A TYPICAL LYCEUM LIBRARY

A historical analysis of school libraries inside lyceums in Amsterdam between 1900 and 2015

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ABSTRACT

Since 2012 the reading level of students in the Netherlands is dropping. The blame is mostly put on the increasing digitalisation of the world. This research tries to help battle this decrease, by analysing how libraries in lyceums in the Netherlands looked before the digitalisation. This will be done by looking at 5 different case studies in Amsterdam, with their building build between 1900 and 2015. The research will try to formulate a typical library inside a lyceum based on the functionality and other characteristics. The author found out that the libraries started off as mainly a place to store books and having a closed off character. This evolved to larger libraries that would be more open to the other parts of the school. Architecturally, the libraries were not very different from the rest of the school. Therefore, they always look like a function like any other inside a school, while they have different requirements.

CONTENTS

I. INTRODUCTION

In the secondary education level of the Netherlands, 60% of the students only read when it is required, and 50% of the people think reading is a waste of time.[1] This problem is also visible in the average reading level of the students, where the level has been dropping since 2012. This is mostly explained by the increasing digitalisation of the world, including the school libraries. And while the school library is not the only factor in the reading level of students, it has changed due to the increasing digitalisation. The contributions of a school library have already been researched, but not much is said about the design of the school library itself. Therefore, this research looks to the changes of the design of the school libraries in the secondary education level of the Netherlands. The research will focus on a specific school type: the lyceum. This school type originated around the 1900s and there are still schools of this type operating today, besides major shifts in the school education systems. Therefore, this school type is ideal to analyse the change in libraries. In this research, the following question is investigated:

How does a typical library inside a Lyceum in Amsterdam function between 1900 – 2015, and what are the typical characteristics?

To answer this question, archival research will be used to analyse and compare several case studies. The case studies are lyceums in Amsterdam, with the buildings originating between 1900 and 2015. In these case studies, the analysis will focus is on the original design of the school library. If the school is still operating today, the changes between the current library and the original library would also be investigated, providing an insight how the school library has evolved through time. Before the analysis of the case studies, literature research will be done on the functionality and architecture of the libraries to understand the functioning and reasoning behind the school libraries in the case studies.

1.1 Literature Review

To understand what qualifies as a well-designed school library, literature research will be done on this subject. This literature research will try to focus on the school library alone, but due to a lack of information in certain areas, research about ordinary public libraries will also be used. While there are differences between school libraries and general libraries, the literature could still provide important information to help with the archival research. Literature about the schools in general focusses more on the classrooms itself, with none focusing on the libraries inside the schools. This leads to the conclusion that there is a surprisingly lack of research about the design of school libraries. Therefore, this research tries to help fill in this gap.

The limited amount of research about the school libraries is about the working of the libraries itself. Researchers like Huysmans and Kleijnen (2013) have argued that school libraries contribute positively to the amount people reading and their view on it.[2] And while this kind of research is not the most influential for the library design, some research focusses on the development of libraries which helps understand the designs. Research by Das (2003) shows multiple reasons why

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1. Amber Dujardin, and Robin Goudsmit, "Hoe Krijgen We Scholieren Weer Aan Het Lezen, Al Is Het Maar Een Pizzafolder?" *Trouw*, December 13, 2019, https://www.trouw.nl/nieuws/hoe-krijgen-we-scholieren-weer-aan-het-lezen-al-is-het-maar-een-pizzafolder~b28362ca/

2. Frank Huysmans et al., "The Library at School: Effects on Reading Attitude and Reading Frequency." *Performance Measurement and Metrics* 14, no. 2 (2013): 153, https://doi.org/10.1108/pmm-05-2013-0013.

the introductions and development of school libraries was slow,[3] but sadly they do not go into detail about the possible design changes it underwent if any. One change that almost all literature describes is the change to multimedia libraries. This change is described with many aspects that are beneficial for the students, leading to many who argue in favour of these multimedia libraries. And while some also go into detail about the changes compared to a regular library, even here it is more about the functionality changes than the design itself.[4]

The relation with architecture is most often not mentioned in library research, while research proves that early on only architects were designing libraries.[5] This has of course changed with the time, where now a commission with the architect and library staff are responsible in the first stage of the design. If we look specifically into the architecture of school libraries, the information is lacking. But about public libraries there is more information to be found. One important piece of literature is the research from Ellsworth (1955), where he goes into depth on the different philosophies architects have used with designing libraries. This research is from the 1950s, depicting the view from that time on the design of the libraries which is useful for this thesis. But while this research is mostly about public libraries, they do mention some similarities with university libraries.[6] This literature could still provide some clarity into the relation between architecture and design. While this research provides insight to the design of libraries in that era, others claim that there is simply a lack of research about the history of library architecture and the information that is available is scattered throughout different forms and publications, making it hard to find.[7]

So overall there is a large amount of research about school libraries, but most of the research do not mention the design of the libraries itself. And if it does, the information is often limited. Therefore, this study will try to add to the knowledge about school libraries by combining the different knowledge of the different aspects of school libraries and apply it to historical examples. With this more should become clear of the role of architecture in school libraries in the Netherlands.

1.2 Thesis Structure

The thesis will start with the literature research. This research will be used to create a base for analysis of the archival research later. The main body of this thesis will focus on the archival research. The different sources mentioned above will be used to analyse the different case studies, so they could be compared to each other. The archival research will focus on 3 specific parts. The first part will focus on the location of the library. The second part will focus more on the functionality. The third part will focus on the development of the library through the years of operation. In the last part, the main aspects, characteristics, and functionality of the case study will be summarized, to form a base were the conclusion of this thesis will focus on. The archival information used in this thesis will be gathered from historical databases from the municipality, province, or nation, depending on the broadness of the subject.

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3. Lourense Das, "Bibliotheken in Het Voortgezet Onderwijs." *Informatie Professional 7*, no. 12 (2003): 26-28.

4. S. Auer, W. Jansen, and J. Zuylen. Rep. Mediatheken En Bibliotheken. Tilburg MesoConsult B.V., 1996.

5. Ralph E. Ellsworth, "Library Architecture and Buildings." *The Library Quarterly* 25, no. 1 (January 1955): 66.

6. Ellsworth, "Library Architecture," 68.

7. Donald E. Thompson, "A History of Library Architecture: A Bibliographical Essay." *The Journal of Library History* (1966-1972) 4, no. 2 (April 1969): 138.

For the research, a total of 5 case studies have been selected in Amsterdam. The selection was mainly based on the origin date of the building that houses the case studies. While this research focusses on buildings between 1900 and 2015, the focus has been put on buildings before the 1960s. These buildings would have the most changes compared to current school libraries and they would be designed without the current knowledge about school libraries. So, if there was any change that could have negatively influenced the reading skill in the Netherlands, these buildings would be the most likely to show a difference. Therefore, the first 3 case studies have been selected for this principle. These case studies are: The Amsterdams Lyceum (1920), The Berlage Lyceum (1951) and the Spinoza Lyceum (1957). Besides these case studies, two others have been selected that have been built after 2000, to see if the typical libraries of lyceums have changed. These lyceums are the CalandLyceum (2003).and the Cartesius Lyceum (2011).

II. DEVELOPMENT OF SCHOOL LIBRARIES

School libraries have a difficult relationship with the school itself on the topic of architecture. This is because libraries normally stand on their own with their own architectural styles and building philosophies, while here they must be integrated within another type of building. Therefore, they must be able to be integrated into the design of the building while otherwise still function as a library. Several aspects, like the architecture, experience and functioning of the library, are important to make it a successful library. And here they must be combined with the architectural motivations of the school itself.

2.1 Libraries and Architecture

It is almost impossible to know on what architectural trend the school library inside the case study was following. This is because at the time, there were not any trends. While libraries have been around for centuries, the additions to primary and secondary schools in the beginning of the 1900s was scarce.[8] This was mostly because their influence and benefits to learning was not known back then. During the 20th century, more and more schools started adding school libraries. But because it was relatively new to add them to the schools, it was not possible to follow a certain architectural trend in libraries. Therefore, most of the designs followed the trends of ordinary libraries.

The architecture of libraries in the beginning of the 20th century was going through a major shift. Before this time, libraries were designed by only the architect. This led to many problems when it came to the functioning of the library itself. Because there was barely communication with the staff that would run the library, they were required to make changes in the layout to make the library function normally. Ellsworth (1955) explains that it was mostly because architects wanted their library to be beautiful, and that would lead to a truthful and useful library. This was not the case for most libraries. Designing the libraries without paying attention to the functionality of the library seems like a weird idea now, but even in 1950 it was already a weird idea. Therefore, Ellsworth warns that it is impossible to project oneself back into the spirit of library planning in the beginning of the 1900s.[9] The way libraries would be designed started to change after 1900. From the 1930s the architect and the librarians would end up inside a committee, that would plan the predesign of the library. This coincided with the shift in trend in architecture, with the famous words form follows function. But for school libraries it would take longer before the designs would become more integrated. Bennet (1987) explains that there was not much interaction between the architects and administrators of the schools regarding philosophical and behaviour aspects of the design. While these aspects are important to a school library, most of the time it was skipped due to a hurried design process.[10]

The shift in the design process was not the only trend in library design that changed. The architectural shift with form followed function led to a sharp contrast with the old gothic libraries to form more box-shaped libraries with little ornamentation.[11] But the bigger trend was the idea of flexibility. A library should be able to be modular, where one space could store books from one moment, while at other times fulfil another function of a library. This was also the case for the general space a library should have, where there would always be some room to expand in should it be necessary. This modular trend combined with more studies about the functionality of libraries lead to more

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8. Das, "Bibliotheken in Het Voortgezet Onderwijs." 26.

9. Ellsworth, "Library Architecture." 67.

10. Jim Bennett, Rep. Trends in School Library Media Facilities, Furnishings, and Collections, 1987

11. Ellsworth, "Library Architecture." 67.

optimised library designs. During its implementation, the box shaped structure would start to make other forms to optimise these aspects.[12] Lastly, the increasing technology also led to changes inside the designs. While the introduction of the computer is a given, lighting also played a major role in these changes. New types of lighting invented in this period made it possible for libraries to be constructed without the necessity of a lightwell.[13] Other types of light also lead to different rooms with different lighting, giving people more variations in light that they want when they are reading.[14] This led to more possibilities with the design of libraries.

2.2 Usages and Experience

The design of the library is not only affected by the architecture and technological innovations. Another important part is the usage and experience the (school)library has to offer. And while it can vary from person to person, it is still an important aspect of the library. For school libraries, the most important group for the experience is of course the students. Skantze (1989) has studied how different ages react to the physical environment and architecture inside school buildings. She noticed that older students in the secondary education level think more consciously about details and forms of the rooms and are then able to conceive and interpret the physical environment more than people from a younger age.[15] This means that the experience of a school library in the secondary education level would be judged and experienced the same as adult library users would do.

The school libraries inside schools are experienced and used differently than the rest of the school. Limberg and Alexandersson (2003) have shown that students see the library as a quiet place, a place of discovery. This is in sharp contrast to the classrooms, which are experienced as monotone.[16] The library should therefore be a place that promotes these feelings since they are important to the students. The library could be a space where people could escape from the regular, structured classes. This is one of the reasons why study places are important to offer inside the library. This can offer students a quiet and motivating place where they could study and learn. The library should therefore be more than just a warehouse of books, but a place of freedom and study.

2.3 Development in Time

Since the introduction of the school library there have been a lot of changes. Nowadays, most libraries are multimedia centres which besides books also host a series of computers. On some places, the computers get more space than the books itself. But even then there are still aspects that remained the same, so what is expected today of a school library? The school library is beginning to take a bigger role inside the education programs, and government programs are trying to increase this role to battle the current decline in reading levels. Therefore, the library should reflect this position. The library should be on a central location inside the building and should be recognisable as a school library.[17] The Library also needs to be flexible, a trend that has remained since the inception of this idea in the 1930s.

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12. Thompson, "History of Library Architecture," 137.

13. Ellsworth, "Library Architecture and Buildings." 73.

14. Bennett, Rep. Trends in School Library Media Facilities

15. Ann Skantze, "Vad Betyder Skolhuset?: Skolans Fysiska miljö Ur Elevernas Perspektiv Studerad i Relation till Barns Och Ungdomars Utvecklingsuppgifter = What Is the Significance of the School Building: the Physical Environment of the School Seen from a Pupil Perspective and Studied in Relation to Their Developmental Tasks." (Thesis, Stockholm University, 1989.).

16. Louise Limberg, and Mikael Alexandersson. "The School Library as a Space for Learning." *School Libraries Worldwide* 9, no. 1 (2003) 11.

17. Auer, Jansen, and Zuylen, "Rep. Mediatheken En Bibliotheken."

Another important part assumed to be of importance in the school library is the computer. Its inception and introduction to the libraries have changed many libraries to multimedia libraries. Most modern schools build today include computers inside their libraries, so one could assume they would be required for a school library. But research by Limberg and Alexandersson (2003) shows a mixed picture. While they show that 70% of the students found that the computers inside the library were important to information seeking, they would use the computers also outside the library for the same purpose.[18] It was never the reason why people visit the library when there would be alternative places with computers. This implies that the libraries do not necessarily need to have computers, only if there are alternative places where they are. But even if the library does not have computers, it is still a place that is more than just a book warehouse. The importance of the library as a study place has only grown, and computers can still help by studying.

2.4 School Libraries in the Netherlands

While the research shown above is mostly about international trends, the information is also applicable to the situation in the Netherlands. One thing that is different is the time when school libraries would be introduced. Research by Das (2003) describes a timeline from when the school library would be introduced in the Netherlands. It started with the rapport Huizinga in 1968, that would argue in favour of a good functioning school library. Before this time, the inclusion of a school library and size of the library would depend on the school itself. While the rapport did have some effect, the main changes happened around 1975. This was because there was a lack of certified staff to work in the libraries, and in 1975 a new education track would be introduced. With more staff available and more research arguing in favour, it would still take more than a decade before it became the norm to have a school library.[19]

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18. Limberg, and Alexandersson, "Space for Learning," 09.

19. Das, "Bibliotheken in Het Voortgezet Onderwijs." 26-27.

III. CASE STUDY: HET AMSTERDAMS LYCEUM

The first of the case studies that will be investigated is the Amsterdams Lyceum. This school is in the south part of Amsterdam, located next to the ValeriusPlein. The project would be part of the municipality plan from Berlage, better known as Plan Zuid. This plan did not include the school in the first place but the designer of this plan, Berlage, ended up agreeing to the location because this school could add to the uniform façade that the blocks would create from the view of the Northern Amstelkanaal. The building would end up going through and it would be designed by Dutch architect H.A.J. Baanders in the style of the Amsterdamse School. The idea was to have the building up and running in 1917, but due to several complications, the building would only end up finishing in 1920. This did not stop the creation of the school, that would still be created in 1917 in a building nearby at the Lairessestraat.
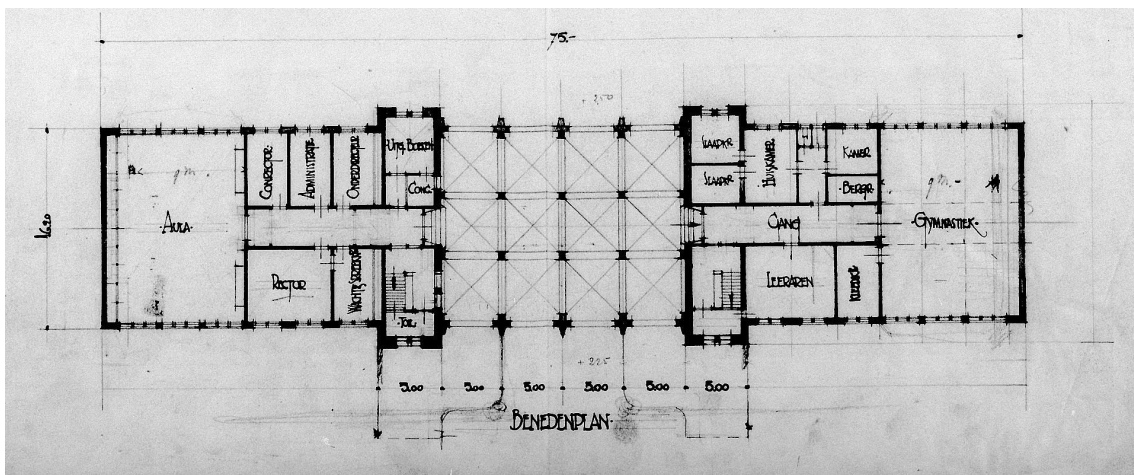

Figure 3.1 - Original Ground Floor, Amsterdam Lyceum. (Source: Stadsarchief Amsterdam, Archictectenbureau Baanders, 1916-1921)

The first design of the building tells already much about the story of the school library in this building. Seen in figure 3.1 is the original sketch design of the ground floor of the building. The building would have a rectangular shape, divided in 3 equal parts. The ground floor of the building would have a passageway in the middle that would act as the entrance to the main building. But the most important thing that can be taken out of this plan is the lack of a Library. And while this sounds strange today, it was normal for this period that most schools did not had a library, as explained in the first chapter. But the situation changed with revisions of the design, seen in figure 3.2 and 3.3. In the revisions, that could have been part of the reason of the delay in construction, several changes are visible. In the first revision a library has been added to the ground floor, situated in the east side of the school. This would end up going through in the final design, but sadly only half the original size.
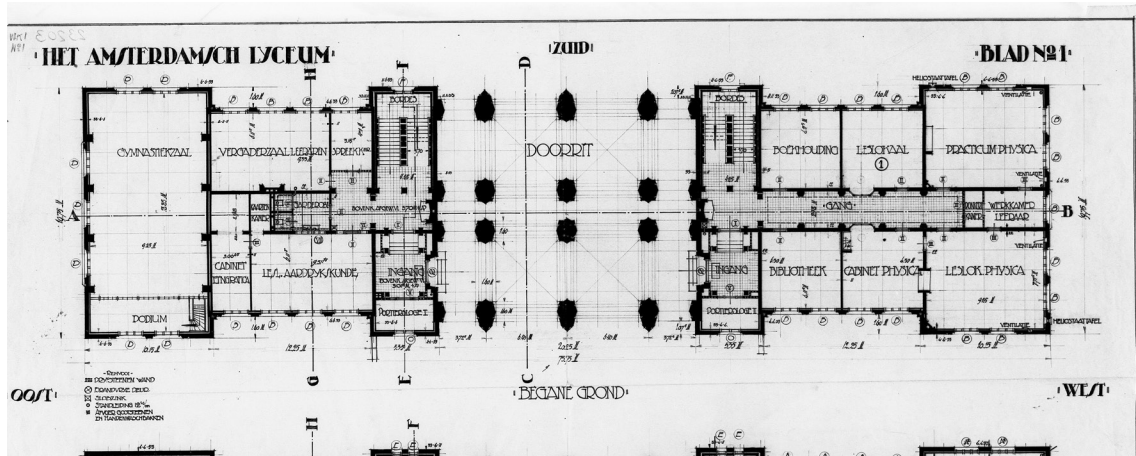
Figure 3.2 - Revision of the Ground Floor Amsterdam Lyceum. (Source: Stadsarchief Amsterdam, Archictectenbureau Baanders, 1918)
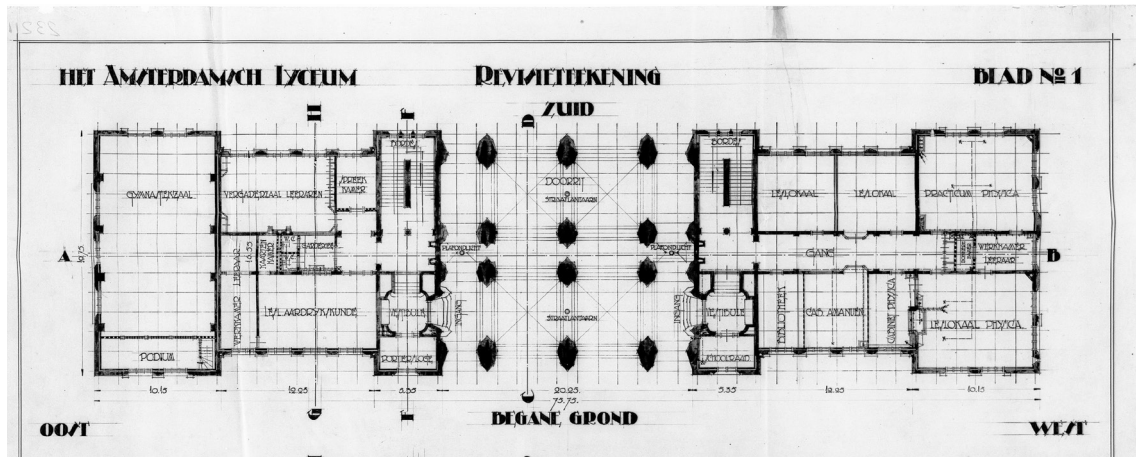

Figure 3.3 - Second Revision of the Amsterdam Lyceum. (Source: Stadsarchief Amsterdam, Archictectenbureau Baanders, 1918-1920)

3.1 The Library Itself.

As seen in figure 3.3 the library is in a small room on the ground floor, at the east wing of the building. The room is approximately around 3.5 x 6 meters wide, with a floorspace of about 21 m^2. This is not much room for a library nowadays, but the inclusion of one is already more than normal for a school build in the 1920s. So how did this library function?

This question is sadly almost impossible to answer. There is a limited number of students that have shared their experience of the school at the beginning, and none of them mention the library. This could be explained in several ways. First it could be that the library was not allowed for students. The library could have been only for the teachers itself, something that was not irregular for the time. But this idea is quickly eliminated when historical pictures are viewed. In some pictures, like the one in figure 3.4, the teachers' lounge is visible. The picture shows a bookcase on the background, which would be improbable when they would have their own library. The second explanation is that the library would not have made a big impact on the students. This is logical, since it was not known how beneficial school library would be in the education of students, so they would not have been stimulated to make use of the library.

Figure 3.4 - Interior Teachers-/meeting room. (Source: Stadsarchief Amsterdam; Eilers, Bernard F. 1920)

With the knowledge provided in chapter one, it is possible to see that this library is severely lacking. The library is in a rectangle room, located at the side of the building. Since there is a passage through the middle of the building, it is only accessible through the second floor from the other side which limits how good the library is connected. In plan the library is also in the same shape as other rooms, so it is not as recognisable as it should have been.

Lastly the architecture of the library is also a short story. The current design trend was still that architects mainly designed the library alone. And while many architects saw the library as maybe one of the most grandiose rooms inside the building,[20] this was not the case for this building since it was not included in the first designs. As for the aesthetics of the final design, it is sadly impossible to know since historic pictures of the library are not available. But the other rooms that have been photographed, it is possible to see that these rooms are not different aesthetically from each other. And since the library was not included in the first design and is in a small room to the side, it is possible to state that this library would not have been aesthetically different from the rest of the buildings.

3.2 Development of Library
The building that hosts the Amsterdam lyceum has gone through several changes in the long lifespan of the school. One of those is relocation of the library. But while it is known that the library has changed, it is impossible to know when. Documents from 2000 shows the start of a large inside renovation of the building. These drawings, shown in figure 3.5, show the library on another location. The library has taken the place of the old Science room above the passage on the first floor. This room is more centrally located, with a better connection to both sides of the building due to it being in the middle. But while it could be possible that the library moved in the year 2000, it would have been illogical. This is because the following years a proper addition to the school would be constructed where the library would get a new place in an extension wing at the northwest side of the building.

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20. Ellsworth, "Library Architecture," 66.

Figure 3.5 - Possible new location of library, Amsterdam Lyceum (Source: Bouwarchief Amsterdam Zuid, 2000)

To conclude, the library inside the Amsterdam lyceum tells the story of school libraries. The different plans at the beginning shows that there was not any certainty about the inclusion of a library in the first place, and how big such a library should be. And with the time the building would move the library to more favourable locations which shows the increasing importance of the library to education. But if we look at it architecturally, the library never had its place until the most recent renovation, because the library had to adapt to the space that was still available. It never got a room designed for the purpose of a library. This meant that it had to adapt to the existing plan, rather than the room following the function of the library.

Figure 3.6 - Change of route and location of the library inside the Amsterdam lyceum.

IV. CASE STUDY: BERLAGE LYCEUM

The second case study is the Berlage lyceum. The Berlage Lyceum is located at the Pieter Lodewijk Takstraat, but compared to the Amsterdams Lyceum it has a very complicated start and history. The buildings where the Berlage Lyceum is in today was originally build in 1921-1924, where they had built two identical mirrored buildings. One of them would host the Eerste HBS (First Higher Civic School) and the other would host the Tweede Openbare Handelschool (Second Public Trade School). This last school would transform to the 2nd HBS later. In 1943 the 4th HBS took the place of the 1st HBS. The next major shift happened in 1951, where a school swap happened between the 4th HBS located at the Takstraat and the new Spinoza Lyceum at the Roelof Hartplein. This was only for 6 years, were after the 4th HBS would return to the building at the Takstraat. After this both schools were reformed to the Comeniuslyceum. This name would be changed later in 1967 when the Comeniuslyceum would merge with the P.C. Hoofdlyceum. The school would get the name it holds today; the Berlage Lyceum.

4.1 The Library

While the schools inside the building may have changed, the building itself existed since the beginning in 1922. The library inside this building is located at the top floor in the centre of the building, as seen in figure 4.1. And since the other building is a mirror variant, it also has the library in the middle on the top floor. The library has a space of 15 x 4.65 meter, leading to an area of around 70 m². And since this was designed in the early 1920's this is a relatively large library for a school of that period. When the two buildings would combine to one school, it is not known if there were any alterations to the plan. Since it is never mentioned anywhere and that the historical archive has no files from this year, it can be assumed that both buildings kept the libraries on the location. The removal of one would lead to a great inconvenience of the students in the other building.

The library has a more central location compared to the library of the Amsterdam Lyceum. The weaker areas like size and location are not applicable here since the library is so centrally located. The only way it could have been more central is if it would switch with the director's office on the floor
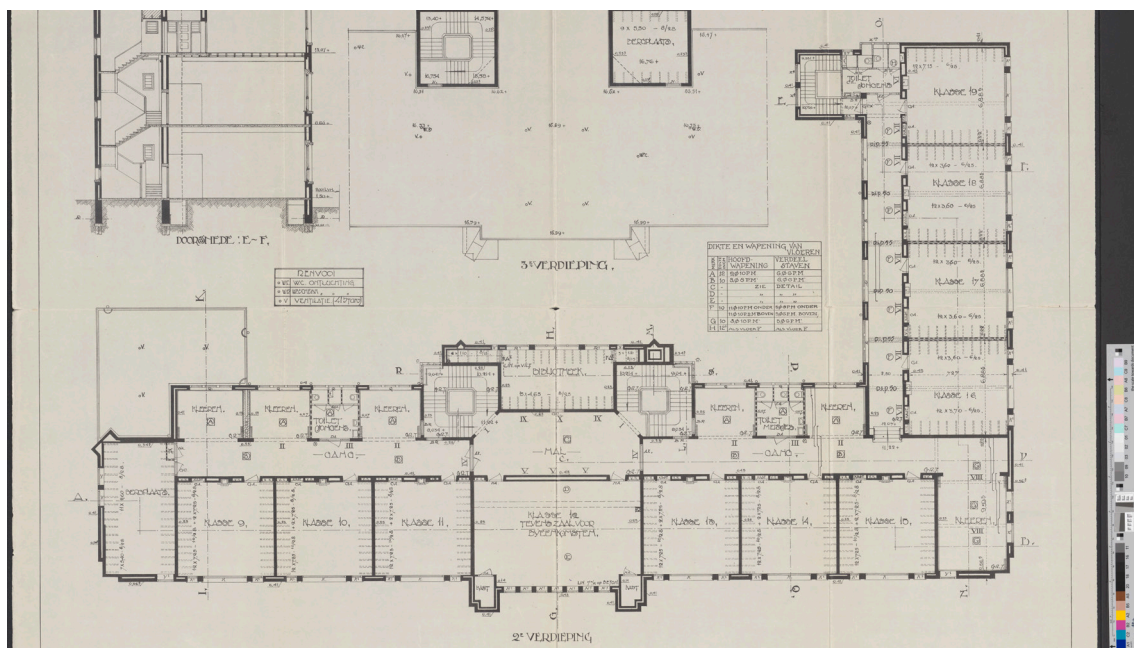

Figure 4.1 - Ground Floor plan - The Berlage Lyceum. (Source: Bouwarchief Amsterdam Zuid; Dienst Der Publieke Werken, 1923)

below, since then the building would also be in the middle of the floors. But with the double stairs on both sides that act as the main connection between floors, this little extra distance is neglectable. With the location on the highest floor also implies that there would be more light, something that the Amsterdam Lyceum is missing.

As for recognisability, it is difficult question to answer since there are no photographs of the library in the archives. But there is much to learn from the plan visible in figure 4.1. The wall bordering the main hall and the library is a load-bearing wall, meaning it is more difficult to have windows inside this wall. There is only a single door in the middle leading to the library, so it is not as open to as nowadays is seen as normal. But the door that is there is not the same as the other doors found on all the other locations, so there is still some uniqueness to this library.

4.2 Planned Renovation

Just like the Amsterdams Lyceum, there is not much information about the development through the years. But like most other old schools, a renovation of the building is planned to take place in 2021-2022, where the whole inside of the school will be redone. With this renovation there will be several new study places, that would help share this function of the library. This would suggest that both libraries are not enough for a modern school, which is expected with the addition of computers to libraries. Still, the library was a good library for the time It was designed. It can be taken as a good example how a library that time should have looked. For this research, there must be made a sidenote in this building. While it was used by the lyceum, it was originally designed for a HBS school. So, this must be considered when comparing this with other school libraries in lyceums.

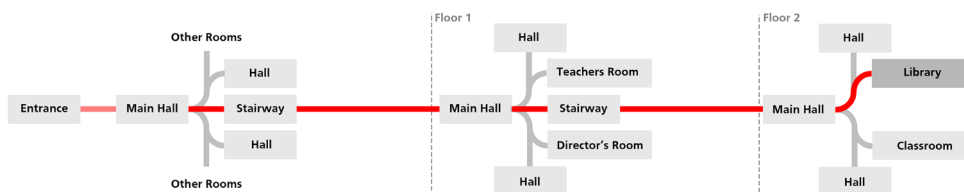Figure 4.2 - New studyplace for 2022 for the Berlage Lyceum. (Source: Atelier PRO, 2020)

Figure 4.3 - Route and location of the library inside the Berlage lyceum

As seen with the creation of the Berlage Lyceum, the story of the Spinoza Lyceum originated from a different location than the building the school would end up in. The story of the creation is also more complicated since it is unclear when the school was created. Some sites claim that it was created in 1898, making it one of the earliest in the Netherlands, but these sites have untrustworthy sources or none at al. Other sources state that the school was created out of the 4th HBS. What is certain is that it existed around the 1948. At that time, the school was situated in two other buildings, one at a building in the Ruysdaelstraat and some classrooms in the school at the Roelof Hartplein. But in 1951 it was decided that the school would get its own building at the Peter van Anrooystraat, designed by the Dienst der Publieke werken, with the architects at the time Jan Leupen and F.H. Gerretsen. But due to a build stop, the school had to swap buildings with the still existing 4th HBS at the Pieter Lodewijk Takstraat. Only in 1957 when the new building was done would the school move to the new building.

5.1 The Building and the Libraries

The new building consists of a main building block, that is connected via a long rectangular block to another building that houses the gym. The connecting rectangle is the part of the building that would act as the main façade and the part that would host the library function of the building. As seen in figure 5.1, the school has a unique situation with the school libraries inside the plan. Rather than having one library, the school has a total of 9 libraries. These libraries are situated between two classrooms, with doors connecting to them from these rooms and one door connecting with the hallway. This is a situation that is not found anywhere else. While there are school types that have storage spaces between classrooms, it is almost never seen that a library takes this spot. And the number of libraries is also conflicting with the general trend of school libraries, where it was not standard that a school included a library in the Netherlands. Each library is around 22.5 m^2, which would lead to a total amount of around 200 m^2. And while this is a very large amount for that time, it is not as crazy nowadays. Some modern libraries use rooms as big as 300 m^2 for a school library.
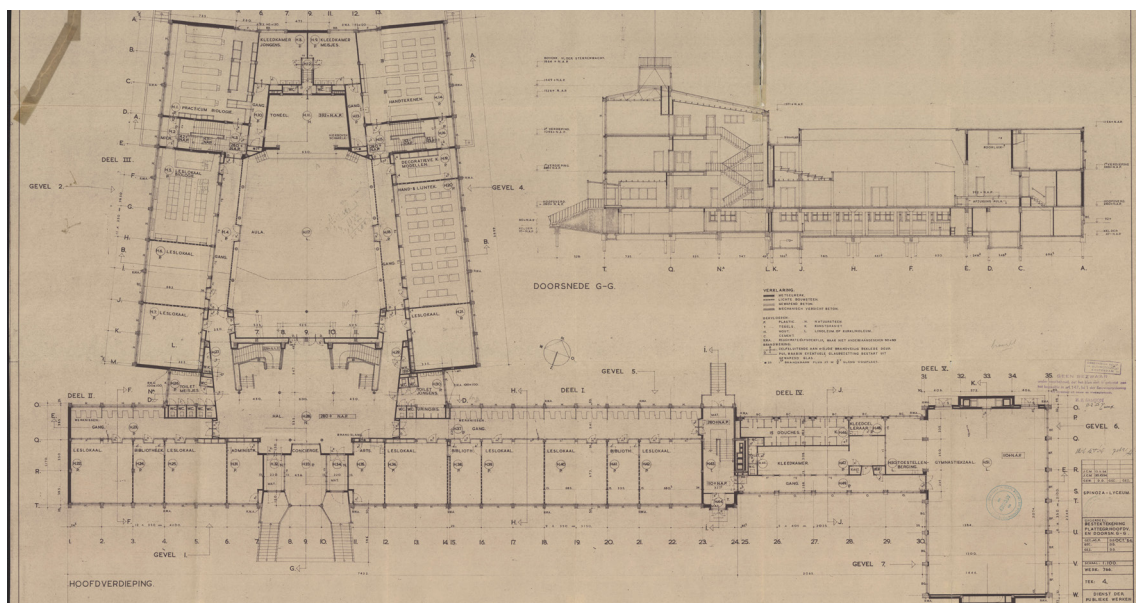

Figure 5.1 - Main Floor Spinoza Lyceum. (Source: Bouwarchief Amsterdam Zuid, Dienst Der Publike Werken, 1954)

The multiple libraries in the school could be explained by the type of education the Spinoza Lyceum offers. The Spinoza Lyceum is a Dalton school, which means that learning would take place in groups and where learning to work together and planning would take a central position. The students would also get a Dalton hour, were they could choose which subject would be followed in that hour. This focus on working together and learning independently from teachers could be the reason why the school has multiple libraries. The Library would then function as a place where the students could study themselves or with their group. If this is the case, it would mean that this school was revolutionary for its time. Current libraries, like explained in the first chapter, are often more than a storage space for books. They are now more seen as an important study place. But then the question is; if they were study places, why would they be labelled as libraries? This can be answered by looking at the library itself. In most libraries, a certain atmosphere is created in the room. This atmosphere, often described as quietness, peace and friendliness is an important aspect of why a study space inside the library functions well.[21] It could be that the Spinoza Lyceum wanted to create these kinds of atmospheres for the students to self-study in. This, combined with other workspaces in the hall, would confirm completely with the ideas of the Dalton School. While this sounds logical, it is never stated in the design drawings that this was the case.

While it is a speculation that the multiple libraries were done because of the educational style, it is confirmed that the building was specifically designed with the Dalton school in mind. In the building there are intentionally more workspaces for students than normal, but there are conflicting reports if this was the choice of the architect[22] or the directors of the school.[23] Most sources state the working places in the hallway, as seen in figure 5.2, as the main addition with this philosophy. None of the sources state the number of libraries in the building as being a part of this. But then again, they do not mention the libraries at all. These libraries could have been one of the first examples where the quality of the library space was used in a school, instead of a storage space for books. But the lack of sources, pictures, or research this means that this will remain a hypothesis.

Figure 5.2 - Working spaces inside the Spinoza Lyceum. (Source: Stadsarchief Amsterdam, Dienst der Publieke Werken, n.D.)

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21. Limberg, and Alexandersson, "Space for Learning," 11.

22. 020Apps. "SpinozaLyceum, Peter van Anrooystraat." Wederopbouw Amsterdam.

23. "SpinozaLyceum." Monumenten.nl, November 5, 2020.

From all the studied sources, there is only one that mentions the existence of these rooms. In a newspaper from the Algemeen Handelsblad in 1955 the writer states that between the two classrooms, there would be an extra workspace of about half a class. This was because of the Dalton education, where the students could have an hour where they could choose which subject they would follow. This could mean that a single classroom would not have enough space sometimes. Therefore, the extra workspace between the classes could be used as extension in busy periods.[24] This would confirm that the spaces in between were in fact workspaces, but it raises the question again why they would be labelled as a library in the plan.

5.2 Piet Mondriaanstraat 140

While it is stated that the building has been designed specifically for the Dalton style of education, it becomes a complicated story when a school at the Piet Mondriaanstraat 140 is viewed. This building, which hosted at the time of opening the Cartesius Lyceum, was built around 1957 and has the exact same layout as the Spinoza Lyceum as seen in figure 5.1 and figure 5.3. And while the Spinoza Lyceum is a Dalton School, the Cartesius Lyceum was not, so it did not require extra study space. So, why would a school copy this design philosophy if they did not require it? The answer to this question is that they probably did not had a choice in the matter. These two schools are similar in plan because it is the exact same plan that is used to build this school. The creation of this school was in a period where budget cuts would take place in the Public works department of Amsterdam.[25] This budget cut of more than 35 million could explain why they decided to reuse the plans of their most recent designed school. But at the time of this announcement, the school is already in construction. So, before the budget cut it was already announced that they would reuse the same plans.[26] . The most likely reason why is that they already knew that they could not afford to design a new school. Therefore, the Cartesius lyceum had to use this layout. And while the Cartesius lyceum would end up merging with other schools and in the end stop existing, the building would keep the same. Even after a renovation of the inside round the 1995s, the spaces would remain. But due to lack of pictures and information, it is also unknown how these spaces looked and functioned.
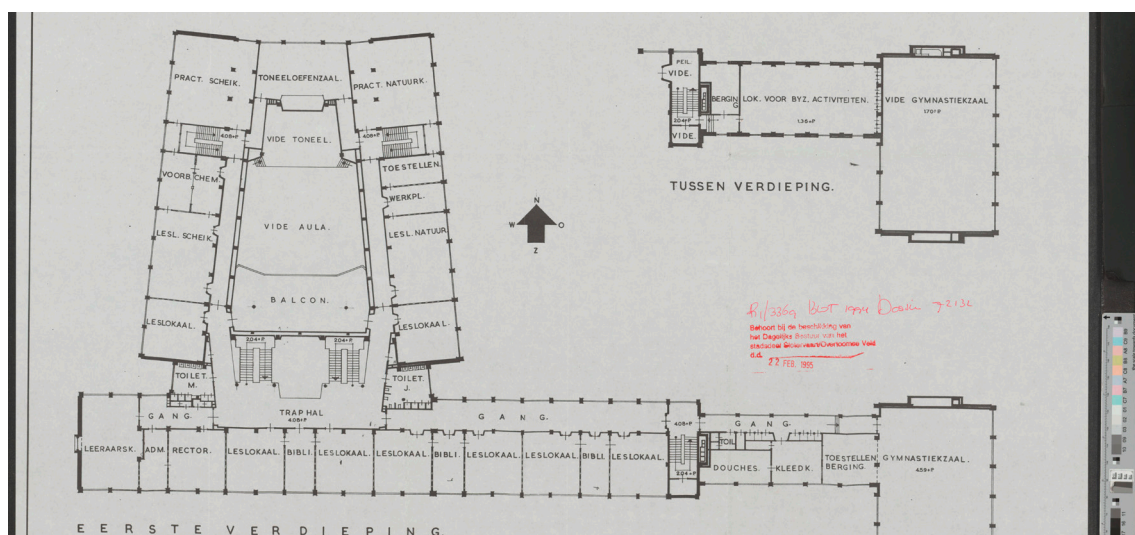

Figure 5.3 - First Floor Cartesiuslyceum. (Source: Bouwarchief Amsterdam Nieuw-West, 1995)

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24. "Nieuw Gebouw Voor Spinoza Lyceum". *Algemeen Handelsblad*. 1955

25. "Toenemende Opschorting van Openbare Werken". *De Volkskrant*. 1957

26. "Nieuw Gebouw voor Cartesius-Lyceum." *Algemeen Handelsblad*. 1957

5.3 Development of the Library

The building of the Spinoza lyceum would remain the same until a major renovation between 2009-2011. In these new plans, an extension to the building would be added on the location of the old outside soccer field. This building would host several new classrooms and the new gymnastics halls. This would mean that a new multimedia library would take the place of the old gymnastic hall on the first floor with a total space of $235m^2$. The old locations would be repurposed into meeting rooms, study rooms or merged with an adjacent space. This hints to the fact that the rooms were already used as a space to meet or study.

Overall, the libraries inside the Spinoza lyceum are an interesting case, since it is unusual that a school has more than one library. But it can be explained looking at the way the school's education. While it is not certain that the space would function as a working space, it is at least an example of a school experimenting with the idea of working places and libraries. It is also curious to see that the same principle was used in another school but with a different type of education, and that it lasted just as long as the original building did.
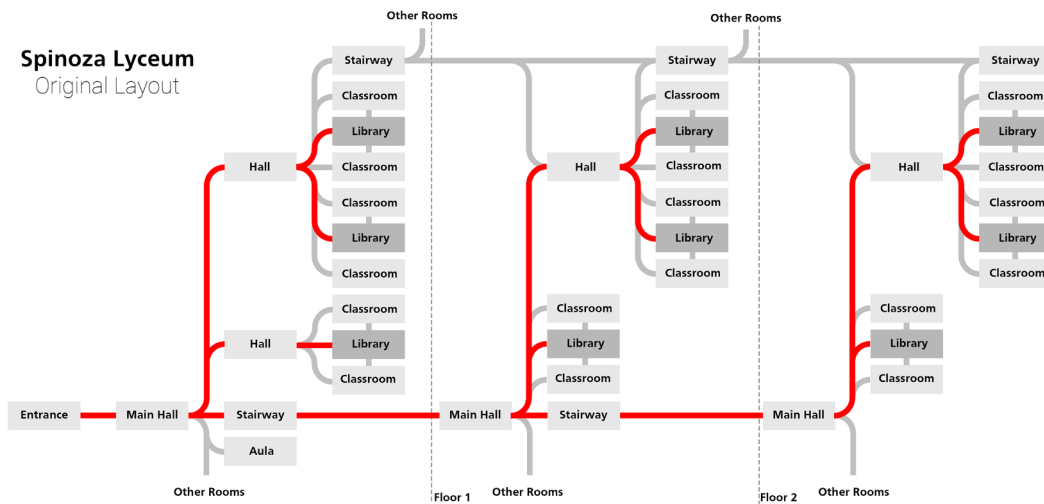

Figure 5.4 - Route and location of the library inside the original layout of the Spinoza Lyceum
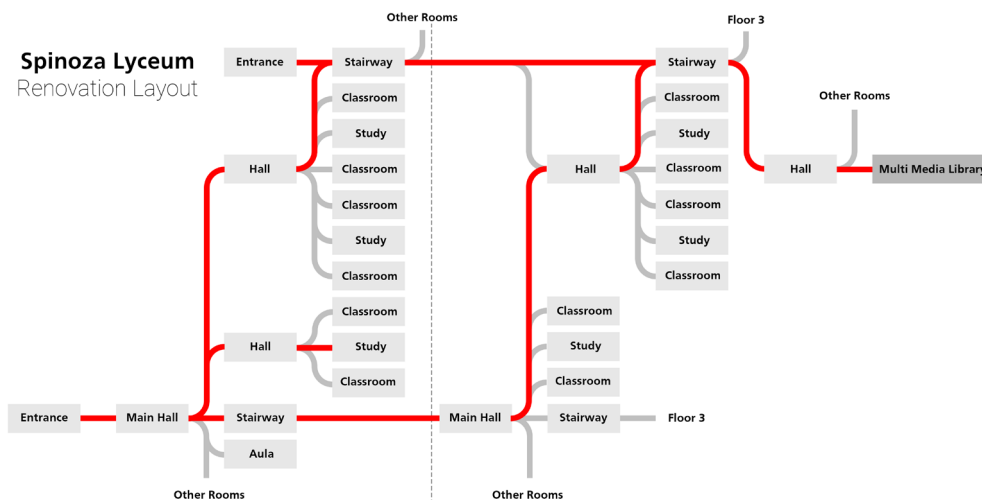

Figure 5.5 - Route and location of the library after the Renovation

VI. CASE STUDIES: MODERN LYCEUMS

While the earlier case studies have all been focussed on school buildings originating in the beginnings of the 20th century, this chapter will focus on more recent buildings, originating from 2003 and 2011. These buildings have been designed after more was known about the importance of school libraries.

6.1 CalandLyceum

The first modern school building to be analysed the CalandLyceum. While this school originated from a HBS around 1916, the school would have problems with a lack of space inside their building leading to them moving to several emergency buildings in the district Osdorp. Therefore, the school got the name the Osdorper Schoolgemeenschap. Only in 1976 it would get the funding to build the new building, with the plan visible in figure 6.1 and 6.2 This building would be one of the most modern school complexes in the Netherlands, but it did not last long. In the 90s the school would change name to CalandLyceum, and with this name they would move to another new building in 2003/2004.
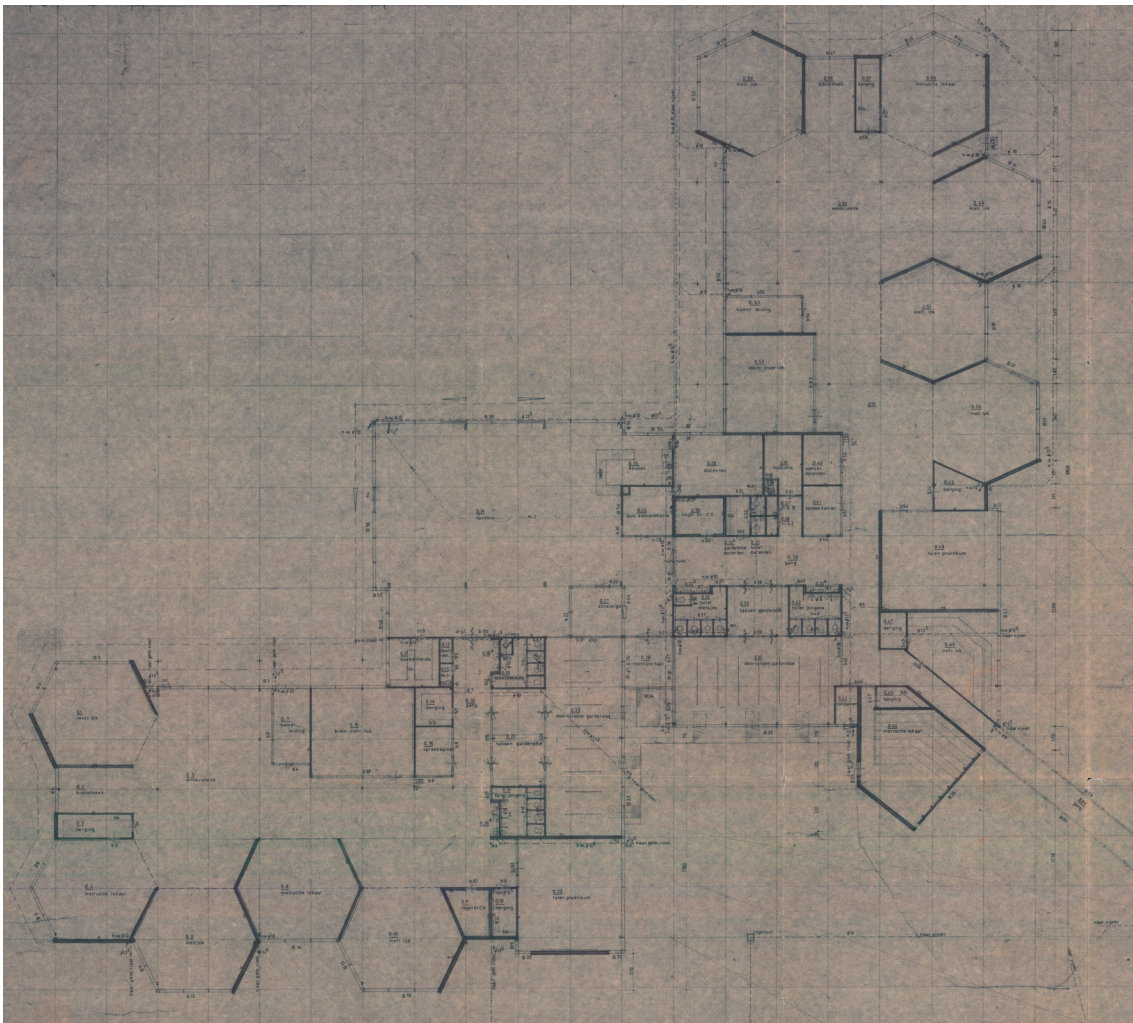

Figure 6.1 - Floor plan Building 1. (Source: Bouwarchief Amsterdam Nieuw-West, J.B. Ingwensen Architect B.N.A., 1974)
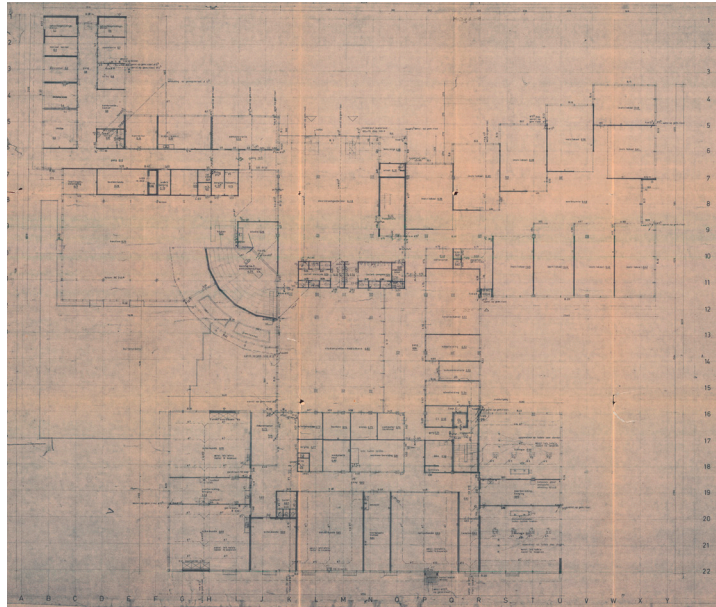
Figure 6.2 - Floor plan Building 2. (Source: Bouwarchief Amsterdam Nieuw-West, J.B. Ingwensen Architect B.N.A., 1974)

In both versions of the CalandLyceum, the school would have a different library philosophy than usual. As shown in figure 6.1 and 6.2, the complex used to exist out of multiple buildings, separating the school in a so called beginschool (building 1) and an eindschool (building 2; translates to end school). Class 1 through 3 would use the beginschool, while 4th class and higher would use the eindschool. Both buildings had unusual libraries. Building 1 had two, with one open library on either side of the school. Building 2 had a place for the library staff and a place for the books, but the plans do not indicate a library space itself. But it can be assumed that the function of library would be carried by these two spaces. The newer building is more interesting to investigate, since it was built with for a lyceum, seen in figure 6.3 and 6.4, and it shows us a more similar idea as the Spinoza lyceum.

Figure 6.3 shows the first floor of the new building, where the library is located near the left diagonal in the building. The room is classified as library and study space, implying that like most modern libraries it also focuses on being a study place. But the school has several other workspaces for students, one function that could be seen similar as a study space. Therefore, the philosophy behind the building can be compared to the Spinoza Lyceum, where there were multiple libraries hypothetically functioning as study places. But instead of being between the classrooms, these spaces are in the gaps between diagonal walls and straight walls that could not function as classroom.

The building becomes even more interesting when looking at the 4th floor, seen in Figure 6.4. Here there is also a multimedia library located, which means that the building has multiple libraries as well. The first idea is that this library could be the space that handles the digital side of a modern library, with mainly focusing on computers. The other library could therefore be more focussed on creating the ideal study space. In the research of Limberg and Alexandersson (2003) they argue that the computer can be separated from the libraries, only if there are other places where students can use them.[27] This school could be trying to get the most out of both situations, with literally having

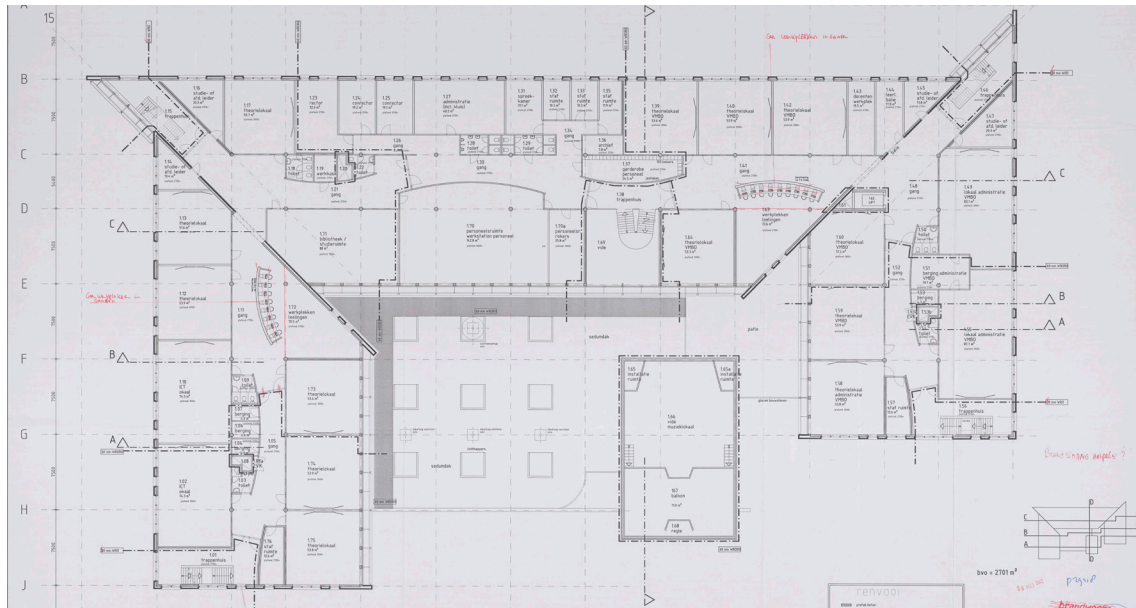27. Limberg, and Alexandersson, "Space for Learning," 10-14.

Figure 6.3 - New First Floor Cartesius Lyceum. (Source: Bouwarchief Amsterdam Nieuw-West, Architektenburo A.A. Bos en Partners B.V., 2002)
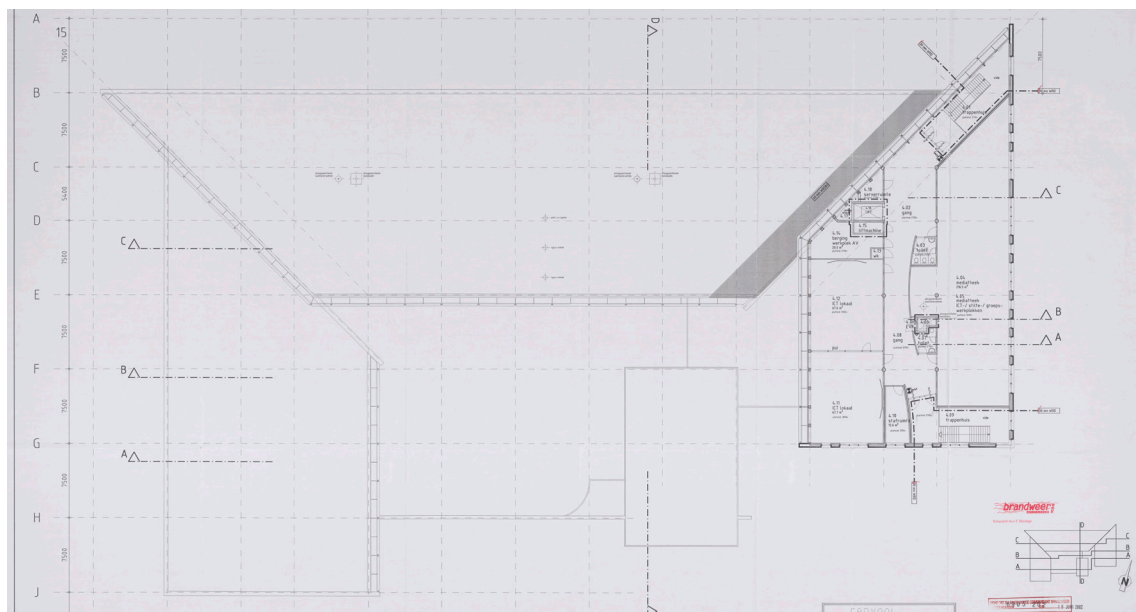

Figure 6.4 - New 4th Floor Cartesius Lyceum. (Source: Bouwarchief Amsterdam Nieuw-West, Architektenburo A.A. Bos en Partners B.V., 2002)

both situations separate. But then it leads to the curious case of the ICT room that is located next to the Multimedia library, which means that this is not the only place with computers. It could also be that there is still a division between the first 3 classes and the others, just like in the old building they had. But since the building is connected, it would raise the question if that was the optimal solution.

The answer here might again be explained by the education style of the school. While the school started as a normal building inside this building, in 2020 the school would transform to a Dalton school. This process had already started with some of the classes, but in 2020 the whole school would use this system. This education system could explain why they chose to build the school like this. However, the shift to this system happened more than 10 years after completion of the build, leading to the question if this was really planned from the beginning or not.

6.2 Cartesius Lyceum

While the Cartesius Lyceum started at the Piet Mondriaanstraat 140, it is nowadays in a different building. The Cartesius lyceum would use that building until 1989, when it merged with another school to create the Mondriaan Lyceum. This lasted until 1995, when a fusion with four other schools would lead to the end of a Lyceum inside that building. But the name Cartesius Lyceum would move on. In the 2011 this new school would move into the old building on the Frederik Hendrikplatsoen 7 in Amsterdam. The new plan for this building is visible in figure 6.5. With the increasing awareness of the benefits of school libraries it is curious is that even while it is a smaller school there is not a library inside the building. This is especially curious for the period when it was constructed in since the importance of libraries was already known. And while only the name is similar to the original school, it is curious how the school went from having multiple libraries inside their building to none. But while a library is missing, they do have multiple study places. So, it could be seen as an ultimate test of the theory from Limberg and Alexandersson (2003), who argued that the study places inside the library are becoming more important.[28] And what would happen if you would remove the library entirely, and just keep the study spaces?

The school did end up adding a multimedia centre inside the building. In 2019 one of the study spaces was extended and remodelled as a multimedia centre. But even here the space is mostly used as a study place, as seen in figure 6.6 This new library is a good example of a modern library,
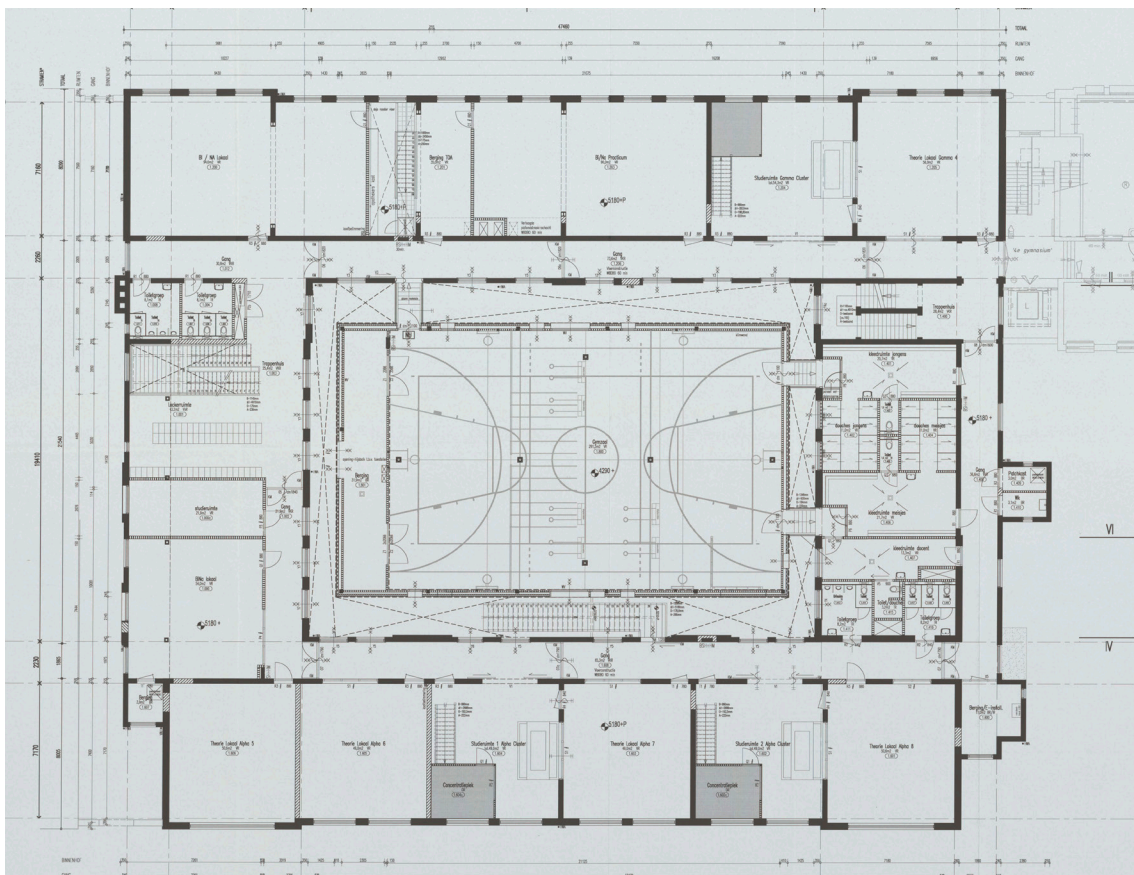

Figure 6.5 - First Floor of the new Cartesiuslyceum. (Source: Bouwarchief Amsterdam West, MAX Architectuur, 2009)

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28. Limberg, and Alexandersson, "Space for Learning," 09.

where the place is more than just a space to store books. But with this renovation it could be stated that a study place alone is not enough since the addition of a multimedia library here proofs that they still needed it. As for the place itself, since it takes over the place of a study room, it is not as centrally located as it would optimally be. But the different door designs and openings makes the library stand out from the rest of the classrooms, which helps with the recognisability of the library. .

Figure 6.6 - New mediacentre for the Cartesius Lyceum. (Source: BuroBEB, 2017-2018)

6.3 Conclusions

Overall, it can be said that the modern school libraries inside lyceums are developing to be more of a study space compared to a warehouse of books. This follows the trend of what research think a school library should have. It is therefore curious is that there are still schools being built without school libraries, implying that the importance of a library inside a school for better education is not general knowledge for every school.
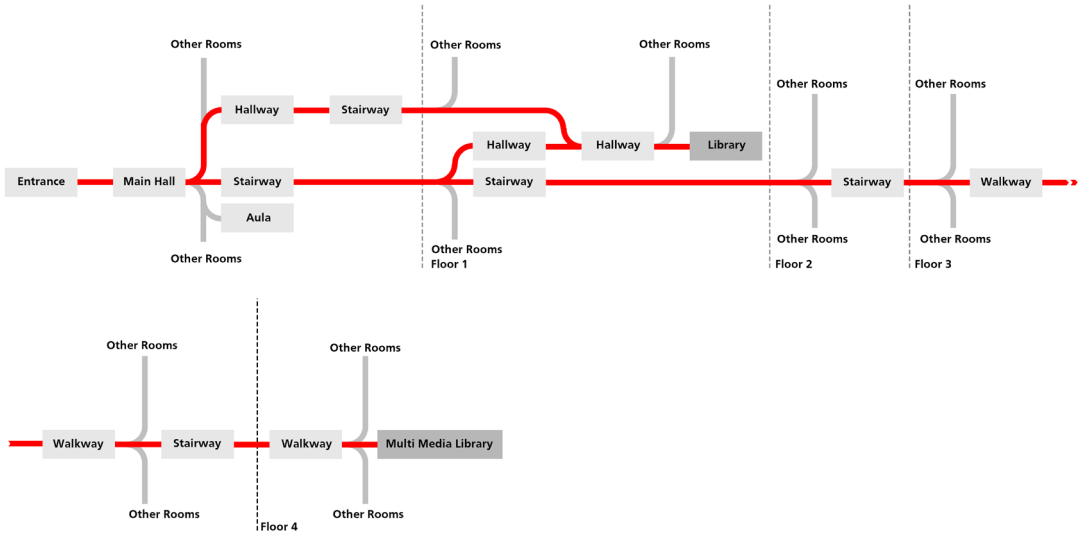
CalandLyceum
Original Layout

Figure 6.7 - Route and location of the library inside the Calandlyceum
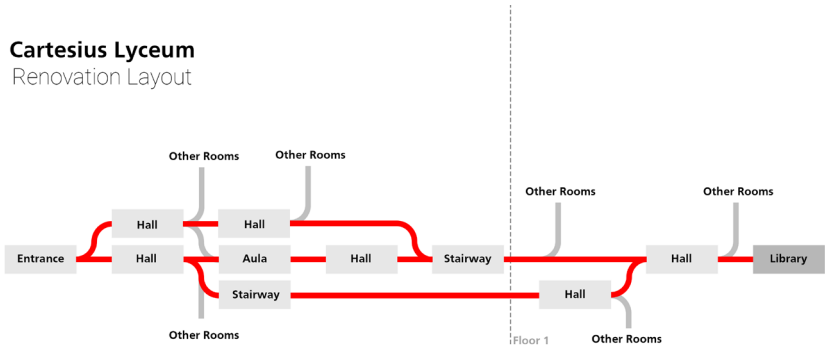
Cartesius Lyceum
Renovation Layout

Figure 6.8 - Route and location of the library inside the Cartesius lyceum

Overall, the different case studies show entirely different scenarios on how school libraries are integrated in the schools. In the Amsterdams Lyceum we see that the library was a late addition and that they did not know how big it should be, or if it should be removed after all. It was not a typical library architecture, with it just being a normal room inside the school. But with the start in 1920 it was already a unique situation that the library was included. And that is the main thing that can be learned from all the case studies; that while it was uncommon to have a library, they all included one.

At the start of the investigation, the school libraries would be studied on several aspects. The first aspect was the architecture. While this was proven difficult, it can be said that the school libraries are not a unique element inside the building. While architects in the past saw libraries as an excuse to make a grandiose room, this is not reflected inside the school libraries. All the libraries from the case studies are normal rooms inside a school. The older schools have smaller libraries while the newer ones have bigger school libraries. It could be said that architects are not focussing on this room in schools. They see it more as a function inside the school like the other functions, instead of a function on its own. While this is exactly the opposite to the main philosophy of libraries before 1900 it can be seen as good, since the functionality is the most important part of the library.

The functionality of the libraries is quite different between the case studies. The Amsterdams Lyceum for example has the library in just a room to the side, implying that the function was not as important than libraries nowadays. While other lyceums, like Spinoza and the new CalandLyceum use the library mainly for the type of room they provide, where the study spaces might be more important than the books itself. And there are libraries in between these two, seen in the Berlage Lyceum and the Cartesius Lyceum. In the Berlage Lyceum the room is not pushed to the side, but centrally located inside the building. But here the library is still closed off from the hallway, not inviting students inside. The Cartesius Lyceum is the opposite, with the multimedia library located to the side, but actively trying to get students inside by wide open doors and different style entrances.

The research question that was asked at the beginning of this research was:

How does a typical library inside a Lyceum in Amsterdam function between 1900 – 2010, and what are the typical characteristics?

A typical library inside a lyceum is still hard to define exactly, but it can be said that a lyceum would have a library in the first place. In the early period most of the libraries would not take focus inside the building, either pushed to the side of the building or having a closed off character. The library would here focus mainly as a storage space for books. As time went on, the study space itself would become more important, reflected in the size and openness of newer school libraries. Some schools would even introduce multiple libraries for more study spaces. As for architecture, the libraries would not stand out, and is most of the time just a room inside the building. In recent years, more libraries would get attention in the relation of the design of the library and the functionality of the library. But even then, the room is never executed as a centrepiece in a school like the architects before 1900 would have done it.

VIII. DISCUSSION

This research was started with the idea of researching old school libraries to learn what has been done differently today which could have tributed to the decrease of the reading skills of students. What can be said after this research, is that it cannot be the cause of the decrease. Libraries have evolved drastically since the first inceptions. The role of the libraries has become more important, and this has been reflected in the buildings. So, while there are many changes, they all provide more benefits to the library than negatives, so it can be assumed that it is barely a factor in the decline in the last decade. But what can be said is that some of libraries in lyceums could have been revolutionary. The Spinoza Lyceum can be an example of this, where the study aspect of the library was already heavily utilised before research showed how useful these study spaces are.

But this aspect could be amplified by the current chosen chase studies. This research has been done on 5 case studies in Amsterdam, which is of course limiting the reach of the conclusion. To expand this, further research can be done to lyceums in other cities or even other countries. Other research could also be done to other school types or on the specific cases, like the case of the Spinoza Lyceum. The author did not find any other school that uses this library philosophy, but not mean that there are no other buildings using the same system. More research can also be done to the role of the books in the library and the study spaces. Could it be possible to have a library space without books? The research of Limberg and Alexandersson touch on this topic with computers, but not for the books itself.

This research has been mainly based on archival research. And therefore, it must be mentioned that this research has been done in the time of a global pandemic. This means that the archives were only available online, which severely limits the usability. This was also the case of libraries, where it was not possible to view some historic books. Therefore, when viewing this research this must be considered when viewing the observations made or the conclusion from this research. But this does not mean that this research would not provide useful information. Research about school library is severely lacking, and in speciality historic research. As seen in this research, there is little historic information known about the libraries of the case studies. The rooms were not seen as important, therefore were often ignored when designing or taking photographs. So, if this research ends up missing some important aspects due to the closure of the archives, it at least can be used as an example of the limited knowledge about school libraries. Therefore, this author recommends that more research must be done to the school libraries, besides research to the effect on students. This applies to general research for current school libraries, and for historical research. Because there is always something to learn from the history.

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Bouwarchief Gemeente Amsterdam – Stadsdeel Zuid:

Valeriusplein 15	Amsterdam Lyceum
Pieter Lodewijk Takstraat 33	Berlage Lyceum I
Pieter Lodewijk Takstraat 34	Berlage Lyceum II
Peter van Anrooystraat 8	Spinoza Lyceum

Bouwarchief Gemeente Amsterdam – Stadsdeel Nieuw-West

Pieter Calandlaan 182   CalandLyceum
Piet Mondriaanstraat 140   Cartesius Lyceum I

Bouwarchief Gemeente Amsterdam – Stadsdeel West

Frederik Hendrikplantsoen 7   Cartesius Lyceum II
Van Oldenbarneveldtplein 16 Cartesius Lyceum III

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