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CHURCH AS A CONNECTOR

An Investigation into the role of the Transition zone in the Transformation of the Grote- of Mariakerk towards a Public Interior, whilst maintaining its Heritage Values



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ABSTRACT

Churches have always been the centre of Dutch society to gather under one roof (De Kruijf & De Roest, 2010). Due to the secularization of the Netherlands, church vacancy is increasing. Currently, churches still fulfill a central function within a city, village or neighborhood (Kerkmagazine, 2022). The Grote- of Mariakerk is one of them, and the vacancy of buildings in such prominent areas of the city will detract from social and physical quality of these areas (De Kruijf & De Roest, 2010). The church should not withdraw from the public domain (Kennedy, J. C. K., 2010). A transformation towards a public interior could avoid this. Kloos (1993) describes public interiors as buildings in which the city's public space is continued. The social and functional diversity of urban buildings is reflected in their façades (Jürgenhake, 2014), especially around their interior and exterior; the 'transition zone' (Gehl, 2011). Therefore this paper focuses on the role of the transition zone when transforming the Grote- of Mariakerk towards a public interior, whilst maintaining its heritage values. By combining literature research, case studies, and field research, the role of the transition zone in public interiors is clarified. By analysing the existing transition zones of the Grote- of Mariakerk and linking them with the criteria of a public interior, opportunities and challenges for the transformation towards a public interior result in design approaches regarding the transition zone.

INTRODUCTION

Churches have always been the centre of Dutch society. (De Kruijf & De Roest, 2010). It was a place of gathering where people from different backgrounds in society came together under one roof. The villages and towns are often characterized by the churches that stand as major landmarks in their environment. (M. Kloos, 1993, p. 17).

However, the population's religious involvement has declined sharply in recent decades. *"Between 1970 and 2010, the Dutch population increased by 28%. In the same 40 years alone, the number of Dutch people registered with a church denomination decreased by more than 3.1 million, a contraction of one-third."* (De Hart, J & Van Houwelingen, P., 2018, p. 150). As a result of declining church attendance and membership, maintenance of church buildings became too expensive. Therefore, many congregations were combined, making other churches become vacant. (De Hart, J & Van Houwelingen, P. 2018).

The vacancy of churches is increasing rapidly. In the coming years, 10 churches per week will be closed. (De Hart, J & Van Houwelingen, P. (2018), p.36). Although many churches are closing, both religious and non-religious people consider them as valuable. (Kerkmagazine, 2022). This has to do with the fact that *"Historic buildings play a key role in the socio-economic and cultural development of a society by providing a physical link and progression of cultural evidence to the past."* (Yakubu, E, et al., 2017, p.2).



Figure 1: Grote- of Mariakerk, Meppel (Ritsema, 2023)

This is also the case in the Grote- of Mariakerk in Meppel (figure 1), which has lost its function since October 2022.

It is of great importance to find a new use for churches that are already vacant in time, and churches that await the same fate shortly, to avoid long-term vacancy and additional maintenance costs. This is also important because churches still have a large impact on social cohesion in societies (Centraal Bureau voor de Statistiek, 2020; Kalmar, 2010).

The Grote- of Mariakerk in Meppel is considered very valuable and therefore listed as a national monument. It lies in the heart of Meppel, is surrounded by retail and catering functions and its adjacent square is used as a public space. The vacancy of buildings in such prominent areas of the city, like the case-study of Meppel, will detract from social and physical quality of these areas (De Kruijf & De Roest, 2010). To prevent this from happening, a transformation of the Grote- of Mariakerk in Meppel is necessary.

The secularization of the Netherlands has ensured that the function of the church has changed (Kennedy, J. C. K., 2010). Nevertheless, churches currently still fulfill a central function within a city, village or neighborhood. (Kerkmagazine, 2022). According to Van Engelshoven, Minister of Education, Culture and Science, it is “crucial for the preservation and restoration of churches that the buildings remain in use and retain a relevant function in society.”. Van Engelshoven and The Synod of the Protestant Church in the Netherlands argue for a public function. (Kerkmagazine, 2022; Kennedy, J. C. K., 2010).

In Meppel the municipality and residents of Meppel want to keep the building, but its function must change. Therefore this paper studies the possibilities of transforming the Grote- or Mariakerk towards a public interior. Kloos (1993) describes public interiors as buildings in which *“the city’s public space is, in a certain sense, continued. These buildings’ interiors are intended to be temporary, comfortable, covered alternatives to one’s own home.”* Through this transformation, a contemporary twist to the original church idea in which the church is for the entire society can be provided.

The public character of buildings is strongly linked to the façade of the building and the quality of public spaces contribute to the defining quality of the façade. (Martinelli, P. M. (2019, p. 57). Hence, integrating the public space, and especially its edge to make a good transition between the interior and exterior is important. (Gehl, 2011). Because of this, the focus lies on the transition zone, which is located around the in- and outside of the façade.

Because the church is listed as a national monument, it is of great importance that the heritage values that the church possesses are also taken into account when transforming the church. In this way, the quality of Meppel city centre does not decline. Instead, the transformation of Grote- or Mariakerk can be an addition to the existing city centre of Meppel and improve the social and physical quality of its environment. Cultural heritage plays an essential role in developing strategies for enhancing the image of contemporary cities (Naheed, S., Shooshtarian, S., 2022). The transformed church can also contribute towards tourism in Meppel, since old historic buildings provide evidence of the origins and identity of a distinct society (Yakubu, E, et al., 2017, p.2).

Therefore the following research question is posed:

“What role can the transition zone play in the transformation towards a public interior, whilst maintaining its heritage values, when redesigning the Grote- of Mariakerk in Meppel?”

THEORETICAL FRAMEWORK

Public Space

Activities in public space

The way people use public spaces tells a lot about the quality of the public space. Outdoor activities can be subdivided into necessary activities, optional activities and social activities (figure 2). Necessary activities like everyday tasks or pastimes will take place under nearly all conditions. Optional activities like recreational activities are only performed if the exterior conditions are favourable. Social activities are dependent on the presence of others in public spaces, like conversations, communal activities and passive contacts. Nearly all instances of social activities evolve from necessary or optional activities. They occur spontaneously, as a result of different people being in the same place or moving around a place.

"If the edge works, so does the space"

(Gehl, 2011, p.150)

In line with this Gehl also writes about *'The Edge Effect'*, where people want to stay close to transition zones to avoid open spaces unless the edge zones are fully occupied (Gehl, 2011). Martinelli also mentions that public spaces contribute to the defining quality of the façade. (Martinelli, P. M. (2019, p. 57). Therefore it is important to also integrate the public space, and especially its edge to make a good transition between the interior and exterior.

	Quality of the physical environment	
	Poor	Good
Necessary activities	●	●
Optional activities	●	●●●●
"Resultant" activities (Social activities)	●	●

Figure 2. Graphic representation of the relationship between the quality of outdoor spaces and the rate of occurrence of outdoor activities. Adopted from *Life Between Buildings: Using Public Space (Sixth Edition)* (p.11), Gehl, J., 2011, Island Press.

When the quality of the physical environment is poor, only strictly necessary activities occur. If the quality of the physical environment improves by inviting people to sit eat and play, optional activities and social activities also occur. (Gehl, 2011, p.11)

Public Interior

Architect Manuel de Solà-Morales describes public interiors as *“places that are used as public spaces although they might belong to a private owner.”* (Solà-Morales, de, M., 1992). Public interiors aren't particularly defined by its ownership, but by the way people use the building. In line with this, Kloos writes that public interiors continue the public space of a city and that they create a temporary, comfortable, covered alternatives to one's own home. (Kloos, 1993).

American urbanist and sociologist William Whyte mentions the key of success or failure of a public interior is its design and mainly its connection to the street. According to him, the best-used and best-liked public interiors have strong visual tie with the outside. (Harteveld, M., 2014, p.128). Besides its visual tie with the outside, public interiors only work as public space if they're able to attract people. (Harteveld, M., 2014, p.130). Kloos also writes about this attraction and says a good public interior should have *“attractive designed entrances so that you walk inside in a natural manner”* (Kloos, 1993, p.26)

Kloos (1993) also mentions there is a growing need for encounters on 'neutral ground'. It is important that 'neutral' encounters can take place in public interiors, the function of the building is inferior to this idea. Therefore, according to Kloos (1993, p. 19), a good public interior consists of the following features amongst other things:

- *It lies on an urban route*
- *It is easily accessible*
- *It is in principle accessible to everyone*
- *Entering is non-committal and implies no compulsion*
- *The site is warm and covered to protect public from the climate*
- *Possibility to obtain refreshments is appealing*
- *Temporary form of privacy must be possible*
- *Visitors don't need to concern themselves with the management of the building*

Transition zone

The social and functional diversity of urban buildings is reflected in their façades. Since the façade is directed to the public space, it enters a relationship which may be physical, spatial, or visual. (Jürgenhake, 2014). Yet, according to Martinelli the façade doesn't belong completely to the interior, or the exterior, but is part of the relationship between these two worlds. (Martinelli, P. M. (2019, p. 58). Architect Jan Gehl calls this area surrounding the façade, its interior and its exterior, the 'transition zone' and he mentions that gentle transitions between different degrees of publicity are important. According to Gehl, transition zones should be clearly defined, yet accessible and easy to traverse. (Gehl, 2011, p. 21).

Whether an environment invites or repels depends, among other things, on how the transition zone between public and private is designed. Sharply demarcated borders make it difficult to enter a space, while flexible boundaries in the form of a transition zone tend to form a link between the public and the private. These transition zones are generally neither entirely private nor entirely public, making it easier to move between private and public both physically and psychologically. (Gehl, 2011, p. 113).

Moving between private and public requires a physical connection between these two areas. Francis D.K. Ching defines three types of entrances: flush, projected and recessed. (figure 3). Flushed entrance maintain the continuity of the surface of a wall and the door can be easily obscured. A projected entrance reaches out and forms an intermediate area that provides shelter. A recessed entrance also provides shelter and also forms an intermediate area inwards.

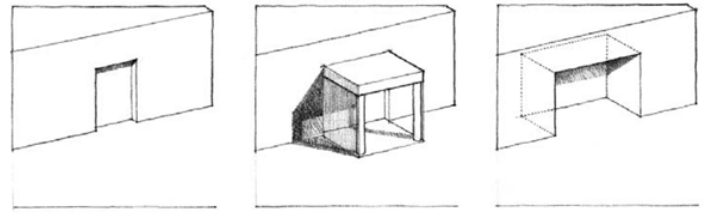


Figure 3. Entrance categories. Derived from *Architecture: Form, Space and Order (4th Edition)* (p. 263), by Ching, F.D.K., 2014, Wiley

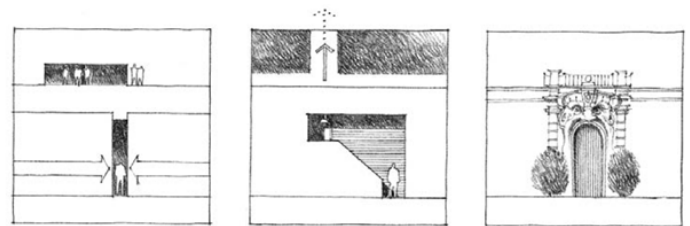


Figure 4. Visually enhanced entrances. Derived from *Architecture: Form, Space and Order (4th Edition)* (p. 263), by Ching, F.D.K., 2014, Wiley

An entrance can be visually enhanced by making the entrance lower, wider, narrower, deeper, circuitous or by enveloping it with decorative elements. (figure 4) (Ching, F.D.K., 2014)

The experience of passing a threshold is often taken for granted by users, but these different thresholds do consciously or unconsciously do something to the users' experience. The architect can influence the awareness of passing a door by emphasising the edge in form or material. (Unwin, S. & Simon, U., 2007)

The way people experience façades is also affected by the viewing distance. A transparent material is important, but this does not necessarily make it an open façade. (Gehl, 2011, p.121) Once activities in buildings become visible, the building's character will be experienced as more inviting. (Gehl, 2011, p.113).

METHODOLOGY

Literary study

The transition zone consists of the façade of a building and the adjacent territories; the public space and the public interior. Of these three topics a literary study is conducted to develop criteria for analysing the case studies in the comparative study. Firstly, 'public space' is studied by using the books 'Close encounters with buildings' (Gehl et al., 2006), 'Life between buildings' (Gehl, 2011) and 'Inside The Façade: The Inhabited Space Between Domestic and Urban Realms.' (Martinelli, P. M., 2019). Secondly, 'public interiors' is studied by using the books 'Public Interiors' (M. Kloos, 1993), 'Public Space: On the Mazes of the Network of an Urbanist.' (Harteveld, M., 2014) and 'Openbare en collectieve ruimte. De verstedelijking van het privédomein als nieuwe uitdaging' (Solà-Morales, de, M., 1992). Lastly, 'transition zone' is studied by using the books 'The Façade A Reflection on the Change of the Public Sphere' (Jürgenhake, B., 2014), 'Inside The Façade: The Inhabited Space Between Domestic and Urban Realms.' (Martinelli, P. M., 2019)., 'Life between buildings' (Gehl, 2011), 'Architecture: Form, Space, and Order' (Ching, F.D.K., 2014) and 'Doorway' (Unwin, S. & Simon, U., 2007).

Comparative research

To get a broader perspective of how the transition zone can contribute to the connection between public and private, case studies of both non-heritage and heritage transformation projects were conducted.

Non-heritage projects:

1. DOK Centrum, Delft
2. Book Mountain, Spijkenisse

Heritage transformation projects:

3. Cuyperskerk, Sas van Gent
4. Elf13, Pastoor van Arskerk, Eindhoven
5. St. Clemenskerk, Steenwijk

(In the results the heritage transformation projects are referred to as 'churches'.)

The criteria for a public interior relating to the transition zone emerge from the literary study of the theoretical framework. The full development of these criteria is further elaborated in the appendices (Ritsema, 2023).

The various projects were analysed according to the following five criteria:

- **Quality of location** -> *urban route/third party visitors, favourable exterior features;*
- **Accessibility of the building** -> *single-sided or multi-sided access, relative amount of public entrances, wheelchair accessibility;*
- **Gentle transitions** -> *territorial tension sequence;*
- (Hertzberger, H, 1991)
- **Attractive/inviting entrances** -> *visibility, hierarchy, type of entrance, visually enhanced;*
- **Visual tie with the outside** -> *transparent/closed ratio, visible activities;*

Each of these components is analysed per case study and briefly described in a table. In addition, these descriptions are visually supported by analysis drawings as shown in figure 5 made on floor plans, facade views and photos of the project. (Ritsema, 2023).

Finally, the case studies are compared next to each other in a table (figure 7) and for each case study it can be concluded what the contribution of the transition zone has been in the connection between the public interior and the public space.

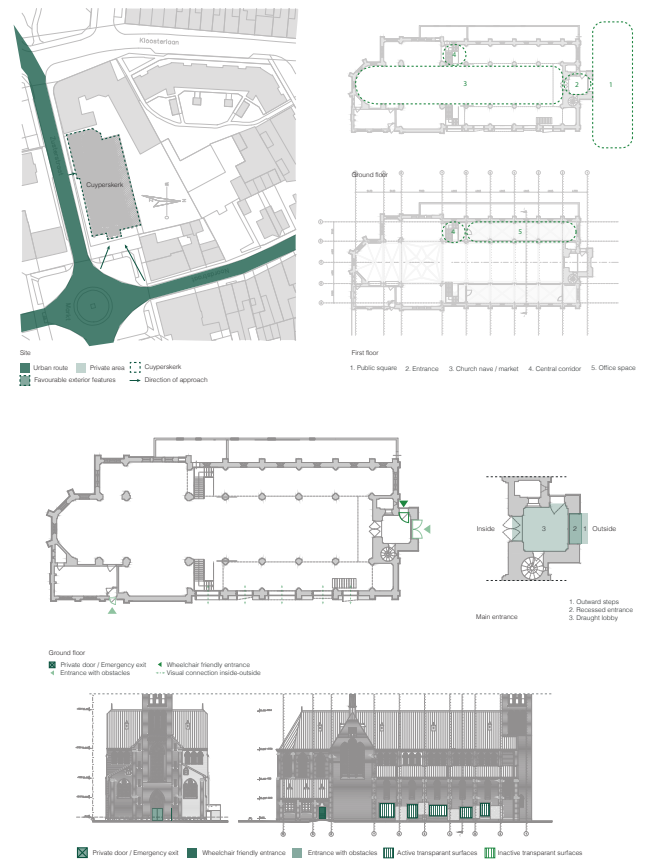


Figure 5. Analysis drawings Cuyperskerk, Sas van Gent (Ritsema, 2023)

Field research

The possibilities for façade transformations in cultural heritage are investigated through a site visit of the Grote- of Mariakerk.

A site analysis which focussed on the current activities (figure 8 & 9) and the history of the church square was performed. Conducting this analysis will reveal the way the church square used to function, how the church square functions now and whether there are differences between them.

In addition, the current transition zones of the church were analysed: the west entrance, the east entrances and the old deathman's gate on the south facade.

The analysis is focussed on how the transition zones function and how the user experiences them. It contains qualitative research based on my personal experience of the space and my ability to analyse a space as a professional.

By means of a technique with overlays on photos (figure 6), inspired by Gordon Cullen's method of serial vision (Cullen, 1971, p.17), the following topics of the analysis are visualized:

- **Connection to the public space** -> *through materials and visibility of entrances;*
- **Entrances** -> *through materials and visual enhancements to define the character of the entrance;*
- **Subsequent spaces in the church** -> *through the spatial perception of the user and the factors which cause this.*

Finally, the analysis of the existing transition zones of the Grote- of Mariakerk converges with the criteria that a public interior should meet. This is visualized in a table (figure 11). This translates into opportunities and challenges for the transformation of the Grote- of Mariakerk towards a public interior. Subsequently, based on the opportunities and challenges, design approaches were formulated enabling the Grote- of Mariakerk to meet the criteria to qualify as a public interior, whilst respecting the existing transition zones and their functioning.

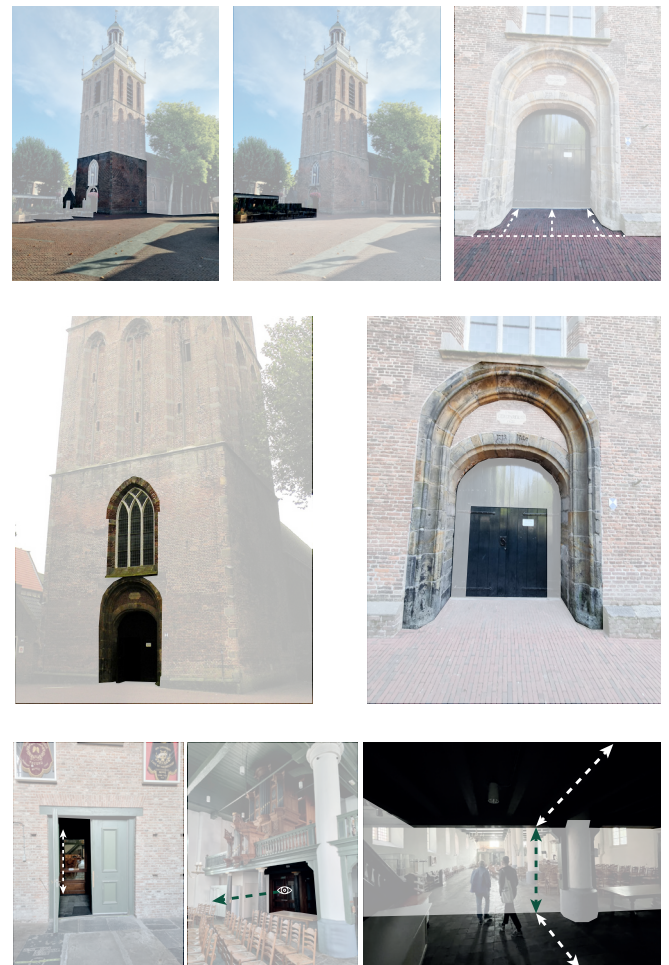


Figure 6. Selection of visualization of West Entrance transition zone (Ritsema, 2023)

RESULTS

Results public interior case studies

Figure 7 shows the results of the five public interior case studies side by side to clarify the similarities and differences between them. These case studies are explained in totality in the research report (Ritsema, 2023).

All locations are centrally located and third-party visitors are present. Yet most church sites don't invite people to sit, eat and play, whilst non-heritage projects do.

All churches have single-sided access whilst the non-heritage projects have both. The number of square metres per public entrance varies between the projects. The non-heritage projects are fully wheelchair accessible, while some churches contain stairs.

The non-heritage projects contain more transitions in their interior than the churches, making them internally further layered. Their entrances yet contain fewer transitions compared to the churches.

All main entrances create an inviting gesture, a transition in height and make the user more aware that they are entering the space, but the transition areas of the churches sometimes also create obstacles for disabled people. All main entrances are clearly distinguished and the entrances of the non-heritage projects only stand out by their shape, whilst the church's entrances can be differentiated from the rest of the building through shape, size and material. All projects contain a projected or recessed entrance which are visually enhanced in several ways, but the church's entrances are less inviting.

The churches contain a relatively closed plinth, while the non-heritage projects contain very open plinths. This continues on the first and on the second floor the churches are completely closed while the new-build projects are still 86.8% transparent. The non-heritage projects also contain a high percentage of active transparent surfaces, whilst the churches do not.

		DOK Centrum Delft	Book Mountain	Cuypperskerk	Pastoor van Arskerck	St. Clemenskerk	
Quality of the location	Centrally located in town or neighbourhood	X	X	X	X	X	
	The site invites people to sit, eat play and so on.	X	X			X	
Accessibility of the building	Single-sided access		X	X	X	X	
	Multi-sided access	X					
	Amount of public entrances relative to building surface	1 per 215 m ²	1 per 1600 m ²	1 per 267 m ²	1 per 500 m ²	1 per 1600 m ²	
	Percentage of wheelchair friendly public entrances	100%	100%	33%	67%	100%	
Gentle transitions	Amount of transitions between public street and nearest private function in building	5	6	4	4	4	
	Amount of transitions at main entrance	2	1	3	3	4	
	Effect of transitions	Creates inviting gesture	X	X	X	X	X
		Transition in height	X	X	X	X	X
		Making the user more aware of entering	X	X	X	X	X
		Forms obstacle				X	X
Attractive / inviting entrances	The entrance stands out in shape	X	X	X	X	X	
	The entrance stands out in size			X	X	X	
	The entrance stands out in material					X	
	The main entrance is clearly distinguished	X	X	X	X	X	
	Type of entrance	Flushed entrance					
		Projected entrance	X	X			X
		Recessed entrance		X	X	X	X
	Visually enhanced entrance	Lower	X	X			X
Wider							
Narrower				X	X		
Deeper				X	X		
Visual tie with the outside	Ground floor	Percentage of transparent surfaces	85,7%	81,7%	5,6%	21,7%	3,8%
		Percentage of active transparent surfaces	100%	100%	100%	42,4%	100%
	First floor	Percentage of transparent surfaces	62,6%	50,4%	5,5%	6,0%	22,9%
		Percentage of active transparent surfaces	78,0%	89,4%	0%	0%	0%
	Second floor	Percentage of transparent surfaces	73,6%	100%	0%	0%	0%
		Percentage of active transparent surfaces	51,7%	100%	0%	0%	0%

Figure 7. Combined results case studies Public Interior (Ritsema, 2023)

Results Grote- of Mariakerk visit

The site analysis shows the location of the church lies on an urban route and contains many third-party visitors. There are optional activities present and social activities take place on the terraces along the church square. Therefore only paid places to sit and eat are present (figure 8). The bi-weekly markets and other events transform the church square into a large social activity (figure 9). The history analysis also shows these markets have been active since 1460 and shaped the identity of Meppel.

The analysis of the transition zones shows a harsh border between all three entrances (figure 10, 11, 12) and their surroundings is present. At the south facade (figure 12), the line of trees forms an additional border between the two. All three entrances have a protective and closed appearance. The walls and door are both thick and solid and show no transparency and the door openings are being visually enlarged. This has an intimidating effect on the user, since they may only enter when the church lets them enter, and it makes them cross a mental threshold.



Figure 8. Site - Regular situation (Ritsema, 2023)



Figure 9. Site - Market situation (Ritsema, 2023)



Figure 10. West entrance (Ritsema, 2023)

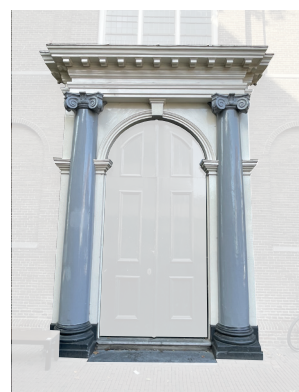


Figure 11. East entrances (Ritsema, 2023)



Figure 12. South Facade (Ritsema, 2023)



Both the west- and east entrances use a gallery with a draught lobby underneath (figure 13 & 14) , to achieve compression. The following features also play a role in making the transition more dramatic:

- *Size difference between subsequent spaces (figure 14 & 15);*
- *Transparent draught lobbies, creating a visual relationship with the church hall (figure 13);*
- *The lack of light underneath galleries makes the user walk from dark to light (figure 14).*

The deadman's gate was used by the poor people and they had to bow to enter the church, due to the door being very low. This also resulted in a form of compression.

Once entering the church hall, the compression is lifted and the space feels larger due to the:

- *Height of the space (figure 15);*
- *Light coming from high windows, making the space feel larger (figure 15);*
- *Verticality of the building, enhanced by the columns and tall windows (figure 15);*
- *Width of the space, enhanced by the wooden beams (figure 16);*
- *Open rhythm of columns, creating an open floor plan (figure 15 & 16);*
- *White-colored stucco surfaces, making the space feel larger (figure 15 & 16).*



Figure 13. Gallery and draught lobby (Ritsema, 2023)



Figure 14. Gallery and church hall (Ritsema, 2023)



Figure 15. Church hall, vertical elements (Ritsema, 2023)

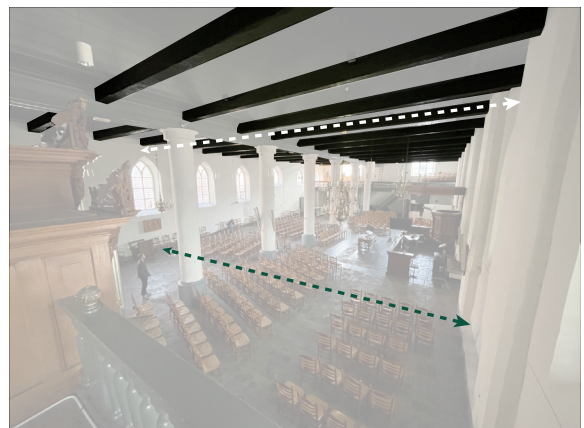


Figure 16. Church hall, width of the space (Ritsema, 2023)

CONCLUSION

What role can the transition zone play in the transformation towards a public interior, whilst maintaining its heritage values, when redesigning the Grote- of Mariakerk in Meppel?

The transition zone forms the relationship between the public interior and the public space (Martinelli, P. M. (2019, p. 58) and the quality of the transition zone, the public interior and the public space affect each other.

The case studies show the contribution of the transition zone is higher in non-heritage projects than in heritage transformation projects. A logical reason for these differences in the contribution of the transition zone on the connection between the public interior and public space between non-heritage projects and heritage transformation projects is that there are fewer sensitivities involved in new construction projects than in cultural heritage. (VG Architecten, n.d.)

Analysing the Grote- of Mariakerk has shown that the existing transition zones have a protective and closed-off character from the outside, whilst creating an amiable inside atmosphere where equality and a sense of community are present through the lack of hierarchy. The existing transition zones form this connection between the interior and public space, where compression is used as architectural tool.

The art of using compression when making the user enter the church and releasing this compression when entering the church hall:

- makes the transition more dramatic, by the size differences of the subsequent spaces;
- raises the focus upwards towards the ceiling, towards heaven;
- transforms the user, bringing the user to a different state.

Converging the analysis of the existing transition zones of the Grote- of Mariakerk with the criteria that a public interior should meet, creates opportunities and challenges (figure 17) for the transformation towards a public interior which help formulating the design approaches below.

In the transformation to a public interior, the opportunities and challenges lie mainly around the church square. Currently, people can only sit and eat on a pand therefore not inviting. However, changing their appearance is not desirable since they are such monumental entrances. Only the visibility and accessibility should be improved in a transformation. It is also important to preserve the current functioning of these entrances, in which compression is applied to transform the user when entering.

The south façade contains an old entrance, the deadman's gate. This was historically a link to the church square and the gate of the 'common folk'. By creating a new entrance in the south façade, this historic feature of the Grote- or Mariakerk can be restored in a contemporary way: by creating an inviting entrance which does not have a stately and formal appearance like the existing entrances. Here it is important to apply compression when creating a new link, as this is an important part of the way people used to experience the deadman's gate.

Improving the link between the church square and the church can also result in visible activities along the façade. This can create opportunities for more people to enter the building, since third-party visitors might also enter spontaneously. Here the dilemma arises between the criteria of a public interior which should be open and show visible activities and the church which is characterised by its closed nature. If the façade is opened up too much, the effect of the existing transition zones may be affected, but if nothing is changed, the building cannot be considered a public interior. By adding an extension, the visible activities can be positioned outside the existing wall. Here again it is important to apply compression. By keeping the new wall openings to a minimum, preferably in line with the current glazing, the verticality of the interior stays intact and the impact on the interior is minimal. By doing this, people still experience entering the thick walls and the existing transition zones won't be negatively affected by the redesign. Finally, the row of trees along the south facade forms a barrier between the church square and the church. By including this row of trees in the redesign, this barrier can be lifted.

By deploying the transition zone as a connector between church square and interior according to the aforementioned design approaches, the Grote- of Mariakerk meets the requirements to qualify as a public interior, while respecting the existing transition zones and their functioning.

	OPPORTUNITIES	CHALLENGES	DESIGN APPROACH
SITE ANALYSIS	There are many social activities present at the church square.	Currently the square is used as market square and square for events.	The current usability of the square as a market square and square for events must be taken into account in the redesign.
	There are many third-party visitors who cross the church square.	The church and the square are not sufficiently linked currently.	The new design could create opportunities for more people to enter and more spontaneous interactions could possibly arise.
	A free water point is available at the church square. There is space to play.	There are no places to sit and eat without having to pay for it available at the church square.	The entire church square should be redesigned to also create spaces for social activity to arise without people having to pay for it.
WEST ENTRANCE	The monumental entrance has a very stately appearance.	The appearance is protective and closed and therefore not inviting.	Changing its appearance is not desirable since it is such a monumental entrance.
	The entrance and its subsequent transitions are already wheelchair friendly.		The entrance needs no severe changes for the redesign.
		The visibility and accessibility is limited, due to the terrace in front of it.	The public space in front of the west entrance should be redesigned to make the west entrance more visible and accessible.
	The existing transition of using compression when entering and releasing this compression after, is making the transition more dramatic.		This is an important part of how people experience entering the church, and it is crucial to keep this transition intact.
EAST ENTRANCES	The monumental entrances have a very stately appearance.	Their appearance is protective and closed and therefore not inviting.	Changing their appearance is not desirable since it is such a monumental entrance.
		The entrance and its subsequent spaces are not wheelchair friendly.	This can be resolved by removing the cut stone step and replacing it by a small ramp in the redesign.
	The entrances are clearly visible from adjacent streets.		The entrance needs no severe changes for the redesign.
	The existing transition of using compression when entering and releasing this compression after, is making the transition more dramatic.		This is an important part of how people experience entering the church, and it is crucial to keep this transition intact.
SOUTH FACADE	Currently all social activities surrounding the church take place on the church square.	The church does not seem to be sufficiently linked with the church square spatially.	Improving the link between the two would benefit the accessibility of the public interior and could create opportunities for more people to enter and more spontaneous interactions could possibly arise.
	The church square has always been related to the church, as a cemetery and market square. The deadman's gate has always been an entrance for the 'common folk'.		By creating a new entrance in the south façade, this historic feature of the Grote- of Mariakerk can be restored in a contemporary way: by creating an inviting entrance which does not have a stately/formal appear like the existing entrances.
	Improving the link between the south façade and the church square can result in visible activities along this facade, which is currently not present and which is beneficial to a public interior.	The protective character is an important feature of the south facade. By opening up the facade, this feature might be negatively affected.	If a new link towards the church square is to be made, the new wall openings should be kept to a minimum, preferably in line with the current glazing to keep the verticality intact. By doing this, people still experience entering the thick walls and the existing transition zones won't be negatively affected by the redesign.
		The row of trees along the south facade forms a border between the church square and the church and currently hides the Grote- of Mariakerk from the church square.	By integrating the row of trees in the redesign, it could be an additional transition zone instead of a border.
	The existing transition of using compression when entering and releasing this compression after, is making the transition more dramatic.		This is an important part of how people experienced entering the deadman's gate, and if a new link towards the church square is to be made, this transition should use the art of compression and releasing this compression again.

DISCUSSION

The criteria that the transition zones of a public interior should meet have been chosen through examination of various sources (Ritsema, 2023, p.5-6).

The research is focused on the criteria regarding the transition zones of public interiors. There might be other factors involved which determine how well a public interior is performing. For future research, it is recommended to add these factors, but because of feasibility, this was not possible. Hence, the studies were also conducted generically. Therefore it was difficult to analyse why certain choices were made by the architect. Future research could examine each case study more specifically to provide a better explanation of the way the project functions as a public interior and why certain choices were made in a project.

The five case studies of public interiors were mainly focused on the functional requirements of the transition zone regarding a public interior. Because of this, the results of the case studies were less useful than desired. It mainly constituted an incentive in the process of conducting the field research. In future research, it is recommended to extend the amount of case studies to get more representative results. It is also recommended to add the experience of the user in these case studies in future research. Currently, the experience of the user has only been elaborated with depth in the field research of the Grote- of Mariakerk.

The field research of the Grote- of Mariakerk is performed as qualitative research about the experience of one professional, but it might be interesting to make it quantitative in future research. By adding the experiences of more professionals as well as non-professionals, similarities and differences in the way they experience the transition zones can be studied. Finally, only one design approach was put forward, but in reality, several design approaches might be possible which could be tested in further research.

FIGURE LIST

Figure 1:

Grote- of Mariakerk, Meppel

Figure 2:

Graphic representation of the relationship between the quality of outdoor spaces and the rate of occurrence of outdoor activities. Adopted from Life Between Buildings: Using Public Space (Sixth Edition) (p. 11), Gehl, J., 2011, Island Press.

Figure 3:

Entrance categories. Derived from Architecture: Form, Space and Order (4th Edition) (p. 263), by Ching, F.D.K., 2014, Wiley

Figure 4:

Visually enhanced entrances. Derived from Architecture: Form, Space and Order (4th Edition) (p. 263), by Ching, F.D.K., 2014, Wiley

Figure 5:

Analysis drawings Cuyperskerk, Sas van Gent (Ritsema, 2023)

Figure 6:

Selection of visualization of West Entrance transition zone (Ritsema, 2023)

Figure 7:

Combined results case studies Public Interior (Ritsema, 2023)

Figure 8:

Site - Regular situation (Ritsema, 2023)

Figure 9:

Site - Market situation (Ritsema, 2023)

Figure 10:

West entrance (Ritsema, 2023)

Figure 11:

East entrances (Ritsema, 2023)

Figure 12:

South Facade (Ritsema, 2023)

Figure 13:

Gallery and draught lobby (Ritsema, 2023)

Figure 14:

Gallery and church hall (Ritsema, 2023)

Figure 15:

Church hall, vertical elements (Ritsema, 2023)

Figure 16:

Church hall, width of the sapce (Ritsema, 2023)

Figure 17:

Opportunities, Challenges and Design Approach (Ritsema, 2023)

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