How does the Goetheanum building refer to anthroposophic cosmology?

-

Concrete for eternity

Nicole Montag-Keller

Dissertation submitted in partial fulfilment of an
M.A. in Cultural Astronomy and Astrology

University of Wales Trinity Saint David

13 March 2020

PRIFYSGOL CYMRU
Y Drindod Dewi Sant
UNIVERSITY OF WALES
Trinity Saint David

Master's Degrees by Examination and Dissertation

Declaration Form

1. This work has not previously been accepted in substance for any degree and is not being concurrently submitted in candidature for any degree.

Name..…… Nicole Montag-Keller……...

Date ……13 March 2020……...

2. This dissertation is being submitted in partial fulfilment of the requirements for the degree of ……Cultural Astrology and Astronomy…….....

Name… Nicole Montag-Keller…….

Date ……13 March 2020…….……..……...

3. This dissertation is the result of my own independent work/investigation, except where otherwise stated.

Other sources are acknowledged by footnotes giving explicit references.

A bibliography is appended.

Name…… Nicole Montag-Keller…….

Date: ……13 March 2020……..…….

4. I hereby give consent for my dissertation, if accepted, to be available for photocopying, inter- library loan, and for deposit in the University's digital repository

Name…… Nicole Montag-Keller…….

Date……13 March 2020…….……..

Supervisor's Declaration.

I am satisfied that this work is the result of the student's own efforts.

Signed: ……...

Date: ……..

Table of Contents

1 TABLE OF CONTENTS

2 Introduction 8
3 Literature Review 9
3.1 Rudolf Steiner's life 9
3.2 Historical context with a focus on western esotericism 13
3.3 Anthroposophical Cosmology 17
3.3.1 "Erkenntnisweg", a developmental process 17
3.3.2 Steiner's philosophical epistemology for overcoming dualism: spiritual monism 18
3.3.3 Trinity, anthroposophical esoteric Christology and hierarchies 19
3.3.4 The hierarchies' connection to the sky sphere(s) 21
3.3.5 Human beings' connection to the Earth 22
3.3.6 Human beings' spiritual development towards "ICH" (I) 23
3.3.7 The sevenfold human being 24
3.3.8 "Weltentwicklungsstufen" (developmental stages) of the Earth 24
3.3.9 The eighth sphere of the Earth 26
3.3.10 Ahriman and Lucifer: adversaries supporting human beings' developmental processes 26
3.3.11 "Weltzeitalter" (world ages) and current fifth culture epoch 27
3.4 Anthroposophical architecture embedded in anthroposophical cosmology 30
3.5 The building 40
4 Methodology 42
4.1 Insider and outsider issue addressed 42
4.2 Archaeoastronomical methodology 42
4.3 Interviews 43
4.4 Self-Ethnography 43
5 Findings and Discussion 44
5.1 Results of the archaeoastronomical method 44
5.2 Results of the interviews conducted 54
5.3 Results of the self-ethnographic method 57
5.3.1 Shadows, weather and introspection 58
5.3.2 Windows, spiritual pathway and insight 61
5.3.3 Conclusion from methods, findings and discussion 67
6 Conclusions 67
7 Bibliography 69

8.1 Ethical approval PG2 / E1 Form 74
8.1.1 SECTION K: Declaration 74
8.2 Interview Release Form 75
8.3 Interview Consent, process, questions, Thanks and information sheet 76

List of Tables and Figures

Table 1:Nicole Montag-Keller, table of field measurement added by calculated azimuth, altitude and declination degrees, 2020..... 45
..... **Fehler! Textmarke nicht definiert.**
Table 2: Nicole Montag-Keller, table of sun rise and sun set data on summer and winter solstice and equinoxes provided by Fabio Silva's archaeoastronomy app, https://archaeofsilva.shinyapps.io/skyscapeR-legacy/, 2020. 47
..... **Fehler! Textmarke nicht definiert.**
Figure 1: Nicole Montag-Keller, foto of Goetheanum showing south-west facade (13 Feb, 2019, 16:42h), 2019; Figure 2: Nicole Montag-Keller; foto showing some neighbourhood area upon approaching the Goetheanum from south-west (6 Dec, 2019, 16:19h), 2019. 9
Figure 3: Otto Rietmann at Rudolf Steiner Archiv Dornach, postcard picture Rudolf Steiner (1861-1925), June 1923. 10
Figure 4: Rudolf Steiner, ranking order of the nine beings of the three hierarchies, GA 136, p. 117, 1912. 21
Figure 5: Rudolf Steiner, the planetary spheres are the dominions of the spiritual hierarchies, GA 110, p. 103, 1909. 21
Figure 6: Rudolf Steiner, the eight (to be nine) interrelated inner layers of the earth, GA 95, p. 33, 1906. 22
Figure 7: Rudolf Steiner, basic schema of a spiritually developed human being, GA 124, p. 92, 1910. 23
Figure 8: Rudolf Steiner, structuring of the lower and middle three parts of a human being, GA 145, p. 175, 1913. 24
Figure 9: Rudolf Steiner, future transformation of the Ich into the upper part of a human being, GA 104, p. 176, 1908. 24
Figure 10: Rudolf Seiner, the cosmic evolution of human beings from Saturn to Vulcan in reference to the human lower, middle and upper gestalt parts (Wesensglieder), GA 89, p. 73, 1905. 25
Figure 11: Rudolf Steiner, planetary earth development from Saturn to Vulcan exhibiting the eighth sphere adjacent to the earth, GA 254, p 83, 1915. 26
Figure 12: Nicole Montag-Keller, Bruce McClure's enhanced model of the Earth's orbit, showing ecliptic and celestial equator, earthsky.org, Feb 2020. 28
Figure 13: Rudolf Steiner, subsumption of the seven culture epochs into the grander scheme of "Weltzeitalter" (ages), GA 104, p. 67, 1908. 29
Figure 14: Otto Rietmann, photo of the first Goetheanum seen from South-West, available at Rudolf Steiner Archiv Dornach Switzerland , undated; Figure 15: Rudolf Steiner, West-East cross section of the Goetheanum I (1914-1920), GA 286, p. 82, 1982. 31
Figure 16: Nicole Montag-Keller, photo: replica model of the second Goetheanum building, exhibited in the Goetheanum seen from North-West, Jan 2020; Figure 17: Wolfgang Pehnt and Thomas Dix, West-East cross section of the second Goetheanum (1925-1928), in Rudolf Steiner Goetheanum Dornach, p. 49, 1991. 32
Figure 18: Rudolf Steiner, macrocosmic prayer in response to the fifth gospel both given by Rudolf Steiner, GA 245, p. 127, 1920. 33
Figure 19: Max Benzinger, photo of the foundation stone, crafted copper, for the Goetheanum consisting of two differently sized pentagon dodecahedrons the smaller one faced West when put into the Earth, Archivmagazin Nr 2, p. 45, 2013; Figure 20: Carl Kemper, drawing of the foundation stone and a drawing of the triangular trowel used by Rudolf Steiner used in the evening of 20th September 1920, Archivmagazin Nr 2, p. 56, 2013. 34
Figure 21: Rudolf Steiner, notes for the foundation document, Archivmagazin Nr 2, p. 60., 2013. 35
Figure 22: Nicole Montag-Keller, extract of the foundation stone speech for the second Goetheanum held on 25th Dec 1923 in Dornach, GA 260, p. 63, Mar 2020. 38
Figure 23: Rudolf Steiner, drawings of how the forms for the second Goetheanum should be composed, GA 286, p. 121, 1924. 40
Figure 24: Philosophisch-Anthroposophischer Verlag am Goetheanum, Goetheanum seen from South-West, undated; Figure 25: Taxiarchos (Wladyslaw), aerial view of the Goetheanum seen from South-West, 20 Aug 2012. 41
Figure 26: Dietrich Hagen, floor plan of the great hall (oriented to the West) and stage area (oriented to the East) of the Goetheanum, Der Goetheanumbau, p. 43, 1978; Figure 27: Nicole Montag-Keller, photo taken to the West in the great hall, standing in Eastern part of the hall (depicted with a red dot in figure 24), 8th Oct 2019. 41
Figure 28: Nicole Montag-Keller, snapshot from google maps depicting Dornach, Switzerland close to neighbouring France and Germany, 2020. 44
Figure 29: Nicole Montag-Keller, snapshot from heywhatsthat 360° vista seen from the GREEN North and South windows as calculated Az 187.44, Alt 3.37 (table 1), 2020. 45
Figure 30: Nicole Montag-Keller, snapshot from heywhatsthat 360° vista seen from the BLUE North and South windows as calculated Az 181.59, Alt 3.79 (table 1), 2020. 46
Figure 31: Nicole Montag-Keller, snapshot from heywhatsthat 360° vista seen from the VIOLET North and South windows as calculated Az 179.20, Alt 4.15 (table 1), 2020. 46
Figure 32: Nicole Montag-Keller, snapshot from heywhatsthat 360° vista seen from the PINK North and South windows as calculated Az 179.38, Alt 4.2 (table 1), 2020. 46
Figure 33: Nicole Montag-Keller, snapshot from heywhatsthat 360° vista seen from the PINK North and South windows as calculated Az 91.34, Alt 9.77 (table 1), 2020; Figure 34: Nicole Montag-Keller, snapshot from heywhatsthat 360°vista pointing towards Gempen as calculated Az 91.34, Alt 9.77 (table 1), 2020. 46

Figure 35: Nicole Montag Keller, graphical representation of sun set data on summer and winter solstice and equinoxes provided by Fabio Silva's archaeoastronomy app, https://archaeofsilva.shinyapps.io/skyscapeR-legacy/, 2020. 47
Figure 36: Nicole Montag-Keller, snapshot from heywhatsthat 360°vista seen from the West as per table 2 Az 59.97, Alt 4.63, 2020; Figure 37: Nicole Montag-Keller, snapshot from heywhatsthat 360° vista indicating summer solstice sun rising point on the map, 2020. 47
Figure 38: Nicole Montag-Keller, sunrise over the Ermitage valley observed from a North-West position on 24th June 2019, 2019. 47
Figure 39: Nicole Montag-Keller, snapshot from heywhatsthat 360° vista seen from West as per table 2 Az 137.94, Alt 7.7, 2020; Figure 40: Nicole Montag-Keller, snapshot from heywhatsthat 360° vista indicating winter solstice sun rising point on the map, 2020. 48
Figure 41: Nicole Montag-Keller, sunrise over the Burgruine Dorneck observed from a South-West position on 31st December 2019, 2019. 48
Figure 42: Nicole Montag-Keller, snapshot from heywhatsthat 360° vista seen from West as per table 2 Az 230.33, Alt 3.0, 2020; Figure 43: Nicole Montag-Keller, snapshot from heywhatsthat 360°vista indicating winter solstice sun setting position on the map, 2020. 48
Figure 44: Nicole Montag-Keller, sun set over the Blauen hillside ridge observed from a West position of the Goetheanum terrace on 19th December 2019, 2019; Figure 45: Nicole Montag-Keller, sun set over the Blauen hillside ridge observed from a West position of the Goetheanum terrace on 18th December 2019, beneath the area called "Felsli" with three lines of stone markings the earth, 2019. 49
Figure 46: Nicole Montag-Keller, snapshot of the Goetheanum "Gartenpark" (landscape garden) map, depicting the Goetheanum (top left) and the "Felsli" round shaped structure with three stone rows directed to the Goetheanum, map provided by the landscape gardeners "Gärtnerei" am Goetheanum", undated, 2020. 49
Figure 47: Nicole Montag-Keller, Rudolf Steiner's poem «Wintersonnenwende» (winter solstice), GA 40, p. 96, 2020. 51
Figure 48: Nicole Montag-Keller, snapshot from heywhatsthat 360° vista seen from West as per table 2 Az 305.54, Alt 0.35, 2020. 51
Figure 49: Nicole Montag-Keller, photo of the East façade of the Goetheanum, 2019; Figure 50: Nicole Montag-Keller, photo of the West façade of the Goetheanum taken on 21st September 2019, 18:30 h where the reflection of sunlight on a window to the right can be seen on the street (front right), 2019. 52
Figure 51: Nicole Montag-Keller, photo of the west façade of the Goetheanum on 21st September 2019, 17:44 h, 2019. 52
Figure 52: Nicole Montag-Keller, photo of the sun setting on 28th September 2019 seen from within the cobweb shaped window of the Goetheanum, 2019; Figure 53: Nicole Montag-Keller, photo of the sculptural head which is fully illuminated when the sun sets on 28th September 2019, 2019. 53
Figure 54: Nicole Montag-Keller, photo of the red window lit by sunshine on 21st September 2019, 17:48 h, 2019. 53
Figure 55: Nicole Montag-Keller, participants age and gender distribution, 2020. 54
Figure 56: Nicole Montag-Keller, distribution of religious orientation, 2020; Figure 57: Nicole Montag-Keller, distribution of interest in other religious orientations, 2020. 55
Figure 58: Nicole Montag-Keller, participants age when they first encountered anthroposophy, 2020; Figure 59: Nicole Montag-Keller, decade indicated when first encountered anthroposophy, 2020. 55
Figure 60: Nicole Montag-Keller, strength of orientation towards anthroposophy, 2020. 55
Figure 61: Nicole Montag-Keller, word cloud on my key word entries from my Goetheanum journal, 2020. 57
Figure 62: Nicole Montag-Keller, word cloud on my coding from the Goetheanum journal, 2020. 58
Figure 63: Nicole Montag-Keller, Goetheanum seen from West, 4th June 2019, 2019; Figure 64: Nicole Montag-Keller, Goetheanum seen from Wes, 8th October 2019, 2019. 58
Figure 65: Nicole Montag-Keller, Goetheanum close-up from South, 31st December 2019, 2019. Figure 66: Nicole Motnag-Keller, Goetheanum close-up from South, 27th August 2019, 2019 Figure 67:Nicole Montag-Keller, Goetheanum close-up from West, 3rd June 2019, 2019. 59
Figure 68: Nicole Montag-Keller, Goetheanum disguised view from South-West, 22nd October 2019, 2019. Figure 69: Nicole Montag-Keller, Goetheanum seen from West, 17th June 2019, 2019. 60
Figure 70: Rudolf Steiner, Rudolf Steiners Entwürfe für die Glasfenster des Goetheanum, 1961, p. 28, 1913/14. 61
Figure 71: Carl Kemper, photo of the representative of man published in 'Der Bau', p. 119, 1966. 62
Figure 72: Assia Turgenieff, copper engraving of the red window after Rudolf Steiner's sketch, 1913/1914 and 1935. 63
Figure 73: Nicole Montag-Keller, snapshot from Stellarium Taurus (Stier) to the West, Lion (Löwe) to the South, Saturn in the constellation of Twins (Zwillinge) for midnight on 1st March 1916, 2020. 64
Figure 74: : Nicole Montag-Keller snapshot from Stellarium Taurus (Stier) to the West, Lion (Löwe) to the South, Saturn close to the constellation of Twins (Zwillinge), the moon in the West close to Taurus, for midnight on 1st March 1917, 2020. midnight on 1st March 1917, 2020. 65
Figure 75: Assia Turgenieff, copper engraving of the blue South window after Rudolf Steiner's sketch, 1913/1914 and 1935. 66
Figure 76: Rudolf Steiner, three cosmic poems for eurythmie, Cancer constellation, GA 40, p. 57, 1915. 66
Figure 77: Nicole Montag-Keller, the stone sculpture called the "Drachenschwanz" (dragon tail) to the west of the Goetheanum, 27th Feb 2020; Figure 78: Nicole Montag-Keller, picture from Night Sky app where the constellations can be merged with the background 67

Acknowledgements

My sincerest thanks go to all my tutors of the MA in Cultural Astronomy and Astrology for their support, guidance and stimulating feedback throughout the programme.

First of all, and above all, I am thanking Dr. Nicholas Campion, Associate Professor in Cosmology and Culture, director of this MA for his outstanding knowledge and oversight throughout the course. I am also thanking Dr. Bernadette Brady for her guidance, especially her motivational addresses throughout the dissertation seminars. I am forever thankful to Dr. Darrelyn Gunzburg who patiently steered me through my very first essays on the MA route and because she believed in me, I have gotten this far. Last but not least I am thanking Dr. Fabio Silva, who taught me how the sky can be calculated for which has become a new perspective in my life.

The research, formulation and development of this dissertation was made possible through the constant support, help and advice of my supervisor Dr. Nicholas Campion. I am inspired by his lectures, writings and numerous books and benefitted tremendously from his longstanding experience as a Historian and a versatile Professor in Cosmology and Culture.

My further acknowledgement and thanks go to: Dr. David Marc Hoffmann, Hans-Christian Zehnter, Prof. Dr. Roland Halfen, Silvana Gabrielli and Claudia Forster from the Rudolf Steiner Archiv in Dornach, Switzerland. Further acknowledgement and thanks go to: Marianne Schubert, Esther Gerster, Kurt Remund, Dino Wendtland, Jörg Mensens and Jonas Lismont from the Allgemeine Anthroposophische Gesellschaft am Goetheanum in Dornach, Switzerland. Additionally, I thank Dr. Stephan Stockmar for sharing his thoughts and experience.

Many thanks go to the staff at the libraries of the Universität Basel, the Universität Bern, the Schweizerische Nationalbibliothek and the Goetheanum Bibliothek.

It is my pleasure and my honour to thank Rosmarie Heider from Arlesheim, Switzerland for supporting me through discussions, books and many cups of coffee. My deepest thanks go to Thomas Keller, friend, coach, supporter and beloved husband.

This dissertation is dedicated to my son Linus who teaches me who I am.

Abstract

This thesis aimed to guide understanding how the Goetheanum building in Dornach, Switzerland refers to anthroposophic cosmology. The fundamental concepts of anthroposophic cosmology were put forward as well as the stylistic elements which identify anthroposophy inspired art and architecture. This thesis offered an in-depth insight into anthroposophic cosmology by providing information about Steiner's biography, his historical context and how the concept of western esotericism tries to capture ideas of the invisible in academic terms. The application of three methodological approaches aided the research process, which obtained data and information for how the Goetheanum related to the skyscape, the horizonscape, the landscape, the gardenscape, the representative of man, the red window and the blue window to the South and even to a dragon. All these features helped to understand, that the Goetheanum and its surrounding exhibited numerous references to the sky and that is was a process of making the invisible visible.

2 INTRODUCTION

This dissertation aims to understand how the Goetheanum building located in Dornach, Switzerland refers to anthroposophic cosmology. Rudolf Steiner (1861-1925) the founder of anthropsophy suggested a cosmology that offers a pathway for understanding and knowing the spiritual world implicitly suggesting, that a spiritual world could exist and, that human beings can develop their capabilities detecting it.[1] Steiner proposed, that if an individual follows the anthroposophic pathway, the person's consciousness of humanity (Menschheitsbewusstsein) will expand, implicitly suggesting that a collective consciousness exists and that one would be part of it unconsciously[2]. Steiner, who encountered Johann Wolfgang von Goethe's idea of metamorphosis of plants '…that all gestalt is similar, but none identical…'into the gestalt of the first and second Goetheanum.[3] Steiner also transferred the concept of metamorphosis to the development of an individual's spirituality, which through meditation and contemplative thinking would become more and more capable of self-researching the spiritual world while at the same time adhering to the objectivity of the natural sciences.[4] Rudolf Steiner said, that 'anthroposophy expresses a worldview and by self-developing spiritual organs an individual brings spiritual world content into his consciousness, in the same way as natural sciences bring forth the material through the senses perception.[5]

The research undertaken looked into how insiders to anthropsophy perceived and understood the Goetheanum building as a reference to anthroposophical cosmology. Firstly, interviews were conducted for understanding the participants relation between the building and its reference to the sky. Secondly I chose an ethnographic and visual self-reflective journaling approach for understanding my relationship to the building's cosmological reference and thirdly archaeoastronomical research looked into the orientation of the building's central axis and whether the central axe related to celestial objects as they rose and set.

Since existing research has mainly looked into fields of education, i.e. Waldorf/Steiner schools, farming, medicine and hospitals, this research studied the link between a unique material structure and its possible reference to the sky and how insiders to anthroposophic cosmology construct this their relationship and reference to this space in the year 2019.[6] This was important for gaining an understanding how anthroposophic cosmology not only informs about the past, but the present and future and how the construction of space was expressed. Edward Soja's concept of Thirdspace was chosen to resolve the 'either …or ' dichotomy or any other notion of a dualistic worldview.[7] Firstspace is the perspective considering the fixed, concrete materiality of spatial forms and

[1] Rudolf Steiner, *Was wollte das Goetheanum und was soll die Anthroposophie?* http://fvn-archiv.net/PDF/GA/GA084.pdf#view=Fit (accessed 30 May 2019), p.10

[2] Rudolf Steiner, *Anthroposophische Gemeinschaftsbildung*, http://fvn-archiv.net/PDF/GA/GA257.pdf#page=76&view=Fit (accessed 30 May 2019), p. 76;

[2] Rudolf Steiner, *Anthroposophische Gemeinschaftsbildung*, http://fvn-archiv.net/PDF/GA/GA257.pdf#page=76&view=Fit (accessed 30 May 2019), p. 76;

[3] Johann W. Goethe (1749-1832), Die Metamorphose der Pflanze, Kapitel 502, https://gutenberg.spiegel.de/buch/gedichte-9503/502 (accessed 23 Oct 2019); 'Alle Gestalten sind ähnlich, und keine gleichet der andern;' translated by N. Montag-Keller.

[4] Rudolf Steiner, *Wie erlangt man Kenntnisse der höheren Welten*, http://fvn-archiv.net/PDF/GA/GA010.pdf#view=Fit (accessed 30 May 2019), p. 38.

[5] Rudolf Steiner, *Der Goetheanumgedanke inmitten der Kulturkrisis der Gegenwart*, http://fvn-archiv.net/PDF/GA/GA036.pdf#view=Fit (accessed 30 May 2019), p. 305.

[6] Applied anthroposophical research projects, https://eliant.eu/en/key-areas-of-activity/research-projects/ (accessed 31 May 2019).

[7] Edward W. Soja, *Thirdspace* (Oxford: Blackwell Publishers Ltd, 2000), p. 12.

Secondspace is the perspective where ideas about space are expressed 'in thoughtful re-presentations of human spatiality', short: the real and the imagined space.[8] Thirdspace attempts to capture what is actually constantly shifting and are changing milieus of ideas, events, appearances and meanings 'for understanding the world, in the most general sense, a simultaneously historical and social project.'[9]

3 LITERATURE REVIEW

In the beginning of the twentieth century, according to Robert Klanten, 'two parallel aesthetics informed utopian architecture: a geometric, structuralist impulse, and an organic approach inspired by natural forms.' [10] He argues, that the utopian approach to building 'was driven by visions of how life could – *should* - be', because 'architects believed they could reshape societal relationships and refashion modes of life and human interaction just by designing what they believed were better buildings.'[11] By looking at the photos of the Goetheanum displayed in figures 1 and 2, a possible geometric impulse could be detected and probably an organic impulse upon closer inspection. But by whom and how did these utopian ideas arrive? A biographical introduction to Rudolf Steiner and his historical context will be given. Then anthroposophic cosmological ideas will be described and the Goetheanum architectural uniqueness presented.



Figure 1: Nicole Montag-Keller, foto of Goetheanum showing south-west facade (13 Feb, 2019, 16:42h), 2019;
Figure 2: Nicole Montag-Keller; foto showing some neighbourhood area upon approaching the Goetheanum from south-west (6 Dec, 2019, 16:19h), 2019.

3.1 RUDOLF STEINER'S LIFE

Rudolf Josef Lorenz Steiner (figure 10) was born on 27th February 1861 in Kraljevec in the Austrian-Hungarian Empire (today Croatia).

[8] Edward W. Soja, *Thirdspace* (Oxford: Blackwell Publishers Ltd, 2000), p. 2.
[9] Edward W. Soja, Thirdspace, Journeys to Los Angeles and other real-and-imagined places (Oxford: Blackwell Publishers Ltd, 2000), p. 2, 12.
[10] Robert Klanten, Telling Tales of Tomorrow in Robert Klanten and Sofia Borges (eds.), *The Tale of Tomorrow* (Berlin: Gestalten Verlag GmbH, 2016), p. 12.
[11] Robert Klanten, Telling Tales of Tomorrow in Robert Klanten and Sofia Borges (eds.), *The Tale of Tomorrow* (Berlin: Gestalten Verlag GmbH, 2016), p. 4-5.



Figure 3: Otto Rietmann at Rudolf Steiner Archiv Dornach, postcard picture Rudolf Steiner (1861-1925), June 1923.

Steiner's family moved four times throughout his childhood and youth due to his father employment with the Austrian Südbahn (train company).[12] Steiner's essays written from December 1923 till March 1925 highlight his life events dating from his earliest memory till 1907.[13] Not only did Steiner describe how he experienced his external life events but he also carried on to explain how he tried to make sense of his inner life phenomena, e.g. encountering other people and subjects such as the pastor who left 'a visual imprint in his soul' and at school being taught the Copernican system by the same pastor and how a geometry book rendered Steiner's 'justification of the spiritual world'.[14] He wrote, that 'for weeks, my soul was filled with congruence, similarity of triangles, quadrangles, polygon and my thinking mused about the question where parallels intersect; the Pythagorean theorem enchanted me'.[15] At the age of ten a country doctor taught Steiner about German literature opening new forms of education beyond his school teaching .[16] In 1872 Steiner was sent to the Realschule in Wiener-Neustadt which he finished with the Abitur (A-level) in 1879.[17] Since he was 15 years old, Steiner provided private teaching lessons for his schoolmates in supporting family income, according to his writing benefitted as well, because he 'had to enliven his own knowledge' and learnt 'the difficulties of soul development of his schoolmates'.[18] From 1879-1883 Steiner studied at the "Technische Hochschule"' in Vienna. His subjects were mathematics, physics, botany, zoology and chemistry for he envisaged to become a professional teacher.[19] Among his official subjects, Steiner managed to be a guest auditor at the University of Vienna and he pursued further readings of German literary figures, e.g. Goethe's Faust I.[20] Meeting two philosophers, Robert Zimmermann (1824-1898) and Franz Brentano (1838-1917) at Vienna University, he was impressed how philosophy was lectured in a classroom, since he knew philosophy from books only.[21] In his autobiography Steiner wrote, that he found himself 'obliged to search the truth through philosophy', because to him

[12] Rudolf Steiner, *Mein Lebensgang*, GA 28, (Dornach: Rudolf Steiner Verlag), p. 8,9,11,16, 17.
[13] Rudolf Steiner, Mein Lebensgang, p. 7, 479.
[14] Rudolf Steiner, *Mein Lebensgang*, GA 28, p.22-24; '..einen bildhaften Eindruck auf meiner Seele hinterlassend…', …die Rechtfertigung der geistigen Welt, die ich damals brauchte', translated N. Montag-Keller.
[15] Rudolf Steiner, *Mein Lebensgang*, GA 28, p. 21; 'Wochenlang war meine Seele ganz erfüllt von der Kongruenz, der Ähnlichkeit von Dreiecken, Vierecken, Vielecken; ich zergrübelte mein Denken mit der Frage, wo sich eigentlich Parallelen schneiden; der pythagoreische Lehrsatz verzauberte mich', translated N. Montag-Keller.
[16] Rudolf Steiner, Mein Lebensgang, GA 28, p. 30.
[17] Rudolf Steiner, *Mein Lebensgang*, GA 28, p. 32-33.
[18] Rudolf Steiner, *Mein Lebensgang*, GA 28, p. 45; '..dass ich meine Kenntnisse in den Nachhilfestunden beleben musste; …Ich lernte die Schwierigkeiten der menschlichen Seelenentwicklung an meinen Schülern kennen.', translated N. Montag-Keller. A note to the usage of Steiner's German: though Rudolf Steiner wrote in German, Steiner invents his own idiom. It bears witness, that to him the unseen world is alive, and he expressed these experiences by relating them to theological concepts of soul, spirit and Christian religion.
[19] Christoph Lindenberg, *Rudolf Steiner Eine Chronik* (Stuttgart: Verlag Freies Geistesleben, 1988), p.49.
[20] Rudolf Steiner, *Mein Lebensgang*, GA 28, p. 56.
[21] Rudolf Steiner, *Mein Lebensgang*, GA 28, p. 55.

seeing a spiritual world represented reality and he saw, that 'in all its clearness the spiritual individuality of every human being was disclosed' to him.[22] The way he experienced life, lead him to argue, that philosophy itself was to be regarded as a safe ground towards which mathematics and natural sciences should be related to and he argued, that 'through mathematics you learn to get to know the world, for being able to attain this, one has to emerge mathematics out of the human soul.'[23] In 1882, still a student, Carl Julius Schröer (1825-1900), one of his Viennese teachers, suggested him helping to edit Goethe's scientific writings within the series called Kürschner's Nationalliteratur which in 1883 lead Steiner to decide leaving the "Technische Hochschule" without final examinations. His editing work was printed from 1884 onwards. Besides his editing work, Steiner was employed as a private teacher in the wealthy Specht family from 1884-1890. During this time he pursued other writing projects and in 1886 he was able to publish his first book called 'Epistemology of Goethe's world-view'.[24] In the autumn of 1890 Steiner moved to Weimar (Prussia) working as an employee at the Goethe and Schiller archive till 1897. In 1891 he obtained his Doctor of Philosophy for his work on 'The fundamental question of epistemology with special consideration of Fichte's theory of science. Prolegomena for the communication of philosophising consciousness with itself' from the University of Rostock (Prussia).[25] Steiner's dissertation was published in 1892 entitled 'Truth and Science' to which he added a practical final statement.[26] In this final statement Steiner made clear, that his philosophical ideas on how an individual obtained knowledge were rooted in experience, in physical experience and were therefore not to be counted towards a metaphysical stance as Immanuel Kant (1724-1804) suggested in his work 'Critique of Pure Reason'.[27] Not agreeing with Kant, it becomes clear that Steiner differentiates between self-experienced spiritual life events and Kant's metaphysics which according to Michael Rohl 'concerns a priori knowledge or knowledge whose justification does not depend on experience'.[28] For Steiner a spiritual realm was not to be equated with knowledge nor reason. Kant according to Anthony Thiselton as the originator of the term "Enlightenment" 'abetted the use of reason and scientific methods' leading to a materialist and rationalist worldview. [29] At the turn of the century Steiner's wrote in his biography, that he envisioned a possibility to bring a new spiritual light to humanity. 'To me it looked as if the closedness of human thought and will towards spirit reached its peak moment. The change of the

[22] Rudolf Steiner, *Mein Lebensgang*, GA 28, p. 59, 'Ich hielt mich damals für verpflichtet, durch die Philosophie die Wahrheit zu suchen.', translated N. Montag-Keller; 'Mit aller Anschaulichkeit offenbarte sich mir an jedem Menschen seine geistige Individualität.', trans. N. Montag-Keller

[23] Rudolf Steiner, *Mein Lebensgang*, GA 28, p. 63-64. 'Durch die Mathematik lernt man die Welt kennen, und doch muss man, um dies erreichen zu können, erst die Mathematik aus der menschlichen Seele hervorgehen lassen.', translated N. Montag-Keller;

[24] Rudolf Steiner, *Mein Lebensgang, GA 28*, p. 472, 'Grundlinien einer Erkenntnistheorie der Goetheschen Weltanschauung.', translated N. Montag-Keller.

[25] Rudolf Steiner, *Mein Lebensgang, GA 28*, p. 472, 'Die Grundfrage der Erkenntnistheorie mit besonderer Rücksicht auf Fichtes Wissenschaftslehre. Prolegomena zur Verständigung des philosophierenden Bewusstseins mit sich selbst.', translated N. Montag-Keller.

[26] Rudolf Steiner, *Mein Lebensgang, GA 28*, p.472, 'Wahrheit und Wissenschaft'., translated N. Montag-Keller.

[27] Rudolf Steiner, *Wahrheit und Wissenschaft* (Dornach: Verlag der Rudolf Steiner Nachlassverwaltung, 1958), p. 29.

[28] Michael Rohlf, *«Immanuel Kant»*, https://plato.stanford.edu/cgi-bin/encyclopedia/archinfo.cgi?entry=kant (accessed 2 Dec 2019).

[29] Anthony C. Thiselton, *Approaching Philosophy of Religion* (London: Society Promoting Christian Knowledge, 2017), p. 20.

course of humanities' development appeared as a necessity to me'.[30] During Steiner's time at Weimar Steiner not only wrote and published his dissertation but also worked on his main philosophical oeuvre called 'Philosophie der Freiheit' (Philosophy of freedom) published in 1893. From 1897 – 1912 Steiner was home in Berlin and started as a publisher of a journal addressing artistic and literary works. He then became a teacher at the "Arbeiterbildungsschule" (school for workers, aiming to educate a social-democratic political elite).[31] Steiner held lectures at the "Giordano-Bruno-Bund für einheitliche Weltanschauung" (1900-1907), a club for the promotion of a uniform worldview and in a small circle called "Die Kommenden" (those who will come) he had a platform with other literary artists.[32] In 1902 Steiner obtained the General Secretary of the German Section within the Theosophical Society (TS), ultimately changing his career from being a publisher to becoming a lecturer of occult (hidden) and esoteric (related to inner life) topics.[33] In 1905 Steiner became a Freemason in the tradition of the Memphis-Misraim-Rite (not the Ordo Templi Orientis) through Theodor Reuss (1855-1923) and from 1906 acted as grandmaster.[34] Eugen Lennhoff et al. write, that Reuss acted upon, lead and imported all sorts of irregular rites within Germany for economic reasons and Lindenberg argues, that Steiner was well aware of Reuss's interests, but nevertheless wanted to tie into the freemasonic acting symbolism (Handlungssymbolik) for the work in a lodge is preparatory work what a freemason should be working outside of the temple.[35] Christoph Lindenberg reports that Steiner wrote to Marie von Sivers (his to be second wife) that he experienced the ceremony of the Freemasons' esoteric institution did not live up to he thought they were once; no longer were they an imprinted mould of the higher worlds.[36] Steiner in Lindenberg stated, that the three grades of initiation, apprentice, fellow and master mason shall be the grades on which an individual should find himself "in the spirit", which Steiner perceives as finding his self (Selbst) within men's developmental stage of humanities evolution.[37] This statement indicates, that Steiner applied the principle of evolution to the inner spiritual development of individuals. Within the TS he found a platform not only to promote theosophical ideas, but also his own thinking, emphasizing with his talks an anthroposophic Christology, especially the biblical event he called 'Mystery of Golgatha', which is not only to be understood as the resurrection of Jesus Christ being in its exoteric (seen from the outside) form, but is also a transcendental (übersinnlich) event, because 'upon the mystery of Golgatha, the body of Jesus from Nazareth was given to the elements of the earth, and from this time onwards the Christ was connected to the spiritual spheres of the earth and lives within these.[38]In 1907 Annie Besant (1847-1933) in Lindenberg, leader of the TS stated, that

[30] Rudolf Steiner, *Mein Lebensgang*, p. 367. 'Es schien mir, dass die Abgeschlossenheit des menschlichen Denkens und Wollens vom Geiste einen Höhepunkt erreicht hätte. Ein Umschlagen des Werdegangs der Menschheitsentwicklung schien mir eine Notwendigkeit.', translated N. Montag-Keller.
[31] Jonathan Stauffer, *Gesamtverzeichnis* (Basel: Rudolf Steiner Verlag, 2018), p. 5.; Arbeiterbildungsschule, https://sozoekarchiv.wordpress.com/tag/berliner-arbeiterbildungsschule/ (accessed 3 Dec 2019).
[32] Johann Stauffer, *Gesamtverzeichnis*, p. 5; Giordano-Bruno-Bund, http://fvn-rs.net/PDF/GA/GA255b/GA255b-429.html (accessed 3 Dec 2019).
[33] Johann Stauffer, *Gesamtverzeichnis*, p. 5.
[34] Christoph Lindenberg, *Rudolf Steiner – Eine Biografie* (Stuttgart: Verlag Freies Geistesleben, 2011), p. 398-399; Eugen Lennhoff, Oskar Posner, Dieter A. Binder, *Internationales Freimaurer Lexikon* (München: Herbig Verlagsbuchhandlung GmbH, 2006), p.804.
[35] Eugen Lennhoff, Oskar Posner, Dieter A. Binder, *Internationales Freimaurer Lexikon* (München: Herbig Verlagsbuchhandlung GmbH, 2006), p. 703; Christoph Lindenberg, *Rudolf Steiner – Eine Biografie* (Stuttgart: Verlag Freies Geistesleben, 2011), p. 398-399.
[36] Christoph Lindenberg, *Rudolf Steiner – Eine Chronik*, p 238.
[37] Christoph Lindenberg, *Rudolf Steiner – Eine Chronik*, p. 238.
[38] Die Bibel, *Mt 28, 1-10* (Stuttgart: Deutsche Bibelgesellschaft, 1999), p. 41; Die Bibel, *Mk 16, 1-8* (Stuttgart: Deutsche Bibelgesellschaft, 1999), p. 65; Die Bibel, *Lk 24, 1-12* (Stuttgart: Deutsche Bibelgesellschaft, 1999),

Steiner taught the Christian-Rosicrucian pathway, which was different from the Eastern pathway[39] The relationship between Besant and Steiner deteriorated over the next few years and on 28th December 1912 the Anthroposophic Society was founded.[40] From 1913 till 1925 Dornach (Switzerland) became the centre of Steiner's life where the first Goetheanum was built and destroyed by fire in the night of 31st December 1922 due to arson.[41] In concluding it can be said, that Steiner's biographical experience, the milieu he grew up in, the places he lived at, his education, his professional experience and all the people he encountered as well as his inner life experiences shaped Steiner's worldview which is published in his books and the many lectures he held in his role of a spiritual teacher first in the theosophical and then in the anthroposophical society. His anthroposophical cosmology will be put forward in the course of introducing the second Goetheanum building but first a historical context with a focus on western esotericism will be put forward.

3.2 HISTORICAL CONTEXT WITH A FOCUS ON WESTERN ESOTERICISM

Hans Dollinger identifies the second half of the 19th century as a political era of nationalism and imperialism where European countries sought to gain new balances of power, especially the establishment of the German Empire in 1870/71 lead to an alliance with the Austro-Hungarian Monarchy opting to weaken the French Third Republic and opting to equalise the dominating world economic power of the United Kingdom.[42] Further Dollinger points out that the Social Question, where masses of workers experienced thorough misery through progressing industrialisation, invigorated the workers' movement.[43] The turn of the 19th to the 20th century is portrayed by Walter Kugler as a platform for memories and visions, where inventions and advances of scientific research affected societies in their everyday life, induced by electricity, automobiles and large scale steel production.[44] The profound processions of the sciences, according to Kugler, seemed unstoppable and henceforth academic disciplines were transformed by focussing more on scientific theory, which meant that 'the human soul was taken out of its overall context of ontology' and allocated to the new field of empirical psychology.[45] John W. Monroe highlights, that in 1900 on the occasion of the Universal Exposition in Paris 'the precise terms of psychology's abandonment of metaphysics had yet to be fully negotiated', because 'academic psychologists read papers alongside clinicians, psychical researchers, Spiritists and Occultists.[46] Nevill Drury defines an occultist as a person knowledgeable in the secret mystical arts of magic, theosophy, mysticism and spiritism and a spiritist exhibits the faith that a medium in trance (a person receptive to spirits) is able to communicate between the spirits of the dead and the living.[47] Monroe states also, that French psychologists saw it as their task 'to

p.105; Die Bibel, *Jhn 20, 1-10* (Stuttgart: Deutsche Bibelgesellschaft, 1999), p. 133; Rudolf Steiner, *Vorstufen zum Mysterium von Golgatha*, GA 152, http://fvn-archiv.net/PDF/GA/GA152.pdf#page=39&view=Fit (accessed 4th Dec 2019), p. 39; 'Als das Mysterium von Golgatha stattfand, wurde der irdische Körper des Jesus von Nazareth den Element der Erde übergeben, und von der Zeit an war der Christus verbunden mit der geistigen Sphäre der Erde und lebt darin.', translated N. Montag-Keller.

[39] Christoph Lindenberg, *Rudolf Steiner – Eine Chronik*, p. 260.

[40] Christoph Lindenberg, *Rudolf Steiner – Eine Chronik*, p. 324.

[41] Christoph Lindenberg, *Rudolf Steiner – Eine Chronik*, p. 503.

[42] Hans Dollinger, *Weltgeschichte auf einen Blick*, (Freiburg: Verlag Ploetz, 1988), p. 331.

[43] Hans Dollinger, *Weltgeschichte auf einen Blick*, (Freiburg: Verlag Ploetz, 1988), p. 331.

[44] Walter Kugler, *World Spirit where are you?!*, p. 24.

[45] Walter Kugler, *World Spirit where are you?!,* p. 24; '...die menschliche Seele aus dem Gesamtzusammenhang des menschlichen Seins… .', translated N. Montag-Keller.

[46] John Warne Monroe, *Laboratories of Faith* (London: Cornell University Press, 2008), p. 201;

[47] Nevill Drury, *Lexikon Esoterischen Wissens* (München: Droemer Knaur, 1988), p. 456, 561.

elaborate an empirical and secular understanding of consciousness' and deriving theories of mind from their research .[48] An example of how the concept of consciousness was suggested to be seen stems from the clinical psychiatrist Joseph Pierre Durand de Gros (1826-1900) who introduced the 'notion of multiple centres of consciousness… arrayed hierarchically under the supremacy of the chief consciousness that each of us calls his ego' as stated in Monroe. [49] Yet another example stems from Frederic W.H. Myers (1843-1901) in Monroe who argued, that the concept of the "subliminal self" indicated 'the transcendent rather than the "inferior" aspects of the subconscious'.[50] Monroe stresses, that the focus on day-to-day lived experience changed into a 'product of complex, mysterious interactions between conscious thought and subconscious impulse' of interior life where 'an understanding of the "modern self"'. suggests a 'blending of contemporary psychology with ancient esoteric ideas', because occultists 'transformed the notion of the subconscious from a purely scientific concept into a metaphysical one.'[51] The most influential Occultists were Helena Petrovna Blavatsky's (1831-1891) and Henry Steele Olcott (1832-1907) when in 1875 they founded the Theosophical Society (TS) in New York with the aim 'to discover nothing less than the essence of religion itself, which they believed took the form of a unified body of esoteric knowledge subtending all the world's diverse and seemingly irreconcilable faiths' which meant that 'Westerners in search of the truth, then, would need to turn to the East' according to Monroe.[52] It becomes clear, that psychical researchers like Myers and Durand de Gros offered interpretations going beyond the boundaries of a scientific worldview for studying aspects of subconscious or inner life processes, where psychological concepts such as 'self' and 'subjectivity' went along with 'transcendence' usually attributed to study areas of religion and philosophy. Transcendence, according to Drury is a religious concept, expressing the inability to capture nor comprehend the highest being, sometimes called God.[53] The rising popularity of occult and neo-religious groups in the end of the 19th century is also mentioned by Kugler and Antoine Faivre calls this venturing of new explanatory models which are to be found outside of the established world religions organisations 'occidental esotericism'.[54] Faivre suggests, that esotericism deals with human beings longing for a secret invisible reality beyond the visible world, a longing for a hidden wisdom beyond knowledge, which he perceives to intensify with an increasing rationalist-scientific world-view.[55] In 1992 Faivre was the first scholar who defined esotericism and he put forward a methodological approach for studying it, serving as a reference to other scholars since.[56] Faivre suggested, that in an academic setting esotericism should be employed for a 'distinct "form of thought" perceptible in western traditions since the Renaissance' distinguishable by 'four intrinsic and two extrinsic characteristics'.[57] Faivre defines the four intrinsic constitutive elements as: 'the doctrine of universal correspondences, living nature, imagination/mediations, and transmutation' and the two extrinsic cases (an absence is possible):

[48] John W. Monroe, *Laboratories of Faith*, p. 200.
[49] John W. Monroe, *Laboratories of Faith*, p. 201, 202.
[50] John W. Monroe, *Laboratories of Faith*, p. 202.
[51] John W. Monroe, *Laboratories of Faith*, p. 202.
[52] John W. Monroe, *Laboratories of Faith*, p. 235.
[53] Nevill Drury, *Lexikon Esoterischen Wissens* (München: Droemer Knaur, 1988), p. 601.
[54] Walter Kugler, *World Spirit where are you?!*, p. 24; Antoine Faivre, *Esoterik im Überblick* (Freiburg: Herder Verlag, 2001), p. 11, 14.
[55] Antoine Faivre, *Esoterik im Überblick* (Freiburg: Herder Verlag, 2001), p. 13.
[56] Arthur McCalla, Antoine Faivre and the Study of Esotericism, *Religion* (2001), 31, 435, doi:10.1006/reli.2001.0364; Wouter Hanegraaff, *Western Esotericism – A Guide for the Perplexed* (London: Bloomsbury, 2013), p. 3.
[57] Antoine Faivre and Wouter Hanegraaff, *Western Esotericism and the Science of Religion* (Leuven: Peeters, 1998), p. VIII, 1.

'concordance of traditions, and transmission of knowledge.[58] Wouter J. Hanegraaff however clearly states, that 'Western Esotericism is a modern scholarly construct, not an autonomous tradition that already existed out there and merely needed to be discovered by historians' and Glenn A. Magee puts forward, that 'esoteric doctrines, schools or practices include alchemy, astrology, magic, Kabbalism, Renaissance Hermetism, Freemasonry, Rosicrucianism, number symbolism, sacred geometry, Christian theosophy, spiritualism, mesmerism and much else.'[59] The scholarly approach to 'understanding of the roots of esoteric currents almost always leads us back to the mystical tradition' writes Magee, and he goes on to argue, that the subject constitutes 'in effect the hidden intellectual history of the West' offering yet another categorisation.[60] By now it becomes clear, that the scholarly field called 'Western Esotericism' is a contested subject, where interpretation and meaning making processes are and will be continuously mediated. An example of a renegotiation can be found in Kocku von Stuckrad's writing suggesting that the methodology traits of western esotericism can be distinguished through 'four necessary characteristics – the idea of correspondences; the concept of living nature; imaginations and mediations; and the experience of transmutation – and two relative characteristics: the praxis of concordance; and the notion of transmission.'[61] Von Stuckrad replaced the words "doctrine" and "universal" by "concept" and "experience" which could indicate that he implicitly suggests to move western esotericism away from the field of religious studies towards an affiliation with cultural anthropological studies. As William A. Haviland et al. define, anthropologists do not judge whether there is a metaphysical truth 'of any particular faith system', but '… show how each (faith system) embodies a number of revealing facts about humanity and the particular cultural superstructure within which these religious or spiritual beliefs are ideologically embedded'.[62] From yet another perspective Wouter Hanegraaff argues, that 'academics tend to look on "esoteric", "occult", or "magical" beliefs with contempt, but are usually ignorant about the religious, and philosophical traditions to which these terms refer, or their relevance to intellectual history' implicitly suggesting that there is 'a religious tradition', 'a philosophical tradition' and 'an intellectual history'.[63] By taking Faivre, Haviland and Hanegraaff into account, von Stuckrad suggests, that western esotericism can be studied as a form of thought by accepting all forms of knowledge, which need not to be distinguished by a categorisation of e.g. philosophical, religious, historiographical, anthropological and cultural studies but need to apply the concept of discourse analysis. where discourse strands and their entanglement with other discourse strands are identified in order to reflect on the social construction of knowledge as von Stuckrad argues.[64] Stuckrad suggests to study, 'the various meanings that are attributed to religion and science in cultural communication and practice' because the meanings of academic disciplines/domains and terms associated with these change over time 'and it is the advantage of discursive analyses to make these changes visible in their historical contexts.'[65] Looking at Faivre, who argues, that esotericism is regarded as a secret, but that

[58] Antoine Faivre and Wouter Hanegraaff, *Western Esotericism and the Science of Religion*, p. 2.
[59] Wouter J. Hanegraaff, *Western Esotericism – a guide for the perplexed* (London: Bloomsbury Publishing Plc, 2013), p. 3; Glenn A. Magee, *The Cambridge Handbook of Western Mysticism and Esotericism* (Cambridge: Cambridge University Press, 2016), p. xiii.
[60] Glenn A. Magee, *The Cambridge Handbook of Western Mysticism and Esotericism* (Cambridge: Cambridge University Press, 2016), p. xv.
[61] Kocku von Stuckrad, Esotercisim Disputed: Major Debates in the Field in April DeConick, *Religion: Secret Religion* (Farmington Hills: Mac Millan, 2016), p. 272.
[62]William A. Haviland, Harald E.L. Prins, Bunny McBride, Dana Walrath, *Cultural Anthropology – The Human Challenge* (Boston: Cengage Learning, 2017), p. 299.
[63] Wouter Hanegraaff, *Esotercisim and the Academy*, (Cambridge: Cambridge University Press, 2012), II.
[64] Kocku von Stuckrad, *The Scientification of Religion* (Berlin: Walter de Gruyter, 2014), p. 14, 15.
[65] Kocku von Stuckrad, *The Scientification of Religion* (Berlin: Walter de Gruyter, 2014), p. viii, 16.

an individual can go beyond that secret, if that person makes the effort to go through a learning process, resulting in an understanding of a symbol, a myth or reality, suggests a discourse strand on knowledge or knowledge acquisition.[66] By further analysing Faivre's point of view that esotericism is to be understood as a form of knowledge (Erkenntnisform), but is at the same time also to be understood as a spiritual space proving transcendental unity, and is also understood as a pathway and a technique beyond all notable traditions and initiations, offers other discourse strands which can be named as e.g. 'spiritual space', 'transcendental space', 'experience of unity', 'acquisition of spiritual knowledge', 'initiatory processes' to name but a few.[67] If a scholar then tries to identify the various discourse strands, it becomes clear, that Glenn Magee might no longer arrive at a statement, that 'defining esotericism is a difficult task and one fraught with controversy', but means '…to designate currents of thought formerly referred to occultism' instead he would have identified two different though entangled discourse strand categories namely 'esotericism' and 'occultism'.[68] Put differently, Stuckrad's explanation, that Western Esotericism is an expression that deals with 'the cultural history of Europe and North America' and is at the same time according to Wouter Hanegraaff a 'scholarly construct' that emerged 'because intellectuals and historians became attentive to structural similarities that actually existed between the ideas and worldviews of a wide variety of thinkers and movements' offers no concise nor a single methodological approach for studying western esotericism.[69]In concluding it can be said, that the historical context of the 19th to the 20th century was marked by political, economic and social changes, and brought changes to everyday life due to unparalleled inventions within a spreading scientific worldview setting. Western Esotericism which looks to study a form of thought applying certain "laws of analogy" (Entsprechungsgesetze) can be seen as an attempt trying to reconcile dualism, the split between mind and body. Howard Robinson offers a historical outline, tracing dualism back to Plato (428/27 – 348/347 BCE) whose writing offers arguments for the immortality of the soul, being first imprisoned in the body, but this soul strives to leave the body in order to dwell in the realm of forms.[70] However Louise Hickman suggests to be cautious with interpretations by arguing though Plato 'tells us that the soul is immortal and indestructible he also insists that only a god is capable of describing its nature in literal terms' and she goes on to argue, that 'humans can only suggest what it resembles in myth and allegory', which is why Plato offers three different accounts, he 'presents the myth of the winged charioteer in *Phaedrus*, a political state in the *Republic*' and in the *Timaeus* 'that the Soul is related to the world-soul and also to the divine means that the world is infused with the divine'.[71] In contrary to Plato René Descartes (1596-1650) introduces the mind as an aspect of thinking, writing that 'for I consider the mind not as a part of the soul but as the thinking soul in its entirety', which according to Hickman promotes 'a more reductive explanatory account of the human person' resulting in 'a de-sanctification of the natural world and a conception of science as knowledge aimed at control over

[66] Antoine Faivre, *Esoterik im Überblick*, p. 13.
[67] Antoine Faivre, *Esoterik im Überblick*, p. 13-14.
[68] Glenn Alexander Magee, *The Cambridge Handbook of Western Mysticism and Esotericism* (New York: Cambridge University Press, 2016), p. xiii.
[69] Wouter Hanegraaff, *Western Esotericism*, p. 3, 15.
[70] Howard Robinson, *Dualism*, https://plato.stanford.edu/entries/dualism/ (accessed 19th Dec 2019); Plato, *Phaedo*, edited by John M. Cooper (Cambridge: Hackett Publishing Company, 1997), 78b4-84b8; Plato, *Phaedrus*, edited by John M. Cooper (Cambridge: Hackett Publishing Company, 1997), 249e.
[71] Louise Hickman, The Nature of the Self and the Contemplation of Nature in Michael Fuller, *The Concept of Soul* (Newcastle upon Tyne: Cambridge Scholars Publishing, 2014), p. 10; Plato, *Phaedrus*, edited by John M. Cooper (Cambridge: Hackett Publishing Company, 1997), 246a.

nature for human gain.'[72] It becomes clear, that the turn from the 19th to the 20th century brought unprecedented industrial and technological changes, an age 'that had never existed before' argues Nicholas Campion and he goes on to suggest, that 'the new golden age might (…) be rooted in ancient philosophy, but in other respects it represented a major historical innovation.'[73] Campion puts forward, that Cosmology 'played its part in new theories of historical development' where 'the Joachite belief that the millennium might be reached peacefully was revived, through gradual evolution, rather than through violent revolution.'[74]It was believed, that 'conditions on Earth, …, were destined to improve to the point at which, quite soon, perfection would be attained. This was the theory of progress.' Campion explains.[75]And he expands by writing, that 'the discoverer of the law of progress' put forward by Marie-Jean Condorcet (1743-1794) marked another influential voice of the Enlightenment era around the late seventeenth and eighteenth centuries who 'believed that they had finally attained a state of unparalleled reason.'[76] The function of progress mythology aims, according to Peter Bowler in Campion, 'to unify the potentially different worldviews of the various emerging sciences (including geology, palaeontology, archaeology and biological evolutionism)' ultimately aiding 'to prophesy the future and so assist in the ordered management of history.'[77] In concluding on the historical context, it can be said, that 'western esotericism' is a scholarly construct, aiming to research what thinkers, writers and philosophers put forward in opposition to the doctrine of the Christian church in a certain context at a certain time, focusing on, in today's wording, dualistic concepts such as materiality and immateriality, usually referred to as body and mind dualism, explaining and interpreting their new insights. The next paragraph puts forward the thoughts of Rudolf Steiner on anthroposophical cosmology for providing a foundational understanding how the architecture of the Goetheanum might have been inspired.

3.3 ANTHROPOSOPHICAL COSMOLOGY

In order to understand anthroposophical cosmology and especially its likely reference in the Goetheanum building, worldviews of how the earth develops, what the cosmos is, how a human being is structured and in what ways the world develops.

3.3.1 "Erkenntnisweg", a developmental process

In 1924, a year before his death, Steiner defined that 'Guiding principle 1: Anthroposophy is a pathway towards insight which wants to lead the spirit in a human being to the spiritual of all worlds (Weltenall).[78] By citing this first guiding principle I point out, that Steiner's German wording and grammatical style presents challenges not only in German, and by translating into English adds another layer of meaning. Therefor it needs to be pointed towards George A. Kelly, who argued, that 'constructs are primarily personal, not all of them are easily shared. The peculiar nature of a person's

[72] René Descartes, The Philosophical Writings of Descartes, Volume 2, translated by John Cottingham, Robert Stoothoff, Dugald Murdoch (London: Cambridge University Press, 1984), p. 246; Louise Hickman, The Nature of the Self and the Contemplation of Nature in Michael Fuller, *The Concept of Soul* (Newcastle upon Tyne: Cambridge Scholars Publishing, 2014), p. 21.
[73] Nicholas Campion, *The Great Year* (London: Arkana Penguin Group, 1994), p. 455.
[74] Nicholas Campion, *The Great Year* (London: Arkana Penguin Group, 1994), p. 455.
[75] Nicholas Campion, *The Great Year* (London: Arkana Penguin Group, 1994), p. 456.
[76] Nicholas Campion, *The Great Year* (London: Arkana Penguin Group, 1994), p. 456.
[77] Nicholas Campion, *The Great Year* (London: Arkana Penguin Group, 1994), p. 457.
[78] Rudolf Steiner, *Anthroposophische Leitsätze, GA 26* (Dornach: Rudolf Steiner Verlag, 1998), p. 14; 'Leitsatz 1: Anthroposophie ist ein Erkenntnisweg, der das Geistige im Menschenwesen zum Geistigen im Weltenall führen möchte.', translated N. Montag-Keller.

construct or his unusual use of terminology may be misleading to the listener.'[79] I consent to Kelly's personal construct theory and declare, that my understanding and translation of Steiner's work is subject to my cultural and social context, which is stated more clearly in the methodologies section. Getting back to how Steiner defined anthroposophy it becomes clear, that for him, human beings have a spirit which in some sort of process inform the spiritual of the world surrounding human beings. The idea of a developmental process stems from Goethe's observations on the metamorphosis of plants '…that all gestalt is similar, but none identical…' which Steiner applied to any other sphere beyond biology.[80] This developmental process ("Erkenntnisweg", literally pathway of cognition) towards insight, which is a form of knowledge mastery which in today's terms could be equated to attaining and outperforming the highest order of thinking skills, known to educationalists as Benjamin Bloom's taxonomy objectives since 1956.[81] Nevertheless, a process of knowledge attainment is not confined to understanding and meaning making of events outside of a human being, but can also be directed towards exploring the inner realm, which is known to psychologists as introspection and links to phenomenology, which Edmund Husserl (1859-1938) influenced by arguing, that observation of immediate and ongoing experience as they are presented must come before analysis and interpretation in order to arrive at knowledge of humans, as defined by Ray Corsini.[82] Wolfgang Peter writes, that 'phenomenology is not a school for learning logical thinking, but one to learn the exact observation and "seeing" of phenomena.[83] This argument brings the methodological difference on how to arrive at knowledge to the attention of the reader, where Peter uses "seeing" with hyphenation hinting the anthroposophical concept on how to attain knowledge of the spiritual realm (höhere Welten) understood as the ultimate stage of the path towards knowledge (Erkenntnisweg), which Steiner explains, that 'clairvoyance doesn't mean anything different, than having attained a developmental stage of human beingness, through which a human being is able to perceive the world without lust and woe.'[84] In other words, the "Erkenntnisweg" is an ethically disciplined learning experience of study, righteous thinking and morally inclined deeds.

3.3.2 Steiner's philosophical epistemology for overcoming dualism: spiritual monism

Already in 1893 Steiner developed in his book 'philosophy of freedom, foundations of a modern worldview' his own epistemological approach of monism based on considerations of ethical individualism.[85] Erik Dilloo-Heidger suggests six steps helping to understand Steiner's philosophical approach. First of all, Steiner must be understood as a critical voice of Immanuel Kant's rationalism, who excluded thought in the realm of metaphysics.[86] Steiner in Dilloo-Heidger embraced a monistic worldview and suggested an epistemology which is informed by perception through the senses,

[79] George A. Kelly, *A Theory of Personality* (New York: Norton & Company, Inc., 1963)), p. 116.
[80] Johann W. Goethe (1749-1832), *Die Metamorphose der Pflanze*, Kapitel 502, https://gutenberg.spiegel.de/buch/gedichte-9503/502 (accessed 23 Oct 2019); 'Alle Gestalten sind ähnlich, und keine gleichet der andern;', translated N. Montag-Keller.
[81] Peter Senge, *Schools that Learn* (New York: Crown Publishing, 2012), p. 219.
[82] Ray Corsini, *The Dictionary of Psychology* (New York: Brunner-Routledge, 2002), p. 505, 719.
[83] Wolfgang Peter, *«Edmund Husserl»*, https://anthrowiki.at/Edmund_Husserl (accessed 19 Dec 2019); 'Phänomenologie ist keine Schule des logischen Denkens, sondern eine des genauen Beobachtens und «Sehens» von Phänomenen.', translated N. Montag-Keller.
[84] Rudolf Steiner, *Spirituelle Seelenbetrachtung und Weltbetrachtung*, GA 52 (Dornach: Rudolf Steiner Nachlassverwaltung, 1986), p. 202; 'Hellsehen heisst nichts anderes, als es zu einer Entwicklungsstufe der menschlichen Wesenheit gebracht zu haben, durch welche der Mensch lust- und leidfrei die Welt um sich herum wahrzunehmen vermag.', translated N. Montag-Keller.
[85] Rudolf Steiner, *Philosophie der Freiheit, GA 4* (Dornach: Rudolf Steiner Verlag, 1894, 1918).
[86] Erik Dilloo-Heidger, 1.4. Steiners Überarbeitung des Kantschen Ansatzes, http://www.dilloo.de/phil.htm#BM1_5 (accessed 5 Nov 2019).

starting with 'incoherent aggregates of objects of perception: evoked by colour, sound, pressure, warmth, taste and smell.'[87] Secondly Steiner in Dilloo-Heidger asks for conscious observation of self-perception while perceiving an object. 'I am no longer conscious of the object, but also of my personality facing the object.'[88]Thirdly Dilloo-Heidger arrives at a concept (Vorstellung), since the content of perception is connected with self-perception, citing Steiner's take on idea which is routed 'between perception and term (Begriff).'[89]Fourthly Steiner in Dilloo-Heidger described the process of thinking leading to recognition (erkennen) adding up more terms (Begriffe) into an individual's consciousness.[90]Fifthly Steiner in Dilloo-Heidger arrived at intuition, where any thought process leads beyond an individual's world of concepts (Vorstellungswelt).[91] This leads according to Dilloo-Heidger Steiner to argue towards monism, because 'what we can observe in singular form, interconnects itself through our unitary world of intuition form by form and through our thinking we put everything together, which we took apart for the process of perception.'[92] Dilloo-Heidger argues, that for Steiner thinking is not a subjective activity, which every single person performs, but part of world affair (Weltgeschehen) which happens inside every human being, who is consciously present.[93] Steiner's epistemology put forward in 'philosophy of freedom' overcomes dualism, because a human being has direct access to the 'Weltgeschehen' and since the cosmos is a single entity of being, containing forces, which guide evolution of the world spirit (Weltengeist) according to Dilloo-Heidger. Dilloo-Heidger adds, that Steiner considered I (Ich) and world, subject and object, spirit and matter as two poles of one unitary reality.[94] It is necessary to understand Steiner's epistemological approach in order to grasp how he arrives at anthroposophical cosmology and anthropology.

3.3.3 Trinity, anthroposophical esoteric Christology and hierarchies

In anthroposophical Christology the Trinity is the highest source of godly creation, it is the three logoi: father, son or the word (Christ) and holy ghost, consisting of three characteristics of one entity.[95] As Thomas Weinandy explains, the Trinity is a doctrine of faith established in 325 CE at the Council of Nicaea, expressing a 'foundational dogmatic truth(s) concerning the Son's existence as

[87] Erik Dilloo-Heidger, Steiners Weltbild, erster Schritt, http://www.dilloo.de/phil.htm#BM1_5 (accessed 5 Nov 2019). 'zusammenhangloses Aggregat von Empfindungsobjekten: Farben, Töne, Druck-, Wärme-, Geschmacks- und Geruchsempfindungen.', translated N. Montag-Keller

[88] Erik Dilloo-Heidger, Steiners Weltbild, zweiter Schritt, http://www.dilloo.de/phil.htm#BM1_5 (accessed 5 Nov 2019); 'Ich bin mir nur mehr nicht bloss des Gegenstandes bewusst, sondern auch meiner Persönlichkeit, die dem Gegenstand gegenübersteht und ihn beobachtet.', translated N. Montag-Keller.

[89] Erik Dilloo-Heidger, Steiners Weltbild, dritter Schritt, http://www.dilloo.de/phil.htm#BM1_5 (accessed 5 Nov 2019); 'zwischen Wahrnehmung und Begriff. Sie ist der bestimmte, auf die Wahrnehmung deutende Begriff.', translated N. Montag-Keller.

[90] Erik Dilloo-Heidger, Steiners Weltbild, vierter Schritt, http://www.dilloo.de/phil.htm#BM1_5 (accessed 5 Nov 2019).

[91] Erik Dilloo-Heidger, Steiners Weltbild, fünfter Schritt, http://www.dilloo.de/phil.htm#BM1_5 (accessed 5 Nov 2019);

[92] Erik Dilloo-Heidger, Steiners Weltbild, sechster Schritt, http://www.dilloo.de/phil.htm#BM1_5 (accessed 5 Nov 2019); 'Was uns in der Beobachtung an Einzelheiten gegenübertritt, das verbindet sich durch die zusammenhängende, einheitliche Welt unserer Intuition Glied für Glied und wir fügen durch das Denken alles wieder zusammen, was wir das Wahrnehmen getrennt haben.', translated N. Montag-Keller.

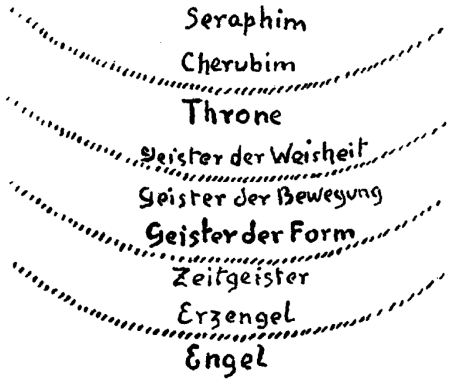
[93] Erik Dilloo-Heidger, Steiners Weltbild, Gedankengang, der zum Monismus führt, http://www.dilloo.de/phil.htm#BM1_5 (accessed 5 Nov 2019).

[94] Erik Dilloo-Heidger, Steiners Weltbild, Steiners philosophisches Bekenntnis, http://www.dilloo.de/phil.htm#BM1_5 (accessed 5 Nov 2019);

[95] Rudolf Steiner, *Das Geheimnis der Trinität, GA 214* (Dornach: Rudolf Steiner Verlag, 1999), p.71.

God and as man'.[96] Since anthroposophical Christology suggests to offer a pathway to the spiritual realm (das Übersinnliche), Steiner argues, that a human being is able 'out of the intellect to soar up for understanding the Spiritual.'[97] In another lecture, Steiner explains, that 'because an occultist, the real spiritual science or occultism cannot share the idea, that a human being could directly look up to the highest godhead; but we have a whole ladder of beings, which we called in a Christian sense angels, archangels and so on, standing between.'[98] It seems likely that Steiner references to Jacob's dream in the Bible, where angels descended and ascended via a ladder.[99] Furthermore Steiner adopts the angelology of Dionysius Areopagita (around 100 CE), also taken up by Alphonse L. Constant dit Eliphas Levy (1810-1875) an influential French occultist, by stating, that he read in the akashic record (Akasha Chronik), the spiritual world memory (geistiges Weltengedächtnis), that there was a line of initiates who passed on the knowledge orally from Dionysius Areopagita to Pseudo-Dionysius (early 600 CE) about the 'hierarchy of higher ranking beings' poignantly arguing against Proclus as the originator.[100] Arthur Versluis in Nicholas Goodrick-Clarke however notes, that Christian theosophers are to be identified by a '"timeless revelation or gnosis within Christianity"' and that this tradition stretches 'from Pseudo-Dionysius the Areopagite through Clement of Alexandria and Origen to St. Maximus the Confessor, John Scotus Eriugena, Meister Eckhart, Johannes Tauler and thence to Jacob Boehme and his followers.'[101] Versluis in Goodrick-Clarke explains, that the ladder of intermediaries is based on emanationist cosmology, stemming from the One as a ray of light which then can be said to be theophanic, 'revealing God all around us.'[102] Steiner lectures, that human beings can only ascend through the four visible hierarchies through the mineral world, the plant world, the animal world and the human world.[103] For Steiner the Seraphim as one part of the intermediate beings called the first hierarchy, receive the plan of the Trinity aspiring for the development of a planetary system.[104]The Seraphim, together with the Cherubim and Thrones represent the first hierarchy (figure 4).[105] The second hierarchy are called Kyriotetes, Dynameis and Exusiai and to the third hierarchy belong the Archai, Archangeloi and Angeloi (figure 4).[106]

[96] Thomas G. Weinandy, Trinitarian Christology: The Eternal Son in Gilles Emery and Matthew Levering, *The Oxford Handbook of The Trinity* (Oxford: Oxford University Press, 2011), p. 389.
[97] Rudolf Steiner, *Das Geheimnis der Trinität, GA 214* (Dornach: Rudolf Steiner Verlag, 1999), p.70; '…, aus dem Intellektuellen heraus selber sich aufzuschwingen zum Begreifen des Geistigen.', translated N. Montag-Keller.
[98] Rudolf Steiner, Das Hereinwirken geistiger Wesenheiten in den Menschen, GA 102 (Dornach: Rudolf Steiner Verlag, 2001), p. 128; '…, dass der Mensch unmittelbar aufblicken könnte zur höchsten Gottheit; sondern wir haben die ganze Leiter von Wesenheiten, die wir im christlichen Sinne Engel, Erzengel und so weiter nannten, dazwischenstehen.', translated N. Montag-Keller.
[99] Die Bibel, *Gen 28, 10-12* (Stuttgart: Deutsche Bibelgesellschaft, 1999), p. 30.
[100] Rudolf Steiner, *Das Hereinwirken geistiger Wesenheiten in den Menschen, GA 102* (Dornach: Rudolf Steiner Verlag, 2001), p. 137; Rudolf Steiner, *Grundelemente der Esoterik, GA 93a* (Dornach: Rudolf Steiner Verlag, 1987), p. 97; 98; '…Hierarchie von dem Menschen übergeordneten Wesenheiten… .', translated N. Montag-Keller.
[101] Nicholas Goodrick-Clarke, *The Western Esoteric Traditions* (Oxford: Oxford University Press, 2008), p. 101.
[102] Nicholas Goodrick-Clarke, *The Western Esoteric Traditions* (Oxford: Oxford University Press, 2008), p. 102.
[103] Rudolf Steiner, *Geistige Hierarchien und ihre Widerspiegelung in der physischen Welt, GA 110* (Dornach: Rudolf Steiner Verlag, 1991) p. 7.
[104] Rudolf Steiner, *Geistige Hierarchien und ihre Widerspiegelung in der physischen Welt*, *GA 110* (Dornach: Rudolf Steiner Verlag, 1991), p. 81, 82.
[105] Rudolf Steiner, *Geistige Hierarchien und ihre Widerspiegelung in der physischen Welt*, *GA 110* (Dornach: Rudolf Steiner Verlag, 1991), p. 4, 83.
[106] Rudolf Steiner, *Geistige Hierarchien und ihre Widerspiegelung in der physischen Welt*, *GA 110* (Dornach: Rudolf Steiner Verlag, 1991), p. 2, 69, 166, 91.



Translation:
1st hierarchy:
Seraphim
Cherubim
Throne

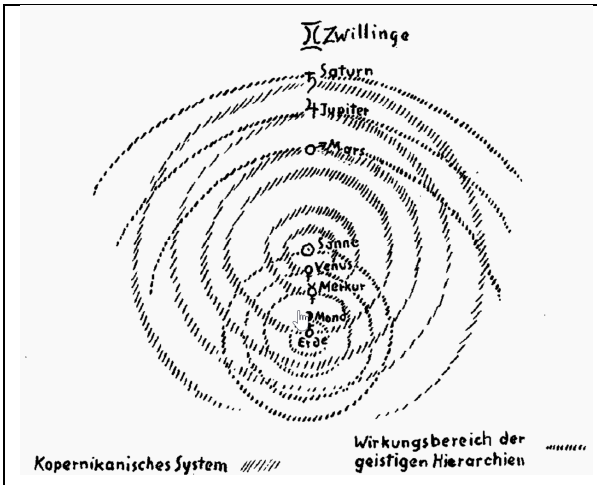
2nd hierarchy:
Kyriotetes (Geister der Weisheit, Herrschaften)
Dynameis (Geister der Bewegung, Mächte)
Exusiai (Geister der Form, Gewalten)

3rd hierarchy:
Archai (Zeitgeister, Urkräfte/Anfänge and Geister der Persönlichkeit)
Archangeloi (Erzengel)
Angeloi (Engel)

Figure 4: Rudolf Steiner, ranking order of the nine beings of the three hierarchies, GA 136, p. 117, 1912.

3.3.4 The hierarchies' connection to the sky sphere(s)

Steiner puts forward, that the Seraphim and Cherubim are present in the zodiac, especially the Cherubim present themselves in etheric and winged gestalt, as Lion, Taurus, Man and Eagle.[107] The zodiac, seen from earth, is the annual imaginary pathway of the sun around the earth, called ecliptic, passing through twelve star constellations appearing in the northern night sky.[108] The Thrones belong to the sphere of old Saturn, the first embodiment of the planetary system (figure 5).[109] The Kyriotetes belong to the Jupiter sphere, the Dynameis to the Mars sphere and the Exusiai to the sun sphere, all seen from a geocentric perspective (figure 5).[110]The Archai belong the Venus sphere, the Mercury sphere is home to Archangeloi and the Moon sphere to Angeloi (figure 5).[111]



Translation:
astrological symbol for twins

astrological symbol for Saturn
… for Jupiter
… for Mars

… for Sun
… for Venus
… for Mercury
… for Moon
Earth

Copernican system --- dominion of the spiritual hierarchies

Figure 5: Rudolf Steiner, the planetary spheres are the dominions of the spiritual hierarchies, GA 110, p. 103, 1909.

[107] Rudolf Steiner, *Geistige Hierarchien und ihre Widerspiegelung in der physischen Welt*, *GA 110* (Dornach: Rudolf Steiner Verlag, 1991), p. 82, 74.
[108] Michael Baigent, Nicholas Campion, Charles Harvey, *Mundane Astrology* (London: Thorsons, 1995), p. 118.
[109] Rudolf Steiner, *Die geistigen Wesenheiten in den Himmelskörpern und den Naturreichen*, *GA 136* (Dornach: Rudolf Steiner Verlag, 1996), p. 79.
[110] Rudolf Steiner, *Die geistigen Wesenheiten in den Himmelskörpern und den Naturreichen*, *GA 136* (Dornach: Rudolf Steiner Verlag, 1996), p. 85.
[111] Rudolf Steiner, *Geistige Hierarchien und ihre Widerspiegelung in der physischen Welt*, *GA 110* (Dornach: Rudolf Steiner Verlag, 1991), p. 99, 100, 102.

3.3.5 Human beings' connection to the Earth

The esoteric knowledge of the Earth sphere, Steiner explains, was enabled through Christ who experienced the Mystery of Golgatha, where Christ went through the inner depths of the earth, also known as hell.[112] Steiner's Christological approach for interpreting "cruxifiction and resurrection of Jesus" as well as putting forward a concept of 'inner depths of the earth' Wouter Hanegraaff argued, that it is Steiner's 'appeal to authority' which would elevate him above what other spiritual seekers face as a dilemma, because either the seeker is not being able to understand what Steiner put forward, so the seeker would need to work on his understanding or by agreeing with what Steiner said, the seeker signals indirectly that he understood Steiner.[113] Steiner's new approach to exegesis, his esoteric approach called spiritual sciences meant, that he was able to recount historical events as interrelated, providing a basis for a new identity of human beings and offering an answer to the unanswerable question what the meaning of life was. Earth as the domicile (Wohnplatz) of human beings, in Steiner's notion can be seen as a mirror, a reflex of the whole cosmos.[114] A human being has a reference to all the inner layers of earth and since these layers constantly emit their power, therefore human beings have to overcome these powers continuously, which means by spiritualising himself the earth becomes spiritualised.[115] The nine interrelating layers (figure 6) are called: 1. mineral layer, (mineralische Erde), 2. fluid earth (flüssige Erde), 3. Air-earth (Luft-Erde), 4. water or form-earth (Wasser oder Form-Erde), 5. fruit earth (Frucht Erde), 6. Fire-earth (Feuer-Erde),7. earth mirror/reflector (Erdenspiegel, Erdreflektor), 8. splinterer (Zersplitterer), 9. earth nucleus (Erdkern).[116]

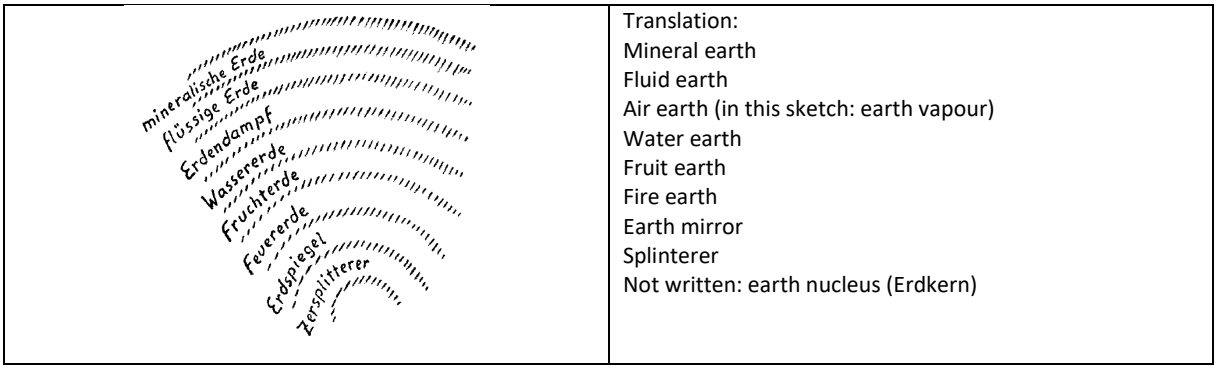


Figure 6: Rudolf Steiner, the eight (to be nine) interrelated inner layers of the earth, GA 95, p. 33, 1906.

Steiner puts forward, that these layers (figure 6) can be spiritually researched, exhibiting, that the fluid layer extinguishes life; the air layer extinguishes feelings; the water layer exhibits the negative image of physical things; the fruit layer serves as a growth substance similar to a sponge, it is the form behind the preceding forms; the fire layer consists fully of fervour; the mirror layer transforms everything into its opposite, a polar reflection; the splinterer layer replicates everything, therefore human beings should develop harmony, and Dante, Steiner writes, described this layer in the divine comedy as the abyss of Cain 'whosoever finds will slay me' (in the Bible Cain kills Abel out of envy), it

[112] Rudolf Steiner, *Das Sonnenmysterium und das Mysterium von Tod und Auferstehung, GA 211* (Dornach: Rudolf Steiner Verlag, 2006), p. 186; Die Bibel, *Eph 4, 8-10* (Stuttgart: Deutsche Bibelgesellschaft, 1999), p. 223.
[113] Wouter J. Hanegraaff, Rudolf Steiner und die hellsehende Einbildungskraft in Christian Clement, *Rudolf Steiner – Schriften zur Anthropogenese und Kosmongonie, 8.1* (Stuttgart-Bad Cannstatt: frommann-holzboog Verlag, 2018), p. xx.
[114] Rudolf Steiner, *Die Grundimpulse des menschlichen Werdens der Menschheit, GA 216* (Dornach: Rudolf Steiner Verlag, 1988), p. 86.
[115] Rudolf Steiner, *Vor dem Tore der Theosophie, GA 95* (Dornach: Rudolf Steiner Verlag, 1996), p. 145, 149.
[116] Rudolf Steiner, *Vor dem Tore der Theosophie, GA 95* (Dornach: Rudolf Steiner Verlag, 1996), p. 145 – 147.

is the layer where evil/bad were brought into the world and lastly the nucleus layer which is the where black magic stems from, the evil spirits (das geistig Böse) crop out from there.[117] The first seven layers correspond with the seven planetary spheres, the eight layer with the fixed stars and the zodiac and the 9th layer the earth nucleus corresponds with the crystal heaven (Kristallhimmel), which are the deeds of an earlier evolution, located beyond the zodiac.[118] The concept of heaven can again be found in Dante's divine comedy and in the Bible, where on the second day of creation heaven is made.[119]

3.3.6 Human beings' spiritual development towards "ICH" (I)

Steiner clearly is not in favour of a materialistic worldview, because a human being might miss learning to acquire spiritual ideas within this earth life and as a consequence human soul will remain in the mineral and plant nature and cannot go beyond to the nature of animals and the nature of human spiritual realm.[120] Human beings are called to become the 10th hierarchy of spiritual beings and to act as spirit of freedom and love (Geist der Freiheit und Liebe) which will integrate into the cosmos new spiritual qualities.[121]The human being itself consists of body, soul and spirit (Leib, Seele und Geist) where the body is capable of referring to things, the soul retains impressions and through spirit things reveal what they contain in themselves.[122] Furthermore the body is related to three forms of "Dasein" (to be present), namely the mineral, the plant and the animal "Dasein".[123]

If within the soul the "Ich" flashes, it leaves an imprint to the spirit and becomes the carrier of the spiritual human (Geistmensch), therefore the human being is part of the three worlds (physical, etheric (soul) and astral (spirit) explains Steiner.[124] Figure 7 depicts the three parts of the lower body gestalt, called physical, etheric and astral body, topped by the "Ich" as representative of the middle gestalt part of a human being.



Translation:

"I"

Astral body

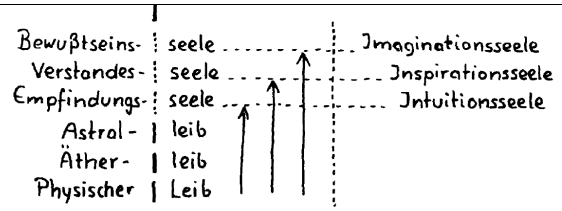
Etheric body

Physical body

Figure 7: Rudolf Steiner, basic schema of a spiritually developed human being, GA 124, p. 92, 1910.

[117] Rudolf Steiner, *Vor dem Tore der Theosophie, GA 95* (Dornach: Rudolf Steiner Verlag, 1996), p. 145 – 147;); Dante Alighieri, Divine Comedy, Purgartory, XIV, 133, http://www.gutenberg.org/files/8795/8795-h/8795-h.htm#link14, (accessed 17 Dec 2019); Die Bibel, *Gen 4, 14* (Stuttgart: Deutsche Bibelgesellschaft, 1999), p. 6.
[118] Rudolf Steiner, *Geistige Hierarchien und ihre Widerspiegelung in der physischen Welt*, *GA 110* (Dornach: Rudolf Steiner Verlag, 1991), p. 158.
[119] Dante Alighieri, Divine Comedy, Paradise, XXVII, 36-40 http://www.gutenberg.org/files/8799/8799-h/8799-h.htm#link27, (accessed 17 Dec 2019); Die Bibel, *Gen 1, 6-8* (Stuttgart: Deutsche Bibelgesellschaft, 1999), p. 3: http://www.gutenberg.org/files/8794/8794-h/8794-h.htm
[120] Rudolf Steiner, *Der Tod als Lebenswandlung, GA 182* (Dornach: Rudolf Steiner Verlag, 1996), p. 20.
[121] Rudolf Steiner, *Mysterienstätten des Mittelalters. Rosenkreuzertum und modernes Einweihungsprinzip, GA 223a* (Dornach: Rudolf Steiner Verlag, 2013), p. 23.
[122] Rudolf Steiner, *Theosophie, GA 9* (Dornach: Rudolf Steiner Verlag, 1987), p. 26.
[123] Rudolf Steiner, *Theosophie, GA 9* (Dornach: Rudolf Steiner Verlag, 1987), p. 14.
[124] Rudolf Steiner, *Theosophie, GA 9* (Dornach: Rudolf Steiner Verlag, 1987), p. 56; Rudolf Steiner, *Welche Bedeutung hat die okkulte Entwicklung des Menschen für seine Hüllen und sein Selbst, GA 145* (Dornach: Rudolf Steiner Verlag, 2015), p. 176; 'Beim okkult sich entwickelnden Menschen verwandelt sich die Bewusstseinsseele in die Imaginationsseele.', translated N. Montag-Keller.

The "Ich" itself also comprises three parts which are called "Empfindungsseele", "Verstandesseele" and "Bewusstseinsseele" (figure 8) where the soul parts are informed by the body parts, e.g. the physical body informs the consciousness soul part and Steiner explains, that 'a human being who develops occultly the souls of consciousness transforms into the souls of imagination.'[125]

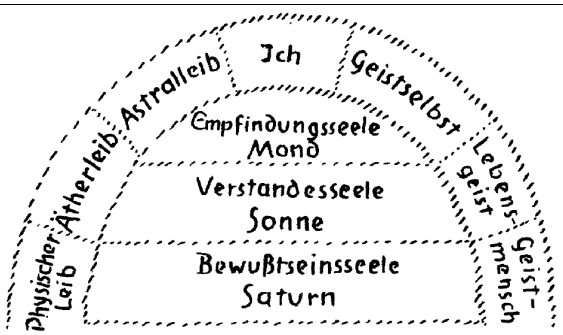


Translation:
Consciousness: soul : soul of imagination
Mind: soul : soul of inspiration
Sentient: soul : soul of intuition
Astral : body
Etheric: body
Physical : body

Figure 8: Rudolf Steiner, structuring of the lower and middle three parts of a human being, GA 145, p. 175, 1913.

3.3.7 The sevenfold human being

From the concept of the sevenfold human being, (half circle depicted in figure 9) where a human being consists of three lower, one middle ("Ich") and three possible upper gestalt parts, Steiner explains, that human beings will develop the upper ones in the future.[126] He indicates, that the "Ich" has developed from Saturn to Sun to Moon and is now to be found on Earth, where human beings are now on a preparatory level for working half consciously and half unconsciously on his lower three gestalt parts.[127] The upper three gestalt parts (figure 9: "Geistselbst", "Lebensgeist", "Geistmensch") are also called "Manas", "Buddhi" and "Atma" which Steiner derived from Blavatsky's theosophical teachings and since she was inspired by Hindu-Vedic teachings these words are found in the Katha-Upanishad referring metaphorically to these three parts 'Know the Self (Atma(n)) as the lord of the chariot, the body as the chariot itself, the discriminating charioteer (Buddhi), and the mind (Manas) as reins.'[128]



Translation:
Left: lower gestalt part of a human being: parts consisting of physical, etheric and astral body
Middle from bottom to top: middle gestalt part of a human being consisting of consciousness soul, mind soul and sentient soul (added by sky object locations where these soul parts were developed)
Right: upper gestalt part of a human being consisting of Geistselbst also known as Manas (spiritual self), Lebensgeist also known as Buddhi (life spirit) and Geistmensch also known as Atma (spiritual being).

Figure 9: Rudolf Steiner, future transformation of the Ich into the upper part of a human being, GA 104, p. 176, 1908.

3.3.8 "Weltentwicklungsstufen" (developmental stages) of the Earth

Figure 10 shows how Steiner perceived in occult terms the development of the earth in the current planetary stage of the world development (Weltentwicklungsstufe). Steiner argues, that since human beings go through recurring embodiments by means of metamorphosis, the same applies to all other

[125] Rudolf Steiner, *Exkurse in das Gebiet des Markus Evangeliums, GA 124* (Dornach: Rudolf Steiner Verlag, 1995), p. 92; Rudolf Steiner, *Welche Bedeutung hat die okkulte Entwicklung des Menschen für seine Hüllen und sein Selbst, GA 145* (Dornach: Rudolf Steiner Verlag, 2015), p. 175.
[126] Rudolf Steiner, *Die Apokalypse des Johannes, GA 104* (Dornach: Rudolf Steiner Verlag, 2006), p. 177.
[127] Rudolf Steiner, *Die Apokalypse des Johannes, GA 104* (Dornach: Rudolf Steiner Verlag, 2006), p. 177.
[128] Eknath Easwaran, Katha Upanishad, III, 3, http://veda.wikidot.com/katha-upanishad-eknath (accessed 17 Dec 2019).

beings of the world, such as the Earth.[129] The Earth's current incarnation, which is represented through Mars and Mercury, started its development on old Saturn, incarnated into old Sun, growing up through old Saturn stage first, then incarnated into old Moon, growing up through old Saturn and old Sun stage, in other words, Earth's current incarnation is the fourth stage of seven.[130] Though Claudius Ptolemy (100 - ca.170 CE) refers to the luminaries, Sun at day and Moon at night and the five planets and attributes these to the constellations in the zodiac resulting in a sequence of Sun and Moon followed by Mercury, Venus, Mars, Jupiter and Saturn, no distinct seven week-day order is given.[131] Benson Bobrick argues, that in the second century CE there might have been a convergence of an astrological week based on the seven planetary gods (includes Sun and Moon) with the Sabbath cycle of the Jews, holding Saturday as a holy day, resulting into: Saturn: Saturday, Sun: Sunday, Moon: Monday, Mars: Tuesday, Mercury: Wednesday, Jupiter: Thursday and Venus: Friday.[132] This idea is supported by Eviatar Zerubavel who suggests, that in the aftermath of Alexander the Great's conquest of Asia a 'Hellenistic fusion of astronomy, astrology and mathematics' produced the 'the seven day week in its final form.'[133] Steiner's cosmic evolution stages (figure 10) will be continued through an occult new Jupiter, new Venus and Vulcan and he adds, that every image of the past corresponds to one of the future but also warns, without becoming specific, that there are boundaries to such occult research.[134]

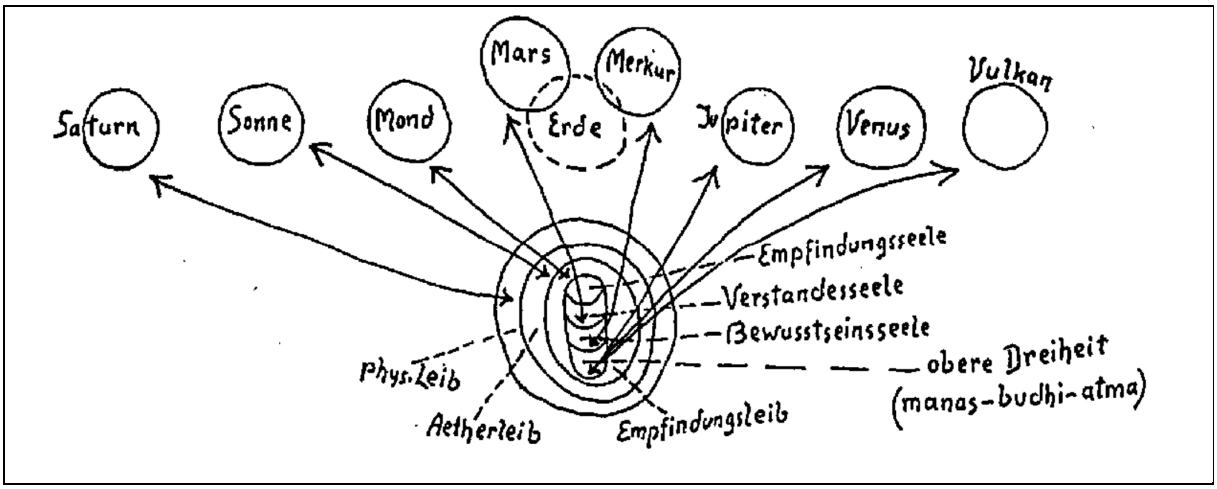


Figure 10: Rudolf Seiner, the cosmic evolution of human beings from Saturn to Vulcan in reference to the human lower, middle and upper gestalt parts (Wesensglieder), GA 89, p. 73, 1905.

Furthermore figure 10 shows how the three human gestalt parts correspond to the planetary developmental stage, physical body built on old Saturn, etheric body on old Sun, "Empfindungsleib" or astral body on old Moon, on Mars (part of Earth) the soul of intellect/mind (Verstandesseele), on

[129] Rudolf Steiner, *Geistige Hierarchien und ihre Widerspiegelung in der physischen Welt*, *GA 110* (Dornach: Rudolf Steiner Verlag, 1991), p. 48.
[130] Rudolf Steiner, *Geistige Hierarchien und ihre Widerspiegelung in der physischen Welt*, *GA 110* (Dornach: Rudolf Steiner Verlag, 1991), p. 48, 78; Rudolf Steiner, *Aus der Akasha Chronik, GA 11* (Dornach: Rudolf Steiner Verlag, 2018), p. 130-131.
[131] Claudius Ptolemy, *Tetrabiblos, Book 1, VII*, translated by J.M. Ashmand (Seattle: Pacific Publishing Studios, 2011), p. 13; Claudius Ptolemy, *Tetrabiblos, Book 1, XX*, translated by J.M. Ashmand (Seattle: Pacific Publishing Studios, 2011), p. 26.
[132] Benson Bobrick, *The Fated Sky* (New York: Simon and Schuster Paperbacks, 2005), p. 10.
[133] Eviatar Zerubavel, *The Seven Day Circle* (Chicago: University of Chicago Press, 1985), p. 14.
[134] Rudolf Steiner, *Die Geheimwissenschaft im Umriss, GA 13* (Dornach: Rudolf Steiner Verlag, 1989), p. 400.

Mercury (part of Earth) the soul of consciousness (Bewusstseinsseele), the soul of sentient (Empfindungsseele) has no arrow indicating a planet and the upper three gestalt parts refer to new Jupiter, new Venus and Vulcan respectively. Steiner explains, that the sentient soul is born in a human being around 21 years of age and that through spiritual training it will be transformed into the soul of intuition.[135] Steiner's cosmological approach by recounting an embedded esoteric history could possibly understood by what Richard J. Evans argued as 'the search for truth, the belief in objectivity, and the quest for a scientific approach in the past' which Steiner introduced with his methodological epistemology known as spiritual sciences and henceforth applying it to any domain of knowledge.[136]

3.3.9 The eighth sphere of the Earth

For a further understanding how the nine earth layers (figure 6) of the earth fit into the planetary evolution of the earth, figure 11 is given, where Steiner marks the eighth sphere (8. Sphäre) as adjacent to the Earth. The eighth sphere is, according to Steiner, important for the development of earth and human beings where the Elohim (belong to the hierarchy of the Exusiai) act, alongside with Luciferic and Ahrimanic beings, which are able to create ghosts (Gespenster) and intend to take away substance of the earth in order to strike new pathways for the world.[137]

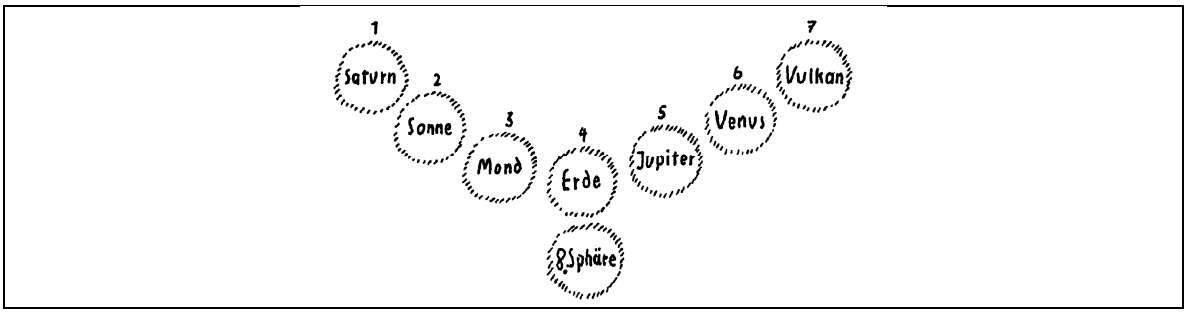


Figure 11: Rudolf Steiner, planetary earth development from Saturn to Vulcan exhibiting the eighth sphere adjacent to the earth, GA 254, p 83, 1915.

Usually, Steiner explains, human beings are unconscious of this sphere, though 'human beings should open up an organ for the eighth sphere which is as adequate as the physical senses for Earth'.[138] Furthermore, Steiner expands, that the eighth sphere is where everything goes which cannot connect to the continuous development through the seven planetary steps and he adds, that other religions have called this place "hell".[139]

3.3.10 Ahriman and Lucifer: adversaries supporting human beings' developmental processes

Since the planetary developmental processes of human beings are directed by the hierarchies, an unfolding called 'dying', nor the development of intellect were possible.[140] Steiner reveals, that

[135] Rudolf Steiner, *Welche okkulte Bedeutung hat die okkulte Entwicklung des Menschen für seine Hüllen und sein Selbst?, GA 145* (Dornach: Rudolf Steiner Verlag, 1986), p. 177.
[136] Richard J. Evans*, In Defence of History*, (London: Granta Books, 1997), p. 4.
[137] Rudolf Steiner, *Die okkulte Bewegung im neunzehnten Jahrhundert und ihre Beziehung zur Weltkultur, GA 254* (Dornach: Rudolf Steiner Verlag, 1986), p. 86, 88.
[138] Rudolf Steiner, *Die okkulte Bewegung im neunzehnten Jahrhundert und ihre Beziehung zur Weltkultur, GA 254* (Dornach: Rudolf Steiner Verlag, 1986), p. 84; '… es müsste dem Menschen ein Organ aufgehen, welches für die achte Sphäre so geeignet ist, wie die physischen Sinne für die Erde.', translated N. Montag-Keller.
[139] Rudolf Steiner, *Grundelemente der Esoterik, GA 93a* (Dornach: Rudolf Steiner Verlag, 1987), p. 112, 113.
[140] Rudolf Steiner, *Das Sonnenmysterium und das Mysterium von Tod und Auferstehung, GA 211* (Dornach: Rudolf Steiner Verlag, 1986), p. 110.

Ahriman, a being which is not part of the hierarchies, is "Herr des Intellekts" (master of the intellect), that it is "Wissender" (knowing entity) and "Weiser des Todes" (sage of death) with whom human beings need to engage with.[141] The mystery of Golgatha, according to Steiner, is a unique event where a God went through death and defeated it and now one knows 'how the intellect can be lead back to spirituality' due to Ahriman's influence.[142] Steiner argues, that in esoteric Christianity, human beings knew about this "Götterkampf" (fight of the Gods) and that the initiates of Christ needed to transform the powers of Ahriman for the benefit of human beings.[143] In other words, human beings whose worldview is materialistic and use their intellect for their own benefit, might be prone to experience the eighth sphere after death. Ahriman, who is called "Geist der Schwere" (spirit of the heaviness) has the aspiration to counterbalance Lucifer called "Geist des Lichts" (spirit of light) who aims to lift up beyond the earthly, Steiner describes.[144] According to F. Max Müller, Ahriman stems from the Persian Angra Mainyu and James Darmsteter in Müller explains, that Ahura Mazda (also Ormazd: the sky god) and Ahriman (in the Vendidad: who is all death) struggle and destroy each other's work and 'in the end, Ahriman is conquered and men live happily, needing no food and casting no shadow'. [145] According to Steiner, in the Bible Lucifer is the symbolised serpent which seduces Eva to eat from the tree of knowledge.[146] Steiner points out, that this biblical original sin leitmotif is nevertheless a possibility for overcoming egoism and because Lucifer opened up the senses of humans, it brought freedom (Freiheit) and the knowledge about Good and Evil (Erkenntnis des Guten und des Bösen).[147] In anthroposophic cosmology Lucifer can be redeemed through love, a higher love, which is free from egoism and Ahriman can be redeemed through thinking.[148] To finish off with anthroposophic cosmology, one last concept, the development of "Weltzeitalter" (world eras) is put forward.

3.3.11 "Weltzeitalter" (world ages) and current fifth culture epoch

Before the Earth went into the current sevenfold developmental process (the occult planets development from old Saturn to Vulcan), Steiner taught that before this cycle started the earth experienced seven "Wurzelrassen" (root races) beforehand, which were: 1. "Polarische", 2. "Hyperboräische", 3. "Lemurische", 4. "Atlantische", 5. "Arische", 6. "Sechste Wurzelrasse", 7. "Siebente Wurzelrasse".[149] Though in 1909 Steiner said, that 'the term races stopps to have any meaning especially in our era', he was proved wrong by the atrocities of German National Socialist people before and throughout World War II. The usage of the "Rassen" nomenclatur was changed

[141] Rudolf Steiner, , *Das Sonnenmysterium und das Mysterium von Tod und Auferstehung, GA 211* (Dornach: Rudolf Steiner Verlag, 1986), p. 111.
[142] Rudolf Steiner, *Das Sonnenmysterium und das Mysterium von Tod und Auferstehung, GA 211* (Dornach: Rudolf Steiner Verlag, 1986), p. 112, 113.
[143] Rudolf Steiner, *Das Sonnenmysterium und das Mysterium von Tod und Auferstehung, GA 211* (Dornach: Rudolf Steiner Verlag, 1986), p. 117.
[144] Rudolf Steiner, *Faust, der strebende Mensch, GA 272* (Dornach: Rudolf Steiner Verlag, 1981), p. 182.
[145] F. Max Müller, *The Sacred Book of the East, Zend-Avesta* (Oxford: Clarendon Press, 1895), p. xxiv; F. Max Müller, *The Sacred Book of the East, Zend-Avesta* (Oxford: Clarendon Press, 1895), p. 4.
[146] Die Bibel, *Gen 3, 1-6* (Stuttgart: Deutsche Bibelgesellschaft, 1999), p.5.
[147] Rudolf Steiner, *Das Karma des Berufes des Menschen in Anknüpfung an Goethes Leben, GA 172* (Dornach: Rudolf Steiner Verlag, 2002), p. 207.
[148] Rudolf Steiner, *Aus den Inhalten der Esoterischen Stunden. Band III, GA 266/3* (Dornach: Rudolf Steiner Verlag, 1998), p. 167.
[149] Rudolf Steiner, *Aus der Akasha-Chronik, GA 11* (Dornach: Rudolf Steiner Verlag, 1986), p. 104-105.

into “Zeitalter” (age) which resulted into the re-naming of the fifth epoch into “Post-Atlantische”.[150] Each of these ages yet again passes through seven smaller epochs, which lasts 2160 years, which Steiner ascribes to Plato having expressed that 25’920 years are a Great Year (“Platonisches Jahr” in German).[151] However tracing this assumption back to Plato’s Timaeus it becomes clear, that there is no precise number given.[152] Campion argues, that ‘it has been widely and mistakenly assumed since classical times that Plato was arguing for the existence of a literal period of history, a Great Year beginning and ending with successive cataclysms’ and he suggests, that the source of this idea is the Cambridge scholar James Adam who argued, that there were ‘two numbers defining historical change’ back in 1891, notably none of them literally stated the number 25’920.[153] Figure 12 shows the earth’s tilted pathway (by 23.5°) around the sun called the ecliptic plane, where the intersection of celestial equator and ecliptic lead to equal length days on Earth which are called spring and autumn equinox respectively. Martin Rees explains that currently the axis of the Northern hemisphere points towards the star Polaris (figure 12), the star closest to “true North”, (celestial north on the northern hemisphere) and around which all other stars revolve, but because the ‘Earth’s slow “wobble”, alters the direction of its axis over a 25’800-year cycle’ which shifts the zodiacal star constellation on spring equinox (March) moving along the celestial equator.[154]

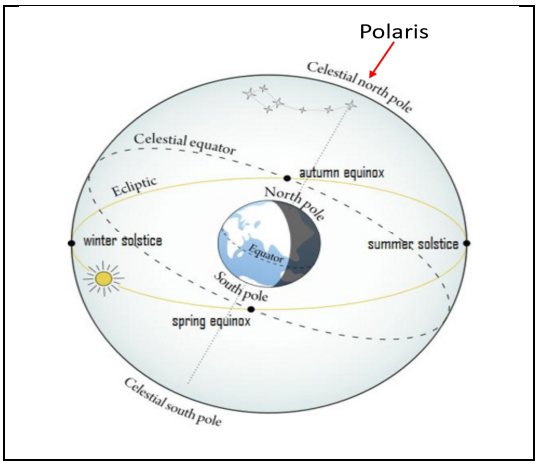
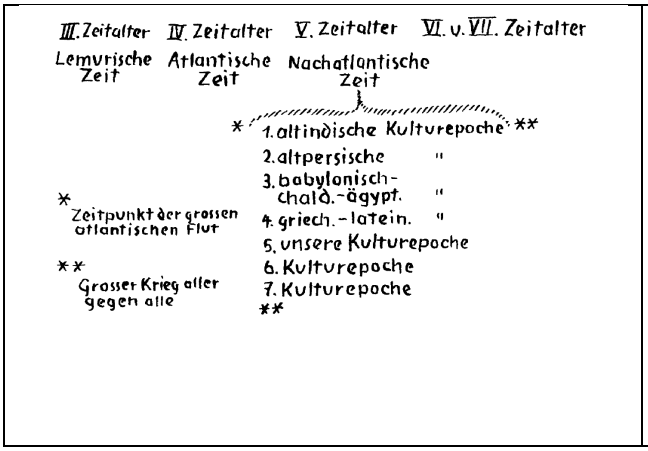


Figure 12: Nicole Montag-Keller, Bruce McClure’s enhanced model of the Earth’s orbit, showing ecliptic and celestial equator, earthsky.org, Feb 2020.

Steiner relates the 25’920 number to the human body by arguing, that a person breathes 25’920 times in 24 hours, which ‘is one of the evidences, showing us ‘….microcosm is the effigy of the macrocosm, but that a person is ruled by the same number, is ruled by the same measure as the sun’s pathway, into which he is put into’.[155] It becomes clear, that Steiner’s explanation of the Great Year merges scientific knowledge and occult thought, which Egil Asprem calls ‘forms of rejected scientific knowledge’ which ‘became important resources for occultists to challenge established

[150] Rudolf Steiner, *Die tieferen Geheimnisse des Menschheitswerdens im Lichte der Evangelien, GA 117* (Dornach: Rudolf Steiner Verlag, 1986), p. 152; ‘…, dass der Rassenbegriff aufhört eine jegliche Bedeutung zu haben gerade in unserer Zeit.’, translated N. Montag-Keller.
[151] Rudolf Steiner, *Bausteine zu einer Erkenntnis des Mysteriums von Golgatha, GA 175* (Dornach: Rudolf Steiner Verlag, 1996), p. 44.
[152] Plato, *Timaeus*, edited by John M. Cooper (Cambridge: Hackett Publishing Company, 1997), 39d, 47a.
[153] Nicholas Campion, *The Great Year* (London: Penguin Group, 1994), p. 244-245.
[154] Martin Rees, *Universe* (London: Dorling Kindersley Ltd., 2012), p.64, 124, 388.
[155] Rudolf Steiner, , *Bausteine zu einer Erkenntnis des Mysteriums von Golgatha, GA 175* (Dornach: Rudolf Steiner Verlag, 1996), p. 45; ‘Das ist eines der Zeugnisse, welches uns zeigt, … Mikrokosmos – Abbild des Makrokosmos, … von derselben Zahl regiert wird, von demselben Mass regiert wird, wie der Sonne Umlauf, in den er hineingestellt ist.’, translated N. Montag-Keller.

science' …'while at the same time claiming a form of rational knowledge for themselves.'[156] Yet another application of 'Great-Year cyclic thinking' occurs for the fifth "Weltzeitalter", the post-Atlantis period which is again divided into seven culture epochs as depicted in figure 13. Steiner explains, that a great flood marked the beginning of the old-indian culture epoch, then leading to old-persian, to babylonian-chaldean-egyptian, to greek-latin and to the current culture epoch and after the 7th culture epoch there will happen a great war all against all.[157] The flood and war motif supports Campions Great Year argument of 'successive cataclysms' mentioned earlier.[158]



Translation:
III. age: Lemurian period
IV. age: Atlantis period
V. age: post-Atlantis period
VI. and VII. period
The V. age is subdivided into 7:
old-indian culture epoch
old-persian culture epoch
babylonian-chaldean-egyptian culture epoch
greek-latin culture epoch
our culture epoch
6th culture epoch
7th culture epoch
*point in time of the great atlantic flood
** great war all against all

Figure 13: Rudolf Steiner, subsumption of the seven culture epochs into the grander scheme of "Weltzeitalter" (ages), GA 104, p. 67, 1908.

Anthroposophical cosmology as put forward in the preceding paragraphs comprises a dynamic worldview, a worldview which is informed by the principle of metamorphosis, not only for human beings, but for the earth as well, originating in the Christian dogma of Trinity and guided by Christian concepts of intermediate beings represented in three hierarchies supporting the developmental processes, the "Erkenntnisweg" of human beings for enabling the birth of the "Ich" (I) which gives way to the future evolutionary stages. Seen from a psychological point of view, Steiner addresses an individual's self-consciousness by saying 'Overcome yourself means to know yourself' and he adds, that 'the higher human being is everywhere outside, if I feel the world inside of myself, then I have found my higher self. My Self is outside of me. World-cognition is self-cognition.'[159] This reciprocal process of outside and inside discovery, a reflective process, which could lead to personal development psychologically spoken or hermeneutics philosophically spoken is in the words of Steiner 'esoteric training' ("esoterische Schulung").[160] However arguing from a historical point of view with the words of the historian R.G. Collingwood who wrote, that the past cannot be apprehended by mathematical or theological thinking because 'the past consisting of particular events in space and time which are no longer happening, … where mathematical thinking apprehends objects that have no special location in space and time, and it is just that lack of peculiar spatio-temporal location that makes them knowable' and '…, because the object of theological

[156] Egil Asprem, Science and the Occult in Christopher Partridge (ed.), *The Occult World* (Abingdon: Routledge, 2018), p.713.
[157] Rudolf Steiner, *Die Apokalypse des Johannes, GA 104* (Dornach: Rudolf Steiner Verlag, 1985), p. 44.
[158] Nicholas Campion, *The Great Year* (London: Penguin Group, 1994), p. 245.
[159] Rudolf Steiner, *Vor dem Tore der Theosophie, GA 95* (Dornach: Rudolf Steiner Verlag,1990), p. 140; 'Erkenne dich selbst heisst zugleich überwinde dich selbst.', translated N. Montag-Keller; 'Der höhere Mensch ist überall draussen. Wenn ich die ganze Welt in mir fühle, dann habe ich mich, mein höheres Selbst gefunden. Mein Selbst ist ausser mir. Welt-Erkenntnis ist Selbst-Erkenntnis.', translated N. Montag-Keller.
[160] Rudolf Steiner, *Ursprungsimpulse der Geisteswissenschaft. Christliche Esoterik im Lichte neuer Geist-Erkenntnis, GA 96* (Dornach: Rudolf Steiner Verlag, 1989), p. 258.

thinking is a single infinite object, and historical events are finite and plural', it can be argued, that Steiner's cosmological approach lacks coherence from a historical point of view.[161] However Freya Mathews argues, that 'a cosmology serves to orient a community to its world, in the sense that it defines, for the community in question, the place of humankind in the cosmic scheme of things. Such a cosmic orientation tells the members of the community, …, who they are and where they stand in relation to the rest of creation,' and '…is active too in the prescription of a system of norms, or at least in contributing to the normative tone of the community.'[162] It can be concluded, that anthroposophical cosmology is the expression of Rudolf Steiner's worldview informed by his personal, educational and professional life experiences, which he translated into a universal experiential self-educational programme. The next paragraph introduces how Steiner explained the distinctiveness of the anthroposophical architectural style which will then lead on to answering the research question how the Goetheanum building refers to anthroposophic cosmology.

3.4 ANTHROPOSOPHICAL ARCHITECTURE EMBEDDED IN ANTHROPOSOPHICAL COSMOLOGY

Pieter von der Ree writes, that Steiner's material and artistic culture according to his then theosophical worldview expressed itself for the first time in 1907 on the occasion of the 4th European theosophical convention in Munich.[163] Steiner directed the design of entry tickets, a programme booklet, decoration with red cloth and staging with planetary seals and columns, as well as apocalyptic seals for having what Steiner called 'an artistic surrounding and spiritual activity ' of '…harmonious unity'. [164] In the wrap-up phase of the European theosophical convention Steiner agreed with Annie Besant, that henceforth he lead his own esoteric school, a western esoteric school based on Christian mysticism, accompanied by a Christian- Rosicrucian initiatory pathway.[165] Rosicrucianism, according to Nicholas Goodrick-Clarke appeared in the ' first two decades of the seventeenth century' alongside with the theosophical writings of Jacob Böhme, in form of a legend of Christian Rosenkreutz and the Fraternity of the Rosy Cross.[166] The text describes the discovery of a new philosophy based on alchemy and mechanical arts, where notions of perfect harmony between macrocosm and microcosm are described and Goodrick-Clarke argues, that the 'pansophy, or universal wisdom', represented 'an illumination of religious and spiritual nature'.[167] The Rosicrucian brotherhood were supposedly 'members of an invisible order' 'working for the regeneration of

[161] R.G. Collingwood, The Idea of History (Oxford: Oxford University Press, 1971), p. 5
[162] Freya Mathews, The Ecological Self (London: Routledge, 1994), p. 12.
[163] Pieter van der Ree, Living Thought and Plastic Art – Rudolf Steiner and Organic Architecture in Mateo Kries, Alexander von Vegesack (eds) *Rudolf Steiner – Alchemy of the Everyday* (Weil am Rhein: Vitra Design Museum, 2010), p. 184; Karl Lierl, Florian Roder, *Anthropsophie wird Kunst* (München: Anthropsophische Gesellschaft in Deutschland, 2008), p. 19, 23-36.
[164] Pieter von der Ree, Living Thought and Plastic Art – Rudolf Steiner and Organic Architecture in Mateo Kries, Alexander von Vegesack (eds) *Rudolf Steiner – Alchemy of the Everyday* (Weil am Rhein: Vitra Design Museum, 2010), p. 184; Rudolf Steiner, *Mein Lebensgang, GA 28* (Dornach: Rudolf Steiner Verlag, 2011), p. 464; 'Künstlerische Umgebung und spirituelle Betätigung im Raume sollten eine harmonische Einheit sein.', translated N. Montag-Keller.
[165] Rudolf Steiner*, Zur Geschichte und aus den Inhalten der ersten Abteilung der Esoterischen Schule 1904-1914, GA 264* (Dornach: Rudolf Steiner Verlag, 1996), p. 269-270; Christoph Lindenberger, *Rudolf Steiner – Eine Chronik* (Stuttgart: Verlag Freies Geistesleben, 1988), p. 259, 260.
[166] Nicholas Goodrick-Clarke, *The Western Esoteric Tradition* (Oxford: Oxford University Press, 2008), p. 107.
[167] Nicholas Goodrick-Clarke, *The Western Esoteric Tradition* (Oxford: Oxford University Press, 2008), p. 107.

mankind' and the archetypal imagery of rose and cross inspired 'literature, eighteenth-century Masonic adaptations and the rituals of late nineteenth century 'Hermetic order of the Golden Dawn'.[168] Steiner who was a grandmaster of Freemasonry from 1906 onwards, also identified with Rosicrucianism and his reformulated and adapted anthroposophy grew out of theosophy which according to Goodrick-Clarke also 'took some initial inspiration' from theosophy.[169] It is suggested, that the segmentation into two esoteric schools preluded what was to become the final split from the TS in February 2013 and that Steiner's artistic and architectural activities multiplied out of the need to have a grand theatre and convention location.[170] Lindenberg reports that Marie E. Waller suggested in 1908, that 'a "temple" should be built for the words of Rudolf Steiner'.[171] From 1909 onwards plans were made for Munich, but building permission was several times denied, whereupon Steiner accepted the offer of Emil Grosheintz, landowner in Dornach, Switzerland for building the first Goetheanum (figure 14) as the headquarters of the then founded Anthroposophical Society (December 1912) and as Steiner said, by its 'own character being an embodiment of the spiritual development of mankind'.[172]

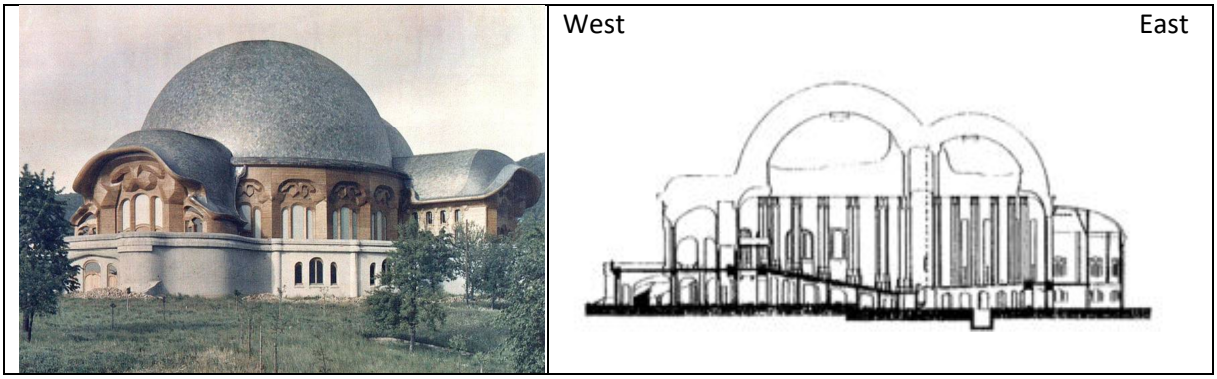


Figure 14: Otto Rietmann, photo of the first Goetheanum seen from South-West, available at Rudolf Steiner Archiv Dornach Switzerland , undated; Figure 15: Rudolf Steiner, West-East cross section of the Goetheanum I (1914-1920), GA 286, p. 82, 1982.

In 1921 Steiner mentioned twice, that if there would be another building, it would be rooted in anthroposophic mindedness, but its detail would be differently due to a different moment in time and he added what he called the 'laws of destiny of spiritual life, of spiritual progress' which were also applicable to the "Dornacher Bau" (the building of Dornach).[173] The building depicted in figure 14 was built from 1914-1920 and got destroyed due to arson on New Year's Eve in 1922. As can be seen, the model of the second Goetheanum (figure 16) looks differently and for understanding how the current Goetheanum refers to anthroposophical cosmology some of its historical framework given. Steiner, who was closely involved with the design and execution of the first building, inspired

[168] Nicholas Goodrick-Clarke, *The Western Esoteric Tradition* (Oxford: Oxford University Press, 2008), p. 107.
[169] Nicholas Goodrick-Clarke, *The Western Esoteric Tradition* (Oxford: Oxford University Press, 2008), p. 127.
[170] Rudolf Steiner, Wege zu einem neuen Baustil, GA286 (Dornach: Rudolf Steiner Verlag, 1982), p. 11.
[171] Christoph Lindenberger, *Rudolf Steiner – Eine Chronik* (Stuttgart: Verlag Freies Geistesleben, 1988), p. 271; 'dem Worte Rudolf Steiners einen «Tempel» zu bauen.', translated N. Montag-Keller.
[172] Rudolf Steiner, Wege zu einem neuen Baustil, GA 286 (Dornach: Rudolf Steiner Verlag, 1982), p. 11; Rudolf Steiner, *Erdenleben und Weltenleben. Anthroposophische Lebensgaben. Bewusstseins-Notwendigkeiten für Gegenwart und Zukunft, GA 181* (Dornach: Rudolf Steiner Verlag, 1991), p. 296, 303; '…seine ganze Eigenart hineinstellen in die Geistesentwicklung der Menschheit, … .', translated N. Montag-Keller.
[173] Rudolf Steiner, *Der Baugedanke des Goetheanum, GA 289* (Dornach: Rudolf Steiner Verlag, 2017), p. 63; Rudolf Steiner, *Kunst und Anthropsophie, GA 77b*, (Dornach: Rudolf Steiner Verlag, 1996), p. 106; 'Das ist etwas, was nun einmal die Schicksalsgesetze des geistigen Lebens, des geistigen Fortschritts sind, und gegen diese ist ja wohl auch bei der Aufrichtung des Dornacher Baues nicht verstossen worden.', translated N. Montag-Keller

the new building through his plasticine model and building plans were approved in September 1924, but plans for the interior were delayed due illness and death end of March 1925.[174]

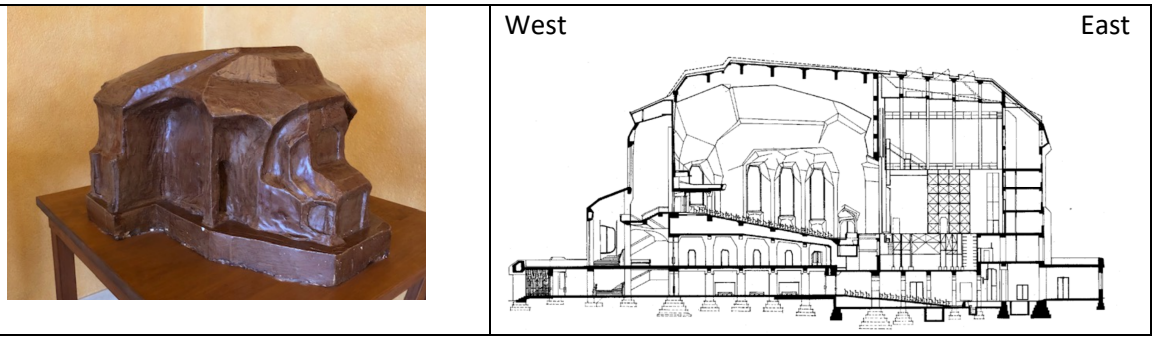


Figure 16: Nicole Montag-Keller, photo: replica model of the second Goetheanum building, exhibited in the Goetheanum seen from North-West, Jan 2020; Figure 17: Wolfgang Pehnt and Thomas Dix, West-East cross section of the second Goetheanum (1925-1928), in Rudolf Steiner Goetheanum Dornach, p. 49, 1991.

The foundation stone for the first Goetheanum was laid in the evening on 20th September 1913 on the "Hügel of Dornach" (hilltop of Dornach).[175] Roland Halfen assembled eye-witness reports from which it can be deduced, that Steiner defined the location of the foundation stone on two occasions, once in the evening for finding North he oriented himself through Polaris, the North Star, and on the following midday by having lines marked for geographic, magnetic and astronomic East, since he wanted the East-West axis to become the central axis of the building. [176] Furthermore eye-witnesses in Halfen report about an orchestration of stylistic elements, a burning wood stack, a speech, ritually handled material culture enacted by Steiner and the architect in blue aprons and a specially produced trowel (see figure 20 for a sketch on the right) and an invocation of the hierarchies, to name but a few elements.[177] Steiner called the building a 'landmark of spiritual life of more new times'.[178] In his speech he asked all participants to link their souls to the foundation stone and to get engaged with the building, which would become the human beings' "Wahrzeichen" (landmark, literally: true sign) on their mission of a spiritual evolutionary movement.[179] According to Steiner, human souls' lost their correlation with the divine "Weltendasein" (world is here), lost it with their will, their feeling and their divine-spiritual cognition and this loss evoked longing and hoping of the spirit.[180] He also talked about a karmic moment and location through which important spiritual currents were flowing and he added, that when humankind had reached the end of striving for ego related selfhood the "Weltenwort" (word of the world or logos) appeared in the East, and it is unclear, whether this moment had arrived with the life history of the biblical Jesus or whether this

[174] Christoph Lindenberger, *Rudolf Steiner – Eine Chronik* (Stuttgart: Verlag Freies Geistesleben, 1988), p. 602, 605, 631-632.
[175] Roland Halfen, Dokumente, Erinnerungen, Ansprachen in David Marc Hoffmann (ed), *Zur Grundsteinlegung des Ersten Goetheanum am 20. September 1913* (Basel: Rudolf Steiner Verlag, 2013), p. 14.
[176] Roland Halfen, Dokumente, Erinnerungen, Ansprachen in David Marc Hoffmann (ed), *Zur Grundsteinlegung des Ersten Goetheanum am 20. September 1913* (Basel: Rudolf Steiner Verlag, 2013), p. 15, 23, 82-83.
[177] Roland Halfen, Dokumente, Erinnerungen, Ansprachen in David Marc Hoffmann (ed), *Zur Grundsteinlegung des Ersten Goetheanum am 20. September 1913* (Basel: Rudolf Steiner Verlag, 2013), p. 51, 54, 79.
[178] Rudolf Steiner, *Anweisungen für eine esoterische Schulung, GA 245* (Dornach: Rudolf Steiner Verlag, 1987), p. 121; 'ein Wahrzeichen geistigen Lebens der neueren Zeit.', translated N. Montag-Keller.
[179] Rudolf Steiner, *Anweisungen für eine esoterische Schulung, GA 245* (Dornach: Rudolf Steiner Verlag, 1987), p. 121.
[180] Rudolf Steiner, *Anweisungen für eine esoterische Schulung, GA 245* (Dornach: Rudolf Steiner Verlag, 1987), p. 122.

moment is to come.[181] Then Steiner referred to Mathew's Gospel by saying that 'In the beginning was the word, and the word was with God, and one God was the word.', slightly altering the wording of "beginning" into "Urbeginn" (which would be the very beginning of all beginning) and he added that there was "one" God which is not written in the Gospel of John in the Bible edition used for reference.[182] Again, the reference of Jesus's Sermon on the Mount might be associated with Steiner's enactment of speech on the Dornach mountain top. Further Steiner added, that the eastern "Weltenwort" awaited the western one, like a mirror (he said mirror not echo), adding to the "Erkenntnis"(insight) presented in the four biblical Gospels.[183] Steiner said, that the words of Jesus spoken in the 'Sermon on the Mount' were awaited to be understood by human beings' hearts, because the hearts could understand the "Dasein" (the existence). The 'mystery of Golgatha' (Jesus Christ's crucifixion and resurrection) sank into the earth and since then the Lord's Prayer spoken by human beings awaited the echo, sounding from the macrocosm, the West.[184] According to Steiner, Steiner's fifth Gospel (introduced by him a year earlier), added to the four biblical ones and helped to inform the understanding, that a macrocosmic prayer (given in figure 18) with a reference to 'AUM', according to Drury a sacred sound in Sanskrit calling on Brahma, Vishnu and Shiva, a threefold principle in Hinduism, comparable to Christian Trinity, in company of Jupiter and Moon came along which could be heard as an echo to the fifth Gospel, probably for indicating that the East, the orient is linked to the East taught in theosophy.[185]

Makrokosmisch widerklingende Stimme des uralt ewigen Gebets:	Translation of the macrocosmic resounding voice of an age-old everlasting prayer:
AUM, Amen! Es walten die Übel, Zeugen sich lösender Ichheit, Von ändern erschuldete Selbstheitschuld, erlebet im täglichen Brote, In dem nicht waltet der Himmel Wille, Da der Mensch sich schied von Eurem Reich Und vergass Euren Namen, Ihr Väter in den Himmeln.	AUM, Amen! The evils rule it, (the) witnesses of resolving ego, (because) change is indebted to selfhood-debt, (since it is) experienced in the daily bread, In which the Heaven's will does not rule, In the location where the man parted from your kingdom, And forgot your names Your fathers in the Heavens.

Figure 18: Rudolf Steiner, macrocosmic prayer in response to the fifth gospel both given by Rudolf Steiner, GA 245, p. 127, 1920.

But Steiner did not only refer to anthroposophic cosmology, he embedded the foundation stone on an East-West axis (smaller dodecahedron to the West, contrary to how the building was erected) and made a reference to the evening sky objects where 'Mercury (the planet) was to be found in the star

[181] Rudolf Steiner, *Anweisungen für eine esoterische Schulung, GA 245* (Dornach: Rudolf Steiner Verlag, 1987), p. 123.
[182] Rudolf Steiner, *Anweisungen für eine esoterische Schulung, GA 245* (Dornach: Rudolf Steiner Verlag, 1987), p. 123; Die Bibel, Jhn 1, 1 (Stuttgart: Deutsche Bibelgesellschaft, 1999), p. 107; 'Im Urbeginne war das Wort - Und das Wort war bei Gott – Und ein Gott war das Wort. … Jetzt ist das Wort selber übergegangen in die Erden-Aura, ist aufgenommen von der spirituellen Aura der Erde.', translated N. Montag-Keller.
[183] Rudolf Steiner, Rudolf Steiner, *Anweisungen für eine esoterische Schulung, GA 245* (Dornach: Rudolf Steiner Verlag, 1987), p. 124.
[184] Rudolf Steiner, Rudolf Steiner, *Anweisungen für eine esoterische Schulung, GA 245* (Dornach: Rudolf Steiner Verlag, 1987), p. 127.
[185] Rudolf Steiner, Rudolf Steiner, *Anweisungen für eine esoterische Schulung, GA 245* (Dornach: Rudolf Steiner Verlag, 1987), p. 127; Die Bibel, Mt 5, 1-10 (Stuttgart: Deutsche Bibelgesellschaft, 1999), p. 6; Die Bibel, Lk 6, 20-23 (Stuttgart: Deutsche Bibelgesellschaft, 1999), p. 75; Nevill Drury, *Lexikon Esoterischen Wissens* (München; Droemer Knaur Verlag, 1988), p. 458, 603.

constellation of Virgo in the sign of Libra' according to an eye-witness in Halfen.[186] Furthermore the pre-manufactured foundation stone, consisted of two differently sized pentagon dodecahedrons (figure 19), added by an installation of two hanging pyrite stones (figure 20, indicated as dots in the middle of the foundation stone drawing) containing the foundation stone document (figure 21).[187]

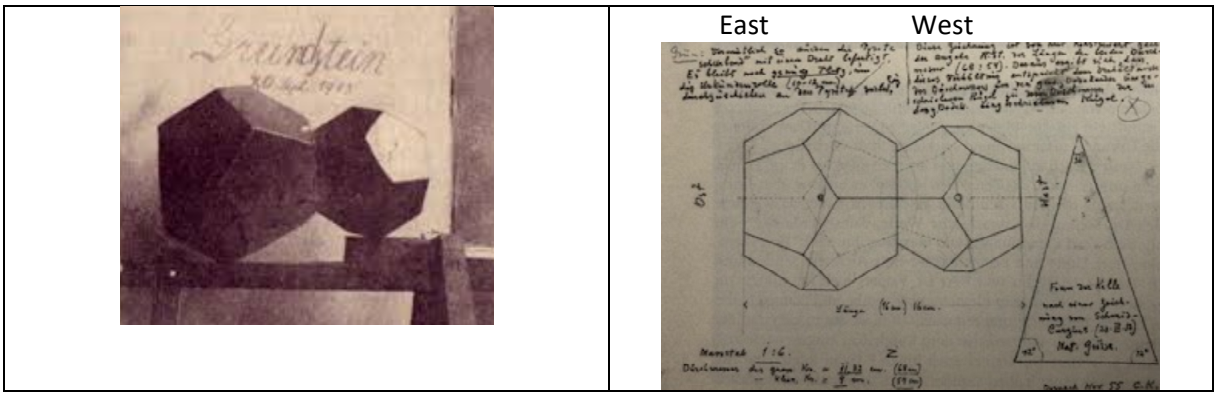
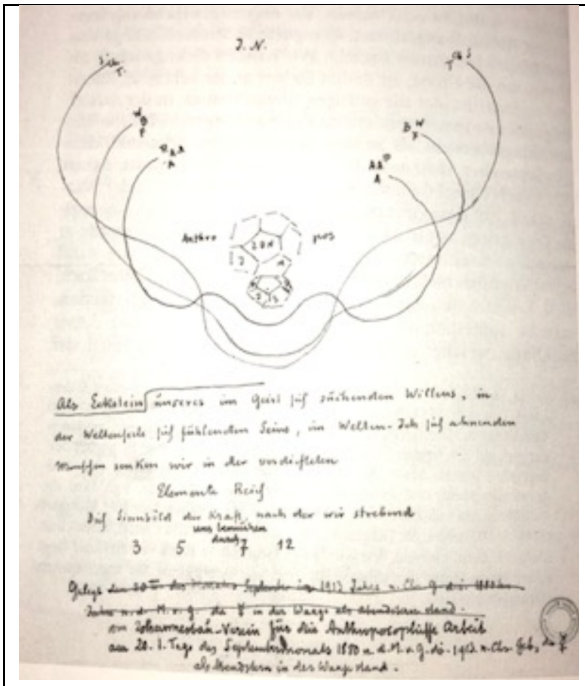


Figure 19: Max Benzinger, photo of the foundation stone, crafted copper, for the Goetheanum consisting of two differently sized pentagon dodecahedrons the smaller one faced West when put into the Earth, Archivmagazin Nr 2, p. 45, 2013;
Figure 20: Carl Kemper, drawing of the foundation stone and a drawing of the triangular trowel used by Rudolf Steiner used in the evening of 20th September 1920, Archivmagazin Nr 2, p. 56, 2013.

Though Steiner intended that anthroposophic material culture should speak for itself, one eye-witness reported, that 'the stone was a "Sinnbild" (symbol) of a person's soul was put into the earth as a "Wahrzeichen" (emblem/ literally: true sign) of the striving for insight, for love and strong deed, human beings "Sinnbild" (symbol)'.[188] Further this eye-witness mentioned, that the soul uncovered three secrets of existence, they were symbols first, then signs and finally the soul was capable to read the "Weltenwort" (logos), nevertheless the deepest world secrets were connected alive with the soul from the realm of the hierarchies which were able to form a cover and with that cover, the "Eckstein" (cornerstone) was a sign of a person's soul, which became covered.[189] It could well be, that the foundation stone was inspired by Blavatsky's "central spiritual sun" teachings referring to Hermetic doctrine 'that the cosmos has two centres; a physical earth at the centre of the physical universe and a spiritual sun at the heart of a spiritual universe' as put forward by Campion.[190] Yet, it is suggested, that the foundation stone could uncover more. According to Gerhard Gutzmann, pyrite was known as a firestone in antiquity, that it contained iron and sulphur and medieval alchemists believed that pyrite carried the secret of gold.[191]If we take Plato into account who mentioned the fifth solid, which is the dodecahedron, to be '…this one god used for the whole universe, embroidering figures on it' a representation of the universe, it can be deducted, that the bigger dodecahedron might represent the microcosm and the smaller one macrocosm, even a matter/body

[186] Roland Halfen, Dokumente, Erinnerungen, Ansprachen in David Marc Hoffmann (ed), *Zur Grundsteinlegung des Ersten Goetheanum am 20. September 1913* (Basel: Rudolf Steiner Verlag, 2013), p. 76.
[187] Roland Halfen, Dokumente, Erinnerungen, Ansprachen in David Marc Hoffmann (ed), *Zur Grundsteinlegung des Ersten Goetheanum am 20. September 1913* (Basel: Rudolf Steiner Verlag, 2013), p. 54-55.
[188] Roland Halfen, Dokumente, Erinnerungen, Ansprachen in David Marc Hoffmann (ed), *Zur Grundsteinlegung des Ersten Goetheanum am 20. September 1913* (Basel: Rudolf Steiner Verlag, 2013), p. 70; 'Der Stein als Sinnbild unserer Seele ist in die Erde versenkt; er sein ein Wahrzeichen des Strebens nach Erkenntnis, nach Liebe, nach starkem Handeln, der Menschheit Sinnbild.', translated N. Montag-Keller.
[189] Roland Halfen, Dokumente, Erinnerungen, Ansprachen in David Marc Hoffmann (ed), *Zur Grundsteinlegung des Ersten Goetheanum am 20. September 1913* (Basel: Rudolf Steiner Verlag, 2013), p. 70.
[190] Nicholas Campion, *History of Astrology, Volume II* (London: Bloomsbury Publishing Plc, 2009), p. 232.
[191] Gerhard Gutzmann, Das grosse Lexikon der Heilsteine, Düfte und Kräuter (Neu-Ulm: Methusalem Verlagsgesellschaft, 2008), p. 214-215.

and spirit representation is thinkable.[192] Added by Rosicrucian alchemical teachings, Steiner once explained, that the medieval Rosicrucian sought to be inspired by nature, for making himself alike the macrocosm, because to him anything that could be burnt was sulphur and this combustion process sparked him to sacrifice himself in service.[193] In the Rosicrucian teachings from 1785 it is written, that the hermetic seal uncovers, that in Mercury sulphur is found, which is capable of going beyond Mercury's original coldness and humidity through fire.[194] In other words, Mercury in the sky could be seen to lighten up the fire of the pyrites, also lightening up the foundation stone document which addressed the hierarchies, the nine and the one human beings should become (figure 21). The text of the foundation stone was written on calf skin as per Steiner's request and the text offers references to anthroposophical cosmology through drawing and text.



Translation:

J.N.: not clear, J. for in? N for North, because this part of the document points North.

On the geometric figure:
EDN: ex deo nascimur;
JM: usually this sentence is called: in christo morimur, but there are only two letters given. Suggested: in mori;
PSSR: per spiritum sanctum reviviscimus.
Left and right of the geometric figure: "Anthro" "pos"

The hierarchies on the endings of the curled lines are abbreviated from left to right and mirrored on the other end:
SCHT, WBF, PAAA and AAAP, FBW, TCHS
Seraphim, Cherubim, Throne and reverse
Spirits of wisdom (Weisheit), movement (Bewegung) and form (Form)
Archai, Archangeloi, Angeloi, there is an additional P written, which I suggest indicating the 10th hierarchy, the human being who has attained divine status: Spirit of personality (Geister der Persönlichkeit), in GA 233, p. 23.

Unreadable text:

Als Angelobeformel (invented word), verstehen wir uns recht, steht es auf diesem Stein, der als Eckstein ausdrückt den im Geist sich suchen wollenden, den in der Weltenseele sich fühlen wollenden, im Welten-Ich sich ahnenden Menschen. Diesen Stein versenken wir in der verdichteten Elemente Reich, als Sinnbild der Kraft, nach der wir uns zu streben bemühen durch 3, 5, 7, 12 gelegt vom Johannesbau-Verein Dornach am 20. Tag des September 1880 nach dem Mysterium von Golgatha, d.i. 1913 nach Christi Geburt, da Merkurius als Abendstern in der Waage stand.

Translation of unreadable text:

As a formula of engagement, we understand ourselves rightly, it is written on this stone, which as a cornerstone expresses the one who seeks himself in the spirit, the one who seeks to feels himself in the world-soul, who senses himself as a human being in the "Welten-Ich" (world I). This stone we embed in the compacted realm of the elements, as a symbol of power, of which we aspire to strive through 3, 5, 7, 12 laid by the 'Johannesbau' (former name of the Goetheanum) club on the 20th day in September1880 after the mystery of Golgatha, which is 1913 after Christ's birth, when Mercury as evening star stood in Libra.

Figure 21: Rudolf Steiner, notes for the foundation document, Archivmagazin Nr 2, p. 60., 2013.

[192] Plato, *Timaeus*, edited by John M. Cooper (Cambridge: Hackett Publishing Company, 1997), 55c.
[193] Rudolf Steiner, *Das esoterische Christentum und die geistige Führung der Menschheit, GA 130* (Dornach: Rudolf Steiner Verlag,1995) p. 74.
[194] Rosicrucian Brother, *Geheime Figuren der Rosenkreuzer aus dem 16. Und 17. Jahrhundert* (Freiburg: Hermann Bauer KG, 1988), p. 6.

The drawing contains a sketch of the dodecahedron in the centre accompanied by swirling lines, where top is oriented North as per Halfen.[195] The letters stem from the Rosicrucian saying "from God we are born", but it is not followed by "in Christ we die" instead it reads "JM" which it is suggested to read "in death" (in mori) and "through the holy ghost we resurrect". This interpretation is suggested because the calf skin could represent nature, the body, which would be burnt through the fire of the pyrite, leading to ash. So, as per the Rosicrucian teachings, instead of having a Phoenix die into itself, the calf skin could mean, that the body will die through an inner fire, because the foundation stone is the symbol of the human soul which is laid into the compacted realm of the elements as written in the text of the foundation stone (figure 21, translation of the unreadable text).[196] The swirling lines, the nine representative spirits of the hierarchies could indicate how these are weaving around the corner stone in order to bring forth a "philosopher's stone" or how Drury calls it, a life elixir, that in the process of alchemical transmutation - altering metals from impure to pure (Gold) - so that they become a life elixir for giving life to the 10th hierarchy, which according to Steiner is the evolutionary goal of human beings.[197] The foundation stone which was put into a pedestal was sanctified by Steiner through three, five and seven strokes on the small dodecahedron and 12 on the bigger one, as put forward in Halfen.[198] In summing up, it can be said, that Steiner sought to invoke and enact earth (calf skin) and sky (Mercury), calling on the hierarchies, laying a foundation stone into the earth and connecting it with the human beings souls, which he did ritually, symbolically and through speech for enabling the evolutionary progress of microcosm and macrocosm, so that the building which would be erected on top of the foundation stone could act as the seedling probably like an "axis mundi", according to Drury, the world tree connecting earth and sky.[199] On the other hand if symbols and rituals are taken into account, it could be argued, that Steiner designated the location of a sovereign sanctuary, in his role as a Master Mason by acting on syncretised masonic, rosicrucian and hermetic concepts pointing towards anthroposophic spiritual science and for putting the seed into the ground and fertilising it through knocking, so that the building can grow into a unique meeting and staging place, as a living entity, because Steiner said, that 'buildings will start to *speak*. They will speak a language, which today human beings have no presentiment of.'[200] Due to the destruction of the first Goetheanum by fire, Steiner reinvigorated the anthroposophic movement with yet another foundation stone, when on December 25th in 1923 he laid the foundation stone into the hearts of the members.[201] Steiner said, that he followed a vocation for bringing spirit onto earth, which is not to be seen as a service on earth, but that the anthroposophical movement in its entirety

[195] Roland Halfen, Dokumente, Erinnerungen, Ansprachen in David Marc Hoffmann (ed), *Zur Grundsteinlegung des Ersten Goetheanum am 20. September 1913* (Basel: Rudolf Steiner Verlag, 2013), p. 63.
[196] Rosicrucian Brother, *Geheime Figuren der Rosenkreuzer aus dem 16. Und 17. Jahrhundert* (Freiburg: Hermann Bauer KG, 1988), p. 6; Roland Halfen, Dokumente, Erinnerungen, Ansprachen in David Marc Hoffmann (ed), *Zur Grundsteinlegung des Ersten Goetheanum am 20. September 1913* (Basel: Rudolf Steiner Verlag, 2013), p. 86.
[197] Roland Halfen, Dokumente, Erinnerungen, Ansprachen in David Marc Hoffmann (ed), *Zur Grundsteinlegung des Ersten Goetheanum am 20. September 1913* (Basel: Rudolf Steiner Verlag, 2013), p. 60; Rudolf Steiner, *Die Weltgeschichte in anthroposophischer Beleuchtung, GA 233* (Dornach: Rudolf Steiner Verlag, 1991), p. 23.; Nevill Drury, *Lexikon Esoterischen Wissens* (München: Droemer Knaur, 1988), p. 564.
[198] Roland Halfen, Dokumente, Erinnerungen, Ansprachen in David Marc Hoffmann (ed), *Zur Grundsteinlegung des Ersten Goetheanum am 20. September 1913* (Basel: Rudolf Steiner Verlag, 2013), p. 87.
[199] Nevill Drury, *Lexikon Esoterischen Wissens* (München: Droemer Knaur, 1988), p. 64, 637.
[200] Rudolf Steiner, Wege zu einem neuen Baustil, GA 286 (Dornach: Rudolf Steiner Verlag, 1982), p. 72; 'Baulichkeiten werden zu sprechen beginnen. Eine Sprache werden sie *sprechen*, die heute die Menschen noch nicht einmal ahnen.', translated N. Montag-Keller.
[201] Rudolf Steiner, *Die Weihnachtstagung zur Begründung der Allgemeinen Anthroposophischen Gesellschaft 1923/24, GA 260* (Dornach: Rudolf Steiner Verlag, 1994), p. 60.

had to be seen in its particularity as a service to the gods, a divine service.[202] He stated, that anthroposophy sought to reinforce the epiphany of human beings' development on earth, which was to be expressed as 'yes, that is me as a human being, as a divine-volitional human being on earth, as a divine-volitional human being in the cosmos ("Weltenall").'[203] He stressed, that the highest principle was now to be written into the souls for the anthroposophic movement, that everything in it was spiritual-volitional and that it sought to liven up to what the 'signs of the time say to the hearts of human beings through luminous letters', which is 'the old word of the mysteries: "Know yourself"'.[204] He stressed, that the heart of the people needed to be the spiritual seed for all actions and that the centre of the newly founded "Allgemeine Anthroposophische Gesellschaft" was the to be newly built Goetheanum at Dornach.[205] In his speech he addressed the three constituents of human beings, in the head the "Nerven-Sinnen-System" (nerves and senses system) which deals with imagination and thinking, in the chest area the "Rhythmisches System" (breath and circulatory system) which deals with feelings and "Stoffwechsel-Gliedmassen-System" (metabolism-extremities system) which deals with will and connected these three constituents to what human beings shall do to 'actively grasp what needs to be done, for he takes on his duties, his tasks, for fulfilling the mission in the world.'[206] For the purpose of illustration how creatively Steiner used German, an extract of what he addressed throughout the foundation speech is given in figure 22. He started with trinity, added love and man, then because these act together they bring forth thought ("Menschheitsgedanken) (add love + man = thought; the third is born out of the other two), because man is able to think trinity (gave birth to the thought) and act upon it he will understand that he is free within the gods effectiveness ("Götterwirken") in the cosmos which brings forth the world-man ("Weltenmensch") (add trinity + gods effectiveness = world-man), then he starts over again, stating that there is a world-man an individual world man within mankind who acts for the future of the world (add world-man + individual within world-man = future of the world).[207] Not only did Steiner put forward his idea on "Dreigliederung" (trinity), but it is suggested, that his explanations can be deciphered as demonstrating how this process could work and that human beings are doing it every time they think and that this thinking shapes the future, and if an individual understands that thinking resembles a birth, where man and love fertilise each other symbolically for bringing forth a third component", then according to Steiner, "know yourself" will become renewed.[208] Especially if A.E. Waite in Bogdan, the Bible and the Rosicrucian teachings are taken into account, then

[202] Rudolf Steiner, *Die Weihnachtstagung zur Begründung der Allgemeinen Anthroposophischen Gesellschaft 1923/24, GA 260* (Dornach: Rudolf Steiner Verlag, 1994), p. 35.
[203] Rudolf Steiner, *Die Weihnachtstagung zur Begründung der Allgemeinen Anthroposophischen Gesellschaft 1923/24, GA 260* (Dornach: Rudolf Steiner Verlag, 1994), p. 35; 'Ja, das bin ich als Mensch, als gottgewollter Mensch auf Erden, als gottgewollter Mensch im Weltenall.', translated N. Montag-Keller.
[204] Rudolf Steiner, *Die Weihnachtstagung zur Begründung der Allgemeinen Anthroposophischen Gesellschaft 1923/24, GA 260* (Dornach: Rudolf Steiner Verlag, 1994), p. 36; '…was die Zeichen der Zeit mit leuchtenden Lettern zu den Herzen der Menschen sprechen.', translated N. Montag-Keller; '…das alte Mysterienwort: «Erkenne dich selbst.»', translated N. Montag-Keller.
[205] Rudolf Steiner, *Die Weihnachtstagung zur Begründung der Allgemeinen Anthroposophischen Gesellschaft 1923/24, GA 260* (Dornach: Rudolf Steiner Verlag, 1994), p. 41.
[206] Rudolf Steiner, *Allgemeine Menschenkunde als Grundlage der Pädagogik I, GA 293* (Dornach: Rudolf Steiner Verlag, 1992), p. 195, 196, 198; Rudolf Steiner, *Heilpädagogischer Kurs, GA 317* (Dornach: Rudolf Steiner Verlag, 1995), p. 76; Rudolf Steiner, Rudolf Steiner, *Die Weihnachtstagung zur Begründung der Allgemeinen Anthroposophischen Gesellschaft 1923/24, GA 260* (Dornach: Rudolf Steiner Verlag, 1994), p. 62.
[207] Rudolf Steiner, *Die Weihnachtstagung zur Begründung der Allgemeinen Anthroposophischen Gesellschaft 1923/24, GA 260* (Dornach: Rudolf Steiner Verlag, 1994), p. 63.
[208] Rudolf Steiner, *Die Weihnachtstagung zur Begründung der Allgemeinen Anthroposophischen Gesellschaft 1923/24, GA 260* (Dornach: Rudolf Steiner Verlag, 1994), p. 63.

Rosicrucian brothers are 'a "Company of Spiritual Brothers" that is set out to build a "Spiritual Palace, A House founded on the Rock, the Holy Place of a Holy Priesthood". Furthermore the "corner-stone" (foundation stone) of this building is Christ, while those who are integrated in the House are the Living Stones thereof.'[209]

Extract of the speech:	Translation of the extract:
Und er wird so die Dreiheit alles Seins – Weltenliebe, waltend in Menschenliebe; Weltenimagination, waltend geheimnisvoll untergründlich in Menschheitsgedanken – er wird diese Dreigliederung erfassen und sich erkennen als individuell freier Mensch im waltenden Götterwirken des Kosmos, als Weltenmensch, individueller Mensch im Weltenmenschen, wirkend als individueller Mensch im Weltenmenschen für die Weltenzukunft. Er wird aus den Zeichen der Gegenwart heraus erneuern das alte Wort: «Erkenne dich selbst»!	And man is to become the trinity of being – world-love, acting in man-love; world-imagination, acting occult and beyond the underground in mankind-thought – he will grasp this trinity and will recognise himself as an individual free man within the acting gods-effectiveness of cosmos, as a world-man, an individual (man) within mankind, acting as an individual (man) within mankind for the future of the world. He will renew out of the present times the old world: "Know yourself"!

Figure 22: Nicole Montag-Keller, extract of the foundation stone speech for the second Goetheanum held on 25th Dec 1923 in Dornach, GA 260, p. 63, Mar 2020.

In the Christmas speech, Steiner referred to the dodecahedron and asked the participants to visualise the "world" dodecahedron and the "man" dodecahedron, so that with the aid of the spirit from above, the "Christus-Kraft" (power of Christ) of the "Umkreis" (circumference) and the "Vater-Wirksamkeit" (father effectiveness) from the depths, and he also said, that the dodecahedron foundation stone was to be sent into the foundation of the souls, so that it became a strong sign of powerful grounds of the souls being and from which in the future, the effectiveness of the anthroposophic society would stand on this firm foundation stone.[210] Furthermore Steiner put forward, that the unique historical event which he referred to was the "Urweihenacht" (the first of any sanctifications) when the spirit moved into Jesus to bring forth Jesus Christ.[211] He finished off his speech, by saying that the participants should have heard the sound in their heart and that the anthroposophic movement would have been the light, which worked in the shining thoughts of light around the dodecahedron, the love stone. This stone should have been carried out into the world, where it should have shone and brought warmth for the progress of humanities souls, for the progress of the world.[212] For answering the research question how the current Goetheanum refers to anthroposophic cosmology it is important to know what wording and methodological approaches Steiner chose when he laid the foundation stone into the hearts of the anthroposophist, because for

[209] Henrik Bogdan, Freemasonry and Western Esotercisim in Henrik Bogdan and Jan A.M. Snoek (eds.), *Handbook of Freemasonry* (Leiden: Brill, 2014), p.289; Die Bibel, *1 Peter 2, 4-7* (Stuttgart: Deutsche Bibelgesellschaft, 1999), p. 251; Die Bibel, *Ephesians 2, 19-22* (Stuttgart: Deutsche Bibelgesellschaft, 1999), p. 222; Rosicrucian Brother, *Geheime Figuren der Rosenkreuzer aus dem 16. Und 17. Jahrhundert* (Freiburg: Hermann Bauer KG, 1988), p. 53.

[210] Rudolf Steiner, *Die Weihnachtstagung zur Begründung der Allgemeinen Anthroposophischen Gesellschaft 1923/24, GA 260* (Dornach: Rudolf Steiner Verlag, 1994), p. 64.

[211] Rudolf Steiner, *Die Weihnachtstagung zur Begründung der Allgemeinen Anthroposophischen Gesellschaft 1923/24, GA 260* (Dornach: Rudolf Steiner Verlag, 1994), p. 64; Rudolf Steiner, *Das Prinzip der spirituellen Ökonomie im Zusammenhang mit Wiederverkörperungsfragen, GA 109* (Dornach: Rudolf Steiner Verlag, 1979), p. 154.

[212] Rudolf Steiner, *Die Weihnachtstagung zur Begründung der Allgemeinen Anthroposophischen Gesellschaft 1923/24, GA 260* (Dornach: Rudolf Steiner Verlag, 1994), p. 69.

understanding how the anthroposophic architectural style has its roots in the 'extensive formation of a human lifestyle out of the spirit.'[213]

The second Goetheanum, Steiner said, was to become a more rectangular "Eckenbau" (building with corners) built out of concrete.[214] And he mentioned, that building needed to service anthroposophy, which meant, that it was not only a building with a stage and an audience hall for eurythmy (anthroposophic movement, where letters are danced) and the mystery dramas (anthroposophic play, written and conducted by Rudolf Steiner), but that it needed to house rooms for artistic and scientific work in addition to administrative rooms.[215] The stage was to be built in a semicircle added by adjacent storage rooms and for practicing eurythmy there had to be a practicing stage.[216] Steiner intended, that the roof should be compounded out of plotted areas ("Flächen"), which should become aesthetically attractive.[217] The building would become multifunctional for doing things simultaneously and this insight is taken from experience and has therefore undergone a development, as Steiner pointed out.[218] He distinctively argued, that "time" is a reality and that arguments and wording from 1919 were no longer appropriate and sounded as if one was retarded by centuries, therefore the new building had to adjust to more needs than servicing lectures and mystery dramas.[219] The forms, which could be extracted out of concrete should offer something new to the artistic observer, and that meant, that the old forms were then part of history, Steiner said on 31st Dec 1923.[220] And he went on to say, that it was a challenge to form concrete so that the human eye of the soul could follow artistically, but that it was necessary to form the part which rises out of it, to create something which is artistic, pictorial and three-dimensional for bringing concrete into its artistic revelation.[221] 'If the Goetheanum as a building out of concrete has to be built, it has to arise out of an original thought, and everything, which has been achieved so far in building out of concrete, is actually no foundation for the one that has to be built here' Steiner explicitly remarked.[222] He added, that the building should have been partially round and partially angular and said, that if someone looked at hit how the wall came down, then he wanted this person to experience the power of pressure.[223] The perception of this power which is evoked through the way the concrete is built, Steiner said, should have been also perceivable in the portals and for the window sills and he wanted to evoke the impression, that in the interior, spiritually, the observer was absorbed by the portal or how the window takes up the light, for giving it way to arrive in the interior.[224]And at the same time, Steiner intended, that the form is a protection, for 'the one who

[213] Rudolf Steiner, *Wege zu einem neuen Baustil, GA 286* (Dornach: Rudolf Steiner Verlag, 1982), p. 118; '…umfassende Gestaltung der menschlichen Lebensführung aus dem Geiste heraus sein.', translated N. Montag-Keller.
[214] Rudolf Steiner, *Wege zu einem neuen Baustil, GA 286* (Dornach: Rudolf Steiner Verlag, 1982), p. 113.
[215] Rudolf Steiner, *Wege zu einem neuen Baustil, GA 286* (Dornach: Rudolf Steiner Verlag, 1982), p. 113, 114.
[216] Rudolf Steiner, *Wege zu einem neuen Baustil, GA 286* (Dornach: Rudolf Steiner Verlag, 1982), p. 114.
[217] Rudolf Steiner, *Wege zu einem neuen Baustil, GA 286* (Dornach: Rudolf Steiner Verlag, 1982), p. 115.
[218] Rudolf Steiner, *Wege zu einem neuen Baustil, GA 286* (Dornach: Rudolf Steiner Verlag, 1982), p. 115.
[219] Rudolf Steiner, *Wege zu einem neuen Baustil, GA 286* (Dornach: Rudolf Steiner Verlag, 1982), p. 115.
[220] Rudolf Steiner, *Wege zu einem neuen Baustil, GA 286* (Dornach: Rudolf Steiner Verlag, 1982), p. 115, 116.
[221] Rudolf Steiner, *Wege zu einem neuen Baustil, GA 286* (Dornach: Rudolf Steiner Verlag, 1982), p. 116.
[222] Rudolf Steiner, *Wege zu einem neuen Baustil, GA 286* (Dornach: Rudolf Steiner Verlag, 1982), p. 116; 'Wenn das Goetheanum als Betonbau zustande kommen soll, so muss es aus einem ursprünglichen Gedanken hervorgehen, und alles, was im Betonbau bis jetzt geleistet worden ist, ist eigentlich keine Grundlage für dasjenige, was hier entstehen soll.', translated N. Montag-Keller.
[223] Rudolf Steiner, *Wege zu einem neuen Baustil, GA 286* (Dornach: Rudolf Steiner Verlag, 1982), p. 117.
[224] Rudolf Steiner, *Wege zu einem neuen Baustil, GA 286* (Dornach: Rudolf Steiner Verlag, 1982), p. 117.

seeks spirit in this Goetheanum.'[225] Steiner drew how he envisioned the new buildings main formal aspects, especially how a red pentagram (figure 23) should have grown out of the west front (yellow part to the back, blue part to the front) and that the columns (orange) to the left and right of the front should absorb the weight.[226]



Figure 23: Rudolf Steiner, drawings of how the forms for the second Goetheanum should be composed, GA 286, p. 121, 1924.

He explain detailed, that the pressure load would have been taken up from above, but on the other hand, that the columns will have grown, for that which comes from inside, which reveals from the interior, had to be absorbed and therefore had to carry the matching load. He wanted to have a harmony between loaded and supportive powers. Columns should have started in the ground floors similarly to roots, become a column in the middle floor and turn into a support of the roof.[227] Additionally he said, that he was convinced, that the formation of the hilltop landscape had a corresponding expression in the shaping of the Goetheanum.[228] Any area or line or angular shape should have revealed what was to be shaped and structured within, so that it imprints on the outer form and reveals itself through this, Steiner wrote in a local newspaper in November 1924.[229] In concluding it can be said, that Steiner indicated how the second Goetheanum should be built from concrete and how the interior influenced, the enactment of anthroposophy in eurythmy and plays, such as the mystery dramas, how this active engagement with anthroposophy should work on the outer form, a 'stretching of the space' as Steiner expressed it.[230] Due to Steiner's illness which started end of September 1924 and finished with his death in March 1925 he was not able to work on an interior model, nor was he able to guide the construction. The next paragraph introduces what was done with his legacy.

3.5 THE BUILDING

Figure 26 shows, how the Goetheanum looks from the South-West and figure 27 is an aerial view, also from the South-West. Dietrich Hagen reports, that the building shell, the pouring of the concrete, was done from 1925-1928 and works as well as re-works of the interior can be said to be

[225] Rudolf Steiner, *Wege zu einem neuen Baustil, GA 286* (Dornach: Rudolf Steiner Verlag, 1982), p. 117; '…der Geistiges in diesem Goetheanum sucht.', translated N. Montag-Keller.
[226] Rudolf Steiner, *Wege zu einem neuen Baustil, GA 286* (Dornach: Rudolf Steiner Verlag, 1982), p. 117.
[227] Rudolf Steiner, *Wege zu einem neuen Baustil, GA 286* (Dornach: Rudolf Steiner Verlag, 1982), p. 117.
[228] Rudolf Steiner, *Wege zu einem neuen Baustil, GA 286* (Dornach: Rudolf Steiner Verlag, 1982), p. 120.
[229] Rudolf Steiner, *Wege zu einem neuen Baustil, GA 286* (Dornach: Rudolf Steiner Verlag, 1982), p. 120.
[230] Rudolf Steiner, *Wege zu einem neuen Baustil, GA 286* (Dornach: Rudolf Steiner Verlag, 1982), p. 119.

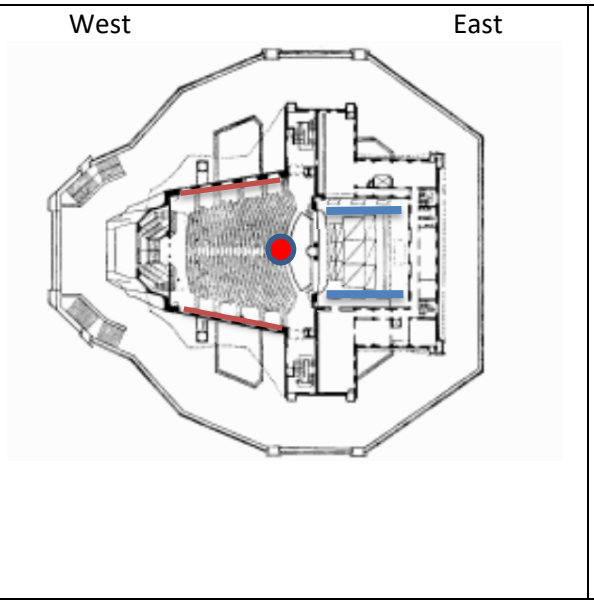
ongoing.[231] The great hall was first finished in 1956-1957 by Johannes Schöpfer and re-decorated form 1996-1998 under the direction of Christian Hitsch according to Hans Hasler and Jürg Buess.[232]





Figure 24: Philosophisch-Anthroposophischer Verlag am Goetheanum, Goetheanum seen from South-West, undated;
Figure 25: Taxiarchos (Wladyslaw), aerial view of the Goetheanum seen from South-West, 20 Aug 2012.

Figure 24 shows the floor plan of the great hall and the stage, in other words, the trapezoid area (red lines) is where the audience is seated, divided by a central axis from West to East towards the stage area (blue lines) which is found in the eastern part of the building, located in a quadratic area.[233] Figure 25 shows a photo taken towards the West inside the great hall in the Goetheanum, where in the top area the ceiling painting is partly visible, followed by an organ in the middle enframed by the western part of the architrave, below the organ the balustrade springs forth, under which the three wooden western doors are situated (the door to the left is open) and in the bottom there are the seating rows visible divided by the stairs of the central east-west axis. The picture was taken by the author in front of the stage, which is marked by a red dot in figure 24.



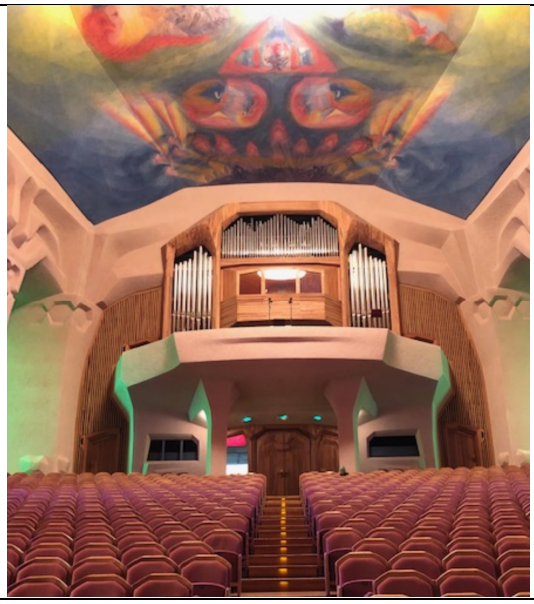


Figure 26: Dietrich Hagen, floor plan of the great hall (oriented to the West) and stage area (oriented to the East) of the Goetheanum, Der Goetheanumbau, p. 43, 1978;
Figure 27: Nicole Montag-Keller, photo taken to the West in the great hall, standing in Eastern part of the hall (depicted with a red dot in figure 24), 8th Oct 2019.

[231] Dietrich Hagen, *Der Goetheanumbau* (Dornach: Philosophisch-Anthroposophischer Verlag, 1978), p. 41.
[232] Hans Hasler, Jürg Buess, Der grosse Saal im Goetheanum 1996-1998 (Dornach: Administration des Goetheanum Baues, 1998), p. 7, 8.
[233] Dietrich Hagen, *Der Goetheanumbau* (Dornach: Philosophisch-Anthroposophischer Verlag, 1978), p. 43.

It needs to be stressed, that the formal style of the Goetheanum, the exterior was built as best as was possible after Steiner's model and the constructional drawings which he signed off. Everything else which is to be found in the Goetheanum as of today was built by his successors. For answering the research question, how the Goetheanum building refers to anthroposophic cosmology, the methodologies chosen are presented.

4 METHODOLOGY

4.1 INSIDER AND OUTSIDER ISSUE ADDRESSED

Three different methodological approaches were applied to research how the Goetheanum building refers to anthroposophical cosmology and it was a difficult choice of research question wording, because looking at the Goetheanum from an outsider point of view resulted in different answers than looking from an anthroposophic or insider point of view. In other words, as an outsider I focused on how the Goetheanum refers to anthroposophic cosmology whereas as an insider I treated the Goetheanum as a living entity, modelling and shaping the present, as was put forward in depth in the preceding literature review. This research has challenged me in various ways, due to my several life roles informing my identity such as being a member of the anthroposophic movement which deals with the culture around death and dying, and as a member of the esoteric school, which I decided to join. Nevertheless I consider myself to be an outsider as well for I grew up in a roman-catholic context in Germany some 300 km North of Dornach and I was 32 years old, when I saw the Goetheanum building for the first time because we moved into the valley from which it can be seen widely. My e-mail message to my supervisor exemplifies my insider-outsider perception, because on 22nd Nov 2019 I wrote, that 'I experience to be torn between kind of a dogma of anthroposophy and academic rigour, being a beginning insider to anthropsophy, though member of the esoteric school, because I simply did not read every line of Steiner and some things I read, I simply dismissed and cherry picked the concepts, ideas, thoughts which matched my world-view.'[234]

4.2 ARCHAEOASTRONOMICAL METHODOLOGY

In a first methodological approach, the building and its interconnectedness to the surrounding landscape and skyscape were researched for understanding how Rudolf Steiner possibly intended to take these into account. Fabio Silva defines skyscape as encompassing '…the heavens and celestial bodies and how they relate back down to human beliefs and practices, to their notions of time and place, to their structures and material remains.'[235] In order to find the orientation of the Goetheanum building, measurements of latitude, longitude and elevation were taken outside on the ground floor with a satellite-based GPS (Geo Positional System) Garmin eTrex 30x with precision of <10m. The measurement points are tabulated (table 1) and GPS elevation level was checked against elevations read off one ordnance map given in a scale 1: 25'000 confirming the accuracy of the GPS retrieved data.[236] For obtaining the orientation of the coloured windows (1 red, 2 green, 2 blue, 2 violet and 2 pink) along the more Northern and Southern oriented side of the building, GPS points were taken from outside on 2nd September standing beneath and as close as possible in the middle of

[234] Nicole Montag-Keller, e-mail message to Dr. Nicholas Campion at UWTSD, 22nd November 2019.
[235] Fabio Silva, The Role and Importance of the Sky in Archaeology: An Introduction in Fabio Silva and Nicholas Campion (eds) Skyscapes (Oxford: Oxbow Books, 2015), p. TH3.
[236] Landeskarte der Schweiz, *Arlesheim No 1067* (Wabern: Bundesamt für Landestopografie swisstopo, 2012).

the coloured windows which can be accessed from the terrace of the Goetheanum. The GPS positions beneath the green and pink windows could be taken easier than the blue and violet window positions because of an atrium, inhibiting to access the outer wall directly. In order to cross check reliability of the GPS positions taken from outside, GPS measurements from inside the great hall were taken on 8th October 2019 standing in front and beneath the coloured windows. These measurements were deemed to be unusable due to a recurring GPS error of weak signal receptivity which I started to call the "Chernobyl" error, because the ferroconcrete "sarcophagus" built around the remains of the accident at the Chernobyl Nuclear Power Plant is supposed to limit radioactive radiation, which is suggested to generate a similar effect with radio-waves receptivity inside the Goetheanum (the same accounts for smartphones and their receptivity). For cross checking the orientation of the windows, additional measurements of the magnetic azimuth were taken with a Suunto Tandem hand-bearing sighting compass (with precision to 1/3°) which was pointed towards the windows below the coloured ones, since there was no possibility to attain the actual height of the coloured windows from outside. To counter any criticism, it is deemed justified to extend any further research on the Goetheanum windows, since the first Goetheanum windows position are not in line with the second Goetheanum, probably by reconstructing the first Goetheanum in a 3D software for better understanding the exact locations of the coloured windows in the first Goetheanum and their possible relationship to nearby landscape reference points and the rising and setting of stars.

4.3 Interviews

Interviews with insiders to anthroposophy were chosen to be conducted as a second methodological approach. I focused on *Verstehen*, that is, I aimed to understand how and what the participants answered when prompted for their understanding of the Goetheanum space and its reference to anthroposophic cosmology. I sought to hear about their individual cosmologies expressed through personal insight, opinion, attitude, explanations and behaviour.[237] The questions asked looked into life stories and experiences which shaped and are shaping their attitudes towards the Goetheanum and because it is argued, that experience shapes and informs attitude, it was explored if and whether anthroposophic cosmology is to be found in the Goetheanum. Clustering the answers according to Edward Soja's Thirdspace concept, aided the analysis of the answers given. Firstspace looks to identify the concrete, the material and Secondspace identifies the human representations of how a space is imagined. Thirdspace resolves the either or dichotomy or any notion of a dualistic worldview because it 'attempts to capture what is actually a constantly shifting and changing milieu of ideas, events, appearances and meanings' for 'understanding the world is, in the most general sense, a simultaneously historical and social project.'[238]

4.4 Self-Ethnography

Finally for the third methodological approach I took the Goetheanum as a primary source and researched it by conducting phenomenological and reflexive research referring to Charlotte Aull Davies, that 'informed reflexivity is compatible with, indeed is essential for, both a realist ontology and a commitment to social scientific knowledge in the sense of knowledge that is based in, and can

[237] Monique Hennink, Inge Hutter, Ajay Bailey, *Qualitative Research* (Los Angeles: Sage, 2011), p. 17.
[238] Edward W. Soja, *Thirdspace* (Oxford: Blackwell Publishers Ltd, 2000), p. 2.

inform (..) about, a real social world and that is public and open critical analysis.[239] A notebook was used, the so called Goetheanum journal, as an auto ethnographic instrument. The research I undertook placed an emphasis on my observations and perceptions of what happened to my outer and inner worlds.[240]My journaling started on Thursday, 29th May 2019 and stopped on 30th December 2019. I wrote and drew into my Goetheanum journal and took photos with my iphone camera. As Charlotte Aull-Davies highlighted, the use of self-ethnography as a method is prone to two obstacles; one, that a space journal is 'self-indulgent and narcissistic, telling (…) about the ethnographer, not about social and cultural phenomena that are the proper subject matter of ethnography…' and, that the approach 'represents a particular Western literary genre, the Great man tradition, …used to describe individual achievements based on a linear and goal-oriented interpretation of what constitutes a meaningful life.'[241] Aull-Davies clearly highlighted, that an egocentric approach, where I would see my perception as superior to other people's perceptions would definitely misplaced. In resolving this issue, I needed to be conscious of my judgement when interpreting my and other person's behaviour, but I also needed to maintain my awareness of my self-centredness for being both, involved and detached towards this research as Powdermaker expressed in Aull-Davies.[242] The overall emphasis of my research is, like the interviews, based on *Verstehen*, that is, understanding my own and other people's perspectives, understanding, subjectivity, individuality, identity, world-view and cosmology, while I am in relationship with the Goetheanum and how I perceive it to relate to anthroposophic cosmology.[243]

The findings of the three methodological approaches and the discussion is now put forward.

5 Findings and Discussion

5.1 Results of the archaeoastronomical method

The Goetheanum is located at Dornach in the Birs valley approximately 20 km South-East of downtown Basel (figure 28).

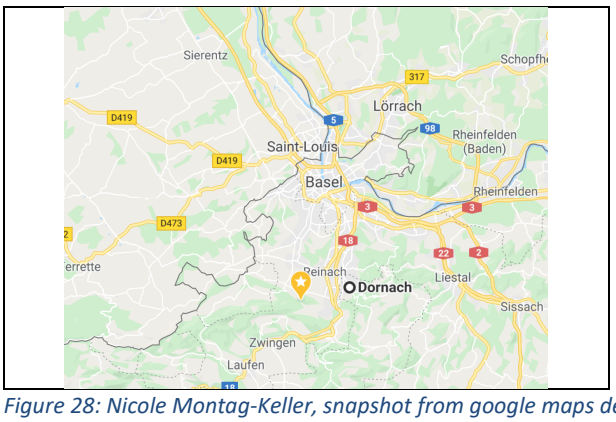


Figure 28: Nicole Montag-Keller, snapshot from google maps depicting Dornach, Switzerland close to neighbouring France and Germany, 2020.

[239] Charlotte Aull-Davies, *Reflexive Ethnography: A guide to researching selves and others* (London: Routledge, 1999), p. 178.
[240] Charlotte Aull-Davies, *Reflexive Ethnography: A guide to researching selves and others* (London: Routledge, 1999), p. 4-5; Sarah Pink, *Doing Visual Ethnography* (London: Sage, 2007), p.24.
[241] Charlotte Aull-Davies, p. 179.
[242] Charlotte Aull-Davies, p. 5.
[243] Monique Hennink, Inge Hutter, Ajay Bailey, *Qualitative Research* (Los Angeles: Sage, 2011), p. 17.

Table 1 shows the field measurements taken, added by calculated azimuth (Az), altitude (Alt) and declination (Dec) degrees. The compass measurements were taken as a rough approximation, and later discarded, due to the more precise positioning element rendered with a GPS (Geo Positional System) device, a Garmin eTrex 30 with precision of <10m. The GPS tracked Latitude and Longitude positions were cross checked and verified for reliability against in Google EarthPro version 7.3.2.5776. In table 1 the magnetic azimuth was calculated and added by true north azimuth, revealing that the data was off by +/- 2.36 degrees. Horizon altitude was calculated in order to obtain true north declination values by using Fabio Silva's skyscapeR app and an excel template in which a function of spherical trigonometry was used to calculate true north declination values.

As table 1 shows, the Az of 91.34, roughly abbreviated to 90°, states, that the Goetheanum is indeed oriented to the cardinal East-West points. This interconnectedness of the building with the skyscape is in line with what Assja Turgenieff in Halfen reported, that the East-West orientation for the foundation stone were determined with lines on the ground and that Steiner had looked out for the North Star.[244] The southern and northern directions for the four windows to the South and North differ slightly due to the trapezoid shape of the great hall (figure 26). All four Declination values (-38) of the South and North oriented windows are beyond the solar arc and no stars could be identified, because the values are beyond horizon visibility.

	from			to			Compass			Calculated		
survey date	Name	Lat Deg	Lon Deg	Name	Lat Deg	Lon Deg	Mag Az	Mag Dec	Az	Az	Alt	Dec
02.09.2019	green N	47.48631	7.62019	green S	47.48593	7.6201	200.0	2.36	202.4	**187.44**	3.37	-38.73
02.09.2019	blue N	47.48634	7.62019	blue S	47.48584	7.6202	188.0	2.36	190.4	**181.59**	3.79	-38.70
02.09.2019	violett N	47.48631	7.62027	violett S	47.48582	7.6203	195.0	2.36	197.4	**179.20**	4.15	-38.36
02.09.2019	pink N	47.48625	7.62036	pink S	47.48586	7.6204	192.0	2.36	194.4	**179.38**	4.2	-38.31
02.09.2019	West	47.48605	7.61997	East	47.48606	7.6208	80.0	2.36	82.4	**91.34**	9.77	6.29

Table 1:Nicole Montag-Keller, table of field measurement added by calculated azimuth, altitude and declination degrees, 2020.

As can be seen in the horizon snapshots from heywhatsthat homepage, where figures 29, 30, 31 and 32, show the green, blue, violet and pink windows facing North and South respectively, the landscape markers research delivered no significant results. The hilltop range which can be seen to the South is called the "Blauen" and to the North there is the "Birs" (river) valley which meanders towards the Rhine (river) valley around Basel, Switzerland.

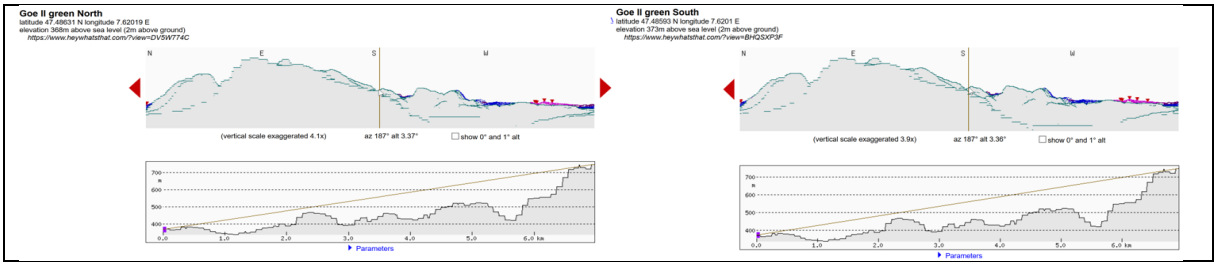


Figure 29: Nicole Montag-Keller, snapshot from heywhatsthat 360° vista seen from the GREEN North and South windows as calculated Az 187.44, Alt 3.37 (table 1), 2020.

[244] Roland Halfen, Dokumente, Erinnerungen, Ansprachen in David Marc Hoffmann (ed), *Zur Grundsteinlegung des Ersten Goetheanum am 20. September 1913* (Basel: Rudolf Steiner Verlag, 2013), p. 83, 23.

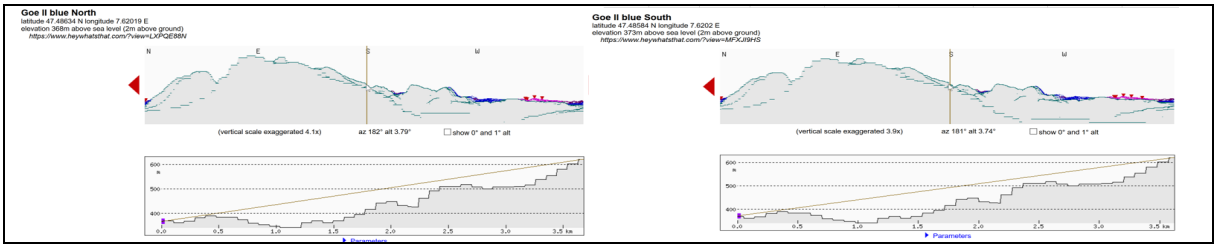


Figure 30: Nicole Montag-Keller, snapshot from heywhatsthat 360° vista seen from the BLUE North and South windows as calculated Az 181.59, Alt 3.79 (table 1), 2020.

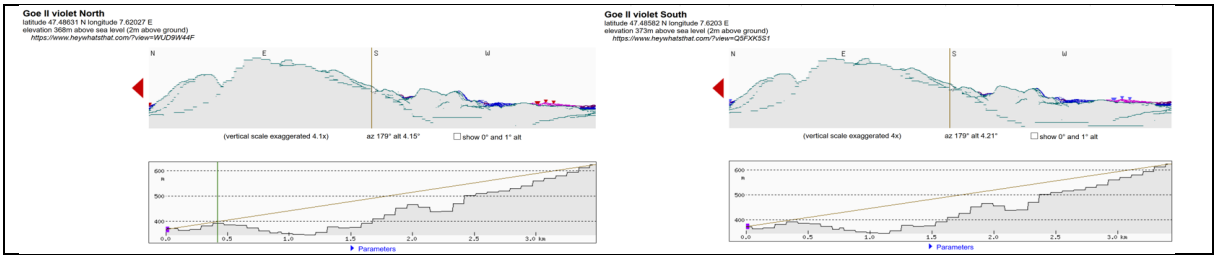


Figure 31: Nicole Montag-Keller, snapshot from heywhatsthat 360° vista seen from the VIOLET North and South windows as calculated Az 179.20, Alt 4.15 (table 1), 2020.

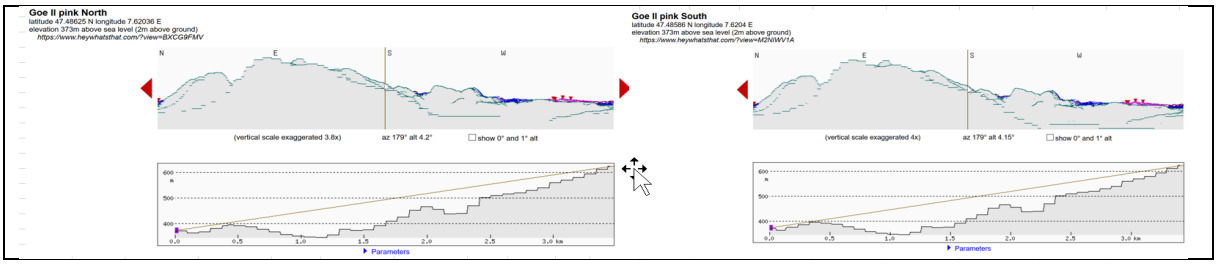


Figure 32: Nicole Montag-Keller, snapshot from heywhatsthat 360° vista seen from the PINK North and South windows as calculated Az 179.38, Alt 4.2 (table 1), 2020.

However, a closer look at the East-West orientation, where the sun's rising and setting points can be observed for describing the pathway from spring equinox towards the summer solstice and back to the autumn equinox towards the winter solstice identified the Gempen hilltop ridge being the significant landscape marker (figure 33, 34).

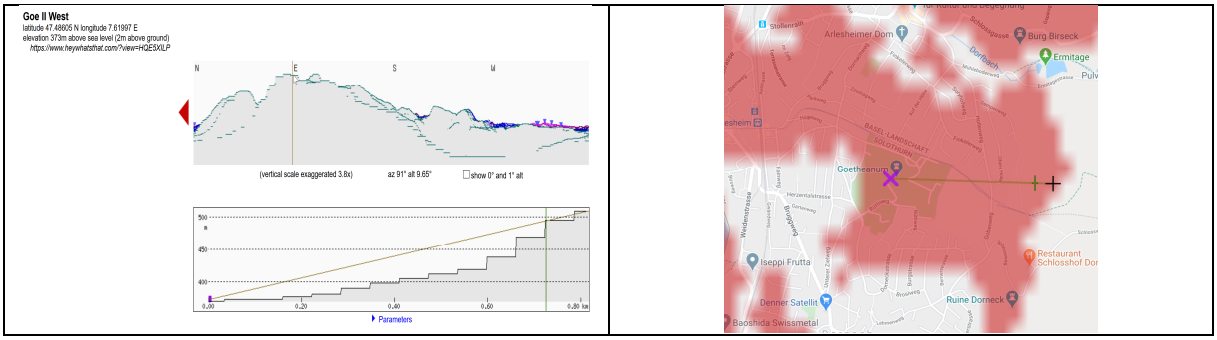


Figure 33: Nicole Montag-Keller, snapshot from heywhatsthat 360° vista seen from the PINK North and South windows as calculated Az 91.34, Alt 9.77 (table 1), 2020;
Figure 34: Nicole Montag-Keller, snapshot from heywhatsthat 360°vista pointing towards Gempen as calculated Az 91.34, Alt 9.77 (table 1), 2020.

Checking against Fabio Silva's skyscapeR v0.4b app of horizon visualisation, resulted in figure 37 , which shows the pathways of the sun rising and setting from summer solstice to equinox to winter solstice (figure 37). The rising and setting points were read off the figure 37 visualisation and tabulated in table 2 for identifying the landscape horizon markers in heywhatsthat.

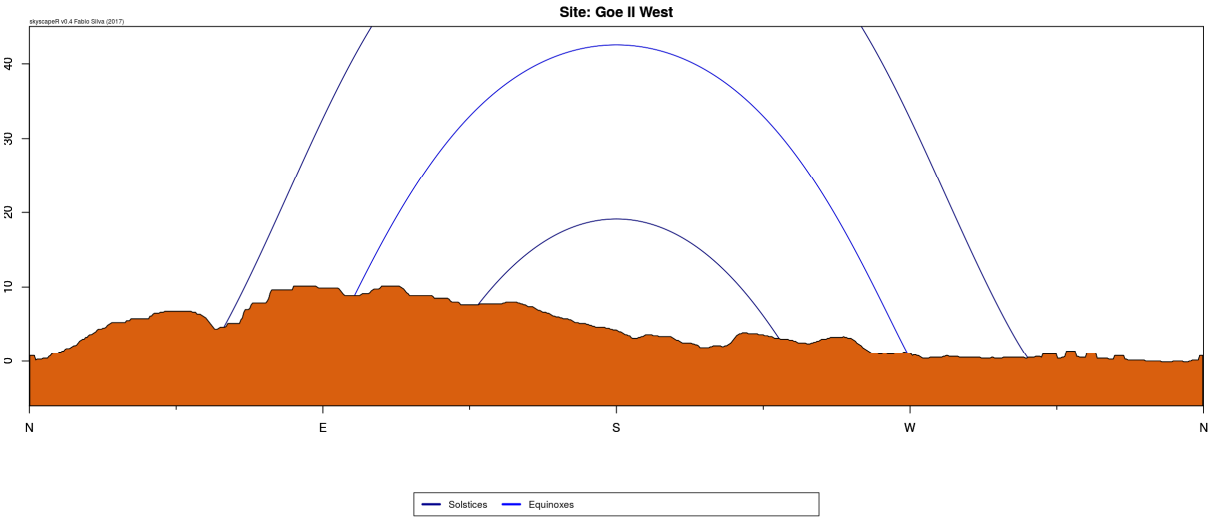


Figure 35: Nicole Montag Keller, graphical representation of sun set data on summer and winter solstice and equinoxes provided by Fabio Silva's archaeoastronomy app, https://archaeofsilva.shinyapps.io/skyscapeR-legacy/, 2020.

	Sun rise Summer Solstice	Sun set Summer Solstice	Sun rise Winter Solstice	Sun set Winter Solstice	Sun rise Equinox	Sun set Equinox
Az	59.97	305.54	137.94	230.33	100.55	270.01
Horizon Alt	4.63	0.35	7.7	3.0	8.88	1.11

Table 2: Nicole Montag-Keller, table of sun rise and sun set data on summer and winter solstice and equinoxes provided by Fabio Silva's archaeoastronomy app, https://archaeofsilva.shinyapps.io/skyscapeR-legacy/, 2020.

Figure 35 shows, that the summer solstice sun rising point is in the "Ermitage" (figure 37) valley indentation, this is in line with what I observed on 24th June 2019 (figure 38).

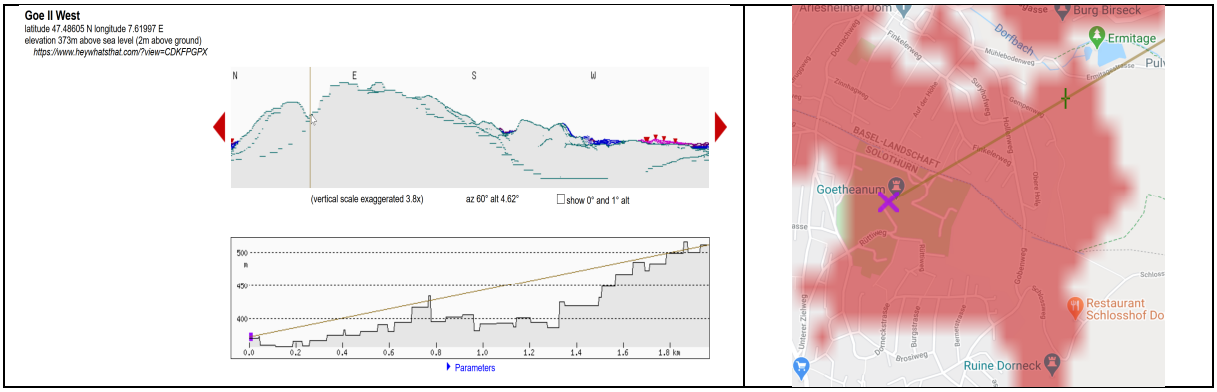


Figure 36: Nicole Montag-Keller, snapshot from heywhatsthat 360°vista seen from the West as per table 2 Az 59.97, Alt 4.63, 2020;
Figure 37: Nicole Montag-Keller, snapshot from heywhatsthat 360° vista indicating summer solstice sun rising point on the map, 2020.

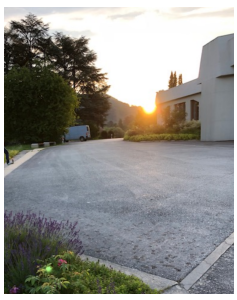


Figure 38: Nicole Montag-Keller, sunrise over the Ermitage valley observed from a North-West position on 24th June 2019, 2019.

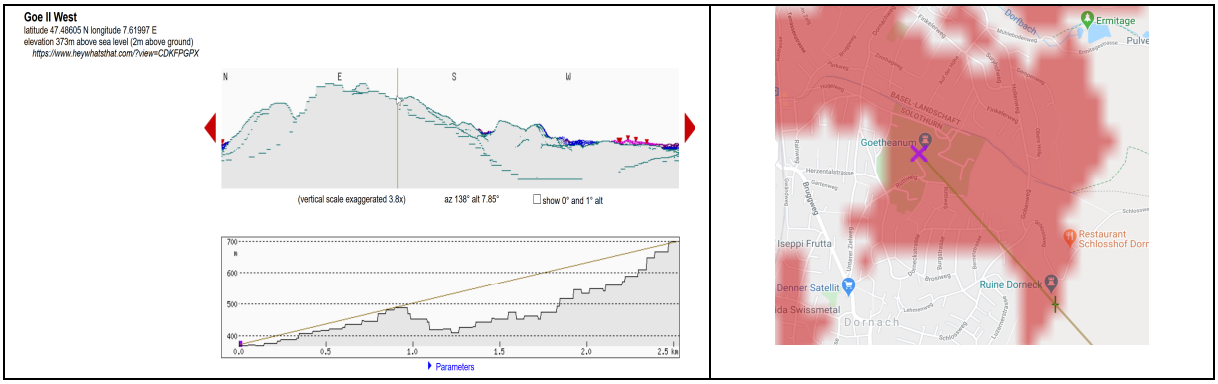


Figure 39: Nicole Montag-Keller, snapshot from heywhatsthat 360° vista seen from West as per table 2 Az 137.94, Alt 7.7, 2020;
Figure 40: Nicole Montag-Keller, snapshot from heywhatsthat 360° vista indicating winter solstice sun rising point on the map, 2020.

Figure 39 shows, that the summer solstice sun rising point is over the hilltop where the "Ruine Dorneck" (a castle ruin) a hilltop exaltation can be found. This finding is in line with what I observed on 31st Dec 2019, the first sun rise day after three weeks of clouded morning sky (the clouds lifted in the afternoon throughout December 2019).



Figure 41: Nicole Montag-Keller, sunrise over the Burgruine Dorneck observed from a South-West position on 31st December 2019, 2019.

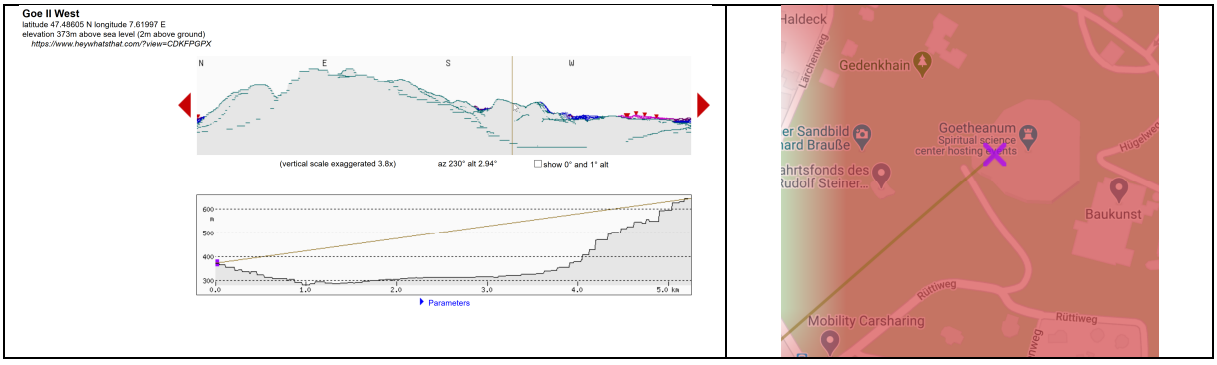


Figure 42: Nicole Montag-Keller, snapshot from heywhatsthat 360° vista seen from West as per table 2 Az 230.33, Alt 3.0, 2020;
Figure 43: Nicole Montag-Keller, snapshot from heywhatsthat 360°vista indicating winter solstice sun setting position on the map, 2020.

Figure 42 shows, that the winter solstice sun setting point is to be found over the "Blauen" hillside ridge, which at first did not seem to have an eye-catching landscape marker such as the "Ermitage valley" or the "Ruine Dorneck". But on closer inspection, the "Felsli" ('little rock' in Swiss German) (figure 45) was identified as a landscape element designed by Rudolf Steiner for the landscape garden around the first Goetheanum and the stone settings in figure 46, looking like an arrow (see also map drawing of figure 47) intriguingly seem to point towards the sun setting point on the "Blauen" hillside ridge.



Figure 44: Nicole Montag-Keller, sun set over the Blauen hillside ridge observed from a West position of the Goetheanum terrace on 19th December 2019, 2019;
Figure 45: Nicole Montag-Keller, sun set over the Blauen hillside ridge observed from a West position of the Goetheanum terrace on 18th December 2019, beneath the area called "Felsli" with three lines of stone markings the earth, 2019.

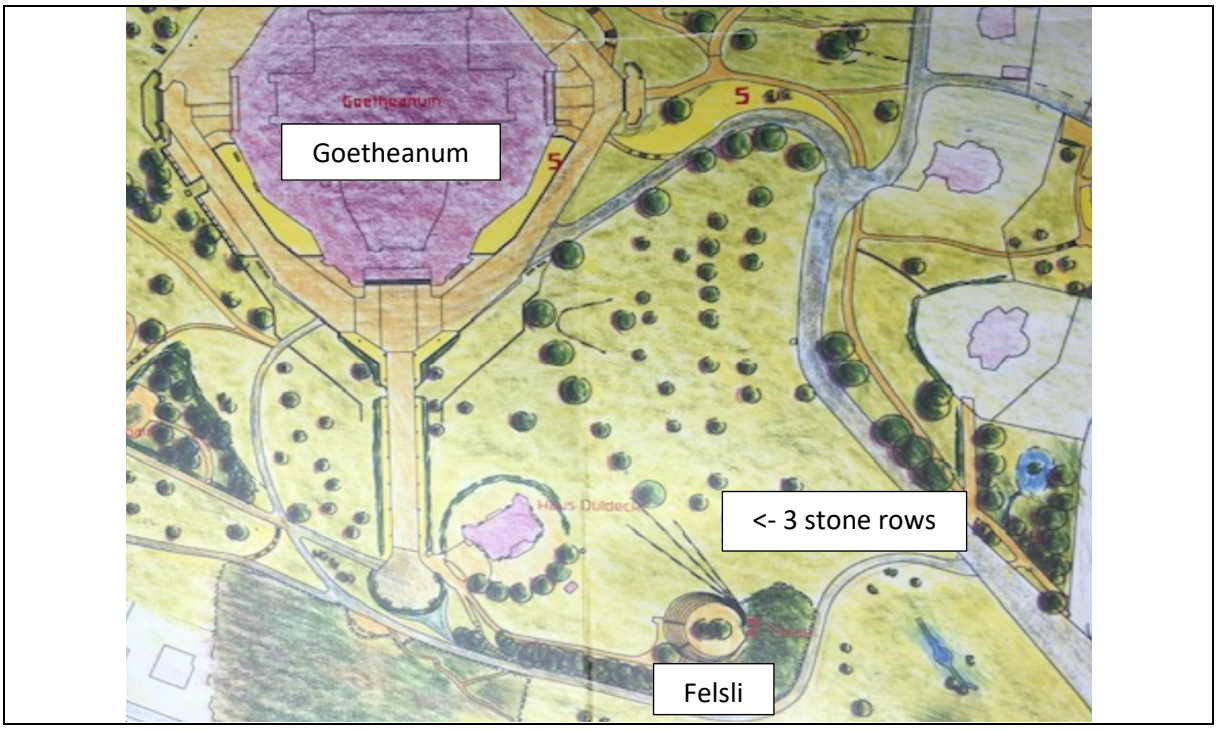


Figure 46: Nicole Montag-Keller, snapshot of the Goetheanum "Gartenpark" (landscape garden) map, depicting the Goetheanum (top left) and the "Felsli" round shaped structure with three stone rows directed to the Goetheanum, map provided by the landscape gardeners "Gärtnerei" am Goetheanum", undated, 2020.

It is therefore suggested, that the "Felsli" (figure 47) is the landscape marker for Winter solstice sun setting, because Steiner explained, that the seasonal rhythm can be regarded as a breathing process of powers of the earth (the earth brings forth plants in spring), breathing out and pulls them back in autumn (plants wilt), breathing in and in the end of December, the earth holds the spiritual completely in itself.[245] This inner holding of the breath, is the time when Jesus is born, because the Earth in full possession of its soul power. And because Jesus is born around this time, he is born out of the earth power, which is carried within the earth spiritual realm. Steiner goes on to explain that

[245] Rudolf Steiner, *Der Jahreskreislauf als Atmungsvorgang der Erde und die vier grossen Festeszeiten, GA 223* (Dornach: Rudolf Steiner Verlag, 1990), p 12.

the old initiates (alte Eingeweihte) changed from observing the moon and stars to a sun observation and he remarked, that 'towards the sun everything has to be related.'[246] In Christianity, Jesus's birth is usually connotated with the rising sun of winter solstice, due to the Gospel of Matthew, where it is claimed, that '"wise men" or magi came from the east to worship the new-born Jesus' according to William Burns.[247] It is suggested to interpret the sun rising over "Ruine Dorneck" signifying historic Christian faith and that the significance of West, the setting sun could offer insight into what Steiner taught about the happenings throughout nightly sleep. Steiner argues, that throughout night's sleep, the usual day-time consciousness of a spiritually developed human being consisting of four body parts (see figure 7), split into two parts, the physical and etheric body form as one part and astral body and "Ich" as the other one.[248] Because these two parts are under the influence of ahrimanic and luciferic powers it becomes necessary to obtain consciousness also throughout sleep, which can be attained through spiritual training, as put forward in Steiner.[249] Sleep, Steiner explained, is the effigy of what happens between a human being has died and a new birth.[250] In other words, a human being on a spiritual pathway of training ("geistiger Schulungsweg") learns how to maintain consciousness throughout sleep and this capability could lead on to what Steiner put forth in his poem for winter solstice (figure 44), that a human being should 'build up a sun' within himself for becoming able to navigate fully conscious through sleep but also through the stage between death and a new birth.[251] It is therefore suggested, that the "Felsli" is the location and visual marker of Steiner's winter solstice poem, where a human being on a spiritual pathway could decipher on what to be doing after the sun has set.[252]

Wintersonnenwende	Winter Solstice
Die Sonne schaue	See the Sun
Um mitternächtige Stunde	At the time of midnight
Mit Steinen baue	Build with stones
Im leblosen Grunde	In the lifeless ground
So finde im Niedergang	So that you find in the decline
Und in des Todes Nacht	As well as in the night when death arrives
Der Schöpfung neuen Anfang	A creation a new beginning
Des Morgens junge Macht	The power of a young morning
Die Höhen lass offenbaren	Let the heights disclose
Der Götter ewiges Wort	The eternal words of the gods
Die Tiefen sollen bewahren	The depths shall preserve
Den friedvollen Hort	The peaceful hoard
Im Dunkel lebend	Living within the dark
Erschaffe eine Sonne	Build up a Sun
Im Stoffe webend	Weaving within cloth (substance)
Erkenne Geistes Wonne. –	Recognise spirit's delight. –

[246] Rudolf Steiner, *Der Jahreskreislauf als Atmungsvorgang der Erde und die vier grossen Festeszeiten, GA 223* (Dornach: Rudolf Steiner Verlag, 1990), p 12; 'Auf die Sonne muss alles bezogen werden.', translated N. Montag-Keller.
[247] William E. Burns, *Astrology through History* (Santa Barbara: ABC-CLIO LLC, 2018), p.54; Die Bibel, *Mt 2, 2* (Stuttgart: Deutsche Bibelgesellschaft, 1999), p. 4.
[248] Rudolf Steiner, *Das Leben zwischen dem Tode und der neuen Geburt im Verhältnis zu den kosmischen Tatsachen, GA 141* (Dornach: Rudolf Steiner Verlag, 1997), p. 79.
[249] Rudolf Steiner, *Ursprungsimpulse der Geisteswissenschaft, GA 96* (Dornach: 1989), p. 258.
[250] Rudolf Steiner, *Geistige Zusammenhänge in der Gestaltung des menschlichen Organismus, GA 218* (Dornach: Rudolf Steiner Verlag, 1992), p. 108.
[251] Rudolf Steiner, *Wahrspruchworte, GA 40* (Dornach: Rudolf Steiner Verlag, 2011), p. 96.
[252] Rudolf Steiner, *Wahrspruchworte, GA 40* (Dornach: Rudolf Steiner Verlag, 2011), p. 96.

Rudolf Steiner, 17. Dezember 1906	Rudolf Steiner, 17th December 1906

Figure 47: Nicole Montag-Keller, Rudolf Steiner's poem «Wintersonnenwende» (winter solstice), GA 40, p. 96, 2020.

Finally the sun setting on summer solstice was researched, where figure 48 shows, that the sun sets on the other side of the Birs valley, which does not reveal a distinctive landmark such as the Ermitage valley or the Ruine Dorneck.

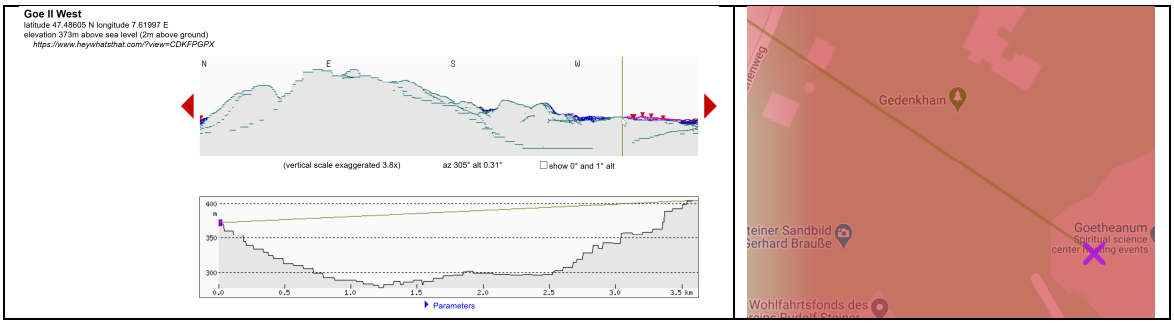


Figure 48: Nicole Montag-Keller, snapshot from heywhatsthat 360° vista seen from West as per table 2 Az 305.54, Alt 0.35, 2020.

However on closer inspection yet another onsite location, the "Gedenkhain" (where the ashes of Rudolf Steiner and numerous other anthroposophic dead men and women are buried) was identified. This place was erected after Rudolf Steiner's death and is therefore not part of the original landscape garden. However, if the Felsli is leading the way towards the sun beyond death, then it could be argued, that the place where the ashes of dead anthroposophic people are buried could be interpreted as a reminder to their afterlife journey when they approach "Weltenmitternachtsstunde" (the world's midnight sun hour for the soul), the highest and culmination point through the spheres after death.[253] It is thinkable, that the people who decided where to locate the Gedenkhain (memorial grove) had the image of the "Weltenmitternacht" in mind, because according to Steiner, there is spiritual darkness at this point, but this is needed, so that the soul is inclined to carry on its pathway down to earth. [254]

Lastly it is reported that the spring and autumn equinoxes (figure 33, 34) rise and set along the east-west axis of the Goetheanum building. As can be seen from figure 49, the East façade of the Goetheanum embodies some 28 windows and one door in the cubicle like structure above the ground floor, where three cars can be seen parking. Since Rudolf Steiner did not give any details on how the façade should be designed, no interpretation for the arrangement of the openings on what I call the back side (stage and storage area) of the Goetheanum is given. It is however suggested, that the east side of the Goetheanum is a profane and everyday place and space, since there are numerous car parking possibilities adjacent to the building busily used. Sunrays on spring and autumn equinox falling on the windows either on sun rise or sun set, reflect the sunlight, such was observed on 21st September 2019 (figure 50).

[253] Rudolf Steiner, *Die Geheimnisse der Schwelle, GA 147* (Dornach: Rudolf Steiner Verlag, 1997), p. 19.
[254] Rudolf Steiner, *Inneres Wesen des Menschen und Leben zwischen Tod und neuer Geburt, GA 153* (Dornach: Rudolf Steiner Verlag, 1997), p. 163.

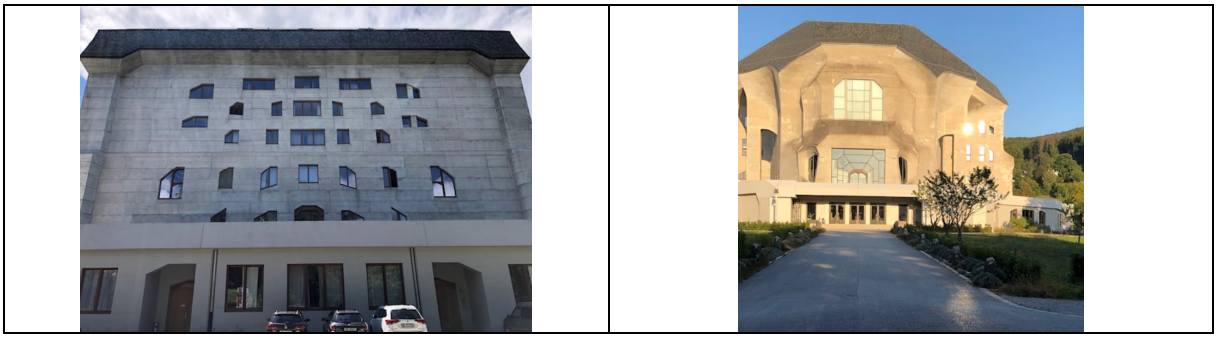


Figure 49: Nicole Montag-Keller, photo of the East façade of the Goetheanum, 2019;
Figure 50: Nicole Montag-Keller, photo of the West façade of the Goetheanum taken on 21st September 2019, 18:30 h where the reflection of sunlight on a window to the right can be seen on the street (front right), 2019.

The west façade of the Goetheanum, which I call front side can be described to consist of four parts (figure 50 and 51), the ground floor with three double entrance doors, then above the ground floor the door and window element which I will call the "main window element" henceforth, is the location where the sunlight can freely float into the Goetheanum, then the silver-white looking window (blind glass from the outside, red window glass from the inside) above and finally the roof elements.



Figure 51: Nicole Montag-Keller, photo of the west façade of the Goetheanum on 21st September 2019, 17:44 h, 2019.

The sun set on the autumn equinox was observed on 28th September 2019 (figure 52) from the interior of the "main window element" which is a spacious area from which the stairs to both sides of the window spiral up and down. The sunset time around the equinox date exhibited a structure usually not fully lit by the sun setting. It remains open, whether the structure called "das Antlitz Michael" (the visage of Michael) was hung there on purpose, because no written record about this structure was found by me so far. The saint's day is on 29th September according to catholic, protestant and Anglican Christian tradition, which seems to indicate that sculpture hangs there purposefully.[255] Furthermore archangel Michael plays an important role in anthroposophic cosmology. According to Steiner, the reign of archangel Michael, a Sun regency, began in November 1879 and will last till 2300 CE.[256] Steiner also reported, that throughout the Michael reign, some people are prepared who are destined to 'shine the torch of spiritual insight' in the subsequent reign of Oriphiel, a Saturn regency, which is to be a gloomy era.[257] And Steiner reassured, that the era of

[255] St. Michael, archangel, https://www.heiligenlexikon.de/BiographienM/Michael.htm (accessed 12 Feb 2020).
[256] Rudolf Steiner, *Anweisungen für eine esoterische Schulung, GA 245* (Dornach: Rudolf Steiner Verlag, 1993), p. 107.
[257] Rudolf Steiner, Rudolf Steiner, *Anweisungen für eine esoterische Schulung, GA 245* (Dornach: Rudolf Steiner Verlag, 1993), p. 107; ' …die Fackel der Erkenntnis leuchten… .', translated N. Montag-Keller.

Michael brought forth the possibility of spiritual deepening, which had to become an asset ("das Gut", literally good) to all of humanity.[258] Elisabeth Vreede (1879-1943) commented on Steiner's work, that re-adjusting the regency of the archangels published by Johannes Trithemius (1462-1516) '... is not a contradiction, but a historic approach on one hand and a mere rhythmic approach on the other.'[259]

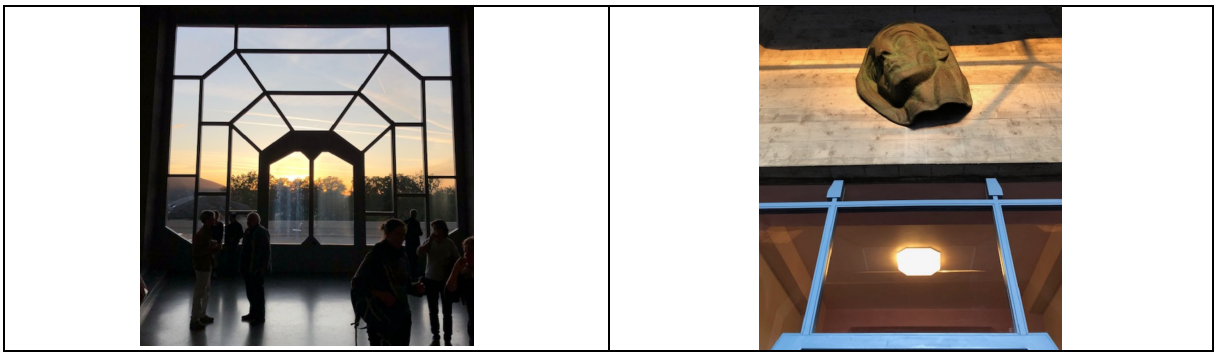


Figure 52: Nicole Montag-Keller, photo of the sun setting on 28th September 2019 seen from within the cobweb shaped window of the Goetheanum, 2019;
Figure 53: Nicole Montag-Keller, photo of the sculptural head which is fully illuminated when the sun sets on 28th September 2019, 2019.

Further up on the highest floor of the west inside the Goetheanum, the red window (figure 54) is located above any observer's position and quite literally, every observer has to look up to this structure, if one wanted to have a closer look. This window is called "Schwelle" (threshold), a motif recreated for the second building, because Steiner did leave any information about the windows behind.[260] This window will be examined in more depth in the course of my Goetheanum journaling reflections in subsequent paragraphs.



Figure 54: Nicole Montag-Keller, photo of the red window lit by sunshine on 21st September 2019, 17:48 h, 2019.

In summarising the findings of the archaeoastronomical research on how the Goetheanum relates to anthroposophical cosmology it is suggested, that Steiner purposefully intended to orient the first and therefore also the second Goetheanum along the cardinal east-west axis for erecting a structure, that informs and possibly teaches the observer about the sun's pathway throughout a year. It is suggested, that the landscape markers were chosen purposefully by Steiner, an indentation

[258] Rudolf Steiner, *Vorstufen zum Mysterium von Golgatha, GA 152* (Dornach: Rudolf Steiner Verlag, 1990), p. 60.
[259] Elisabeth Vreede, *Anthroposophie und Astronomie* (Freiburg: Novalis Verlag, 1954), p. 29-30; 'Nicht um einen Widerspruch handelt es sich hier, sondern um wirklich historisches Vorgehen auf der einen Seite, um ein bloss rhythmisches Betrachten auf der anderen.', translated N. Montag-Keller; Johannes Trithemius, *Seven Secondary Causes*, http://www.esotericarchives.com/tritheim/tritem.htm (accessed 13 Feb 2020).
[260] Rudolf Steiner, *Rudolf Steiners Entwürfe für die Glasfenster des Goetheanum* (Dornach: Rudolf Steiner Nachlassverwaltung, 1961), p. 27, 28.

(Ermitage valley) for summer solstice and a hilltop (Ruine Dorneck) for winter solstice, in other words, the greatest contrast between earth and sky is touched upon: sun rise at summer solstice is the highest point of the sun in a year, marked by and indentation on earth which stands in contrast to sun rise at winter solstice, the lowest point of the sun in the year, marked by a hilltop. For the western orientation Steiner chose to refer to anthroposophy itself, anthroposophy as a pathway to the spirit, which could be literally understood upon the sun set at winter solstice, if a spiritual seeker is able to create its own sun inside of him, he will be equipped for the soul's journey from death to a new birth. The possible turning point of the soul's "Weltenmitternacht" was suggested to be inscribed in the sun set marking point of the "Gedenkhain", possibly the deceased anthroposophists (follower of anthroposophy) will be guided back to earth when the sun sets on summer solstice. It is suggested that future research should also look into the pathway of the moon as well as the change of the star constellations throughout a year.

5.2 RESULTS OF THE INTERVIEWS CONDUCTED

After having obtained permission to conduct research I conducted interviews with 15 people from my personal network. Participants were provided with

The participants signed the participants informed consent sheet, then the questions were asked and recorded with a Dictaphone. the and I asked Figure 55 shows, that nine were female and six male and that the age range of my participants span from 26 to 85 years of age.

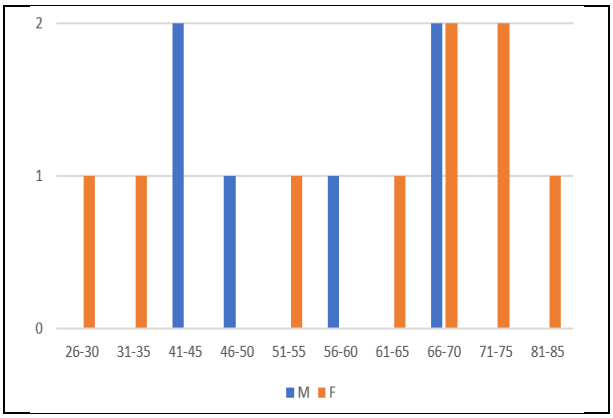


Figure 55: Nicole Montag-Keller, participants age and gender distribution, 2020.

Figure 56 exhibits, that 80% of the participants answered they were religiously oriented towards Christianity, comprising, Christian, Catholic, Protestant and Christengemeinschaft (the religious orientation of anthropsophy; anthroposophy is a world view not a religion). Two participants expressed to be religiously oriented as Buddhists, one as a Jew and one person expressed no interest in religious orientation. Figure 57 shows, that there 30 % of the participants stated, they had no interest in other religious orientation, in comparison to the 70% who named an eclectic mix of other religious orientations, such as Hinduism, Animism, Shintoism, Shamanism and nature religion. It was interesting to hear, that one person is interested in the "Christian in all religions".

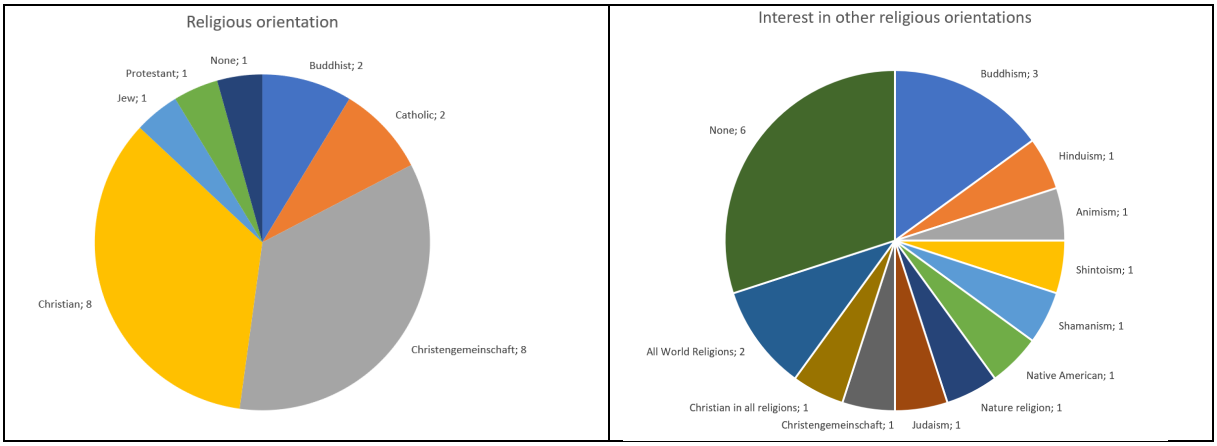


Figure 56: Nicole Montag-Keller, distribution of religious orientation, 2020;
Figure 57: Nicole Montag-Keller, distribution of interest in other religious orientations, 2020.

Figure 58 shows, that six participants grew up in an anthroposophic family, seven participants encountered anthroposophy in their twenties and one person in the forties. Figure 59 shows, that 80% of the participants encountered anthroposophy before 1990, an era before the great hall was remodelled.

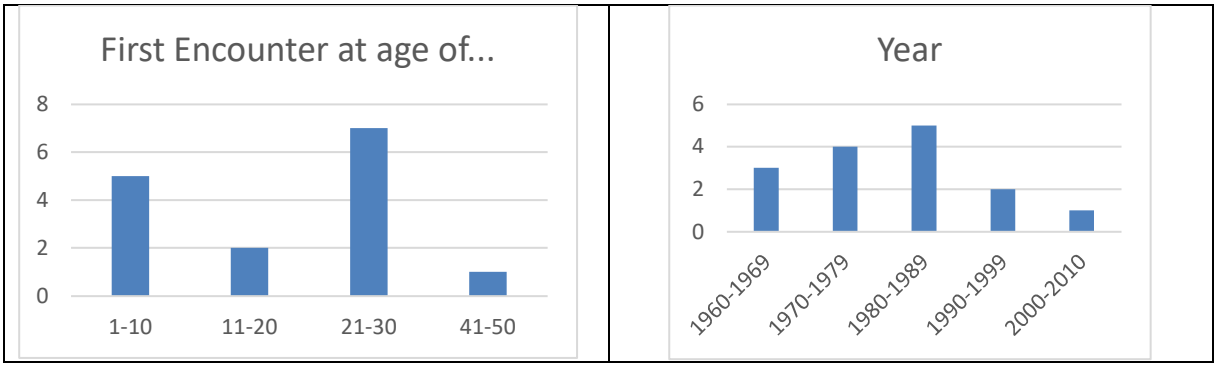


Figure 58: Nicole Montag-Keller, participants age when they first encountered anthroposophy, 2020;
Figure 59: Nicole Montag-Keller, decade indicated when first encountered anthroposophy, 2020.

Figure 60 shows, that 80% of the participants name themselves as strongly oriented towards anthropsophy, though one person remarked, that anthroposophy was perceived as a lifelong striving and could never be attained, five participants said, that anthroposophy was a “Schulungsweg zur Selbsterkenntnis” (spiritual pathway for attaining self-knowledge), two answered, that anthroposophy increases and deepens thinking skills and one participant stated, that it was deemed the only spiritual pathway from the whole range of esoteric and new age offers, because it specifically asks to think.

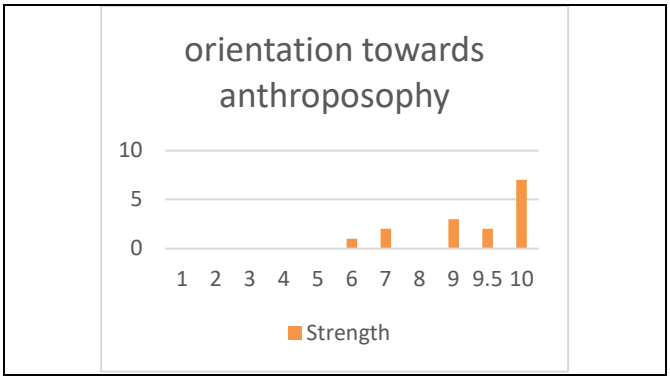


Figure 60: Nicole Montag-Keller, strength of orientation towards anthroposophy, 2020.

I asked participants how often they were visiting the Goetheanum throughout a year and 60% answered they were between 10 to 80 times at the Goetheanum, which is an average of once to twice per month. The participants who were more often at the Goetheanum said they were working (paid and unpaid) at the Goetheanum. For the majority the purpose for visiting the Goetheanum contained attending anthroposophic artistic performances, such as eurythmy, mystery dramas, Faust plays as well as anthroposophy centred conferences and events and a few came for meetings on anthroposophy related projects. Some answered that they visited the bookshop or met friends and acquaintances. Only one participant said to come for leisure purposes, such as being in the landscape garden. It can be argued that the majority of the participants go to the Goetheanum quite target-oriented, for them the Goetheanum represents a Firstspace as well as a Thirdspace, the building is the material where they go to for attending an event. 80% of the participants remembered, even remembered vividely when they had encountered the Goetheanum for the first time. The feelings mentioned were overwhelmed, awestruck, amazed and joyous, which also pointed towards a Firstspace and Thirdspace encounter. A Firstspace encounter which left a lifelong memory for many of the participants. One participant remarked, that if he had to rate the Goetheanum for a Michelin guide book it would be a "worthwhile detour" to him, which can be seen an expression of Secondspace, and yet another participant told me, that because of her spiritual exercises inspired through Steiner's book on "how to attain insight on the higher worlds" the Goetheanum's surrounding and the Goetheanum itself were experienced exceptionally different at this certain day, turning this example into a Secondspace, because she imagined the space before actually going there and a Thirdspace description, because it is linked to an event at a certain date around in in the Goetheanum. When asked what unique memories recalled concerning the Goetheanum half of the participants mentioned specific performances or conferences, two encountered the Goetheanum under a starry sky and one person said, that she would always remember the rainbow over the Goetheanum which can all be interpreted as Thirdspace experiences. When I asked whether there was anthroposophic cosmology visible in the Goetheanum, many answered, that the building itself is anthroposophy, that it represented the spiritual and that the forms would communicate, but it also needed the human beings, which come to the building. Another participant said, that the first Goetheanum was a temple, offering a Secondspace example since the first Goetheanum does no longer exist and that the second Goetheanum represented a social space for her, which can be interpreted to be a Thirdspace, a changing milieu. Another person said, that the Goetheanum appears to her like a gate towards heaven and another participant mentioned, that the building got a soul, these were two more examples of Secondspace descriptions. When prompted on how they identified anthroposopic cosmology in the building itself, the answers were 'the coloured windows, the columns and the architraves, the painted ceiling in the great hall and the "Menschheitsrepräsentant" (representative of man)', which was interesting to hear, because the windows, columns and ceiling are all immovable material culture, which are certainly to be interpreted as Firstspace, but at the same time are also Secondspace because they are all inseparably linked to anthroposophic cosmology. The "Menschheitsrepräsentant", a wooden sculpture about nine metres high and five metres wide (figure 71) however stands out, because it was still work in progress in the carpenters shop when the fire destructed the first Goetheanum and is now on display in the Southern wing of the Goetheanum. The Goetheanum might represent, for a person not familiar with anthroposophy, a Firstspace, but it most possibly represents Secondspace to many of the participants I interviewed, since one person answered, that the sculpture made things visible which he described as hypnotising, and to him evoked the impression of being alive. This description

is both, it is a Secondspace, the imagined and a Thirdspace description, for he expressed to have encountered this experience various times but in varying appearances.

From interviewing insiders to anthropsophic cosmology it became clear, that the Goetheanum was not only to be seen as an example of Firstspace, of material culture, but it also turned into a Secondspace and Thirdspace description respectively. The Secondspace examples referred to the participants individual encounter with the building and the way they described the encounter highlighted the interrelatedness of their description with anthroposophical cosmology. The more the participant knew about anthroposophic cosmology the richer the imagined and experienced relationship between the building and the person became. The Thirdspace descriptions, it can be said, were all tied to events which did not only take the encounter of an individudal and a building into account but also the encounter with other people or a memorable point of time in a specific context. Argued from Kelly's point of view it can be put forward, that 'the universe is real; it is happening all the time; it is integral; and it is open to piecemeal interpretaion. Different men construe in different ways. …Within the structure of a system determinism and free will are directional aspects of the same system; that is, a construct is determined by that with which one judges it must always be consistent, and it is free of that which one judges must always be subordinate to it.[261] Summing Kelly up, it can be said, that all participants shared their construction of how they perceived the Goetheanum to refer to anthroposophic cosmology and I can only but acknowledge to abstain from any judgement, because all statements can be valid only, since '…a good cosmology is good for its adherents' as Mathews argued.[262] In summarising it can be said, that the Goetheanum refers to anthroposophic cosmology through the interrelationship of the building, the people and the groups of peopole who encounter it and share their encounters.

5.3 Results of the self-ethnographic method

In March 2018 my family and I moved home, from a place where I could see the Goetheanum from my office window to a place from which the Goetheanum became invisible, though now located in five minutes of walking distance. This best describes what happened to me, when I started to research the Goetheanum in depth. I experienced the naiveté of that which is unseen and unforeseeable.



Figure 61: Nicole Montag-Keller, word cloud on my key word entries from my Goetheanum journal, 2020.

[261] George A. Kelly, *A Theory of Personality* (New York: Norton & Company, 1963), p. 43-44.
[262] Freya Mathews, *The Ecological Self* (London: Routledge, 1991), p. 13.

By looking at the world cloud shown in figure 61, which is derived from coding my Goetheanum journal it becomes clear, that my engagement was clearly directed at the “Goe”, the Goetheanum itself, then with the windows (Fenster) followed by human beings (Menschen), shadows (Schatten), nature (Natur), up and down (oben, unten) and building (Gebäude). Comparing the word cloud in figure 61 with the one in figure 62, shows, the windows (Fenster) took up a large amount of my thinking and reflection and that I was also engaged with the “M-Rep”, the “Menschheitsrepräsentant” (the representative of man). The shadow theme is present in figure 61 as well as in figure 62, yet weather (Wetter) and spiritual pathway (Schulungsweg) were new. The question of what this all would be meaning (Bedeutung) has taken up a lot of my time over the last year.



Figure 62: Nicole Montag-Keller, word cloud on my coding from the Goetheanum journal, 2020.

5.3.1 Shadows, weather and introspection

The Goetheanum building is an outstanding structure for researching shadows (figure 63, 64). At various times I tried to sketch the shadow in my journal, but since there seemed to be no right angle on the outer structure of the Goetheanum I fell short of being able to draw what I saw. I was unable to transfer a three dimensional view onto my two dimensional plane. The manifold polygonal shadows all looked very interesting figure 65, 66, 67 on a polygonal shaped structure and I concluded, that I had never ever before tried to sketch a rock formation with an accompanying shadow, because then I would have been aware of the difficulties arising, if there are no right-angle shaped objects. I was even more astonished to understand, that I had rarely tried to sketch natural objects, let alone with their shadow.



Figure 63: Nicole Montag-Keller, Goetheanum seen from West, 4th June 2019, 2019;
Figure 64: Nicole Montag-Keller, Goetheanum seen from Wes, 8th October 2019, 2019.

As can be seen in figure 63, the sun stood high up in the sky on 4th June 2019 which left the impression of a well sculpted West façade, where the middle section of the West can be seen to come to the forefront and move backwards, almost as if the "main window element" wanted to bow, because the element seen on the left looked as if bending backwards. I concluded, that I looked at a Firstspace and upon longer gazing it turned into a Secondspace. In comparison to the photo in figure 64, the West façade to the left where the shadow is, seemed to me rugged and at the same time the left side appears to be a lot smaller than the right side, which I knew it wasn't. I approached Steiner, for understanding what anthroposophical cosmology offers on the subject "shadow". According to Steiner's teachings, light consists of a physical and an astral part and if a ray of light hits an object, this ray of light would contain the exterior of the physical light as well as the rays of light which contained living astral beings[263] Steiner proceeded, that the physical shadow falls to the back and that the astral being would be the shadow that falls to the front of a person.[264] He argued, that the shadow acts as a "Nachbild" (afterimage) and that this afterimage is the physical body, and the being which lives within the physical body is formed through the soul.[265] Apart from Steiner's explanations, I had experienced afterimages before. It is according to Corsini 'an image that remains after a visual stimulus ceases', where two types of images could occur, 'a positive afterimage is caused by a continuation of receptor and neural processes following cessation of the stimulus' and 'a negative image is usually complementary to the original stimulus in colour and brightness.[266] I tried very hard, but I was not able to see the afterimage of the shadows casted on the Goetheanum structure. Additionally I felt, that my mindset was more oriented to perceiving the shadow in psychological terms. In Corsini, shadow is defined as 'an archetype that encompasses a person's animalistic side' which I concluded could be what Steiner expressed with the ahrimanic and luciferic beings, where I associated, that the sunlight could be seen as the luciferic element and that the shadow could be seen as the shadow. This reflective process brought to my attention how I approached a Firstspace, the Goetheanum and because I defined it to be a living organism according to anthroposophical cosmology, I tried to imagine the Secondspace, but since I could not reach a definitive answer, I felt unsatisfied and realised how I always seek to find one answer. Having studied economics, I realised, that I am a knowledge seeker for optimising my personal value.



Figure 65: Nicole Montag-Keller, Goetheanum close-up from South, 31st December 2019, 2019.
Figure 66: Nicole Motnag-Keller, Goetheanum close-up from South, 27th August 2019, 2019
Figure 67:Nicole Montag-Keller, Goetheanum close-up from West, 3rd June 2019, 2019.

[263] Rudolf Steiner, *Ursprungsimpulse der Geisteswissenschaft, GA 96* (Dornach: Rudolf Steiner Verlag, 1989), p. 134.
[264] Rudolf Steiner, *Ursprungsimpulse der Geisteswissenschaft, GA 96* (Dornach: Rudolf Steiner Verlag, 1989), p. 134.
[265] Rudolf Steiner, *Ursprungsimpulse der Geisteswissenschaft, GA 96* (Dornach: Rudolf Steiner Verlag, 1989), p. 134.
[266] Ray Corsini, *The Dictionary of Psychology* (London: Brunner Routledge, 2002), p. 27.

Over the course of my observation and journaling phase I realised how my curiosity broadened, and I concluded that the weather influenced everything, because on one morning the Goetheanum had obviously disappeared (figure 68). I felt joy and ran back and forth for understanding at which distance the Goetheanum would rise out of the mist. I started talking to myself and said, that the "Mysterienstätte" (mystery site) was to be found behind a curtain, and I called it a physical "Isis to be unveiled" in a creative rephrasing of Blavatsky's theosophical book "Isis unveiled". Seeing the Goetheanum, experiencing the misty air, hearing the softened noises of everyday routine evoked the joy of a child inside of me. I concluded, that the 22nd October 2019 was a day of personal epiphany to me and it can therefore be termed a Thirdspace.



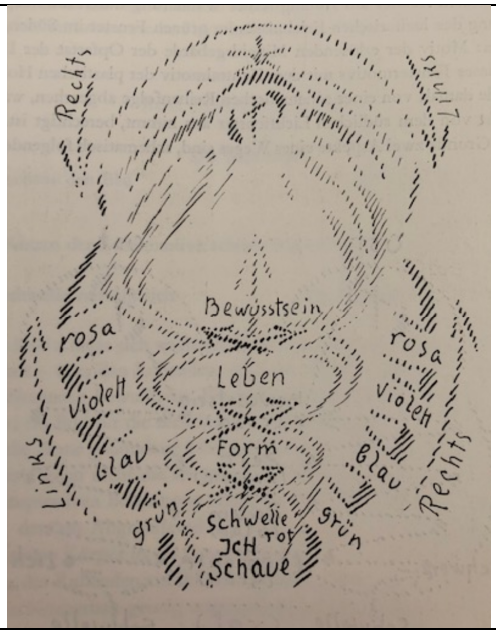
Figure 68: Nicole Montag-Keller, Goetheanum disguised view from South-West, 22nd October 2019, 2019.
Figure 69: Nicole Montag-Keller, Goetheanum seen from West, 17th June 2019, 2019.

Yet another outstanding experience happened on the 17th of June in 2019. It was around summer solstice time and I got up early for observing where exactly the sun rose above the Gempen hillside. Since then I am aware, what I miss out on summer mornings before the sun rises. I felt that I was on my own with the Goetheanum, I listened intently what was to be heard around me and I felt the serenity of the atmosphere. An hour later I stumbled across the biggest Goetheanum shadow I had ever seen before (figure 69). It left me speechless. Speechless about me not knowing, nor understanding. Again I experienced, that understanding a shadow means, that I had to observe it. The shadow taught me once again, that there are realities, which cannot be learnt from a book, but only by being in the moment and observing what happened around me. Figure 69 also shows, how the sun rays are broken down by the i-phone camera and I was smiling when I saw it and thought, that 'good old Steiner was right in his own right', since I saw the shadow appear in a crystal shaped formation and I concluded, that the Goetheanum is truly a rock, beginning with its 'double' foundation stone, the structure which is today's Goetheanum is a crystal rock and on a sunny day I can see the double stone, the concrete and its shadow, poured out of concrete.

In concluding I admit that the shadow observation was the most plausible learning curve I had experienced in years. I understood that my knowledge cannot be derived from books and on paper only, but that there is always more than one answer to a (any) question. It was a priceless experience, being confronted with my own constructions and going beyond them, metaphorically speaking, going beyond my shadow images. I encountered a Firstspace and because I interacted with it and experienced more than one epiphany while on the observation pathway, the Goetheanum became my teacher and therefore my Thirdspace.

5.3.2 Windows, spiritual pathway and insight

The Goetheanum's nine coloured windows were the biggest and hardest riddle I tried to solve. First of all, I realised how little I knew about anthroposophic cosmology, because seeing the images did not result in an instant understanding of what I was observing. I realised, that I knew this feeling from when I visit cathedrals I have never seen been before. It is a space, where everything one needs to know is made visible through image, but reading the images, adorning them with meaning is a long process. Karen van den Berg and Claus Volkenandt put forward Michael Bockemühl's (1943-2009) work developed a «Leitformel» (leading formula) which he called "Bildrezeption ist gleich Bildproduktion" (the reception of the picture is equal to the production of the picture).[267] Berg and Volkenandt described how Bockemühl use a process of observative analysis in which he self-observed himself how he observed his own perceptive process and how the perspective changes, as soon as one is observing a piece of art and how this art reveals itself in the process of looking at the structures of this piece of art.[268] I was struck, when I read the description of this methodological approach, because I knew where I was applying this approach, but I hadn't thought to apply it while I was observing the glass windows. I had yet again, tried to find the "right" answer and as fast as possible too. I consulted Steiner's work on the first Goetheanum(figure70), looked at it and could not understand how the motifs fitted the categories of 'form, life and consciousness'. I visited the great hall many times, watching and observing but nothing happened, I could not understand what I was seeing. This non-understanding stressed me out, I could not bear it. In a second try I sat there patiently and sketched the motifs. One motif at one visit and when I lay in bed in the evening I tried as best as I could to re-call the picture I had drawn on that day. With the hint of the Bockemühl method, I became aware, that I had to observe my own observation process and then 'it' happened.



Translation:

Right		Left
Left / pink	consciousness	pink/ Right
Violet	Life	violet
Blue	Form	blue
Green		green
	Threshold /red	
	I see	

Figure 70: Rudolf Steiner, Rudolf Steiners Entwürfe für die Glasfenster des Goetheanum, 1961, p. 28, 1913/14.

The writing-up process for the literature review aided my understanding. Only by delving deeply into the teachings of Steiner, I would not have understood. I needed to present anthroposophical cosmology in the most straightforward way as possible. Only if I understood was I able to write one

[267] Karen van den Berg and Claus Volkenandt, Sehen gestaltet Wirklichkeit in Michael Bockemühl (ed), *Bildrezeption als Bildproduktion* (Bielefeld: transcript Verlag, 2016), p. 7.
[268] Karen van den Berg and Claus Volkenandt, Sehen gestaltet Wirklichkeit in Michael Bockemühl (ed), *Bildrezeption als Bildproduktion* (Bielefeld: transcript Verlag, 2016), p. 7.

sentence after the other. And finally I understood what went on in my head, I took the first Goetheanum as a template and tried to replicate Steiner's ideas. I only realised, that the second Goetheanum is yet another metamorphosis of the first one some time ago. For me the first Goetheanum was a pathway of initiation, enacted by the building, inscribed into its 'DNA' (its life code, if the Goetheanum is taken to be a living entity). I am the initiate. I chose which pathway to walk for entering the Goetheanum, I chose which door to take, I chose which stairs to walk up to where the red window is located. Then I entered the great hall. According to Steiner's schematic drawing (figure 70), the sequence is now provided. In other words, as long as I am in the outer world I can make as many choices as I want, but upon entering the threshold, when I have seen what is depicted on the red window, then the pathway starts from green North to South windows and in the next stage from blue North to South windows, followed by the violet stage and finally done at the pink stage. Since each stage had a key word I thought to reflect on the spirit of heaviness for the green North window and the spirit of light for the green South window according to another sketch of Steiner.[269] Then I repeated the processes until I arrived at the pink windows. Since the "representative of man" (figure 71) was the next stage I took time to sit there and reflect. According to Christian Stuuten, Nanna Osmer and Jesse Osmer the sculpture was thought to be on display in the stage area within the first Goetheanum, due to limited stage space in the second Goetheanum it was decided to put it on display in the southern storage area.[270] I chose to limit my reflective considerations on the red window only. The green, blue, violet and pink windows would need to be discussed and analysed in their context as a regress to the first Goetheanum within the second as argued by Stuuten, Osmer and Osmer.[271] I chose to put a focus on the red window.

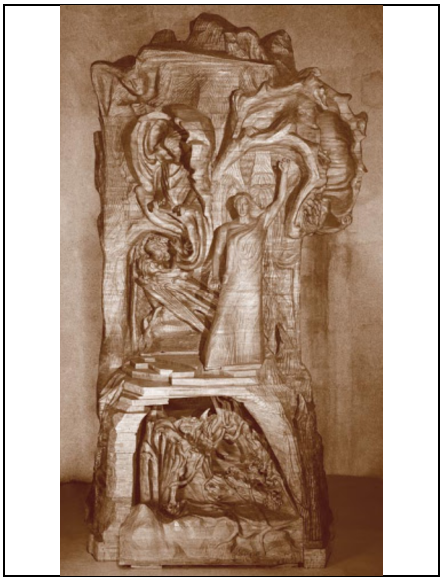


Figure 71: Carl Kemper, photo of the representative of man published in 'Der Bau', p. 119, 1966.

As can be seen in figure 71, there stands a person holding its left arm up and putting the right hand down. There are additional figures carved into the wood and these figures could be interpreted to be the ahrimanic and luciferic beings in action, when these beings try to hamper the evolution of mankind as was put forward in chapter 3.3.10 within the literature research. I concluded, that the last stage of the initiation is the realisation of oneself as the representative of man. Then I further

[269]Rudolf Steiner, *Rudolf Steiners Entwürfe für die Glasfenster des Goetheanum* (Dornach: Rudolf Steiner Nachlassverwaltung, 1961), p. 17-18.
[270] Christian Stuuten, Nanna Osmer, Jesse Osmer, *Im Zeitenstrom* (Dornach: Christian Stuuten, 2013), p.145.
[271] Christian Stuuten, Nanna Osmer, Jesse Osmer, *Im Zeitenstrom* (Dornach: Christian Stuuten, 2013), p.149.

concluded, that I had to turn around by 180° for walking the stages up towards the red window, which I took literally to mean, that I was now the "being the representative of man" and I interpreted, that I took the consciousness of who I am with me, walked through the life process, that is the life between death and a new birth, then through the formation process directed by the trinity, the hierarchies and the zodiacal constellations, back through the luciferic and ahrimanic adversaries and then finally arrived in front of the red window (figure 72).

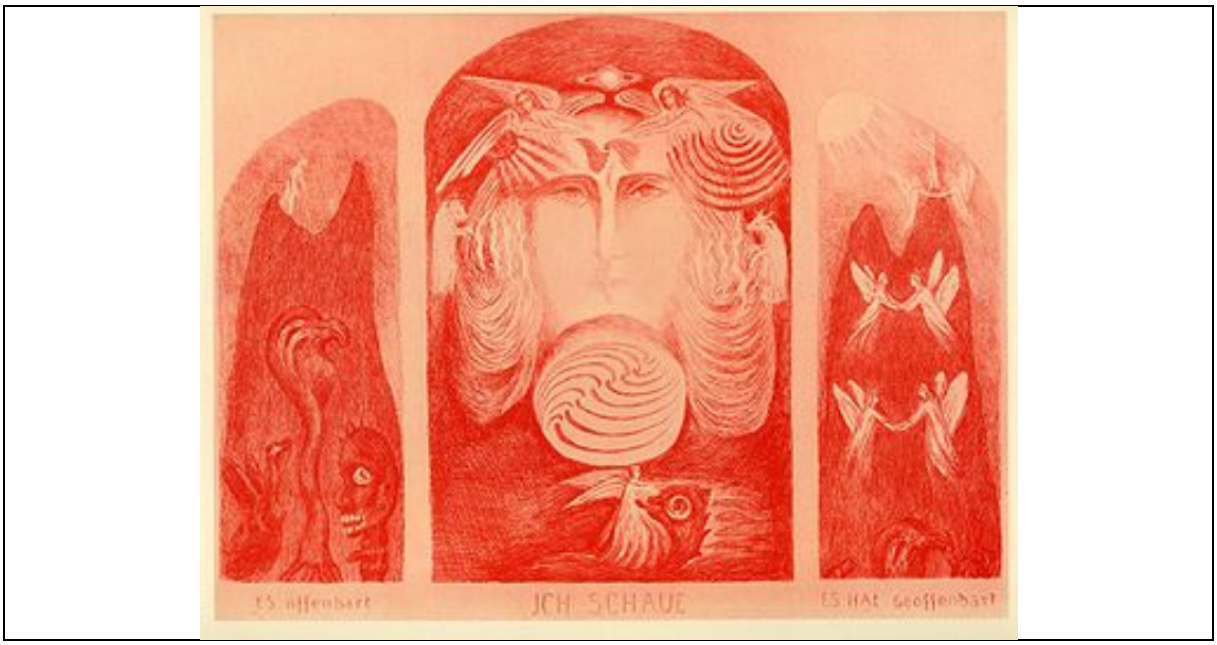


Figure 72: Assia Turgenieff, copper engraving of the red window after Rudolf Steiner's sketch, 1913/1914 and 1935.

The red window (figure 72) to the left reads "it reveals", in the middle "I see" and on the right "it has revealed". On the left can be seen three animal like beings who left me with the impression not to be friendly. Assia Turgenieff, the artist who transposed Steiner's sketches into copper engravings, had confirmed with Steiner, that these were "Denken, Fühlen, Wollen Tiere" before an initiate embarked on the pathway to self knowledge.[272] Behind the animals a hilltop ridge can be seen where a person seems to walk down to the valley. On the right hand side it can seen, that the "Denken, Fühlen, Wollen Tiere" (animals hereafter) are sunken and that six pairs of angelic beings float around a hill similar to the one on the left side, with a person on the highest hilltop of the hilltop side addressing himself to the sun. I interpreted, that the left hand panel showed a person before he embarked on a spiritual pathway and the right panel, that the spiritual pathway worked out and, that this "representative of man" greeted the sunlight. The middle panel shows, a planet which I interpreted as Saturn over a face, where the forehead is surrounded by two angelic beings who have a dark sun and waves or rays under one of their wings respectively. According to Jim Tester, Saturn was called "sun of the night" by the Babylonians and Greeks.[273] The angelic beings (angel from now on) seem to work on the waves which are located in the middle of the faces forehead, which I interpreted as a chakra. According to Anodea Judith a chakra is an invisible energetic vortex.[274] I interpreted, because of the Saturn as "sun at midnight" metaphor from Tester and because of the winter solstice poem of

[272] Rudolf Steiner, *Rudolf Steiners Entwürfe für die Glasfenster des Goetheanum* (Dornach: Rudolf Steiner Nachlassverwaltung, 1961), p. 27.
[273] Jim Tester, *A History of Western Astrology* (New York: Ballantine Books, 1987), p. 9.
[274] Anodea Judith, *Eastern Body, Western Mind* (Berkley: Celestial Arts Publishing, 1996), p. 240.

Steiner (figure 57), that the angel to the South worked with the sun powers and the angel to the North with the reflection of the sun throughout night, with the moon powers on the awakening of the forehead chakra. the face is enframed by long hair and in the area where the ears are located the a lion, South, and a bull, North in upright position. According to Steiner, the lion and the bull are clothed as priests and that they murmur world secrets through the waves of the ethereal sound.'[275] I interpreted the lion and bull images as belonging to the actual night sky, as was cross checked in Stellarium version 0.19.3. The possible constellations which matched closest to my interpretation of the red window is seen in figure 73 and 74 for the astronomical start of spring (1st March) around midnight in the years 1916 and 1917 respectively. Figure 73 shows Taurus in the West, Lion in the South, Saturn in the constellation of Twins. Figure 74 shows, Taurus in the West, Lion in the South, Saturn next but close to the constellation of Twins and the moon over Taurus. I concluded and interpreted, that the constellation for 1917 matched the closest the red window elements, but Cancer was still missing. Why did Steiner envision on this date, if I was right with my interpretations?

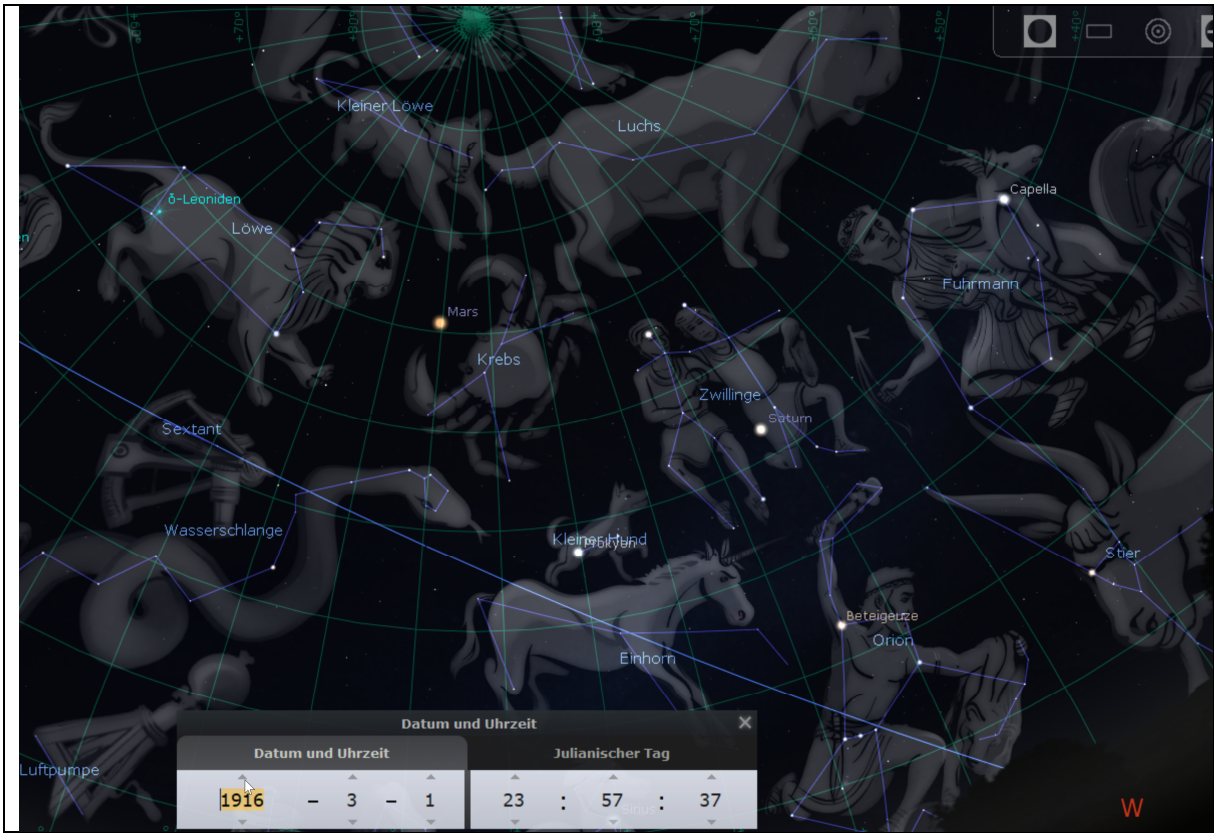


Figure 73: Nicole Montag-Keller, snapshot from Stellarium Taurus (Stier) to the West, Lion (Löwe) to the South, Saturn in the constellation of Twins (Zwillinge) for midnight on 1st March 1916, 2020.

[275] [275] Rudolf Steiner, *Rudolf Steiners Entwürfe für die Glasfenster des Goetheanum* (Dornach: Rudolf Steiner Nachlassverwaltung, 1961), p. 17; '…mit Löwe und Stier im Priestergewande, die ihm auf den Wellen des Klangäthers die Weltengeheimnisse zuraunen.', translated Nicole Montag-Keller.

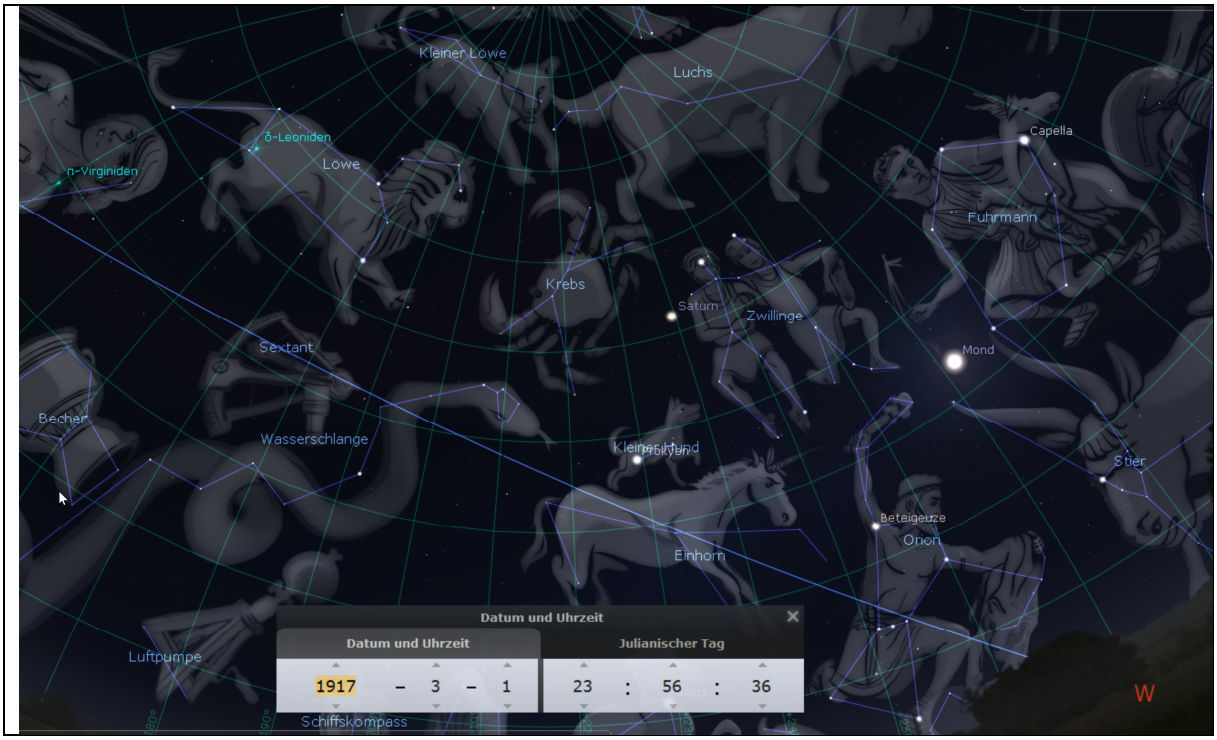


Figure 74: : Nicole Montag-Keller snapshot from Stellarium Taurus (Stier) to the West, Lion (Löwe) to the South, Saturn close to the constellation of Twins (Zwillinge), the moon in the West close to Taurus, for midnight on 1st March 1917, 2020. midnight on 1st March 1917, 2020.

I suggest figure 75 to offer the answer. This figure shows the blue window located to the South, where in the middle part an anthroposophic version of a zodiacal constellation can be interpreted. In the top of the middle part, I interpret Twins, in the middle Cancer and to the right Leo. Now this constellation is in reverse order to what would be seen on the night sky of figure 74, but since Steiner suggested a pathway, where directions are encountered in reverse order, I suggest interpreting this constellation as a vision. The vision, that the heart chakra, which is the stars in the chest area of the figure representing the constellation. Since Steiner gave cosmic poems in 1915, I interpreted that cancer had a task according to Steiner's vision (figure76).[276] I assumed and this is suggested here, that the light, the inner light, should have been born out of the heart chakra on spring in 1917.

[276] Rudolf Steiner, *Wahrspruchworte, GA 40* (Dornach: Rudolf Steiner, 1998), p. 57.

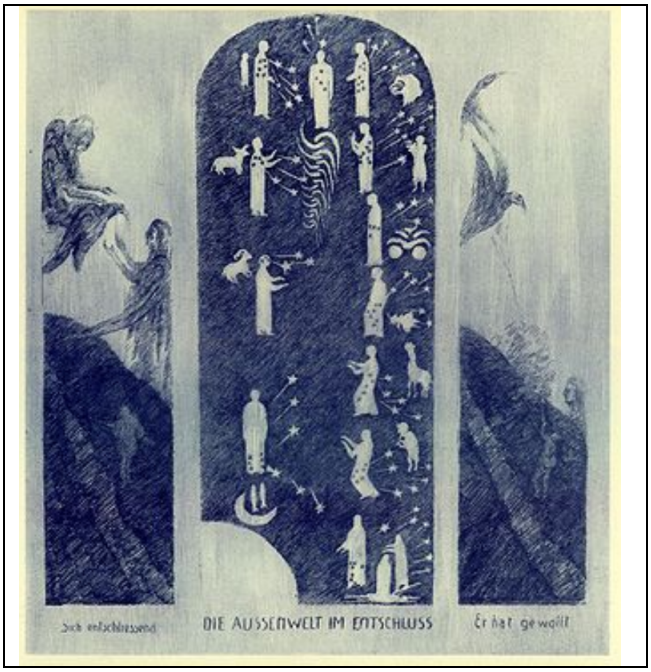


Figure 75: Assia Turgenieff, copper engraving of the blue South window after Rudolf Steiner's sketch, 1913/1914 and 1935.

Krebs:	Translation for Cancer:
Du ruhender Leuchteglanz,	You resting glowing-luminousness,
Erzeuge Lebenswärme,	Bring forth life-warmth,
Erwärme Seelenleben	Warm up the soul-life,
Zu kräftigem Sich-Bewähren,	For strong self-prove (to stand the test of time)
Zu geistigem Sich-Durchdringen,	For spiritual self-penetration,
In ruhigem Lichterbringen.	In quiet light-bringing.
Du Leuchteglanz, erstarke!	You glowing-luminousness, get stronger!

Figure 76: Rudolf Steiner, three cosmic poems for eurythmie, Cancer constellation, GA 40, p. 57, 1915.

And if this suggestion is accepted as a valid argument, I suggest, that the red window (figure 72) which depicts a huge chakra in the throat area, means, that the secrets of the world will be uttered from here, interpreted as the "Weltenwort", the logos. Furthermore I am suggesting that there needs to be an encounter with the dragon, which Steiner called "Michael in the fight with the dragon", a light bringing gestalt, which is able to carry itself out of his own strength, which carries its head over the baling evil, which is directed to the divine. If Michael would look down onto the dragon, he would need to affirm him, said Steiner.'[277]

I am arguing that Steiner was ahead of his time, since I perceive this knowledge to belong to psychology and the counselling professions. If a person is capable of seeing her shadow, such as I did, when I researched the Goetheanum building shadow, at the moment when I was ready to go beyond my probed problem solving skills, then I was open to find new solutions beyond my comfort zone by simply reasoning and deducting what was and is in front of me. As I mentioned earlier, it needed the change of my perspective, the Bockemühl method for observing myself while I observed, which gave me a key for solving this riddle. I am looking forward to solving many more riddles which are still inscribed into the mantle of the Goetheanum.

[277] Rudolf Steiner, *Rudolf Steiners Entwürfe für die Glasfenster des Goetheanum* (Dornach: Rudolf Steiner Nachlassverwaltung, 1961), p. 18; '…Michael im Kampfe mit dem Drachen: eine lichtspendende Gestalt, sich aus eigener Kraft tragend, das Haupt über das sich ballende Böse hin auf das Göttliche gerichtet. – Würde Michael auf den Drachen herunterblicken, so würde er ihn bejahen müssen, sagte uns Dr. Steiner', translated Nicole Montag-Keller.

5.3.3 Conclusion from methods, findings and discussion

In concluding on my findings and discussion section it is suggested that I needed to conduct my research with an approach of triangulation. By using the archaeoastronomical or skyscape methodology I obtained the hard facts of the sun's pathway throughout a year and how Steiner used the East markers as a transition to relate the western sun set on winter solstice to anthroposophic cosmology. From the results of my interview section I concluded, that every person constructed their own reality by interrelating with the place constructing Firstspace, Secondspace as well as Thirdspace and they were and are all valid, because they are markers of a person's identity with a cosmology. By applying the third method, researching myself and my construction of knowledge, I learnt, that I always tried to find a single one right solution to a problem, added by the fact, that it had to be as quick as possible. This research method proved the most valuable for myself, for it gave me the chance to learn to trust, go step by step and let the solution unfold itself like a rose. The image of the rose, which is for me a symbol of love represents, what was before visible, became invisible and I had the opportunity and finally the patience to find the rose in the depths, heights and in the cosmos in and around the Goetheanum space. I am not at peace with myself, because I found the dragon not only in the midnight sky and in Stellarium, but also the dragon tail (figure 77) in the landscape garden of the Goetheanum and it must have been a lucky dragon who rode on the rainbow and this dragon rushes down into the West façade of the Goetheanum (figure 78), metaphorically speaking, into the red window for re-enacting the dragon fight daily, which is usually invisible but from now on visible for me.

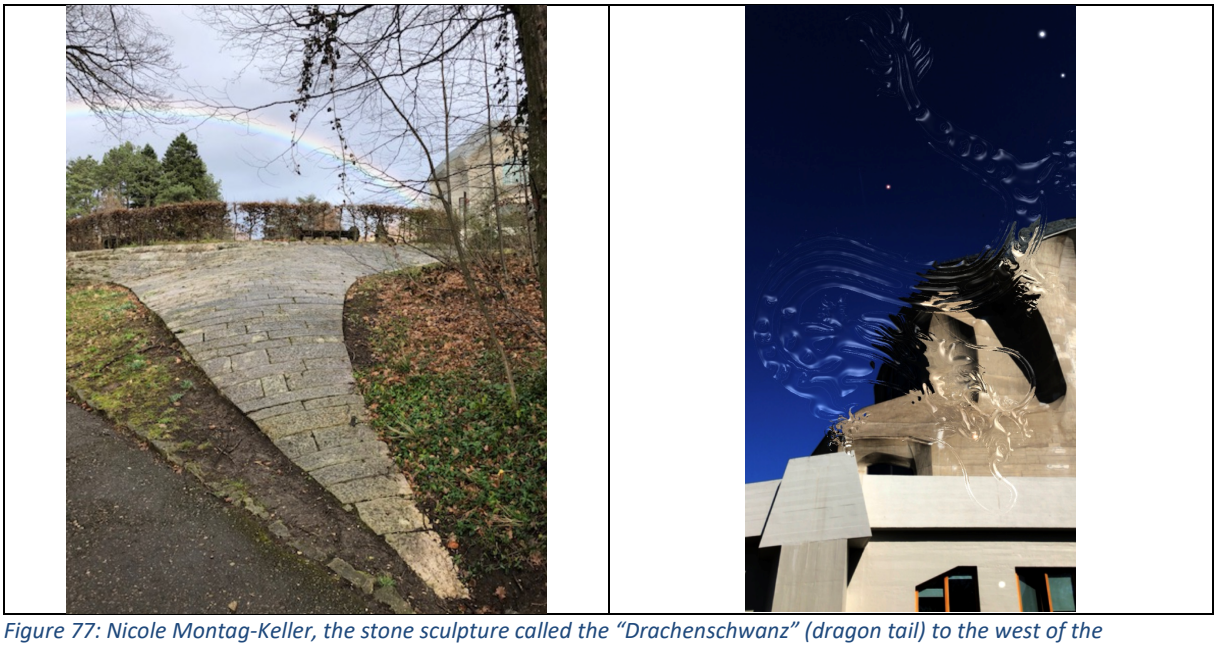


Figure 77: Nicole Montag-Keller, the stone sculpture called the "Drachenschwanz" (dragon tail) to the west of the Goetheanum, 27th Feb 2020;
Figure 78: Nicole Montag-Keller, picture from Night Sky app where the constellations can be merged with the background

6 CONCLUSIONS

This dissertation aimed to understand how the Goetheanum building located in Dornach, Switzerland referred to anthroposophic cosmology. Rudolf Steiner, the founder of anthroposophy suggested a cosmology that offers a pathway for understanding and knowing the spiritual world, which for people with an anthroposophic world view is taken for granted. Steiner also suggested, that if an

individual followed the anthroposophic pathway the person's consciousness of humanity would expand. Steiner who transferred Goethe's concept of metamorphosis to any other life area especially the development of the self, which is called "Selbsterkenntnis" (insight into one's self). This thesis offered an in-depth insight into anthroposophic cosmology by providing information about Steiner's biography, his historical context and how the concept of western esotericism tries to capture ideas of the invisible in academic terms. Moreover it was put forward, what the anthroposophic developmental process consists of, what Steiner's spiritual monism comprises, how Steiner adopted Christian concepts of Trinity and how the realm of intermediate beings, the hierarchies and how these are related to the cosmos and the sky constellations. This thesis put also forward how the earth is structured according to anthroposophical cosmology and what the developmental plans for mankind imply for every human being is related to the cosmos. The grand developmental plan of the earth was put forward and the adversaries of human beings were introduced. Finally the world ages were put forward for guiding an understanding, that Steiner's extensive cosmology comprised everything for not leaving anything unedited. All these concepts needed to be introduced for understanding how Steiner arrived at his architectural ideas, how he laid two foundation stones and what his ideas were for the stylistic motif of the second Goetheanum. Due to Steiner's inapt death, the second Goetheanum exhibits the new stylistic elements as well as the old ones. For understanding how the Goetheanum as is seen today refers to anthroposophic cosmology, three methodological approaches were applied. The Goetheanum structure was researched by using archaeoastronomical methods, that was by looking how the Goetheanum referred to the landscape horizon and the skyscape. Secondly interviews with insiders were conducted for understanding how they perceived the Goetheanum's reference to anthroposophical cosmology and lastly a self-ethnographic method was applied for understanding how the author approached her own meaning making process. Soja's Firstspace, Secondspace and Thirdspace concept was applied in order to analyse how the construction of space was expressed. It was found that there are several skyscape, horizon and landscape markers suggesting a reference to anthroposophical cosmology. It was suggested, that the interview participants all constructed their own reference to anthroposophical cosmology and it was suggested, that the author also constructed her own reference to anthroposophic cosmology as well as to a rigorous academic world view which resulted in a suggestion, that the author had found a interrelatedness between the skyscape, the horizonscape, the landscape, the gardenscape, the representative of man, the red window and the blue window to the South and even to a dragon. All these features helped to understand, that the Goetheanum and its surrounding exhibited numerous references to the sky and that is was a process of making the invisible visible.

7 BIBLIOGRAPHY

Alighieri, Dante, *Divine Comedy, Paradise, XXVII, 36-40* http://www.gutenberg.org/files/8799/8799-h/8799-h.htm#link27, [accessed 17 Dec 2019].

Alighieri, Dante, *Divine Comedy, Purgartory, XIV, 133*, http://www.gutenberg.org/files/8795/8795-h/8795-h.htm#link14, [accessed 17 Dec 2019].

Applied anthroposophical research projects, https://eliant.eu/en/key-areas-of-activity/research-projects/ [accessed 31 May 2019].

Arbeiterbildungsschule, https://sozoekarchiv.wordpress.com/tag/berliner-arbeiterbildungsschule/ [accessed 3 Dec 2019].

Asprem, Egil, *Science and the Occult* in Partridge, Christopher (ed.), *The Occult World* (Abingdon: Routledge, 2018).

Aull-Davies, Charlotte, *Reflexive Ethnography: A guide to researching selves and others* (London: Routledge, 1999).

Baigent, Michael, Campion, Nicolas, Harvey, Charles, *Mundane Astrology* (London: Thorsons, 1995).

Bobrick, Benson, *The Fated Sky* (New York: Simon and Schuster Paperbacks, 2005).

Bogdan, Henrik, *Freemasonry and Western Esotercisim* in Bogdan, Henrik, Snoek, Jan A.M. (eds.), *Handbook of Freemasonry* (Leiden: Brill, 2014).

Burns, William E., *Astrology through History* (Santa Barbara: ABC-CLIO LLC, 2018).

Campion, Nicholas, *A History of Western Astrology, Volume II* (London: Bloomsbury Publishing Plc, 2013).

Campion, Nicholas, *History of Astrology, Volume II* (London: Bloomsbury Publishing Plc, 2009).

Campion, Nicholas, *The Great Year* (London: Arkana Penguin Group, 1994).

Collingwood, R.G., *The Idea of History* (Oxford: Oxford University Press, 1971).

Corsini, Ray, *The Dictionary of Psychology* (London: Brunner Routledge, 2002).

Descartes, René, *The Philosophical Writings of Descartes, Volume 2*, translated by Cottingham, John, Stoothoff, Robert, Murdoch, Dugald (London: Cambridge University Press, 1984).

Die Bibel (Stuttgart: Deutsche Bibelgesellschaft, 1999).

Dilloo-Heidger, Erik*, Steiners Überarbeitung des Kantschen Ansatzes*, http://www.dilloo.de/phil.htm [accessed 5 Nov 2019].

Dollinger, Hans, *Weltgeschichte auf einen Blick*, (Freiburg: Verlag Ploetz, 1988).

Drury, Nevill, *Lexikon Esoterischen Wissens* (München: Droemer Knaur Verlag, 1988).

Easwaran, Eknath, *Katha Upanishad, III, 3*, http://veda.wikidot.com/katha-upanishad-eknath (accessed 17 Dec 2019).

Faivre, Antoine, *Esoterik im Überblick* (Freiburg: Herder Verlag, 2001).

Faivre, Antoine, Hanegraaff, Wouter J., *Western Esotericism and the Science of Religion* (Leuven: Peeters, 1998).

Giordano-Bruno-Bund, http://fvn-rs.net/PDF/GA/GA255b/GA255b-429.html [accessed 3 Dec 2019].

Goethe, Johann W., *Die Metamorphose der Pflanze, Kapitel 502*, https://gutenberg.spiegel.de/buch/gedichte-9503/502 [accessed 23 Oct 2019].

Goodrick-Clarke, Nicholas, *The Western Esoteric Tradition* (Oxford: Oxford University Press, 2008).

Gutzmann, Gerhard, *Das grosse Lexikon der Heilsteine, Düfte und Kräuter* (Neu-Ulm: Methusalem Verlagsgesellschaft, 2008).

Hagen, Dietrich, *Der Goetheanumbau* (Dornach: Philosophisch-Anthroposophischer Verlag, 1978).

Halfen, Roland, *Dokumente, Erinnerungen, Ansprachen* in Horrmann, David Marc (ed), *Zur Grundsteinlegung des Ersten Goetheanum am 20. September 1913* (Basel: Rudolf Steiner Verlag, 2013).

Hanegraaff, Wouter J., *Rudolf Steiner und die hellsehende Einbildungskraft* in Clement, Christian, *Rudolf Steiner – Schriften zur Anthropogenese und Kosmongonie, 8.1* (Stuttgart-Bad Cannstatt: frommann-holzboog Verlag, 2018).

Hanegraaff, Wouter J., *Esotercisim and the Academy*, (Cambridge: Cambridge University Press, 2012).

Hanegraaff, Wouter J., *Western Esotericism – a guide for the perplex*ed (London: Bloomsbury Publishing Plc, 2013).

Hasler, Hans, Buess, Jürg, *Der grosse Saal im Goetheanum 1996-1998* (Dornach: Administration des Goetheanum Baues, 1998).

Haviland, William A., Prins, Harald E. L, McBridy, Bunny, Walrath, Dana, *Cultural Anthropology – The Human Challenge* (Boston: Cengage Learning, 2017).

Hennink, Monique, Hutter, Inge, Bailey, Ajay, *Qualitative Research* (Los Angeles: Sage, 2011).

Hickman, Louise, *The Nature of the Self and the Contemplation of Nature* in Fuller, Michael, *The Concept of Soul* (Newcastle upon Tyne: Cambridge Scholars Publishing, 2014).

J. Evans, Richard, *In Defence of History*, (London: Granta Books, 1997).

Judith, Anodea, *Eastern Body, Western Mind* (Berkley: Celestial Arts Publishing, 1996).

Kelly, George A., *A Theory of Personality* (New York: Norton & Company, 1963).

Klanten, Robert, *Telling Tales of Tomorrow* in Klanten, Robert Klanten, Borges Sofia (eds.), *The Tale of Tomorrow* (Berlin: Gestalten Verlag GmbH, 2016).

Kugler, Walter, World Spirit where are you?!, in Kries, Mateo, von Vegesack, Alexander (eds) *Rudolf Steiner – Alchemy of the Everyday* (Weil am Rhein: Vitra Design Museum, 2010).

Landeskarte der Schweiz, Arlesheim No 1067 (Wabern: Bundesamt für Landestopografie swisstopo, 2012).

Lennhoff, Eugen, Posner, Oksar, Binder, Dieter A., *Internationales Freimaurer Lexikon* (München: Herbig Verlagsbuchhandlung GmbH, 2006).

Lierl, Karl, Roder, Florian, *Anthropsophie wird Kunst* (München: Anthropsophische Gesellschaft in Deutschland, 2008).

Lindenberg, Christoph, *Rudolf Steiner – Eine Biografie* (Stuttgart: Verlag Freies Geistesleben, 2011).

Lindenberg, Christoph, *Rudolf Steiner – Eine Chronik* (Stuttgart: Verlag Freies Geistesleben, 1988)

Magee, Glenn Alexander, *The Cambridge Handbook of Western Mysticism and Esotericism* (New York: Cambridge University Press, 2016).

Mathews, Freya, *The Ecological Self* (London: Routledge, 1991).

Max Müller, F., *The Sacred Book of the East, Zend-Avesta* (Oxford: Clarendon Press, 1895).

McCalla, Arthur, Antoine Faivre and the Study of Esotericism, *Religion* (2001), 31:4, p. 435-450.

Montag-Keller, Nicole, e-mail message to Dr. Nicholas Campion at UWTSD, 22nd November 2019.

Peter, Wolfgang, *"Edmund Husserl"*, https://anthrowiki.at/Edmund_Husserl [accessed 19 Dec 2019].

Pink, Sarah, *Doing Visual Ethnography* (London: Sage, 2007).

Plato, *Phaedo*, edited by Cooper, John M. (Cambridge: Hackett Publishing Company, 1997).

Plato, *Timaeus*, edited by Cooper, John M. (Cambridge: Hackett Publishing Company, 1997).

Ptolemy, Claudius, *Tetrabiblos*, translated by Ashmand, J.M. (Seattle: Pacific Publishing Studios, 2011).

Rees, Martin, *Universe* (London: Dorling Kindersley Ltd., 2012).

Robinson, Howard, *Dualism*, https://plato.stanford.edu/entries/dualism/ [accessed 19th Dec 2019].

Rohlf, Michael, *"Immanuel Kant"*, https://plato.stanford.edu/cgi-bin/encyclopedia/archinfo.cgi?entry=kant [accessed 2 Dec 2019].

Rosicrucian Brother, *Geheime Figuren der Rosenkreuzer aus dem 16. Und 17. Jahrhundert* (Freiburg: Hermann Bauer KG, 1988).

School of Spiritual Sciences, https://goetheanum.co/en/school [accessed 23 Oct 2019].

Senge, Peter, *Schools that Learn* (New York: Crown Publishing, 2012).

Silva, Fabio, *The Role and Importance of the Sky* in *Archaeology: An Introduction* in Silva, Fabio, Campion, Nicholas (eds), *Skyscapes* (Oxford: Oxbow Books, 2015).

Soja, Edward, W. *Thirdspace, Journeys to Los Angeles and other real-and-imagined places* (Oxford: Blackwell Publishers Ltd, 2000).

St Michael Archangel, *https://www.heiligenlexikon.de/BiographienM/Michael.htm* [accessed 12 Feb 2020].

Stauffer, Jonathan, *Gesamtverzeichnis* (Basel: Rudolf Steiner Verlag, 2018).

Steiner, Rudolf, *Philosophie der Freiheit, GA 4* (Dornach: Rudolf Steiner Verlag, 1894, 1918).

Steiner, Rudolf, *Theosophie, GA 9* (Dornach: Rudolf Steiner Verlag, 1987).

Steiner, Rudolf, *Wie erlangt man Kenntnisse der höheren Welten*, http://fvn-archiv.net/PDF/GA/GA010.pdf#view=Fit [accessed 30 May 2019].

Steiner, Rudolf, *Aus der Akasha Chronik, GA 11* (Dornach: Rudolf Steiner Verlag, 2018).

Steiner, Rudolf, *Die Geheimwissenschaft im Umriss, GA 13* (Dornach: Rudolf Steiner Verlag, 1989).

Steiner, Rudolf, *Anthroposophische Leitsätze, GA 26* (Dornach: Rudolf Steiner Verlag, 1998).

Steiner, Rudolf, *Mein Lebensgang, GA 28* (Dornach: Rudolf Steiner Verlag, 2011).

Steiner, Rudolf, *Der Goetheanumgedanke inmitten der Kulturkrisis der Gegenwart*, http://fvn-archiv.net/PDF/GA/GA036.pdf#view=Fit [accessed 30 May 2019].

Steiner, Rudolf, *Wahrspruchworte, GA 40* (Dornach: Rudolf Steiner Verlag, 2011).

Steiner, Rudolf, *Spirituelle Seelenbetrachtung und Weltbetrachtung, GA 52* (Dornach: Rudolf Steiner Nachlassverwaltung, 1986).

Steiner, Rudolf, *Kunst und Anthropsophie, GA 77b*, (Dornach: Rudolf Steiner Verlag, 1996).

Steiner, Rudolf, *Was wollte das Goetheanum und was soll die Anthroposophie?* http://fvn-archiv.net/PDF/GA/GA084.pdf#view=Fit [accessed 30 May 2019].

Steiner, Rudolf, *Grundelemente der Esoterik, GA 93a* (Dornach: Rudolf Steiner Verlag, 1987).

Steiner, Rudolf, *Vor dem Tore der Theosophie, GA 95* (Dornach: Rudolf Steiner Verlag, 1996).

Steiner, Rudolf, *Ursprungsimpulse der Geisteswissenschaft, GA 96* (Dornach: 1989).

Steiner, Rudolf, *Das Hereinwirken geistiger Wesenheiten in den Menschen, GA 102* (Dornach: Rudolf Steiner Verlag, 2001).

Steiner, Rudolf, *Die Apokalypse des Johannes, GA 104* (Dornach: Rudolf Steiner Verlag, 2006), p. 177.

Steiner, Rudolf, *Das Prinzip der spirituellen Ökonomie im Zusammenhang mit Wiederverkörperungsfragen, GA 109* (Dornach: Rudolf Steiner Verlag, 1979).

Steiner, Rudolf, *Geistige Hierarchien und ihre Widerspiegelung in der physischen Welt, GA 110* (Dornach: Rudolf Steiner Verlag, 1991).

Steiner, Rudolf, *Die tieferen Geheimnisse des Menschheitswerdens im Lichte der Evangelien, GA 117* (Dornach: Rudolf Steiner Verlag, 1986).

Steiner, Rudolf, *Exkurse in das Gebiet des Markus Evangeliums, GA 124* (Dornach: Rudolf Steiner Verlag, 1995).

Steiner, Rudolf, *Das esoterische Christentum und die geistige Führung der Menschheit, GA 130* (Dornach: Rudolf Steiner Verlag,1995).

Steiner, Rudolf, *Die geistigen Wesenheiten in den Himmelskörpern und den Naturreichen, GA 136* (Dornach: Rudolf Steiner Verlag, 1996).

Steiner, Rudolf, *Das Leben zwischen dem Tode und der neuen Geburt im Verhältnis zu den kosmischen Tatsachen, GA 141* (Dornach: Rudolf Steiner Verlag, 1997).

Steiner, Rudolf, *Welche Bedeutung hat die okkulte Entwicklung des Menschen für seine Hüllen und sein Selbst, GA 145* (Dornach: Rudolf Steiner Verlag, 2015).

Steiner, Rudolf, *Die Geheimnisse der Schwelle, GA 147* (Dornach: Rudolf Steiner Verlag, 1997).

Steiner, Rudolf, *Vorstufen zum Mysterium von Golgatha, GA 152* (Dornach: Rudolf Steiner Verlag, 1990).

Steiner, Rudolf, *Inneres Wesen des Menschen und Leben zwischen Tod und neuer Geburt, GA 153* (Dornach: Rudolf Steiner Verlag, 1997).

Steiner, Rudolf, *Das Karma des Berufes des Menschen in Anknüpfung an Goethes Leben, GA 172* (Dornach: Rudolf Steiner Verlag, 2002).

Steiner, Rudolf, *Bausteine zu einer Erkenntnis des Mysteriums von Golgatha, GA 175* (Dornach: Rudolf Steiner Verlag, 1996).

Steiner, Rudolf, *Erdenleben und Weltenleben. Anthroposophische Lebensgaben. Bewusstseins-Notwendigkeiten für Gegenwart und Zukunft, GA 181* (Dornach: Rudolf Steiner Verlag, 1991).

Steiner, Rudolf, *Der Tod als Lebenswandlung, GA 182* (Dornach: Rudolf Steiner Verlag, 1996).

Steiner, Rudolf, *Das Sonnenmysterium und das Mysterium von Tod und Auferstehung, GA 211* (Dornach: Rudolf Steiner Verlag, 1986).

Steiner, Rudolf, *Das Geheimnis der Trinität, GA 214* (Dornach: Rudolf Steiner Verlag, 1999).

Steiner, Rudolf, *Die Grundimpulse des menschlichen Werdens der Menschheit, GA 216* (Dornach: Rudolf Steiner Verlag, 1988).

Steiner, Rudolf, *Geistige Zusammenhänge in der Gestaltung des menschlichen Organismus, GA 218* (Dornach: Rudolf Steiner Verlag, 1992).

Steiner, Rudolf, *Der Jahreskreislauf als Atmungsvorgang der Erde und die vier grossen Festeszeiten, GA 223* (Dornach: Rudolf Steiner Verlag, 1990).

Steiner, Rudolf, *Mysterienstätten des Mittelalters. Rosenkreuzertum und modernes Einweihungsprinzip, GA 223a* (Dornach: Rudolf Steiner Verlag, 2013).

Steiner, Rudolf, *Die Weltgeschichte in anthroposophischer Beleuchtung, GA 233* (Dornach: Rudolf Steiner Verlag, 1991).

Steiner, Rudolf, *Anweisungen für eine esoterische Schulung, GA 245* (Dornach: Rudolf Steiner Verlag, 1987).

Steiner, Rudolf, Die *okkulte Bewegung im neunzehnten Jahrhundert und ihre Beziehung zur Weltkultur, GA 254* (Dornach: Rudolf Steiner Verlag, 1986).

Steiner, Rudolf, *Anthroposophische Gemeinschaftsbildung*, http://fvn-archiv.net/PDF/GA/GA257.pdf#page=76&view=Fit [accessed 30 May 2019].

Steiner, Rudolf, *Die Weihnachtstagung zur Begründung der Allgemeinen Anthroposophischen Gesellschaft 1923/24, GA 260* (Dornach: Rudolf Steiner Verlag, 1994).

Steiner, Rudolf, *Zur Geschichte und aus den Inhalten der ersten Abteilung der Esoterischen Schule 1904-1914, GA 264* (Dornach: Rudolf Steiner Verlag, 1996).

Steiner, Rudolf, *Aus den Inhalten der Esoterischen Stunden. Band III, GA 266/3* (Dornach: Rudolf Steiner Verlag, 1998).

Steiner, Rudolf, *Faust, der strebende Mensch, GA 272* (Dornach: Rudolf Steiner Verlag, 1981).

Steiner, Rudolf, *Wege zu einem neuen Baustil, GA 286* (Dornach: Rudolf Steiner Verlag, 1982).

Steiner, Rudolf, *Allgemeine Menschenkunde als Grundlage der Pädagogik I, GA 293* (Dornach: Rudolf Steiner Verlag, 1992).

Steiner, Rudolf, *Heilpädagogischer Kurs, GA 317* (Dornach: Rudolf Steiner Verlag, 1995).

Steiner, Rudolf, *Rudolf Steiners Entwürfe für die Glasfenster des Goetheanum* (Dornach: Rudolf Steiner Nachlassverwaltung, 1961).

Steiner, Rudolf, *Wahrheit und Wissenschaft* (Dornach: Verlag der Rudolf Steiner Nachlassverwaltung, 1958).

Stuuten, Christian, Osmer, Nanna, Osmer, Jesse, *Im Zeitenstrom* (Dornach: Christian Stuuten, 2013).

Szeemann, Harald, *Der Hang zum Gesamtkunstwerk* (Aarau: Verlag Sauerländer AG, 1983).

Tester, Jim, *A History of Western Astrology* (New York: Ballantine Books, 1987).

Thiselton, Anthony C., *Approaching Philosophy of Religion* (London: Society Promoting Christian Knowledge, 2017).

Trithemius, Johannes, *Seven Secondary Causes*, http://www.esotericarchives.com/tritheim/tritem.htm [accessed 13 Feb 2020].

van den Berg, Karen, Volkenandt, Claus, *Sehen gestaltet Wirklichkeit* in Bockemühl, Michael (ed), *Bildrezeption als Bildproduktion* (Bielefeld: transcript Verlag, 2016).

van der Ree, Pieter, *Living Thought and Plastic Art – Rudolf Steiner and Organic Architecture* in Kries, Mateo, von Vegesack, Alexander (eds) *Rudolf Steiner – Alchemy of the Everyday* (Weil am Rhein: Vitra Design Museum, 2010)

von Stuckrad, Kocku, *Esotercisim Disputed: Major Debates* in the Field in DeConick, April, *Religion: Secret Religion* (Farmington Hills: Mac Millan, 2016).

von Stuckrad, Kocku, *The Scientification of Religion* (Berlin: Walter de Gruyter, 2014).

Vreede, Elisabeth, *Anthroposophie und Astronomie* (Freiburg: Novalis Verlag, 1954).

Warne Monroe, John, *Laboratories of Faith* (London: Cornell University Press, 2008).

Weinandy, Thomas G., *Trinitarian Christology: The Eternal Son* in Emery, Gilles, Levering, Matthew, *The Oxford Handbook of The Trinity* (Oxford: Oxford University Press, 2011).

Zerubavel, Eviatar, *The Seven Day Circle* (Chicago: University of Chicago Press, 1985).

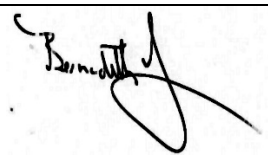
8 APPENDICES

8.1 ETHICAL APPROVAL PG2 / E1 FORM

8.1.1 SECTION K: Declaration

The information which I have provided is correct and complete to the best of my knowledge. I have attempted to identify any risks and issues related to the research activity and acknowledge my obligations and the rights of the participants**.** In submitting this application I hereby confirm that I undertake to ensure that the above named research activity will meet the University's Research Ethics and Integrity Code of Practice	
Signature of applicant: **Nicole Montag-Keller**	**Date:** 3rd June 2019

For students:

Director of Studies/Supervisor:	
Signature:	
Date:	15 July 2019

For staff:

Head of School/Assistant Dean:	
Signature:	
Date:	

Checklist: Please complete the checklist below to ensure that you have completed the form according to the guidelines and attached any required documentation:

x	I have read the guidance notes supplied before completing the form.
x	I have completed **ALL RELEVANT** sections of the form in full.
x	I confirm that the research activity has received approval in principle

☐	I have attached a copy of final/interim approval from external organisation (where appropriate)
☐	I have attached a full risk assessment (and have NOT completed Section H of this form) (where appropriate)
☐	I understand that it is my responsibility to ensure that the above named research activity will meet the University's Research Ethics and Integrity Code of Practice.
☐	I understand that before commencing data collection all documents aimed at respondents (including information sheets, consent forms, questionnaires, interview schedules etc.) must be confirmed by the DoS/Supervisor, module tutor or Head of School.

8.2 INTERVIEW RELEASE FORM

INTERVIEW RELEASE FORM

MA in Cultural Astronomy and Astrology
Department of Archaeology, History and Anthropology,
University of Wales Trinity Saint David, Ceredigion, Wales, SA48 7ED, UK.

STUDENT NAME ADDRESS AND E MAIL HERE:
Nicole Montag-Keller, Nicole.Montagkeller@hobbes.ch

INTERVIEWEE DETAILS HERE:

Name: _____

Address:_____

Tel.:_____ E Mail:_____

This form has been drawn up in order to ensure that the material in your interview with NICOLE MONTAG-KELLER is used only in accord with your wishes.

1. May we use your contribution:

a. for public reference. Yes ☐ No ☐

b. for research purposes. Yes ☐ No ☐

c. for academic presentations, e.g. in seminars and lectures. Yes ☐ No ☐

d. in research material which may be published at a future date Yes ☐ No ☐

2. May we use your name? Yes ☐ No ☐

NB. Even when permission is given to use your name, all material will be cited anonymously unless explicitly requested otherwise.

Signature of interviewee _____ date _____

Signature of interviewer _____ date _____

Note to interviewee: if you have any questions or concerns, please address them to Dr Nick Campion, Director, Sophia Centre for the Study of Cosmology in Culture, Department of Archaeology History and Anthropology, University of Wales Trinity Saint David, Ceredigion, Wales, SA48 7ED, UK. E mail: n.campion@uwtsd.ac.uk

8.3 INTERVIEW CONSENT, PROCESS, QUESTIONS, THANKS AND INFORMATION SHEET

Interview: Consent Form

Hello, I am Nicole Montag-Keller, studying towards my Masters Degree in Cultural Astronomy and Astrology with the University of Wales Trinity Saint David, UK - http://www.uwtsd.ac.uk/ma-cultural-astronomy-astrology/.

Right now I am working towards my Masters degree and this project is part of my Master thesis. I am interested in learning more on how you feel, think and perceive about the Goetheanum.

I am asking you, whether you want to participate in this in-depth interview relating to you as a person and your attitudes and world-view on the Goetheanum. The interview will take approximately between 30 to 60 minutes.

Please be aware, that you can terminate the in-depth interview at any time without giving reasons. I have a little bell with me. If you want to terminate the in-depth interview, ring the bell and I stop to proceed. You decide to stop and you do so without giving any reasons.

I am adhering to the Code of Conduct of the British Psychological Society and the Ethical Guidelines of the University of Wales Trinity Saint David for conducting research. Your answers will be treated fully confidential and impartial. I will store your responses on my laptop, which is password protected. The data will be coded to ensure anonymity and confidentiality. My tutors will read the research report, where your answers will not be traceable to your person and you will obtain an e-mail, a telephone call, a postcard telling you, that a paper copy of this research report is available to you.

Do you want to take part in the questionnaire?

Yes No

How do you stop the in-depth interview?

Ring the bell

Personal information being asked before interview

What age group do you belong to?

18-20, 21-25, 26-30, 31-35, 36-40, 41-45, 46-50, 51-55, 56-60, 61-65, 66-70, 71-75, 76-80, 81-85, 86-90.

What is your gender?

F M

To which of the following religions do most closely relate yourself to?

Buddhist, Hinduist, Jew, Christianity Catholic, Protestant, Orthodox, Anglican, other Christian, Christengemeinschaft, Muslim, Other Religion please specify, Pagan, New Age, Atheist, Non-Religious

Did you participate in any religious rites in order to be a member of your religion?

Y N

If you did participate in religious rites in your life so far, when did you do so?

0-5, 6-10, 11-15, 16-20, 21-25, 26-30, 31-35, 36-40, 41-45, 46-50, 51-55, 56-60, 61-65, 66-70, 71-75, 76-80, 81-85

How often do you attend service of your religion?

Once a week, once a month, once a quarter, once half yearly, once a year

Which other religions are you interested in? If yes, what draws you to any other religion?

…

Do you consider yourself to be an anthroposophic person?

Y N

If yes, how strongly do you consider yourself being an anthroposophic person?
1: none at all; 10: strongly.

1	2	3	4	5	6	7	8	9	10

What makes a person anthroposophic?

Sample of the questions asked:

1	How do you feel about the Goetheanum?	
2	How often do you visit the Goetheanum throughout a year?	
3	Why do go to the Goetheanum?	
4 4a 4b 4c 4d	When did you first go to the Goetheanum? How old were you? On what occasion? Please describe when you first encountered the Goetheanum. Can you remember what you felt when you first went to the Goetheanum?	
5	Are there any unique memories about the Goetheanum?	
6	And what makes the Goetheanum ordinary?	
7	What is your favourite place outside the Goetheanum? Why?	
8	Anything else you want to share with me concerning the outside of the Goetheanum?	
9	What is your favourite place inside the Goetheanum? Why?	
10	Anything else you want to share with me concerning the inside of the Goetheanum?	
11	What is the Goetheanum to you personally?	
12	In what ways does the Goetheanum influence your daily life?	
	How do you perceive the Goetheanum?	
13	Do you change your everyday behaviour when you go to the Goetheanum?	
14	What is your opinion about the Goetheanum?	
15	How do you feel about the Goetheanum's past?	
16	And what do you feel about the Goetheanum's future?	
17	What else have you got in mind, which you want to share with me?	

Thanking the participant

Thank you for taking part in my in-depth interview and sharing your attitude relating to the Goetheanum.

If you got questions, you can either e-mail me at:

nicole.montagkeller@hobbes.ch or 1503212@student.uwtsd.ac.uk

Or ring me on my landline: +41 61 701 35 40 or mobile: +41 (0)79 291 69 34

It is an honour to me, that you participated and that you share your thoughts with me.

Thank you.

Information sheet on the research

The interview consists of 17 open ended questions which aim to understand your world-view towards the Goetheanum and how you express it through your opinion, aspiration, feelings or behaviour. I am hoping to interview 10 to 20 people. After the interviews I will analyse the responses, structure and present them in a research report and I will compare and contrast them with my self-ethnographic research. I expect to find similarities and differences among my participants and aim to make a statement how people relate to the Goetheanum and how it is related to anthroposophical cosmology. The findings will be presented as part of my Master thesis, which will be read and marked by my supervisors and tutors.