

Wisdom from the Past

A case study on how the Rijnlands Lyceum in Oegstgeest, the Netherlands, impacted the findings around multifunctional accommodations in the second half of the 20th century

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Abstract – Multifunctional accommodations (M.F.A.) have been a topic of conversation in the Dutch educational sector since the late 1960s. The first Dutch M.F.A. to have been constructed, the Rijnlands Lyceum in Oegstgeest (R.L.O.), was built at a time when the Dutch government had greatly reduced funding into this sector as a result of the devastating effects of the Second World War in the country. As a result, many schools were executing with insufficient funds, leading to necessary facilities lacking in most schools. The R.L.O. was a result of an at the time rare successful collaboration between a variety of stakeholders, making it an interesting case study for research after its execution. As a result of the approval of the various stakeholders of the R.L.O. after project completion, the Dutch Ministeries of Education and of Culture established a Commission of Multifunctional Accommodations, which was in charge of researching how educational buildings could be used by third parties after school hours. Architect Rutger D. Bleeker, the architect of the R.L.O., had a place in this commission as well. After publishing two reports with their findings in 1975 and 1980, the C.M.A.'s findings were picked up by the Dutch government and used to inspire other schools in the Netherlands to open their doors for multifunctional use. The research question guiding this research is **'To what extent did the R.L.O. have a significant impact on the Dutch educational system in the second half of the 20th century?'** At the end of the paper, it is found that the R.L.O.'s impact on the Dutch educational sector at the time was extensive and deep rooted, especially in its example of successful stakeholder relationship management and collaboration.

Key words

Multifunctional Accommodations, Secondary Education, Dutch Educational Sector, Rutger D. Bleeker

Acknowledgements

It almost seems surreal to me that I am currently putting the finishing touches on my master thesis. My time at the Faculty of Architecture at the TU Delft has almost come to an end, and yet I feel like it just started. I will miss the educational sphere, but everyone eventually grows up and has to enter the real world, as their parents and grandparents have done before them. Hopefully I too will be ready for the new challenges that await me then.

For the actual acknowledgements, I first and foremost would like to deeply thank the all kind people at the National Educational Museum in Dordrecht, especially Petra Reijnhoudt, Jacque Dane, and Lisa Traarbach, for all the help with the archival material and kindness during my research there. Your collaboration was invaluable and the information retrieved from the Ton Elias archive has formed the backbone of this paper. Similarly, I would like to thank the staff at the New Instituut in Rotterdam, where the archive of Rutger D. Bleeker can be found. This archive allowed me to understand Bleeker's motivations and the complexities about the Rijnlands Lyceum, completing the gaps in the research of the paper.

Secondly, I would like to thank my tutor, Dolf Broekhuizen, for the guidance during this paper. There were a lot of times during this research where I felt like I hit a wall in regards to available information, and you pulled me out of those moments and showed me where to go, even providing me with research. This paper in no way would've been possible without your help and I truly thank you for the patience.

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1 Introduction

Multifunctional accommodations (M.F.A.s) have been a significant point of discussion in the Dutch architectural sphere since the mid-20th century. The main question the conversations revolve around is what makes these arrangements work long-term. That is why the Commission Multifunctional Accommodations (C.M.A.) was established by the Dutch Ministries of Education and of Culture, intended to "...explore modalities of using school buildings in evening hours and weekends" (p. 46, Bleeker & Ibelings, 1996, translated from Dutch). Amongst the members of this commission was Rutger D. Bleeker (1920 - 2016), a structural engineer and B.N.A. architect who built a significant number of school buildings (Bleeker & Ibelings, 1996). One of these educational buildings, the Rijnlands Lyceum in Oegstgeest (R.L.O.), was the first multifunctional accommodation in the Netherlands and was the "... reason for the founding of the C.M.A." (p.46, Bleeker & Ibelings, 1996, translated from Dutch). The R.L.O. can, therefore, not only be considered a significant representative of Bleeker's work before joining the commission, but also an influential building since it was the first of its kind in the Dutch context (Bleeker & Ibelings, 1996). Aside from housing two different schools, the building was also fitted with a library, auditorium, and gymnasiums made available for third party use at the time (Bleeker & Ibelings, 1996).

The C.M.A., aside from being founded as a result of the success of the R.L.O., did a significant amount of research into M.F.A.s, eventually influencing the perception around the Dutch educational sector and what a school should look like^[26]. However, how much of those research findings were influenced by the dynamics Bleeker and the other involved stakeholders planned into the R.L.O.?

This paper aims to analyse the social functions that Bleeker integrated both architecturally and logistically into the Rijnlands Lyceum Oegstgeest and what the social, political, and cultural trends were in the Dutch society and context that led to their implementation. These findings are then compared to the findings of the C.M.A., founded by the I.C.S and the Dutch Ministry of Education and Culture. The research question guiding this paper is **'To what extent did the R.L.O. have a significant impact on the Dutch educational system in the second half of the 20th century?'**. This research also includes two additional sub-questions:

- How do the integrations in the building relate to the objectives and findings of the Commission Multifunctional Accommodations?
- What was the reaction of the stakeholders after completion of the R.L.O.?

The chapter below analyses the literature about the conversation surrounding M.F.A.s as a literature review to identify the gap in knowledge and research this paper is trying to fill. This chapter was written as a separate assignment from the complete thesis, so some repetitive information can be found in this section.

1.1 Literature Review

'Exploring the Dynamics of Multifunctional Accommodations in Dutch Education'

Multifunctional accommodations (M.F.A.s) have become a topic of discussion in the architectural and planning sphere over the last decades in The Netherlands, with the movement officially gaining traction in the 70s and 80s after the implementation of the Law on Secondary Education (Bleeker & Ibelings, 1996). This new legislation changed the composition of the different secondary education levels and promotion requirements (Visser, 2022). Over time, the world of secondary and pre-university education started receiving more and more responsibilities for its students besides education, such as health and counselling (Broekhuizen, 2008).

However, the recurring question surrounding these multifunctional schools is whether implementing additional functions inside a building with an institution primarily focused on education achieves the intended results. Surprisingly, there is an influx of educational reports and papers and a lack of scientific or independent research. Many of these student papers mention the supposed 'success' and 'failure' factors of M.F.A.s. The first graduation thesis on this topic, written by students Romme and Schepens from Avans Hogeschool in Breda, focuses more on 'success factors' in these projects' design and planning process, even including a table on page 42 to act as a type of rubric that encompasses their findings (2014). On the other hand, Blijham, another graduation student at Radboud University in Nijmegen, focuses in his research more on 'success factors' in the long run, such as community acceptance of the project and functions, the extent of collaboration between involved parties, and how well the

multifunctional accommodation reflects the values and lifestyle of its context (2009). However, though the factors might vary between papers, one theme in both conclusions is the same and is also shared with other papers of this nature: every M.F.A. is different, and whatever counts as a 'success' or 'failure' is different per institution (Blijham, 2009 Romme, 2014). As a result, more focused and "imperative" research has to be conducted (p.2, Romme, 2014).

The contribution of this paper's research to this conversation is twofold. In a practical sense, case-specific research of multifunctional accommodations, such as the Rijnlands Lyceum in Oegstgeest, could contribute to the available knowledge on M.F.A.s. Architects, project leaders, and other involved parties could see the implementations and strategies employed by two existing M.F.A.s, see the community reaction and engagement resulting from these, and implement them into their projects.

Second, relating the findings of the comparative analyses of the two schools to the research findings of the multifunctional accommodations commission I.C.S. would also add a solid theoretical framework and research to the analysis. This framework could be used in further discussions around M.F.A.s.

1.2 Research Strategy

The chosen methodology for this historic architectural master thesis is a combination of archival research and literature research. The archival research will entail accessing and studying the material from various archives. For this paper, two archives have been used. The first, the archive 'Ton Elias' at the National Education Museum in Dordrecht, the Netherlands. This archive includes information about the Dutch educational context around the time and after the R.L.O. was built, and information about the development of M.F.A.s in the Netherlands. On the other hand, the second archive is the archive 'Rutger D. Bleeker' at the New Institute in Rotterdam, the Netherlands. This archive was used to reach more detailed information about Bleeker and the R.L.O..

First, this paper describes the context surrounding the educational sector the Netherlands from the late 1950s to 1969, followed by an explanation of the Law on Secondary Education and an analysis of the development of Dutch M.F.A.s. This historical analysis is conducted to understand the context in which Rutger D. Bleeker and the commission multifunctional accommodations were consulting and building. Afterward, the chosen case study, the Rijnlands Lyceum in Oegstgeest (R.L.O.), is discussed. First, its architect, Rutger D. Bleeker, is outlined to understand the ideas and concepts that formed the basis for the construction of this school. Then, the plans and construction of the R.L.O. are analysed. Lastly, the creation of the Commission Multifunctional Accommodations (C.M.A.) is discussed and their findings in relation to M.F.A.s. Later, in the discussion, the findings are compared to answer the research question guiding this paper. Afterward, a reflection on the modern-day applicability of this research is provided, followed by a short analysis of the research shortcomings of this paper.

2 Background Context and Information

As the great ancient Greek philosopher Plato once said: "our need will be the real creator" (Lotz, 2020). This world-famous saying also applies to M.F.A.s in Dutch education since their implementation was more necessity-driven than pure

experimentation. However, why were these types of schools necessary? What was happening in the social, political, and cultural context of the Netherlands to create this 'need,' Plato speaks about in his quote? Some of these answers can be found in the many newspapers, articles, press releases, and other documents collected by Ton Elias.

Ton Elias is an entrepreneur and retired Dutch politician who, from 2008 to 2017, served as the chair for the Dutch House of Representatives (Staten-Generaal, n.d.). However, before his political career, Elias was a political journalist for 18 years who, amongst other topics, reported on the developments in the Dutch education sector throughout the second half of the 20th century (Elias, 2017). During this time, Elias composed an archive containing records of the occurrences in various Dutch social sectors, including *Scholenbouw*¹ ('school construction'). The information gathered in this archive is used to understand the context surrounding the Dutch educational sector between the late 1950s and the end of the 60s.

2.1 The Educational Sector between 1957 and 1969

2.1.1 Post-War Dutch Context

One of the most impactful phenomena in the Dutch education sector is the baby boom², described by the Oxford Advanced Learner's Dictionary as "a temporary marked increase in the birth rate, especially the one following the Second World War" (n.d.). In the Netherlands, the number of live births increased to almost 300,000 after the end of WW2, while right before the war, this number was almost half (Beets & van Nimwegen, 2000). The elevated number of births also saw a slight decrease towards the mid-1950s before dropping to the pre-war trend between the 70s and 80s, as is visible in figure 2.A (Beets & van Nimwegen, 2000).

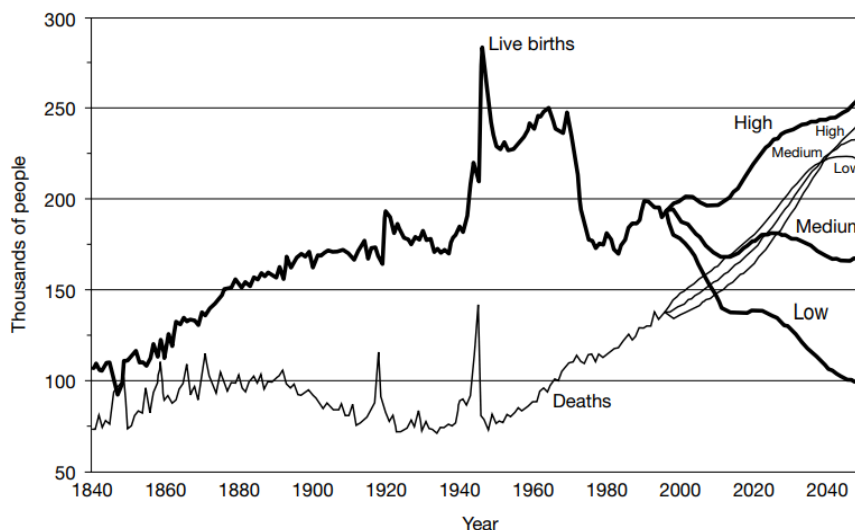


Figure 2.A, Number of Live Births and Deaths in the Netherlands, Beets & van Nimwegen, 2000

Additionally, the Netherlands saw a small spike in migration after the Second World War, which seemed to keep increasing in an oscillating trend (Beets & van Nimwegen, 2000). This development can be seen in parallel to the Dutch natural increase trend in figure 2.B (Beets & van Nimwegen, 2000).

¹ Archive 'Ton Elias'

² *Press Bulletin*, 1961, Archive 'Ton Elias'

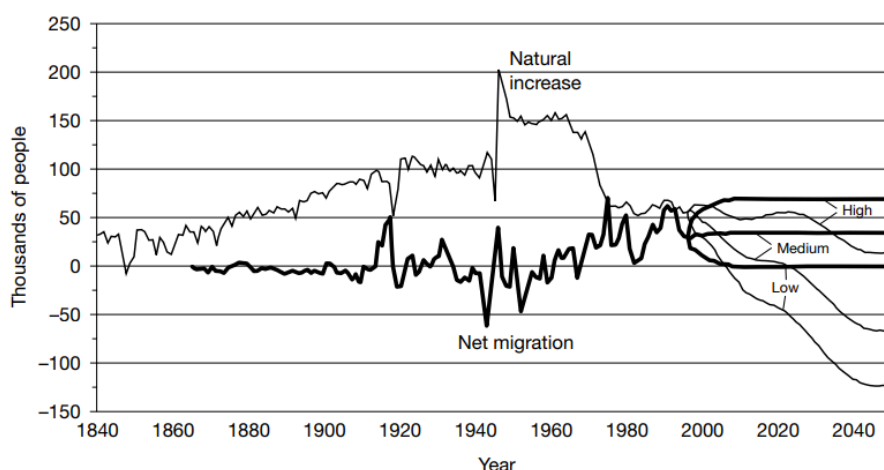


Figure 2.B, Natural Population Increase and Net Migration in the Netherlands, Beets & van Nimwegen, 2000

Due to the baby boom and increased migration, the number of students across all levels of education slowly increased significantly. This increase in alums can be found as a recurring theme in the articles written at this time. In addition to these demographic developments, the Netherlands was left with many problems in virtually all sectors of the built environment after the Second World War. The national situation mainly affected the housing sector, with over half a million Dutch citizens having lost their homes at the end of the war (Taverne, 2016). As a result of these circumstances, the Dutch government focused on rebuilding houses above many other sectors, including education^[3].

These factors added significant pressure on the already strained educational system, where many existing school buildings were ruined, outdated, or simply too small^[4]. Due to the lack of available funding for the educational sector, the Dutch government implemented several rules for these types of projects to receive approval and funding^[5]. The first and most impactful policy was that the government would only fund new school construction, meaning that it would offer no backing or even construction approval for renovation projects^[5]. In addition to this restriction, all submitted educational construction requests were ranked according to the urgency of the situation, causing a delay in the approval of plans since the amount of newly constructed schools was also significantly regulated^{[5][6]}. To cut down further on costs, the construction of sports facilities, predominantly gymnasiums, was effectively banned from government funding, despite physical education being a mandatory part of all levels of education since before the Second World War^[7]. Additionally, the minister of Education, Arts and Sciences in 1962, J.M.L.Th. Cals (Ministerie van Algemene Zaken, 2017) remarked in a newspaper article that often, not enough funding is provided to realise the educational plans as approved by the government, resulting in a significant increase in shortcuts^[8]. This lack of necessary funding resulted in many of the new education facilities constructed during this time likely needing renovation in a short amount of time due to their reduced quality^[8].

2.1.2 The Law on Secondary Education

As evident from the archival sources until this point, from a financial and architectural point of view, the educational system in the Netherlands in the post-war period was struggling significantly. In addition, the various educational institutions and educational levels were uneven throughout the country (Visser, 2022). To alleviate some of the predominantly managerial issues, the Dutch government announced a reform in the predominantly Dutch secondary educational system on February 14th, 1963, implemented in August of 1968 (C.B.S., 2023). This reform was the 'Law on Secondary Education, also known as the Mammoetwet, which aimed to "streamline" the various

³ *Bureaucratie verlamt jarenlang de scholenbouw*, 1957, Archive 'Ton Elias'

⁴ *Onderwijs op zolders, gangen, en noodlokalen*, 1957, Archive 'Ton Elias'

⁵ *Wat er moet gebeuren om een school te kunnen bouwen*, 1958, Archive 'Ton Elias'

⁶ *Rijksambtenaar werkt de bouw van scholen tegen*, 1958, Archive 'Ton Elias'

⁷ *Motie 3*, 1958, Archive 'Ton Elias'

⁸ *In dit nummer*, 1962, Archive 'Ton Elias'

types of secondary educational schools the Netherlands had at the time (De Graaff et al., 2020; Visser, 2022).

In the post-Second World War period, the Dutch educational system knew four main types of secondary schools: the More Extended Primary Education (MULO), the Girls' Secondary School (MMS), the Higher Citizens School (HBS), and the Classical Gymnasium (De Witte et al., 2013; Visser, 2022). The Law on Secondary Education changed virtually every one of these categories. For starters, the division between male- and female institutions was removed, making the MMS type obsolete (De Witte et al., 2013). These schools focused on teaching girls how to be good homemakers or preparing them for jobs that were considered socially acceptable for women, such as nursing (De Witte et al., 2013; Visser, 2022). In the 60s, this was seen as an outdated idea that no longer aligned with the rapidly evolving and 'modernising' Dutch society⁹ (De Graaff et al., 2020). As a result, in the Law on Secondary Education, all schools and educational institutions of all types and levels were made available to all genders (De Witte et al., 2013).

Consequently, the other three categories were either changed or expanded. The MULO became the MAVO, or Secondary General Continued Education, which prepares students for vocational training, such as carpenter or mechanic (De Witte et al., 2013; De Graaff et al., 2020). Similarly, the HBS became the HAVO, or Higher General Continued Education, where students are trained to attend universities of applied sciences afterward (De Witte et al., 2013; De Graaf et al., 2020). Lastly, the fourth type, the gymnasium, was expanded. Besides the gymnasium, which, in addition to academic and scientific university preparation, also studied Greek and Latin, the ateneum category was added, which solely focuses on scientific and academic preparation (Visser, 2022). These two academic types of secondary schools were grouped under VWO, or Preparatory Scientific Education (De Witte et al., 2013). Figure 2.C offers a visual overview of the various changes in Dutch secondary education discussed (own work, 2024).

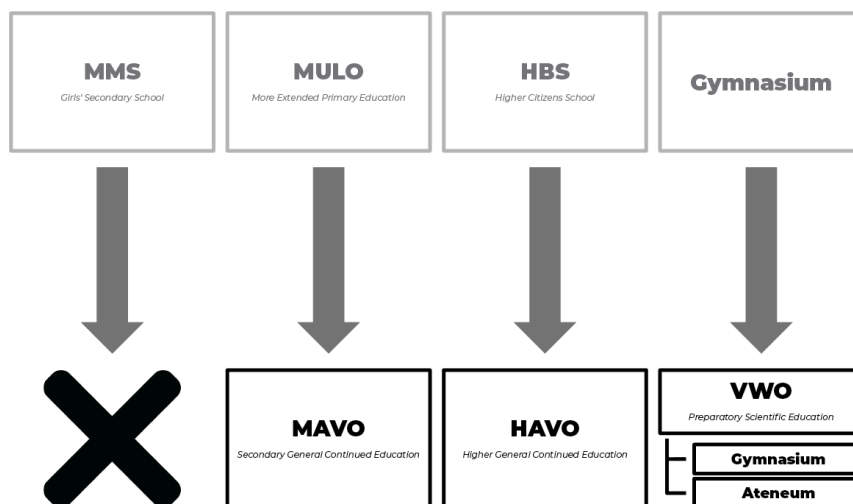


Figure 2.C, Summary Changes to the Dutch Secondary Schools System, Own Work, 2024

Two other significant changes introduced by the Law on Secondary Education of 1968 are relevant to the scope of this paper. The first was the implementation of the so-called bridge class, which was the first year of secondary education across all levels. The aim of the introduction of this class was that students would get lessons from two different levels of secondary education, so for example, HAVO and VWO, to see which one would be the best fit for them before continuing with this level, often within the same school (Visser, 2022).

Secondly, the other relevant change was the addition of subject packages, allowing each student to choose the subjects they wish to take for the final exams (De Graaff et al., 2020). For the MAVO, this involves choosing which type of vocational job the student would like to follow after secondary education. At the same time, for HAVO and VWO institutions this means choosing subject packages that align with the type of institution they want to attend in the future (De Graaff et al., 2020; Visser, 2022).

⁹ Amerika bouwt moderne scholen, 1959, Archive 'Ton Elias'

2.1.3 *The Development of Multifunctional Accommodations*

In 1959, the School Construction Information Centre (I.C.S. for short) issued a competition for a six-year primary school, encouraging architects and planners to think creatively^[10]. However, the general directors of the Public Housing and the Education ministries, ir. H.M. Buskens and mr. J.G.M. Broekman, respectively, found this competition unrealistic and inapplicable to the Dutch context due to the reduced funds and other implemented policies^[5] of the time needing to be considered^[10]. The I.C.S., on the other hand, argued that this competition was not meant to result in the realisation of the winning concept but rather to show the new possibilities for educational buildings and how the modern needs of today can be implemented in these institutions^[10]. In a way, the aim was to inspire change and experimentation. However, due to the policies, regulations, and other laws at the time, the capacity and execution of the intended experimentation were minimal^[1]. To support this conclusion, a newspaper published two years after the competition remarks how little has been done with these projects, going so far as calling the submitted designs “pretty words”^[11].

This situation all changed with the Law on Secondary Education in 1968. This new law opened the door for M.F.A.s since the implementation of the bridge year somewhat forced secondary education institutions to combine two levels in one building (Visser, 2022). This new regulation meant that secondary schools had to accommodate the needs and functions of two schools and that common spaces, such as the gymnasium or other sports facilities, would need to be able to accommodate multiple classes at the same time (De Graaff et al., 2020; Visser, 2022). This change led to the need for experimentation since the classic composition of schools would no longer be able to accommodate the requirements of the law. After passing the Law on Secondary Education, Rutger D. Bleeker built the first official multifunctional accommodation in the Netherlands (Bleeker & Ibelings, 1996).

2.2 Rutger D. Bleeker

2.2.1 *The Life*

In order to understand a building, one needs to know its architect. Rutger Dirk (Rudi) Bleeker was born on the 19th of June, 1920, in Epe, a small town in the Dutch province of Gelderland (Bleeker, Rutger Dirk, n.d.; *Overlijdensbericht*, 2022). Early in his life, his family moved to Bandung, the capital of the Indonesian Java province, where he started his education towards becoming a civil engineer in the 1930s (Bleeker & Ibelings, 1996). However, in 1939, Bleeker returned to the Netherlands to study architecture at the then-Technical College of Delft after following the advice of his professors (Bleeker & Ibelings, 1996; Bleeker, Rutger Dirk, n.d.). However, this year also marked the beginning of the Second World War for Europe, which would eventually cause Bleeker to move to Canada, where he became a soldier in the liberation army (Bleeker & Ibelings, 1996).

After the war, Bleeker returned to the Netherlands and worked as an assistant for urban advisor J.A. Kuiper in the reconstruction of Doetinchem, Zelhem, and Zutphen, all small towns in the east of the Gelderland province (Bleeker & Ibelings, 1996; Netherlands Architecture Institute, 2015). Here, Bleeker worked for over a year, after which he returned to the Faculty of Architecture at the now Technical University of Delft, where he graduated as an architect in 1949 (Bleeker & Ibelings, 1996; Netherlands Architecture Institute, 2015). After this graduation, Rutger D. Bleeker was in architectural practice for 40 years, during which he worked at two different architectural studios before starting his own (Bleeker, Rutger Dirk, n.d.). During Bleeker's career, this architecture studio was called Ir. R.D. Bleeker b.i. Architect BNA changed to Buro Bleeker after he went into pension in 1985 (Bleeker, Rutger Dirk, n.d.; Bleeker & Ibelings, 1996).

Throughout his time in architectural and urban practice, Bleeker often combined traditional Dutch and modern styles (Bleeker & Ibelings, 1996). This combination was highly uncommon in the Netherlands before the Second World War since most architects tended to pick an architectural movement that resonated with them the most and, almost exclusively, built in that style (Van Dijk, 1999). At the time, the two predominant architectural movements in the Netherlands were Traditionalism and Modernism, each with sub-styles and derivations depending on location (Bleeker & Ibelings, 1996; Van Dijk, 1999). This clash between movements also manifested in materialisation since traditionalists often worked predominantly in brick and modernists in concrete and cement (Bleeker & Ibelings, 1996). Bleeker, however, found a way to incorporate both styles and materials into his projects, using brick for its aesthetics and

¹⁰ *Succesvolle prijsvraag voor scholenbouw*, 1959, Archive 'Ton Elias'

¹¹ *Scholen op papier*, 1961, Archive 'Ton Elias'

practicality while integrating modernist concepts in the layout and planning (Bleeker & Ibelings, 1996). It is worth noting that due to the enormous national reconstruction program architects, urbanists, and planners found in the Netherlands after the Second World War, the division between different architectural styles disappeared quickly (Van Dijk, 1999; Beets & van Nimwegen, 2000).

2.2.2 Previous Work

Before the Rijnlands Lyceum in Oegstgeest, Bleeker had planned and executed many projects which, together with his affinity for mixing materials and styles, showed architectural ingenuity. The first project he worked on after the reconstruction of the three towns in Gelderland and winning silver in de Prix de Rome in 1950, was the Nutsschool in Breda, built in 1952^[12] (Bleeker & Ibelings, 1996). This school already stood out from the traditional school design by introducing a concept without hallways (Figure 2.D, Bleeker, 1957^[12]).

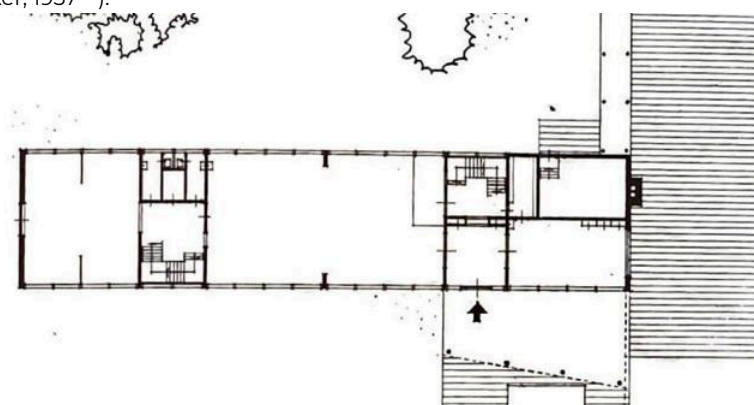


Figure 2.D, Ground Floor and Situation Drawing Nutsschool in Breda, Rutger D. Bleeker, 1957^[12]

According to Bleeker in the article from the *Bouwkundig Weekblad* ('architectural weekly') in 1957, the introduction of this new school type was inspired by the new research and policies in relation to daylight requirements in the educational sector, and because it was able to be executed in the small budget allowed at the time^[12]. Due to the division of functions and entrances, the large hall in the middle of the ground floor was used even during school hours by third parties to practise music and theatre^[12]. This project can be seen, in a way, as a predecessor of the multifunctional accommodations Bleeker would build later on in his life. However, it is not quite a multifunctional accommodation just yet since the building was not planned to serve this purpose. The article in the architectural weekly states that this possibility was discovered during the use of the completed project^[12].

Other schools that Bleeker designed between 1952 and 1963 also do not seem to have been designed with multifunctional use in mind but could be used for this purpose. One such example is the Rhedens Lyceum in Velp, constructed in 1957 (Bleeker & Ibelings, 1996). This secondary school was specifically designed to not only academically, but also socially educate the students by offering an innovative and 'modern' curriculum^[13]. The building, additionally, had to be entirely trolley accessible to allow for easy transportation of materials from function to function^[13]. As a result, a larger amount of functions had to be incorporated into the design, which were clustered according to practicalities and positioned in such a way that activities inside one branch of the building will not disrupt the activities in the others. Figure 2.E shows the ground floor blueprint of this design (Bleeker, n.d.^[13]).

¹² Nutsschool te Breda, 1957, Archive 'Rutger D. Bleeker'

¹³ Overzicht uit het zuidoosten, n.d., Archive 'Rutger D. Bleeker'

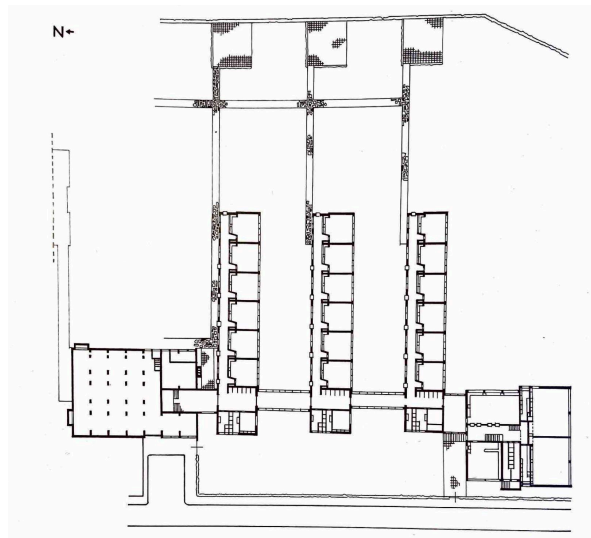


Figure 2.E, Ground Floor Rhedens Lyceum in Velp, Rutger D. Bleeker, n.d.^[13]

From the over twenty schools that Bleeker built before the Rijnlands Lyceum in Oegstgeest, the overwhelming majority still exist and have received many extensions throughout the years. A drastic example of this development is the current Nutsschool in Breda, who's original design is barely recognizable (Figure 2.F, Nutsbasischool Dirk van Veen, Google Maps, 2024).



Figure 2.F, Nutsschool in Breda Today, Nutsbasischool Dirk van Veen, Google Maps, 2024

A similar conclusion could be drawn about the Rhedens Lyceum in Velp, even though the overall shape of the building is still recognisable for its composition (Figure 2.G, Het Rhedens Rozendaal, Google Maps, 2024). However, all the exterior walkways visible in figure 5 have been either removed or covered.



Figure 2.G, Rhedens Lyceum in Velp Today, Het Rhedens Rozendaal, Google Maps, 2024

3 The Rijnlands Lyceum in Oegstgeest

Despite multifunctional use seemingly being a consistent trend in Bleeker's educational projects even before the implementation of the Law on Secondary Education in 1963, the Rijnlands Lyceum in Oegstgeest (from now on R.L.O.) was the first multifunctional accommodation in the Netherlands (Bleeker & Ibelings, 1996). This school was so unique that one of Bleeker's lectures references it as the project where "... the sense of multifunctionality is demonstrated" (translated from Dutch, Bleeker, n.d.^[14]). However, what makes this project the first Dutch multifunctional accommodation, and what is so special about its facilities?

3.1 Urban and Architectural Analysis

3.1.1 Urban Context

The project for the R.L.O. started in 1963, with construction finishing six years later in 1968 in Oegstgeest, a small town directly north of Leiden, the Netherlands. This secondary school resulted from collaborating with various stakeholders who funded different parts of the project, including the Oegstgeest municipality and the General Public Library of Oegstgeest^[15]. The school is situated between the current A44 highway and the town, as shown in figure 3.A (Topotijdreis, n.d., edits: own work, 2024).

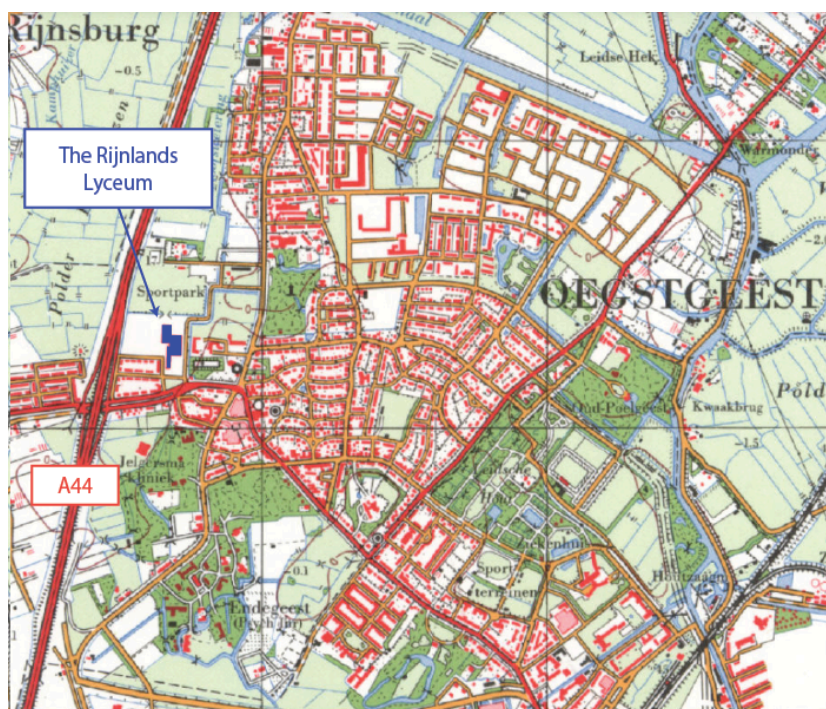


Figure 3.A, Location of the Rijnlands Lyceum in Oegstgeest in 1969, Topotijdreis, n.d., edits: own work, 2024

This location is near many vital roads, connecting different parts of Oegstgeest and surrounding cities and towns. The R.L.O.'s location, therefore, makes the school highly accessible for users to reach from within Oegstgeest or not. Though the archival material does not explicitly mention the school's location, it likely got such a significant location partially due to its role as the only secondary school in Oegstgeest^[15]. In addition to this importance, the R.L.O. had already gained the status of a community centre inside the emergency building that preceded Bleeker's building^[15]. Bleeker notes in 1968 that this emergency building, in addition to its educational function, is also being used for meetings, religious events, and shows, amongst others^[15]. Lastly, even before the new school in 1968, the General Public Library of Oegstgeest was already housed with the R.L.O., creating a solid partnership between the two organisations^[15]. As a result of all the

¹⁴ *Flexibiliteit en Multifunktionaliteit, Zin of slagzin?*, n.d., Archive 'Rutger D. Bleeker'

¹⁵ *Toelichting over de samenwerking met andere instanties*, 1968, Archive 'Rutger D. Bleeker'

previously mentioned factors, the municipality of Oegstgeest had a personal interest in the success of the school's construction, joining the planning process even before the project's official start in 1962^[15]. On a neighbourhood scale, the Rijnlands Lyceum was surrounded by sports fields, big infrastructure, and residential homes. Figure 3.B shows an aerial image of the R.L.O. after completion (Foto K.L.M. Aerocarto N.V., n.d.^[16]).



Figure 3.B, Aerial View Rijnlands Lyceum Oegstgeest, Foto KLM Aerocarto N.V., n.d.^[16]

3.1.2 Multifunctionality

At completion, the building housed two levels of Dutch education: HAVO and VWO (R.L.O., 2023). In addition, the project included two gymnasiums of different sizes, a library, and an auditorium^[17]. These three functions, as mentioned above, are either accessible by the public, library, or third-party organisations, auditorium, and two gymnasiums^[15]. Figure 3.C shows the blueprint for the Rijnlands Lyceum (BOUW, 1972^[17], edits: own work, 2024).

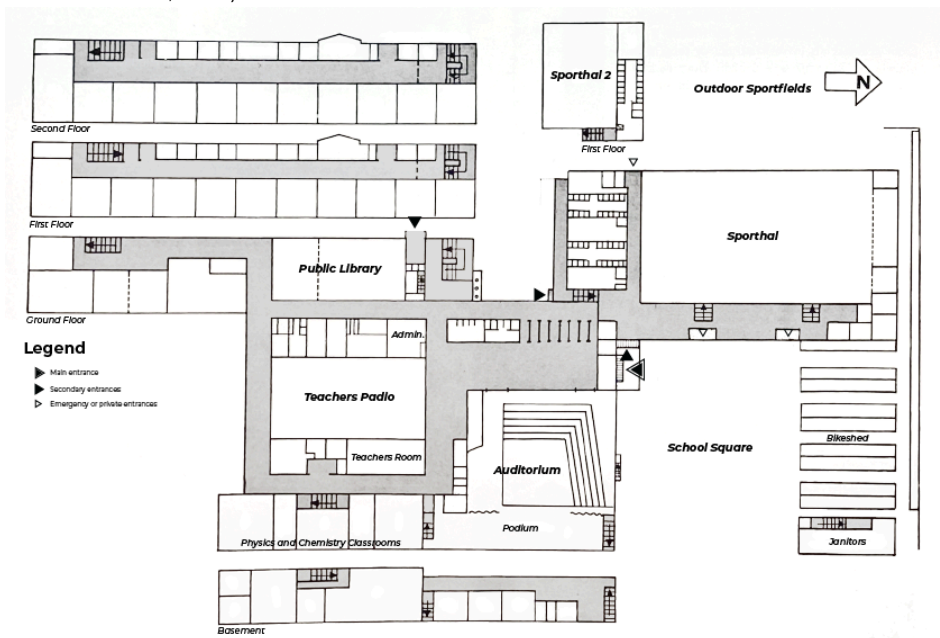


Figure 3.C, Blueprint Rijnlands Lyceum Oegstgeest, BOUW, 1972^[17], edits: own work, 2024

¹⁶ BLEEph288-a, n.d., Archive 'Rutger D. Bleeker'

¹⁷ Rijnlands Lyceum te Oegstgeest, 1972, Archive 'Rutger D. Bleeker'

These three functions, together with the school's teaching function, form the institution's multifunctional dynamic, the star of the show being the multipurpose auditorium design^[14]. In Bleeker's lecture on flexibility and multifunctionality in school buildings, he highlights this auditorium as a beautiful implementation of multipurpose principles to benefit the multifunctional use of the space^[14]. Designed as an amphitheatre, the auditorium in the R.L.O. has a main stage and a smaller side stage that can be accessed from behind the curtains, covering the access to the backstage^[17]. In order to visualise this, Bleeker provided a diagram showing the different aspects of this space in his lecture, shown below as figure 3.D (Bleeker, n.d.^[14]).

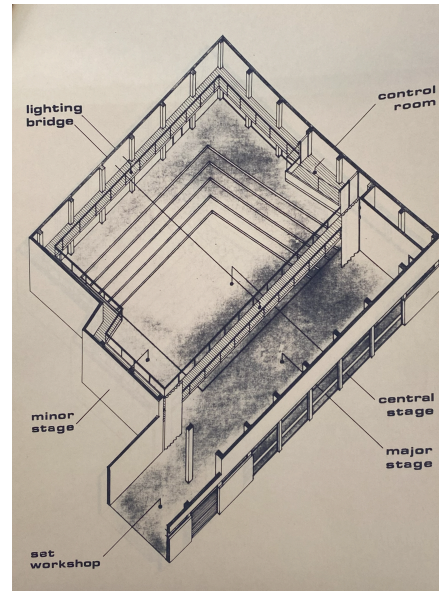
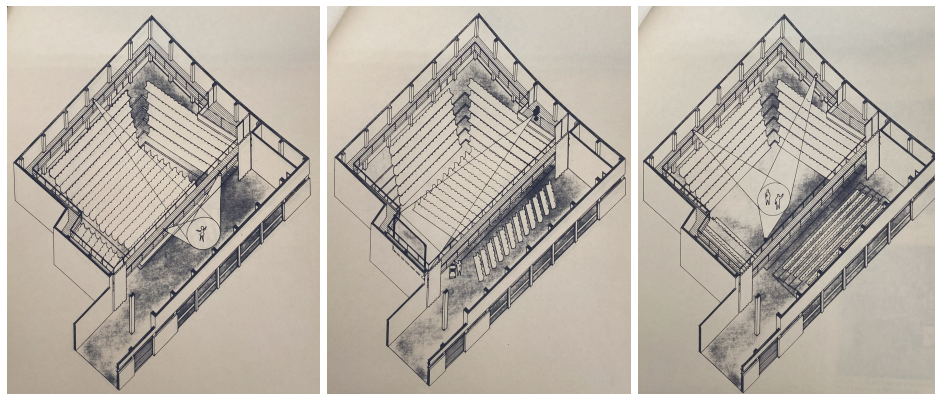


Figure 3.D, Composition Auditorium Rijnlands Lyceum Oegstgeest, Bleeker, n.d.^[14]

Bleeker designed the form of the auditorium so that the room could accommodate various functions, like ballets, concerts, and theatre shows, simply by organising chairs in different ways^[14]. Images 3.E 1, 2, and 3 show how Bleeker envisioned the space to be used for different purposes (Bleeker, n.d.^[14]).



Figures 3.E 1, 2, and 3 (from left to right), Possibilities for Multipurpose Use of the Auditorium, Bleeker, n.d.^[14]

Below the main stage, several dressing and storage rooms are included in the basement for dancers or singers to get ready before their performances^[17]. In addition to this, there are various ways to enter or exit the auditorium cluster, allowing performers and staff to navigate around the stage easily^{[14][17]}. Figure 3.F shows the entrances and functions inside the auditorium cluster explained so far in a visual manner (BOUW, 1972^[17], edits: own work, 2024).

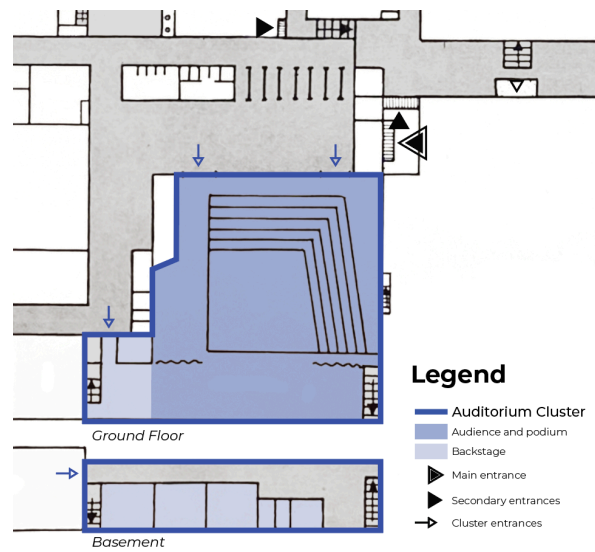


Figure 3.F, Entrances and Composition Auditorium Cluster, BOUW, 1972^[17], edits: own work, 2024

Secondly, the gymnasium is another significant component that contributes to the multifunctionality of the R.L.O. project. As mentioned previously, the R.L.O. does not only have the main 924 m² sports hall, but an additional smaller gymnasium was constructed on the first floor of the cluster to increase the capacity^[17]. Having a separate main entrance for the sporting facilities allows the cluster to function independently from the rest of the building, making it easy for third parties to use^[18]. This feature was necessary since the municipality primarily funded the gymnasium cluster, making it into the municipal sports hall^[19]. As a result, after the school closes for the day at 15:00, the sports halls would be used by third parties, likely surrounding sports organisations or third-party organised events^[15]. Figure 3.G shows the composition of the entrances and functions of the gymnasium cluster in the R.L.O. building (BOUW, 1972^[17], edits: own work, 2024).

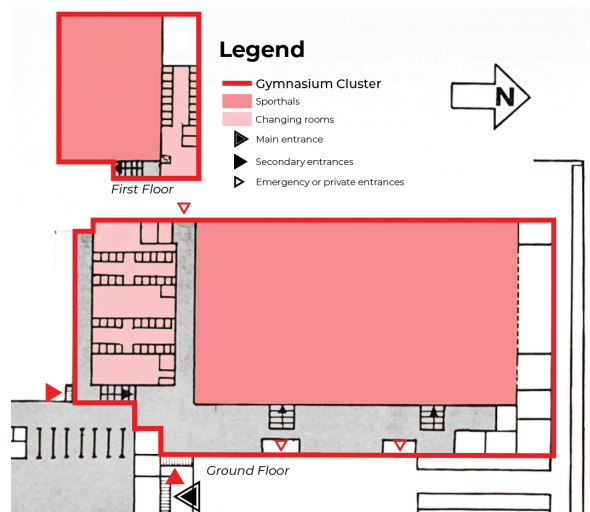


Figure 3.G, Entrances and Composition Gymnasium Cluster, BOUW, 1972^[18], edits: own work, 2024

Lastly, instead of the R.L.O. receiving a small school library, the General Public Library of Oegstgeest was given a place in the building^[14]. The public library was previously housed in an emergency building and, therefore, was interested in moving to a more permanent location together with the R.L.O.^[14]. The library cluster was positioned between the teaching spaces and the publicly accessible functions (Figure 3.H, BOUW, 1972^[17], edits: own work, 2024).

¹⁸ *Gebruikers aan het woord*, 1972, Archive 'Rutger D. Bleeker'

¹⁹ *Opening Rijnlands Lyceum Oegstgeest*, 1968, Archive 'Rutger D. Bleeker'



Figure 3.H, The Five Main Functional Clusters of the Rijnlands Lyceum in Oegstgeest, BOUW, 1972^[17], edits: own work, 2024

Like the gymnasium cluster, the public library has an individual entrance. However, unlike all other entrances to the building, the one for this cluster is located at the back of the building, on the side of a small residential area behind it and the highway exit (figures 3.A and 3.B). Since the students and users of the auditorium or gymnasiums would likely enter from the required entrance on the school square, the location of the library entrance would likely prove quieter, fitting the often expected atmosphere of a studying and reading facility.

The previously discussed clusters form function-oriented areas in the building together with the educational and administrative clusters (figure 3.H). These clusters either exclusively have to or can be accessed from the main entrance of the school square. Figure 3.I displays the crossing streams of different users travelling through the ground floor of the R.L.O. to one of the five functional clusters (BOUW, 1972^[17], edits: own work, 2024).

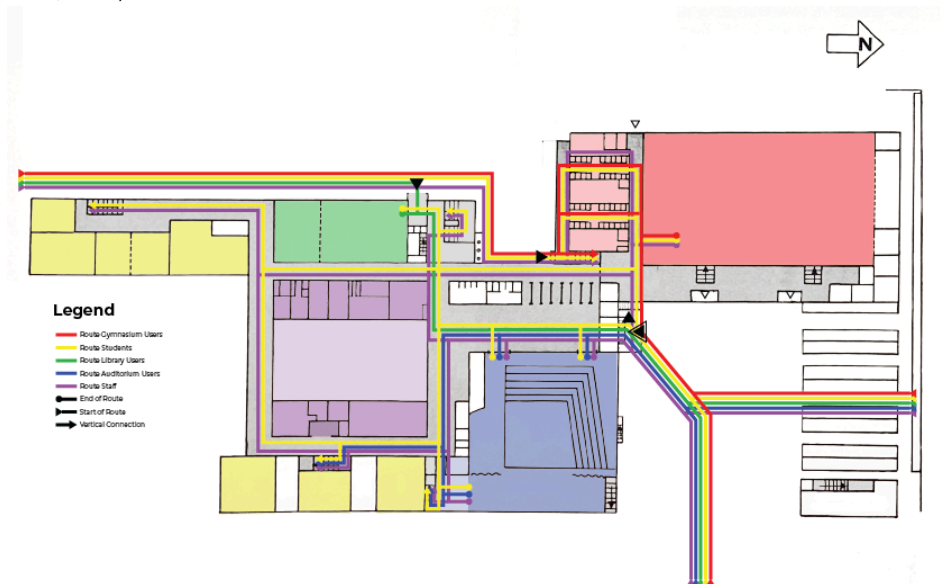


Figure 3.I, Routes through the R.L.O., BOUW, 1972^[17], edits: own work, 2024

The routes through the building indicate that there is a clear division between the more private functions, like the teaching spaces, and the louder and more public functions, like the auditorium and the gymnasiums (figure 3.I). The public library and administrative functions act as a buffer between these two areas, being quieter but less private and sensitive compared to the classrooms. This ground floor composition, together with the location of the main entrance and separate cluster entrances, highlights the main hall in front of the auditorium as the heart of the building, where casual encounters between students and other community members happen regularly due to wayfinding^[18].

A similar dynamic can be observed in the exterior areas of the building, namely the school square and bike parking area, and the back of the building by the library entrance (figure 3.I). These exterior areas increase the likelihood of random encounters between different users since all streams have to pass by one of two exterior areas to reach any function of the building (figure 3.I).

3.1.3 Reaction from Stakeholders

After the school's opening in 1968, the design and composition of the school building saw great success, to the extent that two years after opening the school already required a large extension for teaching and communal space^[18]. The number of students had increased from 700 students in the first academic year, to 840 in the second, with an additional expected rise to 1.200 in the coming year^[18]. This phenomenon, according to the Oegstgeest municipality, shows that there was a clear need for a secondary school in the town and state to be particularly content with it having become a hub for cultural and social activities in the community^[18]. These developments meant a success for the municipality, who's primary aim in the project was to support the facilitation of this role for the R.L.O. in their new building^[15].

However, the municipality of Oegstgeest was not the only stakeholder to be satisfied with the final result. In 1972 BOUW magazine noted that the building was in constant use, from early in the morning until, sometimes, late in the evening^[18]. Specifically, the auditorium and gymnasium are seen as great successes, with the auditorium being used by, for example, Leiden University, music or acting associations, and community-organised events, and in the gymnasium by many sport associations and other organisations^[18]. Both the headmaster and the physical education teachers say that the multifunctional use of these facilities does not impact the education functions both facilities have to fulfil due to careful planning and good work from the concierge staff^[18].

The headmaster of the R.L.O. additionally points out that, due to the flexibility of many rooms and facilities, the school has many opportunities in addition to the multifunctional use of the auditorium and gymnasium, even walking through the school with the reporter and pointing out all the additional flexible aspects of the school^[18]. The flexible areas the headmaster pointed out in this interview are shown in figure 3.J (BOUW, 1972^[17], edits: own work, 2024).

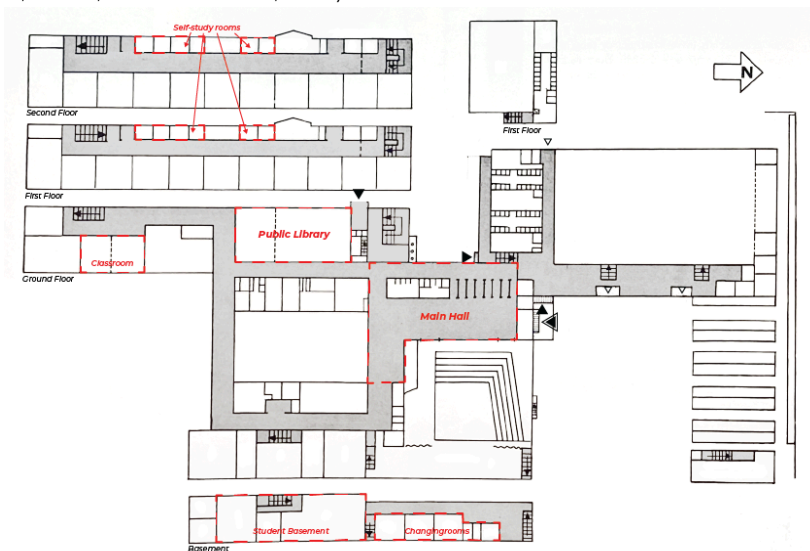


Figure 3.J, Additional Flexible Rooms and Facilities in the Rijnlands Lyceum Oegstgeest, BOUW, 1972^[17], edits: own work, 2024

The flexible and multifunctional opportunities of many of these areas were discovered due to the lack of space resulting from the student increase in the first two years of the school^[18]. The student basement and auditorium changing rooms, for example, were not planned with multifunction use in mind, but for some time were used as drawing and arts rooms in addition to their original function^[18]. The main hall and public library were executed with multifunctional use in mind, but ended up serving a larger educational function than expected as, once again, a result of lack of space^[18]. For the partitionable classroom and self study rooms, the headmaster remarks that they have been spaces perfect to accommodate any type of educational or extra curricular activity^[18].

From the article it seems like every stakeholder was satisfied with their arrangement except for the public library, who felt that, due to the location of the school, the amount of public users is likely reduced compared to if it were to be housed in a more central location of the town^[18]. In addition to this, the librarian complained not to have enough time to effectively manage both the public visitors and educational responsibilities she had at the time^[18].

3.2 Commission Multifunctional Accommodations

3.2.1 *The C.M.A and I.C.S.*

As a result of the R.L.O.'s uniqueness in terms of multifunctionality and design flexibility, the ministries of Education and of Culture established the Commission of Multifunctional Accommodations (C.M.A.) in collaboration with the Information Center for School Construction (I.C.S.) in Rotterdam in 1969^{[20][21]} (Bleeker & Ibelings, 1996). The I.C.S. was an organisation partially established and funded by the Ministries of Public Housing and of Education in 1955 and focused on researching and advising in the planning and construction process of school construction (ICSadviseurs, 2023). As a result of the developing issues and dynamics in the Dutch educational sector, the Ministry of Education established various work groups and commissions tasked with researching different key issues in the school system through the I.C.S., where the organisation was tasked with the research, funding, organisation, and more^[20]. Bleeker was not only an active member of the C.M.A., but an administrative member of the I.C.S.^[20], tasked with carrying out research for multiple workgroups and commissions at the time^[21]. As a result, the findings of the I.C.S. in the field of M.F.A.s directly reflects the findings of the C.M.A.

3.2.2 *Research into Multifunctional Use*

The goal of the C.M.A. was to investigate how schools could be utilised outside of school times like in the situation of the R.L.O. (Bleeker & Ibelings, 1996). If the R.L.O. truly was the inspiration for forming this workgroup, it is likely that the Ministry of Education observed the successful around the clock use of the R.L.O. and the community engagement with the school and wanted to explore ways to establish this dynamic in other Dutch cities. This conclusion is supported by the Ministry of Education organising an European study conference from the 11th until the 18th of January in 1969 in Leiden^[22], a large city bordering Oegstgeest from the south-east. During these discussions various topics in regards to the developments in the field of educational institutions, with one of the four focus points being how the modern school can serve a social-cultural role in the community^[22]. The main conclusion that this study conference found, is that school can no longer be seen as mere buildings with classrooms, but as "community centres with educational, social and information functions"^[23] (translated from Dutch). A second broad conclusion reached that day was that flexibility in educational architecture meant more than simply being able to easily remove a wall, but rather had to mean total flexibility in the arrangement, purpose, and composition of a space^[23].

After the study conference in Leiden, the C.M.A. focused on researching the possibilities for multifunctional accommodations for years, though the I.C.S. in general spoke many times throughout the years on multifunctional use in the educational sector. The first mention in the archive of the C.M.A. in Dutch news would come in September of 1976, when at the time editor Ton Elias discussed the opening of a new

²⁰ *Jaarverslag 1970, 1970* Archive 'Ton Elias'

²¹ *Bouwen in de onderwijssector*, n.d., Archive 'Rutger D. Bleeker'

²² *Conferentie over onderwijskundige aspecten van de scholenbouw*, 1969, Archive 'T. E.'

²³ *Wens van Europees overleg: School als flexibel gemeenschapshuis*, 1969, Archive 'T. E.'

M.F.A. in Holendrecht, a residential area in Amsterdam^[24]. This project was a combination between a school and a community centre which, according to Elias, tried to follow the concept of multifunctional use to an "ideal"^[24] (translated from Dutch). However, on an administrative basis, the educational function and social-cultural functions in the building were not in a good collaboration dynamic, leading to the latter being absent from the construction's opening ceremony^[24]. The events observed in this case prompted a member of the Christian pedagogical study centre to directly point out at a studyday where the case study was being discussed with the C.M.A. present, that more research has to be done into why a multifunctional accommodation should be implemented into a context, instead of how^[24].

Throughout the 1970s, the Commission Multifunctional Accommodations published two crucial documents for the development of M.F.A.s in the Netherlands, the first in 1975^[25] and the second, a clarification of the first document, in 1980^[26]. The 1975 brochure entitled *Building for School and Neighborhood* was a type of manifesto that initiated the increasing interest in M.F.A.s^[27]. This led to more experimentation with this educational type, including the Holdendrecht case study in 1976. Before publishing the second document in 1980, the I.C.S. dedicated a significant part of their 1977 yearly report on the findings surrounding M.F.A.s of the recent years^[27].

3.2.3 Findings of the C.M.A.

In this yearly report from the I.C.S., a short outline is given about the role and application of M.F.A.s from their research findings^[27]. The findings given in this booklet are representative for the research conducted by the Commission Multifunctional Accommodation's findings, since the C.M.A. was composed of some of the members of the I.C.S. and since the C.M.A. is explicitly referenced as the source^[20].

In this 1977 report, a whole chapter is dedicated to discussing the findings and developments around M.F.A.s. Interestingly, the discussion does not speak much about physical or architectural features or interventions. This is because in the context of M.F.A.s there are no one-size-fits-all or cookie-cutter solutions. Every school's composition, layout, architectural features, and other such physical components of a building have to be determined through consistent collaboration between the stakeholders to create a custom solution that benefits all parties^[27].

Some of the findings in relation to multifunctional accommodation in the yearly report look at important factors to pay attention to in the planning process of multifunctional accommodations^[27]. All five factors listed by the I.C.S., three of which originally from a C.M.A. report, are in relation to relationship management between all the stakeholders, especially in the planning and designing process^[27]. Stakeholders collaborating effectively in complex architectural and urban projects, such as multifunctional accommodations, is fundamental to be able to achieve a collective output (Yang et al., 2023). The first factor of successful collaboration in the yearly report is to consider the relationships of the stakeholders prior to the start of the project^[27]. Afterwards, the other four factors can all be considered forms of stakeholder relationship management, such as equitable allocation of financial and managerial responsibilities^[27].

After these five factors, the yearly report discusses reasons for and against the application of a M.F.A.. This discussion was very relevant for the time because, following the publishing of the first report by the C.M.A. in 1975^[27], the Dutch government had been pushing in particular secondary schools to at least allow for multifunctional use of the educational building and some of its facilities^[28]. However, especially educational institutions for children with mental or physical disabilities, protested this urge from the government, arguing that multifunctional use of such sensitive buildings would disturb the educational functions and go against the right to own property^[28]. On the other hand, secondary schools for neuro- and physically typical students refused multifunctional use of their building on the grounds of mistrust of the other party, arguing that they cannot trust no damage will be done to the school or equipment without a member of the educational staff being present at all times^[29].

The I.C.S. and C.M.A. argue in the 1977 yearly report that though there are an overwhelming amount of reasons to not build or plan an M.F.A., when all stakeholders are willing to work together on finding solutions for clashing needs and don't fear underlying competition from other stakeholders in the planning process^[27]. The report

²⁴ *Cahier*, 1976, Archive 'Ton Elias'

²⁵ *ICS Informeert*, 1977, Archive 'Ton Elias'

²⁶ *Meer scholen gaan open voor andere activiteiten*, 1980, Archive 'Ton Elias'

²⁷ *Landelijke stichting scholenbouwteam*, 1978, Archive 'Ton Elias'

²⁸ *Bijzonder onderwijs wil baas in eigen huis blijven*, 1979, Archive 'Ton Elias'

²⁹ *Olympia in de problemen*, 1980 Archive 'Ton Elias'

gives three ways in which this can be ensured, stating that a solid record of the needs and wishes of every stakeholder is necessary so that every party can feel like their voices are being heard^[27]. This is especially important for the wishes of the final users, who after the construction project will have to collaborate on management and administration for the long-term of the construction^[27]. This group does not only include, for example, the students and staff of the secondary school, but also the wishes of the nearby inhabitants and, if applicable, the whole community^[27]. Additionally, the rules of the collaboration between stakeholders in the planning and designing process should be clear to every party and written down, so that everyone knows what to expect from the planning process and final outcome^[27].

These previously mentioned rules of collaboration, or how the report names them “rules of the game”, are also touched upon in the last couple of pages^[27]. Here, the I.C.S. mentions that to achieve successful collaboration in such a complex project, a non-profit management committee has to be set up, composed from members representing various stakeholders, to oversee the planning, execution, and eventual exploitation of the M.F.A.^[27]. In addition to this committee, the rules of collaboration and usage schedule for the shared facilities have to be planned out and agreed upon up front^[27].

Due to the complexities about the planning and realisation of multifunctional accommodations, the C.M.A. give a list of nine questions stakeholders should ask themselves at the first planning meeting to decide whether to apply the M.F.A. model or not. These are visible in table 3.L (I.C.S., 1977^[27], visual: own work, 2024).

Table 3.L, Nine Questions about the Applicability of M.F.A.s

Topic	Question
Why?	What are the social or cultural reasons for the M.F.A.?
Where?	Where would the M.F.A. be built?
For whom?	Who is the target group of the M.F.A.?
How, what?	What are the possibilities in execution of the M.F.A.?
By who?	Who will be leading the initiative of the M.F.A.?
Costs	Where will the funding come from for (parts of) the M.F.A.?
Management	Who will manage the M.F.A. after completion and how?
Existing	What existing functions have to be integrated into the M.F.A.?
Technical	Who will be collaborating in the planning process of the M.F.A.?

I.C.S., 1977^[27], visual: own work, 2024

3.3 Rutger Bleeker's Findings

In 1967, the year before the completion of the R.L.O., the school's architect Rutger D. Bleeker wrote a document about how he sees schools and their composition as a result of the developing and modernising Dutch educational system^[30]. Bleekers summarises his findings in twelve points, some of which are more technically and architecturally oriented, some more in regards to stakeholder collaboration and planning^[30]. It is important to note that this document is not specifically titled or introduced as being an opinion piece on M.F.A.s, but rather a document that reflects his opinion on the construction of all types of schools^[30].

The first six points of this document highlight the role of the school inside of the community, truly emphasising how important that element is in the view of Bleeker. He states that education has developed far past the traditional model, and now also has to prepare its students for integration with society and community life after graduation^[30]. Bleeker additionally agrees that a new school has to be up to date with the national pedagogical and didactic developments in education, but that to save money in the long run it must be flexible to adapt as well^[30]. From this point of view, the

³⁰ Scholenbouw, 1967, Archive 'Rugter D. Bleeker'

urban design supersedes the architectural design, since not only integration in the community but also wayfinding around the building are crucial for a successful school^[30].

The remaining six points are in regards to minimum- and maximum measurements for different rooms and facilities in the school, which are outside the scope of this paper. However, it can be assumed that, since these points were written in 1967 during the planning process of the R.L.O. the twelve aspects mentioned by Bleeker in this document are representatives of the concepts he applied to the design of the school.

4 Discussion

4.0.1 The Impact of the R.L.O.

The findings of the Information centre for School Construction (I.C.S.) and the Commission Multifunctional Accommodations (C.M.A.) line up very well with the organisation and planning of the Rijnlands Lyceum Oegstgeest (R.L.O.). If we were to take the questions posed by the I.C.S. in table 3.L and apply them to the R.L.O., we would see that every point is something that has been considered implemented during the planning phase. Table 4.A showcases the answer to all the posed questions for the R.L.O. (I.C.S., 1977^[27], visual: own work, 2024).

Table 4.A, The R.L.O.'s Answers to the Nine Questions about the Applicability of M.F.A.s

Topic	Answer (R.L.O.)
Why?	R.L.O. was already a significant community centre in its previous emergency accommodation.
Where?	Close to the highway and other, more local primary infrastructure to benefit accessibility.
For whom?	The whole community of Oegstgeest.
How, what?	The execution was a collaborative effort between all stakeholders and no complaints were made in this regard.
By who?	Primarily the municipality of Oegstgeest, Bleeker and his team, the R.L.O., and the Public Library of Oegstgeest.
Costs	Predominantly from the primary stakeholders and other funds willing to subsidise small parts of the project.
Management	Though the composition of the managerial team is not highlighted anywhere, the stakeholders do not mention a problem with planning other than the library.
Existing	Two secondary schools, a public library, and the school as a community centre
Technical	All stakeholders were involved in the planning and execution of the school.

Topics: I.C.S., 1977^[27], answers: *Gebruikers aan het woord*, archive 'Rutger D. Bleeker', 1972^[18], visual: own work, 2024

In addition to the R.L.O.'s correlation with these nine questions, the school correlates with all the other findings of the I.C.S. and C.M.A. in sub-chapter 3.2.3. Most of these findings revolve around successful stakeholder relationship management and participation, something the R.L.O. was a unique example of during its time^[15]. As mentioned in subchapter 2.1.1., the Netherlands's educational system at this time was experiencing a tremendous amount of struggle, primarily due to the lack of funding for this sector made available by the Dutch government^[5]. Collaboration between a complex network of stakeholders and acquiring enough funding to execute the plan was, therefore, something that the rest of the country could learn a lot from. It, therefore, is logical that the architectural and physical features of M.F.A.s, excluding the integration in the urban fabric, are irrelevant when considering the implementation of such a feature. As we see in the case study of the R.L.O., Bleeker's 1967 document^[30], and the 1977 report from the I.C.S.^[27], the most important element of an M.F.A. is the collaboration between its stakeholders. From this research it can, therefore, be concluded that the Rijnlands Lyceum in Oegstgeest had a significant impact on changing the perception around the education sector in the Netherlands in the second half of the 20th century. This is because Bleeker, after the execution of the R.L.O., went on to be a part of the C.M.A., likely taking the twelve points he wrote during the planning and execution of the project with him. In fact, the C.M.A. would likely not have existed without the success of the

R.L.O., since its revolutionary multifunctional and flexible aspects caused the Ministries of Culture and of Education at the time to order this commission to start doing research into M.F.A.s (Bleeker & Ibelings, 1996). This research would later manifest itself in the two reports written by the C.M.A. in 1975^[25] and 1980^[26], which both were picked up by the Dutch government and used as reference from the second half of the 1970s to encourage more multifunctional use in other schools across the whole country^[28].

4.0.2 *Correlation with Existing Literature*

As apparent from the literature review in subchapter 1.1, the information related to M.F.A.s available on the Internet in the modern day is extremely limited. Most papers, like the ones in the literature review, mostly focus on supposed success and failure factors of multifunctional accommodations after their planning, execution, and implementation. However, as we see from the findings of this research, evaluating the M.F.A. after execution is the incorrect approach. Instead, the applicability of and conditions for an M.F.A. in a particular location or community has to be discussed from the first meeting^[27]. The only source coming close to this conclusion is by Romme and Schepens, though their findings are based on M.F.A.s in a modern-day context (2014) and do not mention the research carried out by the I.C.S. and C.M.A. decades prior to their paper.

All sources do recognise that these supposed success and failure factors are different per situation, without ever truly expanding on why. Why is every M.F.A. different? Why are the 'successfactors' for one M.F.A. different from the other? We find the answer to this in the findings of this paper as well. Each M.F.A. has to be planned and designed in such a way that it is the perfect custom solution for all stakeholders involved, who are, of course, different per location, time, context, project, etc. Because of this, creating uniform criteria for every M.F.A. is not only virtually useless, but it also goes against the whole purpose and concept of these types of institutions^[30].

4.0.3 *Application to a Modern Day Issue*

The analysed Dutch educational sector situation in the second half of the 20th century carries striking similarities with the current Dutch housing crisis. In short, the current housing crisis is predominantly caused by a almost 400,00 unit housing shortage (Boelhouwer et al., 2022; Boztas, 2023). Experts argue that due to the Dutch government's decentralisation of the housing market and withdrawal of funding over the last decade has only contributed to the problem (Boelhouwer et al., 2022; Oostveen, 2022). Despite the many housing protests and calls to action from the population and research, the government is limited in solving the shortage due to funding and the development of environmental sustainability policies (Oostveen, 2022; Boztas, 2023).

Likewise, in the Dutch educational sector of the previous century the Dutch government was facing similar issues to the government of today. The example we can take from the Rijnlands Lyceum in Oegstgeest is that with the right amount of motivation and willingness to collaborate from multiple parties, especially the municipalities, new initiatives can flourish even in dire times. Interestingly, this phenomenon can already be observed in the handful of alternative housing initiatives sparking up all over the Netherlands, such as the Community Land Trust movement (Janssen, 2021).

4.0.4 *Research Evaluation*

The most significant hurdle that stood in the way of this research other than time, was the lack of literature or digital sources outlining the events at the time in the Dutch educational sector, Bleeker's work and findings, etc. This is likely because Bleeker was never a famous architect, like Gerrit Rietveld or Theo van Doesburg, and, therefore, is not the subject of constant research. The I.C.S. itself ceased to exist in the way I did from 1955 until the early 2000s, making its research from during that time only the stuff for archives (ICSadviseurs, 2023). Though the archival material found for this paper was very extensive, checking the information for biases and agendas was made difficult due to this lack of other sources. When carrying out this type of research, it is important to remember that simply because it is the only available source of information, that does not mean that all the normal credibility rules do not apply. In fact, as someone of non-Dutch descent born in 2002, it is virtually impossible to form an objective opinion and/or understanding of events in the Netherlands between the 1950s and 1980s, since native Dutch individuals born in the same year can at a bare minimum ask their parents or grandparents about certain developments. This factor should, therefore, be kept in mind when evaluating the research in this paper.

5 Conclusion

In conclusion, the Rijnlands Lyceum in Oegstgeest had a significant impact not only on the findings of the C.M.A., but also in the Dutch educational context of the second half of the 20th century. This was likely the result of the successful collaboration between stakeholders on this project^[15], a sight very rare for the post-world war times in the Netherlands (chapter 2). Funding for educational products was cut to a minimum, making it so that many schools relying only on government funding were built with missing necessary facilities or aspects^[5]. For this reason, in addition to being the first M.F.A. in the Netherlands, the Rijnlands Lyceum in Oegstgeest is an important example from which we can learn from even in the modern day.

The most decisive factor in the planning and executing of a M.F.A., is the stakeholder relationship management and nature of collaboration between all the involved parties instead of physical factors^{[27][30]}. This is because an M.F.A. should be a custom solution to integrate all stakeholder's needs and wishes, and can therefore not be successful without successful collaboration (chapter 3). This lesson was learned from the R.L.O. could serve as an example for the modern day Dutch housing crisis, which follows a number of similar trends as the problems in the education sector in the 1960s and 70s.

There are various options for continuing the research in this paper. The first would be to analyse the stakeholder reactions to the R.L.O. in the long-term and how those have influenced different iterations of the school. This was something intended to be included in this research, but due to lack of time, resources, and applicability to the scope was scrapped. However, in order to truly evaluate whether the R.L.O. was a success the way the stakeholders at the time claimed it to be, long-term research is indispensable. On the other hand, another further research direction would be to analyse the case studies of other M.F.A.s that came after the R.L.O. and how the perception around these types of institutions has changed over time.

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6.2 Archival Glossary

6.2.1 Archive 'Ton Elias'

Name: Archive Ton Elias, Scholenbouw, 1965-1985 NL

Location archive: National Educational Museum Dordrecht, the Netherlands

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