ARCHITECTURAL COMPETITIONS FOR SCHOOL BUILDINGS IN THE NETHERLANDS AROUND 1960

How architectural competitions were assessed in the Netherlands around 1960, and the role, the design of social spaces played on this assessment.

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Abstract

In this thesis, research is done looking into the assessment of architectural competitions for school buildings in the Netherlands around 1960 and which role the design of social spaces played on the assessment. The main research question is therefore: *'How were architectural competitions for school buildings assessed in the Netherlands around 1960, and which role did the design of social spaces play in this assessment?'.* A case study about the 1959 competition for a primary school in the Netherlands is done in combination with architectural historical research to answer this question. The results of the research and case study show that the new ideas about education and school buildings, emerged after the Second World War, directed the development of a new type of school where room was left for social spaces as a place of interaction. In the assessment of the architectural competitions the jury would therefore focus on the implementation of the new ideas in the school buildings in which social spaces, and specifically a central common room, played an important role.

Content

1. Introduction

In today's architecture and society, social spaces or places for meeting get more and more attention in the design of public buildings. School buildings are no exceptions in this as a school is the place where children try to find their place in society and in most cases the school building is also a child's first big encounter with architecture (Verstegen & Boersma, 1996). When looking at the design of school buildings in the Netherlands the time period around 1960 is really interesting as it is a time at the end of the rebuilding period in the Netherlands where more time became available for creating and reviewing designs. This extra time was spent, among other things, on study competitions aimed at exploring new ideas in terms of layout, use, as well as economics and building systems. The overall aim of those competitions was to stimulate further development of a specific building typology (B.N.A. et al., 1959). Consequently, these study competitions now provide an ideal opportunity to research how people at the time thought of social spaces in the design of a building and how much value was attached to them.

Using architectural competitions to look at the design of school buildings gives a lot of information as it shows which criteria were found important and which criteria less important. Furthermore it showcases different ideas about certain topics (in this case the role of social spaces in a design) by the different competing architects. The main research question in this thesis is therefore: *'How were architectural competitions for school buildings assessed in the Netherlands around 1960, and which role did the design of social spaces play in this assessment?'*.

Sub-questions that will lead to answering this main research question are:

- Why was there a need for the renewal of school buildings?
- Which criteria where used to asses designs in an architectural competition?
- What was the importance of the different criteria in the assessment?
- How does the design of the social spaces in a winning project differ from the design of social spaces in other competing projects?

Even though research into this topic can give a better understanding of the evolution of school buildings and the importance that was given to the different elements of its design, very little is written about it. Studies that do look at the topic are 'Nederland naar school', a book written by Tjeerd Boersma and Ton Verstegen published in 1996, and the study by Letty Meeuwssen called 'Lessen uit het verleden: een categorale studie van lagere scholen uit de wederopbouwperiode (1945 -1965)' published in 2002. Both works however don't look at the role of social spaces in the design and how those social spaces where valued. That's why this thesis will look at how the designs of school buildings where assessed and which role the design of social spaces played in this assessment in an attempt to fill the gap in the existing literature.

In this thesis, architectural history research will be conducted in combination with conducting a case study on a study competition for a primary school in the Netherlands of 1959. In the case study the winning projects as well as other competing projects will be analysed using explanatory texts from the architects and the assessment of the projects in the jury report. In addition, a critical architecture-historical analysis of the projects will be made by the author and discussed in the thesis when it adds value to the analysis of the projects.

The structure of the thesis is as follows: the first chapter following this introduction will introduce the design and evolution of school buildings in the Netherlands after the Second

World War. The third chapter will introduce architectural competitions in general and the study competition analysed in the case study with a focus on which criteria were used to assess the designs. In the fourth and biggest chapter the case study will be done in which the different ideas of the social spaces in a selection of projects from the competition will be discussed from the point of the architects of the projects, the jury of the competition and the author of this thesis. To end this thesis a conclusion will be made summarising the results of the previous chapters which will be used to answer the main research question of this thesis. This conclusion will then be followed by a discussion on the research conducted in this thesis.

2. School buildings in the Netherlands after World War II

In this paragraph the design and evolution of school buildings in the Netherlands after the Second World War will be discussed. The first sub-paragraph is about the Netherlands after the Second World War and the shortage of school buildings during this period. This is followed by a sub-paragraph that discusses the new ideas about education and school buildings after the war. A third sub-paragraph will then discuss the establishment of the Information Centre for the Construction of Schools (ICS) in the Netherlands. To conclude, a conclusion to this paragraph is given.

2.1. The Netherlands after World War II

In the first years after the Second World War a lot of postponed weddings took place in the Netherlands leading to a large amount of babies being born. Nevertheless in those first years after the war almost no schools where built due to a shortage of construction workers and financial resources, but also because priority was given to the construction of housing until late in the 1950s. Besides the increased demand for education due to the birth of many children after the war, the war had also taken its toll on the current infrastructure of school buildings. Accordingly, about 1,000 school buildings got severely damaged during the war and 273 school buildings were in fact completely destroyed (Meeuwssen, 2022). A solutions was therefore necessary to accommodate education in the Netherlands after the Second World War. That solution was mainly found in building emergency schools and accommodating schools in existing buildings that survived the war as a semi-permanent solution. Here, quantity always took precedence over the quality of the buildings (Verstegen & Boersma, 1996).

2.2. New ideas

The war had changed the global picture in many ways. This included education and the relationship it has with one's family. Where before the war education and family were rather separate and the focus was put on individualism, after the war the school together with the family became responsible for the child's education. In this way the school became an extension to the family and together they were seen as a community, the individual and the community became equal (Meeuwssen, 2022).

This new view on the relationship between education and family demanded for new school buildings that were adapted to these ideas, school building needed to serve the community (Buddingh, 1972). In fact, the existing and traditional corridor school had become the model of pre-war passive seat-listening education. The new school required more freedom of movement for the child within the classrooms, but also additional spaces outside the classroom with changing uses, following the ideas of the school as an organisational community. However, the most important translation of this idea within school buildings was the realisation of a common central space in the school. Nevertheless, the regulations for the construction of school buildings at that time in the Netherlands prevented many of these new ideas from being realised. For example, the realisation of a central common space only became possible by making the school entirely on one level. In this way, a lot of building volume was saved from stairwells which allowed the realisation of the common space "... maakte de ruimte-verslindende trappenhuizen overbodig, zodat de vrijkomende ruimte gebruikt kon worden voor een gemeenschapsruimte en een bibliotheek", or translated in English "... made the space-consuming stairwells redundant, so that the freed-up space could be used for a common room and a library" (Verstegen & Boersma, 1996, p. 192). This single-storey school also met the desire for direct contact with the adjoining outdoor area from the classrooms, which was considered desirable, especially for small children (Bouwcentrum 1958-1960).

2.3. Information Centre for the Construction of Schools (1955)

As a result of the new ideas emerging for school building but also the need for more innovative insights, improved standardization and inspiring practical examples, the Information Centre for the Construction of Schools (ICS) was established in 1955 as part of the Construction Centre of Rotterdam. The initiative to the establishment of the ICS was taken by the ministries of education and science, and of public housing and spatial planning in cooperation with the Construction Centre. The main activities of the ICS in their early years focused on study trips to England, among others, where knowledge and inspiration were gathered to apply on the design of school buildings in the Netherlands (Korevaar, 1980). However, the outcomes and recommendations that came out of it later proved difficult to realise because regulations with maximum building volumes and construction costs prevented it (Verstegen & Boersma, 1996). Nevertheless, Baaijens explicitly mentions the ICS in his work, that was discussed in the 1972 work of Buddingh, as a body that had during its lifetime already made a strong effort to improve school buildings where justified educational aspirations were given a chance (Buddingh, 1972).

2.4. Conclusion

New ideas about education and school buildings after the war got stimulated through the high demand for school buildings during this time. A new type of school was needed for this new type of education in which the school was seen as part of a community. The Information Centre for the Construction of Schools in the Netherlands was established to guide these new ideas towards a new type of school. The regulation at the time in the Netherlands for the construction of school buildings however prevented most of these new ideas from being realised.

Answering the sub-question *'Why was there a need for the renewal of school buildings?'* is found in the new ideas about education after the war. The focus of education that before the war was put on the individual had shifted into a focus in which the individual and the community where equal. In this way the school became part of a community which asked for a new type of building.

3. Architectural competitions and school buildings

This paragraph will focus on architectural competitions in the Netherlands and how they can be linked to the design of school buildings in the Netherlands. The first sub-paragraph will briefly introduce architectural competitions, what they are, and what kind of competitions exists. The second sub-paragraph will then link architectural competitions to the design of school buildings. Following sub-paragraph will discuss the case study competition that will be analysed in chapter four of this thesis by looking at the design brief. To conclude a conclusion to this paragraph will be given.

3.1. Architectural competitions

An architectural competition is in its essence a competition in which architects compete with each other to create the best design following a given design brief. The way this competition is structured and the purpose of the competition can however differ. In his work from 1989, Neele divides the different types of competitions that existed at the time in the Netherlands into three categories: the regulated competitions, the multiple assignment and the unregulated competition. Within the category of the regulated competition, there is a division between a project competition, an ideas competition or study competition, an open competition and a closed competition. The multiple assignment category and the unregulated competition category each include one type of competition (Neele, 1989).

The regulated competitions category can roughly be divided in competitions focusing on realising/building the winning project and competitions that are meant as a study. Competitions that are held as a study therefore do not always result in a physical construction but are held to stimulate discussions, gather new ideas or even on the occasion of a celebration (Neele, 1989).

The multiple assignment looks a lot like a regulated competition, in fact, in this competition, as in the closed competition, the client invites a selected group of architects to compete in the competition. The goal of the multiple assignment can also be either building the winning project or focus on finding solutions to a certain problem. The main difference between the multiple assignment and the regulated competitions is however that the competing architects in the multiple assignment all receive the same compensation to cover the costs made (Neele, 1989). Besides this there is also a difference in the assessment. In a regulated competition the assessment is done by a professional jury which focuses on the quality of the designs and the solutions given in the design. The assessment of the multiple assignment is done by the client, sometimes advised by experts, and focuses mainly on the expense item, balancing predetermined positions from the programme in the design brief with the costs (Lambert, 1989).

3.2. Architectural competitions and the design of school buildings

As mentioned in the previous paragraph 3.1., some architectural competitions are held to stimulate discussions and gather new ideas about different design problems. This therefore includes stimulating change in building types driven by new ideas from the society on certain topics. Similarly, the design of school buildings is influenced by architecture competitions that studied this design of school buildings.

"Nieuwe, betere scholen doel van prijsvraag" or translated in English: "new, better schools goal of competition", was the title of an article published in 'De Volkskrant' on the 12th of Novembre 1958 announcing a study competition for the design of a primary school in the Netherlands. This competition was organised by the Information Centre for the Construction of Schools in corporation with the ministry of education, art and science, and

funded by the ministry of public housing and spatial planning to mark the 50th anniversary of the B.N.A. (Association of Dutch Architects). Besides the special occasion for which the competition was organized, the main goal of the competition was to contribute to the development and promotion of new ideas regarding the layout and use of school buildings (B.N.A .et al., 1959 & Stichting Bouw, 1959a). In order to reach as many architects and their refreshing ideas as possible, besides an announcement in 'De Volkskrant', announcements were also placed in several other national and regional newspapers including: 'Algemeen handelsblad', 'Deventer dagblad', 'Het Rotterdamsch parool', 'Het vrije volk: democratisch-socialistisch dagblad', 'Winschoter courant' and 'Zutphens dagblad'.

3.3. Study competition for a primary school 1959

The design brief for the study competition was formulated in a way that encouraged innovation. This was not only done by creating a programme that asked for a common room, outdoor teaching spaces and a coffee/tea kitchen for the teachers, but also by not imposing restrictions from the existing building code for primary school buildings, nor setting a maximum building volume and building area. Nevertheless, as efficient use of space was considered important by the jury, which was chaired by Mr. P. Bakkum, municipal inspector of education in Amsterdam at the time, each competing project was asked to provide a floor area analysis and figures on the building's volume in its submission (ICS, 1959).

Other important criteria, discussed in the jury report, that were used to assess the competing projects in this particular competition are: the situation of the design on the plot, clearness of design and floorplan, the design and positioning of the common room, the design of the classrooms, the scale of the child, the amount of daylight in the building, and noise pollution between the different spaces in the building. These criteria, along with some other minor ones, were all tested using the 2D drawings submitted for each project provided with an explanatory text on the design, vision and technical aspect. The use of perspective drawings was not allowed (ICS, 1959).

3.4. Conclusion

Architectural competitions come in different types, however, the purpose of these competitions can be either to realise a winning design or to stimulate discussions and gather new ideas on certain themes. In this way, the architectural competition can also have its influence on the design of the school building. An example of such a competition is the 1959 study competition for the design of a primary school in the Netherlands. This competition will be used in the next chapter as a case study investigating how architectural competitions were assessed in the Netherlands around 1960 and what role the design of social spaces played in it. In this chapter, this competition provides the opportunity to answer the sub-question *'Which criteria where used to assess designs in an architectural competition'*. The criteria used for judging an architecture competition were: the location of the design on the plot, the clearness of the floorplans, the design and positioning of the (most important) rooms, the characteristics of the user, and technical requirements regarding daylight and noise pollution. Something that was not included in this particular competition is compliance with the regulations from the building code. In competitions with the aim of realising the winning project, these naturally serve as important assessment criteria.

4. Social space in school buildings

This paragraph will conduct a case study examining the assessment of the winning projects, two projects with an honourable mention, and a project which has not been discussed in literature before from the 1959 competition for a primary school in the Netherlands. In this regard, the first sub-paragraph will analyse the projects using the jury report, the architect's explanatory text published in the 'Bouwkundig weekblad' magazine of 1959, and a critical architecture-historical analysis by the author of this thesis. A special focus in this analysis is put on the design of the social space. The next sub-paragraph will focus on the results of the competition and which influence it had on the design and construction of schools in the following years. Finally, a conclusion will be made to this paragraph.

4.1. Analysis of competing designs in study competition

4.1.1. What are social spaces

Because this case study focusses on the role social spaces play in the assessment of architectural competitions, a definition must be given on what exactly defines a social space in this thesis. Based on how Lefebvre defined social space in his work of 1991, where he states that "social space is a space of enjoyment, of non-labour, but merely that produced or worked objects pass from the space of labour to the enveloping social space only once the traces of labour have been effaced from them." (Lefebvre, 1991, p. 212). This thesis defines social space as any space that initiates, or provides the opportunity for, the gathering of people in an informal way. Looking at the school building, these are the places where students or teachers can interact with each other apart from the main activity of the school which is passing knowledge.

4.1.2. Motto "Duo"

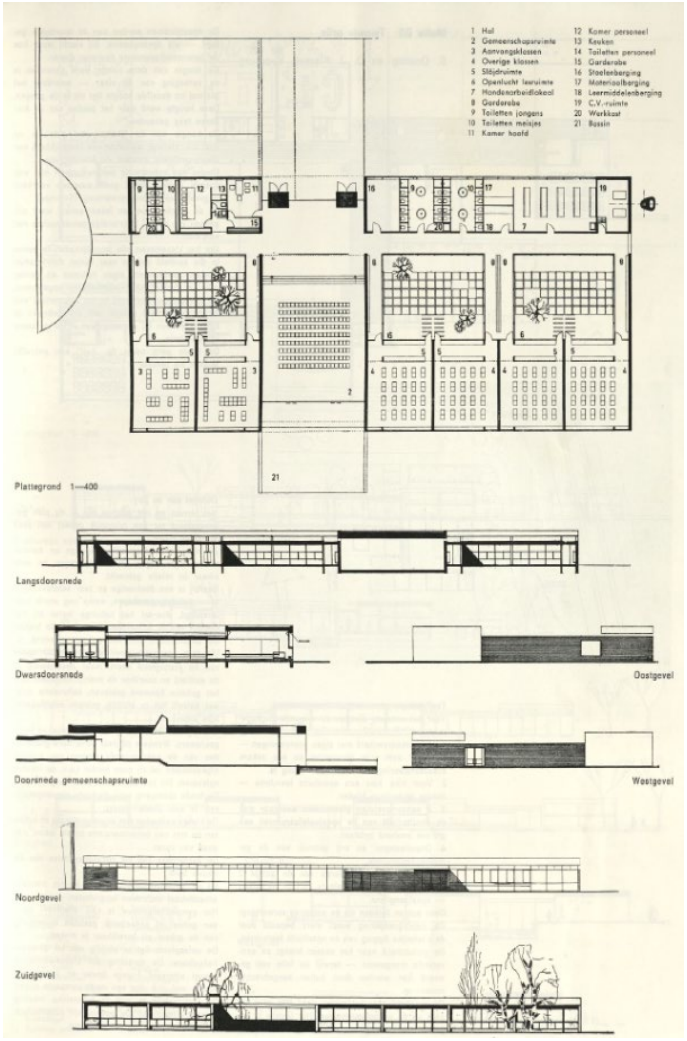

Figure 1: Motto Duo Eerste Prijs. From *Bouwkundig weekblad* (77 ed., p. 373), by Bond van Nederlandse Architecten, Maatschappij tot Bevordering der Bouwkunst, Genootschap Architectura et Amicitia (Amsterdam), 1959, G. van Saane.

The winning project of the competition designed by J.J. Konijnenburg is interesting as the common room is located right in the centre of the school, at the main entrance and connected to all classrooms and other facilities by a wide central corridor. This common room as the binding element of the school was really appreciated by the jury. The appealing interaction between the common room and surrounding patios along with the vision and incorporation of child-centred design encourages the use of the common room as a place of gathering. Because the common room is located at the main entrance, it also offers the possibility of being used as a social hub for the neighbourhood after school hours. Apart from this, the jury had doubts about whether enough daylight entered the common room, but they considered this criteria as less important. Furthermore, the two-class patio system was considered interesting. From a critical architecture-historical analysis by the author of this thesis, these patios as outdoor teaching spaces also offer an ideal place for two classes to come together in a more free teaching format that encourages social contact.

4.1.3. Motto "D.S."

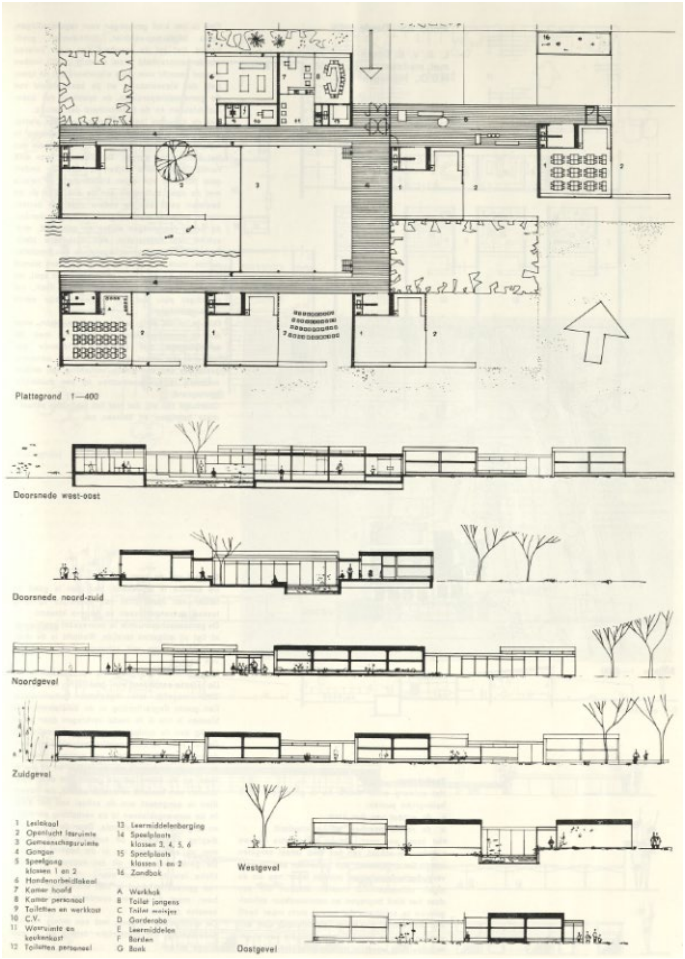

Figure 2: Motto DS Tweede Prijs. From *Bouwkundig weekblad* (77 ed., p. 375), by Bond van Nederlandse Architecten, Maatschappij tot Bevordering der Bouwkunst, Genootschap Architectura et Amicitia (Amsterdam), 1959, G. van Saane.

The second placed design of the competition made by S. Oosting and D.J. Klamer was praised for its idea of the wide playground corridors. As the name already suggests, the corridors were designed in a way that allowed for children to play in them, making it a place of meeting and interaction. Besides this, the layout of the building exists of a central common room with classrooms in separate wings scattered around it creating a more free relation between the classrooms and the common room. The architects' goal of stimulating the use of the common room in a free and casual way was therefore considered very successful by the jury. In addition, implementing the child's scale in the design was also appreciated by the jury. However, the spacious design with the scattering of classrooms is less economically efficient and results in higher construction costs.

4.1.4. Motto "Aa"

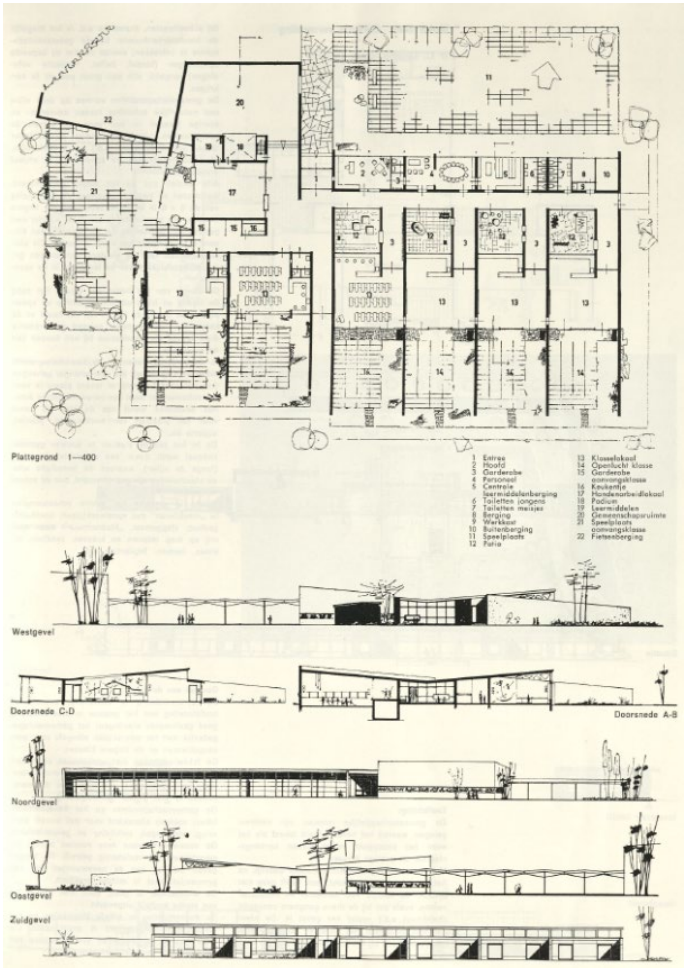

Figure 3: Motto Aa Derde Prijs. From *Bouwkundig weekblad* (77 ed., p. 377), by Bond van Nederlandse Architecten, Maatschappij tot Bevordering der Bouwkunst, Genootschap Architectura et Amicitia (Amsterdam), 1959, G. van Saane.

The third place was given to the design of L.A. van den Bosch and J. Hendriks in which they focussed a lot on the scale of the child. Different from the other awarded projects the common room in this project is located at the side of the building which is an interesting choice as it is a bit secluded from the rest of the building. The philosophy of the architects was to create a balance between open and closed spaces, as the perception of the open spaces depends heavily on closed spaces. Translated into the design this resulted in open classrooms and a closed common room, open outdoor classrooms and closed patios. The choice to make the common room as an enclosed space aimed to remove distractions from the outside world and strengthen the feeling of being together. Although the jury found it unfortunate that the common room is located somewhat remote, the jury followed the architects' reasoning. They did note, however, that daylight in the space will be scarce, and the podium in the space is not perceived as being connected to the social function of the common room.

4.1.5. Motto "Machteld"

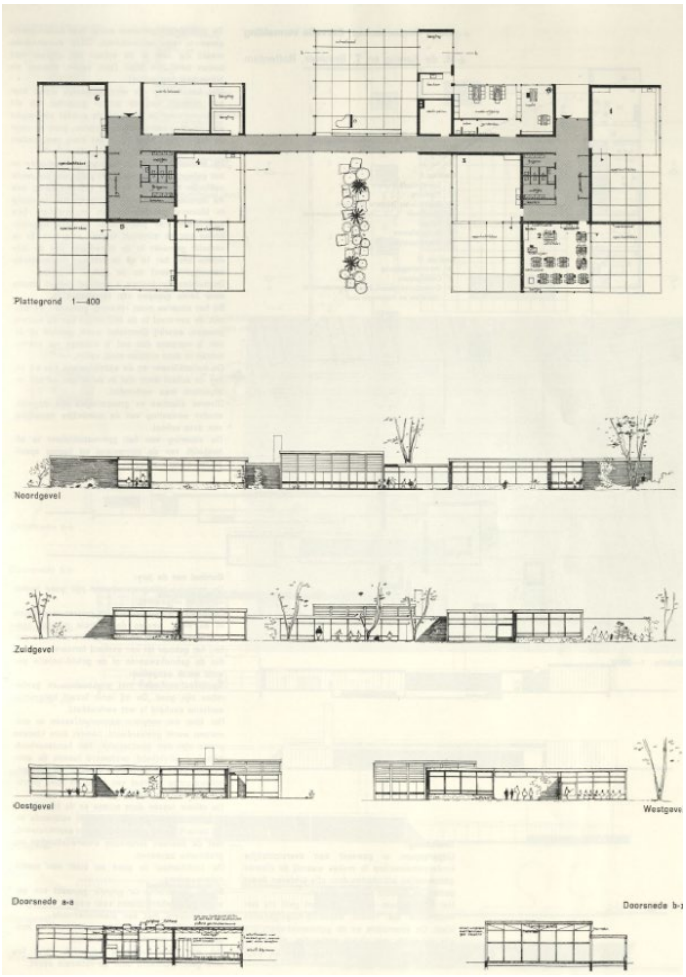

Figure 4: Motto Machteld Eervolle Vermelding. From *Bouwkundig weekblad* (77 ed., p. 381), by Bond van Nederlandse Architecten, Maatschappij tot Bevordering der Bouwkunst, Genootschap Architectura et Amicitia (Amsterdam), 1959, G. van Saane.

The design of J. Bredman received an honourable mention in the competition as the project shows a new way of creating a clear lay-out of a school with good connections using the method of decentralization. The two clusters of three classrooms allow for an intimate circulation that also contributes in a positive way to the perception of the school. The corridor that connects the two clusters acts as a place of meeting because the common room and other common functions are located along this corridor. Although, from an educational point of view, the jury preferred a division of two and four classes over a division of two times three classes, the idea of the connecting corridor was considered interesting. The implementation of child-scale designs was also appreciated by the jury. Other technical aspects such as a lack of ventilation in the garderobes were therefore considered less important in the assessment.

4.1.6. Motto "Gemeenschap"

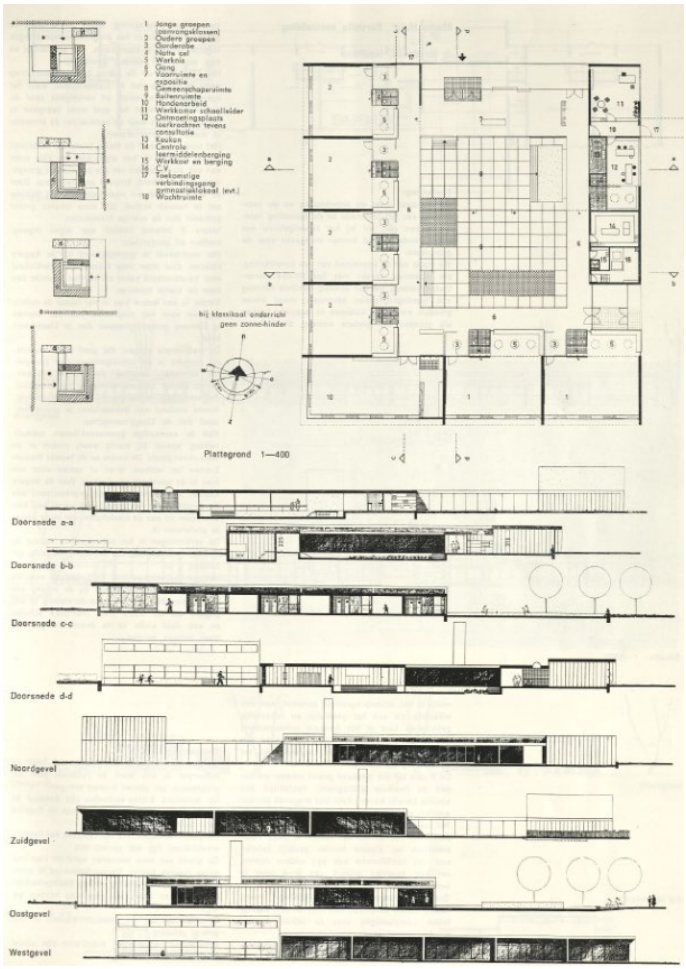

Figure 5: Motto Gemeenschap Eervolle Vermelding. From *Bouwkundig weekblad* (77 ed., p. 383), by Bond van Nederlandse Architecten, Maatschappij tot Bevordering der Bouwkunst, Genootschap Architectura et Amicitia (Amsterdam), 1959, G. van Saane.

The design of M. de Koning and T. Brouwer places a common core in the school building to which all functions are grouped together. The common core exists of the main entrance with an exposition space, a common room and a patio that work together in an appealing way for which the design received an honourable mention by the jury. The guiding principle the architects used to do so was to create a children's community where various collective activities could be experienced and enjoyed by all the children. In this way, the central common core was extended into the outdoor space and the relationship between the common core and the classrooms was designed keeping noise pollution in mind. The indirect connection of classrooms to outdoor classrooms was however considered inefficient by the jury.

4.1.7. Motto "Hylas"

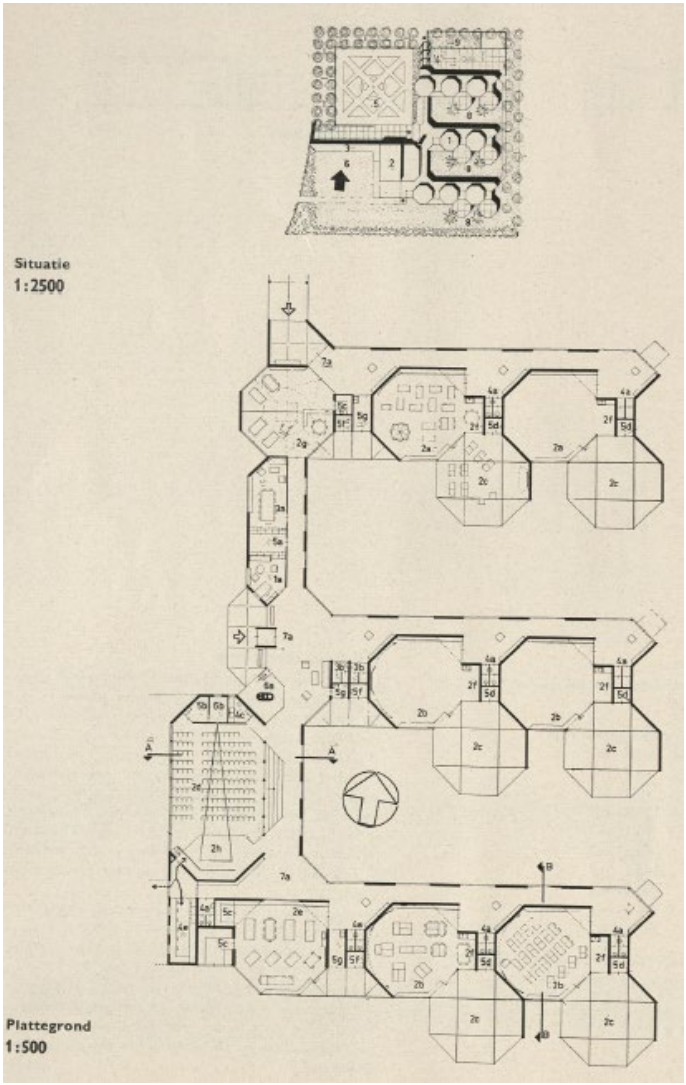

Figure 6: Motto "Hylas". From *Documentatie bouwwezen: gebouwen voor onderwijs, wetenschap, kunst.* (p. 30), By Bouwcentrum, 1960, Bouwcentrum.

The design of T. Wynalda is added in this thesis as, besides the octagonal shaped classrooms, it has interestingly designed corridors with widenings that can enhance social contact within the circulation space of the school building. Although the design was therefore placed in a separate group with designs that have interesting features when judged by the jury, the design has not received further discussion in literature.

The design consists of three wings of classrooms enclosed by corridors that allow for intimate circulation in addition to the previously mentioned widenings that can enhance social interaction in the circulation space. These corridors make the school into a whole and connect the classrooms to the common room. However in the assessment the design was found less practical for prefab construction because of the octagonal shape of the classrooms. In addition, some spaces did not entirely meet the predefined requirements and the integration of the handcraft classroom into the circulation space was judged inefficient.

4.2. Results of competition and their influence on the design of school buildings

4.2.1. *Results of the competition*

With 162 participating designs, the jury called the competition one of the largest and most important competitions of its time, especially in terms of the number of participants. In terms of quality, the jury called the competition a success as well, with in their opinion, several projects able to withstand international criticism (ICS, 1959).

The positioning and design of the common room showed to be a really important aspect of each design and their assessment. On page 27 of their jury report the jury even stated that the best projects were characterised by a centralised common room. This can be seen as the result of the new ideas regarding education and the idea of the school as an organisational community that arose after the Second World War and that were discussed in paragraph 2.2.. The option of making the common room accessible even after school hours (without having to open the entire school) was appreciated by the jury. Similarly, the option of making the playgrounds accessible after school hours was appreciated and fits into the image of the school as a social centre for the neighbourhood (ICS, 1959).

When looking at the winning designs and those that received an honourable mention, it is notable that, because no maximum floor area was given, these designs provided an average of 5.4 m2 brut per student. Compared to a traditional hall school of the time, built in accordance of the building code, the maximum area per student here would be 3.3 m2 (ICS, 1959). The designs from the competition provide much more space per student, which from an analysis of the plans is mainly reflected in common areas. Both the participating architects and the jury thus felt that the new school building should encourage social contact but also be able to facilitate it. Something that was (almost) non-existent in the existing school types (ICS, 1959).

4.2.2. *Influence of the competition on the design of school buildings*

Even though the competition was considered a success and got published in several magazines, none of the designs were eventually realised. This was also discussed in the article of May 15th 1959 published in ‘De Tijd De Maasbode’ called “Succesvolle studieprijsvraag voor scholenbouw Vooruitgang op traditionele typen”. In this article the author citate H. A. Maaskant, board member of the B.N.A., when he states “Kunnen we de scholen niet bouwen? We willen het niet! Als we het willen, kunnen deze projecten gerealiseerd worden!” translated into English he says "Can't we build the schools? We don't want it! If we want it, these projects can be realised!". With this, Maaskant expresses his opinion on the regulations for the construction of school buildings that held back innovation but to which no action was taken (De Tijd De Maasbode, 1959).

While none of the projects were eventually realised, some ideas from the competition, mainly from the winning project of J.J. Konijnenburg, would appear in prints and models made by an ICS development group in the years following the competition (Verstegen & Boersma, 1996). This development group led by architect P. Stikovits eventually developed the ICS type which had its first realisation in 1966 in the ‘Jan Anthonie Bijloschool’ in Rotterdam (Broekhuizen, 2015). Entirely according to J.J. Konijnenburg's design, the ICS type consisted of a central common room with patios as outdoor classrooms and a programme stretched over a single floor (Verstegen & Boersma, 1996). Taking its inspiration from the 1959 competition, the ICS type made a statement against storey buildings in schools and provided an advancement on the traditional corridor, corridor-less and hall school (Bouwcentrum, 1958-1960 & Bouwwereld, 1959).

Although the ICS type provided advancements on the existing traditional types, real major innovations within school construction were still blocked by regulations. The best example of this is probably the study competition itself from which no realised project emerged as current regulations did not allow it. A reason for this might be that the focus in 1959 was mainly put on system construction due to the still high demand for school buildings. This is also shown by the articles “School voor lager onderwijs te Assen” and “School voor lager onderwijs te Papendrecht” published in the 1959 ‘Bouw’ magazine, which focused entirely on the construction method of schools. It would eventually take until 1985 until real major changes could take place within school construction. This because the new primary education act and the revision of the building code for primary education removed many of the previously restrictive rules (Verstegen & Boersma, 1996).

4.3. Conclusion

The study competition provided many new ideas regarding the design of the school building. Many of these ideas were positively received by the jury, which had encouraged innovation in its design brief. The best-rated designs in the competition were characterised by their good positioning and elaboration of the common room and their clear structure. The common room and connecting corridors, both with a social function, were therefore seen as the binding element for the new school type according to the jury.

As the designs in the competition were not made in accordance with the building code, none of the projects got eventually realised. Some of the ideas from the competition would eventually find their way into the ICS type that emerged in the years after the competition. Major changes in the design of the school building, however, did not occur until 1985 when the building code and its constraining regulations were revised.

An answer to the sub-question *‘What was the importance of the different criteria in the assessment?’,* using the study competition can be found in the balance between innovation and realism. The jury found the positioning and design of the common room together with the clear layout of the school to be the most important items. In addition, the child-centred design and realisation possibilities were important criteria in the assessment. The more technical aspects of ventilation, daylight and noise pollution were given a less decisive place in the assessment.

The answer to the sub-question *‘How does the design of the social spaces in a winning project differ from the design of social spaces in other competing projects?’,* calls for a nuanced response. First, the positioning of the common room as the main social space was found to be very important in the assessment. In addition, the common room should be the binding element within the school building. Offering the possibility to make this space accessible to the community after school hours would ensure that the school will serve even more as a social centre within the neighbourhood. Finally, an attractive design of the common room with connection to green outdoor space should be realised to stimulate its use. When all these requirements were met, a design had the potential to be awarded as a winning project.

5. Conclusion

The assessment of architectural competitions for school buildings in the Netherlands around 1960 focused a lot on the new ideas that had emerged after the Second World War. Consequently, the design of social spaces became more important within the school as those new ideas considered the school as part of a community in which the focus was put on the individual as well as the community. This can be noticed in the 1959 study competition for the design of a primary school in the Netherlands. Both from the purpose which led to issuing the competition, which was to develop and promote new ideas in terms of layout and use of the school building, the design letter that requested a common room and set aside restrictions of the building code, and the final assessment and explanation of this by the jury. The common thread here was to try and find new ways to implement the new ideas in the school building in which especially social spaces and places for meeting were considered important. This with the overall aim of creating a new type of school that could distance itself from the traditional types.

The competing architects in the competition succeeded in this and projected several interesting translations of the ideas in their designs. Nevertheless, none of the designs would eventually be realised because the existing regulations did not allow it. As a result, the ideas that resulted from the competition only had their first real-world testing in the ICS type created in 1966. This ICS type was a school design made in response to the competition where the winning design of the competition was used as inspiration. Eventually, it took until 1985 when the building code for primary education was renewed and the primary education act was introduced before real large-scale innovations for the design of school buildings could take place. The fact that this took until 1985 even though the new ideas from the competition already saw the light of day in 1959 shows how the government prioritised the introduction of system building for schools after the war over the implementation of more social space in the school building.

6. Discussion

The approach used in this thesis to look at an architectural competition in order to determine the importance that was given to a specific topic in a certain time is new in literature. In addition, the focus on the design and appreciation of social spaces within the school building around 1960 in the Netherlands presented a gap within existing literature that this thesis attempted to fill. In this regard, the 1959 study competition for designing a primary school is used as a case study in which apart from the projects published at the time, one other participating project has been analysed. The decision to include this previously undiscussed project in this thesis was made because the design showed interesting and relevant aspects regarding the design of social spaces within the school building. In addition, incorporating the design shows that besides the award-winning designs and their architects, other architects at the time also consider the design and implementation of social spaces in the school building to be important.

Besides answering the research questions using the projects analysed in the case study, this thesis also discusses the impact and influence that the results of the competition had on the design of school buildings in the Netherlands. This revealed that regulations prevented innovations within the school building until 1985 which raises the question what if regulations did not prevent innovations, and what impact would this have had on how school buildings look like today.

The literature used in this thesis includes many magazine and newspaper articles. This is because many projects were published at the time with the aim of improving the overall quality of designs and assessments in architectural competitions (Lambert, 1989). Furthermore the literature used to discuss the general information about architectural competitions used in chapter three of this thesis are published after the research period and date back to 1989. The reason for this is that previous work on this topic is almost non-existent in the Netherlands.

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- Figure 1: Bond van Nederlandse Architecten, Maatschappij tot Bevordering der Bouwkunst, Genootschap Architectura et Amicitia (Amsterdam). (1959). *Bouwkundig weekblad* (77 ed.). G. van Saane.

- Figure 2: Bond van Nederlandse Architecten, Maatschappij tot Bevordering der Bouwkunst, Genootschap Architectura et Amicitia (Amsterdam). (1959). *Bouwkundig weekblad* (77 ed.). G. van Saane.

- Figure 3: Bond van Nederlandse Architecten, Maatschappij tot Bevordering der Bouwkunst, Genootschap Architectura et Amicitia (Amsterdam). (1959). *Bouwkundig weekblad* (77 ed.). G. van Saane.

- Figure 4: Bond van Nederlandse Architecten, Maatschappij tot Bevordering der Bouwkunst, Genootschap Architectura et Amicitia (Amsterdam). (1959). *Bouwkundig weekblad* (77 ed.). G. van Saane.

- Figure 5: Bond van Nederlandse Architecten, Maatschappij tot Bevordering der Bouwkunst, Genootschap Architectura et Amicitia (Amsterdam). (1959). *Bouwkundig weekblad* (77 ed.). G. van Saane.

- Figure 6: Bouwcentrum. (1958-1960). *Documentatie bouwwezen: gebouwen voor onderwijs, wetenschap, kunst*. Bouwcentrum.