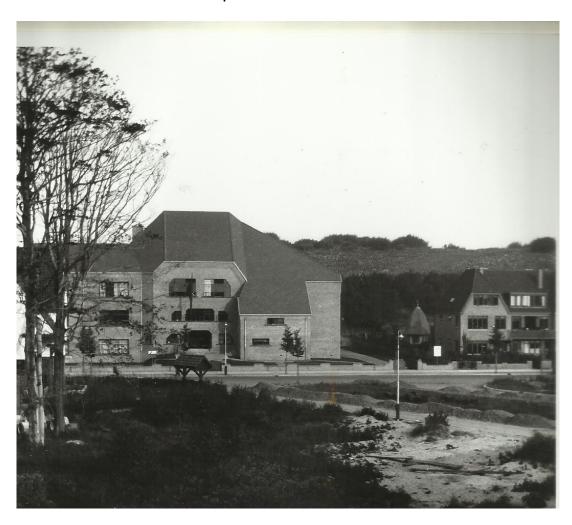
# **EARLY WALDORF SCHOOL ARCHITECTURE:**

# A study of the design of The Vrije School, The Hague

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#### Abstract

This thesis provides an historical overview of the development of anthroposophy in the Netherlands and its impact on school architecture, with a specific focus on the Vrije School in The Hague. Through primary and secondary source analysis, the paper explores the origin of anthroposophy and the Waldorf education system, the influence of anthroposophy on architecture and design, the spread of the anthroposophical movement in the Netherlands and the establishment of the first Waldorf School in the Hague. Further it investigates the key principles and features of anthroposophic design found in school architecture practice during the early spread of the movement. It explores anthroposophical school design as organic architecture, which communicates with people on an emotional, psychological, mental, moral, and spiritual level. The case study of the Vrije School allows for a better understanding of the application of anthroposophical principles in school architecture, including the school's L-shaped floor plan, the use of organic forms and colors, and the careful consideration given to supporting the Waldorf education system. Overall, this research highlights the course of events that led to the development of anthroposophy and the Waldorf education system in the Netherlands and formed important motives behind the design of the Vrije School.

**Keywords:** Anthroposophy, Waldorf education, School architecture, Anthroposophical movement, Organic architecture

#### 1. Introduction

Anthroposophy is a spiritual movement founded by Austrian philosopher Rudolf Steiner in the early 20th century, which has had a profound effect on social and economic life as well as fields like education, art, medicine, and agriculture. It comprises various ideas and practices that lay emphasis on the spiritual dimensions of human existence, including the belief in reincarnation and the significance of fostering spiritual awareness via various forms of inner growth. Based on this philosophy, the Waldorf education system originated. Also referred to as Steiner education, it is a pedagogical strategy based on anthroposophical ideas. It places a strong emphasis on the holistic development of the child and aims to foster in students a feeling of wonder, creativity, and critical thinking (Alexander and Loeffler, 2019; Gruber, 2018). After the opening of the first school in Stuttgart, Germany in 1919, the following years saw the spread of the Waldorf ideology and establishment of schools in Cologne, Hamburg and Essen and later in other countries like Switzerland, England and the Netherlands.

The history of the anthroposophical movement in the Netherlands goes back to 1923. The anthroposophical society was founded in the Hague in the presence of Rudolf Steiner. (Antroposofische Vereniging in Nederland, n.d.). This was also the time when great attention was paid to anthroposophical community building. This resulted in the spread of the Waldorf education system. In the same year, the first Waldorf school began in a small living room on Columbusstraat (History - Free School The Hague , 2017). The school grew quickly due to which in 1929 a large building was constructed on Waalsdorperweg. The Vrije school was the first educational institution in the Hague that followed the Waldorf ideology, inspired by Rudolf Steiner (1861-1925), the founder of anthroposophy. It was designed by Frederik Herman Gerretsen and Chris Wegerif.

There is little known about the Anthroposophical movement in the Netherlands. The most important literature sources regarding this subject can only be found in the library of the Anthroposophical Society in the Hague. The limited number of books reveal the history of the origin and development of Anthroposophy in the Netherlands. Important school archives had been burnt during the war<sup>1</sup>. Most sources relevant to research that could be attained are found to be from within the Anthroposophical movement and may lack critical distance. The Vrije school being a crucial part of the spread of this movement becomes increasingly interesting to study. There is also a lack of information about the design practice of Gerretsen and Wegerif readily available to the public and thus insufficient means to learn about anthroposophical influence on the architecture of schools.

This makes it essential to investigate how the anthroposophic movement as a social and philosophical movement had an effect on the architectural designs of school buildings that are based on the Waldorf educational ideology. This includes the study of anthroposophical features, the meaning behind them and their relation to the ideology. The thesis thus aims to provide an historical overview of the development of anthroposophy in the Hague and its impact on school architecture. The Vrije school has been chosen as the case study to analyze anthroposophic design practice in the Hague. The main research question is as follows: What influence did the contextual anthroposophic doctrine have on early school architecture?

In order to carry out this research, this thesis makes use of a limited collection of secondary sources and relies heavily on primary sources such as interviews, archival articles and drawings. The research begins with a broader context by gaining a better understanding of the origin of the philosophy of anthroposophy and the Waldorf education system in chapter 2, then in chapter 3 it understands the influence of anthroposophy on architecture with special emphasis on school architecture, further in chapter 4 it dives deeper into the history of the Anthroposophical movement in the Netherlands and the origin of the Vrije School and is followed by chapter 5 closely analyzing the design of the school. The study of the Vrije School is used as a means to discover relevant principles that showcase the influence of Anthroposophy on the design of schools built during the spread of the movement.

# 2. Anthroposophy and the Waldorf education system

To comprehend the philosophy of Anthroposophy, it is primary essential to understand its roots which are interwoven with the life and ideas of its founder, Rudolf Steiner. Steiner obtained his doctorate in Rostock on a philosophical inquiry into Truth and Science and wrote his most important work in this field, The Philosophy of Freedom (Antroposofische Vereniging in Nederland, n.d.). At this time he became involved with Friedrich Nietzsche. Inspired by his ideas, Steiner started taking care of the publications of his work. After Nietzsche's death in 1900, Steiner started working with theosophists

<sup>&</sup>lt;sup>1</sup> Zwakman, M. (personal communication, April 6, 2023)

which he found highly intriguing as it allowed his ideas to go beyond the boundaries of the then known science. This interest can be seen in his early writings about Theosophy. About a decade later, in 1913, he founded the anthroposophical society by breaking away from theosophy and taking a different direction. Anthroposophy for Steiner was spiritual science for people who seek depth. In 1923 he saw the need for reform to be implemented. This not only re-established the Anthroposophical society but also led to the establishment of a 'Free school of Humanities' to guide people in his philosophy.

The practice of anthroposophy came to be seen through art forms such as architecture. Art turned out to be the best way to put out knowledge about anthroposophy. This can be found for example in the design of the Goetheanum, a monumental wooden building located not far from Basel in Switzerland. This building became the center of Anthroposophy from 1913. This also marked the origin of an anthroposophic association that could stand on its own feet in pursuit of giving life to Steiner's work. The Goetheum's design served as a space that could accommodate various art forms such as drama, theater and eurythmy for which architecture, painting and sculpture were realized in an anthroposophical manner (Antroposofische Vereniging in Nederland, n.d.).

The Waldorf school movement however has a different origin that for its evolution merged with Anthroposophy and became a central part of the philosophy. The movement began as an initiative by the industrialist, Emil Molt, owner and director of Waldorf- Astoria cigarette factory in Stuttgart. (Vrijeschool Den Haag, n.d.) During the crisis of western civilization following the war, Molt decided to take action in order to change how people think, feel and act to save the collapsing social and economic life in Germany. At this time of social chaos, he turned to Steiner for help in inaugurating the programme that he thought could be an effective solution to society's problems. As a result of the fruitful outcomes, Molt asked Steiner to develop a curriculum for a full- fledged school for the children of his employees. This school was open to all children regardless of their religion, race or social and economic conditions (Barnes, 1980, p-1).

During a lecture on 23 April 1919, Rudolf Steiner argued about the decentralization of the three spheres of social life- spiritual-cultural, legal-political, and economic (Uhrmacher, 1995). Offering hope for a new world order, he suggested the importance of education in shaping the society. Before his death in March 1925, Steiner lived to see the opening of four Waldorf schools, two in Germany and one each in Great Britain and the Netherlands. The Waldorf education system or the free school for humanities covers various aspects of the philosophy such as spirituality. The ideology is a holistic and integrative approach towards education (Randoll & Peters, 2019, p- 1). It gives rise to the hope that younger people may grow up to be capable of forming independent judgment (Vrijeschool Den Haag, n.d.). The ideology is based on the belief that education should not be solely dictated by political and economic motives. The 'free' in Waldorf education thus refers to the ability to shape education beyond much influence of the government and commercial associations. Within this education system, a human being is considered to be a 'triple being', consisting of body, soul and spirit. The body is bound by the laws of nature, the soul represents consciousness connected to physicality and the spirit is the mind that has the ability to imagine without the restriction of space and time (Vereniging van vrijescholen, n.d.). Every human

being has a source of something new and unique, and this type of education aims to give way to an individual to recognize and develop these abilities.

One of the main starting points of Waldorf schools is that teaching is also educating. It is considered a service to personality development. Teachers and students both are expected to challenge themselves and inspire each other. Every student must feel personally seen and every member of the school team must feel free to contribute to the principles about the identity of education based on their own progressive insights. Teachers thus get special training to be able to work in Waldorf schools. This includes the recognition of the defects of the children and how they can be treated. Through this can arise curative pedagogy , curative rhythm , speaking exercises for the development of the inner being of a child<sup>2</sup>.

### 3. Influence of Anthroposophy on School architecture

Waldorf buildings display a special type of architecture called 'organic architecture'. In his lecture, Prof. Lievegoed<sup>3</sup>, talks about the meaning of organic as it corresponds to an organism that is a living system. He describes the structure of a cell as mentioned in the book "The Science of Life" by biologist Paul Weiss<sup>4</sup>. He says that people may imagine the cell as static, however, the cell is constantly active- vacuoles arise, vacuoles disappear, protein clumps arise, protein clumps disappear, things are absorbed and things are expelled. By this he explains that life is not bound to matter but to the process or an event in time where the matter is in motion. In approaching this mathematically, projective geometry is used, where planes and lines are set in motion. Organic forms thus are able to arise by allowing movement to enter space. Architecture however poses a limitation to the use of organic forms because a building is a piece of static. Even in sacred buildings like ancient Egyptian or Greek temples that were designed in accordance to the proportions of the human body, there has rarely been use of organic forms outside of decorations and leaf motifs.

According to Steiner there are twelve senses out of which the most important ones are the haptics, i.e. the ones which let perceptions act through the subconscious: sense of touch, sense of life, sense of movement, sense of balance<sup>5</sup>. Certain forms and shapes can thus have an effect on us through these senses. The concepts of rhythm and metamorphosis can explain these effects to some extent. Lievegoed characterizes rhythm as the creative force that is born through the meeting of two polarities like movement and slowness. Rhythm is considered to be one of the most important organizers of spaces

<sup>&</sup>lt;sup>2</sup> Stibbe, M. (1929). Openingsweek van de Vrije School, Den Haag, 7-15 September, 1929. Ostara: Tijdschrift voor de Pedagogie van Rudolf Steiner, 3(1), 5.

<sup>&</sup>lt;sup>3</sup> Dutch psychiatrist, educator, professor, organization expert and anthroposophist, who was closely involved in the development of the anthroposophical movement in the Netherlands.

<sup>&</sup>lt;sup>4</sup> Vrijeschoolpedagogie. (2015, September 15). VRIJESCHOOL – Organische bouw [Blog post]. HET ORGANISCHE IN DE ARCHITECTUUR.Retrieved from <a href="https://vrijeschoolpedagogie.com/2015/09/15/vrijeschool-organische-bouw/">https://vrijeschoolpedagogie.com/2015/09/15/vrijeschool-organische-bouw/</a>

<sup>&</sup>lt;sup>5</sup> Vrijeschoolpedagogie. (2015, September 17). VRIJESCHOOL – Organische bouw (2-1) Geplaatst op 17 september 2015. GRONDSLAGEN VOOR EEN LEVENDE BOUWKUNST (1). Retrieved from <a href="https://vrijeschoolpedagogie.com/2015/09/17/vrijeschool-organische-bouw-2-1/">https://vrijeschoolpedagogie.com/2015/09/17/vrijeschool-organische-bouw-2-1/</a>

arising from the intersection of space and counterspace. When looking at a facade of a building, one can notice how the size may seem different depending on the type and number of windows. Here rhythm can have an effect on the perception of size. In organic architecture, a rhythmic balance that is in accordance with our own life processes must be present. Metamorphosis on the other hand is a theory developed by Goethe that can be described as process- oriented formation of life where one form arises from another. In architecture, metamorphosis deals with the principle of intervals that may create tension between different elements. When one looks at the facade of a building from bottom to top along the windows on each floor and slight changes are noticed through every row of windows, a type of event arises. It is not just mere repetition of elements but has artistry like music where one form develops from the other<sup>6</sup>.

Anthroposophy suggests the powerful effects of buildings that one lives, works, studies or learns in. Steiner gave substantial importance to architectural designs arising from living forms so that it can communicate with the users on an emotional, psychological, mental, moral, and spiritual level. Steiner mentions that a building must form "an environment that will express the human being's inner being in forms." According to him, as compared to static forms, dynamic forms and organic movement speak more effectively to the human psyche. This also applies in the layout of the classroom. An organic shaped classroom supports the artistically based instruction of a teacher more than a rectangular room does. It also allows a more flexible thought process that the Waldorf education system hopes to develop in its students. The design of classrooms including the floorplan, ceiling design and shape of room is however different per grade in order to attend to the changing needs of students through numerous developmental phases. Kindergarten and preschools have a more rounded shape of classrooms in favor of welcoming the unique experiences children have during that time. In the following years the softer elements become firmer, more articulated and angular. All visible elements in a building such as lighting, doorways, corridors, stairwells, materials and arrangement of spaces can be designed specifically to fit their role in the education function.

Steiner once noted how the individual character of each color within an environment must be carefully adapted to a particular use. Similarly he mentioned once that everything that one may come in contact with in life has an aesthetic effect in that person. Some colors thus fit certain functions better than others and convey a different type of impression. According to him, the wall painting or decoration inside a school must consider the specific qualities of each color. These colors must be related to the function for example architectural details of intensification of color toward the entrance of a classroom or beginning or a staircase. Steiner showed great interest in choosing different colors for each classroom, changing every year as pupils mature<sup>9</sup>.

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<sup>&</sup>lt;sup>6</sup> Vrijeschoolpedagogie. (2015, September 19). VRIJESCHOOL – Organische bouw (2-2). Grondslagen voor een levende bouwkunst (2) [Blog post]. Retrieved from <a href="https://vrijeschoolpedagogie.com/2015/09/19/vrijeschool-organische-bouw-2-2/">https://vrijeschoolpedagogie.com/2015/09/19/vrijeschool-organische-bouw-2-2/</a>

<sup>&</sup>lt;sup>7</sup> Rudolf Steiner, Ways to a New Style in Architecture (London: Anthroposophical Publishing Company; New York: Anthroposophic Press, 1927), p. 11; also published in Christian Thal-Jantzen, ed., Architecture as a Synthesis of the Arts, trans. Johanna Collins et al. (London: Rudolf Steiner Press, 1999), p. 72

<sup>&</sup>lt;sup>8</sup> Adams, D. (n.d.). Organic Functionalism: An Important Principle of the Visual Arts in Waldorf School Crafts and Architecture. Waldorf Research Institute, p. 13-15. Retrieved from <a href="https://www.waldorfresearchinstitute.org/pdf/BACraftsArchtRev.pdf">https://www.waldorfresearchinstitute.org/pdf/BACraftsArchtRev.pdf</a>

<sup>&</sup>lt;sup>9</sup> Adams, D. (n.d.). Organic Functionalism: An Important Principle of the Visual Arts in Waldorf School Crafts and Architecture. Waldorf Research Institute, p. 11-13. Retrieved from <a href="https://www.waldorfresearchinstitute.org/pdf/BACraftsArchtRev.pdf">https://www.waldorfresearchinstitute.org/pdf/BACraftsArchtRev.pdf</a>

# 4. Development of Anthroposophy and the Vrije School in the Netherlands

Since the beginning of anthroposophy in 1913 in Stuttgart, there had been followers of Steiner in different parts of The Netherlands. After 1921, Steiner visited the Netherlands many times and was often accompanied by Marie Steiner, DR. Wegman, Miss Peace, Dr. Wachsmuth and others who contributed to bring spiritual substance to his lectures and performances. Steiner also traveled to the Netherlands in November 1923 to found national associations During this time he delivered five lectures which turned out to mark the beginning of the anthroposophical movement. In the years 1921-1925, alot was sown by Anthroposophy in the Netherlands. This included the establishment of the waldorf schools, training schools, the Heilpädagogische Instituut Zonnehuis Veldheim, the medical movement, the biodynamic agricultural movement and other achievements in the field of arts, drama and speech formation 12.

In 1923, the Hague Society of the Vrije School was founded as an initiative of a few young members after which the school started being designed. In the presence of Rudolf Steiner, the anthroposophic society had taken this new turn. The school first began small in a building on Columbusstraat and grew in Rudolf Steiner's immediate circle. It soon had to move to a building on Kranenburgweg and shortly after to a double mansion in the van Speykstraat where they were also able to establish a eurythmy hall<sup>13</sup>. Rudolf Steiner still visited the school in 1924 and talked about different children and gave instructions to the first few teachers about the organization of the school. On his advice the Waldorf school was for the first time named the "Free School". After the sacrifice and hard work of the members of the society, it finally became possible to erect their own building on Waalsdorperweg, where the current school is situated. The transition from Speykstraat to Waalsdorperweg also meant giving up intimacy as the school grew to be bigger. At this time, many members lived intensively with the school.



<sup>&</sup>lt;sup>10</sup> Van Wettum, J. "25 Jaar Vrije School in Nederland." Mededelingen van de Antroposofische Vereniging in Nederland, pp. 142.

<sup>&</sup>lt;sup>11</sup> Von Plato, B. (1987). De Antroposofische Vereniging: impuls en ontwikkeling. Vrij Geestesleven, p57. ISBN: 9060382331

<sup>&</sup>lt;sup>12</sup> Van Wettum, J. "25 Jaar Vrije School in Nederland." Mededelingen van de Antroposofische Vereniging in Nederland, pp. 148.

<sup>&</sup>lt;sup>13</sup> Van Wettum, J. "25 Jaar Vrije School in Nederland." Mededelingen van de Antroposofische Vereniging in Nederland, pp. 139.

The Vrije School in the Hague began small with 10 students, but soon expanded to 250 in a few years. There were two motives behind the opening of the school: firstly, the fruitfulness of pedagogical work could bring in the life of a child as he grows older; secondly, the inner development of the teacher through the growing understanding of time through the life of children. It was crucial for the Waldorf ideology that education be given according to the age of children. This thus became the basis of the curriculum. The thirteen grades in the school represent the thirteen stages of the development of a human being. The new school however needed to adapt to the Dutch ways of life which demanded a different pedagogy than the German ones<sup>14</sup>.

The Vrije School in the Hague offers 'period education' which is a pedagogical-didactic concept that allows the student to connect to the subject of study mentally, emotionally and physically. This gives way to deepening and broadening into the subject through various methods of learning. Visual subjects such as design, handicrafts, media, music, drama and eurythmy are paid special attention too. Eurythmy, interestingly, is unique as it is only offered in Waldorf schools. It is a movement art, developed from anthroposophy, that involves moving to language, music or silence. Pedagogical eurythmy has played a very important role in the school curriculum. Steiner called eurythmy a 'soul gymnastics'. (Vereniging van vrijescholen, n.d.) This makes pupils aware of themselves, their relationship to other people and the space around them. Furthermore, philosophy of life is another major subject of interest that teaches about destiny, biographies, life and death, different religions etc.. This promotes social integration and allows students to become acquainted with a diverse society with many backgrounds and cultures (Vrijeschool Den Haag, n.d.).

### 5. The design of The Vrije School

During the early years when the anthroposophical society finally decided to have their own school, they formulated an assignment for the architects. This assignment as given by the school board for the construction of the school was a difficult one. It stated the ideal requirements for a school building under very poor financial conditions<sup>15</sup>. However, due to the financial circumstances the expectations had already been set very low. The requirements mentioned that the exterior must be able to determine what lives in the school and tell about the child's soul. The interiors however did not have specific requirements. The economy in such circumstances had to be strictly checked. This was done in the following way: each room was only made to meet the minimum requirements. The construction unit was divided into different groupings each of which contained different types of rooms. Using this method each room had, for example, that floor height, that floor construction and that insulation which was

<sup>&</sup>lt;sup>14</sup> Stibbe, M. (2023, February 1). VRIJESCHOOL – Het leerplan – Max Stibbe. Vrijeschoolpedagogie. Retrieved from <a href="https://vrijeschoolpedagogie.com/2023/02/01/vrijeschool-het-leerplan-max-stibbe/">https://vrijeschoolpedagogie.com/2023/02/01/vrijeschool-het-leerplan-max-stibbe/</a>

<sup>&</sup>lt;sup>15</sup> Gerretsen, F., & Wegerif, C. (1929). De architectuur van het nieuwe schoolgebouw. Ostara: Tijdschrift voor de Pedagogie van Rudolf Steiner, 3(1), 21.

required in that specific room. It is only because of this freedom of determining the floor heights, that each floor could be economized. This grouping of premises that allowed such freedom could be regarded as 'organic'. This construction became an example of a dogma- free thinking that is capable of working economically.

### 5.1. The Design process

The Vrije school being the first Waldorf school outside Germany is an early example of organic building in the Netherlands (Vrijeschool Den Haag, n.d.). It is located on Waalsdorperweg 12 in a relatively green neighborhood and was designed by Frederik Herman Gerretsen and Chris Wegerif. Gerretsen was also the architect responsible for designing the first house on the basis of anthroposophy or organic architecture. This was his own house located at Nieboerweg in the Hague<sup>16</sup>. He is also known to be the first architect who tried to put Steiner's architectural theory into practice. In 1924 he made a design for the Vrije School; however it was never implemented. Later in 1927, when Chris Wegerif graduated as a structural engineer, he was assigned the contract of the school and he joined Gerretsen to carry out the pioneering work together for anthroposophical architecture. The school was completed in 1930. Apart from their most well known work of the Vrije School, they also completed a number of villas, in the vicinity of the school, for anthroposophists. Around 1935 Gerretsen devoted himself to the anthroposophical society and also became a teacher at the Vrije School for a couple of years before anthroposophy was banned in 1941 and the school was closed down because of the war<sup>17</sup>.

The first design of the Vrije school by Gerretsen started through modeling in clay, similar to the technique to Rudolf Steiner's designing. This method allowed him to create shapes that were closely related to the shape of his hands and developed a conscious contrast with the plastic form of the building. Then a "corrective play" was used where Steiner himself corrected certain elements of the design. These corrections included the changing of direction of two cornice slopes to be downwards and one of them that extended horizontally above the entrance to be broken to create a kind of small entrance roof. Gerretsen was thus in contact with Steiner from an early stage. The design however did not focus on the methods but rather how the very new artistic means were used. The most important characteristics of the building were how the building mass subordinated the floor plans, a roof section which was irregularly faceted lying on the building like a kind of cushion and a strong facade with plastic frames for windows and doors <sup>18</sup>.

<sup>&</sup>lt;sup>16</sup> Schilstra, O. (1983). De Architektuur van Frits Gerretsen en Chris Wegerif 1924-1933 [The Architecture of Frits Gerretsen and Chris Wegerif 1924-1933] (Scriptie) [Thesis], p.11

<sup>&</sup>lt;sup>17</sup> Asselbergs-Hagedoorn, S. (personal communication, March 23, 2023)

<sup>&</sup>lt;sup>18</sup> Schilstra, O. (1983). De Architektuur van Frits Gerretsen en Chris Wegerif 1924-1933 [The Architecture of Frits Gerretsen and Chris Wegerif 1924-1933] (Scriptie) [Thesis], p.17





**Figure 2.** Facade drawings (Source: Drawings by author)

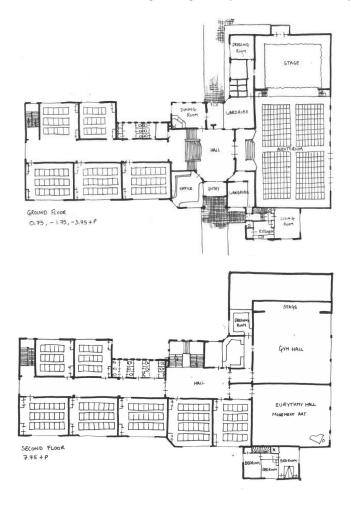
The design of the school by Gerretsen and Wegerif won in the competition against a design by Buijs and Lursen. Both had an L shaped floor plan with a virtually identical division of functions. However, the winning design was more organically shaped as compared to the other which was rather a series of concatenated blocks. In an explanation of the design, Wegerif writes: 'The task was to design cheaply. Shape wasn't really that important. Hence, much competition from the design of Buijs, who had proven with the construction of the Rudolf Steiner clinic that our design was priceless.' Wegerif wanted a building like an organism with jaw muscles and calf muscles. His solution of the building was that walls have a load bearing function and should be thick enough to protect against cold and rain. The inner coverings must be warm and human friendly. This was the main motive behind the use of bricks: hard bricks outside and unfired bricks that could be painted in the interior. He described the design as a solution to a puzzle where they had to think about the location on the site, the number of storeys, location of the entrance, location in relation to the wind direction etc..

#### 5.2. Design features and relation to anthroposophy

The present building comprises 14 classrooms, a gym and a theater of 12 by 23 meters. Before its extension in 1955, the building consisted of 10 classrooms (Architectuur.org, n.d.). The original building

<sup>&</sup>lt;sup>19</sup> Schilstra, O. (1983). De Architektuur van Frits Gerretsen en Chris Wegerif 1924-1933 [The Architecture of Frits Gerretsen and Chris Wegerif 1924-1933] (Scriptie) [Thesis], p.37-38

had an L- shaped floor plan and comprised classrooms for all 13 grades from primary to upper school. As the number of pupils increased, the school expanded into other buildings. The current school on Waalsdorperweg 12 only consists of the upper school with 6 grades. The distribution of programs in the original school was as follows: classrooms are located on either side of the long side of the central corridor (figure 3). The corner between the short and long side of the L shaped plan consists of a slightly higher entrance porthole and a low extension on the right of the entrance that merges into the short side of the L. This short side comprises the Eurythmy hall, the teacher's lounge, a meeting room and some other functions. There are two staircases, one in front of the entrance and one at the end of the long side. Further, the design of facades interestingly include three different types (figure 4): firstly, type A on the front facade with the entrance which is described as the frightened and sheltered type. Then, type B on the side walls is the wolf- roof facade and finally type C on the rear side is the contemplative facade<sup>20</sup>. There is a different type of rhythm that can be noticed in type A, B and C facades. These types of facade can generally be found in most buildings designed by Gerretsen and Wegerif.



**Figure 3.** Floorplan (Source: Drawings by author)

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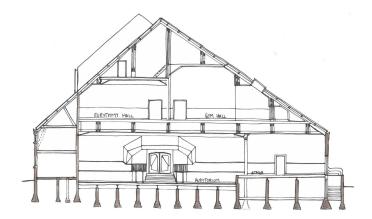
<sup>&</sup>lt;sup>20</sup> Schilstra, O. (1983). De Architektuur van Frits Gerretsen en Chris Wegerif 1924-1933 [The Architecture of Frits Gerretsen and Chris Wegerif 1924-1933] (Scriptie) [Thesis], p.25





Figure 4. Front & side facade- type A & B (left), Rear facade- type C (right) (Source: Archief Vrijeschool Den Haag, Waalsdorperweg. (1929-1960). T.H. 8-9 Beeldmateriaal [Inventory])

The distribution of functions inside the building can be derived from the outside as the floorplans are adapted to the shape of the building. The roof takes on a primary role. It lies like a celestial vault over the total building mass, forms a union of irregularities and gives rise to unity and coherence. In the gradual transition from wall section to roof section one can notice that the walls cantilever about half a meter below the cornice in order to seamlessly merge into the roof. The cornice sets the mood of the building acting as eyebrows on a face. Furthermore, the placement of the windows in the facade is what determines the shape of the building and the form of the building in turn determines the shape of the windows. The facade displays curved windows with light coloured bricks and faceted roof with red slates. Another crucial detail in the facade is the entrance areas which are given a plastic form through which an organic porch is created where the wall juts out above and around the door.



**Figure 5.** Section showing crawl space, auditorium, eurythmy hall and gym hall (Source: Drawing by author)

Currently, the school consists of two parts, the original part from 1923 and the newly built part completed in 1958. The original school consists of four floors constructed from mostly wood, cement

and stone-like material in some parts.<sup>21</sup> There is also a basement that is typically a crawl space and is not accessible (figure 5). The ceilings are mostly made from stucco on reed and the floors in different rooms are made from wood, tiles, linoleum and carpets. In the initial plans of the school most classrooms are rectangular and have sharp angles. It is also noticed that the eurythmy hall is given a large space almost as much as the gym hall.<sup>22</sup> Interestingly there are also three bedrooms located in a part of the building that seems to be separated from the main part (figure 3). It also has its own stairway. This was a house for the concierge. Over the course of time, this house was used by a teacher and his family but is presently used as office space.<sup>23</sup> Further, the original plans and section also show an amphitheater with a podium for performances which too is a large rectangular room. Unlike other Waldorf schools of the time which had more rounded shapes of rooms, Gerretsen and Wegerif mostly used rectangles. This is probably an attempt to save funds as the school had to be constructed on a low budget.

Organic forms however are evident in many other parts of the design, including the facades and the interiors. These can be seen especially on the shape of the roof which adds a sense of motion to a static facade. The shape of the entrance also resembles organic architecture (figure 6). This is also understandable, as the entrance is one of the most important parts of the facade and that which experiences the most movement throughout the day. This logic can also be applied to another important element i.e the staircase. The shape of the stair both in plan and section can be noticed to be angular as though inviting movement. Organic shape can also be found in other decorative elements and features like ceilings, railings and furnishings (figure 7).



**Figure 6.** The Vrije School- Main entrance (left) and entrance to auditorium (right) (Source: Archief Vrijeschool Den Haag, Waalsdorperweg. (1929-1960). T.H. 8-9 Beeldmateriaal [Inventory])

<sup>&</sup>lt;sup>21</sup> Municipal Archive of the Hague. (1928-2004).Plan drawings Waalsdorperweg 10,12,14 [CR number 11021, Box 18409]. The Hague, Netherlands.

<sup>&</sup>lt;sup>22</sup> Municipal Archive of the Hague. (1928-2004). Permits and Plan Drawings Waalsdorperweg 10,12,14 [CR number 11021, Box 18407]. The Hague, Netherlands.

<sup>&</sup>lt;sup>23</sup> Asselbergs-Hagedoorn, S. (personal communication, March 23, 2023)





**Figure 7.** Organic shaped elements in the lobby (left) and auditorium (right) (Source: Archief Vrijeschool Den Haag, Waalsdorperweg. (1929-1960). T.H. 8-9 Beeldmateriaal [Inventory])

Further observations show special anthroposophical features in the interiors. In the interior of the Vrije School, the color blue predominantly covers most of the decorative and functional elements such the steel railings along the main staircase and the steel window frames on the facade. There is also use of a strip of blue glazed bricks that continues through the hallways. Rest of the features such as doors are painted white for simplicity and complement well with the yellow bricks in the hallways (figure 8).



**Figure 8.** Color and material usage of railings, windows, doors and hallways (Source: Photograph by author)

#### 6. Conclusion

The thesis aimed to provide an historical overview of the development of anthroposophy in the Netherlands and its impact on school architecture, with a specific focus on the Vrije School in The Hague. Through the analysis of primary and secondary sources, a better understanding could be gained of the origin of anthroposophy and the Waldorf education system, as well as the influence of anthroposophy on

architecture and design, particularly in the context of school buildings. The case study of the Vrije School allowed the identification of key principles and features of anthroposophic design practice during the early spread of the movement in the Netherlands.

Anthroposophy and the Waldorf education system are deeply intertwined and are derived from the teachings and philosophy of Rudolf Steiner. Anthroposophy is a spiritual science that seeks depth and understanding beyond the boundaries of traditional science and has been expressed through various art forms. The Waldorf education system emerged as an initiative by Emil Molt to save the collapsing social and economic life in Germany and has since grown into a holistic and integrative approach towards education. Both Anthroposophy and the Waldorf education system are based on the belief that education should not solely be dictated by political and economic motives, and that every human being has a unique source of creativity and imagination that should be recognized and developed. Through the principles of curative pedagogy, curative rhythm, and speaking exercises, Waldorf education aims to provide a service to personality development and encourages both teachers and students to challenge themselves and inspire each other. The Waldorf education system thus provides a unique perspective on education and personal growth that emphasizes the importance of spirituality, individuality, and creativity.

The ideology also has its influence on the architecture of buildings in which people live and learn. Waldorf buildings display a unique and meaningful type of architecture called organic architecture. This type of architecture is designed to communicate with people on an emotional, psychological, mental, moral, and spiritual level. Organic forms arise through the use of projective geometry, where movement enters space to create living forms that reflect the dynamic nature of life. Rhythm and metamorphosis play important roles in creating a rhythmic balance that is in accordance with our own life processes and helps to organize spaces. The design of Waldorf schools is also carefully considered to support the Waldorf education system and to attend to the changing needs of students through numerous developmental years. This includes shapes and forms found in layouts, facades or other decorative features. Also, the use of color in Waldorf buildings is carefully adapted to the particular use of each space, creating an aesthetic effect that can have a powerful impact on individuals. Waldorf buildings are therefore designed with great care and attention to detail to support and enhance the well-being of those who inhabit them.

The development of anthroposophy and the Vrije School in the Netherlands was a significant movement that has had a lasting impact on education and culture in the country. The establishment of the Waldorf schools, training schools, the medical movement, the biodynamic agricultural movement, and other achievements in the field of arts, drama, and speech formation, were all important contributions to the growth of anthroposophy in the Netherlands. The Vrije School in the Hague was founded by a few young members of the anthroposophical society, and its design began with the guidance of Rudolf Steiner. It started in a small building and moved several times before finally erecting its own building on Waalsdorperweg, where it is currently located. The school initially had 10 students but grew rapidly to 250 within a few years, with the aim of providing fruitful pedagogical work and promoting the inner

development of teachers. The school had to adapt to Dutch ways of life, which demanded a different pedagogy from German ones.

The design of the Vrije School was a result of the anthroposophical principles of organic architecture, which focused on a harmonious relationship between the building and the environment, as well as between the building and its occupants. The Vrije School in The Hague, Netherlands was originally built in 1923 and was expanded in 1955. Frederik Herman Gerretsen and Chris Wegerif, the architects responsible for the original design, were pioneers in implementing Rudolf Steiner's architectural theory. The building was designed as a solution to a puzzle that took into consideration the location, number of stories, entrance location, and wind direction. The original building had 10 classrooms and an L-shaped floor plan that included classrooms for all 13 grades.

The distribution of programs in the original school was such that classrooms were located on either side of the long side of the central corridor, while the short side comprised other functions like the Eurythmy hall, the teacher's lounge, a meeting room etc.. The original school consisted of four floors constructed from mostly wood, cement, and stone-like material in some parts. Further, the design featured three different types of facades. The front facade with the entrance is described as the frightened and sheltered type, the side walls have a wolf-roof facade, and the rear side has a contemplative facade. The roof takes on a primary role and lies like a celestial vault over the total building mass, forming a union of irregularities and giving rise to unity and coherence. Organic forms are evident in other parts of the design, including doors, windows and the interiors. This can be found in the shape of the entrance and the staircase. Organic shapes can also be noticed in decorative elements and features like ceilings and furnishings. Lastly, the color blue predominantly covers most of the decorative and functional elements such the steel railings along the main staircase, the steel window frames on the facade and a row of glazed bricks in the hallways.

Overall, this research highlights important happenings in the early course of the spread of anthroposophy and the Waldorf education system in the Hague. With this it forms a relation between the Anthroposophical movement and early Waldorf school architecture. It also underscores the most important design features which make the architecture of the school characterize as anthroposophic and provides the motives behind them. This thesis thus opens up the possibilities for further research in this area, particularly in the context of the Anthroposophical movement in the Netherlands. By understanding the historical and cultural context of anthroposophy and its influence on school architecture, one can gain a deeper understanding of the holistic and spiritual approach to education and design that it espouses.

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