

[www.pauldekort.nl](http://www.pauldekort.nl) [info@pauldekort.nl](mailto:info@pauldekort.nl)

©2009

# HET GETIJDENPARK VAN SAENDELEFT

## THE PARK OF HOURS OF SAENDELEFT

Paul de Kort





'HET GETIJDENBOEK VAN  
BEATRIJS VAN ASSENDELFT'

THE BOOK OF HOURS FROM BEATRIJS VAN ASSENDELFT



The Catharijne Convent in Utrecht has a very special book in its collection; The Book of Hours from Beatrijs van Assendelft.

This wonderful book of prayers belonged to a little girl from a rich family in the 15th century.

Beatrijs' father was Sir of Assendelft and owned, among other things, the castle Assumburg near Heemskerk.

A medieval book of hours was a structured book full of prayers. It was meant to be used at fixed times during the day.

Seeing the zodiac signs, the ecclesiastical year was connected with the astronomical time and seasonal work on the land. This way, the daily rituals and structure of daily life were placed in a bigger and more general context.





Before the medieval polder landscape around Assendelft was created, this landscape was dominated by the Oerij. The Oerij was a tidal channel in direct connection with the North Sea. The elements were able to roam freely in an area that reached just above sea level and was not yet protected by dykes.

The municipal Zaanstad is in the process of developing a new residential area called Saendelft near Assendelft. Saendelft's street plan is inspired by the vast medieval polder landscape. The urban planning project is characterised by the Groene Dragers; long open strips between residential building blocks, which enables people to see the horizon from everywhere in the neighbourhood.



In various places in the neighbourhood, the open strips have an additional oval-shaped space. These ovals are turned slightly. Oval I between the Van der Meystraat and Weideland forms the space for this art project.

Because of the slight turn, the oval is positioned in an exact north-south direction. A greater force seems to have broken the oval free of the street pattern, turning it into a compass needle pointed towards the earth's magnetic field.

The oval seems to break free from its surroundings to make contact with the cosmos.



# HET GETIJDENPARK VAN SAENDELFT

## THE PARK OF HOURS OF SAENDELFT

Just like the Book of Hours linked the religious life of Beatrijs with the bigger rituals of her day, 'Het Getijdenpark' in Oval I can make you, as residents of Saendelft, aware of the movements of the sun and the moon, the sea and the seasons. The forces and powers so strongly connected to the former inhabitants of this area of the OerIJ.

Since time immemorial we have been trying to grasp the infinity of time and the immensity of space. We look for connections and patterns, rhythm and regularity. We divide the days in manageable minutes and hours, and in the nocturnal starry sky we distinguish signs, each given their own 'meaning'. Because of the technological developments of the modern age we feel less dependent on these forces and powers, but does that not make them equally misunderstood and mysterious?

As 'HET GETIJDENPARK VAN SAENDELFT' gives us insight into some of these phenomena, we are also made aware of the fact that these systems are perhaps slightly less organised and regular as we perceived them to be.

themes

- ZODIAC
- COMPASS
- PLAYGROUND
- TIDES DOT
- SOLAR TIME
- PHASES OF THE MOON







Gemini 22 june - 20 july

Cancer 21 july - 10 august

Lion 11 august - 16 september

Virgo 17 september - 31 october

Libra 1 november - 23 november

Scorpio 24 november - 29 november

Ophiucus 30 november - 18 december

Sagittarius 19 december - 19 january

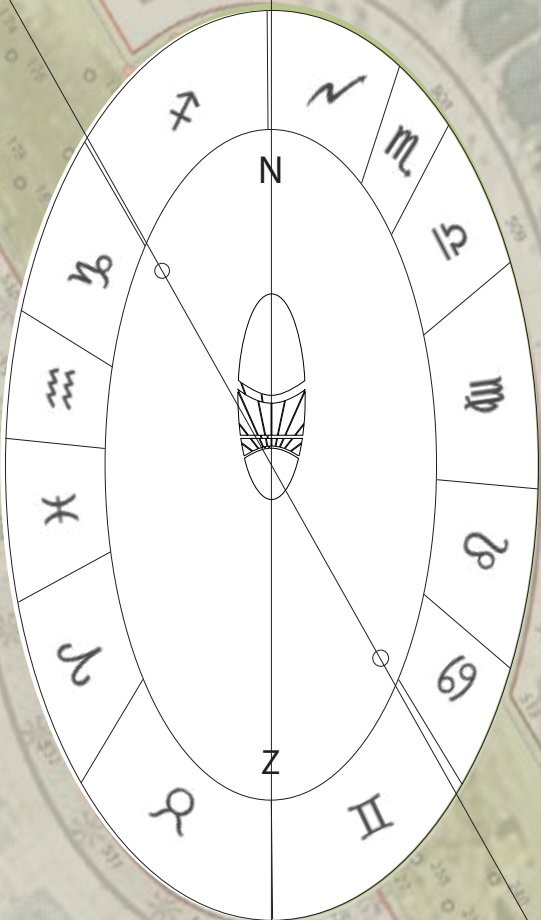
Capricorn 20 january - 16 february

Aquarius 17 february - 11 march

Pisces 12 march - 18 april

Aries 19 april - 14 may

Taurus 15 may - 21 june



## ZODIAC

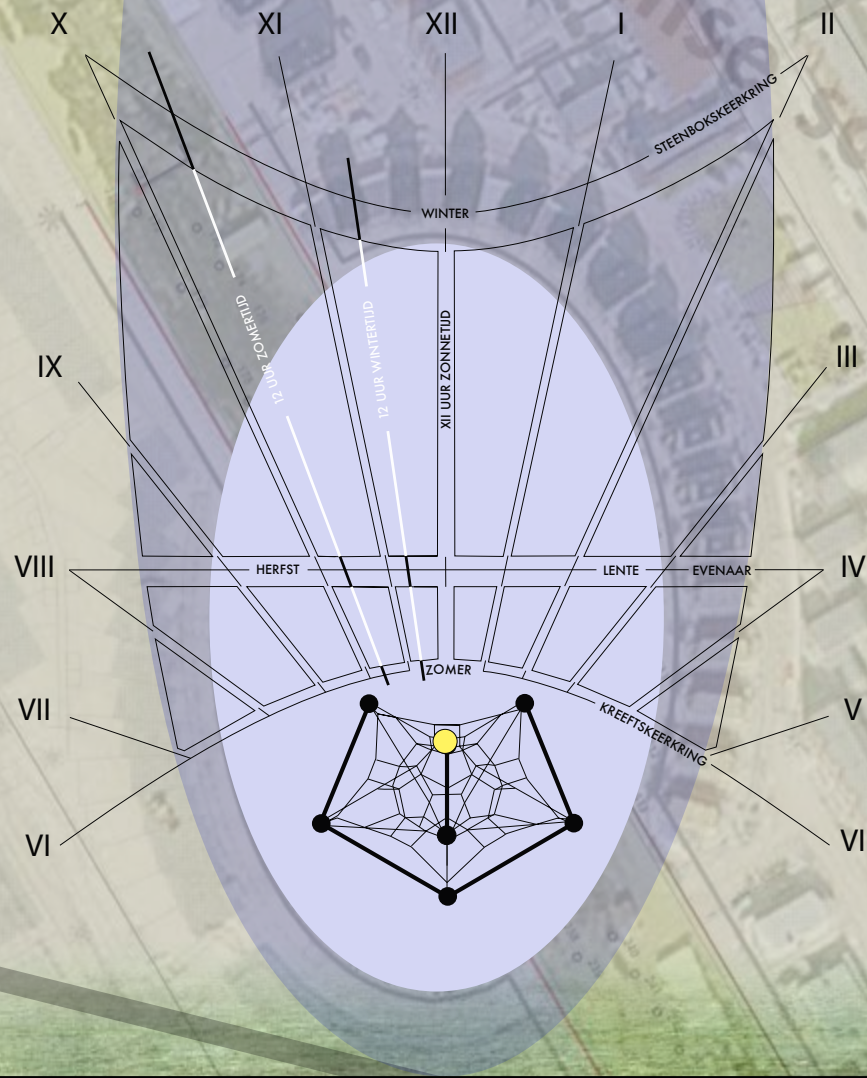
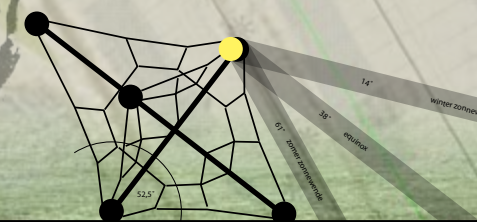
The earth turns around the sun in a year, which makes it look like the sun circles a fixed course along the sky. This course is also called the ecliptic. The moon as well as the planets can be found in the same space as the sun and are therefore always near the ecliptic as well. During the year, the sun shifts in her course around the earth through various constellations. These are the signs of the zodiac.

We need to distinguish astrology and astronomy. According to astrology, a connection exists between the position of the sun and the planets and events that happen on earth. This system is thousands of years old and was developed in the old Mesopotamia, current day Iraq. Astronomy researches all objects, occurrences, and events outside the earth's atmosphere in a factual and scientific manner.

Astronomy has taught us that the starry sky is less static than it seems. Over thousands of years, the zodiac signs have shifted in their position to the earth and the sun. We also know that the sun is not positioned perfectly in a different zodiac sign every month, which is what astrology leads us to believe. It varies from sign to sign and from a couple of days to nearly a month and a half. And did you know, that if you were born in the beginning of December, you were born under the 13th zodiac sign, Ophiucus!

In the zodiac of the Park of Hours the signs are distributed according to an astronomical pattern. Their mutual distances are irregular and there are 13, instead of 12, signs.





## SOLAR TIME

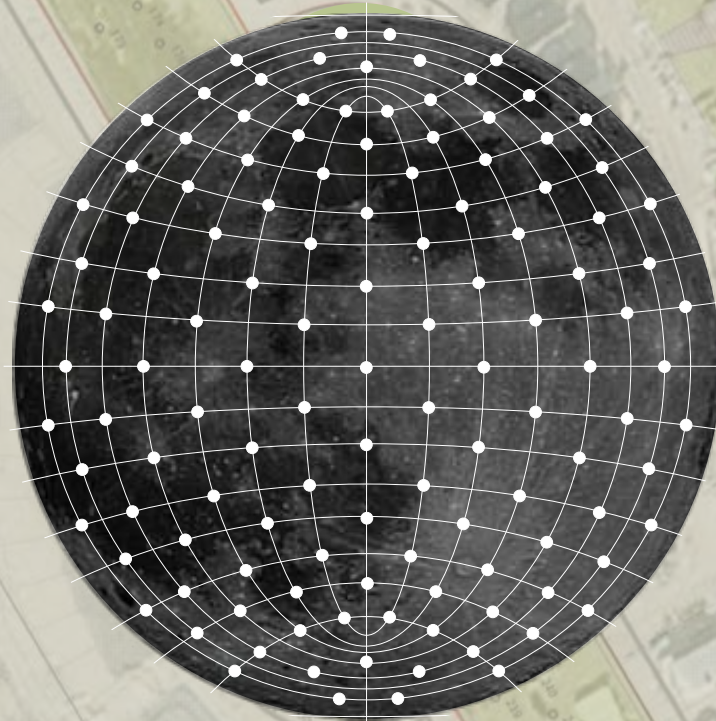
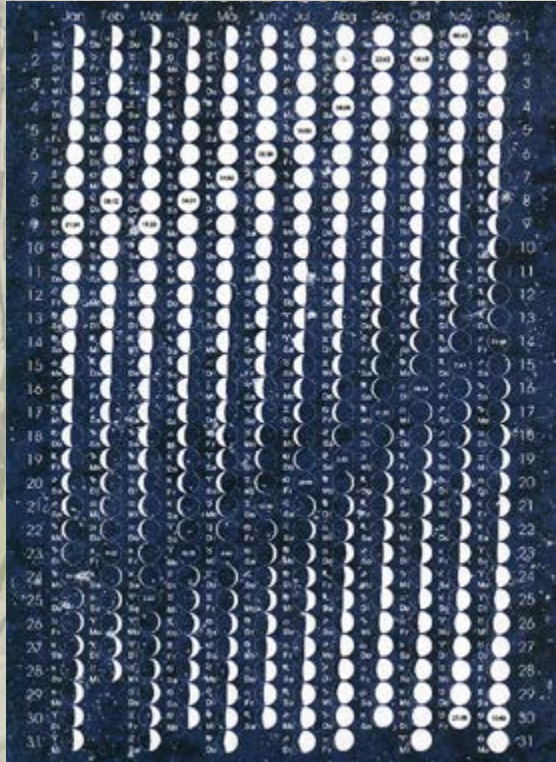
The sun rises every day on the eastern horizon, paints a bow across the sky, reaches its highest peak in the afternoon in the south and disappears behind the western horizon. In reality it is the earth that spins around its own axis in 23 hours, 56 minutes and 4 seconds; a star day. But during a star day, the earth shifts a bit further in her course around the sun, which means we have to wait 3 minutes and 56 seconds to see the sun in the exact same place as the previous day. Together, this is exactly 24 hours; a solar day.

You could say that the day and thus the time shifts slowly across the globe, but if you need to make an appointment this would be very impractical. Thus, we separated the earth's surface in time zones. Dutch time is based on the Central European Time zone (CET). Saendelft is approximately 40 minutes west of the centre of this time zone (Berlin). The sun is precisely in the south at XII solar time, but that moment does not coincide with 12.00h clock time. In the winter, the sun is precisely in the south at approximately 12.40h. In the summer, this is not until 13.40h. When our clocks chime 12 it's about 20 minutes after XI solar time in the winter, and 20 minutes after X solar time in the summer.

In the centre of the Park of Hours, the Playground, monkey bars are located that also function as a sun dial. The slanting bar with the yellow orb is positioned at an angle of  $52,5^\circ$  to the field. This gnomon is parallel to the rotating axis of the earth. If you look at the extension of the gnomon at night, you will see the pole star (polaris). This star stands in the extension of the earth's axis which makes it look static, while every other star shifts around it.

At the changing of the seasons on June 21st, September 21st, March 21st, and December 21st, a shadow of the yellow orb glides over the seasonal lines in the sun dial. On these days, the sun is in a perpendicular position towards one of the tropics or the equator.





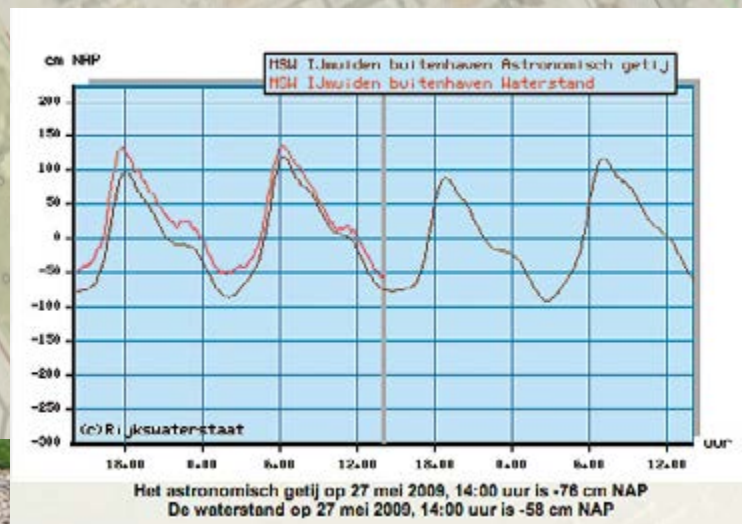
## PHASE

A complete rotation of the moon around the earth takes 27 days and 8 hours and is called a sidereal month. During a sidereal month, the earth shifts (together with the moon) further down its course around the sun. To be able to see the moon in the same position towards the sun from earth, the moon has to travel further down its course around the earth for a little over two days. This is a synodic month and takes 29 days, 12 hours, 44 minutes and a couple of seconds. During the synodic month, the moon develops into new moon, through first quarter, into a full moon and then through last quarter into a new moon. These are called the phases of the moon.

The moon itself does not produce light, but reflects light from the sun. During full moon, the earth, the moon and the sun are aligned. The moon is then on the night side of the earth and the entire moon catches the sun's light. This is also when a lunar eclipse might occur. During new moon they are also aligned, but the sun and moon are positioned on the same side of the earth. The moon is positioned high in the sky during the day and the back of the moon catches the sun's light, which makes the moon invisible to us. However, this is the moment the spectacular event of a solar eclipse could occur. During the first and last quarter the sun and the moon are positioned in a square angle towards the earth. Only half of the moon catches the sun's light. The development of first quarter to full moon is called the crescent moon. During the crescent moon the right side of the moon is illuminated.

Because the sun, the earth, and the moon rotate around each other on one level, the moon is very low above the horizon during the summer months, but very high above the horizon during winter months. This is the exact opposite of the positions of the sun. From now on, even if it is clouded, the people in Saendelft will always be able to see the phase of the moon.





## TIDES DOT

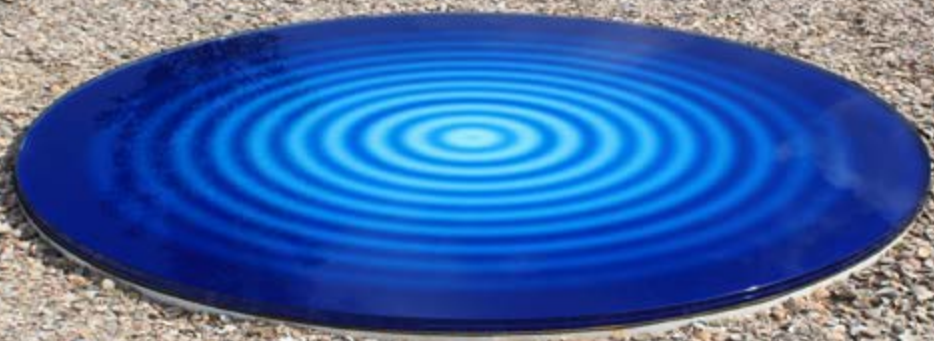
The moon is closest to the earth and pulls hardest at the sea. The sun is infinitely farther away, but at the same time is much bigger and has more influence. Because of a kind of swaying movement between the earth and the moon, each tidal wave receives a counter from the other side of the globe. This is why we do not have low tide and high tide once every 24 hours, but twice every 24 hours.

The time between the creation of a tidal wave in the Antarctic Ocean and the passage of that tidal wave on another place on earth is called the age of the tides. A tidal wave that passes IJmuiden is two days old. Thus, springtide does not coincide with full or new moon, but happens two days later.

Tidal waves curl around the British Isles and turn alongside the French and Belgian coast back up. The tidal wave shifts from south to north to our coast.

At full moon and new moon, the sun and the moon pull at the sea from the same direction and this is called spring tide; high tide is higher and low tide is lower. During half moon, also known as first and last quarter, the forces of the sun and the moon cancel each other out and this is called neap tide; high tide is lower and low tide is slightly higher. Between these circumstances there is a normal tide.

The blue waves in TIDES DOT are illuminated during spring tide with white light, which makes the waves stand out more. During neap tide, the waves are illuminated with blue light, which diminishes the visibility of their presence. During normal tide the blue and white lights are mixed.







Playground



Phase during full moon











