Roman schedule. One of them was the expansion of days to February to make it a 28-day month. The week was likewise diminished by one day to make it a 7-day week. Moreover, Caesar presented the leap year rule, which expressed that all leap years can be equitably partitioned by four [4].

5. The Calculation of Easter

In his original work *Ecclesiastical History of the English*, the student of history Bede portrayed how the Roman Church and Irish Church had isolated suppositions on the count of Easter. At the synod of Wilby, King

Oswy heard the two sides of the contention lastly chose to decide in favor of the Roman technique, which recommended that Easter Day should fall on the primary Sunday after the paschal full moon. The impact of the powerful Roman Church of the fourteenth century additionally guaranteed that most European locales embraced the Roman count. It was during this time the "In the year of the Lord" dating, or "AD", was actualized. Anno Domini is the counting of years from the time of Jesus Christ's incarnation.

6. The Gregorian Conversion

In the year 1582, Pope Gregory XIII proclaimed that there ought to be an adjustment in the Julian schedule. The Gregorian schedule was a hypothetical schedule, and it was made from exact estimations of vernal equinoxes. The Julian schedule depended on the assumption that the term between vernal equinoxes is 365¼ days, yet in actuality, it is inexactly 11 minutes less. As such, the Gregorian schedule had three jump days removed each 400 years. Likewise, changes were made to the lunar cycle, which aided in the estimation of Easter. Numerous European nations did not embrace the Gregorian calendar when it was presented, for the most part due to the Protestant Reformation that was occurring around then. By the twentieth century, the Gregorian calendar turned into the standard calendar in Europe. Today, it is the most broadly utilized calendar on the planet [5].

7. Calculation of Earth Light Year

A light-year is defined as the distance that light can travel in 1 year. Typically, we calculate this by multiplying the speed of light by 1 year $(\text{or } 3.1557 \times 10^{7} \text{ seconds})$ to find the distance.

$$d = c \times t,$$

$$d = 3 \times 10^{8}\,\text{m/s} \times 3.1557 \times 10^{7}\,\text{s},$$

$$d = 9.4605 \times 10^{15} \text{meters.}$$

8. Calculation of Earth Lunar Light Year

A Lunar light-year is defined as the distance that light can travel in 1 year. Typically, we calculate this by multiplying the speed of light by 1 year (or 3.05856×10^7 seconds) to find the distance:

$$d = c \times t,$$

$$d = 3 \times 10^8 \text{m/s} \times 3.05856 \times 10^7 \text{s},$$

$$d = 9.18 \times 10^{15} \text{meters.}$$

9. Calculation of RPM of Magnetic Field Speed and Rotational Speed

Here *g* force refers to Relative Centrifugal Force (RCF). RCF is positively related with the rotor radius and the rotation speed of the centrifuge. The *g* force rpm conversion formula is as follows:

$$RCF = 1.118 \times 10^{-5} \times r \times (rpm)^2$$

or

$$\text{RPM} = \sqrt{(\text{RCF}/1.118 \times 10^{-5} \times r)},$$

where

RCF is Relative Centrifuge Force, in “g”,

R is Rotor radius, in “m”,

RPM is Rotation speed, rotations per minute, in “rpm”.

Inserting an RCF of 9.806 Newton, and a radius of one light year, I obtain RPM 9.774506×10^{-7}.

Inserting an RCF of 9.806 Newton, and a radius of one lunar light year, I obtain RPM 9.628962×10^{-7}.

10. Calculation of Calendric Motor Slip

It is common to express the slip as the ratio between the shaft rotation speed and the synchronous magnetic field speed.

$$s = (n_s - n_a)100\% / n_s, \quad (1)$$

where

s = slip,

n_s = synchronous speed of magnetic field (rev/min, rpm),

n_a = shaft rotating speed (rev/min, rpm).

When the rotor is not turning, the slip is 100 %. No slip or zero slip can never be achieved. Inserting the values of RPM for a light year and a lunar light year, I obtain a slip of approximately 1.5%. Full-load slip for large hp motors is typically near 1%.

11. Conclusion

My calculations have shown that the long history and evolution of mankind's various calendars is the result of motor slip. The long arc of a light year makes a circle around the earth which has an inward acceleration or relative centrifugal force. A standard light year can be modeled as a synchronous magnetic field of a motor with a lunar light year representing the spinning of the shaft at rotational speed. The net effect is that the lunar light year never catches up to the standard light year and a calendric motor slip of 1.5% results. Mankind has compensated for this naturally occurring slip by adding days to catch up to the rotating magnetic field. We note that the difference in days between a lunar calendar and the Gregorian calendar is about 1%. It is recommended that a larger sample of calendars be consulted and compared to calendric motor slip calculation.

By combining electro dynamo and relative time, we have a new concept of electro relativity, which is a function of radius, rotational speed and *g* force, or more typically known as gravity, or acceleration. A light year is the astronomical distance that light travels in one year. Radius is thus proportional to periods of time, or cycles, and the speed of light. Since we know that the speed of light is constant in a vacuum, and/or space, I conclude that the key underlying variable of electro relativity is periods, or what we know as electrical frequency. Speed, or RPM, is directly proportional to frequency in a motor. Motor slip is commonly calculated using RPM or frequency. I conclude that relative time and distance, or space if considered in three dimension, is at its core a function of periods, or what electrical engineers call cycles or frequency.

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