Expression of Steiner's anthroposophy

How is the anthroposophy of Steiner expressed in the architectural style of the Rudolf Steinerkliniek in the Hague?

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Introduction

"The word 'anthroposophy' comes from the Greek (anthropos meaning 'human' and sophia meaning 'wisdom'). It can also be translated as 'wisdom of the human being' or understood as 'consciousness of one's humanity'. Anthroposophy is a spiritual philosophy; not a religion" -Rudolf Steiner

Rudolf Steiner was born in 1861in the Kingdom of Hungary (moved to Austria when he was two) as a son of a telegraph operator of the southern Austrian Railway and a housemaid. When he was eighteen, Steiner attended the Vienna Institute of Technology on a scholarship and enrolled in a variety of courses, including mathematics, physics, chemistry, botany, zoology, mineralogy, literature, and philosophy. In 1882, one of his professors suggest Steiner's name to Joseph Kürschner, an editor of Goethe's work and Steiner was introduced to his inspiration for his philosophical movement "Anthroposophy".¹ After learning about different philosophers before his lifetime, Steiner became an editor at the Goethe archives in Weimar and thereby wrote several books about Goethe's philosophy, a foundation for his later work. After that, Steiner received his doctorate in philosophy and moved to Berlin (1897) to be a chief editor of a literary journal, hoping to spread his philosophy.²

Furthermore, Steiner's interest in theosophy resulted in different articles about the subject, gatherings where Steiner spoke, and joining and leading several theosophical societies. In 1904, Steiner was appointed to be the leader of the Theosophical Esoteric Society for Austria and Germany. Steiner's approach was rather western and because he lectured throughout Europe, the society grew rapidly. Due to opinion differences between members, the group split in 1912 and Steiner formed the Anthroposophical Society. Steiner moved to Dornach and stayed there until he passed in 1925. Later, he founded a school that lectured in astronomy, education pedagogy, medicine, science, mathematics, agriculture, and (performing and literary) arts, all by his anthroposophical philosophy.³

Moreover, the main principle of the movement anthroposophy is about a comprehensible spiritual world that is accessible to human experience. In this movement, followers aim to

¹ Taylor, *Rudolf Steiner: Een Geïllustreerde Biografie*, 27-45.

² Taylor, Rudolf Steiner: Een Geïllustreerde Biografie, 49-51.

³ Taylor, *Rudolf Steiner: Een Geïllustreerde Biografie*, 170-172.

engage and connect on the spiritual level through their own (sensory) experiences. It can be seen as a mode of thought, spiritually connecting with the existence of an objective. A variety of existential questions (what is the meaning of life? What is the purpose of life? Where do we go when we die?) are answered through inner enlightenment and self-conscience to connect with the living nature and spiritual world. Furthermore, nature has a significant role in anthroposophy because we humans are made of nature. Every living creature is connected and bears sentience or consciousness (hence the connection). Steiner spoke of society relying too much on abstraction and losing contact with natural and spiritual reality and thus a corresponding loss of intuition and finding balance. This also expresses itself in sustainability principles in architecture for example.⁴

At the beginning of the 20th century, Rudolf Steiner introduced Anthroposophy to the Dutch theologians in the Netherlands. Steiner used to visit the Netherlands occasionally and primarily focused on connecting with his followers by giving lectures. The first time he visited the Netherlands in 1904, he gave a lecture about theosophy at the Dutch theosophical society. In the following years, his lectures were about anthroposophy, mainly in the Hague. After the first world war, anthroposophy spread across the country and in 1923 the Dutch Anthroposophical Society was born.⁵ Currently, his influence is best seen in Waldorf education establishments throughout the Netherlands based on his pedagogical principles.

As written before, there are different approaches to anthroposophical philosophy. One important approach is an architectural style and visual arts. Even at the beginning of the upcoming Anthroposophical Society, architecture and art were significant for Steiner and his followers. When the Society was founded, they were in great need of a place to hold its yearly conferences and performances of plays, which were a big part of anthroposophy.⁶ In 1913 Steiner designed a theatre and organizational center: the Goetheanum, located in Dornach, Switzerland (image 1). Unfortunately, on new year's eve 1922, the building burned down, leaving only the foundation intact. Steiner began designing a new building, with a concrete structure. The second Goetheanum (image 2) was finished three years after Rudolf Steiner passed away.

⁴ Taylor, Antroposofie: een inleiding, 7-63.

⁵ Taylor, *Rudolf Steiner: Een Geïllustreerde Biografie*, 187-190.

⁶ Steiner, Architecture as a Synthesis of the Arts, 159-161.



Image 1 Paull, John. 2020. *The First Goetheanum: A Centenary for Organic Architecture*. Photograph. Australia: Sryahwa.



Image 1 Knudsen, Jaqueline. *Stromende ruimte in Goetheanum*. Photograph. The Netherlands: Architectuur.nl.

The designs of both buildings were derived from organic and expressionist architectural styles. In one of his essays, he wrote about his aesthetic conception: art has the task of bridging the gulf between physics and metaphysics. The first Goetheanum for instance, showed the translation of "forms inherent in nature" into architecture. The interior of anthroposophical architecture has fewer perpendicular angles and shapes need to be rounded (abgeeckt). The external form of the building should be determined by the building material, polygonal and sloping surfaces, and handcrafted details in and outside the building are appreciated. He derived his ideas from Goethe's studies, which were also about studies on organic matter.⁷ After Rudolf Steiner, thousands of further buildings have been built following the anthroposophical style. Some of Steiner's buildings are listed amongs the most significant works of modern architecture, influencing numerous architects.

⁷ Steiner, Architecture as a Synthesis of the Arts, 169.

Another approach to anthroposophy is medicine. At the beginning of the twentieth century, Steiner was working with the help of doctors on a new approach to integrative medicine. Anthroposophical medicine is not scientifically proven (still holds around one hundred scientific publications a year) and is merely based on pseudoscientific, hence an alternative form of medical practice.⁸ Although it is science-based, it integrates conventional medicine with an anthroposophical perception of, in particular, the human being. Therefore, the relationship between practitioners (doctors, coaches, nurses, therapists, etc.) and the patient is tremendously important. The healing of a person is seen as a process and takes distinct levels into account (physical, vitality, psychological/emotional, and individuality).⁹ The physical level includes, among other things, surgery, and physical interventions. Vitality is about the improvement of the patient by focusing on what supports health and well-being, instead of focusing on factors that cause the disease. The psychological and individual level regards lowering anxiety and improving a sense of coherence. The most important principle of AM is taking account of the body, mind, and spiritual dimensions with the intention of self-healing and health balance. It includes special therapies such as eurythmy, artistic therapies, and special nursing. Around 1920, the first physicians specialized in anthroposophic medicine, and the first anthroposophical medical clinic (Ita Wegman Clinic) was built in Arlesheim, Switzerland. There are a total of twenty-four hospitals in Europe that offer anthroposophic medicine. The two previously mentioned approaches to anthroposophy are commonly combined, a few examples are the Filderklinik in Stuttgart, Germany (image 3) and the Vidar Clinic in Stockholm, Sweden (image 4).



Image 3 *The Filderklinik*. Photograph. Stuttgart: Mahle Stiftung.



Image 4 Nerstu, Hans. *The Vidar Clinic I*. Photograph. Stockholm.

⁸ Bhasin, "Medical Anthropology: A Review." 2-3.

⁹ Bhasin, "Medical Anthropology: A Review." 12-17.

The scope of this thesis is the expression of anthroposophic architectural concepts and in combination with anthroposophic medicine principles. To shed light on how these two approaches are combined and what the purpose of this combination can be. To summarise, finding the main causes why the two approaches are seen together. This thesis will focus on one case study to thoroughly conduct information for this research: the Rudolf Steinerkliniek in the Hague, the Netherlands (image 5). Some other case studies of clinics outside the Netherlands will be compared to the main case study to elaborate and/or support the subject and found information about the Rudolf Steinerkliniek but will not be as extensively analyzed. The Rudolf Steinerkliniek (now called Raphaëlstichting) is located in the Hague and was built in 1928 between the Hague and Scheveningen, on top of a dune. The architect of this clinic is Jan Willem Eduard Buijs, who was not fond of the anthroposophical building style, but got asked to design the building because he was acquainted with one of Rudolf Steiner's friends. The friend, Willem Zeylmans van Emmichoven, a psychiatrist who was deeply inspired by Rudolf Steiner, began running his own clinic in the Netherlands at the encouragement of Steiner. When Willem's clinic needed additional space, he asked Buijs, his friend, to design the new building. In the run-up to designing this hospital, Jan Buijs went to Dornau for a month to study the first architectural building Rudolf Steiner made; the Goetheanum. Till this day, this clinic is a healthcare institution, focusing on anthroposophic care for people with mental disabilities, and still has a psychiatry and nursing department.



Image 5 Rudolf Steiner Zorg. Photograph. The Hague: Raphaëlstichting.

The main question for this research states: How is the anthroposophy of Steiner expressed in the architectural style of the Rudolf Steinerkliniek in the Hague? This question will be answered through four sub-questions and therefore four chapters will answer this main question. The first sub-question states: What are the fundamentals of anthroposophical architecture for healthcare buildings? This first chapter will be a steppingstone for chapter two. This chapter is more in-depth about Rudolf Steiner's architectural style to determine elements that will be used to analyze Rudolf Steinerkliniek in the next chapter. The chapter proceeds to elaborate on the main principles and theory of anthroposophical medicine by Rudolf Steiner, to determine important categories which are also needed in the next chapter (analyzing the case study).

The second sub-questions states: What is the architectural expression of anthroposophy in the Rudolf Steinerkliniek related to practice? In this chapter, we will gather more information about the practice (program) of the Rudolf Steinerkliniek to answer the main question. This chapter focuses on the case study and the purpose is to analyze and to observe. In this chapter, the two approaches are now more closely related. In addition, this chapter will compare other case studies in Europe to the Rudolf Steinerkliniek, to elaborate and/or support the information found in the previous chapters. Other examples will be mentioned to support the analysis.

The third sub-question states: What is the purpose of anthroposophical expression in architecture related to the patient? In this chapter, we will analyze the two approaches and will further form the answer to the main question. This chapter will also observe the different opinions and experiences in/about the clinic related to the program. Then, a conclusion will be formed to answer the main question.

Lastly, this history research is done via primary and secondary research. The primary sources will consist of photographs, drawings, and written documents. To find these sources, I will visit the archives of Gemeente Den Haag and Nieuwe Instituut and visit the location of the case study myself. These sources will contribute to analyzing one building: de Rudolf Steinerkliniek. The secondary sources will consist of literary sources. A lot of research and publications exist about the separate approaches to anthroposophy (anthroposophical architecture and anthroposophical medicine). Less can be found regarding the combination of these approaches, certainly not about case studies in the Netherlands. An example of similar research is "A study on the Characteristics of Healing Space...based on the theory of Rudolf Steiner..." by H. Kim.¹⁰ The most known work of Rudolf Steiner and anthroposophy in the Netherlands is the Waldorf schools. This paper will shed a light on a less-known subject. This research will be less general about the anthroposophic definition of architecture and medicine (and the combination of the two) than most of the publications found and will be the first (not yet found) specific analysis of the Dutch anthroposophic case study: de Rudolf Steinerkliniek.

¹⁰ Kim, "Journal of The Korea Institute of Healthcare Architecture."

1 Theory and fundamentals of anthroposophical architecture and medicine

This chapter will answer the sub-question: What are the fundamentals of anthroposophical architecture for healthcare buildings? The purpose of this chapter is to be a steppingstone for the next chapter (where the case study will be analyzed) and determine the subdivisions in which we can divide the next chapter for a more understanding structure. To determine these subdivisions, the theory of the history of anthroposophic architecture and medicine (specifically nursing institutions for people with mental disorders like the Rudolf Steinerkliniek) will be discussed and analyzed from a critical distance. Thereby, to understand the case study, a brief explanation about this specific kind of institution in the nineteen twenties will be given. The theory of the two mentioned approaches to anthroposophy, architecture, and medicine, will be managed separately, yet thoroughly, in this chapter. This chapter will not further elaborate on the crossover between anthroposophy and architecture. The timeframe of the theory for anthroposophical medicine is around the nineteen twenties, during the upcoming of anthropology in the Netherlands and the establishment of the case study. Lastly, there will be given a short summarisation of the theory and found subdivisions. The type of research conducted for this chapter is a literary review, with the use of secondary sources, and therefore consists mostly of qualitative analysis. Other critical analysis will be used to analyze the subjects and keep their critical distance. Some sources for this chapter will be non-academic, and therefore will not determine conclusions. Although, when in line with Rudolf Steiner's theories they can help with understanding the theory.

1.1 Fundamentals of anthroposophical architecture

It is said by multiple sources that the architectural style of Rudolf Steiner is derived from organic architecture, by opposing the nineteenth-century neo-styles and bringing back a holistic attitude. Organic architecture is derived from organicism, a complex philosophical term that roughly states that the universe (including humans) is considered to be alive and naturally ordered (like an organism). This definition is stated in the literature of Van Eck, a professor in Art and Architecture.¹¹ Even though the philosophy of anthroposophy (description in the introduction) is quite similar to this simply stated definition of organicism, no research can proclaim that Steiner directly stated that his philosophy in architecture is derived from organicism (this term will not be further elaborated). Only, different articles, even critical ones, stating that anthroposophical architecture is a representation of organic architecture, are quite common.

A publication by Espen Tharaldsen "*Die Verwandlung des Alltags*" is scientific research, analyzing Steiner's philosophy on architecture and giving a clear and thorough synopsis of Rudolf Steiner's architectural interpretation. This research clearly states that Steiner's architectural view is leaning towards organic architecture and is rather a concept in anthroposophic architecture.¹² The principles of anthroposophic architecture are perhaps derived from organic architecture and therefore has its similarities, however, Steiner introduced more principles that have not yet been seen in the organic architectural style.

Fortunately, Steiner authored several books about his philosophy on architecture and art. As read in the introduction, Steiner's anthroposophy stands for the connection between human and their spiritual world. This connection can be achieved by sensory experiences and

¹¹ Van Eck, Organicism in nineteenth century Architecture, an enquiry into its philosophical and theoretical background.

¹² Tharaldsen, Espen, *Die Verwandlung des Alltags: Rudolf Steiners Ästhetik*.

therefore developing yourself and achieving inner enlightenment and self-conciseness. Steiner believed that the built environment had a profound impact on human beings and their wellbeing, and that architecture should reflect and enhance the spiritual and cultural life of a community. He saw architecture as a way to bridge the gap between the physical and spiritual worlds and believed that the built environment could be designed to promote health, creativity, and spiritual growth.¹³

To understand more about the principles of anthroposophic architecture, we need to look at formal influences with Steiner in his direct cultural environment, instead of general organismic architecture examples. According to a dissertation about the aesthetics of Rudolf Steiner, written by Jennie Cain, was Rudolf Steiner especially fond of German expressionism and greatly inspired by architects older and younger than him, practicing this style.¹⁴ Three different projects are given as an example to show contemporaneous thinkers: Bruno Taut's Glashaus Pavilion from 1914; Erich Mendelssohn's Einsteinturm from 1921 and Herman Finsterlin's Glass House from 1924.

Bruno Taut (1863-1915) built the Glass Pavilion in 1914 (image 6) for an exhibition and it became an expressionist landmark whose purpose was to showcase products for a company. Taut was an expressionist and spiritually inspired architect and was besides an architect also a theorist, similar to Steiner, according to Cain.¹⁵

Hermann Finsterlin (1887-1973) was an anthroposophist and was part of a group, started by Taut, to exchange architectural ideas. Dennis Sharp, a British architect, wrote about the found similarities in the works of Steiner and Finsterlin.¹⁶ He mainly names Finsterlin's drawings about architectural form (image 7).

Another example of an architect who has links between Steiner's architecture and his contemporaries is Erich Mendelsohn (1997-1953). Fiona Gray wrote in an architectural history research that Steiner and Mendelsohn both have the same concept of imitating and understanding nature and cooperating with this in their designs.¹⁷ An example is the Einsteinturm, an astrophysical observatory build in 1921 (image 8).

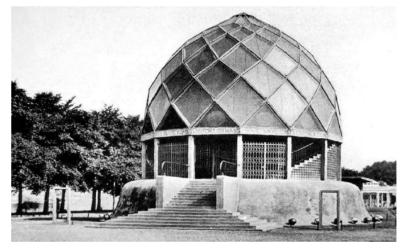


Image 6 Holst, Jonas. *Bruno Taut's Glass Pavilion, 1914*. Photograph. ResearchGate.

¹³ Steiner, Architecture: An Introductory Reader, 17-34.

¹⁴ Cain, The aesthetics of Rudolf Steiner and Spiritual Modernism, 2-25.

¹⁵ Cain, The aesthetics of Rudolf Steiner and Spiritual Modernism, 189.

¹⁶ Sharp, Modern Architecture and Expressionism, 151.

¹⁷ Gray, The synthesis of Empathy, Abstraction and Nature in the Work of Kandinsky, Steiner and Mendelsohn, 3-4.

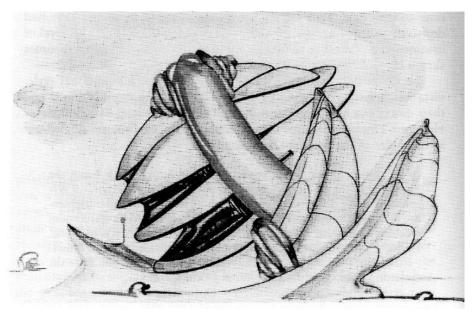


Image 7 Finsterlin, Hermann. 1924. Glass house. Drawing.



Image 8 Janssen, Dieter. 2009. *Einesteinturm by Erich Mendelsohn from 1921*. Photograph. Canada: Dieter Janssen Photopraghy.

When comparing writers and their publications about anthroposophy, with books by Rudolf Steiner, about his interpretations of architecture, we can conclude that the philosophy remains the same. Gray writes about Steiner being particularly interested in architecture because it was a way of expressing his artistic endeavor and it can create physical context.¹⁸ Steiner himself wrote in his book "Toward a New Theory of Architecture" that he is aiming to make the spiritual world sensible by visualizing it in art and architecture.¹⁹ An interesting article written by David Adams indicates the contrast to van Eck, where he writes about the understanding of "style", as being a method or manner or for designing, not a fixed appearance of technique.²⁰ Therefore,

¹⁸ Gray, "Rudolf Steiner: Occult Crank or Architectural Mastermind?", 57-58.

¹⁹ Steiner, *Toward a New Theory of Architecture*, 28.

²⁰ Adams, in the introductory of Steiner's: *Architecture, Sculpture, and Painting of the First Goetheanum*. Collected Works of Rudolf Steiner, 5.

it can be proposed that Steiner uses architecture as a tool to visualize his anthroposophy: an anthroposophical expression. Now that we know why Steiner was interested in architecture, the following text will shortly elaborate on how anthroposophy is expressed in architecture by some main concepts.

Firstly, the term polarity is fundamental in Steiner's philosophy. He stated that polarity is not about opposites or contradictory duality, but about balance. Two polarities, such as dynamic and static, order and chaos, and darkness and light, will help a third find balance, according to Steiner.²¹ According to Gray, polarity was in addition a way for Steiner to visualize the connection between the terrestrial and the cosmic, profane, and sacred.²²

Secondly, Steiner believed when understanding the senses of a human, the spiritual world will be visible. According to Steiner, there are twelve senses (image 9) that when understood, humans were able to perceive another dimension (life beyond, spirit world). ²³ To achieve this, full engagement in sound, light, texture, form, and color is necessary (according to the philosophy of anthroposophy).

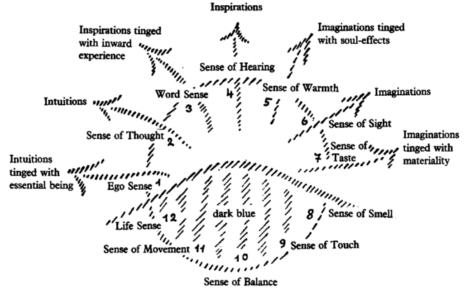


Image 9 Steiner, Rudolf. 1920. *Diagram of the twelve senses*. Drawing. Dornach: lecture.

Another important fundamental in anthroposophical architecture is the user's perspective, where comfort for the user is chosen over the aesthetics of the design. According to the philosophy of anthroposophy are humans an important focus in architecture and buildings are sometimes inspired by the internal human body (image 10).

²¹ Steiner, Art as Spiritual Activity: Rudolf Steiner's Contribution to the Visual Arts, 195.

²² Gray, Rudolf Steiner's theories and their translation into architecture. 91

²³ Steiner, Art as Spiritual Activity: Rudolf Steiner's Contribution to the Visual Arts, 103.

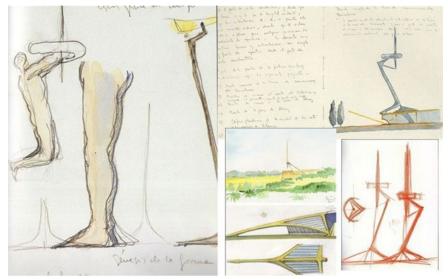


Image 10 Calatrava, Santiago. *Original Sketches of Torre Montjuic*. Drawing. Barcelona.

In addition, the use of curved and organic shapes is preferred rather than straight lines and geometric shapes (only when not natural). For building materials, natural materials are preferred, such as wood, clay, and stone. Also, the use of color is important. Thereby, the architectural style emphasizes the use of natural light and the relationship between light and color.

According to Steiner, it is important to visualize a sense of process and development in architecture, because that is one of the main pillars of his anthroposophy (developing for enlightenment), a building has not simply a roof for protection, yet the whole building has a rather leading and connecting function. Incorporation of spiritual and symbolic elements into the design, such as the use of geometric forms, symbols, and motifs can be beneficial. In addition, elements of craftmanship and the coherency of shapes are also some important key features in anthroposophical architecture.²⁴

Lastly, anthroposophical architecture is open to new technological innovations and construction techniques, which perhaps seems to be contrary (opposing modernity).

There is one important word often repeated in the literature about anthroposophy (architecture and medicine); the word "connection". This is a keyword for fully understanding the thought behind the philosophy of anthroposophy. Every theory according to Steiner, has more or less the same purpose (expressing spirituality) but seems to have different themes to fulfill this purpose. Therefore, if we look at the different methods of how Steiner is trying to connect anthroposophy with architecture, three different themes begin to arise and are noticeably visible, regarding anthroposophical architecture. We can differentiate three different connections: firstly, the connection with spirituality; secondly the connection with nature/surroundings, and lastly the connection with the physical self.

Bernard Lievegoed, a psychiatrist, yet opinionated about architecture, lectured in 1977 to students of the track architecture about "the organic" in architecture. In one of his lectures, he mentioned three different aspects which he thinks anthroposophic architecture is derived from and how it differs from organic architecture.²⁵ The three aspects mentioned by Lievegoed are time and space, metamorphosis, and senses. Interestingly, Lievegoed's three aspects are also fitting in these three themes: time and space for the connection with spirituality,

²⁴ Steiner, Art as Spiritual Activity: Rudolf Steiner's Contribution to the Visual Arts, 120.

²⁵ Lievegoed, Levende Bouwkunst: Over Het Organische in de Architectuur, 9-23.

metamorphosis for the connection with surroundings, and senses for the connection with your (physical) self. Even Rudolf Steiner said it himself while giving a lecture, talking about art: "And when we animate everything that presses, bears, and curves, that crafts surfaces and masters completed forms --we begin to live by opposing and playing with the forces that shape the world, and by creating art we explore fantasy and endless metamorphoses, but we realize that we cannot understand the secrets of the world of forms until we try to express ourselves in the universal organic motion and in creative activity." -Rudolf Steiner

In this citation, the terms "forms and metamorphosis", "expressing ourselves" and "secrets of the world" are all visible and fitting in the three themes. Even though the literature of Lievegoed is not an academic source, in his book he is interpreting the philosophy of Steiner and it helps to clarify these three themes. Fiona Gray, on the other hand, is more objective about her long background in art history and architecture.²⁶

To make the themes more suitable for analyzing the case study from an architectural perspective (instead of an anthroposophic perspective), the found themes will be altered to three types of degrees in design. These key themes will determine the structure of the next chapter, where the expression of anthroposophy in the architecture of the Rudolf Steinerkliniek will be analyzed. The descriptive anthroposophic themes will be mentioned and incorporated into the analysis (therefore linking the two chapters).

Subdivision building elements: instruments for analyzing architecture:

Theme 1- the separate elements, looking at shapes, frames, etc.

Theme 2 - the connection of the elements, looking at the coherency of elements

Theme 3 - the elements altogether, the overall language of design

Subdivision "connectivity in anthroposophy": understanding the theory of anthroposophical architecture:

Theme 1 - connection with surroundings (metamorphosis)

- Theme 2 connection with physical self (senses, polarity)
- theme 3 connection with spirituality

1.2 Fundamentals of anthroposophical medicine

The scope of this text is anthroposophical medicine and health care in the nineteen twenties when anthroposophic medicine was fairly young and just arrived in the Netherlands. In addition, another approach to anthroposophy. This thesis will focus on nursing institutions only, since it was the operating form of the Rudolf Steinerkliniek when it opened its doors. This institution had long-stay medical care (sleeping rooms are visible on the plans) and required longer healing processes rather than relatively short visits to a general practitioner for instance. When looking at the original plans of this building, the program is visible.²⁷ This kind of institution was more related to mental healthcare than solely practicing physical care (treating a wound etc.). The exact program (the 1920s) and relative numbers of the Rudolf Steinerkliniek will be discussed in the next chapter.

Geertje Boschma, a professor in the history of nursing and healthcare, published in 2013 "The Rise of Mental Health Nursing: A History of psychiatric Care in Dutch Asylums" where she writes about an upcoming occupational field in the late nineteen century: mental health

²⁶ Gray, Rudolf Steiner's theories and their translation into architecture.

²⁷ Van Emmichoven, *Bestek en voorwaarden "Rudolf Steiner Kliniek"*. Consulted from Nieuwe Instituut, Rotterdam. Archival number: BUYSCd29.1.

nursing. According to Boschma, nursing institutions in the nineteen twenties were a result of evolving in the rise of scientific psychiatry in the late nineteenth century and after the first world war. The scale of institutional care in the nineteen twenties in the Netherlands was in an uprising, but still relatively minor compared to now. Around that time, boarding nursing institutions for the mentally afflicted were not yet normalized, still, several people stayed with their families (also because of fewer locations).²⁸ Said institutions were typically run by charitable organizations or religious institutions. The idea of establishing the Rudolf Steinerkliniek originated in 1923, shortly after the period of Boschma's analysis.

As said in the introduction, Rudolf Steiner created an alternative form of medical practice, with new physical interventions. Anthroposophical care is about the coherency of the body, mind, and soul, and when not in balance, to eventually reach the patient's capability to self-curing and healing, According to the anthropological philosophy.

The holistic approach to medicine and healing according to Steiner is divided into several fundamentals. The first and most well-known practice for anthroposophic medicine in nursing institutions is long-term external therapy and applications. This is an additional form of therapy including a type of alternative medicine, where the patient has significantly more influence on the scale and progression of the healing process than with regular therapy. With this practice, medicine is externally administered, meaning that it is applied to the patient's skin. Steiner believed that the skin related to everything in your body through the nervous system. Around that time (1920's), anthroposophical medicine was still underdeveloped in comparison to now. A Commonly used "medicine" was organic plant oil. The research of Wölfle explains that the skin can taste bitterness via its taste receptors, and when bitterness is detected, the body stimulates regeneration and the metabolism of the patient, according to the anthropological philosophy. ²⁹ For the periods between therapy sessions, it is important to give the patient's body rest, to fully advance in the next session also according to the anthropological philosophy.

Another practice according to anthroposophical medicine is the importance of warmth. Warmth is seen as a catalysator for the activation of a person's natural healing.³⁰ This was practiced because that explains the bathrooms in the plans. This is important in anthroposophical medicine because practitioners aim for the self-healing and personal development of the patient. According to anthropological philosophy.

Secondly, with institutions that have a psychological department, psychotherapy is a form of practice. This sort of therapy can be seen as psychological counseling in various aspects, depending on the patient's diagnosis.³¹ Examples are anxiety, mental illnesses, existential problems, or spiritual issues. This should be helpful to an extent according to the anthropological philosophy.

Thirdly, additional therapy is often applied for long-term patients, for example, people with a (mental) disability who live in nursing homes. Different additional therapies, for instance, art or eurythmy therapy help patients with various kinds of diagnoses and teach them how to process their diagnosis. Eurythmy, for instance, is an exercise therapy where specific movements of the whole body have a positive effect on for example, breathing problems,

²⁸ Boschma, The Rise of Mental Health Nursing: A History of Psychiatric Care in Dutch Asylums, 1890-1920, 59-80.

²⁹ Wölfle et al., "Expression and Functional Activity of the Bitter Taste Receptors TAS2R1 and TAS2R38 in Human Keratinocytes.", 137-146.

³⁰ Baars, "De Bijdrage van de Antroposofische Eerstelijnszorg Aan de Vermindering van de 'Burden of Disease' in Nederland.", 65-68.

³¹ Kienle et al., "Anthroposophic Medicine: An Integrative Medical System Originating in Europe."

physical vitality, and disease-specific effects, according to the anthropological philosophy.³² Even the rooms for said practices were mentioned in the "Voorwaarden & Bestek" of the Rudolf Steinerkliniek, written by Emmerich.³³

Lastly, it is important to remember that anthroposophical medicine is not seen as a substitution for regular medicine, yet is rather an addition and can give a wider perspective on health care in general.³⁴ Also, as said before, not every practice in anthroposophical medicine is scientifically proven to fully cure the patient's diagnosis. These practices are all written in the view of anthroposophy and are not scientifically proven (most of them).

While analyzing the theory of anthroposophical medicine in the nineteen twenties and finding its fundamentals for this period, different themes are starting to be visible, similar to the fundamentals of anthroposophic architecture. The fundamentals seem to be distinguished by the degree of application. Thence, three different degrees in fundamentals of anthroposophic medicine can be distinguished: nursing, mediating, and coaching, also can be categorized as physical, psychological, and individual (own interpretation of the analyzed theory above). Nurses and doctors commonly practiced physical interventions. To heal a patient psychologically, mostly psychotherapists were the mediators between the patient and their process to "enlightenment". To make sure the patient could heal individually and reach self-development (according to the anthropological philosophy), coaching was often practiced with additional therapies. While these themes are now categorized for the sake of practicality, they were usually practiced together and the patient was approached in every aspect, regardless of the diagnosis, because mind, soul, and body needed to be in balance.

In the Netherlands are currently more than five hundred anthroposophic doctors and therapeutics working at different practices, ranging in different areas of expertise.³⁵ Compared to Germany or Switzerland for instance, the Netherlands has relatively small practices. It is important to remember that sayings, conclusions, and practices are according to anthroposophical medicine. What is striking about the influence of anthroposophical medicine is that they are not clear in a scientific sense. Yet, Steiner writes very clearly in his literature that anthroposophical medicine is crucial and significant when about healing illnesses or mental disabilities. If mentioned practices are indeed scientifically proven (some sources claim to be) will not be overseen in this thesis. The text above is only to summarise important methods in anthroposophic medicine.

To conclude, this chapter has distinguished different themes in the theory of anthroposophical architecture and anthroposophical medicine. These established themes will be applied in the next chapter, where the case study will be analyzed.

Main themes in the fundamentals of anthroposophic medicine:

- 1. Physical (nursing)
- 2. Psychological (mediating)
- 3. Individuality (coaching)

³² Kirchner-Bockholt, "Fundamental principles of curative eurythmy.", 17-19.

³³ Van Emmichoven, *Bestek en voorwaarden "Rudolf Steiner Kliniek"*. Consulted from Nieuwe Instituut, Rotterdam. Archival number: BUYSCd29.1.

³⁴ Baars, "De Bijdrage van de Antroposofische Eerstelijnszorg Aan de Vermindering van de 'Burden of Disease' in Nederland.", 6.

³⁵ Baars, "Complementaire zorg: uitwendige therapie als aanvulling op reguliere zorg", 20.

Thus, the answer to "what are the fundamentals of anthroposophical architecture for healthcare buildings?" is explained in two parts. Together, the fundamentals of anthroposophical architecture in health care buildings consist of various aspects related to the practice in the mindset of anthroposophic medicine. The first fundamental includes that the design of the building needs to be integrated in their surroundings, by implementing nature and visualizing the processes in nature. This is an individual approach where (sometimes a practitioner coaches) the patients are being stimulated to self-heal and being encouraged in the process through architecture. Examples of expressions within this fundamental are integrating organic shapes and natural building materials.

This brings us to the second fundamental, architecture should contribute to the development and enlightenment of a person in order to be beneficial for healing. Examples of expressions within this fundamental are implementing the twelve senses of Steiner (color for instance) and human scale. This is more related to the patient's specific illness, and therefore, this fundamental has a more physical approach.

The third and last important fundamental in anthroposophic architecture in healthcare institutions is connecting the material world with the spiritual world, mainly to express the anthroposophic philosophy. This fundamental has a more psychological or spiritual approach and expresses itself via symbolisms for instance.

The text above shows that these definitions within separate fundamentals also be suitable in other fundamentals (individuality from fundamental one with specific illness treatment from fundamental two). All fundamentals relate to each other, the expression of the fundamentals overlap, and they are almost inseparable, and overall, serving the same purpose. In nursing institutions, these fundamentals are important for healing the patient in (conventional) ways.

2 The expression of anthroposophical architecture at the Rudolf Steinerkliniek

This chapter will answer the sub-question: What is the architectural expression of anthroposophy in the Rudolf Steinerkliniek related to practice? This chapter will begin to elaborate on the program of this institution, to better understand the layout and spaces that are going to be analyzed. Continuing in this chapter, the two approaches will be combined and will be analyzed together but will mainly address the architectural concepts. The anthroposophic architectural expression of the case study will be analyzed in three different paragraphs, divided into the "instruments for analyzing architecture". Thereby, this chapter will include the found "understanding theory" and found themes mentioned in the previous chapter. The three "theory" themes are all based on the word "connectivity" (as described in the previous chapter) and are described via the "practice" themes variating in the scale of elements. Besides analyzing the architecture of the institution, the related philosophy of (medical) anthropology will be mentioned when necessary. Furthermore, other references to anthroposophical buildings located in Europe will be mentioned, intended to support the analysis and whether every architectural element in de Rudolf Steinerkliniek can be directed to "anthroposophical". In addition, this chapter will only analyze and criticize whether the anthroposophical expression of the Rudolf Steinerkliniek by Buijs is commonly used in anthroposophic architecture or not. On occasion, it is Jan Buijs' interpretation of the clinic's architecture, or the context is a design factor and is independent from anthroposophical architecture. Critical opinions and reviews about the outcome of the architectural expressions concerning the users will be mentioned in the next chapter (chapter 3: Review of anthroposophical architectural expression for the patients at the Rudolf Steinerkliniek).

This chapter will be using primary and secondary resources. The theory of the program and practices of the Rudolf Steinerkliniek will be withdrawn from websites and original texts from archives. Therefore, descriptive texts about the institution are found in primary sources and to analyze the case study, primary sources will be used for the most part. As said before, the following three paragraphs will give an overview of the most noteworthy anthroposophical architectural expressions in the Rudolf Steinerkliniek. The paragraphs are architecturally divided into a scale of building elements, to give a clear structure.

The Rudolf Steinerkliniek began its practice in 1928 as a nursing and therapy home for people with mental disabilities. Besides nursing, the clinic offered surgical operations (floorplans), making it also look like a hospital at that time. Around the opening, the clinic could accommodate forty patients at the same time, including adults and the elderly, but also children.³⁶ The patients variated between psychiatric, recovering, and terminally ill. According to van der Duyn Schouten, it was a small institution, compared to other nursing homes in the Netherlands that practiced regular medicine around that time with the same purpose. In addition, the nurses worked internally and slept in the clinic for the first few years. The involved relationship between the staff and the patients contributed positively. There was room for foreign guests of Zeylmans and it was also the place where he lived himself. Rudolf Steiner Zorg, who currently is located in the Rudolf Steinerkliniek, is part of a larger institution called the Raphaëlstichting.

³⁶ Van Der Duyn Schouten, *Een Schip in de Duinen: Het Rudolf Steiner Verpleeg- En Therapiehuis in Beeld*, 14-19.

2.1 Anthroposophical architecture: expression in the individual elements

The façade of the Rudolf Steinerkliniek is made of masonry and wooden slates, window frames, and dividers (image 11). These materials are according to Steiner the right "natural" materials and therefore suitable for the façade material. For structure purposes, natural stone blocks and concrete slabs are used. When looking at several photographs from different archives (Nieuwe Instituut and Haags Gemeentearchief for instance), the most used materials for the interior are also natural (image 12). Although several photographs are not made in the right timeframe for this historical analysis, no information has been found about changes in the interior. Together with the original descriptive text from the client, one can assume that it was the original expression Buijs designed. Another example is the chapel, the walls are plastered white, and the floor, window frames, and decoration are all Swedish Spruce wood.³⁷ Most of the doors and entryways are encircled by a wide heavy wooden framework.³⁸





Image 11 Own picture, 2023. *Façad*e. Photograph. Rotterdam: Nieuwe Instituut.

Image 12 Valentijn, D. 2009. *Chapel*. Photograph. Den Haag: Haags Gemeente archief.

This shows that the Rudolf Steinerkliniek had implemented natural materials in the exterior and interior of the building. Overall, Buijs used common materials according to Steiner's design principles. However, it can be concluded that materialization in the Rudolf Steinerkliniek was not the most iconic anthroposophical application that Buijs had applied, because little is spoken about the purpose materials in the descriptive texts and other sources. Assumably, the used materials are also commonly used building materials around that time (beginning of the twentieth century), so it would not be specifically anthroposophic.³⁹

Secondly, every patient's room had a distinct color, because according to Emmichoven, it had healing properties. A room was, for instance, fully painted red and the matching-colored furniture made the room even more cohesive.⁴⁰ The colors blue, soft green, pink, and purple were also used in the patients' room. Steiner was influenced by Goethe's color theory, which described the beneficial properties of each color. According to Goethe's color theory, yellow, orange, and red encouraged the patient's metabolism; blue and purple stimulated thoughts, senses, and the nervous system; and green was seen as a neutral color. The nurses, for

³⁷ Van Emmichoven, *Bestek en voorwaarden "Rudolf Steiner Kliniek"*, 4. Consulted from Nieuwe Instituut, Rotterdam. Archival number: BUYSCd29.1.

³⁸ Rehorst, Jan Buijs: Interieurs (1889-1961), 12-13.

³⁹ Bleekman et al., "Twentieth Century Building Materials: 1900-1950."

⁴⁰ Rehorst, *Jan Buijs: Interieurs (1889-1961), 14*.

instance, wore lilac and rose uniforms.⁴¹ Colors were also incorporated in many wall paintings in the Rudolf Steinerkliniek. However, it is not certain if the philosophy behind every color in the Rudolf Steinerkliniek is done with philosophical purposes (colors are mainly used in the hallways and patients' rooms) indicating the function of the spaces). The color theory of Goethe has been used by several other anthroposophic buildings, the Goetheanum 2 for instance (image 13). It indicates that Buijs had incorporated color (following Goethe's color theory) well in this building and the colorization of his building became the most well-known characters in anthroposophical expression at that time.⁴²



Image 13 Dengler, Matthias. 2019. The Goetheanum 2. Photograph. Petapixel.

Furthermore, there is not much literature or descriptive texts about the use of the other twelve senses of Rudolf Steiner (image 9) in the Rudolf Steinerkliniek. Only a small piece of documentation was found written by Emmichoven about the use of sound-absorbing panels in the patients' rooms (see appendix). Further examples of sensory function in short notations found in the literature are architecture itself with the sense of touch; dancing (eurythmy) with the sense of balance; paintings with the sense of sight; sculptures with the sense of life; and poetry with the sense of speech. Eurythmy was a form of therapy at the clinic, paintings and sculptures were fairly distributed around the building, and poetry was read every morning by the nurses and doctors to the patients, according to Van Der Duyn Schouten's "*Een Schip in de Duinen: Het Rudolf Steiner Verpleeg- En Therapiehuis in Beeld*".⁴³

When looking through the archives of Nieuwe Instituut in Rotterdam and expecting on finding typical organic references, surprisingly, there were few to be found. From a critical point of view, you could say Jan Buijs did not incorporate enough organic shapes in his building, according to Steiner's organic shape theory mentioned in the previous chapter. The interior of the original drawings does not show many organic or natural shapes that can be related to organicism. The shapes are more geometric and have therefore a different purpose than imprinting nature. Keeping the philosophy of anthroposophy in mind, the patients' rooms are

⁴¹ Van Der Duyn Schouten, *Een Schip in de Duinen: Het Rudolf Steiner Verpleeg- En Therapiehuis in Beeld*, 41-43.

⁴² Van Der Duyn Schouten, *Een Schip in de Duinen: Het Rudolf Steiner Verpleeg- En Therapiehuis in Beeld*, 27.

⁴³ Van Der Duyn Schouten, *Een Schip in de Duinen: Het Rudolf Steiner Verpleeg- En Therapiehuis in Beeld*.

surprisingly square.⁴⁴ The common rooms are shapelier and have cut-off corners, and in almost every room that is visualized in the archives and found literature, you can see facetted shapes. Rehorst calls the lines in the Rudolf Steinerkliniek 'nervous lines" because they avoid straight lines as much as possible whilst creating symmetry.⁴⁵ However, there is one space that has prominent rounded corners, the hallway (images 14 and 15). Examples of anthroposophical architecture by Steiner himself have more "idealistic" organic shapes, the Goetheanum 1 and the heat-house, both by Rudolf Steiner (see appendix). Another example of mimicking organic shapes is the second Goetheanum of Steiner. It is supposed to look like the larynx of a human being, the structure in your throat that contains the vocal cords (see appendix).

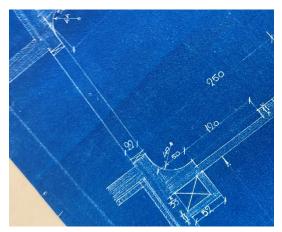


Image 14 Own picture, 2023. *Begane grond*. Photograph. Rotterdam: Nieuwe Instituut.

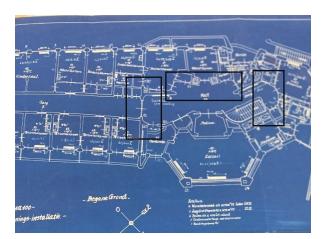


Image 15 Own picture, 2023. *Begane grond*. Photograph. Rotterdam: Nieuwe Instituut.

When understanding Steiner's language in combination with Buijs' design, it can be said that no specific shape is typically anthroposophic architecture, because these shapes are often a result of philosophical thinking rather than typological thinking. Any shape or form could be suitable, as long as it has a relation with surroundings and therefore creates a connection with the spirit world. The encircled frames around the doors and entryways for instance (images 12 and 16), were carved by hand and showed traditional craftmanship, something Rudolf Steiner valued by opposing mass produce.⁴⁶

There is an overall absence of detailing in the Rudolf Steinerkliniek when compared to other examples of Rudolf Steiner himself concerning his statements. In *"Rudolf Steiner's theories and their translation into architecture"*, Gray analysis Steiner's philosophy and the translation to design for the Goetheanum 2.⁴⁷ Gray gracefully describes the Goetheanum "with chiseled patterning and graininess of the material begins to break down the overall solidity of the walls".⁴⁸ She continues explaining that according to Steiner, the walls were imitating the spiritual journey of the user by giving the illusion they expanded out into the cosmos, reaching in every direction. This level of detailing and philosophy is hard to find in the Rudolf Steinerkliniek, no photograph, drawing or source can validate such integrated detailing as the Goetheanum 2. However, the buildings were a lot different in terms of practicality (more

⁴⁴ Buijs, *Dr Rudolf Steinerkliniek te 's Gravenhage begane grond*. Consulted from Nieuwe Instituut, Rotterdam. Archival number: BUYSTd76.

⁴⁵ Rehorst, Jan Buijs, Architect van de Volharding: De Architectuur van Het Bureau Ir. J.W.E. Buijs En J.B. Lürsen.

⁴⁶ Steiner, Art as Spiritual Activity: Rudolf Steiner's Contribution to the Visual Arts, 120.

⁴⁷ Gray, Rudolf Steiner's theories and their translation into architecture. 172-175.

⁴⁸ Gray, Rudolf Steiner's theories and their translation into architecture. 174.

functions) and accessibility (more user traffic) which perhaps made the detailing in the Rudolf Steinerkliniek is less important, but still relatively absent.



Image 16 Valentijn, D. 2009. *Interior of the chapel*. Photograph. Den Haag: Haags Gemeentearchief.

2.2 Anthroposophical architecture: expression in the fusion of elements

The expressive roof on top of the long building with a nick at the end has an abrupt ending on one of the sides. This is a direct translation to the end of the building. On the other side, the roof reaches its highest point, right above the common rooms on the ground floor.⁴⁹ The roof has such a geometrical shape it looked different from every point of view. According to the committee of the Rudolf Steinerkliniek itself, it made you feel protected, it was like a calming hand on top of the building for ill people.⁵⁰ The third floor seemed to be low and hidden behind the roof, giving the clinic a cohesive appearance because of the integration of wall and roof. Therefore, it can be said that the overall shape of the roof was designed with a philosophical interpretation. This directly translates to Steiner's belief, saying the building is not only protection but has a connection with its users and will support the developing of the mind.⁵¹

A not yet mentioned approach to expressing anthroposophic architecture is the significance of Christianity in Rudolf Steiner's buildings. Farfetched, but a symbolic element of sorts in the clinic is the overall shape of the building. Said by several diverse sources, the building suggests a boat on a dune, and can perhaps be interpreted as the Arc of Noah (images 17 and 18). Gray calls Steiner's Christian philosophy rather unorthodox and it differed from traditional Christian teachings.⁵² Overall, Steiner's approach to Christianity was highly individualistic and esoteric, emphasizing personal spiritual development and direct spiritual experience over traditional religious practices, concluded according to the writings about Christianity by Steiner himself. ⁵³

⁴⁹ Rehorst, Jan Buijs, Architect van de Volharding: De Architectuur van Het Bureau Ir. J.W.E. Buijs En J.B. Lürsen.

⁵⁰ Van Der Duyn Schouten, *Een Schip in de Duinen: Het Rudolf Steiner Verpleeg- En Therapiehuis in Beeld*, 14.

⁵¹ Steiner, Art as Spiritual Activity: Rudolf Steiner's Contribution to the Visual Arts, 120.

⁵² Gray, Rudolf Steiner's theories and their translation into architecture, 17-19.

⁵³ Steiner, "Christianity as Mystical Fact and the Mysteries of Antiquity."





Image 17 Photostockam. *The Arc of Noach*. Shutterstock.

Image 18 *Rudolf Steinerkliniek around 1935.* Photograph. Den Haag: Haags Gemeentearchief

Next, there would probably be numerous amounts of polarities in and outside the building, but one of the most visible ones noticed is at the end of the building (images 19 and 20). The small volume and the big volume in the back and the relatively closed façade (protection, ending of a building) versus the ramp of the roof (gives an open feeling). The roof of the volume in the back draped on the building like a blanket, while the roof of the small volume has a big overhang. You could say that the polarity here is large and small and thereby making all volumes cohesive and coherent, and not feel estranged from each other. It is also clearly visible in the section (see appendix).



Image 19 Valentijn, D. 2009. *Balcony west. P*hotograph. Den Haag: Monumentenzorg.



Image 20 Valentijn, D. 2009. *Balcony east. P*hotograph. Den Haag: Monumentenzorg.

An exemplary polarity described in the publication of Gray is the Publishing House by Steiner himself.⁵⁴ The front façade of the building has a deep recess in the front and creates a hollow entrance in the total planar surface. This entrance is revealed through an abnormity in the façade and yet is protected by the recess (image 21). This polarity mediates, according to the explanation of Gray, the contrasting terms inside and outside.⁵⁵

⁵⁴ Gray, Rudolf Steiner's theories and their translation into architecture, 95.

⁵⁵ Gray, Rudolf Steiner's theories and their translation into architecture, 86-91.



Image 21 Publisher's house. Photograph. Germany.

As read in the previous chapter, Steiner stated that the function and practicality of the building, when necessary, needed to be chosen over aesthetics, because the human's (user is the center) experience is more important for development. When reading the texts Emmerich wrote for Buijs about the Rudolf Steinerkliniek's program in "Bestek en Voorwaarden", it clearly says every patient with a physical disability needed to be placed on the ground floor.⁵⁶ This explains the absence of elevators on the drawing plans of Jan Buijs.⁵⁷ In addition, to make the building more adaptable to human scale, the corners were often cut off or made round to diminish a large space and make it feel safer for the user (images 22 and 23). Steiner said in "*Art as Spiritual Activity: Rudolf Steiner's Contribution to the Visual Arts*" to make big rooms feel less colossal when rounding or cutting the corners between the ceiling and the walls.⁵⁸



Image 22 Own picture, 2023. *Mid-hallway*. *P*hotograph. Rotterdam: Nieuwe Instituut.

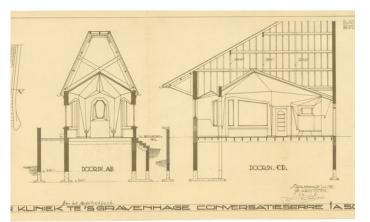


Image 23. 1925. Section. Drawing. Rotterdam: Nieuwe Instituut.

⁵⁶ Van Emmichoven, *Bestek en voorwaarden "Rudolf Steiner Kliniek"*, 4-6. Consulted from Nieuwe Instituut, Rotterdam. Archival number: BUYSCd29.1.

⁵⁷ Buijs, *Dr Rudolf Steinerkliniek te 's Gravenhage begane grond*. Consulted from Nieuwe Instituut, Rotterdam. Archival number: BUYSTd76.

⁵⁸ Steiner, Art as Spiritual Activity: Rudolf Steiner's Contribution to the Visual Arts, 162.

2.3 Anthroposophical architecture: expression in the cohesion of all elements

When analyzing the zoning and layout of the floorplans of the clinic, it is visible that the operating and common rooms are situated on both ends of the building, the outside.⁵⁹ While the patients, doctor, and nurses' rooms are situated in the middle of the building, the inside. It is peculiar why Buijs has chosen to give the patients, the users, the center of the building. Given that Steiner placed the users (patients, doctors, nurses) at the center of his philosophy, it can be translated into floorplans. On the other hand, the rooms of the users seem to be too "functionally" placed in a row resulting, as said before, in square rooms. When connecting with surroundings is an important theme in anthroposophy, the most important rooms in the building should have more of the philosophy integrated. To validate that the operating rooms are less important regarding the connection with the surroundings of the building comes from the text written by Emmerich himself. He stated, for instance, the operational rooms do not need natural light or a view of the adjacent garden (see appendix).

The landscape around the Rudolf Steinerkliniek supported the practices of the clinic by having a garden with different kinds of flowers, herbs, and plants that were incorporated into the healing process of patients (anthroposophic medicine).⁶⁰ Situated in the landscape, there

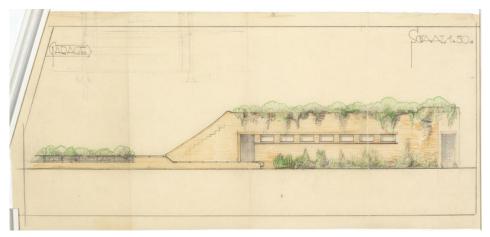


Image 24 Buijs, Jan, 1926. Garage aanzicht. Drawing. Rotterdam: Nieuwe Instituut.

was a garden house where additional therapy was given and where people could seclude themselves. $^{\rm 61}$

When simply searching for a descriptive text about the Rudolf Steinerkliniek, often the description about the building was that the building was integrated with the hill it lies upon, not blending in or mimicking, but it works together with the landscape around it. Therefore, it can be said that Buijs integrated the building nicely into the landscape of the location, however, it also seems that at first sight, the building protrudes from the landscape in an inorganic way. The dune, which the building lies upon, is not that relatively big, and yet the building is relatively massive and has a heavy appearance (image 25).

⁵⁹ Buijs, *Dr Rudolf Steinerkliniek te 's Gravenhage begane grond*. Consulted from Nieuwe Instituut, Rotterdam. Archival number: BUYSTd76.

⁶⁰ Van Der Duyn Schouten, *Een Schip in de Duinen: Het Rudolf Steiner Verpleeg- En Therapiehuis in Beeld*, 12.

⁶¹ Van Der Duyn Schouten, *Een Schip in de Duinen: Het Rudolf Steiner Verpleeg- En Therapiehuis in Beeld*, 17.



Image 25 *Rudolf Steinerkliniek around 1930.* Photograph. Den Haag: Haags Gemeentearchief

To continue, the anthroposophical principle of connection with the surroundings would also apply in the built environment. When the Rudolf Steinerkliniek was built, there were already several buildings surrounding the Westbroekpark in the Hague, Netherlands. By comparing old photos of the Westbroekpark and buildings with the clinic, it became visible that most of the exterior building materials were the same. The rusty red roof tiles and brown bricks were commonly used in the neighborhood at that time. In addition, the shapes of the buildings are quite coherent, with pitched roofs and dark window frames, the clinic was thereby not alienated. Therefore, at first glance, the Rudolf Steinerkliniek seems to fit in the context of this neighborhood.

Lastly, Buijs was not an original anthroposophist and at the beginning of the design process he struggled with the general shape of the building.⁶² Later on, Emmerich helped him sketch the first lines for the Rudolf Steinerkliniek, with the located dune as inspiration. It is therefore questionable if Buijs had understood every Emmichoven and Steiner's design visions. The closeness of partnership and participation between the client and architect is unsure on some levels and is not clear enough to state if there is a philosophy behind every architectural expression in the Rudolf Steinerkliniek. It is not fair to assume that Buijs, even though he studied anthroposophy for several years before designing the Rudolf Steinerkliniek, had all the same knowledge as the person who provided the majority of the theory for this thesis, Rudolf Steiner himself. A hospital or nursing home would be an almost too perfect function for a building where anthroposophical philosophy can be expressed. The healing of humans in this kind of building is significant, rather than a residential building for instance. This makes incorporating as much as needed anthroposophical philosophies in architecture for a nonanthroposophical architect challenging.

To conclude this chapter, Jan Buijs demonstrated the correspondence between the material and spiritual world through architecture in several expressions, while also missing some wellknown fundamentals of anthroposophy. However, Jan Buijs, the architect had a nonanthroposophical background which made assumably the level of integration different than the given examples in this chapter. The level of anthroposophical expression is not related to the scale of elements but rather the importance decided by the client and architect. Examples that are well incorporated in the Rudolf Steinerkliniek are the use of colors by the color theory of

⁶² Mösch, De Rudolf Steinerkliniek en de architect Jan Buijs.

Goethe; the use of natural materials; the attention to craftmanship in frames; the integration of the garden; and the cohesion of shapes and structure. These themes can be quickly recognized when analyzing the case study. Themes that are not or lesser to be found in the Rudolf Steinerkliniek are the integration of the twelve senses of Steiner (several are found, however simple and not architectural); overall few organic shapes; the level of detailing in ornaments; and the contrast between the massive volume and landscape (now the area is denser). It is questionable if the clinic needed these themes to be as prominent, in the context of the building and the non-anthroposophical architect. It seems that the client, or even Buijs perhaps, has given some anthroposophical themes a different outcome, intentionally or accidentally. The zoning of the clinic was an intentional and practical decision for the architect, who also needed to suffice the basic building regulations and requirements. In addition, the context of the building had also an influence on the shape of the building (the nick on the end was created to follow the shape of the Westbroekpark). One of the most interesting discoveries in this analysis was the Christian symbolization in the most clearly visible but rather unspoken way (self-defined). It is possible that Buijs or Emmichoven used the story of the Ark of Noah as a metaphor for spiritual purification, renewal, or salvation, which fitted in the purpose of the building. Besides, the Rudolf Steinerkliniek is often compared to "een schip in de duinen" (ship on the dunes). There is however no (scientific) literature to confirm this suspicion.

3 Review of anthroposophical architectural expression for the patients at the Rudolf Steinerkliniek

This chapter will answer the sub-question: What is the purpose of anthroposophical expression in architecture related to the patient? The goal of this chapter is to give an overall view of the outcome of anthroposophic architecture in medical institutions. This chapter will begin to elaborate on the experiences of the patients that were institutionalized at the Rudolf Steinerkliniek at that time. Short notations coming from other users are included as well when necessary. Literature about different case studies will also be included in this part to support or confute the found theory. Following, the next part of this chapter will mention the importance of anthroposophic architecture in healthcare institutions at that time and will be analyzed. This chapter will include the found theory of the previous chapters and will only focus on the practices of the Rudolf Steinerkliniek in this specific time frame. Furthermore, this chapter intends to focus only on the experiences of the patient, practitioners, and externals who knew the Rudolf Steinerkliniek around the beginning of the twentieth century. However, when the found literature will not suffice, other experiences in other nursing institutions (with anthroposophical architecture) will be added. Lastly, a short analysis including the opinion of the architect Jan Buijs about this project and anthroposophy in general is given. For this last chapter, secondary research will be utilized to formulate the answer to this sub-question.

3.1 The user experience in healthcare institutions with anthroposophical architecture

One example regarding the experience and use of the colored patient rooms was described by the twenty-year-old Cornelia Rens-Portielje, who had a chronic infection and needed to be institutionalized for a longer period at the Rudolf Steinerkliniek. In the book "Een schip in de duinen" she elaborates on her experience, surprisingly positive, in the colored rooms. She was taken to a red-colored patient room because red reduced inflammation, she said. Cornelia was isolated for a week, so the color could work the full healing properties. After seven days, Cornelia tells she finally knows why a bull reacts so aggressively against red fabric. She was taken to another room, which Cornelia found soothing.

Another concern is that some of the treatments used in anthroposophical medicine may be harmful or even dangerous. For example, several practitioners recommend using mistletoe extract as a treatment for cancer, despite the lack of scientific evidence to support its use. In some cases, mistletoe extract can cause serious side effects, including liver damage and allergic reactions.⁶³ It is not certain if the Rudolf Steinerkliniek used this practice.

Maria Arman, specialised in neurobiology, published an article about the anthroposophic healthcare system at the Vidar clinic in Sweden (mentioned in the introduction).⁶⁴ She concludes that most of the interviewed patients have a positive view on the ambiance of the clinic. Patients said it had a peaceful environment and got new perspectives on life.

Unfortunately, finding literature about individual experiences in anthroposophical healthcare institutions, especially about the Rudolf Steinerkliniek itself, is particularly challenging. The majority of the found sources are about anthroposophical hospitals where thorough research results in numbers and data about specific implications which do not apply to the Rudolf Steinerkliniek. It is important to remember that the Rudolf Steinerkliniek also needed to suffice the healthcare regulations at that time.

⁶³ Thiel, "Person-Centeredness in Integrative Health Care and Integrative Medical Education.," 10.

⁶⁴ Arman et al., "Anthroposophic Health Care - Different and Home-Like."

3.2 The benefits and drawbacks of anthroposophical (architecture) in healthcare institutions

According to the text of Rehorst, the Rudolf Steinerkliniek was from the second world war till 1987 not a real (anthroposophic) hospital, but a nursing home with anthroposophic qualities.⁶⁵ It clearly states that there was no anthroposophic specialist at that time. Therefore, there are only a few sources to be found on the outcome and opinions of the anthroposophical architecture in the Rudolf Steinerkliniek, probably because the anthroposophical philosophy was not fully expressed (no specialist, no additional therapies, and not enough knowledge).

The next piece of text is set in a later time yet is still correlated to the original design of the building from the nineteen twenties. The book "Een schip in de duinen" by van der Duijn Schouten briefly stated that in the nineteen seventies, the Rudolf Steinerkliniek was disapproved as a hospital, meaning, surgical operations could no longer be executed.⁶⁶ Why the clinic got disapproved is not further explained, but in the article of Rehorst it is written that the clinic was disapproved by the inspector of health, meaning something did not approve the regulations.⁶⁷ From now on, the Rudolf Steinerkliniek could only facilitate a nursing home. Although, this was almost half a century later, and regulations could have changed.

While several proponents of anthroposophical medicine claim that it can be effective in treating a wide range of health conditions, there are also several downsides and criticisms of this approach. One major criticism of anthroposophical medicine is that it is not based on scientific evidence. The theories behind this approach are based on Steiner's spiritual and philosophical beliefs, rather than on empirical research or clinical studies. As a result, there is little scientific evidence to support the effectiveness of anthroposophical medicine argue that it can be expensive and time-consuming and that it may delay or prevent patients from receiving more effective treatments. Because anthroposophical medicine, patients may have difficulty finding qualified practitioners or accessing reliable information about this approach. Even during Steiner's time, his ideas were considered controversial and not supported by mainstream medical organizations and not supported by mainstream from support in Europe, it remains a controversial and unproven approach to healthcare from a scientific standpoint.

One major criticism of anthroposophical architecture is that it can be impractical and costly. The use of natural materials, specific geometric shapes, and other design elements associated with this approach can be more expensive and time-consuming than conventional building methods. This can make anthroposophical architecture inaccessible to many people, particularly those with limited financial resources.⁶⁹ Another concern is that the spiritual and philosophical basis of anthroposophical architecture can be divisive and exclusionary. Several critics argue that this approach can create an elitist and exclusive environment that is only

⁶⁵Rehorst, Jan Buijs, Architect van de Volharding: De Architectuur van Het Bureau Ir. J.W.E. Buijs En J.B. Lürsen.

⁶⁶ Van Der Duyn Schouten, *Een Schip in de Duinen: Het Rudolf Steiner Verpleeg- En Therapiehuis in Beeld*, 11.

⁶⁷ Rehorst, Jan Buijs, Architect van de Volharding: De Architectuur van Het Bureau Ir. J.W.E. Buijs En J.B. Lürsen.

⁶⁸ Ernst, Healing, Hype Or Harm?: A Critical Analysis of Complementary Or Alternative Medicine, 369-374.

⁶⁹ Kellert, Building for life: Designing and understanding the human-nature connection, 2-3.

accessible to those who share the same beliefs and values. This can limit diversity and inclusivity in communities that were built using anthroposophical principles. Additionally, several critics argue that the focus on spiritual and esoteric principles in anthroposophical architecture can lead to a neglect of more practical considerations, such as safety and functionality. The emphasis on creating a harmonious and spiritual environment can sometimes come at the expense of more practical concerns that are essential to the safety and well-being of the occupants.

Overall, most of the reviews in newspapers, articles, and books are only about the appearance of the clinic and are positive about practices in general. The Haagsche Courant visited the building on opening day and wrote about the warm and comfortable ambiance.⁷⁰ But, one can assume that the ambiance of any institution was welcoming and warm on its opening day.

3.3 The architect Jan Buijs' opinion on anthroposophical expression in architecture

Another approach for analyzing reviews of the Rudolf Steinerkliniek is by the opinion of the architect himself, Jan Buijs. According to the biography of Jan Buijs, written by his son, was Buijs at first not fond of anthroposophy and it was certainly not his architectural style. When he became college friends with Emmichoven he collected more knowledge about anthroposophy on the way. When he got the assignment to design a new clinic for Emmichoven, Buijs moved to Dornach to study anthroposophy.⁷¹

According to van der Duijn Schouten, Buijs had struggled by understanding the vision Emmichoven had visualized. But as said before, Emmichoven helped Buijs sketch the first lines for the design.

Buijs received an amount of critique after finishing the Rudolf Steinerkliniek, resulting in Buijs distancing himself from his design. He became a strong opposer of anthroposophy, but when Buijs' health got worse and he could not work anymore, he decided to go to his so-called "youth-sin" and still eventually called it home. Buijs passed away in 1961 at the Rudolf Steinerkliniek, "het schip in de duinen".

To conclude, not every anthroposophical expression in architecture matches constantly with anthroposophical practices. The color theory, for instance, works only when there are enough patients' rooms including the corresponding color for their illness. Therefore, the clinic may have to reject patients or schedule the patients' rooms accordingly which would be very timeconsuming or put them in a room with an incorrect color. Secondly, the Rudolf Steinerkliniek was not continuously an anthroposophical institution, and together with the lack of literature, one can assume that the clinic cannot be reviewed properly. In addition, anthroposophical medicine and the healing properties of buildings elements still lack scientifically proven research and therefore it cannot guarantee full healing by only using controversial approaches. Also, it is only time-consuming and cost-effective when looking over regular and scientifically proven results because it is harder to find the right practitioner (there are fewer anthroposophical practitioners than regular). Using anthroposophic building techniques and materials, can result in more labor-intense manufacturing and therefore more cost-effective and therefore making it less accessible for everyone. In addition, incorporating multiple holistic and symbolic visualizations in architecture can result in division and exclusion because it feels only accessible to people who share the same philosophy.

⁷⁰ Haagsche Courant, Rudolf Steinerkliniek: organisch bouwwerk.

⁷¹ Rehorst, 'Buijs, Jan Willem Eduard (1889-1961)'.

Discussion

The lack of literature that was needed for this thesis, was while writing more noticeable. General information about anthroposophy, architecture and medicine was easily found, but cross references or Dutch literature was harder. Especially literature about nursing homes in the nineteen twenties, or even the Rudolf Steinerkliniek, is almost non-existing, or extremely hard to find in depth information about. For this thesis, it was important to define what kind of source said what and to stay objective. Yet, my own opinion and critique has been acquired and sufficiently expressed. For additional own opinions and critique, more time is needed.

Positioning

The given definitions and theory about anthroposophy are all relatively the same. The only difference is that some articles are written by non-anthroposophical or even non-historical people who tend to criticize the subject more than defending the subject. Mostly, the positive and elaborate explanations of anthroposophic architecture or anthroposophic medicine are written by people with an anthroposophical background or are specialized in controversial medicine. They tend to be positive publications. This thesis tries to stay in between the positive and negative, by mainly observing and analysing. However, in this thesis, anthroposophical and non-anthroposophical literature is criticized.

Conclusion

Thus, the answer to the main question "how is the anthroposophy of Steiner expressed in the architectural style of the Rudolf Steinerkliniek in the Hague?" is explained in two parts: the architectural expression behind the philosophy of anthroposophy (chapter 2) and the outcome of this expression (chapter 3). Firstly, the fundamentals of anthroposophical architecture in health care buildings consist of various aspects related to the practice in the mindset of anthroposophic medicine. The first fundamental includes that the design of the building needs to be integrated in their surroundings, by implementing nature and visualizing the processes in nature. The patients are being stimulated to self-heal and being encouraged in the process through architecture. The second fundamental, architecture should contribute to the development and enlightenment of a person to be beneficial for healing. This is more related to the patient's specific illness. The third and last important fundamental in anthroposophic architecture in healthcare institutions is connecting the material world with the spiritual world, mainly to express the anthroposophic philosophy.

Expressions within different fundamentals can be applied in other fundamentals, they related to each other, overlap, and they are almost inseparable. Overall, they served the same purpose. In nursing institutions, these fundamentals are important for healing the patient in (rather conventional) ways.

Furthermore, Jan Buijs demonstrated the correspondence between the material and spiritual world through architecture in several expressions, while also missing some well-known fundamentals of anthroposophy. However, Jan Buijs, the architect had a non-anthroposophical background which made assumably the level of integration different than the given examples in this chapter. It seems that the level of anthroposophical expression is not related to the scale of elements but rather the importance decided by the client and architect. Examples that are well incorporated in the Rudolf Steinerkliniek are the use of colors by the color theory of Goethe; the use of natural materials; the attention to craftmanship in frames; the integration of the garden; and the cohesion of shapes and structure. Themes that are not or

lesser to be found in the Rudolf Steinerkliniek are the integration of the twelve senses of Steiner (several are found, however simple and not architectural); overall few organic shapes; the level of detailing in ornaments; and the contrast between the massive volume and landscape (now the area is denser). It is questionable if the clinic needed these themes to be as prominent, in the context of the building. Thereby, the context of the building had also an influence on the shape of the building (the nick on the end was created to follow the shape of the Westbroekpark).

Lastly, not every anthroposophical expression in architecture will always fit with the ongoing anthroposophical practices. The color theory, for instance, works only when there are enough patients' rooms including the corresponding color for their illness. Unfortunately, the Rudolf Steinerkliniek was not continuously an anthroposophical institution, and together with the lack of literature, one can assume that the clinic cannot be reviewed properly (especially historically). Anthroposophical medicine and the healing properties of building elements still lack scientifically proven research, it can be time-consuming, and cost-effective because it is harder to find the right practitioner (there are relatively fewer anthroposophical practitioners than regular). Using anthroposophic building techniques and materials, can result in more labor-intense manufacturing and therefore be more cost-effective, and therefore making it less accessible for everyone. In addition, incorporating multiple holistic and symbolic visualizations in architecture can result in division and exclusion because it feels only accessible to people who share the same philosophy.

Reflection

This thesis was written out of own fascination about anthroposophy. While attending a Waldorf school (age twelve to seventeen), everything described in this chapter came by at some point, but the theory behind it was unknown to me. Examples are: eurythmy which was an obligated course; the colored classrooms; the reading of poetry; and the symbolic/Christian integrations.

There was a limited number of sources available and therefore made it hard to find specific information. When better knowing which sources were available beforehand, it could have affected the direction of the thesis. Due to the historical aspect of the thesis, you could not rely on interviewing or modern data analysis. Personally, it was hard to be critical on this subject and that is something I would have liked to have more time for.

APPENDIX

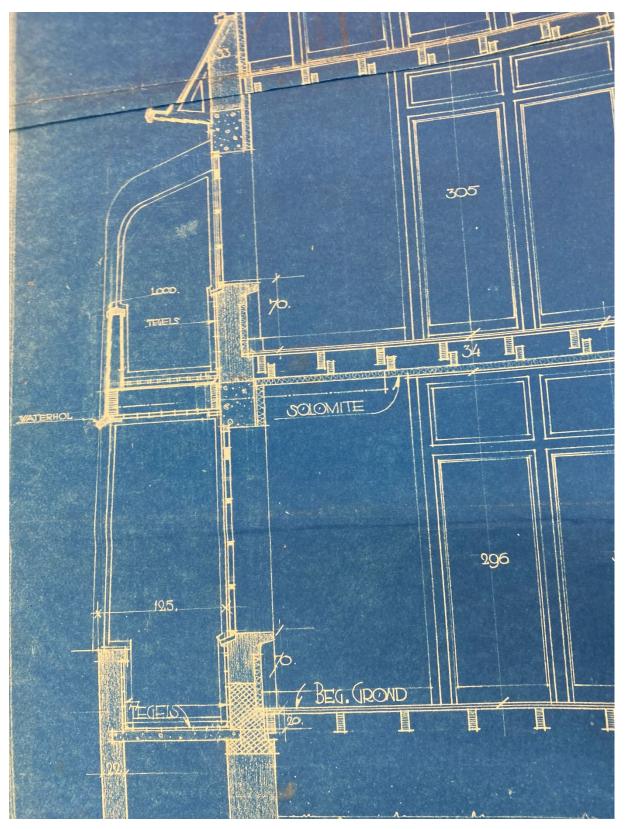
1. Illustrated list of mentioned references

Case study	Image	Description	Supporting subject
Filderklinik, by Christoph Klein and Wilfried Ogilvie (1929 – present)	Mahle Stiftung	Hospital in Stuttgart, with anthroposophical architecture, opened in 1975	Example (introduction)
Vidar Clinic I by Erik Asmussen (1913-1998)	Nerstu, 2006	Clinic in Stockholm, with anthroposophical architecture, opened in 1985	Example (introduction)
Das Heizhaus by Rudolf Steiner (1861-1925)	AEX, 2017	Finished in 2014, held the boiler for the Goetheanum	Expression (chapter 2)
Goetheanum 1 by Rudolf Steiner (1861-1925)	Metalocus, 2017	Finished in 1920, center for the Anthroposophical Society	Expression (chapter 2)
Goetheanum 2 by Rudolf Steiner (1861-1925)	Knudsen, 2017	Finished in 1928, as the new foundation of the Anthroposophical Society, center for activities	Expression (chapter 2)
Publisher's House by Rudolf Steiner (1861- 1925)	آنهای است. Gray, 2014	Finished in 1924, in Germany, and is a house	Expression (chapter 2)

2. Emmichoven's material list in "Bestek en voorwaarden"

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Vereeniging "RUDOLF	STEINER KLINI

Van Emmichoven, *Bestek en voorwaarden "Rudolf Steiner Kliniek"*. Consulted from Nieuwe Instituut, Rotterdam. Archival number: BUYSCd29.1.



3. Notation of solomite by Jan Buijs for the Rudolf Steinerkliniek

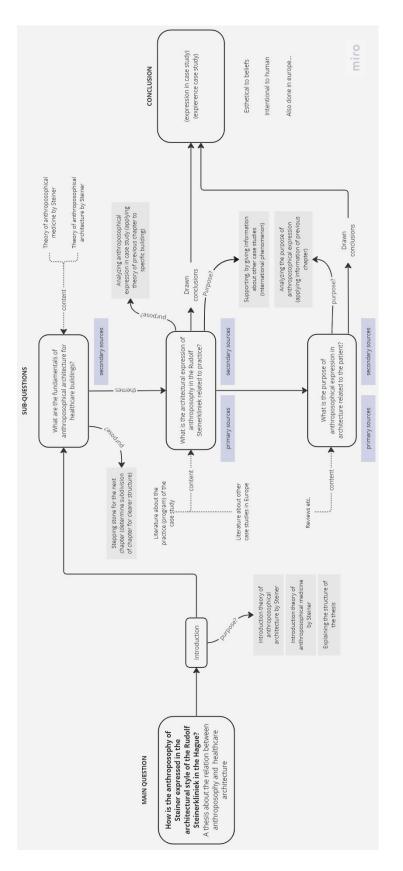
Buijs, *Dr Rudolf Steinerkliniek Te 's Gravenhage Doorsnede*. Consulted from Nieuwe Instituut, Rotterdam. Archival number: BUYSTd49.1

4. Emmichoven's note in "Bestek en voorwaarden"

5. and the second 6. 3. , dat I. Behandelruimte. Uitgaande van het gezichtspunt, dat de behandelruimte centraal moet komen en de Operatiekamer gewenst wordt een uitzicht te hebben doch geen inkijk, valt aan te nemen dat de Operatieruimte op de hoogte moet komen te liggen van de tegenwoordige le étage. De polikliniek en het laboratorium dienen bij elkaar te liggen en van buitenaf zonder trap bereikbaar te zijn. Aan te nemen valt dus, dat 10mizij op de hoogte van het tegenwoordige sousterrain zullen liggen. Voor de Röntgenkamer blijft dan de hoogte van de tegenwoordige begane zaalgrond. Eveneens op de tegenwoordige beg.grond-hoogte, ook centraal gelegen, nige wordt een algemene administratieruimte gewenst. · IIA de ge-Zoals reeds gemeld, valt met een lift en ook met een trappenhuis in ruimte dit gedeelte te rekenen. 3 VO1-De beide Röntgenkamers behoeven geen uitzicht te hebben. orden Bijgevoegd worden 3 plattegrondjes, die niet bedoeld zijn om op de . de opzet van de architecten vooruit te lopen, doch om de wenselijkheden op I van overzichtelijke wijze te verduidelijken. deze II. Operatiekamer. best nter Voor de O.K. is reeds de wenselijkheid uitgedrukt, dat deze niet door 🕱 h het huiselijk verkeer gehinderd wordt, daarom zijn de beide O.K.'s aan een aparte doodlopende gang gedacht, doch een andere constructie kan ook ba aannemelijk zijn. estend voor polikliniek en Ebnigenkemer De minimum-maten van beide O.K.'s worden geschat op 4,5 x 5,5 M. Onmiddellijk aansluitend en in open verbinding met de O.K. zijn geprojecteerd: wordt de ingang van de polikainiek aan a. een narcose-kamer (die geen daglicht behoeft te hebben) met een in- en uitgang; een lavabo met 3 wastafels en een in- en uitgang; b. een kleine ruimte waar toestellen van de O.K.geborgen kunnen c. worden:

Van Emmichoven, *Bestek en voorwaarden "Rudolf Steiner Kliniek"*. Consulted from Nieuwe Instituut, Rotterdam. Archival number: BUYSCd29.1.

5. Visual structure of the thesis



Own work, visual structure of the thesis. Made in Miro.

BIBLIOGRAPHY

Secondary sources introduction

- Bhasin, Veena. "Medical Anthropology: A Review." *Studies on Ethno-Medicine* 1, no. 1 (January 8, 2007). https://doi.org/10.1080/09735070.2007.11886296.
- Kim, H. Y., & Kim, K. H. A Study on the Characteristics of Healing Space of Children Medical Facilities-Focused on the behavioral affordance based on the theory of Rudolf Steiner and Max. 16(2). Journal of The Korea Institute of Healthcare Architecture. 2010.

Steiner, Rudolf. Architecture as a Synthesis of the Arts. Rudolf Steiner Press, 1999.

Taylor, Ed. Antroposofie: Een inleiding. 1st ed. Pentagon, 2013.

——. Rudolf Steiner: Een Geïllustreerde Biografie. 3rd ed. Pentagon, 2010.

Primary sources chapter 1

Emmichoven, Frederik. "Bestek En Voorwaarden 'Rudolf Steinerkliniek.', 1926. *Nieuwe Instituut*. Rotterdam, Zuid-Holland, Netherlands. BUYSCd29.1.

Secondary sources chapter 1

Baars, Erik. "Complementaire Zorg: Uitwendige Therapie Als Aanvulling Op Reguliere Zorg." TvZ 3 (2018).

——. "De bijdrage van antroposofische eerstelijnszorg aan de vermindering van de 'Burden of disease' in Nederland: Een explorerende pilotstudy." Louis Bolk Instituut, 2005.

Van Eck, Caroline. Organicism in nineteenth century Architecture: an enquiry into its philosophical and theoretical background. Architecture & Natura Press, 1994.

Boschma, Geertje. *The Rise of Mental Health Nursing: A History of Psychiatric Care in Dutch Asylums,* 1890-1920. Amsterdam University Press, 2003.

Cain, Jenny. The aesthetics of Rudolf Steiner and Spiritual Modernism. University of Michigan, 2016.

- Gray, Fiona. "Rudolf Steiner: Occult Crank or Architectural Mastermind?" *Architectural Theory Review* 15, no. 1 (March 30, 2010): 43–60. https://doi.org/10.1080/13264821003629246.
 - ——. "The Synthesis of Empathy, Abstraction and Nature in the Work of Kandinsky, Steiner and Mendelsohn Proceedings of the XXVth International Conference of the Society of Architectural Historians, Australia and New Zealand." Proceedings of the XXVth International Conference of the Society of Architectural Historians, Australia and New Zealand, 2008.

——. Rudolf Steiner's Theories and Their Translation Into Architecture, 2014.

Kienle, Gunver S., Hans-Ulrich Albonico, Erik W. Baars, Harald J. Hamre, Peter Zimmermann, and Helmut Kiene. "Anthroposophic Medicine: An Integrative Medical System Originating in Europe." *Global Advances in Health and Medicine* 2, no. 6 (November 1, 2013): 20–31. https://doi.org/10.7453/gahmj.2012.087.

Kirchner-Bockholt, Margarethe. Fundamental principles of curative eurythmy. Rudolf Steiner Press, 1977.

Lievegoed, Bernard. Levende Bouwkunst: Over Het Organische in de Architectuur. Uitgeverij Vrij Geestesleven, 1994.

- Van Der Ree, Pieter. Organische Architectuur: Mens En Natuur Als Inspiratiebron Voor Het Bouwen. Uitgeverij Vrij Geestesleven, 2000.
 - ———. Vormen Scheppen Als Uitdrukking van Innerlijk Leven: Rudolf Steiners Kunst En Architectuur Als Beeld van de Innerlijke Scholingsweg. Uitgeverij Christofoor, 2008.

Sharp, Dennis. Modern Architecture and Expressionism, 1966.

Steiner, Rudolf. Architecture: An Introductory Reader. Rudolf Steiner Press, 2003.

———. *Architecture, Sculpture, and Painting of the First Goetheanum*. Collected Works of Rudolf Steiner, 2017.

———. Art as Spiritual Activity: Rudolf Steiner's Contribution to the Visual Arts. SteinerBooks, 1997.

——. *Toward a New Theory of Architecture: The First Goetheanum in Pictures*. Collected Works of Rudolf Steiner, 2017.

Tharaldsen, Espen. Die Verwandlung des Alltags: Rudolf Steiners Ästhetik. Freies Gestsleben, 2012.

Wölfle, Ute, Floriana A Elsholz, Astrid Kersten, Birgit Haarhaus, Walter E. Müller, and Christoph M.
Schempp. "Expression and Functional Activity of the Bitter Taste Receptors TAS2R1 and TAS2R38 in Human Keratinocytes." *Skin Pharmacology and Physiology* 28, no. 3 (January 7, 2015): 137–146. https://doi.org/10.1159/000367631.

Primary sources chapter 2

- Buijs, Jan. Dr Rudolf Steinerkliniek Te 's Gravenhage Begane Grond, 1926. Drawing. Nieuwe Instituut. Rotterdam, Zuid-Holland, Netherlands. BUYSTd76.
- ------. Dr Rudolf Steinerkliniek Te 's Gravenhage Doorsnede, 1926. Drawing. Nieuwe Instituut. Rotterdam, Zuid-Holland, Netherlands. BUYSTd49.1
- ———. *Mid-hallway*, 1928. Photograph. Photograph. *Nieuwe Instituut*. Rotterdam, Zuid-Holland, Netherlands. BUYSph174, nr. A1340
- ———. Garage, 1927. Drawing. Nieuwe Instituut. Rotterdam, Zuid-Holland, Netherlands. BUYSCd29.2.
- Emmichoven, Frederik. "Bestek En Voorwaarden 'Rudolf Steinerkliniek.' 1926. Text. *Nieuwe Instituut*. Rotterdam, Zuid-Holland, Netherlands. BUYSCd29.1.
- *Façade of Rudolf Steinerkliniek,* 1928. Photograph. *Nieuwe Instituut*. Rotterdam, Zuid-Holland, Netherlands. BUYSph176.

Secondary sources chapter 2

- Bleekman, George M., Ann Girard, Karin Link, and U.S. Department of the Interior. "Twentieth Century Building Materials: 1900-1950." *NPS Reading List*, 1993.
- Van Boven, Cees, Victor Freijser, and Christiaan Vaillant. *Gids van de Moderne Architectuur in Den Haag.* Uitgeverij Ulysses, 1997.
- Van Der Duyn Schouten, Ineke. *Een Schip in de Duinen: Het Rudolf Steiner Verpleeg- En Therapiehuis in Beeld*. Stichting vrienden van de Rudolf Steiner Kliniek, 1998.

Gray, Fiona. Rudolf Steiner's Theories and Their Translation Into Architecture, 2014.

Mösch, M. De Rudolf Steinerkliniek en de architect Jan Buijs, 1983.

Rehorst, Chris. Jan Buijs, Architect van de Volharding: De Architectuur van Het Bureau Ir. J.W.E. Buijs En J.B. Lürsen. Staatsuitgeverij, 1983.

——. Jan Buijs: Interieurs (1889-1961). Uitgeverij 010, 1991.

Steiner, Rudolf. "Christianity as Mystical Fact and the Mysteries of Antiquity." Library of Alexandria, 1922.

Secondary sources chapter 3

- Arman, Maria, Albertine Ranheim, Arne Rehnsfeldt, and Kathrin Wode. "Anthroposophic Health Care -Different and Home-Like." *Scandinavian Journal of Caring Sciences* 22, 2008. https://doi.org/10.1111/j.1471-6712.2007.00536.x.
- Van Der Duyn Schouten, Ineke. *Een Schip in de Duinen: Het Rudolf Steiner Verpleeg- En Therapiehuis in Beeld*. Stichting vrienden van de Rudolf Steiner Kliniek, 1998.
- Ernst, Edzard. *Healing, Hype Or Harm?: A Critical Analysis of Complementary Or Alternative Medicine.* Andrew UK Limited, 2013.
- Groenendijk, Paul, and Piet Vollaard. *Architectural Guide to the Netherlands: 1900-2000*. Ashgate Publishing, Ltd., 2006.
- Kellert, Stephen R. *Building for life: Designing and understanding the human-nature connection*. Island press, 2012.
- Rehorst, Chris. Jan Buijs, Architect van de Volharding: De Architectuur van Het Bureau Ir. J.W.E. Buijs En J.B. Lürsen. Staatsuitgeverij, 1983.

——. 'Buijs, Jan Willem Eduard (1889-1961)'. Biografisch Woordenboek van Nederland, 2013.

Thiel, Michael. "Person-Centeredness in Integrative Health Care and Integrative Medical Education." Complementary Medicine Research 24, 2017. https://doi.org/10.1159/000460277.

Sources images

(1)	ResearchGate	(2020)	Goetheanum 1	
	https://www.researchgate.net/publication/341204208_The_First_Goetheanum_A_Centenary_fo r_Organic_Architecture 1.1			
(2)	Architectuur.nl	(2017)	Goetheanum 2	
	https://www.architectuur.nl/project/stromende-ruimte-in-goetheanum-door-yaike-dunselman/			
(3)	Mahle Stiftung	/	Filderklinik	
	https://www.mahle-stiftung.de/foerderprojekte/filderklinik/?projects=37ℴ=asc&sort=title			
(4)	Flickr	(2006)	Vidar Clinic	
	https://www.flickr.com/photos/28402310@N06/6015559269			
(5)	Raphaëlstichting	/	Rudolf Steinerkliniek	
	https://www.raphaelstichting.nl/rudolfsteiner/			
	ResearchGate	(2010)	Glass pavilion	
(6)				
	https://www.researchgate.net/publication/260399523_Design_of_metal-			
(7)	glass_pavilion_in_urban_prot	ected_area (1920)	_based_on_Voronoi_generated_structure/figures?lo=1 Glass house	
· /		(= -)		

	https://images.lib.ncsu.edu/luna/servlet/detail/NCSULIB~1~1~104707~176233:Traum-aus- Glas?qvq=w4s:/who%2FFinsterlin%25252C%2BHermann%2Fwhat%2FArchitecture%2F&mi=1 &trs=4		
(8)	Dieter Janssen Photography	(2009)	Einsteinturm
	https://www.dieterjanssenph	otography	.com/erich-mendelsohn
(9)	The Steiner Collection	(1920)	The twelve senses
	https://thesteinerconnection.com/2022/07/21/the-12-senses/		
(10)	P10 Design Studio	/	Human body
	https://www.p10designstudio.com/iconic-barcelona-volume-2/		
(12)	Haags gemeentearchief	(2009)	Chapel interior
	https://www.monumentenzorgdenhaag.nl/monumenten/nieuwe-parklaan-58		
(13)	Petapixel	(2019)	The Goetheanum 2
	buildings-in-the-world/	-	uring-one-of-the-most-unique-and-interesting-
(16)	Haags gemeentearchief	(2009)	Chapel interior
	https://www.monumentenzor	gdenhaag	.nl/monumenten/nieuwe-parklaan-58
(17)	Shutterstock	/	The Ark of Noah
	https://www.shutterstock.com	n/nl/image	e-photo/noahs-ark-construction-186687086
(18)	Haags gemeentearchief	(1935)	The Rudolf Steinerkliniek around 1935
	https://www.monumentenzorgdenhaag.nl/monumenten/nieuwe-parklaan-58		
(19)	Haags gemeentearchief	(2009)	Balcony west
	https://www.monumentenzor	gdenhaag	.nl/monumenten/nieuwe-parklaan-58
(20)	Haags gemeentearchief	(2009)	Balcony east
	https://www.monumentenzor	gdenhaag	.nl/monumenten/nieuwe-parklaan-58
(21)	Gray, Fiona	(2014)	Publisher's house
	https://www.academia.edu/9 Architecture	435216/R	udolf_Steiners_Theories_and_Their_Translation_into_
(25)	Haags gemeentearchief	(1930)	The Rudolf Steinerkliniek around 1930
	https://www.monumentenzor	gdenhaag	.nl/monumenten/nieuwe-parklaan-58