# THE EQUINOXES AND THE SOLSTICES IN THE ROMANIAN POPULAR CALENDAR

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Abstract. The paper intends to point out the relevance of equinoxes and solstices in the calendar of the Romanian people. This is achieved by presenting comparatively the astronomical phenomena and the same time events as they were noted by the Romanian peasants throughout time.

Key words: calendar - equinox - solstice - year.

#### 1. INTRODUCTION

The Romanian people used to measure time depending on several elements, harmoniously mingled. For the inhabitants of the traditional village time held a lucrative value. It was intimately connected to the happenings and events that took place in their lives or in nature (the biorhythms of plants, animals and birds). Hence the name of the celebrations, as well as their main occupations, namely agriculture and farming which inspired an agricultural and also a pastoral calendar. The other rural activities (fruit growing, grape growing, bee growing, and fishing) generally superposed over the time frames fixed by the agricultures and farmers.

Directly connected to the peoples' existence, the two axes of the *equinoxes* and *solstices* concentrated around them the main folk celebrations in the popular calendar. They became "*the pillars of the popular calendar*" and the most important reference points for agricultures and farmers.

Depending on the nature of their specific practice, the agricultures centered their activities on the data of the equinoxes and solstices, while the farmers postponed them a month later (animal breeding is carried out depending on other biological rhythms)

Thus, the *agricultural spring equinox* (21 March) was celebrated by the pastors at *Sangiorz* or *Saint George* (23 April), and the *summer solstice* (22 June) at *Saint Ilie's Day* (20 July), the *autumn equinox* (23 September) at *Saint Dmitri Day* (26 October)

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and the winter solstice (22 December) at Winter Saint Peter (16 January).

In the popular calendar the four seasons are also marked by data that do not coincide with those of the astronomical calendar. Thus, it was considered that spring begins at *Dragobete* (24 February), summer makes its debut at the celebration of the *Saints Constantine and Helen* (21 May), autumn was inaugurated at *Cross Day* (14 September) and winter started at *Saint Andrew's Day* (30 November) and even earlier, at *Ovidenie* (21 November)

The seasons were delimitated depending on the intensity of the Sun, as well as on the course of life of the plants, animals and, last but not least, on that of man. The astronomical data of the equinoxes and of the solstices do not correspond almost at all with the data when they are marked in the popular calendar. This is due to the fact that besides the astronomical observations, the Romanian people established its calendar also depending on other factors such as the weather conditions of each season and, last but not least, on the evolution cycles of the flora and fauna.

Life was programmed through the observation of the repeatable phenomena in continuous motion in the sky (sunrise and sunset, Moon evolution phases, equinoxes and solstices), as well as of those on Earth (the succession of the various seasons: cold or warm, rainy or draughty, the vegetation and animal reproduction cycles, etc.) .Popular astronomy knowledge, appeared as a result of practical needs of orientation in space and time, of planning human activities depending on the seasons, months, weeks and days formed an efficient system of chronometry that stood at the basis of popular calendar. The Romanian popular calendar is in fact a complex of magical-ritual practices that accompanied the way in which the man of the old traditional society saw the world.

## 2. THE SPRING EQUINOX

From the astronomical standpoint, in the official calendar spring begins at 1st of March and ends on 31st of May. Astronomical spring in the Northern hemisphere starts at the spring equinox (21 March) and ends before the summer solstice (21/22 June). It is the time when the Sun passes through the vernal point and the day is equal to the night. Starting from the date of the equinox, day duration is growing, while that of night is decreasing until the summer solstice (21/22 June).

In the popular tradition spring begins on the 1st of March or after the days of *Baba Dochia* are over, more precisely around *Saint Alexe* (17 March), and lasts until the date of *Saint Onofrei* (12 June).

Baba Dochia has a multitude of interpretation is the Romanian folklore. It can be a representative of the Old Year, that is defeated and finally replaced, at the end of a long competition, by a much younger woman, her daughter-in-law or stepdaughter. In other representation Baba Dochia is a very old and very faithful old woman who prays

constantly to God for all the people. There are other traditions according to which Baba Dochia is a scary old woman, that haunts the mountains, eternally frozen and scared because she froze to death. The tradition of the seven or twelve days of Baba Dochia come from the legend according to which she is an old shepherdess that climbed the mountains together with her sheep dressed in seven or twelve sheep coats. The day grew warmer and she abandoned her coats one by one until it became suddenly very cold and she froze to death.

There are also parts of the country where it was considered that spring begins after the elapse of thirteen weeks numbered from Christmas day. In calculating spring time the Romanian people used to take into consideration also the signs of the biological revival of nature, as well as those of weather. "They say that spring is coming when the snow is melting and flows in torrents even from the top of the highest mountains (...). When the animals start coming out of their winter hiding places, when the insects and the red butterflies start flying and especially when the swallows, storks and the other birds that spend winter in the warm countries, i.e. when they start coming back it is a sign that spring has arrived and it will not be snowing for much longer" (Olteanu 2009).

Actually, in the Romanian traditional popular calendar spring is announced by the following moments:

2 February – *Stretenia* or *The Greeting of God*, the day when winter starts receding before spring, and also when the bear comes out of its burrow and important meteorological forecasts are made.

24 February – *Spring Saint John* or *Dragobetele*. This day represents the starting point of spring, when winter starts making place for spring and when the bear comes out of his hiding place (a reiteration of the ritual of the 2nd of February). They say that if the bear sees his shadow and returns to his hiding place, winter will continue.

1st of March. The 1st of March stands for the starting point of spring. It represents the auspicious moment when forecasts for the future agricultural year can be done, especially concerning the most significant months in the calendar of field works or in the seeding of various cereals. The oracular function extended even over the people, who, by choosing one of the seven or twelve days of the interval called "the days of Baba Dochia" were able to find out their future fate. The days of Baba Dochia are usually seven. The variant of twelve days stands for the equivalent of the twelve months of the year. The figure twelve confirms the magical value through the two couples of six days that mark a ritual, gradual coming out of spring and gradual setting in of spring.

The astronomical equinox -20/21 March - marks the beginning of spring. The Sun is in its vernal point and is in motion across the orbit, when it crosses the celestial equator and passes from the Southern to the Northern hemisphere. The duration of the day is equal to that of the night. After this date the duration of the day increases steadily, while that of the night decreases in the Northern hemisphere. In the Southern hemisphere things happen the reverse way. In the popular calendar the equinox is celebrated earlier in

March: "It so happened that God made the spring equinox in March, around the 8 or the 10th of the month".

Our ancestors celebrated at the beginning of March, between the 1st and 9th of the month, around the date of the popular spring equinox, the beginning of the New Agricultural Year, this being an ancient celebration, a reminiscence of old cosmogonies. Ancient Romanian folks considered the month of March a month of beginnings, of new starts, primarily the start of the new agricultural year. However, traditionally it was considered that spring was in full swing only in April, namely on the 23rd, when *Saint George* was celebrated. Old peasants used to say that Saint George on his horse drives away winter and hurries in spring (even summer), making the wood leaves bloom. His counterpart was considered *Saint Dmitri*, also a horseman, celebrated on the 26 of October, said to bring along winter. In ancient times, pastors actually had two main time reference points, namely *Saint George* (23 April) who brought summer and *Saint Dmitri* (26 October) who announced wintertime. Summer and winter have made up the major twofold calendar of the pastors and sheep farmers.

#### 3. THE SUMMER SOLSTICE

Astronomical summer starts on 22 June (summer solstice) and ends before the autumn equinox (23 September). Officially it begins on 1 June and ends on 31 August.

In the calendar the date of 21/22 June represents an important moment – the summer solstice - the longest day of the year, across points situated at the middle of the year. The Sun is shining in the sky in the highest point above the equator, while on Earth the day has the longest duration and the night the shortest one. It is a turning point situated in the middle of the year (The summer solstice divides the year in two, marking the maximum of solar force). After this date the day starts decreasing gradually.

"In the folk traditional calendar summer begins on Saint Onofrei's Day (12 June) and lasts until Saint Mary's Day (8 September) (...). In summer the sun walks high in the sky, but in winter it is the moon that walks higher in the sky than the sun does in summer. This is how God decided, that half the year one of them be higher in the sky and the other half the year, the other one be the higher (...). Saint Ilie's Day is the date when the Romanians say that summer starts departing and making place for autumn (...)." (Olteanu 2009). In the popular calendar it is considered that the day is equal to the night even starting from the 11th of June (Saint Vartolommeo's Day), when they say that "The Sun turns southwards", i.e. the day begins to decrease. The following day, 12 June, is celebrated the middle of summer.

 $24\,\mathrm{June}$  – the religious celebration of the birth of Saint John the Baptizer, a day on which superpose the folk celebrations of "Sânziene" and "Drăgaica" .

In the popular calendar this date marks the middle of the summer season. The

Romanian peasants consider it the moment when summer turns to winter, as the agricultural works are at the end and reaping begins. The operation of reaping stretches over a long period of time and consists of several activities such as harvesting, the gathering of the fruit and vegetables and of the vine.

The folk celebrations that take place on the above mentioned date, "Sânzienele" or "Drăgaica", are actually reminiscences of an ancient cult of the Sun. According to the Romanian folk beliefs, at the moment of the summer solstice, the Sun stands still at the highest point in the sky, in preparation for the heavy road ahead towards death. It is a moment full of superstitions and magic. It is believed that this day a female character, a fairy called "Drăgaica", walked through the air, singing and dancing over fields and hills, followed by a bridal suite made of many other fairies and beautiful maiden" so that "the vampires should not eat up the Sun". The Romanian peasant girls also play a dance called also "Drăgaica". "Sânzienele" are other mythical characters of a similar nature to "Drăgaica", a kind of fairies of pre-Christian origin that can protect man and his household if celebrated properly. The goal of this celebration is to stop the negative energies that might become manifest on earth now, at the moment when the sun is about to start losing strength. On the celebration day of Sânziene or on its eve, people start gather flowers with which they adorn the doors, windows, yards, all in order to defend their inhabitation place form the aggression of the bad fairies and evil spirits that are considered to become active now that the Sun is weaker.

There are several legends about the mishappenings that might take place on the day of the summer solstice, when all sorts of negative energies become manifest because the sun is becoming less powerful from now on. There is a metaphor according to which at the moment of the summer solstice in the sky there are three suns and not just one that can affect the sight and the power of work of the people that try to look at them and that can also have a deadly effect on the plants. The folk celebration called "Drăgaica" is carried out by the villagers so that the Sun does not burn the harvests. It is also believed that this day the human beings can find out their future fate: "he who does not see the shadow of his head at sunrise will die the following year". According to popular tradition, the summer solstice is considered "the middle of summer" or "the day when the wood turns to winter" (Olteanu 2009). They say that this day "The Sun got engaged to the Moon" and it is considered right that "this day the people do not do any kind of work because the Sum himself is resting, or is working only until midday." (Olteanu 2009). There are many other Romanian popular sayings relating to this day, such as "The Sun turns three times in the same place, at noon, in the afternoon and at sunset"; " whenever the Sun plays in the sky or stands still at noon, summer is about to turn to winter. Whoever watches him this day will have headaches all summer. One should not watch the Sun that day (...). Whoever sees the Sun playing three times risks going blind? That day, early in the morning, the Sun washes its face during sunrise: whoever watches it attentively can the water flowing down, at the foot of the sunrise, as just as

many long, luminous rays." (Olteanu 2009).

Not only in Romania, but on all continents there are traditions, rituals and similar manifestations related to the summer solstice. It is generally a period that abounds in field celebrations, agrarian rituals and fairs. The summer solstice opens the cycle of summer traditional manifestations.

## 4. THE AUTUMN EQUINOX

Officially, autumn begins on 1 September and ends on 30 November. In the astronomical calendar, this season starts from the autumn equinox (23 September) and ends before the winter solstice (22 December). Each year, at the beginning of the last part of September – the 22nd – in the Northern hemisphere the astronomical autumn opens with the autumn equinox. On that moment the Sun rises right in the east and sets in the west. Consequently, the duration of the day becomes equal, irrespective of the latitude, to that of night. In the Southern hemisphere of the Earth, the date of 22 September marks the debut of spring. Starting from this date, the duration of the days continues to decrease, and that of the nights to increase until 21 December, when the winter solstice takes place at our Northern latitudes.

From the calendar point of view, the autumn is characterized by specific activities such as the gathering of the crops, the sawing of grains, the gathering of some plants and fruits and the stocking of the last crops. It is also the time when the shepherds descend from their mountain pastures to the field yards, which are opened to house them, the shepherds are hired for the new pastoral year and fairs take place where the sheep products are capitalized. Towards the end of autumn (November) the preparations for the coming winter start, the evening sitting of village women are resumed and home activities, such as sewing, spinning, embroidery, knitting, begin to take place regularly to fill in the ever longer nights.

According to the traditional Romanian calendar, autumn begins on *Saint Mary's Day* (8 September) and lasts until *Saint Nicholas's Day* (6 December).

"When the meadow saffrons that are also called the dead's saffrons, starts blooming on the hills, it is a sign that autumn is here" (Olteanu 2009).

Autumn announces the coming of winter, a season of a special importance for the Romanian people as then the main agricultural cease.

According to the popular calendar, the autumn equinox is marked by the date of 26 October, *Saint Dmitri's Day*, said to bring in winter. It is a time border established less depending on astronomical observation as on the evolutions in nature. Also according to popular tradition it is considered that the cold season has already set in by 21 November. On 30 November the Dacians already celebrated the New Year.

#### 5. THE WINTER SOLSTICE

Astronomical winter begins with the winter solstice (21 December) and ends before the spring equinox (21 March). Officially, winter starts on 1 December and ends on 28 (or 29) February.

Every year, although according to the official calendar winter starts from 1 December, the beginning of astronomical winter is marked by a precise moment, namely that of the winter solstice. It is connected to the annual apparent motion of the Sun on the celestial sphere that represents the consequence of the real motion of the Earth around the Sun. This explains, for the average latitudes of the Earth, the inequality of the days and nights, as well as the sequence of the seasons.

The moment of the winter solstice, i.e. the beginning of the astronomical winter, takes place around the date of 21 December. Starting from that date and until 21 June, the duration of the days is increasing and that of the nights is decreasing. The beginning of astronomical winter is marked by a precise moment, i.e. *the winter solstice* in the northern hemisphere and of the summer solstice in the Southern hemisphere. As a result of the winter solstice the day will have the shortest duration and the nights the longest one. Day duration begins to increase gain after the winter solstice and will be equal to that of the night at the spring equinox.

As to calendar, winter begins with the month of December, which is also the most beautiful and the most eagerly expected time of the year all over the world because of the celebrations, beliefs and customs specific to the end of the year, especially Christmas with its mythical rituals that unfold for three days.

In the Romanian popular calendar winter is considered a season unfavorable for productive activities, that does not offer calendar reference points for works and labors specific to the rural area. The main activities carried out at this time of year are related to home industry (sewing, threading, embroidery, and knitting). It is only at the end of February that the first agricultural activities start.

The popular winter calendar is full of magic-ritual celebrations carried out for the protection of the animals in the peasants' yards against the wild animals, such as "Tănase de ciumă" (18 January), "Stretenia" (2 February) marked as days of rest, when rituals are carried out and alms are given to the poor for the protection and wellbeing of the household.

According to the traditions of the Romanian popular calendar "winter is all the time when there is snow. It starts on Saint Nicolas's Day and lasts until the Alexii (17 March) (...). The middle of winter or the hard of winter is the time when the frost is harshest. In winter the Sun fights the night, that is why the day is smaller and weaker, for otherwise it would warm up winter as it does summer. In winter the nights are bigger and the earth frizzes and the sun rises late and cannot melt it. However, as soon as spring sets in and the day grows bigger, the Sun stays longer in the sky, for it rises

early in the morning and thus the earth can warm up over the day and stay warm at night and then it can breed (...). When the storks, the swallows and the other migrating birds fly away it is a sign that cold winter is closing in." (Olteanu 2009).

In the popular calendar the moment of the winter solstice was fixed around the date of 25 December, when, according to the old calendar, the Romanians celebrated not only Christmas but also the New Year. It is worth mentioning that for more than a millennium Christians celebrated the New Year on Christmas Day, immediately after the winter solstice. This took place in Rome until the 13th century, in France until 1564, in Russia until the reign of Tzar Peter the Great. In the Romanian provinces this tradition lasted until the end of the 19th century. With the Romanians, the memories of those times are still alive for in some Banatean and Transylvanian villages: the day of 1st January is still called "the smaller Christmas" instead of the New Year.

On the basis of criteria and ethnographic researches, there were identified in the unfolding of a solar year in the popular calendar almost ten mythical ritual scenarios of time renewal, namely (Ghinoiu 1988, 1997, 2002): New Civil Year – 1 January; New Agrarian Year – 1 March and also 9 March (All Saints' Day); New Pastoral Year – 23 April (Saint George's Day); New Christian Year – Easter; New Biblical Year – 15 August/8 September (between the two celebrations dedicated to Saint Mary); New Dacian Year – 30 November (see Oltean 2009).

## 6. FINAL REMARKS

The popular calendar we tried to present is an attempt at gathering some of the elements that make up the temporal coordinates of Romanian rural life. Some of these elements continue to exist even today in some Romanian villages. To put it shortly, we can say that the Romanian popular calendar is a system of thinking around which sits the entire architecture of the traditional mentality. It is not only an ordering of time, a limitation of the sacred moments in the daily unfolding of lay days, a registering of the flowing of time. The Romanian popular calendar is the best testimony of the philosophy of life and of the empirical science of the Romanian people.

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