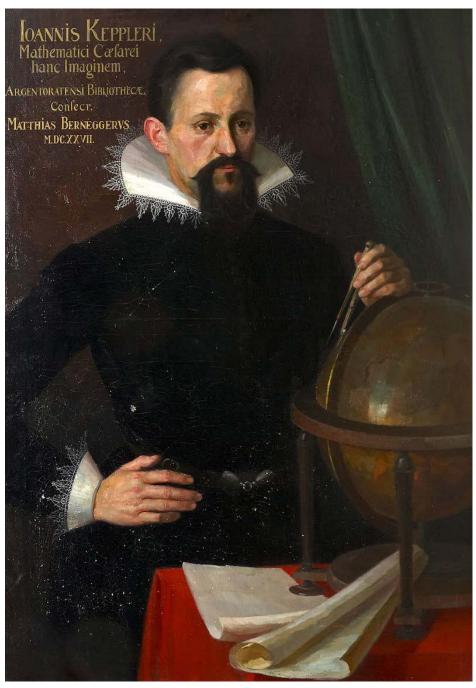
# Johannes Kepler 1571 – 1630

# **Biographical and Karmic Aspects of his Life**



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#### **Translation of terms**

Kepler publishes in German, but has also used German words.

#### Mysterium cosmographicum – World Mystery

The latin "mysterium cosmographicum" is translated as "Cosmographic Mystery" or alternately "Cosmic Mystery" or "The Secret of the World". A term used in German is "Weltengeheimnis" which extends earth (Erde) and would be "World Mystery" in English. I use "World Mystery" as a short form, but translate the latin title of Kepler's book as "The Cosmographic Mystery". Sometimes this is also translated as "The Sacred Mystery of the Cosmos", which is how Kepler might have conceived it.

#### LY = Life Year

LY is used as an abbreviation for Life Years. First LY is birth to 1st birthday!

#### C1f = Child, first, female

**Hypomochlion** = Turning point, the immovable point between the moving scales

#### Sources

Ernst Bindel, Johannes Kepler – Mathematiker der Weltgeheimnisse – Beiträge zu seinem Lebensbild,
 Freies Geistesleben, 1978

Title: *Johannes Kepler – Mathematician of the World Mysteries – Contributions to his Biography* Source for indications regarding the karmic aspects

- Johannes Hemleben, Johannes Kepler, Rowohlt, 1971
   Has an Anthroposophical perspective
- Mechthild Lemcke, Johannes Kepler, Rowohlt, 1995
   Solid Database, source for the Timeline
- Rudolf Steiner on Kepler and Tycho de Brahe
  - Both are mentioned numerous times in Steiner's work, but these are the ones I used for my quotes.
- GA 120, Manifestations of Karma, Lecture 16, The Nature and Significance of Karma in the Personal and Individual; and in Humanity, the Earth and the Universe, 16 May 1910, Hamburg
- GA 106, Egyptian Myths and Mysteries,
   Lecture 12, The Christ Impulse as Conqueror of Matter, 14 Sep 1908, Leipzig
- GA 120, Manifestations of Karma, Lecture VIII, 24 May 1910, Hannover
- GA 217, *The Younger Generation*, Lecture VIII, 10 Oct 1922, Stuttgart
- GA 238, Karmic Relationships, Lecture IV, 16 Sep 1924
- I have also been inspired and used notes I have taken in a workshop with
   Ate Koopmans on Johannes Kepler

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#### Part 1

# **Facets of the Biography**

odour of magic and witchcraft.

#### **1571 – 1584** Childhood and Youth

1571

#### Weil der Stadt

On 27 December 1571, Johannes Kepler was born in the Free Imperial City of Weil der Stadt in Protestant Württemberg as a weak seven-month-old. He owes his name to the calendar day of St John the Apostle. In terms of social circumstances, he was born into an unfavourable hereditary stream. His parents live with him in the house of his paternal grandfather, mayor of Weil der Stadt, who is described as pompous, eloquent, proud, irritable and stubborn. The grandmother is vivacious, fiery, a troublemaker and holds hatred beyond measure. Kepler describes his father as malicious, unyielding, vain, honour-seeking and adventurous. The mother as gossipy,

#### Madhouse environment

The genius-to-be – Johannes Kepler – was exposed to this madhouse environment of nagging maternal relatives and vengeful paternal relatives in his childhood, making a mockery of all socialisation theories.

quarrelsome, unstable and nagging. She brewed potions and was surrounded by the

Both socially and physically, Kepler's individuality is strongly inhibited and tested by the heredity stream.

In 1573, the father leaves the family and fights as a mercenary on the side of Spain 1573 against the Dutch. His mother follows in 1575 to look for him.

#### **Smallpox**

Four-year-old Johannes remains in the care of his grandmother in Weil der Stadt, where he falls ill with smallpox and survives this severe, feverish, purulent illness despite his weak physical constitution.

However, physical impairments remain in his hands (slightly crippled) and eyes (multiple vision). These make him unfit for heavy physical labour, but at the same time strengthen his love of theory. Several other ailments such as headaches, sensitivity to cold and haemorrhoids made him appear unfit to work as an observational astronomer.

#### Leonberg 1576

In 1576 the parents returned to Weil der Stadt and moved to Leonberg, where Kepler attended German reading and writing lessons from 1577. Attending school was based on a decision by his mother, who realised his physical impairments and his bright mind. Kepler remembers observing the comet of 1577 with his mother.

#### Ellmendingen

1578 1578 to 1579 Kepler attended the Latin school on the recommendation of his teachers. In 1579, the family moves to Ellmendingen near Pforzheim. There they leased

and ran the inn called Zur Sonne / The Sun. Despite his physical weaknesses, Johannes Kepler had to help his father like a farm labourer and was only able to complete

his second and third year of Latin school in the winters of 1582/83.

#### Leonberg

1583 The family returns to Leonberg.

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## 1584 – 1594 School and University Years

**Adelberg** 

1583

On 17 May 1583, Kepler passed the state examination in Stuttgart. His academic achievements earned him admission to the monastery school in Adelberg on 16 October 1584.

Maulbronn

1586 He passes the final examination in Adelberg and is admitted to the Maulbronn monastery school on 26 November.

**Baccalaureus** 

1588 At the age of 17, on 25 September 1588, he passed the Baccalaureate examination in Tübingen and returned to Maulbronn for a final year, as according to the rules of the time he could only be admitted to university at the age of 18. Kepler's personality had thus developed out of the flow of family and social circumstances and into a more appropriate intellectual and scientific milieu.

Tübingen

1589

On 17 September 1589, Kepler was admitted to the Tübingen monastery. He began his studies at the Faculty of Arts, studying theology with Matthias Hafenreffer and mathematics and astronomy with Michael Mästlin.

For Kepler, life in the respective boarding schools was hard. Primitive hygienic conditions and the wrong remedies led to skin damage and stubborn ulcers. Social conditions were characterised by intrigue, rivalry and envy of his superiority.

1<sup>st</sup> Lunar Node 1590

Around the time of the 1st lunar node (18 Y / 7 M), he encounters the teachings of Euclid (including treatises on the five regular Platonic solids), Pythagoras, Nicholas of Cusa and, above all, Copernicus through his professor Mästlin. His encounters with people he could honour — Hafenreffer and Mästlin — and the ideas they conveyed had a lasting influence on Kepler's further development. At this crucial time, he encounters impulses that connect his individuality karmically with its past (Pythagoras) and future (Cusanus and Copernicus). He recognises the superiority of Copernicus' heliocentric view of the world and stands up for its recognition in an uncomprehending and rebellious manner, at a time when witch trials and funeral pyres were still deciding (scientific) truths.

In the meantime, his father Heinrich Kepler's thirst for adventure had driven him into Neapolitan service and from 1591 he was presumed dead or missing.

Magister Artium 1591

On 11 August 1591, Kepler completed his studies at the Faculty of Arts with a Magister Artium and began studying theology at Tübingen Abbey at the age of 20. This university had been established in an Augustinian monastery that had been abandoned by the monks. As a result of the Reformation, Tübingen had become a centre of theological battles (e.g. the Eucharist controversy) within Protestantism. In the 16<sup>th</sup> century, strict Lutheranism gained the upper hand, which was significant for Kepler in the confirmation of his exclusion from the Lord's Supper (Communion), among other things. Although repulsed by the theological bickering, Kepler was inwardly completely devoted to preparing for the preaching ministry. At the same time, however, his teacher Mästlin and his support for Copernicus awakened the astronomer.

Call to Graz 1594

Protestants in Graz ask the University of Tübingen to send a successor for the deceased local landscape mathematician. The Tübingen Senate proposed this fateful call to Kepler, whose mathematical abilities were known through his teacher Mästlin. The Senate presumably also took the opportunity to get rid of the rebellious lateral thinker in religious (Concordian formula) and astronomical (Copernicus) matters. Kepler accepts the call with conflicting feelings and the hope of being able to return to Tübingen. Little did he realise that he would only be able to visit his homeland again. In retrospect, however, he himself praised his destiny for having led him in this way.

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#### 1594 – 1599 Graz

1595

1595

1597

1597

The call to Graz initially led to the premature end of his theological studies and at the same time clearly set the course for Kepler's further development as a mathematician and astronomer.

Graz

On 11 April 1594, Kepler arrives in Graz and takes up the post of professor of mathematics at the Stiftsschule (Abbey School) in Graz. He teaches logic, metaphysics, ethics, mathematics and astronomy to the four upper classes of the school. Due to his meagre income, he lives in the school building.

**World Mystery** 

He became famous for his predictions in calendars, which he published every year from 1595. For Kepler, now 23 years old, astrology and astronomy still have a single source. In the mathematical-astronomical field, Kepler had been working on the question of the orbital relationships between the six known planets since 1995. More suspecting than knowing, he sought a connection between their spheres in relation to the five regular Platonic bodies. For Kepler, this is the *Mysterium Cosmographicum*, the **Cosmographic Mystery** – the first work he was working on at the time.

Enlightenment

On 9 July 1595 (aged 24), he has an epiphany during a lesson. He intuitively *recognises* the correct connection between the five regular Platonic solids and Copernicus' six planetary orbits. Lengthy calculations later confirmed his intuition. His search for world harmony, his knowledge of Euclid and Copernicus combine in a unique way so that the correct solution emerges from 120 possibilities, as if the heavens themselves had dictated the solution to him. After completing lengthy cross-checking calculations, a trip to Württemberg at the end of January 1596 gave him the opportunity to relax. He met relatives and his teacher Mästlin, whose advice saved him from attempting to prove that Copernicus was compatible with the Bible in his work.

The *Mysterium Cosmographicum (The Cosmographic Mystery)* appears in Tübingen as a harbinger of future cosmographic treatises on the mystery of the world. He returns to Graz in the summer.

Galilei

When the book was published 1597, in Kepler's 26<sup>th</sup> life-year, Kepler sent a copy to *Galileo Galilei*, who was a professor in Padua at the time. Galileo Galilei expresses his appreciation of this work and reveals himself to be a kindred spirit in recognising *Copernicus*' Heliocentric World View. However, to the disappointment of the rebel spirit in Kepler, Galileo could not be persuaded to publicly support Copernicus. In Padua, on the other hand, he seems to have "adorned" himself with the intellectual fruits of Kepler.

1<sup>st</sup> Marriage

On 27 April 1597 Kepler entered into a marriage of convenience with Barbara Müller (1597 – 1611) and wrote a self-characterisation together with autobiographical sketches.

Death 1598

In 1598 at the age of 27 – he witnesses the birth and death (meningitis) of his first child Heinrich.

**Counter-Reformation** 

At the same time, the Counter-Reformation begins in Styria. This leads to the expulsion of Protestant monastery, church and school employees at the end of September. Kepler is regarded as an exceptional personality and is the only one able to return in October of that year.

**Hypomochlion** 1599

The birth and death of Kepler's first daughter Susanna also occurred during the outwardly and inwardly uncertain period of his 28<sup>th</sup> year, the Hypomochlion (28 LY) and the crisis of talents. In the 29<sup>th</sup> year of his life (1600), however, a new forward-looking tone was already sounded during his first visit to *Tycho Brahe* at Benatek Castle near **Prague**. The activities of the Counter-Reformation made Kepler realise that his stay

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in Styria could no longer be permanent. In his distress, he repeatedly turned to his fellow believers, colleagues and superiors in Tübingen in the hope of a recall. The response from there was silence or the assurance that they would pray for him — which also made the deeply religious Kepler doubt his fellow believers in his acute distress. So the connection to Brahe in Prague had to be explored. Once there, clear differences emerge, which can be explained by different temperaments and lifestyles, but also an offer from Brahe to co-operate with Kepler. Brahe entrusts Kepler with the task of working on the Mars data, as he recognises that his mathematical and geometrical skills are a welcome addition. In July, Kepler returns to his family in Graz. At the beginning of August, the Protestants remaining in Styria (Graz) are demanded to confess their Catholic faith, which Kepler refuses to do.

**Death & Rebirth** 

On 7 August, he is finally expelled from Graz, which he must comply with within six weeks. As there are no calls from Tübingen, Kepler can only respond to Brahe's request: Don't delay, hurry here with confidence.

1600 Following the dictates of destiny, Kepler set off with his family and household goods on two covered wagons on 30 September 1600 on his flight to Prague.

#### 1600 – 1612

#### Prague

**Prague** 

1600

On 19 October 1600, the Kepler family arrives in **Prague** as refugees. Johannes Kepler was in poor physical condition, suffering from malaria. Despite this, Kepler's most important encounter and collaboration with Brahe in Prague marked the beginning of a peak period in his work.

Tycho de Brahe

Even on his first visit, Kepler appraised him with the following words: *Tycho has the best observations and thus, so to speak, the material for the construction of the new building; he also has employees and everything he could wish for. The only thing he lacks is a master builder who can utilise everything according to his own plan. For although he has a happy disposition and real building skills, he is prevented from developing further by the multitude of phenomena and the fact that the truth lies hidden deep within them. Age is also slowly creeping up on him, weakening his spirit and his powers. This missing master builder could be Kepler, but the two have different world-views. While Kepler followed Copernicus completely, Brahe represented a mixture of Ptolemy and Copernicus. This difference meant that Brahe was reluctant to make his observational data available, and did so piecemeal.* 

Mission 1601

The death of his father-in-law prompted Kepler to travel to Graz in 1601 to organise his estate. His hopes for financial improvement were not realised, but despite being a Protestant, he was warmly received everywhere and returned to Prague in September, strengthened in body and soul from his journey. A few days later, Brahe and Kepler had an audience with Emperor Rudolf II, who commissioned them to create new tables for calculating the planets. At Kepler's suggestion, these were to be called the *Rudolphine Tables*. It would be 25 years before this commission was fulfilled.

Death of Tycho de Brahe

A few weeks after this event, a **Death and Rebirth** event takes place (the death of de Brahe creates an opportunity for Kepler). On 24 October 1601, Tycho Brahe dies because of a binge. As a result, Kepler obtains Brahe's observation data in a not entirely clean way. He reports, I confess that on Tycho's death, I took advantage of his absence or the lack of prudence of his heirs and took or presumed to take the observations into my care. Brahe's valuable instruments are jealously guarded by the heirs and deteriorate through ignorant treatment.

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#### **Court Mathematician**

Kepler is appointed Imperial Court Mathematician by Emperor Rudolf II and thus finds himself in a more relaxed economic situation for the first time.

#### Time of 1st Climax

Now productive years followed, in which Kepler gradually developed important fields of astronomy.

In autumn 1604, The Optical Part of Astronomy is published, followed by the Thorough Report of an Unusual New Star. Work also continued on the Mars commentaries. In 1606, Kepler flees Prague to escape the plague. Among other things, The New Star in the Foot of the Serpent Bearer is published.

1607 In 1607, Kepler observed sunspots, which he mistook for Mercury passing through the sun.

1608 In 1608, his **Detailed report on the new hair star or comet that appeared in the months of September and October of 1607 and its meanings** was published.

#### 2<sup>nd</sup> Lunar Node

1609

1611

1611

At the time of his 2<sup>nd</sup> Lunar Node (37 Y / 2 M), Kepler was working on his **New Astronomy**. In 1609, he travelled to Heidelberg, where it was printed, and from there to the Frankfurt Spring Fair with the first finished copies. He uses the return journey via Württemberg to look for a job again.

#### Galileo

In 1611 Galileo reports in his *Sidereus nuncius* (*Starry Messenger*) the discovery of four new planets, which Kepler identified as Jupiter's satellites in his *Dissertatio cum nuntion sidero* (*Conversation with the Starry Messenger*), Galileo observes the rings of Saturn and the phases of Venus with his telescope. The theorist Kepler, who was unable to afford a telescope for a long time and could only observe poorly due to his eye condition, also provided essential mathematical and technical background in this field with his *Theory of light refraction and astronomical telescope observation*, published in 1611. He combined two sciences that were theoretically separate but closely linked in application: Astronomy and optics. Based on his calculations, he designed a three-lens astronomical telescope, which is still known today as Kepler's telescope. Christiaan Huygens (1629 – 1695) and later Isaac Newton (1643 – 1727) built on Kepler's – not Galileo's – theory of light.

#### Trials

In 1611, his last year in Prague begins with a series of difficult trials. His wife Barbara falls ill with typhus, she has epileptic fits and is overcome by depression. His three surviving children Susanna, Friedrich and Ludwig fall ill with smallpox, which Kepler himself had struggled to overcome in his childhood. Two children recover, but his favourite son Friedrich dies on 19 February. A bloody dynastic war is fought within Prague between Emperor Rudolf II and his brother Matthias, which ends with the abdication of Rudolf II and the coronation of Matthias as emperor in Frankfurt on 13 June.

#### Death of first wife

In this situation, Kepler again endeavours to return to Württemberg, but only receives rejections. Patrons successfully support him in an application to the Upper Austrian capital of Linz. Kepler concludes an employment contract with the Linz Estates. The anticipated return to his homeland also suits his wife, Barbara. But destiny decides otherwise: weakened by the loss of her son and the horrors of the bloody battles in Prague, she suffers another outbreak of typhus and dies on 3 July 1611 at the age of 38.

1612 Although Kepler is confirmed as Imperial Mathematician by Emperor Matthias after the death of Rudolf II (20 January 1612, in Prague), the move to Linz is decided and carried out.

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#### 1612 – 1626 Linz

1612

1612

1613

Linz

In Linz, he begins 14 years of work as a landscape mathematician (surveyor) of Austria on the Enns (until 1626), during which, among other works, the volumes on the *Foundations of Copernican astronomy* and the crowning achievement of his life's work, the *Harmonices mundi* – The *Harmony of the Worlds*, are compiled and published. These works were written in a working environment that could no longer be compared with the years of free research in Prague. Kepler is an employee and as such has very small-scale obligations such as compiling a country map and teaching maths, philosophy and history. His nominal employer, Emperor Matthias, who confirmed him as court mathematician, also called on him in 1613 as an expert on calendar matters at his Imperial Diet in Regensburg. Kepler had to formally request his release from his duties by the Linz estates.

Bernegger

Two pleasant private events occurred during the first period in Linz. In July 1612, Kepler received a visit from the young scholar Matthias Bernegger (1582 – 1640), who was on his way from his hometown of Hallstatt to Strasbourg to take up a professorship in history. The brief encounter between the two laid the foundations for a lifelong friendship, which found expression in numerous letters.

2<sup>nd</sup> Marriage

The second event is the marriage to Susanna Reuttinger in Eferding on 30 October 1613. Susanna is a 24-year-old destitute orphan who becomes a faithful and courageous companion in joy and sorrow to the now 42-year-old Kepler. His courtship may be characteristic. Kepler tries to make a choice from eleven possible candidates according to halfway rational criteria. His inner genius also fails and he explains: Could my restless heart now learn to be content with its destiny in no other way than by realising the impossibility of fulfilling all wishes at once. ... You see how Providence brought me into such a predicament so that I might learn to look not to high position, wealth and origin – and my bride has none of these things – but to the simple virtues. Kepler was now able to reunite with his children from his first marriage, who had been living in Wels in the meantime. Together, he and Susanna had six children, the first three of whom died early – much to their parents' regret.

Communion

In the person of the pastor Daniel Hitzler, who was sent from Stuttgart to the Lutheran enclave in Linz, Kepler was once again confronted with the questions of faith that he had left behind in Württemberg at the beginning of his twenties. The church air in Linz is not liberal as it was under Emperor Rudolf II in Prague, but dogmatically reformed. Hitzler knew Kepler from Stuttgart as an unhealthy sheep whom he wanted to teach a lesson. Before taking communion, he demanded Kepler's written consent to his profession of faith, which Kepler was unable to give for reasons of conscience. This was tantamount to excommunication and caused quite a stir in petty-bourgeois Linz. All further consultations and petitions that Kepler addressed to the church superiors in Stuttgart via friends and former teachers remained unsuccessful. By decision of the small-minded Hitzler, Kepler is excluded from the Lord's Supper (Communion) and is regarded as a God-forsaken atheist by the bourgeois section of the Linz community. This hit the deeply religious Kepler, who constantly wrestled with mystical, religious and philosophical questions in his scientific work, hard. In a letter of invitation to his wedding, he had written: Can I also find in myself the God that I almost grasp with my hands when contemplating the universe? ... I don't believe that anything unusual has happened to me. I think we all have the same experience. The only difference is that the others don't worry about it like I do: that they forget more quickly and get over it more easily than I can, or have more control over it and deal with their misfortune themselves ...

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His *Report on Birth Year of Christ* in Strasbourg in 1613 appears as a contribution to the calendar question. In 1614, Kepler again worked on the *Rudolphine Tables* and the map of Upper Austria. The year 1615 saw the birth of his daughter Margarethe Regina and the death of his brother Heinrich. The good wine harvest of the year and an observation in the measurement of the contents prompted him to write *New Spatial Measurement Art for Wine Barrels*. In addition to his work on the *Outline of Copernican Astronomy*, the great astronomer was also preoccupied with very practical questions, which he then tackled at his own level.

#### Mother indicted

1615

In 1615, Kepler's mother Katharina was accused of being a witch in Leonberg. This reflects his heritage, his past, in his current living conditions and he is once again forced to deal existentially with questions of faith. In 1615, six witches were burned in Leonberg, his mother's home. In this serious situation, the famous son initially intervenes in the proceedings against his mother by letter in 1616 and procures lawyers for her.

#### **Journey to Witch Trial**

He travelled to Württemberg in 1617 to assist his mother in the witch trial. His siblings living in Württemberg are unable or do not dare to stand up for their mother.

1617 The *Ephemerides* were completed and published.

1618 The first part of the *Outline of Copernican Astronomy* published in 1618.

He declines an offer to succeed Giovanni Antonio Magini at the University of Bologna.

Several deaths in 1617/18 drove him inwards and into a productivity that came from within: the death of his daughter Margarethe, his stepdaughter Regina (2<sup>nd</sup> marriage, Susanna) and his daughter Katharina.

Time of 2. Climax

Λ

Kepler's individuality, or genius, was able to work its way through all physical and social obstacles and reached the climax of his work at a time when a huge cultural decline was beginning within Central Europe. Goethe said of Kepler in his materials on the history of colour theory: If you combine Kepler's life story with what he became and achieved, you are filled with joyful astonishment, convinced that true genius overcomes all obstacles.

3<sup>rd</sup> Planetary Law 1618

At Easter 1618, Kepler completes the writing of the *World Harmony* and finds the 3<sup>rd</sup> Planetary Law on 15 May, eight days before the outbreak of the Thirty Years' War (23.05.1618 – 1648). This was later published in the 5<sup>th</sup> volume of the *Outline of Copernican Astronomy*.

**World Harmony** 

In Kepler's epilogue to **World Harmony**, his religious-scientific attitude of mind and soul is clearly revealed, *Nature wanted to reveal itself to man through the mouths of men who at quite different centuries set about interpreting it. It is a hint from God ... that in the minds of two men* (Kepler talks about Ptolemy and himself) who had devoted themselves entirely to the contemplation of nature, the same thought of the harmonious shape of the world emerged; for neither was the guide of the other in treading this path. Now, after the first morning light 18 months ago, the bright day three months ago (foreboding of Kepler's 3rd law), and the sun of a most marvellous vision (formulation of Kepler's 3rd law) a few days ago (15 May 1618), nothing holds me back any longer:

#### **Egyptian Incarnation**

**Yes, I abandon myself to holy frenzy.** I defy the mortals with the open confession: **I** have stolen the golden vessels of the Egyptians in order to build a holy hut for my God far from the borders of Egypt. If you forgive me, I will rejoice; if you are angry with me, I will bear it. Go ahead, I'll throw the dice and write a book for posterity. It is all the same to me. It may wait a hundred years for its reader.

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**Defenestration of Prague** At about the same time, on 23 May 1618, the Defenestration of Prague takes place, signalling the outbreak of the Thirty Years' War.

> Kepler had brought the printer Johannes Plank to Linz, and the Ephemerides for the year 1617 appeared (belatedly) as well as the first three volumes of the Outline of Copernican Astronomy V1-3.

1619

Emperor Matthias dies on 20 March 1619, and Ferdinand II is crowned Emperor on 28 August. In this year, Kepler publishes World Harmony Volume V and About Com-

Creed

Kepler writes his own Creed. His Outline of Copernican Astronomy is banned by the Vatican in Rome and the Württemberg consistory, with the participation of his former theology professor Hafenreffer, excludes Kepler – as a last resort, so to speak, after 6 years of dispute - from taking part in the Lutheran communion. The Ephemeris for the coming year appear again: 1620.

Vatican 1620 In 1620, the fourth volume of the *Outline of Copernican Astronomy* was published, despite the Vatican's ban on the first three volumes. Kepler also had to contend with the pseudo-religious actions of his time on another front: on 7 August 1620, Kepler's mother (aged 71) was arrested and imprisoned in chains. In the context of his mother's first defence, he had already cynically asked whether this was a way for the churches to get rid of needy old women. Kepler once again travelled to Württemberg to defend her in the witch trial. He leaves his family behind in Regensburg.

The Report of the Eclipses of the Years 1620 and 1621 is published, and for the Frankfurt autumn fair volumes V to VII of the Outline of Copernican Astronomy, together with a new edition of his first work, the World Mystery.

Witch Trial

The witch trial against his mother reaches its climax on 3 October 1621. She is led into the torture chamber and - in order to torture her mentally - the instruments of torture and their effects are described to her in a sadistic manner and at the same time she is admonished to confess her wickedness voluntarily. In this situation, however, she surpasses herself, gains inner strength, rejects all the accusations and is acquitted after fourteen months in prison.

Kepler is able to return to Linz, where he learns that he has been confirmed as Imperial Court Mathematician by Emperor Ferdinand II.

Logarithms 1622 In 1622, he revised his work *Moon Dream* and produced his own *Logarithmic Table* (Chilias logarithmorum) in order to make faster progress with calculations on the Rudolphine Tables, which were still and repeatedly pending. In 1601, he had accepted this commission from Emperor Rudolf II together with Brahe. These were now urgently awaited and Kepler, who worked on them again and again for 21 years, confessed: I am as eager for their publication as Germany is for peace. From time to time, however, he also has to give himself room to manoeuvre against overly insistent pressure and, by putting his foot down, also makes his working style and preferences somewhat transparent: You can't do everything, as the saying goes. I'm not capable of working in a strictly organised way, sticking to a timetable and certain rules. If I produce something that looks neat, then it has been revised ten times. Often a miscalculation made in a hurry keeps me up for a long time, but I could come up with a myriad of ideas. I beg you, dear friends, not to condemn me entirely to the treadmill of mathematical calculations, leave me time for philosophical speculation, my only delight! To each his own, to some the tables and nativities, to me the blossoming of astronomy, the artful structure of movements.

Counter-Reformation 1622 In the same year (1622), the Counter-Reformation reaches Linz, which means that after an intensive creative phase, he is once again caught up in the turmoil of his time. On 13 April, his mother dies at the age of 75.

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#### **Rudolfine Tables**

- 1623 1623 he publishes the *Discourse of the Great Conjunction*, and continues to work on the completion of the *Rudolfine Tables*. This work continued until 1624, when he was 53 years old. After completion, printing had to be organised during the turmoil of the Thirty Years' War, and this cost money.
- 1624 In autumn 1624, he travelled to Vienna to ask for money to print the *Tabulae Ru-dolphinae* (*Rudolfine Tables*).
- He returned from there in January 1625 and travelled to Augsburg, Kempten, Memmingen and Nuremberg to collect money for the printing of the *Rudolphine Tables*.
   On his return to Linz, the political situation there has deteriorated drastically. The Reformation Patent of 20 October triggers a peasant uprising in Upper Austria. As in Graz, the Protestants are once again harassed and expelled, and once again Kepler and his colleagues are exempt from expulsion.
- In 1626, a peasant uprising against the Counter-Reformation leads to the siege of Linz by peasants. Johannes Plank's printing press goes up in flames as a result of the fighting. This destroyed the physical basis for Kepler to print his *Rudolphine Tables*. Shortly before the 3<sup>rd</sup> Lunar Node, Kepler is forced to leave his place of residence for the third time due to political turmoil, battles and existential threats. Will Kepler's individuality persevere in this great resistance to the times and destiny and realise its goal?

### 1626 – 1630 Last Stage of Life

#### **Departure from Linz**

On 20 November 1626, **Kepler leaves Linz to** print the *Rudolphine Tables* in Ulm. In the meantime, he leaves his family back in Regensburg.

#### 3<sup>rd</sup> Lunar Node

In the course of 1627, the printing of the *Rudolphine Tables progressed* and Kepler was able to travel to the autumn fair in Frankfurt with the first finished copies. ( $3^{rd}$  Lunar Node -55 Y /9 M) At the same time, he had to look for a new field of activity. Kepler travelled via Ulm to Regensburg to visit his family and from there to Prague to present the *Rudolphine Tables* to Emperor Ferdinand II. Although the Counter-Reformation now prevailed in Prague and no public office could be held without the consent of the Jesuits, the Protestant Kepler and his work were graciously accepted. The Emperor is even said to have made him a tempting offer, which would have involved converting to the Catholic faith, which would have been unacceptable to Kepler. Kepler refused and remained true to himself in an uncertain time and in an uncertain position.

#### Move to Sagan

- A way out was offered by the highly respected commander Wallenstein in Prague, whom Kepler had served with horoscopes. He offered him a position as a mathematician in Sagan in 1628, and Kepler accepted. With Wallenstein's help, he **moved to Sagan in** July. Kepler began work there with his assistant Jakob Bartsch on the *1629* edition of the *Ephemerides*.
- 1629 In 1629 Kepler set up his own printing works in Sagan and in 1630 printed the *Ephemerides* 1621 to 1636 and part of the *Moon Dream*.
- 1630 On 12 March 1630, his daughter Susanna marries the assistant Jakob Bartsch in Strasbourg. On 18 April 1630 at the age of 56 his last child, his daughter Anna Maria, was born.

The dismissal of his patron saint Wallenstein (on 13 September 1630) alarms Kepler. He leaves Sagan in poor health and travels via Leipzig and Nuremberg to Regensburg, which he reaches with a fever.

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In the turmoil of his time, Kepler was unable to find the harmony of the world that he had discovered in the stars on earth.

Death

1630 He dies in Regensburg on 15 November 1630, shortly before reaching the age of 60.

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#### Part 2

# **Biographical Aspects**

# A I-Points / Motifs / Turning Points / Mirrorings

### 1<sup>st</sup> Septennial, **☆-7** Despite physical and social resistance: Arrived!

Arrival on earth

The place of his arrival on earth, Weil der Stadt, is a small medieval German town in Württemberg. The universal claim of the Catholic Church is broken by the power of Protestantism. The universal empire sinks into increasing petty statehood. In Württemberg, as in some other small German states, the sovereign decided in favour of Protestantism and his subjects had to follow his faith. The witch trials that were common in the Middle Ages also raged in the Protestant states. The ominous clouds of the Thirty Years' War loom on the horizon with the Counter-Reformation.

**Motif: Unrest** 

Exposed to the world too early as a seven-month-old, his survival is questionable. His further arrival and awakening in the physical world takes place in a restless, noisy extended family. His father and mother are away from home and his grandparents are his carers.

#### The 'I' moves into the body and takes hold of the physical world

**Smallpox** 

With the illness of smallpox around the time of the 'I'-awakening in the physical body (4<sup>th</sup> LY), he goes through a developmental crisis of life and death. High fever and purulent skin processes suggest a radical transformation of the model and the breakthrough of a strong individuality that radically opposes the hereditary current.

Physically, the disease leaves him with disabilities in his hands and eyes (multiple vision). Kepler's physical impairments make him unsuitable for hard labour and, thanks to his mother's insight, give him access to school education. He begins to conquer the world with his head rather than his hands.

Journey / Relocation

Return of the parents. Move from Weil der Stadt to Leonberg.

# 2<sup>nd</sup> Septennial, 8-14 Being allowed and able to learn

Latin school

Kepler's teachers recognised the boy's bright mind and the doors to the Latin school, which was considered the foundation of all higher education in his day, were opened to him.

Journey / Relocation

From Leonberg to Ellmendingen near Pforzheim (1779).

Rubicon

At the Rubicon, he is both his father's servant at the inn *The Sun* and a student of Latin, the latter especially in winter. His love of learning and theory is visible and *recognised* by the world.

#### The 'I' awakens in one's own soul and takes hold of the social world

Journey / Relocation

From Ellmendingen back to Leonberg

State examination

In the 12<sup>th</sup> LY he passes the state examination and finishes Latin school (May 1583).

Journey / Relocation

Moving back with family from Ellmendingen back to Leonberg

**Journey / Relocation** 13

Kepler was admitted to the monastery school in Adelberg to live and study. He never returned to his parents' home. He experienced puberty and further conquest of the social world in the monastery schools of Adelberg (1584), Maulbronn (1586) and the

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Tübingen Abbey School (1589). A tough socialisation for Kepler. His sickly body reacted to a lack of hygiene with ulcers (See next septennial).

Peer group

The relationships within the peer group are characterised by intrigue, rivalry and

envy.

**Death** 20 1591 Death of father, Heinrich Kepler (or missing).

#### 3<sup>rd</sup> Septennial, 15-21 Theology & Philosophy – Memories of the Future

15 In his 15<sup>th</sup> year he passes the final examination in Adelberg and is admitted to the Maulbronn monastery school on 26 November 1586.

#### Journey / Relocation

Adelberg Monastery School to Maulbronn Monastery School.

**Baccalaureate** 

17 At the age of 17, on 25 Sep 1588, he passes the Baccalaureate examination in Tübingen and returns to Maulbronn for a final year, as according to the rules of the time he can only be admitted to university at the age of 18.

By passing this test, Kepler's personality emerged from the current of his given family and social circumstances and worked his way into a religious, spiritual and scientific milieu

#### Journey / Relocation

From Maulbronn Monastery School to the University of Tübingen

18 In his 18th year, he was accepted into the Tübingen Abbey School (university) and began his basic studies at the Faculty of Arts. With the professors Matthias Hafenreffer (theology) and above all Michael Mästlin, he met two people whom he could admire and emulate.

1st Lunar Node

Around the time of the 1<sup>st</sup> Lunar Node (18 J / 7 M = July 1590), he learns about the teachings of Pythagoras, Nicholas of Cusa and, above all, Copernicus through his professor Mästlin (including treatises on the five regular Platonic solids). Here, the future astronomer studying theology is reminded of the subject of his future life. These seem to be both past impulses (Euclid, Pythagoras) and future impulses (Cusanus and Copernicus). Kepler recognises the superiority of Copernicus' heliocentric view of the world.

Motif: Own Faith/Truth

He does not understand why his teacher Mästlin does not openly advocate the correctness of Copernicus.

#### The 'I' awakens in thought formation and gains access to ideas, ideals and ideologies

#### Rebellion (Truth)

20

Kepler rebelled in favour of Copernicus' view of the world in disputes, even though it was still contemporary to have witch trials and funeral pyres decide on (scientific) truths. His intellectual rebellion probably did not go unnoticed by the university management. In his 20<sup>th</sup> LY, Kepler completed his undergraduate studies with a Magister Artium and began his main studies in theology with the aim of becoming a pastor.

# 4<sup>th</sup> Septennial, 22-28 In search of the World Mystery – The Theologian becomes an Astronomer

Ideas – Idols – Ideals

In his main studies, he familiarised himself with intellectual currents and debates. As a result of the Reformation, Tübingen became a centre of theological struggles (e.g. the Eucharist controversy) within Protestantism. In the 16<sup>th</sup> century, the strict

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Lutheran movement gained the upper hand here, which later became significant for Kepler in the confirmation of his exclusion from the Lord's Supper, among other things.

#### Motif: Own Faith/Truth

Although repelled by this *theological bickering*, Kepler was still inwardly focussed on the preaching ministry. At the same time, however, the foundations for astronomy were laid – very quietly – by his teacher Mästlin, his own advocacy of Copernicus and his mathematical-theoretical talent.

#### Calling

In his 23<sup>rd</sup> year, he receives his calling from the world. Protestants in Graz ask the University of Tübingen to send a successor to a deceased landscape mathematician. The Senate proposes Kepler, whose mathematical abilities are known through his teacher Mästlin, and presumably also takes the opportunity to get rid of the rebellious lateral thinker. Kepler accepts the call, with contradictory feelings and the hope of returning to Tübingen.

#### Journey / Relocation 23

University of Tübingen to Graz

This brought his theological studies to a premature end and set the course from theology to astronomy. Looking back, Kepler praises his destiny for having guided him in this way.

Copernicus' view of the world did not let go of the landscape mathematician, even in his new place of work in Linz. He publishes calendars, which he equips with astrological predictions. At the time, this was nothing contradictory. Astrology and astronomy still had a unified source and in Kepler's basic attitude, they anyway represented a single entity, within the mathematical-astronomical field.

24 Kepler dealt with the question of the orbital relationships between the six known planets in 1995.

#### Life theme

For Kepler, this is the *Mysterium Cosmographicum, The Cosmographic Mystery* or short *World Mystery*, which he struggled to solve theoretically. More suspecting than knowing, he sought a connection between the planetary spheres and the five regular Platonic solids.

#### **Enlightenment**

24 On 9 Jul 1595 (age 24), he has an epiphany during a lesson. He intuitively *recognised* the mathematically correct relationship between the five regular Platonic solids and the six planetary orbits of Copernicus. His knowledge of Euclid and Copernicus combined in a unique way so that he "automatically" recognised the correct one out of 120 possibilities, as if the heavens themselves had dictated the solution to him. Lengthy calculations followed, confirming his intuition.

#### **Genius of Youth**

With this product of the **Genius of Youth** as a harbinger of future cosmographic treatises on the **World Mystery**, Kepler made his appearance in public. When the book appeared in print in **1597** at the age of 26, Kepler sent a copy to Galileo Galilei, who was a professor in Padua at the time. Galileo Galilei expressed his appreciation of the work and revealed himself to be a kindred spirit in recognising Copernicus' heliocentric view of the world.

#### Motif: Own Faith/Truth

However, **to the** disappointment of the rebel spirit in Kepler, Galileo could not be persuaded to publicly support Copernicus. Like Mästlin in Tübingen, Galileo reacted to Kepler's storming and urging on this issue with silence. By contrast, the famous Galileo in Padua seems to have "adorned" himself with Kepler's intellectual fruits.

#### Journey

Graz to Tübingen (to get the *World Mystery* printed) back to Graz

#### 1st Marriage

On 27 Ap 1597 Kepler entered into a marriage of convenience with Barbara Müller (1573 – 1611) and wrote an autobiographical sketch together with a self-characterisation.

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**Death & Rebirth** 27 His first child Heinrich was born at the age of 27 (1598), but died shortly afterwards

of meningitis.

Motif: Unrest The start of the Counter-Reformation in Styria. This leads to the expulsion of

Protestant monastery, church and school employees at the end of September.

**Relocation** Expulsion and return to Graz. Kepler is regarded as an exceptional personality and is

the only one able to return in October.

#### **Hypomochlion / Zero Point**

28 In the outwardly and inwardly uncertain period of his 28th year, the Hypomochlion or Zero Point, Kepler is called upon to find himself outwardly and inwardly, regardless of external conditions, and to define his position unwaveringly. Waiting for better conditions would be the end of his path. The fact that he remains on the right path is indicated by his endeavours to gain self-knowledge and his ability to endure strokes of destiny.

**Dearth & Rebirth** 28 Birth and death of first daughter Susanna (1599).

## 5<sup>th</sup> Septennial, 29-35 Meeting Places and People – Here: Tycho de Brahe and Prague

Due to the Counter-Reformation in Linz, the Protestant Kepler had to look for a new place to work.

**Journey** 

He travels to Tycho de Brahe in Prague (1600). Once there, the possibilities and abysses that could arise in the collaboration between the two become apparent. On the one hand, different temperaments and lifestyles, which have a divisive effect, and on the other, complementary prerequisites, possibilities and abilities that could fertilise joint research.

#### 29 Most Important Life Encounter – Turning Point

Kepler himself assesses the situation as follows: Tycho has the best observations and thus, so to speak, the material for the construction of a new building (the World/Cosmic Building – KHF); he also has co-workers and everything he could wish for. The only thing he lacks is a Master Builder who can utilise everything according to his own plan. For although he has a happy disposition and real building skills, he is prevented from developing further by the multitude of phenomena and the fact that the truth lies deeply hidden within them. Slowly, age also creeps up on him and weakens his mind and his powers. Kepler presumably realises that he – using Brahe's observational data – could be this Master Builder. Now everything depends on whether the two can decide to work together despite their differences.

In June 1600, however, Kepler initially returned to his family in Graz. He still hoped to be called back to Tübingen.

Motif: Own Faith/Truth

When he refuses to make a required profession of Catholic faith at the beginning of August, he is finally expelled from Graz on 7 August and must comply within six weeks.

As there was no sign from Tübingen, de Brahe's letter spoke the words of destiny: **Don't hesitate, hurry here (Prague) with confidence.** 

Journey / Relocation

Expulsion from Graz, relocation via Linz to Prague

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#### **Places & People**

Following the calling, Kepler sets off for Prague with his family and household goods in two covered wagons on 30.09.1600 to work with *Tycho de Brahe*.

#### Death & Rebirth

Weakened by the journey and suffering from malaria (alternating fever), Kepler arrives in Prague.

The collaboration with Brahe was not without its tensions, but the task assigned to Kepler of calculating the orbital data of Mars was a challenge that allowed him to grow. Kepler himself speaks of a battle, a campaign against Mars, which wants to keep its secrets hidden.

#### **Christ Years**

The first of the three Christ years of this biography contains two decisive events: (1)
An audience with Emperor Rudolf II and (2) de Brahe's death.

#### Commissioning

In September 1601, Brahe and Kepler were invited to an audience with Emperor Rudolf II. There, they were jointly commissioned to draw up planetary and stellar tables, the *Rudolphine Tables*.

#### Death

30 On 24 Oct 1601 **Tycho de Brahe** dies (as a result of a binge?)

#### **Determination**

In this situation, Kepler has the courage and the audacity to appropriate Brahe's observational data. He writes: I confess that at Tycho's death I took advantage of the absence or lack of prudence of the heirs and took or presumed to take the observations into my care.

#### Journey / Death

After the death of his father-in-law, he travels to Graz to settle property matters. He returns to Prague strengthened by the journey.

#### Taking on my Cross - Do what I came to do

The entire situation of the thirteen months that have passed since the expulsion from Linz and this act of presence of mind raises the image of *taking up my cross*. If Kepler had followed Brahe's last wish, he would have had to advocate a false view of the world, a mixture of Ptolemy and Copernicus. Without decisive action, Brahe's observational data would have perished in the hands of the unappointed just as worthlessly as his valuable astronomical instruments would have rotted in the possession of his heirs. Kepler, who was handicapped by his multiple vision, among other things, would not have been able to obtain the data material through his own observations. Without this encounter between the two individuals at the right time and in the right place, world history would have taken a slightly different course.

#### Time of 1st Climax

Shortly afterwards, Kepler was appointed Imperial Court Mathematician by Emperor Rudolf II. For the first and only time in his life, he found himself in a more relaxed economic situation. The years that followed were the most productive years of his life, during which he gradually developed important fields of astronomy. By the end of the Christ years (33<sup>rd</sup> LY), he had worked on *Astronomia pars optica (Optical Part of Astronomy)*.

Birth 31 9 Jul 1602 Daughter Susanna

**Birth** 33 9 Dec 1604 Son Friedrich

33 Publishes Astronomia pars optica (Optical Part of Astronomy) 1604.

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# 6<sup>th</sup> Septennial, 36-42 *That can I realise what holds the world together at its core* ... (J. W. v. Goethe, Faust I)

**Change of location** Fleeing the plague from Prague and returning to Prague

Publishes *De stella nova in pede serpentarii (1606) (On the New Star in Ophiuchus's Foot)* 

Birth 37 21 Dec 1607 Son Ludwig

**2<sup>nd</sup> Lunar Node** 37 Around the time of his second lunar node (37 J / 4 M = Feb. 1609), Kepler works on

his Astronomia Nova (New Astronomy).

**Journey** 38 He travels to Heidelberg, where it is printed, and from there on to the Frankfurt

Spring Fair with the first finished copies. Returns via Württemberg, looks for a job

again.

Mirroring (31 ½) 40 In 1611 Galileo reports the discovery of four new planets in his Sidereus nuncius

(Starry Messenger), which Kepler identifies as Jupiter's satellites in his Dissertatio cum nuntion sidero (Conversation with the Starry Messenger). Here, the person who turned to Galileo as a "student" in his mid-twenties corrects the then superior,

respected teacher.

Life Task 40 Another result of this productive period is the *Theory of light refraction and astro-*

nomical telescope observation, published in 1611.

**Death** 19 Feb 1611 Favourite son Friedrich dies

**Death** 3 Jul 1611 Wife Barbara dies

Motif: Unrest 40 After a series of difficult trials in 1611 (40<sup>th</sup> LY), the death of his wife Barbara and two

children as well as civil war in Prague, the situation that drove him out of Graz around 11 years earlier (29<sup>th</sup> LY) is repeated. Once again, he endeavours to be called back to Württemberg and receives rejections or silence. However, an application to the Upper Austrian provincial capital of Linz is successful. Kepler concludes an employment

contract with the Linz Estates.

**Journey / Relocation** 41 He escapes from the turmoil of Prague. At the beginning of 1612, he takes up the

post of landscape mathematician in Linz.

Life Encounter 41 In July 1612, Kepler receives a visit from the young scholar Matthias Bernegger (1582

- 1640), who is on his way from his hometown of Hallstatt to Strasbourg to take up a professorship in history. The brief encounter between the two of them was the

beginning of a lifelong friendship.

Mirroring In the Lutheran enclave of Linz, the questions of faith that Kepler had left behind at

the beginning of his twenties in Württemberg caught up with him again. The pastor sent from Tübingen, Hitzler, knew the rebel Kepler and demanded a written declaration of faith from him, which Kepler was unable to give in the required form for

reasons of conscience.

Motif: Own Faith/Truth As a result, he is excluded from the Lord's Supper (Communion) and a dispute about

questions of faith develops that lasts almost 7 years until the church superiors finally

confirm Hitzler's exclusion.

**2<sup>nd</sup> Marriage** 42 Second marriage to Susanna Reuttinger in Eferding on 30 Oct 1613, who becomes

Kepler's faithful and courageous companion in joy and sorrow.

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# 7<sup>th</sup> Septennial, 43-49 Astronomy and World Harmony

#### Truth, beauty, goodness and their counter-images

**Journey** As Imperial Court Mathematician, he is appointed by the Emperor as an expert on

the calendar issue to the Imperial Diet in Regensburg.

Motif: Own Faith/Truth Because he has to defend the Catholic position in accordance with his scientific con-

victions, he does not make any friends among his Protestant co-religionists. Once again, Kepler finds himself in the exceptional situation of having to defend his posi-

tion independently of or even against group affiliations.

**Birth** 44 7 Jan 1615 Daughter Margarete Regina

**Death** Kepler's brother Heinrich dies.

Mirroring 45 Kepler's mother Katharina is accused of being a witch in Leonberg. In 1616, he inter-

venes in the proceedings against his mother by letter and provides her with lawyers. Kepler, who had left his parental home at an early age and was independent of it by the time he entered the Tübingen monastery, took responsibility for his mother with

what he had learnt and become.

Birth 46 31 Jun 1617 Daughter Katharina

**Death** 46 8 Sep 1617 Daughter Margarethe (2<sup>nd</sup> LY)

**Death** 46 1617 Stepdaughter Regina

**Journey** Travels to Württemberg to assist his mother in the witch trial. Returns to Linz in De-

cember.

**Rejecting a Call** He rejects the call to the University of Bologna to succeed Giovanni Antonio Magini.

**Death** 47 9 Feb 1618 Death of daughter Katharina (1<sup>st</sup> LY)

**2<sup>nd</sup> Climax** Shortly after her death, Kepler completed the *Harmonice mundi (Harmony of the* 

Worlds).

**3<sup>rd</sup> Planetary Law** 47 Eight days before **the outbreak of the Thirty Years' War**, Kepler finds his 3<sup>rd</sup> Plane-

tary Law.

Life Task 47 Epitome astronomiae Copernicanae 1-3 (Outline of Copernican Astronomy 1-3) is

published in Linz in 1618.

Kepler writes his Creed.

Motif: Printing Kepler can bring a printer to Linz.

Birth 48 28 Jan 1619 Birth of son Sebald

40 20 Jan 1013 Birth 01 3011 30

Motif: Own Faith/Truth

Heretic The *Outline of Copernican Astronomy* is banned by the Vatican in Rome.

Motif: Own Faith/Truth After 7 years of dispute, the final confirmation of his exclusion from the Lord's Sup-

per takes place with the participation of his former theology professor Hafenreffer.

Journey 49 In Aug 1620 Kepler travels to Württemberg for his mother's defence in the witch

trial. He leaves his family behind in Regensburg.

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# 8<sup>th</sup> Septennial, 50-56 Perseverance

Mirroring Kepler's mother is arrested.

**Birth** 50 22 Jan 1621 Birth of daughter Cordula in Regensburg

50 3 Jan 1621 Climax of the witch trial Kepler's mother is acquitted after fourteen

months in prison.

Return to Linz, where Kepler learns that he has been confirmed as Imperial Court

Mathematician by Ferdinand II.

Motif: Unrest The Counter-Reformation reaches Linz.

**Death** 51 13 Apr 1622 Death of mother at the age of 75

**Birth** 52 24 Jan 1623 Birth of son Friedmar

15 Jun 1623 Death of son Sebald (4th year)

Journey 53 Autumn 1624 Journey to Vienna to ask for money to print the *Tabulae Ru*-

dolphinae (Rudolphine Tables). Return in January 1625.

**Birth** 54 6 Apr 1625 Birth of son Hildebert

**Journey** Kepler travels to Augsburg, Kempten, Memmingen and Nuremberg to collect money

for the printing of the *Rudolphine Tables*. Return to Linz.

Motif: Unrest The Reformation Patent of 20 October triggers a peasant uprising in Upper Austria.

Harassment and expulsion of the Protestants. Kepler and his colleagues are again

exempt from expulsion.

In 1626, Linz is besieged by peasants and the situation in Linz becomes life-threaten-

ing.

Life Task / Printing When Johannes Plank's printing works went up in flames, it no longer made sense

for Kepler, who was responsible for publishing the *Rudolphine Tables*, to remain in

Linz.

**Journey** Kepler leaves Linz to print the *Rudolphine Tables* in Ulm. In the meantime, his family

stays in Regensburg.

 $3^{rd}$  Lunar Node 56 (55 Y / 9 M = Sep 1627) It seems to me that the motif of this lunar node could be: His

life's work, the Rudolphine Tables, are more important than his life. He only leaves Linz when the plates can no longer be printed. And arrives in Frankfurt on the lunar

node (Sep 1627) with the first copies for the autumn fair.

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# 9<sup>th</sup> Septennial, 57-63 Fulfilling the Mission – Delivering the Rudolphine Tables

Life Task Completion of and work on the printing of the *Rudolphine Tables*.

**Journey** Kepler travels to the autumn fair in Frankfurt with the first finished copies of the

Rudolphine Tables.

**Journey** Searching for a new field of activity. Kepler travelled via Ulm to Regensburg to visit

his family.

Mission accomplished Journey from Regensburg to Prague to present the *Rudolphine Tables* to the Em-

peror. This meant that Kepler had completed the mission he had undertaken with

Brahe in 1601 after 26 years.

**Encounter Wallenstein** Wallenstein offers Kepler a position as a mathematician in Sagan. Kepler accepts.

Journey / Relocation Relocation to Sagan. At the end of July, Kepler, reunited with his family, settles in

Sagan with Wallenstein's help.

**Motif: Printing** Kepler sets up its own print shop in Sagan.

59 12 Mar 1630 Marriage of Susanna Kepler and Jakob Bartsch in Strasbourg

**Birth** 59 18 Apr 1630 Birth of daughter Anna Maria

Motif: Unrest Wallenstein's dismissal (13 September) alarms Kepler.

Journey He travels via Leipzig and Nuremberg to Regensburg.

Death 59 15 Nov 1630 Johannes Kepler dies in Regensburg

#### **Observations**

Journey/Relocation I used Journey/Relocation to highlight a Biographical thread. He travels, he is dis-

placed and he has to relocate in tumultuous times. At his time that was only possible for people with a hight social standing or with the support of influential people,

namely the nobility.

A Messenger? Besides him following his research and publishing mission, and being pushed and

shoved by the turmoil of his time, what are these journeys about. Is there hidden

mission, is he functioning as a messenger? For whom and what?

A Support Network He always finds a place to stay and transport for his family and belonging. What net-

work supports this journeyman? Who is protecting him?

**Noble Friends** He mixes with nobility even the Emperor. He is listened to, even in legal matters as

he defends his mother.

**Printing** And finally, printing. Printing is the latest development, state of the art at his time.

Only people in high positions can establish a printing workshop.

This will be followed up in the Karnic Aspects.

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Rhythms

Jupiter Rhythm			12 (6) years (11.86 years) Connection with educational or professional events
1571	27 Jan	☆	Birth
1577	27 3011	6	Attends German reading and writing lessons in Leonberg
1583	17 May	12	Passes the state examination in Stuttgart
1589	17 may	18	Admission to the University of Tübingen
1595		24	First calendar – Enlightenment to the mystery of the world
1601		30	Commissioned by Emperor Rudolf to draw up planets and star charts / Brahe's death / Appointment as court mathematician
1607		36	Most productive work phase / Works on different works at the same time
1613		42	As an expert on the calendar question at the Imperial Diet in Regensburg (court mathematician)
1619		48	Basic lines of Copernican astronomy banned by the Vatican
1625		54	sources of funding to fulfil the commission: printing the Rudolphine Tables
Lunar No	ode Rhythn	n	18 years, 7 months (18.58 years) – Prebirth intentions Connection to the life plan of individuality
1571	27 Jan	$\Rightarrow$	Birth
1590	July	18	1st Moon Node – 18 Y / 7 M: Crisis of growing up
			Around the time of the first lunar node (18 Y / 7 M), he encounters the teachings of Euclid (including treatises on the five regular Platonic solids), Pythagoras, Nicholas of Cusa and, above all, Copernicus through his professor Mästlin. His encounters with people he could honour — Hafenreffer and Mästlin — and the ideas they conveyed had a lasting influence on Kepler's further development. At this crucial time, he encounters impulses that connect his individuality with its past (Pythagoras) and its future (Cusanus and Copernicus). He recognised the superiority of Copernicus' Heliocentric World View and stood up for its recognition in a time when witch trials and funeral pyres were still deciding (scientific) truths.
1609	February	37	<b>2</b> <sup>nd</sup> <b>Lunar Node</b> – 37 Y / 2 M: Having found life task – Moving to karmic realisation
			During the time of the second lunar node, Kepler worked on his <i>New Astronomy</i> . He has found his life's work. The mature late work <i>Harmonice mundi – World Harmony</i> is still to come.
			Kepler travels to Heidelberg, where his <i>New Astronomy</i> is being printed, and from there continues to the Frankfurt Spring Fair with the first finished copies. Return via Württemberg, renewed job search.
1627	September	55	3 <sup>rd</sup> Lunar Node – 55 Y / 9 M – Transition to old age – What still needs to be done?
			The motif of this lunar node at the transition to old age could read: <i>Life's work, the Rudolphine Tables, are more important than life</i> . Despite the turmoil of war, Kepler only leaves Linz when the tables can no longer be printed there. On the lunar node (Sep 1627) he arrives in Frankfurt for the autumn fair with the first printed copies.

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Saturn Rhythm			29 years, 6 months (29.46 years)- Connection with death and resurrection processes
1571	27 Jan	$\Rightarrow$	Birth
1600	Aug	29	Before the first and only Saturn rhythm that Kepler experiences, he visits <b>Tycho Brahe</b> at Benatek Castle near <b>Prague</b> . There were differences of opinion, but also an offer of co-operation. Kepler initially returns to Graz in June 1600. "Just in time" for the start of the Saturn rhythm, he is
1600	Aug	29	Finally <b>expelled from Graz</b> . As the hoped-for return call to Tübingen did not materialise, he was left with only Prague, to which Brahe invited him with the following words: <i>Do not hesitate, hurry here with confidence</i> . The way is now clear for the most decisive encounter of his life, with Tycho de Brahe. A moment of <i>Death and Rebirth</i> is coming, which is timely at the Saturn return.
1600	19 Oct	29	Arrives in <b>Prague</b> with his family as a refugee. He has intermittent fever (malaria). Kepler writes the <i>Apologia pro Tychone contra Ursum on</i> behalf of Tycho Brahe.

Table of Orbital periods of the planets (Sidereal period) | Planetary Cycles

Object	Years, Months, Days	Years
Moon	27.32 days	0.0748
Mercury	87.9691 days	0.241
Venus	224.7 days	0.615
Earth	365.25 solar days	1.0
Mars	1y321d	1.881
Jupiter	11y10m8d	11.86
Saturn	29y5m15	29.46
Uranus		84.01
Neptune		164.8
Pluto		248.1
Lunar Node	(1) 18y7m9d	(2) 37y2m20d
	(3) 55y10m28d	(4) 74y5m
	(5) 92y1m9d	

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#### Part 3

# **Karmic Aspects**

When analysing Kepler's biography, questions repeatedly arise that cannot be treated as *information questions* within the biography, because they have karmic backgrounds. In the following, we will attempt to use a karmic lens with a few motifs as examples.

Note

What matters to me here is above all the exploration, the daring to try and less the publication of final results.

#### 1st Karmic motif

#### **Nature Karma**

# Hereditary stream, time and place of arrival on earth, body as an instrument of the individuality, illnesses

When you read Kepler's biography, the question involuntarily arises: How did this individuality manage to fulfil their life's mission under the given circumstances? Actually, all known external circumstances speak against it.

The individuality in Kepler incarnates itself at the time of the Reformation and Counter-Reformation. During his lifetime, conditions came to such a head that the Thirty Years' War devastated the whole of Central Europe. Kepler's life was characterised by unrest, uncertainty, relocations and expulsions. Weakened by the turmoil of the times, he was forced to embark on a journey during which he died on route, in Regensburg.

Since the death of Charles V (1519-1556), the secular power, the medieval universal empire, has been crumbling and the Catholic unified church is disintegrating under the pressure of the Reformation.

Kepler's family of origin is not portrayed as an oasis of security and warmth. His father is drawn away by mercenary ambitions. During the first years of his life, he grows up with his grandmother, as his mother follows his father. The descriptions of the character traits of his close relatives do not bode well for his socialisation.

Smallpox had damaged Kepler's hand, his digestion and warmth balance were disturbed (liver/gall bladder) and he had multiple vision due to damage to his retina (smallpox). When observing the moon, the great astronomer saw not one moon, but several!

Everything speaks against the development that could lead him to become one of the great mathematicians and astronomers. All the more astonishing is his development, which is able to overcome Nature Karma through the power of individuality and to leave it behind. The formulation of the 3<sup>rd</sup> planetary law, presented in a biographical and historical context, serves as an illustration.

3<sup>rd</sup> Planetary Law

At Easter 1618, Kepler completes the writing of the *World Harmony* and finds the 3<sup>rd</sup> Planetary Law on 15 May, eight days before **the outbreak of the Thirty Years' War.** This will be published much later in the 5<sup>th</sup> volume of the *Outline of Copernican Astronomy*.

Time of 2<sup>nd</sup> Climax

Kepler's individuality, or genius, was able to work its way through all physical and social obstacles and reached the climax of his work at a time when a huge cultural decline was beginning in Central Europe. Goethe said of Kepler in his *Materials on the History of Theory of Colours*: If you combine Kepler's life story with what he became and achieved, you are filled with joyful astonishment, convinced that true genius overcomes all obstacles.

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#### 2<sup>nd</sup> Karmic Motif

# Mirroring from an Egyptian-Chaldean incarnation into the 16<sup>th</sup> century incarnation

The intuitive way in which Kepler arrived at his research results raises the question: How is this possible? Where, how and when did he prepare this? At the same time, the peculiar basic attitude of seeing his own results within the framework of a divine-spiritual harmony or placing them within such a harmony is striking. The following process can serve as a starting point:

On **9 July 1595** (age **24**), he had an epiphany during a lesson. He intuitively *recognised* the coherent connection between the five regular Platonic Solids and the Six Planetary Orbits of Copernicus. Lengthy calculations later confirmed this intuition. His search for *World Harmony*, his knowledge of Euclid and Copernicus combine in a unique way so that the right solution emerges from 120 possibilities, as if the heavens themselves had dictated the solution to him. After completing lengthy crosschecking calculations, he was able to recuperate at the end of January 1596 on a trip to Württemberg. He met relatives and his teacher Mästlin, whose advice saved him from attempting to prove that the Copernican world view was compatible with the Bible in his work.

Of course, choosing the right one from 120 possibilities at the first attempt could also be interpreted as coincidence. He himself sees this as a *hint from God* in line with his basic attitude, which sees himself as embedded in a religious system and equates the wisdom of the stars with divine wisdom.

The gesture becomes even clearer in a text he wrote in connection with the discovery of his third planetary law in March 1618: Yes, I abandon myself to holy frenzy. I defy the mortals with the open confession: I have stolen the golden vessels of the Egyptians in order to build a holy hut for my God far from the borders of Egypt. If you forgive me, I will rejoice; if you are angry with me, I will bear it. Go ahead, I'll throw the dice and write a book for posterity. It is all the same to me. It may wait a hundred years for its reader.

Kepler, for whom everything is to be seen in a universal, harmonious spiritual context, even foreshadows ancient Egypt as the source. According to Rudolf Steiner, the ideas were prepared in ancient Egyptian-Chaldean incarnations, which then found expression in mathematical and cosmological laws in the 16<sup>th</sup> century.

#### **Rudolf Steiner on Kepler**

Source

Rudolf Steiner, GA 120, *Manifestations of Karma*, Lecture 16, *The Nature and Significance of Karma in the Personal and Individual; and in Humanity, the Earth and the Universe*, 16 May 1910, Hamburg

This, again, is still rather an abstract consideration of such a question which we could study much more deeply if we could observe human life over long periods of time. Let us consider human life in the Egyptian-Chaldean age which preceded the Greco-Latin. If we examine the peculiarities of this age, especially with regard to what it has given to mankind, and what mankind then learnt in it, we shall see something curious. If we compare this epoch with our own, we shall perceive that what is happening in our own time is connected with what happened in the Egyptian-Chaldean civilisation. The Greco-Latin lies between the two. In our time certain things would not happen unless other things had happened in the Egyptian-Chaldean times. If present-day natural science has brought about certain results, it has certainly done so by means of powers which have unfolded and developed out of the souls of men. The human souls who worked in our time were also incarnated in man in the Egyptian-Chaldean age, and

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at that time they underwent certain experiences without which they would not be able to accomplish what they do to-day. If the pupils of the old Egyptian temple priests had not learned in Egyptian astrology about the relations existing between the heavenly bodies, they would not later on have been able to penetrate into the secrets of the world, nor would certain souls in the present age have possessed the abilities to explore the regions of the heavens. For instance, how did Kepler arrive at his discoveries? He did so because within him there was a soul who in the Egyptian-Chaldean times had acquired the forces necessary for the discoveries which he was to make in the fifth age. It fills us with inner satisfaction to see in certain souls a realisation arising out of the fact that the germs of what they are now doing were laid in the past. Kepler, one of the men who has played a most important part in the investigation of the laws of the universe says of himself, Yes, it is I who have robbed the golden vessels of the Egyptians to make an offering to my God far removed from Egyptian bounds. If you will forgive me, I will rejoice, but if you blame me, I must bear it; here I throw the dice and I write this book. What matter if it is read to-day or later – even if centuries must elapse before it is read! God himself had to wait six thousand years for the one who recognised his work.'

Here we have a sporadic memory rising in Kepler of what he received as a germ for the work which he, in his personal life as Kepler, accomplished. Hundreds of similar cases might be given. But we see in Kepler something more than the mere manifestation of effects which were the result of causes in a previous incarnation – we see a manifestation which has its significance for the whole of mankind – a manifestation of something which was equally important for the humanity in a previous epoch. We see how a person is placed in the special position in order to do something for the whole of mankind. We see that not only in individual lives, but in the whole of humanity, there are connections between cause and effect, which stretch over wide periods of time, and we can deduce that the karmic law of the individual will intersect the laws which we may call 'karmic laws of humanity.'

Source

Rudolf Steiner, GA 106, *Egyptian Myths and Mysteries,*Lecture 12, *The Christ Impuls as Conqueror of Matter*, 14 Sep 1908, Leipzig

... in his works [Kepler's'] we also find the following: **The ancient memory is knocking at my heart.** 

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#### 3<sup>rd</sup> Karmic Motif

# The strong attitude of formulating one's own Principles of Faith (Motif: Own Faith/Truth) – seen as after-effects of a previous incarnation

In connection with the incarnation alluded to above, perhaps another biographical motif, which was called **Own Faith/Truth**, also becomes transparent. In the way he acts, the way his will expresses itself, he answers the question he himself posed: Can I also find the God, whom I almost grasp with my hands when calculating the universe, in myself? On the one hand, Kepler is absorbed in universal contexts of thought; on the other hand, he individualised certain principles of faith to the point of an individual belief (Own Faith/Truth) and lived them in such a way that he did not really fit into any religious community of his time. He is Catholic on the question of the calendar and not quite Protestant on the question of the Lord's Supper. He writes his own Creed. The gesture expresses the fact that someone here is used to setting principles of faith. This goes beyond the defiant I stand here and can do no other to I stand here and proclaim divine wisdom because it is mine and I live(d) in it. He says about his field of knowledge, astronomy: I wanted to become a theologian, for a long time I was restless. But now see how God is also celebrated through my endeavours in astronomy. This individual service to God is expressed in a similar way, unspoken and unconsciously, at the pole of will.

#### Kepler an Egyptian priest

Source

Rudolf Steiner, GA 120, **Manifestations of Karma**, Lecture VIII, 24 May 1910, Hannover

If we consider the post-Atlantean evolution, we find the Graeco-Latin period in the middle, preceded by the Egyptian-Chaldean period, and followed by our period—the fifth period of civilisation. Our period will be followed by a sixth and seventh cultural epoch. I have also pointed out on other occasions that in a certain respect there are cycles in succession of the various civilisations, so that the Graeco-Latin culture stands by itself, but that the Egyptian-Chaldean period is repeated in our own. Also in this course, I have already pointed out that Kepler lived in our period, and that the same individuality lived earlier in an Egyptian body, and was in that incarnation under the influence of the wise Egyptian priests who directed his gaze to the celestial vault, so that the mysteries of the stars were revealed to him from above. All this was brought further in his Kepler-incarnation which took place in the fifth period, and which, in a certain way, is a repetition of the third.

#### **Johannes Kepler**

#### a partially initiate

Source

Rudolf Steiner, GA 217, *The Younger Generation*, Lecture VIII, 10 Oct 1922, Stuttgart ... Yes, we must admit that we receive our thoughts from the external world, but in spite of this our soul tells us that even the thoughts received from the external world are given us by God. We no longer know how thoughts are God-given, but our inner being tells us that this is so.

A truly brilliant spirit who had such a mood of soul was Johannes Kepler. Johannes Kepler was as much a natural scientist of an earlier time as of a later one. He drew his thoughts from external observation, but in his inner experience he had an absolute feeling that spiritual Beings are there when man is receiving his thoughts from Nature. Kepler felt himself to be partly an Initiate, and for him it was a matter of course that he experienced his abstract building up of the universe artistically.

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#### 4<sup>th</sup> Karmic Motif

#### The connection with the spiritual stream of the Rosicrucians

Kepler is treated as an exceptional personality in many situations. This is a repetitive gesture, a biographical signature. The young rebel is sent to the distant city of Graz, which really awakens the astronomer. In Graz he is shielded from the Counter-Reformation for a long time, is able to develop and publish his *first work*, but in the end has to emigrate to Prague. In Prague, the perspective of the imperial city opened up to him and he became a court mathematician. He was not killed in the turmoil of the civil war in Prague, and a new place of work was prepared for him in Linz. There, and later in Sagan, he even set up a printing press. Apart from the spiritual guidance of his individuality, who actually held a protective hand over Kepler to make all this possible? Where and with whom does he actually stay during his many journeys? Whose doors are open to him so that his family or his children can always find accommodation and care?

The known backgrounds of the people to whom Kepler dedicates his works can provide a clue.

The *New Astronomy* is dedicated to Emperor Rudolf II (1552 – 1612), the *World Harmony* to the King of England James I (1566 – 1625), the son of Mary Stuart. He sends his logarithms to the unnamed *Landgrave of Kassel*, who improves them (!) because he discovers flaws, has them printed and then sends him a printed copy. The first two Rosicrucian writings, *Fama* and *Confessio*, appeared in Kassel in 1614. Landgrave Wilhelm/William IV *The Wise* (1532 – 1592) prepared the spiritual opening. He was an astronomer and had an encounter with Tycho de Brahe in 1575. His successor, Landgrave Moritz/Maurice *The Learned* (1572 – 1632) set up a printing press in his pleasure palace. *Fama* and Confessio were probably printed in this printing works (1614), as were Kepler's logarithm tables (around 1625).

In 1604, at the time when Kepler was working on the *optical part of astronomy* in Prague, the Rosicrucian writings of Valentin Andreae were written down in his native Württemberg. The third, best-known work, the *Chymical Wedding*, appeared in Strasbourg. Kepler's friend Matthias Bernegger (1582 – 1640) lived there, and after a brief encounter (1612 in Linz) they became lifelong friends. The publication of the Rosicrucian writings triggered a powerful cultural impulse. They appear in five languages in various countries.

The dedications mentioned above fit into the picture sketched here to the extent that the following is known about the rulers: All three men are representatives of European throne administrators who were also spiritual seekers. It can be assumed that Rudolf II and James I were associated with the esotericism of their time, the genuine Rosicrucianism, and that Moritz the Scholar promoted its endeavours. These impulses were wiped out during the **Thirty Years' War** (1618 – 1648). How close did Kepler's life's work come to not being published?

Source

**Ernst Bindel** 

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#### 5<sup>th</sup> Karmic motif

# The connection with the Grail Stream Could not yet be satisfactorily explored. Here are some key points and quotes from Rudolf Steiner

In the course of this work on Kepler's biography, the question of Kepler's connection with the Grail stream emerges.

**Key questions** 

- Tycho de Brahe reincarnates (following Rudolf Steiner) as Herzeleide in the Grail period.
- If individualities tend to reincarnate within certain karmic groups, and the meeting of Kepler and de Brahe is important, where is it prepared?
- Where is Kepler during the Grail time?

#### **Rudolf Steiner on Tycho de Brahe**

Source

Rudolf Steiner, GA 238, Karmic Relationships, Lecture IV, 16 Sep 1924

#### **Incarnation line**

#### Julian the Apostate – Herzeleide – Tycho de Brahe and Kepler

Now this soul was among those who had carried over something of the ancient Mysteries. Julian had lived within the substance of the ancient Mysteries at a time when their light was still radiant in many ways. Thus he had received into himself much spirituality of the cosmos. All this had been as it were pressed back during the incarnation as Herzeleide; but it was none the less pressing forth in the soul, and thus we find the same individuality again in the 16th century; we find arising in him once more, in a Christianised form, what he had undergone as Julian the Apostate. For the same individuality reappears in the 16th century as Tycho de Brahe, and stands face to face with the Copernican world-conception which emerges within Western civilisation at that time.

He could make little impression on his contemporaries with his astronomic opinions, differing as they did from Copernicus, or with his other astronomical achievements. He observed countless stars and made a map of the heavens which alone made it possible for **Kepler** afterwards to reach his great results. For it was on the basis of Tycho de Brahe's mapping of the stars that **Kepler** discovered his famous laws. But none of these things could have made so great an impression on his contemporaries as a discovery relatively unimportant in itself, but very striking. He foretold almost to the day the death of the Sultan Soliman (Tycho de Brahe!), which afterwards occurred as he had foretold it. Here we see ancient perceptions working into a later time in a spiritual intellectuality. Perceptions which Julian the Apostate had received light up again in modern time in Tycho de Brahe. Tycho de Brahe is indeed one of the most interesting of human souls. In the 17<sup>th</sup> century he passed on through the gate of death and entered the spiritual world. Now in the spiritual currents which I have described as those of Michael, this being, Tycho de Brahe—Julian the Apostate—Herzeleide, constantly emerges.

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Part 4	Timeline – Includes some Analysis
Source	Mechthild Lemcke, <i>Johannes Kepler</i> , Rowohlt, 1995
Please note	This Timeline substitutes a Life Panorama. Here preferred as it allows to integrate some Biographical Analysis.
1378 – 1448	Christian Rosenkreuz (¥1378 + 120 years of exoteric silence = 1448)
1483 – 1546	Martin Luther
1484 – 1531	Ulrich Zwingli
1517	95 Theses against indulgences (Luther)
1519 – 1556	Emperor Charles V $-$ last representative of the medieval universal empire and the universal church
1529	Marburg religious dialogue (Luther, Zwingli) on the view of the Lord's Supper. A commemorative meal according to Zwingli, or sacrament according to Luther.
1534	Foundation of the Jesuit order (Instrumental in the Counter-Reformation)
1555	Religious Peace of Augsburg, establishing equal rights for Catholic and Lutheran confessions under imperial law. Result: The confession of the sovereign is authoritative for the subjects.
	Internal reform and resurgence of the Catholic Church. Council of Trent.
from 1562	Counter-Reformation Start of the religious wars
1604	Rosicrucian writings written down by Valentin Andreae
1614	Publication of <i>Fama</i> and <i>Confessio</i> . Kassel. Preparation by Landgrave Wilhelm IV "The Wise" (1567 – 1592). Astronomer, meeting with Tycho de Brahe in 1575. Landgrave Moritz "The Learned" (1592 – 1627) sets up a printing works in his pleasure palace.
1616	Publication of the <i>Chymical Wedding</i> in Strasbourg. The publications trigger a powerful cultural impulse. They appear in five languages in various countries.
1618 – 1648	The <b>Thirty Years' War breaks</b> out with the uprising in Bohemia and leads to eradication of the Rosicrucian impulses and the reorganisation of the European balance of power.

1 <sup>st</sup> Septennial, ☆-7		al, ☆-7	Despite physical and social resistance: Arrived!
157	1 ☆	27 Dec	Arrival on earth. On 27 December, Johannes Kepler is born in the Free Imperial City of Weil der Stadt in Württemberg
1573	3 2		The father leaves the family and fights as a mercenary on the side of Spain against the Dutch
			The 'I' moves into the body and takes hold of the physical world
157	5 4		The mother follows the father to look for him. Johannes Kepler (at his grandmothers in Weil der Stadt) falls ill with <b>smallpox</b> . It's in permanent physical impairments to his hands (slightly crippled) and eyes (multiple vision) make him unfit for heavy physical labour. His parents return to Weil der Stadt.
157	6 5		Move to <b>Leonberg</b> (Württemberg)
157	7 6		Johannes Kepler attends German reading and writing lessons in Leonberg, a decision made by his mother, who realises his physical impairments and his bright mind
157	7 6		Observation of the comet of 1577 with the mother

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2 <sup>nd</sup> Se	ptennia	l, 8-14	Being allowed and able to learn
1578	7		Kepler attends the Latin school until 1579
1579	8		<b>Rubicon:</b> The family moves to <b>Ellmendingen near Pforzheim.</b> They lease and run the "To the Sun" inn. Johannes Kepler has to help his father as a farm and inn labourer. Only in winter
1582	11		he was able to complete the second and one year later, in winter
1583	12		complete the third Latin school class The family returns to <b>Leonberg.</b>
			The 'I' awakens in one's own soul and takes hold of the social world
lunita	r 1 Rhyth	m	Connection to education and professional events
Jupitei	12	17 May	Johannes Kepler passes the state examination in Stuttgart
1584	13	16 Oct	He is admitted to the monastery school in <b>Adelberg</b>
			, ,
3 <sup>rd</sup> Se	ptennia	l, 15-21	Theology and philosophy – memories of the future
1586	15		Final examination in Adelberg
		26 Nov	Admission to the <b>Maulbronn</b> monastery school
1588	17	25 Sep	Kepler passes the baccalaureate examination in Tübingen and returns to Maulbronn for a final year, as according to the rules of the time he can only be admitted to university at the age of 18.
1589	18	17 Sep	Admitted to the <b>Tübingen Abbey School</b> , which becomes the <b>Tübingen University</b> . Kepler begins his studies at the Faculty of Arts. Studies theology ( <i>Matthias Hafenreffer</i> ) as well as mathematics and astronomy ( <i>Michael Mästlin</i> ).
1 <sup>st</sup> Lun	ar Node	18-7	(18 Y / 7 M – July 1590) – portal of birth – life plan of individuality – crisis of growing up)
			The 'I' awakens in thought formation and gains access to ideas, ideals and ideologies
			Through Mästlin, he learnt about Pythagoras, Nicholas of Cusa and Copernicus, among others. He recognises the superiority of Copernicus' heliocentric world view.
1591	20		Death of father, Heinrich Kepler (or missing?)
1591		11 Aug	Kepler completes his studies at the Faculty of Arts with a Magister Artium and begins his theological studies
4 <sup>th</sup> Se	ptennia	l, 22-28	In search of the mystery of the world
	-		The theologian becomes an astronomer
1594	23		Early termination of theological studies Kepler accepts the post of professor of mathematics at the Abbey School in Graz.
Graz		11 Apr	Arrival in <b>Graz</b>
1595	24		Kepler's first calendar. Work on the <i>Mysterium Cosmographicum (The Cosmographic Mystery or Short World Mystery)</i>
1595	24	9 Jul	<b>Moment of Enlightenment</b> : In a lesson, Kepler "recognises" a connection between the five regular Platonic solids and Copernicus' six planetary orbits.
1596	25	Jan	At the end of January, Kepler travelled to Tübingen to bring the <i>World Mystery</i> to print. This first work is published in Tübingen as a harbinger of future cosmographical treatises on the mystery of the world. Return to Graz in summer.
1597	26		The <i>World Mystery</i> his 1 <sup>st</sup> scientific publication is <b>published</b> . Kepler sends a copy to Galileo Galilei, professor in Padua.

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<b>1</b> st <b>Marriage</b> 27 Apr		27 Apr	<b>Kepler marries Barbara Müller</b> (1573 – 1611). Marriage of convenience. Composition of his self-characterisation.	
1598	27	C1m	Birth and death of the first child Heinrich	
			<b>Counter-Reformation</b> in Styria. At the end of September, the Protestant monastery, church and school employees are expelled; Kepler is the only one able to return in October	
			Hypomochlion / Zero Point	
1599	28	C2f	Birth and death of daughter Susanna	
5 <sup>th</sup> Sep	tennia	l, 29-42	Place and people – Tycho de Brahe and Prague	
1600	29		First visit to <b>Tycho de Brahe</b> at Benatek Castle near <b>Prague</b> . Differences and offer of co-operation.	
		Jun	Return to Graz	
Saturn	1 Rhyth	m	29 ½ years – death and resurrection processes	
7 Aug		7 Aug	Final expulsion from Graz	
<b>Prague</b> 19 Oct		19 Oct	Arrives in <b>Prague</b> with his family as a refugee. He has intermittent fever (malaria). Kepler writes the <i>Apologia pro Tychone contra Ursum</i> on behalf of Tycho Brahe	
Christ Y	'ears	30-33	Important life encounters – Finding what I came to do – Bearing my Cross	
1601	30		After the death of his father-in-law, Kepler travels to Graz to settle property matters. Ascent of Mount Schöckl.	
		Sep	Return to Prague Emperor Rudolf II commissions Brahe and Kepler to publish the <i>Rudolphine Tables</i> .	
Death	24	Oct	<b>Tycho Brahe dies</b> . Kepler is appointed Imperial Court Mathematician by Emperor Rudolf II. <i>De fundamentis astrologiae certioribus</i> appears, work on <i>Hipparchus</i> and <i>Ad Vitellionem paralipomena</i> , which extends into the following years	
1 <sup>st</sup> Clima	x Period	i	Here: Development of important fields of astronomy	
1602	31	C3f	9 Jul Birth of daughter Susanna	
1604	33		The Ad Vitellionem paralipomena quibus astronomiae pars optica traditur (The optical part of astronomy) appears in autumn, followed by the Thorough account of an unusual new star. Work on the Mars commentaries.	
		C4m	9 Dec Son Friedrich born	

First 33-year rhythm completed (effects, repetition of life motifs – in the social sphere? – 1/3 = 11 years, sunspots = solar rhythm)

6 <sup>th</sup> Sep	6 <sup>th</sup> Septennial <i>I realise what holds the world together at its core</i> (Faust)				
1606	35		Escape from the plague in Prague. De stella nova in pede serpentarii (The New Star in the Foot of the Serpent Bearer) appears together with De stella tertii honoris in cygno and De Iesu Christi servatoris nostri vero natalitio		
1607	36		Kepler obs	erves sunspots, which he believes to be Mercury passing through the sun	
		C5m	12 Dec	Son Ludwig born	
1608	37			eport on the new hair star or comet that appeared in the months of Sepdoctober of the year 1607 and its meanings	
2 <sup>nd</sup> Luna	r Node	37-2	•	1 – February 1609) – After having found one's life mission, now moving armic realisation	
1609	38		Phaenome	enon singulare seu Mercurius in sole appears.	
			tradita cor	vels to Heidelberg, where his Astronomina nova seu physica coelestis, mmentaris de nova stellae Martis (New Astronomy) is printed, and on to furt Spring Fair. Return journey via Württemberg (job search). In autumn	

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1611	40		interveniens is published.
1011	40		In his "Sidereus nuncius", Galileo reports the discovery of four new planets, which
			Kepler identifies as Jupiter's satellites in his Dissertatio cum nuntion sidero.
			Galileo observes the rings of Saturn and the phases of Venus.
			Kepler wrote the Dioptrice (theory of refraction of light and astronomical telescope observation),
1611			The Strena seu de nive sexangula is published as a New Year's gift.
		19 Feb	Son Friedrich dies (6 <sup>th</sup> year)
		3 Jul	Mrs Barbara dies (38. LY)
			Kepler concludes a labour contract with the Linz Estates
1612	41	20 Jan	Emperor Rudolf II dies. Kepler is confirmed as Imperial Mathematician by Emperor Matthias
Relocation	on		to Linz.
			Landscape mathematician of Austria ob der Enns (until 1626).
			Exclusion from communion
44-			
7 <sup>th</sup> Sep	tennia	1	Astronomy and world harmony
			Truth, beauty, goodness and their counter-images
1613	42		As an expert on the calendar issue at the Imperial Diet in Regensburg
2 <sup>nd</sup> Marr	iage	30 Oct	<b>Marriage to Susanna Reuttinger</b> in Eferding. Kepler writes the <i>Nova stereometria</i> doliorum vinaiorum. The report on the year of Christ's birth is published in Strasbourg
1614	43		Work on the Rudolphine Tables and the Upper Austrian map. Libellus de anno natali Christi
1615	44	C6f	7 Jan Birth of daughter Margarethe Regina
		27 Feb	Kepler's brother Heinrich dies
			The Nova stereometria deliorum vinariorum (New spatial metrology for wine barrels) and the Eclogae chronicae appear.
			Kepler's mother Katharina is accused of being a witch in Leonberg
1616	45		Kepler intervenes in the proceedings against his mother by letter and provides her with lawyers
			Extract from Archimedes' ancient art of measurement appears in Linz. Work on the Epitome astronomiae Copernicanae
1617	46	C7f	31 June Birth of daughter Katharina
		8 Sep	Death of daughter Margarethe (2 <sup>nd</sup> year)
			Death of stepdaughter Regina
			First journey to Württemberg to assist his mother in the witch trial. Kepler publishes
			the <i>Ephemerides ad annum 1618</i> and completes the first part of the <i>Epitome astro-nomiae Copernicanae</i> .
		Dec	Return to Linz in December.
			Kepler turns down the offer to succeed Giovanni Antonio Magini at the University of Bologna.
1618	47	9 Feb	Death of daughter Katharina (1st LY)
2 <sup>nd</sup> Clima	ax Perio	d	Shortly afterwards, Kepler completed the Harmonice mundi.
		15 May	Eight days before <b>the outbreak of the Thirty Years' War,</b> Kepler finds his 3 <sup>rd</sup> planetary law.
			The Ephemerides ad annum 1617 are published late. The first three books of the Epitome astronomiae Copernicanae (Outline of Copernican Astronomy) are published in Linz

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8 <sup>th</sup> Sep	tennia	al	Perseve	rance
			Ephemeri	des in annum 1620 are published
				emberg consistory, with the participation of his former theology professorer, excludes Kepler from taking part in the Lutheran Lord's Supper
			Epitomes	is banned by the Vatican in Rome.
				onices mundi libri V and De comentis libelli tres (On Comets) are published. ites his <b>creed</b> .
		28 Aug	Coronatio	n of Ferdinand II
		20 Mar	Death of E	Emperor Matthias
1619	48	C8m	28 Jan	Birth of son Sebald

8 <sup>th</sup> Sep	tennial	Perseverance
1620 49		Ephemerides in annum 1619 and Epitomes astronomiae Copernicanae libri IV appear.
	7 Aug	Kepler's mother is arrested. Kepler travels to Württemberg to defend her in the witch trial. He leaves his family behind in Regensburg.
1621	50 C9f	22 Jan Birth of daughter Cordula in Regensburg
		Report of the eclipses of 1620 and 1621 appears. Epitomes astronomiae Copernicanae libri $V-VII$ are published for the Frankfurt autumn fair, together with a new edition of the. Mysterium cosmographicum (The Cosmographic Mystery).
	3 Oct	Climax of the witch trial Kepler's mother is acquitted after fourteen months in prison.
		Return to Linz, where Kepler learns that he has been confirmed as Imperial Court Mathematician by Ferdinand II.
1622	51	Revision of the <i>Moon Dream</i> , writing of the <i>Chilias logarithmorum</i> (published in 1624), work on the <i>Tabulae Rudolphinae</i> . Counter-Reformation in Linz.
	13 Apr	Death of mother at the age of 75
1623	52 C10m	24 Jan Birth of son Friedmar
		Kepler publishes the Discourse of the Great Conjunction.
	15 Jun	Death of son Sebald (4 <sup>th</sup> LY)
		Work on the Rudolphine Tables, which continued until 1624.
1624	53	Work on Tychonis Brahei Dani hyperaspistes. — Chilias Logarithmorum (On Logarithms).
	Autumn	In autumn, travels to Vienna to ask for money to print the Tabulae Rudolphinae.
1625	54 Jan	Return from Vienna in January
	C11m	6 Apr Birth of son Hildebert
		Kepler travels to Augsburg, Kempten, Memmingen and Nuremberg to collect money for the printing of the <i>Rudolphine Tables</i> . Return to Linz.
		The Reformation Patent of 20 Oct triggers a peasant uprising in Upper Austria. Harassment and expulsion of Protestants; Kepler and his colleagues are exempt from expulsion.
1626	55	Peasant uprising against the Counter-Reformation Linz is besieged by peasants. Johannes Plank's printing works goes up in flames.
		Existential threat. What does Kepler still have to do?
Ulm20	Nov	<b>Kepler leaves Linz</b> to print the <i>Rudolphine Tables</i> in Ulm. His family stays in Regensburg in the meantime.
3 <sup>rd</sup> Luna	er Node 55-9	(55 Y / 9 M – September 1627) – Transition to old age – What still needs to be done?
9 <sup>th</sup> Sep	tennial	Fulfilling the mission

Work on printing the Rudolphine Tables. Kepler travels to the autumn fair in Frank-

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furt with the first finished copies.

1628 1998	57	Jul	Search for a new field of activity. Kepler travelled via Ulm to Regensburg to visit his family and from there to Prague to present the <i>Rudolphine Tables</i> to the Emperor offers Kepler a position as a mathematician in Sagan. Kepler accepts.  Moved <b>to Sagan</b> at the end of July with the help of Wallenstein. Kepler works with his assistant Jakob Bartsch on the edition of the <i>Ephemerides</i>
1629	58		The Sportula and De raris mirisque anni 1631 phaenomenis are published. Kepler sets up his own printing works in Sagan.
1630	59		Printing of the Ephemerides 1621 to 1636 and parts of the Moon Dream.
		12 Mar	Marriage of Susanna Kepler and Jakob Bartsch in Strasbourg
		C12f	18 Apr Birth of daughter Anna Maria
			Kepler is alarmed by Wallenstein's dismissal (13 Sep). He travels to Regensburg via Leipzig and Nuremberg.
		15.11.	Johannes Kepler dies in Regensburg
1633			Galileo's conviction
1634			Somnium seu Opus posthumum de Astronomia Lunan (Dream or posthumous work on lunar astronomy) is published. Sometime called the First Science Fiction.
1642			Galileo Galilei dies
1643			Isaac Newton is born

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