

Transforming Traditions

Designing an urban infrastructure for young religious wanderers

By Noah Joosse



1. Credits

Colophon

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Delft University of Technology
Faculty of Industrial Design Engineering
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Author

N. Joosse (Noah)

Supervisory team

Dr. Ir. M. Bos-de Vos (Marina)	Chair	TU Delft
Ir. S.S. Mulder (Sander)	Mentor	TU Delft
J. ter Beek (Johan)	Company mentor	PKN
G. de Vink (Gertjan)	Company mentor	PKN

Company details

Protestantse Kerk in Nederland
Joseph Haydnlaan 2A, 3533 AE
Utrecht, The Netherlands

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2. Summary

The PKN is losing members

The Protestantse Kerk in Nederland (PKN) is facing a challenge due to a decline in membership, with more people in the Netherlands not believing in God than those who do. This decrease affects the PKN, losing 3% of its 1.6 million members annually, especially among the younger generation.

My research aims to explore how the PKN can adapt to the needs of young religious wanderers and its existing members. This perspective comes from a designer's viewpoint, which is relatively unexplored in church reorganization compared to theological approaches.

Re-imagining church organization

To reimagine church organization, I adopted a methodological approach combining Value-Sensitive Design (VSD) and Research through Design (RtD). VSD focuses on incorporating human values into design, while RtD uses design as a research tool. The research comprised three cycles.

In the first cycle, I assessed the current state of the church and tested research methods, finding that sketches by interviewees were effective in exploring values and ideas. The second cycle involved collaboration with experts working with youth and church innovations. We prototyped through sketches, revealing a value tension between individual needs and the desire for community among young people. This led to the design of an infrastructure that facilitates the exploration of various religious communities, symbolized as a "community garden." The final cycle centered on engaging with religious wanderers at the Graceland Festival. Discussions using a toolkit revealed that each wanderer seeks something unique in a community. They appreciated the idea of exploring different "gardens."

Roadmap towards exploration

The results of this research is a roadmap for building an exploration infrastructure, emphasizing the importance of relationships between organizations, trust-building, and value exploration for religious wanderers. This roadmap serves as a guide for city-based religious communities, encouraging them to establish similar infrastructures; see Figure 1 for an impression of the roadmap.

This research contributes in two ways: first, by offering a design-based solution to reorganize the church to meet the values of its members and religious wanderers. It highlights the need for networked relationships between various organizations, though the practical implications may vary by location.

Secondly, it demonstrates how design principles aid in the redesign of church organizations. The use of sketches, design materials, and toolkits facilitated the exploration of complex ideas, making participants consider their values more explicitly. Visual design allowed for better feedback on concepts.

In conclusion, this research project underscores the potential for designers to play a new role in church innovation. Collaboration between designers and theologians can further the cause of church renewal on a systemic level, utilizing expertise from diverse scientific fields.

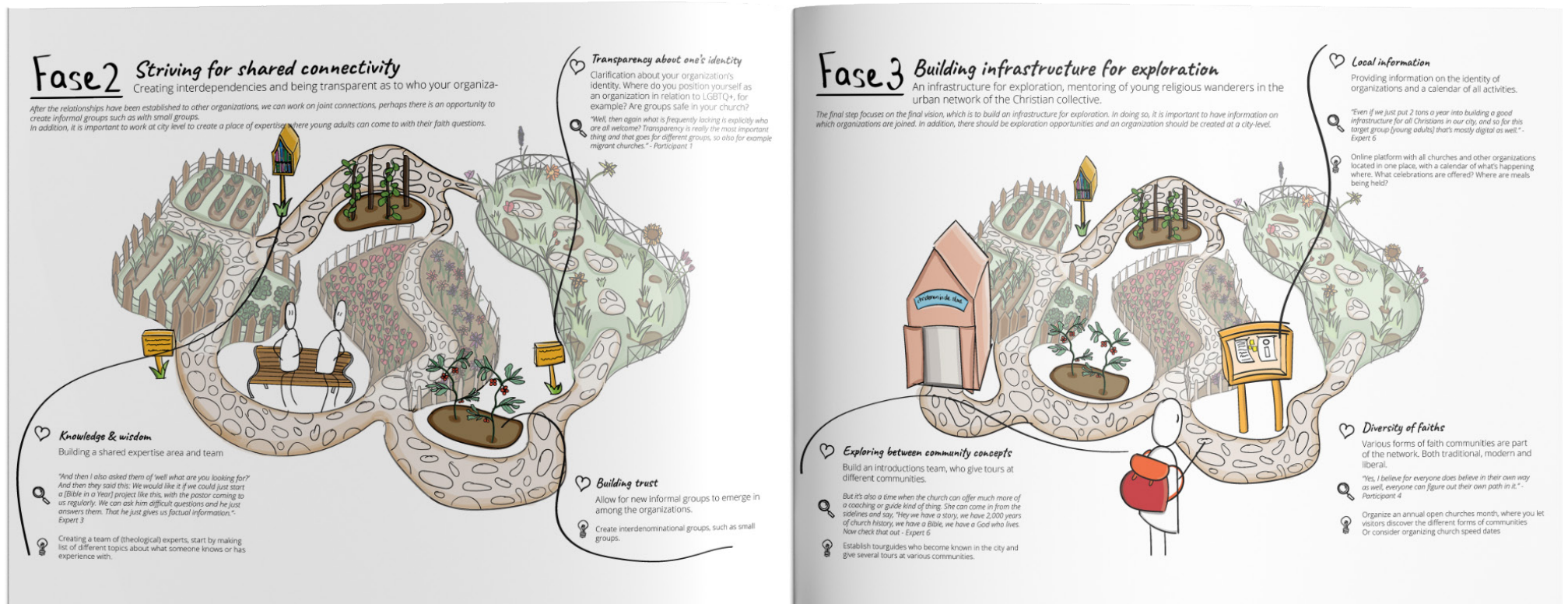


Figure 1 - Mockup design of instruction booklet of the roadmap

3. Table of contents

1. Credits	2
2. Summary	4
3. Table of contents	7
4. Glossary	12
5. Personal introduction	15
6. Project Introduction	17
6.A. Problem statement	18
6.B. Project focus & aim	19
6.C. Research questions	21
6.D. Subject group	21
7. Approach	24
7.A. Value sensitive design	25
7.B. Research through design	26
7.C. Iterative cycles	28
8. Literature review	29
8.A. Values theory	30
8.B. Organization theory	32

8.C.	Church's historical background	35
9.	<i>Research methods, results & analysis</i>	39
9.A.	Cycle 1 Method familiarization and understanding of the status quo	41
9.B.	Cycle 2 Values exploration and gathering ideas	45
9.C.	Cycle 3 Meeting my subject group and co-reflection with design	54
10.	<i>A roadmap towards exploration</i>	61
10.A.	Final Design	63
10.B.	Validation of design	64
11.	<i>Discussion</i>	65
11.A.	Contributions	68
11.B.	Limitations	69
12.	<i>Reflection</i>	71
12.A.	An educational journey	72
13.	<i>Conclusion</i>	73
14.	<i>References</i>	75

4. Glossary

C

Church

A church is a religious institution or building where Christian religious services, ceremonies, and worship occur. It can also refer to the global community of Christian believers.

Classis

In the PKN (Protestantse Kerk in Nederland), a classis is a regional governing body made of multiple congregations. It serves as an administrative and decision-making body responsible for overseeing and supporting the local congregations within its region.

Congregation

A congregation is a group of people who gather regularly for religious worship and activities. It can refer to a local community of believers within a church or religious institution.

Conviction

Conviction is a strong belief or deep-seated principle, often related to religious or moral beliefs. It signifies a person's unwavering commitment to a particular worldview or set of values.

D

Deacon

A deacon is a ministerial role within many Christian denominations. Deacons often assist with various church duties, including service to the community and supporting the pastor or priest.

Denomination

In Dutch Christianity, a denomination refers to a distinct branch or subgroup within the larger Christian tradition. Denominations in the Netherlands often have their own unique theological beliefs, practices, church structures, and historical origins. Examples of Christian denominations in the Netherlands include the Protestantse Kerk in Nederland (PKN), the Roman Catholic Church, and various Reformed and Evangelical denominations.

Dogma

Dogma is a set of religious doctrines or beliefs that are considered unquestionable and authoritative within a particular religious tradition. Dogmas are often central to the faith and teachings of a religious community.

E

Elder

In the PKN, an elder is a lay leader within a congregation who helps with the governance and spiritual leadership of the church.

F

Faith

Faith is a deeply held belief or trust in something typically related to religious or spiritual matters. It involves a strong conviction in the absence of empirical evidence.

Faith-based organization

A faith-based organization is a non-profit or charitable organization that operates based on religious principles and values. Such organizations often provide services and support to communities while integrating their religious beliefs into their mission.

G

Graceland

Graceland is a festival based in the Netherlands that emphasizes the celebration, embodiment, and exploration of Christian values. This festival is designed to appeal to a diverse audience, including individuals who may no longer be connected to conventional church communities.

I

Innovation

It refers to the process of introducing new ideas, methods, products, or technologies that result in significant improvements or advancements. It often involves creativity and problem-solving to bring about positive change.

P

Pastor

A pastor is a religious leader within a Christian congregation who provides spiritual guidance, conducts religious services, and often plays a pastoral role in the lives of church members. Often, the pastor is associated with Reformed churches.

Protestantse Kerk in Nederland

PKN stands for "Protestantse Kerk in Nederland," which translates to the Protestant Church in the Netherlands. It is the largest Protestant denomination in the Netherlands and is part of the broader Reformed tradition.

Preaching

Preaching is the act of delivering religious sermons or messages to a congregation or audience. It is a central aspect of Christian worship and teaching in the Reformed churches.

Priest

A priest is a religious leader in many Christian traditions who is authorized to perform sacred rituals, administer sacraments, and provide spiritual guidance. The term is particularly associated with Catholicism and Orthodox Christianity.

R

Religious wanderer

In this research, they are referred to as individuals who, while maintaining Christian beliefs, no longer attend church services.

Research Through Design

Research Through Design (RtD) is a methodology that employs design

practices to generate knowledge and insights. It involves designing and creating artifacts, prototypes, or interventions to explore and understand complex research questions or phenomena.

S

Subject group

A subject group is a specific set of individuals or participants in a research study. These individuals share common characteristics or attributes that make them suitable for the research focus.

Synod

The synod is the denomination's highest governing body in the PKN (Protestantse Kerk in Nederland). It is composed of representatives from all classes regions. The synod holds the authority to make important decisions regarding the vision, direction, and policies of the PKN as an institution.

T

Transcendental

Relating to or denoting experiences, principles, or realities that go beyond ordinary human perception or understanding.

V

Value/Human values

In the context of design and ethics, "values" refer to principles or ideals that individuals or societies consider important and desirable. Human values encompass various beliefs and preferences, such as honesty, fairness, sustainability, and privacy.

Value Sensitive Design

Value Sensitive Design (VSD) is an approach in design and technology development that aims to integrate human values and ethical considerations into the design process. It emphasizes the importance of understanding and incorporating stakeholders' values to create technology that aligns with societal and individual values.

5. Personal introduction

Who am I?

Hello, my name is Noah. Despite the name being derived from the Biblical character and his Ark, I am actually a female. I have a background in design and am always excited to try new things, explore different research areas, and meet new people. I am a Christian and an active member of a local congregation in my city, along with my husband.

Religious background

Growing up, I had the unique experience of being part of two different churches, which was uncommon since most families belong to one congregation. One of the churches I attended was a PKN, while the other had a more Catholic style, although it was not affiliated with the Roman Catholic Church. The latter was a tight-knit community of approximately 50 individuals, and I developed a strong sense of belonging there. Many of my religious beliefs are rooted in my experiences within that community.

When I was a student, I joined a Christian student union that welcomed members from both conservative and liberal churches and denominations. We would meet every two weeks in small groups to study the bible and discuss its themes. During these sessions, people would ask about your beliefs and your perspective, prompting me to consider what I truly believed and what was simply something I had been taught by my parents. The diversity of views within the group challenged me to re-evaluate my convictions and determine what was truly important to me from a biblical standpoint..

Personal values

Although I come from a Christian family, there came a point in my life where I had to decide whether or not to fully embrace my religion. This decision was made during my teenage years, and it was not an easy one. Most of my friends in high school did not practice religion, and I was in a relationship with someone who did not share my beliefs. However, I realized that I could not maintain my faith alone. I had to choose between living as a Christian by myself or ending my relationship. Ultimately, I decided to end my relationship because I knew that sharing my faith with others was more important than being in love with someone who did not share my beliefs.

While at the student union, I had the opportunity to explore different methods of expressing my faith. One approach is to pray for those who bring their burdens and personal struggles. Another way is to show faith through actions, like distributing Christmas boxes to those in need. Throughout the years, I have come to realize the importance of self-direction in my own faith development. I understand that religion is diverse and everyone has their own opinions and ways of practicing their faith. Personally, I enjoy Catholic services with their emphasis on repetition and symbols. Still, my husband prefers a deeper dive into a specific chapter of the Bible to understand the cultural context. This shows that each individual has their own unique preferences and way of believing. Therefore, I believe that the value of self-direction in choosing what works best for one's religious beliefs is crucial.

6. Project Introduction

6.1. Problem statement

Secularization

Nearly every Dutch citizen was part of a religious practice a hundred years ago. Since the 1960s, this has changed rapidly. Now, people in the Netherlands are becoming more secular. In 2022, more people in the Netherlands do not believe in a God than people who do (de Hart et al., 2022). This decline impacts many religious institutions, including the Protestantse Kerk in Nederland (PKN). However, the church has a vital role in sharing faith and maintaining social cohesion in the Netherlands. Active protestants, those who visit a church service at least once per month, are more active in unions, tend to do more voluntary work and offer more help to others than people who do not visit a church regularly (Bruggink & van Herten, 2009) And people of every age, background, and education are welcome in the church, so there is a mixture of different cultural groups.

Decline in members

The PKN consists of 1400+ local congregations (local church communities) in the Netherlands. Besides the local congregations, the PKN is represented nationally in the form of a General Synod and service office. The PKN has seen a decline of 60,000 members yearly since its founding in 2004 (PKN, 2021). Of its active members, only 8% are below 45. The most significant dropout of members are people under 40 (de Groot, 2021), yet this group is vital for the future of the church.

The decrease in members affects their community, as well as their facilities. PKN expects half of its buildings to be sold in the next few years. Partly because of this, they estimate to have more than one billion euros available. This money is not in one place but will be scattered over different committees and unions. These additional financial resources have not yet been allocated. The PKN is searching for strategic guidance and solutions to counter the decrease

in members and locations and to determine how capital resources can be invested wisely. The PKN has assembled a small strategy team that helps churches to craft alternative opportunities and futures.

New focus areas

The PKN has, besides their standard congregational support, focused on involving contemporary types of people or groups: monastic communities, spiritual seekers, and religious wanderers. Monastic communities are people searching for reflective practices, returning to monasteries and retreats. They meet this group in organizing retreats and supporting a monastery festival. Spiritual seekers are those who do not hold on to any religion (anymore), yet they are searching for some spiritual experience or searching for relevance in this world. Ritme is a toolkit to decide what is important in one's life, focused on four elements: celebrating, dining, playing, and making. This toolkit is based on the resonance theory of Hartmut Rosa. This resonance is a way of encountering the world, people, things, matter, history, nature, and life (Schiermer, n.d.). These encounters are ways to discover what makes a good life (Rosa, 2016). This Ritme toolkit is one of the products made for spiritual seekers. The religious wanderers are side members who do not feel (entirely) connected with the church of today. They may still be members but do not actively participate in church activities. However, they are searching for practices of their (Christian) faith. Graceland festival is one of the activities which tries to meet the needs of this group. This group of people, the religious wanderers, will be focused on during this research.

Lack of innovation within church organization

Young adults between the ages of 20 and 40 are among the highest percentage of church dropouts in the Protestant church. De Groot found that

6.2. Project focus & aim

Church innovation

some younger generations leave the church because they experience little leeway for renewal or organizational change (de Groot, 2021). They do not feel part of the strict way the church is organized and the dogmatic beliefs of the church (set of principles seen as incontrovertibly true). They search for a place where they may have doubts and explore their faith.

While individual faithful practices have been innovating with podcasts, meditation applications, and personal development, the church has not changed radically. The church organization still has a board, elders, deacons, and the pastor in the center. The pastor is connected within all divisions of the church. This kind of organization may have worked in the strong pillarized society during the 20th century, but not necessarily in our current society. There are spiritual seekers and side members of the church looking for exploration and experiences rather than dogmatic statements and fixed convictions (de Hart & Dekker, 2015).

However, change within the church is complex. The PKN is an organization that represents various beliefs and values. There is not a single interpretation of how a church should be organized. Some members are satisfied with the church as it is, while others find it essential to explore directions of change to keep connection with young members and wanderers, thereby avoiding a further decrease in the church community. The church is an institution, a community, and a place for personal faith. Changing this organization has an impact on the entire identity, therefore making innovation complex. Nevertheless, this should not be a reason to avoid change.

Therefore, this project is focused on innovation within the PKN. Many theologians have written about innovative changes and re-organizations within church design. For example, Tabitha van Krimpen recently published her book 'bottom-up church,' which includes recommendations for the PKN (van Krimpen, 2023). She studied business administration and theology and used her marketing and innovation management knowledge in the development of these recommendations. For example, she proposed the implementation of a church membership like Netflix, depending on the size of a family. This membership is an easy way to discover church activities and shape church life according to their needs. Alternatively, congregations should drop their physical newsletters or magazines, but they need to focus on a solid digital platform. And lastly, she mentions the idea of how church members can create their service without a pastor. Moreover, Pete Ward wrote about the Liquid Church two decades ago, creating a new vision for church culture suitable for current society (Ward, 2002). He described that churches need to be a more liquid-like culture. He urges churches to move away from the traditional way of the church as a gathering of people meeting in one place at one time. Liquid Church focuses on how the Christian religion can shape more emergent communities from a theological perspective. And even many more writers and scholars have discussed changes within the church (Zscheile, 2014; Lebreija, 2021).

Why design?

Nearly all these authors have a theological background, which makes sense because the church is grounded in theology. Nevertheless, theologians may have a specific viewpoint towards innovation and change and may mainly stay close to biblical references. This project has a different viewpoint instead, from a design perspective. In the context of design, envisioning the church's future

presents a unique challenge and opportunity. With their pragmatic and forward-thinking mindset, designers have compelling reasons to reimagine the church for the future instead of solely adhering to a theological approach. The notion of practical problem-solving drives designers. While theology provides a solid foundation for faith and spirituality, the world continually evolves, and societal needs change over time.

Design process

When talking about design, people often think of it as making things look good, like designing furniture, creating graphics, or producing art. However, designers do much more than make things visually pleasing. They are trained to research, analyze problems, and use creativity to adjust their approach based on their learning (Dorst & Lawson, 2009). Designers constantly switch between figuring out the problem and finding a solution. This is called the "co-evolution of problem and solution (Crilly, 2021)." In contrast, traditional engineering usually starts with a detailed problem analysis before creating a solution. Designers are used to dealing with uncertainties, which is a big part of their job (Dorst & Lawson, 2009). As they work on creating and designing, they often come across new insights. These insights can lead them to realize that the initial problem they were trying to solve is less important than they thought, and a different problem becomes more crucial (Dorst, 2019). This back-and-forth process is a vital part of the design approach.

Design practices

So, how do designers do all this? They use creative techniques like drawing, making prototypes, and creating physical objects to express and explore their ideas (Dorst & Lawson, 2009). They also collaborate closely with people involved in the project to better understand the context and share ownership.

This collaborative approach helps them create solutions considering different perspectives, including those of the end users who will use the final product or solution.

As written before, many theologians have already analyzed changing the church for future purposes, but as far as I know, it has not been done from a design perspective. Therefore, this was a challenge I gladly wanted to tackle. Given the design-oriented nature of this project, a designerly approach will be employed, utilizing research through design (RtD). This emerging approach from the design field leverages design methods to gain insights for research purposes (Godin & Zahedi, 2014). The value-sensitive design (VSD) method will also be applied, ensuring sensitivity to all stakeholders' cultural backgrounds, values, and norms (Hendry et al., 2021). Chapter 5 will elaborate on these two approaches and discuss why these two approaches are combined. Subsequently, the following section will outline the design challenge, including the research questions for this project.

Designer's reflection

Why design and religion?

Why did I start this project? Because I'm very passionate about my faith and wanted to do more with it. But also because I see that the church sometimes has many shortcomings and deficiencies, while I believe that others should have the opportunity to be part of a community. Additionally, I thought it would be cool as a designer to do something related to the Christian faith. This is not done very often, even though this field has a lot of interesting aspects to offer.

6.3. Research questions

The project aims to address the ongoing decline in active members within the Protestantse Kerk in Nederland (PKN) and explore necessary adaptations to attract and engage younger religious wanderers. My contribution will focus on developing a future scenario tailored explicitly to religious wanderers. The research questions guiding this study are as follows:

How can the PKN adapt its organization to serve young religious wanderers better while staying true to their core beliefs and values?

To answer this question, some sub-questions must be considered: What do religious wanderers under 40 dream of when discussing church organization? Which parts of the PKN's current organizational structure should be changed, kept the same, or eliminated to align with the expectations of religious wanderers?

To address these research questions, two methodological design approaches are deployed, which are Research Through Design (RtD) (Zimmerman & Forlizzi, 2014) and Value-Sensitive Design (VSD) (Friedman & Hendry, 2019). These approaches prove to be suitable for this project. Consequently, the second research question is:

How can integrating values and design principles effectively inform the process of reimagining the PKN's organizational structure?

For this research, the design goal is to develop a strategy that helps the PKN and other churches to become relevant again for young religious wanderers.

6.4. Subject group

As previously stated, this project is centered around the exploration of young religious wanderers. It is crucial to understand the nature of this demographic and the existing research pertaining to them. This section aims to delineate the characteristics of the subject group and provide a clear definition.

Seekers within and beyond the church

Sociaal Cultureel Planbureau (SCP) has researched religiosity trends in the Netherlands over the past few decades. While the number of individuals who profess belief in God is declining, the increase in atheism remains limited (de Hart et al., 2022, p. 12). Remarkably, even among those who no longer attend religious services, a connection persists to the concept of a higher power (God in Nederland, 2020). Affiliation with a specific religious group often serves as a bridge to maintain this connection.

However, the critical question is: What do these doubters or seekers actually doubt, and how do they navigate this uncertainty? In their work "Floating Believers," de Hart and Dekker identified three distinct types of seekers: gatherers, self-active combiners, and inner searchers. Gatherers attend religious services less frequently than non-seekers; they perceive religion as a personal, individualized experience distinct from formal congregational settings (de Hart & Dekker, 2015, pp. 7–8). Self-active combiners blend elements from diverse traditions and movements. They are led by more individual ideas about the meaning of life. Inner searchers value religious doubts and uncertainty. They have an experimental attitude towards religion, guided by personal experience. Importantly, this quest for meaning and spirituality unfolds both within and outside traditional church settings. As De Hart and Dekker properly note: 'Religious seeking is a phenomenon that is clearly present in the Dutch population and that currently appears to be on the rise (2015, p. 20, own translation).'

A call for change within churches

In recent years, several scholars have delved into the relationship between young adults and the church in the Netherlands, each approaching the topic from a distinct angle.

Harmen van Wijnen examined the impact of small groups on the spiritual development of faith of young adults (2016). Drawing upon Maffesoli's theory emphasizing the importance of social interaction within tribal groups (Maffesoli, 1996), van Wijnen applied this concept to the church context. He argues that excessive focus on individual faith can hinder communal spiritual growth. He argues that the communal dimension of faith-sharing can be compromised when individuals join a community solely for their own spiritual development. Therefore, fostering communal values such as shared freedom, togetherness with friends, feeling connected and comfortable, and awareness of being part of a larger whole is essential (van Wijnen, 2016). Besides, his results show that young adults' social and faith interactions take place in smaller settings rather than Sunday church events. Furthermore, van Wijnen's findings suggest that young adults' spiritual and social interactions are more likely to occur within smaller, informal settings rather than during Sunday church events. He advocates for a shift in church organization towards a more organic approach, opposed to the current PKN's structure (Figure 2). He is proposing a hybrid model that can seamlessly transition between organized, organic, and institutional forms, see Figure 3.

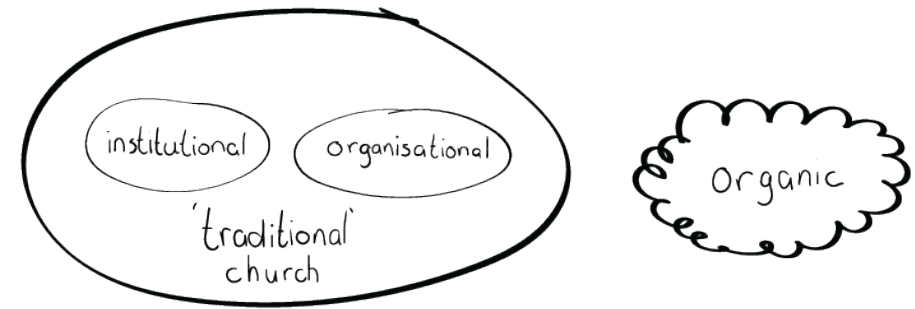


Figure 2 - Image derived from Van Wijnen showing how today's PKN is organized as a structure.

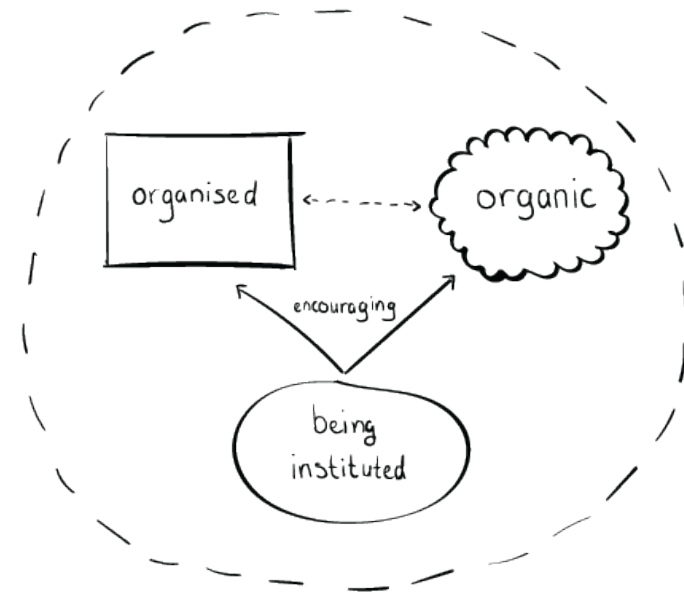


Figure 3 - Van Wijnen argues for a PKN to be more instituted and organic next to being organized.

Jurjen de Groot explored the social infrastructure of young adults and its connection to their search for meaning in life (de Groot, 2021). De Groot argues that informal groups, familial bonds, and friendships constitute critical elements of young adults' social infrastructure in their pursuit of meaning. These informal groups serve as spaces where individuals can be their authentic selves, fostering diversity and mutual care. De Groot identifies five pivotal aspects of this social infrastructure that contribute to a meaningful life, including the incorporation of online communities, intertwining social life with spiritual exploration, and the creation of new rituals, often centered around music, to facilitate transcendental experiences.

Corina Nagel-Herweijer and her colleagues have conducted research on faith formation among children and adolescents (2023). Their findings reveal that young adults are critical of church services, particularly in relation to the music and the relevance of the sermons. They express a desire to engage with the church without preconceived judgments from older generations. Nonetheless, they express a genuine interest in deepening their faith and acquiring knowledge that is personally relevant and applicable to their lives. Young adults are more likely to experience faith formation outside of traditional "organized" activities. The researchers advocate for supporting exploration as a positive journey (Nagel-Herweijer et al., 2023, p. 67).

In summation

In a nutshell, young adults, whether inside or outside the church, are on a quest to find their Christian faith. While some lean toward a more personal belief system, the importance of sharing faith within a community setting remains significant. The research conducted by these scholars underscores the need for substantial changes in how religious institutions operate and how they value the less formal aspect.

Narrowing the focus

In the context of this research, the focus will be specifically on a subset of young adults - those who no longer attend church regularly but maintain Christian convictions. This aligns with the PKN's new focus area, known as the religious wanderers. These wanderers may bear resemblances to the gatherers and self-active combiners (de Hart & Dekker, 2015). The religious wanderers might not have found a religious community where they belong, or they may no longer find traditional church services appealing. This subject group primarily comprises young millennials and older members of Generation Z, typically aged between 25 and 35. I expect they are living independently and have the autonomy to make choices regarding church attendance. This phase of life is marked by significant changes, such as establishing careers, forming relationships, and possibly starting families, which may necessitate a reconsideration of their faith (de Groot, 2021). According to the PKN, this group exhibits the highest rate of church membership resignation.

Throughout this research, I'll refer to this group as "young religious wanderers." Other terms, such as "floating believers," "Christian wanderers," "floating members," "church-side members," or "peripheral church members," may also be used interchangeably to refer to the same subject group.

In the following chapters, this research delves into a comprehensive exploration of the re-design of church organizations. The next chapter will start with the methodological approach, explaining what VSD and RtD are and how these approaches are a good combination.

7. Approach

7.1. Value sensitive design

This study's methodological approach combines Value Sensitive Design (VSD) and Research through Design (RtD). Value Sensitive Design ensures that ethical considerations and stakeholder values are integrated into the design process, while Research through Design allows for research insights to be gathered through design methods.

VSD

VSD is an approach to incorporate values within the design process. It has its origins in information systems design and human-computer interaction. VSD, as a method, is focused on discovering and incorporating human values during the design process of technology (Friedman & Hendry, 2019). The method is also known as the tripartite method, with three types of investigations in which the design is created:

- Conceptual investigations
- Empirical investigations
- Technological investigations

The conceptual investigation focuses on the first exploration of potential values. Which values are essential in this project? Do they fit the subject group? Which stakeholders may be involved in this project? Are there any indirect stakeholders? This phase concentrates on eliciting any interesting or potentially valuable stakeholder or relevant theories. Empirical investigations are qualitative or quantitative research methods used to inform and discover users' values, needs, and practices. It is also a phase to reveal potential value tensions, which are values that may conflict with one another (Miller et al., 2007). Technical investigations are to check technological policies and possibilities. How can the policy be made? Which values will be more important than others? Alternatively,

it can be the design of a system to support values identified in conceptual- and empirical investigations (Hendry et al., 2021).

This approach fits this project, as the aim is to re-design the church organization suitable for religious wanderers. Because the re-organization immediately has religious implications, it is challenging for me as a designer to maintain focus during this process. As I can get into a theological discussion or opposing opinions may arise. VSD supports the inclusion of human values in a design. I am not a theologian and want a designer approach to face this challenge, so VSD will suit that.

VSD is an iterative approach and is meant to iterate on different investigations. Because during the empirical study, one can stumble upon new values, which need conceptual investigations over again. This iterative process fits well with the Research Through Design (RtD) approach discussed in the following section.

7.2. Research through design

The RtD process focuses on using design to gain insights and knowledge. In classical design studies, the designers will first do research, gain knowledge, and use this knowledge to design an outcome. However, designers argue that one can use a design to gain new knowledge outcomes (Stappers & Giaccardi, 2017). Research through Design means that 'design activities,' like sketching, prototyping, concept development, and problem framing, have a crucial role in creating knowledge. It is not only about the design itself, not just validation for commercial purposes. Instead, new knowledge is generated for academic purposes (Stappers & Giaccardi, 2017).

There are many described methods for how to do Research through design, yet Zimmerman argues, based on the research of this process, that all RtD end goals focus on research on the future (Zimmerman, Stolterman, Forlizzi, 2010). However, there is no straightforward method for conducting RtD (Mattelmäki & Matthews, 2009; Wensveen & Matthews, 2014). Stappers & Giaccardi (2017) showed different intentions for RtD:

- Exploring and finding unexpected yet valuable knowledge
- Deriving research findings from realization moments during the design process
- As a basis for user studies on designs
- Use design to provoke thoughts and reflections.

Activities in RtD may include:

- Creating a prototype, like a proper working artifact, and reflecting on the design decisions taken
- Deciding, reflecting, and discussing aspects of the prototype between those involved in making it
- Deploying the prototype in a field study as a means to record contextual/situational data or input from people
- Using the prototype as a 'physical hypothesis' to prove the feasibility of a proposition

Overall, a design is involved, and some new knowledge is created. The type of knowledge generated can be about the functionality of the design, the aesthetics, the practicalities of its production, the design motivations, the target group, politics, or values (B. Gaver & Bowers, 2012; Höök et al., 2015).

RtD is a suitable approach for this study as I can use design to craft new futures for the church. Through the creation of designs made by participants and me, the unraveling of a new future can occur. Through the designs, the values of participants can be unraveled and discussed.

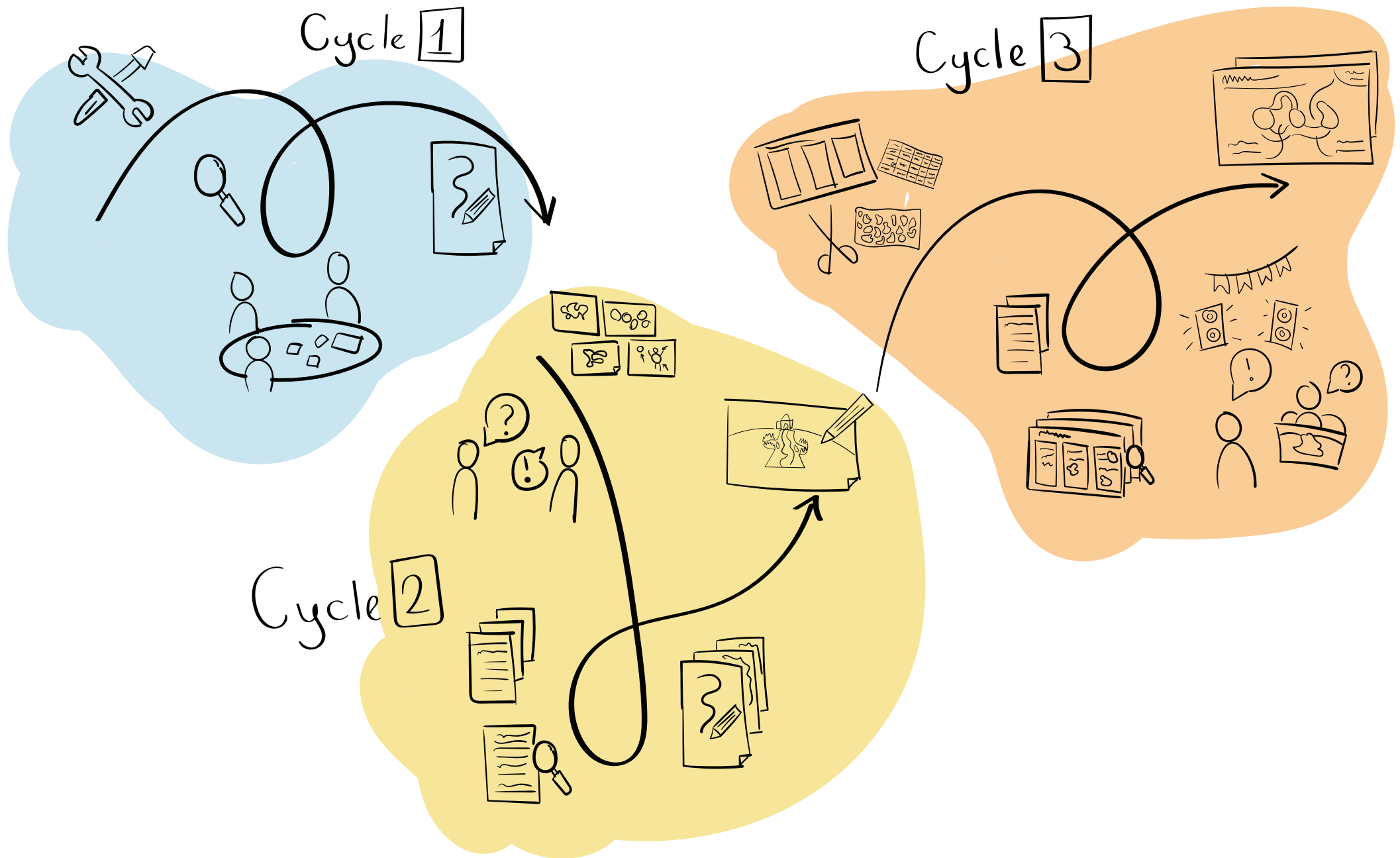


Figure 4 - Visual overview of three cycles in this project.

7.3. Iterative cycles

Both VSD and RtD hold an iterative approach, where there are different cycles in which a design is made and iterated during the process. The project is split into three cycles to ensure this iterative process; see Figure 4 for an illustrated overview.

Cycle 1

The first cycle focused on setting the scene, knowing the church's current situation, and familiarizing and testing research methods. This cycle helped me understand the situational context of the PKN and be prepared to utilize techniques for cycle 2. The methods I deployed were value sketches and stakeholder tokens. Value sketches are a method derived from VSD; it is a way to draw out what is important to somebody (Friedman et al., 2002; Woelfer et al., 2011). By letting the participants sketch their vision, they can process their perceptions and ideas. Values will arise when the participant draws out what is important to them. Value sketches are meant to elicit and discover values. This method is appropriate as it explores new ideas and discovers the participant's perceptions. Stakeholder tokens are a method used to identify direct and indirect stakeholders at the beginning of a project (Yoo, 2017). Using wooden peg dolls, one can physically display stakeholders and their relationships with each other. This method is appropriate as it will help to identify and discuss the current situation and potential future in the organizing of churches. It will help to discover explicit roles in current designs.

Cycle 2

The second cycle focused on value-, theme-, and idea exploration. Within the second cycle, a combination of values sketches and semi-structured interviews took place with experts. Semi-structured interviews involve pre-prepared questions but also allow for flexibility to discuss new topics as they

arise (Patton, 2005). This technique was ideal for the sessions as it focused on the topic of interest while allowing for the exploration of new ideas. The experts were either affiliated with or outside the PKN, but they were all from Christian faith-based organizations. Their expertise was in church innovation, young adults, and faith formation. They were requested to sketch their ideas on the future of the church and young adults' values. The aim of the interviews was to gather information about the values of young adults and gather ideas for the future of the church. A design was created from the expert interviews and sketches, which were used for cycle 3.

Cycle 3

This third cycle is focused on fieldwork and co-reflection with the subject group. This took place at Graceland festival, a Christian-inspired festival focused on exploring yourself with mind, body, and community. This festival specifically targets religious wanderers, where I hoped to meet my subject group. The co-reflection method was integrated, involving the religious wanderers in reflecting and criticizing my design concepts (Tomico, 2009). Co-reflection is a method derived from design studies. Co-reflection exists out of 3 steps: stakeholder exploration, stakeholder ideation, and confrontation (Tomico et al., 2011).

8. Literature review

8.1. Values theory

The following literature may appear somewhat arbitrary, but it comprises theories that provide insight into two fundamental themes at the core of this research. The first theory delves into the concept of values – what they are and the universally recognized human values. The other theories revolve around organizational theories, exploring what is written about the configuration of organizations and their environment. These theories serve as a lens through which the church as an organization can be examined. They are used as instruments in analyzing past church structures and painting a picture of the current situation within the Protestantse Kerk in Nederland (PKN).

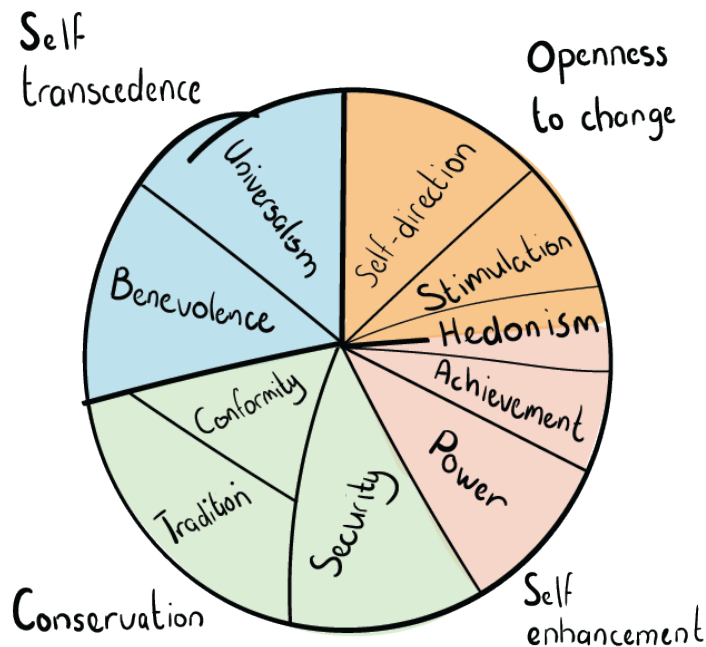


Figure 5 - Schwartz's ten basic human values in relationship with one another.

The term "values" is often paired with "norms," but it can have various meanings. Either value can be about the worthiness of something, yet in this case, the focus is on the aspect of value as that is what is important to someone and drives their behavior (e.g., Bos-de Vos, 2020). Schwartz defines values as 'the criteria people use to select and justify actions and to evaluate people (including the self) and events.' (1992, p. 1) Allport (1961) says that values are 'a belief upon which man acts by preferences.' Batya Friedman sees values as 'what is important in people's lives (Friedman & Hendry, 2019)' According to Schwartz's theory, there are six different features regarding all values (2006):

- Values are beliefs
- Values refer to desirable goals
- Values transcend specific actions and situations
- Values serve as standards and criteria
- Values are ordered by importance
- The relative importance of multiple values guides action

Values are the basis of human behavior (Husain, 2011). Whereas values can also be seen as 'desirable, trans-situational goals, varying in importance, that serve as guiding principles in people's lives.' (Kluckhohn, 1951; as cited in Husain et al., 2011, p.499). Overall, what distinguishes the values is the kind of motivational goal it shows. Although there are many scientists who have discovered different types of values, Schwartz has proposed the most extensive list of values. The values in his theory are accepted cross-culturally, and every value is distinguished by its underlying goal. Based on 57 values, Schwartz identified ten fundamental values; see Figure 5.

These ten basic values are self-direction, stimulation, hedonism, achievement, power, security, conformity, tradition, benevolence, and universalism, each being defined by a goal as a motivator. In the following list, the first word, e.g., Self-direction, is the value, and the text behind the colon is the goal.

- **Self-Direction:** ability to think and act independently.
- **Stimulation:** sensation of excitement, novelty, and challenge in life.
- **Hedonism:** feeling pleasure or satisfaction for oneself.
- **Achievement:** personal success by demonstrating competence in line with social norms.
- **Power:** the social status and prestige of a person, as well as their control or dominance over people and resources.
- **Security:** safety, harmony, and stability in society, relationships, and self.
- **Conformity:** control over behaviors, tendencies, and impulses that could upset or harm others and violate social expectations or standards.
- **Tradition:** being respectful, committed, and accepting of the customs and ideas that come with a person's culture or religion.
- **Benevolence:** keeping and improving the wellbeing of those with whom a person is in frequent contact.
- **Universalism:** understanding, appreciation, tolerance, and protection of the wellbeing of all people and nature.

In his research, Schwartz identified ten values and studied how they relate to each other. He found that these values can be grouped into four dimensions:

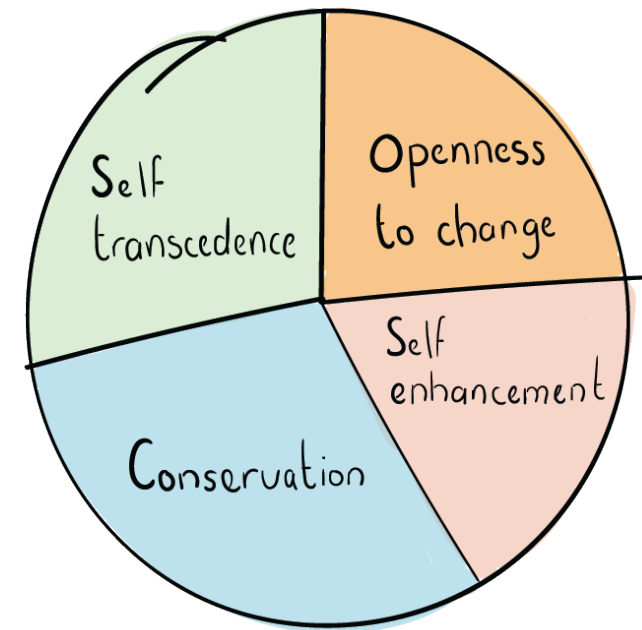


Figure 6 - Schwartz's four dimensions of the ten basic values.

Self-enhancement vs. Self-transcendence. In the Self-enhancement dimension, power and achievement values are opposite to universalism and benevolence values. These dimensions are focused on self-interest. In contrast, the following dimensions focus on independent action. The two dimensions that differ are conservation and openness to change. Figure 6 shows the four dimensions of the basic value theory.

8.2. Organization theory

When examining a church as an organization, it is essential to consider its structures and government design. This section explores various theories on organizations to gain a better understanding of the underlying principles that can be applied to analyzing churches. Several writers have examined the structure, context, management, and people within organizations, including Mintzberg, Burns & Stalker, Pugh & Hickson, and Hofstede. In this chapter, I will only highlight a few, such as Mintzberg, who has created a clear model and structure of an organization; Burns & Stalker, who describe how the environment affects an organization; and Herzberg's theory, which studied the people within an organization.

Organization structures

Mintzberg proposed the necessary elements and structures for an organization to function (Mintzberg, 1980). The essential parts of an organization are:

1. **Operating Core:** All employees who produce the primary products and services
2. **Strategic Apex:** Top management of the organization
3. **Middle line:** The middle managers
4. **Technostructure:** Analysts, work planners, and long-term planners
5. **Support staff:** Those that provide indirect support, such as legal counsel, public relations, and Human Resources Management.

Mintzberg argues that these parts are at the core of every organization, yet later, he adds a 6th part, the organization's ideology. See Figure 7 for the designed configuration of the basic components of an organization.

There are the coordinating mechanisms, which are focused on the coordination

of tasks to put all the work together. The coordination mechanisms are mutual Adjustment, Direct Supervision, Standardization of Work, Outputs, Skills, and Norms (Mintzberg, 1980; 2023). Mutual adjustment differs from the other five mechanisms, focusing on coordination through conversation and people coordinating directly without having supervisor control.

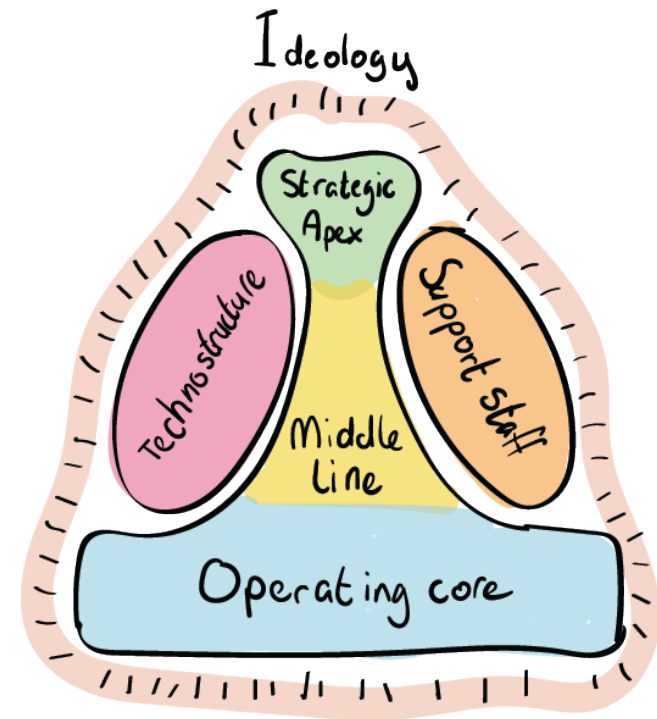


Figure 7 - Six basic parts of organizations according to (Mintzberg, 1989)

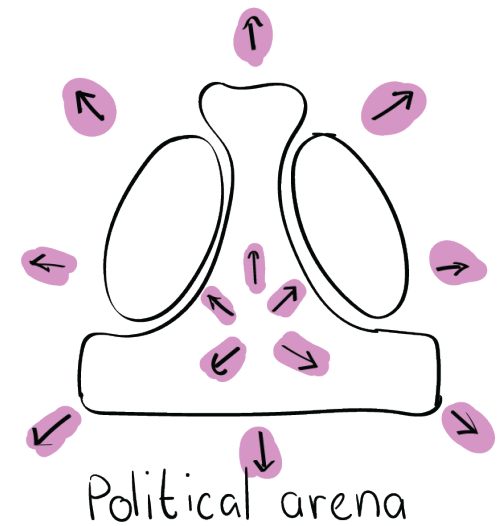
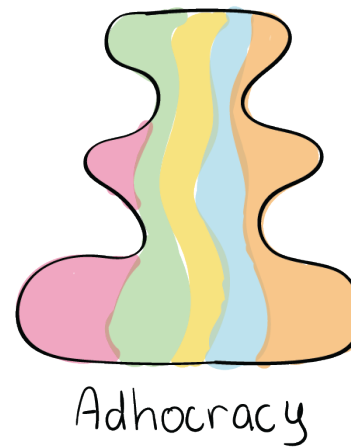
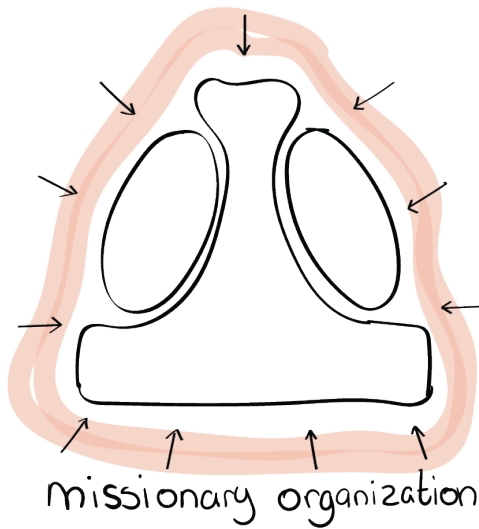
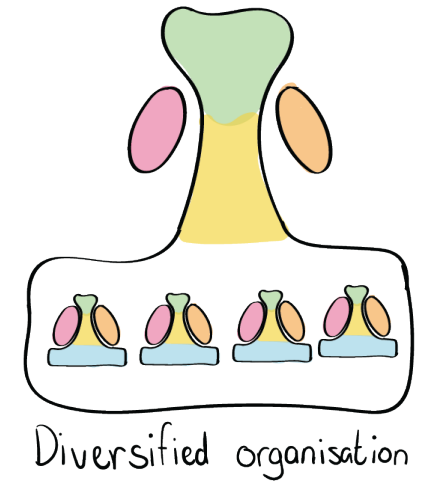
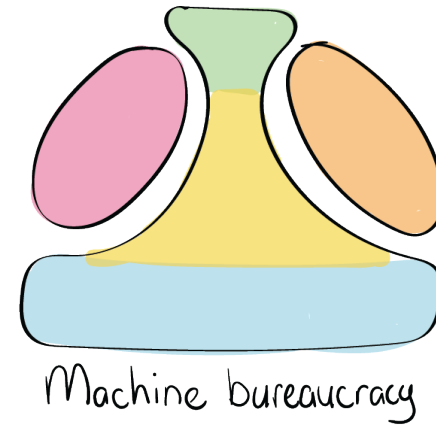
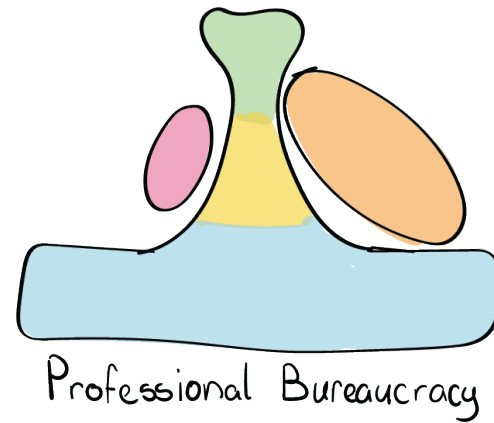
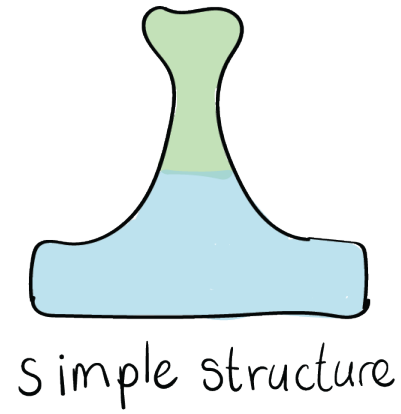


Figure 8 - 7 configurations designed by Mintzberg.

Next to an organization's core identity, he describes its structure with seven types of configurations. The configurations differ depending on where decision-making occurs and every unit's independence within the organization. See Figure 8 for the configurations. The configurations are described as follows:

- The **simple structure** is where coordination is through direct supervision, and there is a minimum need for staff and middle-line management.
- In the **professional bureaucracy**, the coordination is through the standardization of the skills of its employees. The organization needs professionals in its operating core and some support to back them up.
- **Machine bureaucracy** is based on the standardization of work, which needs a large administrative structure and technostructure for designing the standardization.
- The **diversified organization** is based on the standardization of outputs, which allows for mainly autonomous operating units.
- **Innovative organization** or adhocracy is based on mutual adjustment. This leads to dissolving the boundaries between support staff management, operating core, and strategic apex. These are, according to Mintzberg, the most complex organizations (Mintzberg, 1981).
- **Missionary organization** is all about the standardization of norms. This is to ensure that an organization functions to the same set of beliefs.
- In the **political arena**, the political structure is set apart. Mintzberg describes this as an odd structure as it is based on power and politics. Decision-making is complex, with both internal and external forces.

Mintzberg admittedly says these configurations are complete; the configurations are abstract ideas, and an organization is often more complex than those structures. However, the configurations can serve as a diagnostic tool to unravel the problems in an organization, showing that some structures may be a misfit (Mintzberg, 1981). Whereas Mintzberg describes the internal structure of an organization, Burns and Stalker describe how an organization should be structured concerning the environment.

Organization depending on the environment

Burns and Stalker show the theory of two types of organizations depending on the environmental circumstances. The mechanistic organization is suitable for stable and predictable environments. A clear division of departments and tasks characterizes this organization. When the concern faces a problem, the tasks and responsibilities are broken down into functional tasks. There is mainly vertical communication between the supervisor and the employees.

The organismic organization is adapted to unstable conditions when new and unfamiliar problems continually arise, which cannot be broken down into existing roles (Burns & Stalker, 1961). He argues for a non-specific role without specific mention of tasks, which will only restrict the organization. Commitment to subgroups is more extensive than to the whole organization. There is a continuous reflection and adjustment of the individual tasks in collaboration with others. There is horizontal communication, more focused on expertise consultation than commanding order.

8.3. Church's historical background

The people in the organizations

Herzberg's job satisfaction theory showed that the opposite of job dissatisfaction is not necessarily the result of job satisfaction (Pardee, 1990). Instead, they show two different kinds of 'needs'. These two types of needs are seen as hygiene factors and motivation factors. He uses two biblical figures to explain his theory: Adam and Abraham. Adam is focused on his hygiene factors, needs to survive, searching for survival, and the lack of pain and hunger. These can also be linked to the primary layer of Maslow's theory of needs (Pardee, 1990). If factors like company policy, supervision, relationship with boss, work conditions, salary, and relationship with peers are lacking, this may lead to job dissatisfaction. Nevertheless, when these are present, they do not explicitly lead to job satisfaction, as these are from different needs. The motivation factors are related to Abraham, who is human and goes beyond physical requirements and expands psychologically, like the self-actualization of Maslow's pyramid. The motivators for work are achievement, recognition, the work itself, responsibility advancement, and growth. If these are not present, they do not necessarily lead to job dissatisfaction, yet are necessary to grow as an employee.

Herzberg, Burns & Stalker, and Mintzberg only show a part of the numerous theories and literature on organizational theories. Yet, these are the most relevant in this research. From these theories, I will analyze past church organizations that show different configurations together with their values.

The church is an old institution, with its first origins derived from the Christian Bible. In the New Testament, Jesus of Nazareth gives the task to share and preach the Gospel, the good news, worldwide. This task was given to the first followers of Jesus, the disciples (Matthew 28:19-20, Mark 16:15). The disciples were focused on converting people to Christianity and establishing facilities for new Christian communities. So, the church started roughly 2000 years ago. The Christian faith and its churches spread quickly across the Mediterranean land.

Desert Fathers

The Desert Fathers are one of the first types of monastic churches that we know of. They lived solitary in the desert in the 3rd century in the desert of Egypt (Christie, 1993). They are seen as one of the first Christian monks. Their structure was like the simple structure from Mintzberg, see Figure 9. And their values were focused on transcendence, prayer, simplicity, regularity, and being holy (which means being separated or set apart), so being secluded (Christie, 1993). Looking at Schwartz's theory, the value system of the desert fathers was Tradition and Conformity. Their beliefs were focused on traditional repetition. Their organization was also simple, displaying their value system in it.

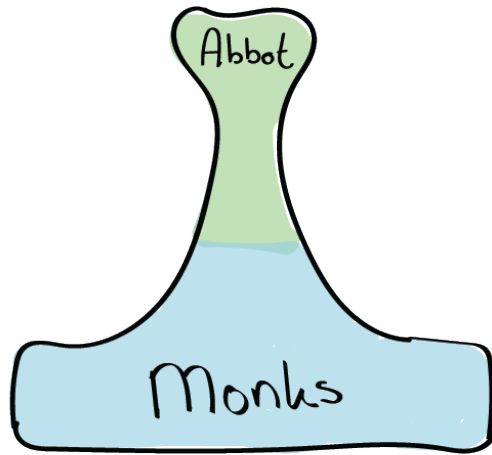


Figure 9 - Desert Fathers configuration based on Mintzberg's theory.

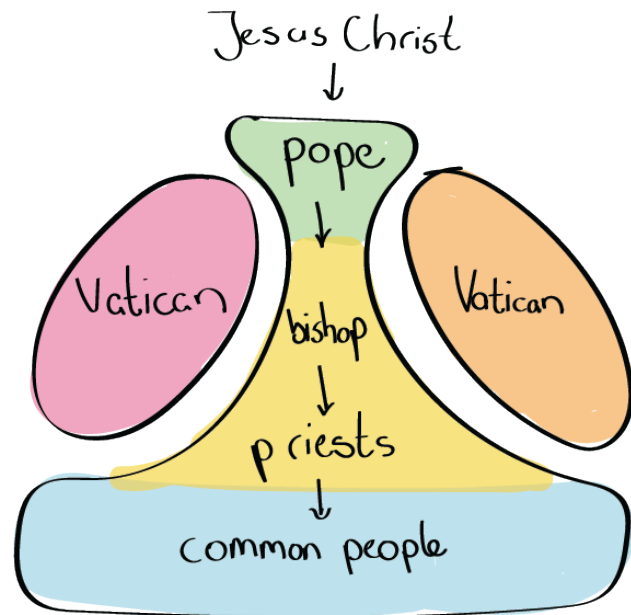


Figure 10 - Roman Catholic configuration

Roman Catholic Church

The Roman Catholic Church is one of the first institutionalized churches (Walker, 1985). Within this church, the Pope was the head and authority, the middle management existed out of bishops and priests, and there was a strong technostucture and supporting staff mainly in the form of the Vatican. And the operational core is the common people; see a total overview in Figure 10. The values within this church were focused on the practice of the faith through rituals rather than believing in articles of faith or dogma. Therefore, the service and all ceremonies were necessary, with the beautiful cathedrals which helped to embody the togetherness of faith (Rogier, 1947). With Schwartz's theories in mind, the values of Catholicism were focused on Benevolence and Tradition (Schwartz & Huismans, 1995), as the communal experience was important to the church, and everyone belonged to it. Besides, the tradition was embedded into the rituals and uniform structures of the church. This organization's physical environment and the collective, or group, were essential. Therefore, the institution was significant as it needed to support the masses.

The Reformed Church

After the Reformation, reformed churches started to emerge (Rogier, 1947). The structure of the reformed churches was with the pastor and other elders at the top and the church visitors as the operational core, see Figure 11. The technostructure and supporting staff were minimized, with a small committee and the pastor who did most of the preparational work, so having little support in technostructure or supporting staff. The values in the reformed church were focused on returning to the Bible as the primary source of faith as opposed to the rituals and practice of religion. Instead of having a collective or mass with rituals, the understanding and knowledge of the bible became prominent (Rogier, 1947). Therefore, preaching became an important part of the church service. Individual faith and, therefore, individual choices were necessary, so the personal responsibility came to accept whether to believe in religion, related to the Self-Direction value (Schwartz & Huismans, 1995). Opposed to the catholic church, it was not about 'we believe'; the emphasis became 'I believe.'

Protestantse Kerk in Nederland

The PKN as an institution is young; it has only existed since 2004. The PKN has the synod at the top, with the Classis in the middle, and the supporting desk has the role of technostructure. There are many supportive institutions like the union for church buildings and committees for financial maintenance. The 1400 congregations are the operational core, yet they all have their own organizational structures, see 6.4 Figure 12. Due to the secularization in the Netherlands, the PKN has become a private union, and being faithful to Christianity has become an individual choice, which relates to the basic value of Self-Direction.

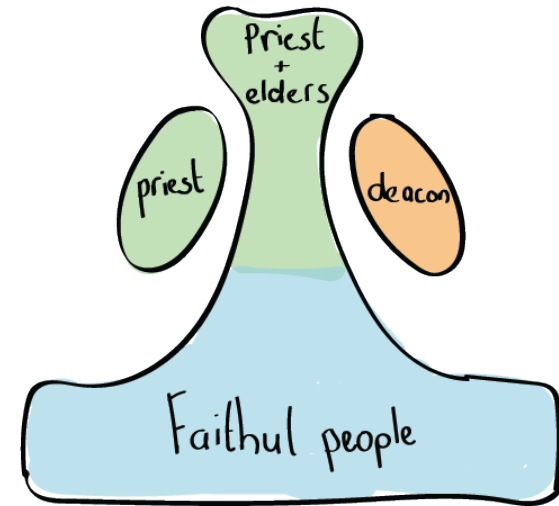


Figure 11 - Reformed church configuration

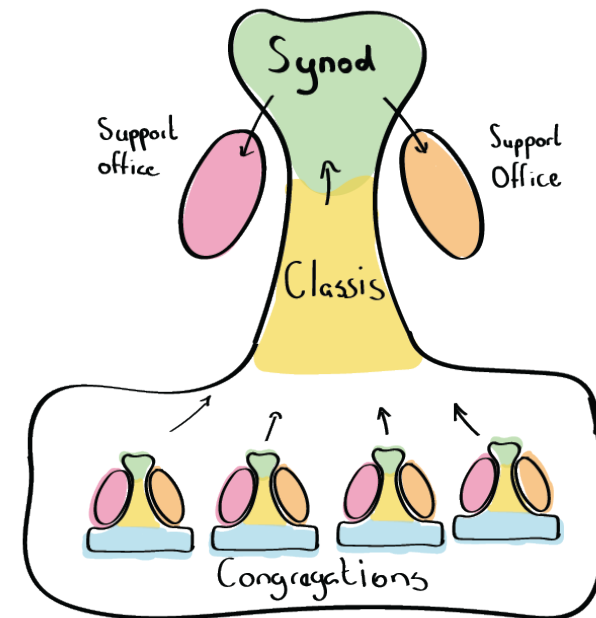


Figure 12 - Configuration of the Protestantse Kerk in Nederland

The values of the PKN are focused on institutionalization and universal processes, but the outcomes are pluriform and beliefs. Also, it is concentrated on indicating and understanding the complex situation we are in. Therefore, there is a need for a high level of standardized skills. The preaching is not solely focused on understanding the bible; it is also important to translate it to the modern context. For this, it is crucial to have an academic pastor who can understand Biblical theory and the context of that time and contemporary culture. The pastor is tasked to connect both the biblical context and modern days, and this is a very complex task that asks for a highly skilled specialist. Those who do well in understanding and explaining the complexity are being appreciated the most, which is related to Schwartz's Achievement value. The Service office serves as an expertise center of specialists who can support pastors and members to guide individual people in the complex society.

Shifting context

Overall, these organizations and churches did not happen suddenly. Most of these organization types show a mechanistic kind of structure. Processes were institutionalized, there were straightforward task divisions, and responsibilities were distributed across the organization. This shows, according to Burns & Stalker, that the context of the organizations at that time was stable. Yet the context was uncertain and complex before and after the organization was created. Like the Desert Fathers, they left the early churches; these churches had different opinions, expectations, and types of organizations. The desert fathers secluded themselves in order to have a stable context again.

Currently, the conditions around the PKN are complex. Many churches are dying out, and secularization is rising, making it harder to be healthy again as an organization. Therefore, this project is relevant to study how the organization needs to change to be relevant to the subject group of religious wanderers. The following chapter will focus on the research setup and results of this thesis.

9. Research methods, results & analysis

In chapter 7, I explained the approach of combining Research Through Design (RtD) and Value Sensitive Design (VSD). The essence of this combination is to use design to gain new knowledge and ensure the inclusion of values in the design process. Both VSD and RtD ask for an iterative approach, so making iterations of a design is a proper combination of methods. This project is executed in three cycles. These cycles are meant to ensure that the design iterations can be made. This process of three cycles was designed by myself.

The first cycle focused on setting the scene, knowing the church's current situation, and familiarizing and testing research methods. This cycle helped me understand the situational context of the PKN and be prepared to utilize techniques for cycle 2. The second cycle is focused on value, theme, and idea exploration. During this cycle, prototyping in the form of sketches started. At the end of cycle 2, I made a design based on the explorations; this design is used in cycle 3. The last cycle centered on meeting the subject group, testing, and reflecting on the design with the subject group. The research methods, results, and analysis are described per cycle.

9.1. Cycle 1 / Method familiarization and understanding of the status quo

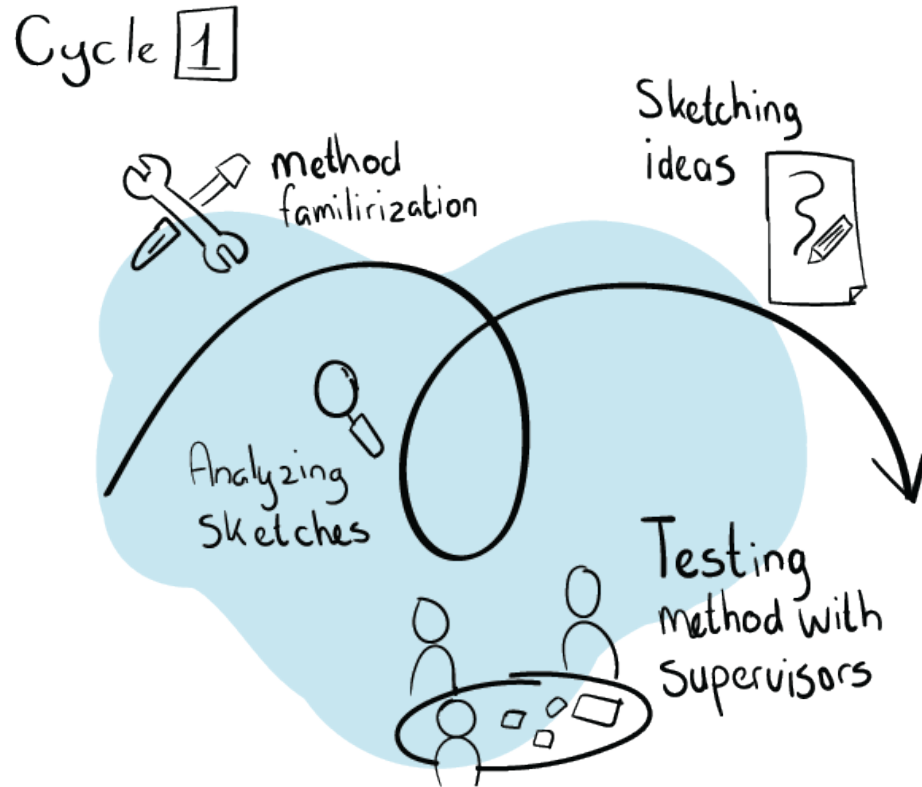


Figure 13 - Process overview of Cycle 2

Research setup

In the first three weeks, I familiarized myself with research materials and tested methods with my supervisors. This helped me understand the context and refine the process. I used the methods of value sketches and stakeholder tokens. Value sketches help explore new ideas (Friedman et al., 2002; Woelfer et al., 2011). and stakeholder tokens identify stakeholders and their relationships (Yoo, 2018).

In this phase, I prepared a session with my supervisors from the PKN. I made sure to have all necessary materials ready; see Appendix I.C.1. The session with the supervisors was two-fold. First, I wanted to know what the status quo is of a congregation within the PKN. Secondly, I wanted to test the research methods planned for cycle 2.

Results

During cycle one, the session occurred with both supervisors from the PKN. First, we explored the current situation of a typical general congregation. I asked them to use the materials to create a design, and I asked them about who is important and what groups or committees are part of a congregation. We used the list made beforehand and included more roles, which the supervisors also seemed to be relevant; see Appendix III.A. for a transcript, and Appendix II.A.1. for codes.

The supervisors made a matrix, with both the internal and the external focus on the outside world on one side. The other side of the matrix indicated the amount of power in decision-making. Then, the peg dolls represented roles within a congregation's organization. The sticky notes represented specific committees or named groups; see Figure 14.

Once we agreed upon the status quo of a congregation, the supervisors were

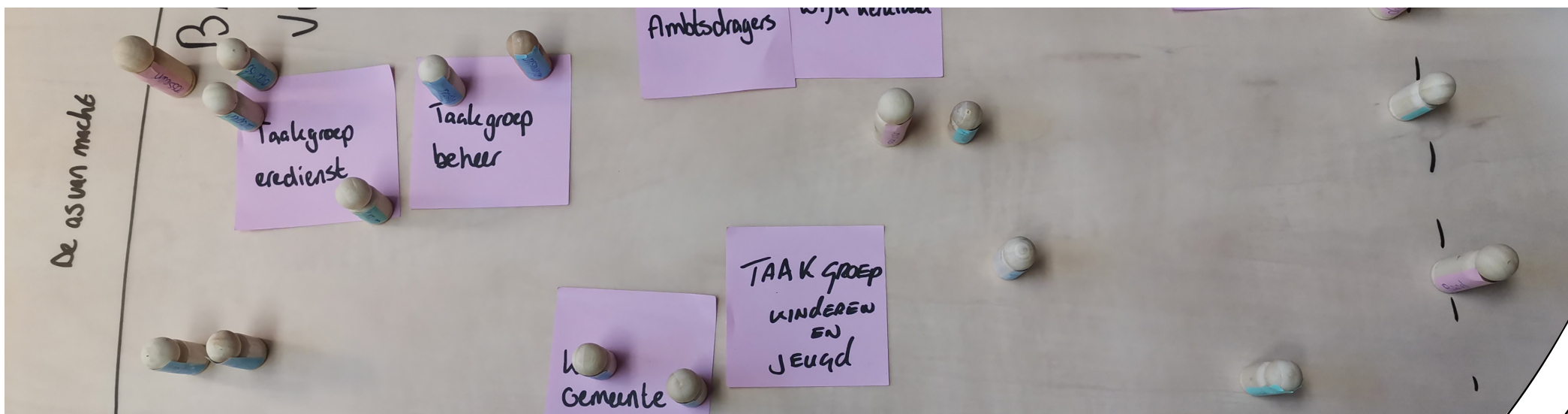


Figure 14 - An impression of how my supervisors from the PKN and me constructed a traditional congregation

asked to each create their ideal church organization. I did not guide them on how they should tackle this question. Both had two entirely different outcomes and ideas. Supervisor 1 designed an organization of the church, which was individual central, with four needs represented. These needs were someone's interest, benefit, ideology, and selflessness. He created roles in this organization to accommodate those needs. Besides, he mentioned the necessity of having a 'welcoming team' and a 'goodbye team.' The 'welcome team' guides new people in their organization. Whereas the 'goodbye team' supports those people who want to leave the church. Whereas Supervisor 2 based its design on the interpretation of the church split up in a matrix. The first side is whether one sees the church as a tool or an essence. On the other side of the matrix, it was focused on who belonged to the church, everyone or only Christian believers. He made four places of how the church can be utilized from this matrix. See the results in Figure 15.

Insights from Cycle 1

From this cycle and session, I learned a few things. The insights are divided based on the results and methodological implications.

The insights from the results were: the status quo of a PKN congregation was as much as how I perceived it and would expect it to be, so my personal view was confirmed, with a congregation being focused on hierarchy and the board with elders being the biggest decision makers. Second, from the results of the experts, the idea from Expert 1, where the church transforms into an individual 'needs' based organization, besides the value of 'person central,' stuck with me. And I liked the idea of having a 'welcoming team' in an organization.

Expert 2 showed me the different viewpoints one could have towards the church and how one can accommodate those viewpoints. A church does not

necessarily have one type of version but can transform into different versions depending on the value of its visitors. Their ideas helped me to start creating and re-designing church organization right away, using their ideas as a starting point for exploration.

The methodological insights were the peg dolls were too small to read the tag; therefore, I needed to have bigger dolls. The peg dolls may have helped to define roles, but in the phase of exploration during cycle 2, they may be irrelevant when a participant mentions no specific roles. And lastly, I learned that sketching a design or concept helps the participants explain their ideas and conceptualize outcomes. Both supervisors had divergent ideas of how a church should re-organize. Therefore, this method, with open-ended questions and value sketches, proved suitable for cycle 2.

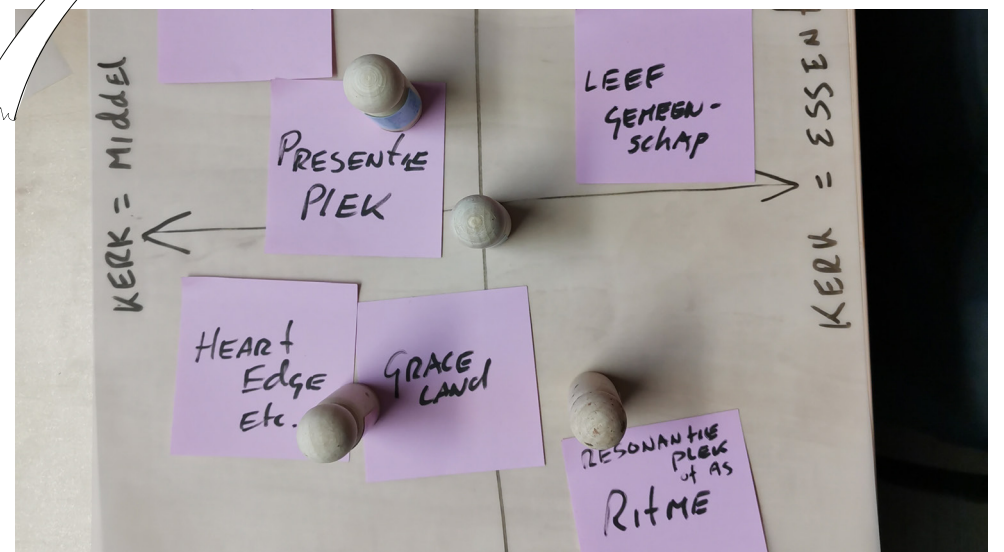
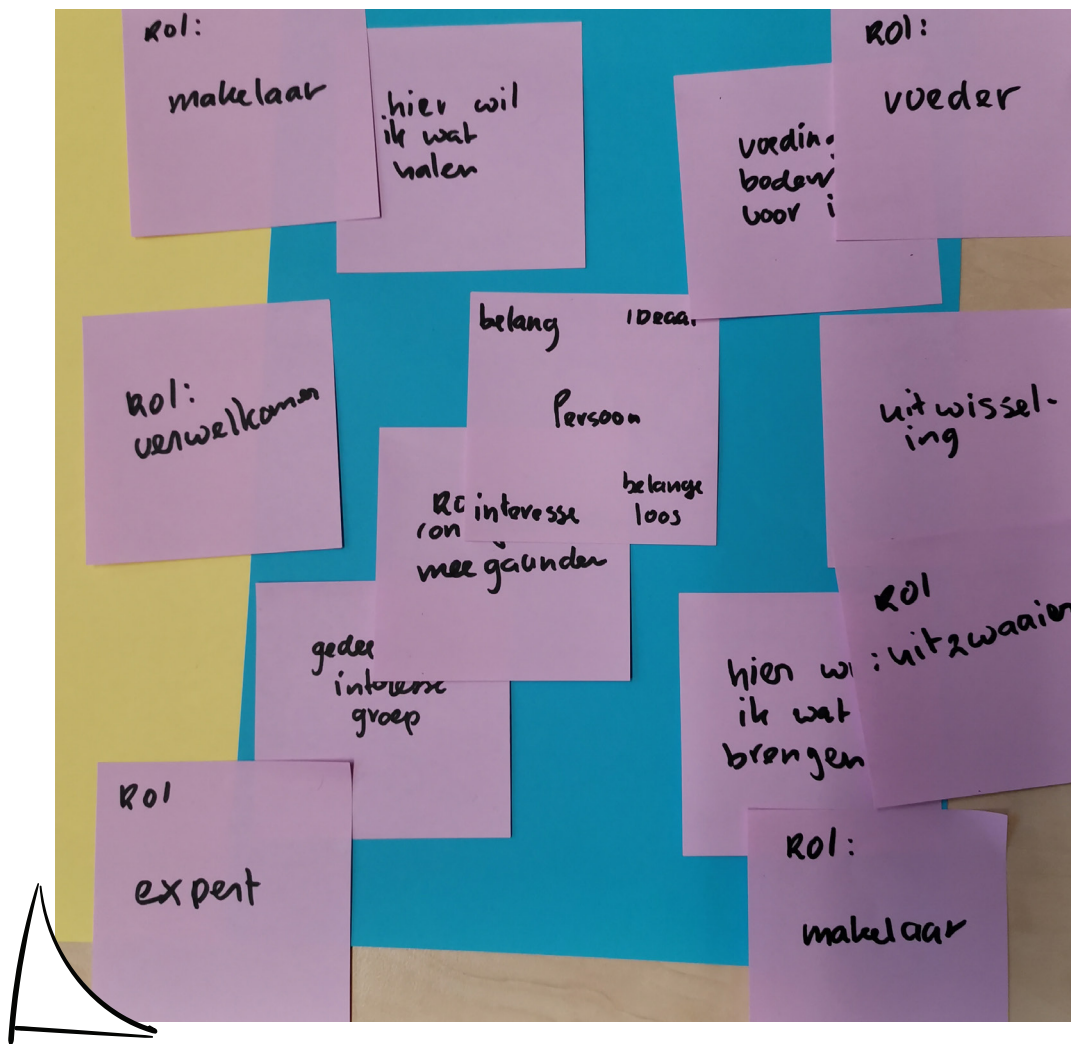


Figure 15 - Left photo is the results from Supervisor 1, two photos on the right are from Supervisor 2

9.2. Cycle 2 / Values exploration and gathering ideas

Research setup

Within the second cycle, a combination of values sketches and semi-structured interviews took place with experts. The experts were from within or outside the PKN, yet all were from Christian faith-based organizations. Their expertise is affiliated with innovation within or outside of the church, or their expertise is focused on young adults and their faith formation. The experts were asked to sketch their ideas on the future of the church and about what they think young adults value.

The interviews were meant to gain knowledge about the values of young adults as well as to collect ideas for the future of the church. From the expert interviews and sketches, a design was made, which was used for cycle 3.

Preparation

I had a contact list provided with experts who might be relevant to contact regarding young religious wanderers or church innovation. The experts were either contacted by myself or through my supervisors. With every expert, there was an interview planned for at least 1 hour. The interviews had a value-oriented semi-structured setup, with questions prepared beforehand. The questions were:

- What do young adults find important in their life?
- Who do they contact, and who are important in their lives?
- What is your (from the expert) vision about the church's future, suitable for young adults?
- How should the church re-organize itself to be fruitful again?
- What is important when re-designing this organization?

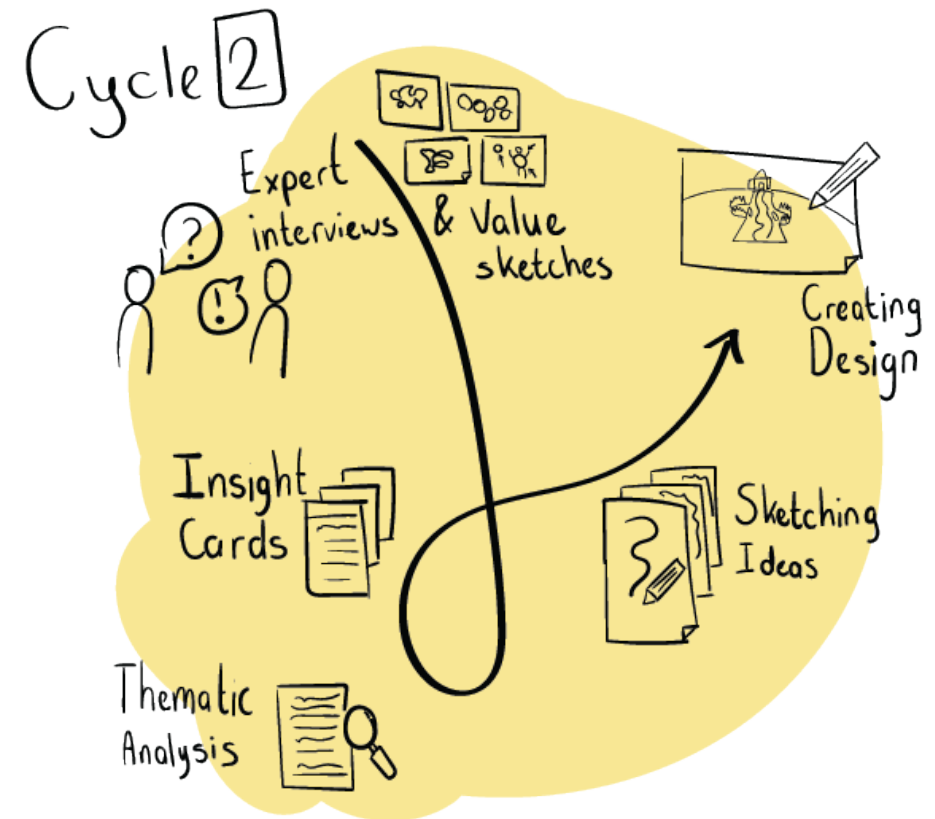


Figure 16 - Process overview of Cycle 2

The interviews were prepared with paper, post-its, and peg-dolls comparable to cycle 1, yet the experts were not obliged to use all the materials. During the interviews, the experts were asked to provide their perspectives on the future of the church. The experts were asked to create drawings using the value sketch method as part of the interview process. This visual approach enabled the experts to express their ideas and visions, including values from young adults and the conflicts within the current church organization. The interviews were recorded for transcript purposes.

Experts background

The following four experts from the PKN were interviewed:

- Missionary research and pioneers
- Youth and faith education
- Young Board member
- Pioneer movement manager

Three external experts were from:

- Union for mission in the Netherlands
- The organization focused on supporting Christian students
- Christian Media House

Results

An impression of one of the sketches can be seen in Figure 17. See Appendix II.B.1. for a complete overview of the sketches. Expert 1 did not make any sketches.

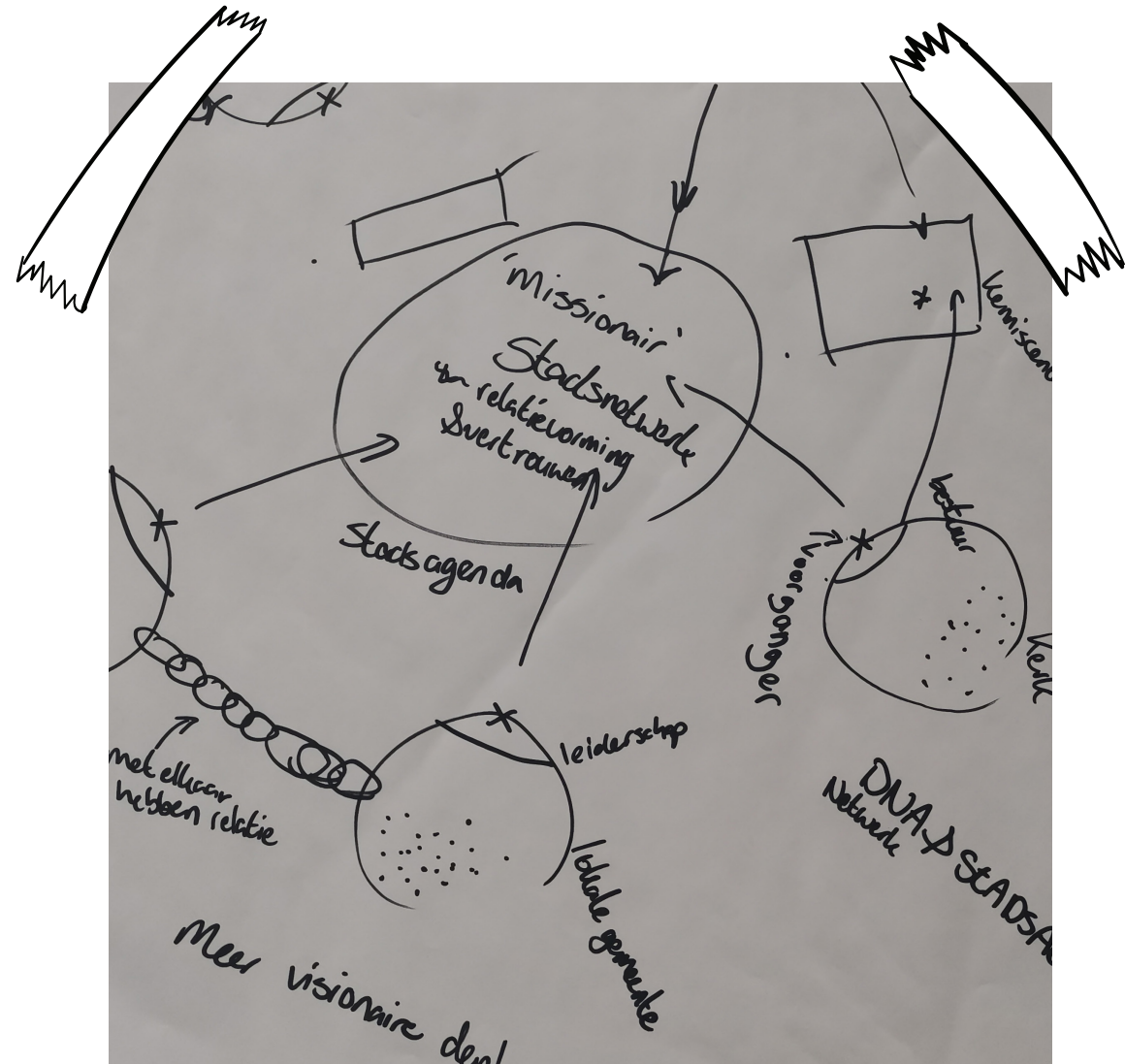


Figure 17 - Impression of one of the value sketches made by the experts

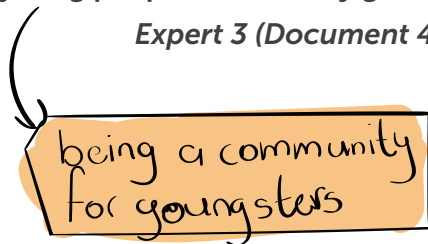
Data Analysis

Thematic analysis

The interviews were transcribed by Microsoft 365; see Appendix III.B. for the transcripts. The collected data from cycles 1 and 2 were analyzed using qualitative methods. The transcripts were analyzed in Atlas.ti, software available for qualitative and quantitative research. In this software, codes can be made to label what interviewees convey, e.g., on the level of one or a few sentences. I made these codes as well, and the code list can be seen in Appendix II.B.9. A thematic analysis was carried out to identify recurring themes and patterns within the interview transcripts and value sketches (Lochmiller, 2021). I will explain one example of how I did this thematic analysis

(...) From those conversations, it emerged that young people miss connection in a community. Yes, and ideally, where such a community would flourish, as far as I am concerned, is in the church. So, the church really has a lot to contribute to this. This requires that young people are actually given space to explore. -

Expert 3 (Document 4: code 19)



being a community
for youngsters

This quote from expert 3 was coded as *being a community for youngsters*, and this code was a subcode from Opportunities for the church. Later on, when I coded all interviews, I created code groups. The code, being a community for youngsters, was added to the code group *Seeking connection*. An example code tree is visible in Figure 18. And lastly, from the various code groups, I made insight cards. Code 4:19 was added to the insight card with the title: *Searching for spirituality in modern times: the desire to be connected*, see Figure 19. See Appendix I.D.1. for all the insight cards.

Value tension between the sense of belonging and one's own desires

During the analyses of all interviews, I discovered the first value tension. This was the need of young people to be their authentic selves, yet at the same time, they needed to be searching for belonging to a social group and being accepted by others. The insight cards were clustered into three themes. The theme was labeled as either a challenge or an opportunity. The three themes are:

Challenges: Religious Wanderers and the church

- *Searching for spirituality in modern times: the desire to be connected*
- *Balancing between connection and utility: spiritual needs and pragmatism*

Challenges: necessary changes within the church

- *The importance of interacting with experts: youth, faith, and support*
- *The critical role of the church: balancing between affirmation and dissent*

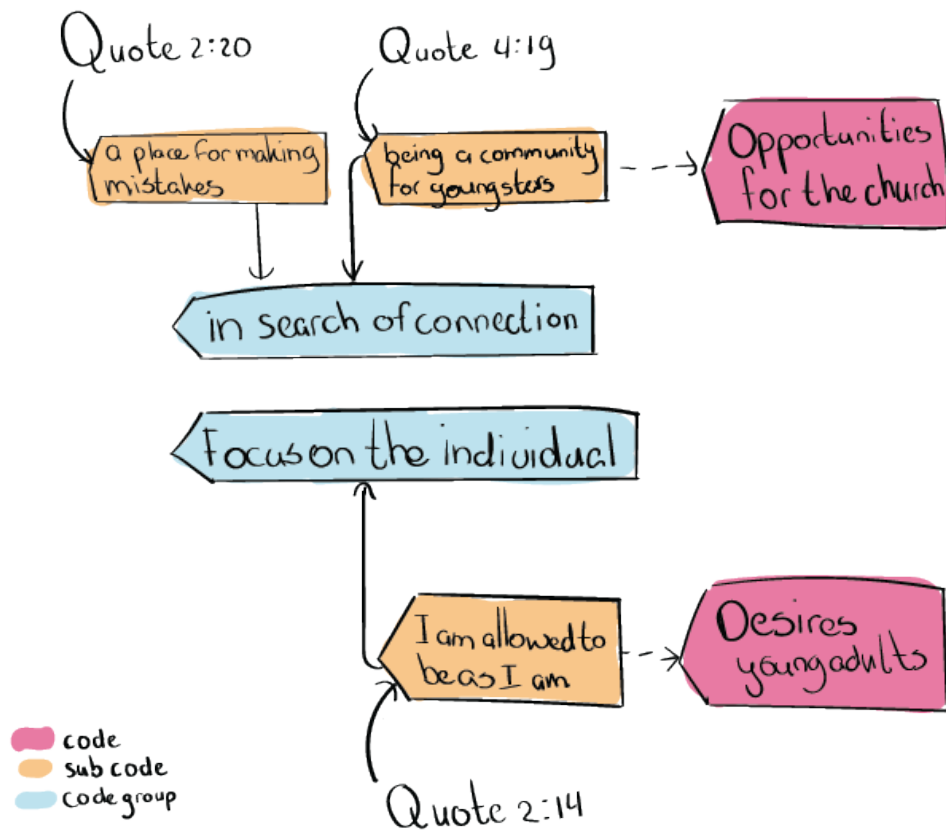


Figure 18 - An example of how the transcripts from the experts were coded.

- *Beyond traditional borders: redefining the term 'church'*

Opportunities: the value of communities

- *Steppingstones for Christian communities: having personal space and trusting each other*
- *The beauty of helping others is cooperation and servanthood, but it doesn't come naturally.*
- *The power of deep relationships: investing in trustfulness*

I clustered the three themes above into one overarching statement: the focus on individual needs versus the need and belonging to a group or a community.

Designer's reflection

Hesitant experts

Encouraging experts to start drawing was a bit of a challenge. Many of them felt hesitant due to their perceived lack of drawing skills. However, I persisted and encouraged them to give it a try. To my surprise, one of them fully embraced the idea and used his drawings to illustrate his perspective. Towards the end of the interview, he even asked me to send him the transcript, acknowledging that the drawings had significantly aided in explaining their company's vision.

Searching for spirituality in modern times: the desire to be connected

Young adults do want to find connectivity in a community. They choose that community according to their own needs. However, as the experts emphasize, they are afraid to making a final decision and would like to remain the freedom of choice.

(...) From those conversations, it emerged that young people miss connection in a community. Yes, and ideally, where such a community would flourish, as far as I am concerned, is in the church. So, the church really has a lot to contribute to this. This requires that young people are actually given space to explore. - Expert 3 (4:19)

(...) But it's at the service of your needs. And, I find that a tricky one. And at the same time, I also recognize that it doesn't work if you don't take those needs into account. So that's where the struggles at. Just yesterday I spoke to a pioneering priest who works a lot with young professionals. On the one hand, they want to be connected. And on the other hand, they shy away from really committing to something, because imagine making the wrong guess. So this freedom of choice is hugely important. 'I have to make the choice. Nobody else makes that choice for me.' - Expert 1 (2:14)

Value of organization

Schwartz's value

Searching for connections with another person

Benevolence

Value of individual

Being able to make own decisions

Self-direction

Research: Transforming Traditions

Oct 2023

Figure 19 - Insight card 'Searching for spirituality in modern times'

Networking as a power source: enrichment of collaborations

We live in a networked society and there is an opportunity for churches to participate with that. By becoming part of a network, Different groups of people come together. The experts point out that the networks in which young people live offer an opportunity for the church to respond to this.

At the same time, however, honoring that those networks are there and that we are seeking just with each other. How can we harness the power of all those networks that young people are moving into. How can we use them? To enrich these with each other. And now it tends to be seen as a kind of threat. - Expert 3 (4:33)

(...) How can we be congregational with each other? But how is the structure then so that we allow that that border traffic That we bring in the networks that everyone is in in just a positive way. (...) Perhaps it is very important that we think about starting from this center. thinking about, how can we strengthen networks when it comes about people in their twenties and thirties? How can we support them from their center? For example, supporting those who are in the middle of their first job. - Expert 3 (4:35)

Value of organization

Schwartz's value

Searching for connections with others

Universalism

Research: Transforming Traditions

Oct 2023

Figure 20 - Insight card 'Networking as a power source'

This statement became my main design challenge:

To design a system that helps younger people find a community that both caters to their needs and can conform to a group or community.

Ideas for the future church

Besides the insights, the experts showed many ideas on how the church should change itself in the future. Though the sketches may be hard to interpret, they still helped the expert grasp their ideas and explain what they had in mind. The sketches forced the expert to make their ideas explicit and logical. Mentioned more frequently is the adaptation to networks, for example, how one expert built their own network of churches in Amsterdam. The ideas and concepts were captured into insight cards as well; see Figure 19 as an example. A fourth theme was created from the insight cards, namely:

Opportunities: Going beyond your own community

- *Networking as a power source: enrichment of collaborations*
- *Creating a liquid church: transforming towards networks*
- *Shared focus on the city: shared collaboration between Christian organizations*
- *The church as a mixture of borders: balancing between openness and maintaining identity*

To give you a brief idea of what some ideas contain:

- Creating an online community
- The church needs to be both an open- and closed system
- Coaching and support for young people
- Being like a starfish, with the DNA everywhere within a church
- Focus less on competition
- A city-based infrastructure
- Consider a congregation's value to society
- Gathering of expertise
- New word for 'church'
- Building small communities

Gathering ideas and starting with sketching

With these ideas, I started drawing out the first concept of a new organization. This sketching started during the period the interviews took place. The ideas that struck me the most were the network-based city 'church' to connect all kinds of initiatives and congregations to each other. Rather than having one organization or congregation provide everything, such as a church service, a community, or small groups, the network is a collective where all kinds of organizations and initiatives are collected and shared. This way, I saw the opportunity for young people to wander around different settings and places, attend a church service, and have a small group somewhere else. So, young adults can 'cherry-pick' their spiritual life rather than having it all in one organization or institution. Therefore, the city initiatives need to relate to each other. The impression of all the different sketches can be seen in Figure 21.

The sketches are focused on the diverse set of communities, a network specifically necessary for young adults, the idea of an expertise team for theological questions, a welcoming team, and an online platform on a city

level. Besides, it was necessary to represent different sets of values within the network, showing the differences between them. Lastly, the value of self-exploration is very important and should be catered to this need.

Preliminary design for cycle 3

These ideas and drawings resulted in preliminary designs necessary for cycle 3, see Figure 22. The visual was explained as follows:

To regain relevance among young religious wanderers, the church should adopt a community garden approach. Picture this community garden as a space with various sections, each mirroring different churches or organizations. The conventional church corresponds to the general vegetable garden, emphasizing tradition. The flower garden, on the other hand, focuses more on aesthetics and beauty, like a modern church, while the wild meadow garden embodies a newer, more open-minded church. Yet, within this garden, all types of gardens are equal, allowing religious wanderers to explore which one resonates with them. The values in this design are incorporated in the fact that a young religious wanderer is allowed to discover what kind of garden is suitable for them. This caters to the value of self-exploration and yet searching for a community to which they feel they belong. Finding a community where they belong is related to the value of safety and benevolence.

To assist them in this exploration, a dedicated team is ready to guide and coach them in finding their fit. This community garden, like the city-based church, operates at the local level, ensuring proximity to the community. Several essential elements are in place here. Information platform is readily available, providing insights into events and activities. The information platform helps them to get an overview of what is out there in a city.



Figure 21 - Impression of all the sketches made by me

Transformerende Tradities | Op zoek naar verbinding?



Figure 22 - Preliminary design used for cycle 3

A welcoming team greets potential members, offering tours of the different garden sections. Expertise in theological inquiries is accessible, represented by a small library in the garden. The expertise team is based on the value of wisdom and knowledge. Informal gatherings, such as small group meetings, are encouraged and take place on a bench outside. Finally, a city center oversees the welcoming team, maintains ties with the city network, and manages the information platform. In essence, by adopting the community garden model, the church can reconnect with young religious wanderers, offering them a diverse and welcoming space to explore their spirituality. This model helps religious wanderers withhold their value of exploration yet helps them in the search for connections.

Insights from Cycle 2

Again, like in cycle one, the insights gained from this period were twofold. From the results perspective, I found that young religious wanderers value being authentic and themselves; they want to feel accepted just the way they are. Even though they value this self-direction, they want to be part of a community. They are searching for acceptance in a group. This relates more to the value of belonging and benevolence. This resulted in my main design challenge, namely the tension between the desires of an individual and the need to belong to a community.

The experts mentioned that the church needs to transform into a network system to be relevant again. I used their ideas to tackle the design challenge. These ideas related to networking actually meant that the focus should not be on the inner structure of an organization but rather on how different organizations can collaborate.

From a methodological perspective, this cycle taught me the richness of letting others draw out their perspective. Without these drawings, I do not think the

experts were able to grasp their ideas so effectively. Yet their sketches were unusable for non-spectators, so if a researcher wanted to use their input directly, then they needed to be guided more into their sketching process. Because I sketched out their perspectives and ideas as part of the research through a design approach, the ideas were not lost.

Because of the little guidance, the ideas of the experts varied a lot. One expert showed their perspective from an educational point of view, whereas the other used a more personal view. Their ideas and experiences enhanced the richness of the design and perspective toward changing the future church.

Designer's reflection

Personal questions with experts

Some of my discussions with the experts naturally delved into religious topics, which was quite logical since we were exploring questions related to the church. However, one particular interview became remarkably personal. It stood out to me because, in this instance, I actually fell within the age range of the subject group we were discussing, and some of the topics we explored were directly relevant to my own life. As a result, the conversation took on an intensely personal tone.

To my surprise, at the conclusion of this conversation, the expert asked me if she could pray for me. I was deeply moved by this gesture, and it felt incredibly special that prayer became an integral part of my graduation journey.

9.3. Cycle 3 / Meeting my subject group and co-reflection with design

Research setup

This third cycle is focused on fieldwork and co-reflection with the participant group; see Figure 23 for the process. This took place at Graceland festival, a Christian-inspired festival focused on exploring yourself with mind, body, and community. This festival specifically targets religious wanderers, where I hoped to meet my subject group. The co-reflection method was integrated, involving the religious wanderers in reflecting and criticizing my design concepts (Tomico, 2009). Co-reflection exists out of 3 steps: stakeholder exploration, stakeholder ideation, and confrontation (Tomico et al., 2011).

During the exploration phase, the design researcher introduces the topic while the participants introduce themselves, stating their role and who they are. Next, in the ideation phase, the designer encourages participants to generate ideas and opportunities. Sensitizing materials are used in the exploration phase to help participants become more attuned to the topic being worked on and involved in generating their own ideas. These materials are similar to those used in context mapping (Sanders & Stappers, 2020), where participants use images and drawings to discuss a topic. Once the sensitizing materials are finished, the design is presented to participants for discussion as part of the confrontation stage, the final step in the co-reflection method. This step stimulates participants to reflect on and make decisions regarding their own ideas and the designer's design. Participants provide feedback on the design based on their first impression, highlighting what they like and dislike about it. This feedback can be used to adjust and refine the final design.

Cycle 3 has as a goal to get in contact with my subject group, religious wanderers, to discuss their concept of community forming. Additionally, I aimed to receive comprehensive feedback on my proposed church organization design during this phase.

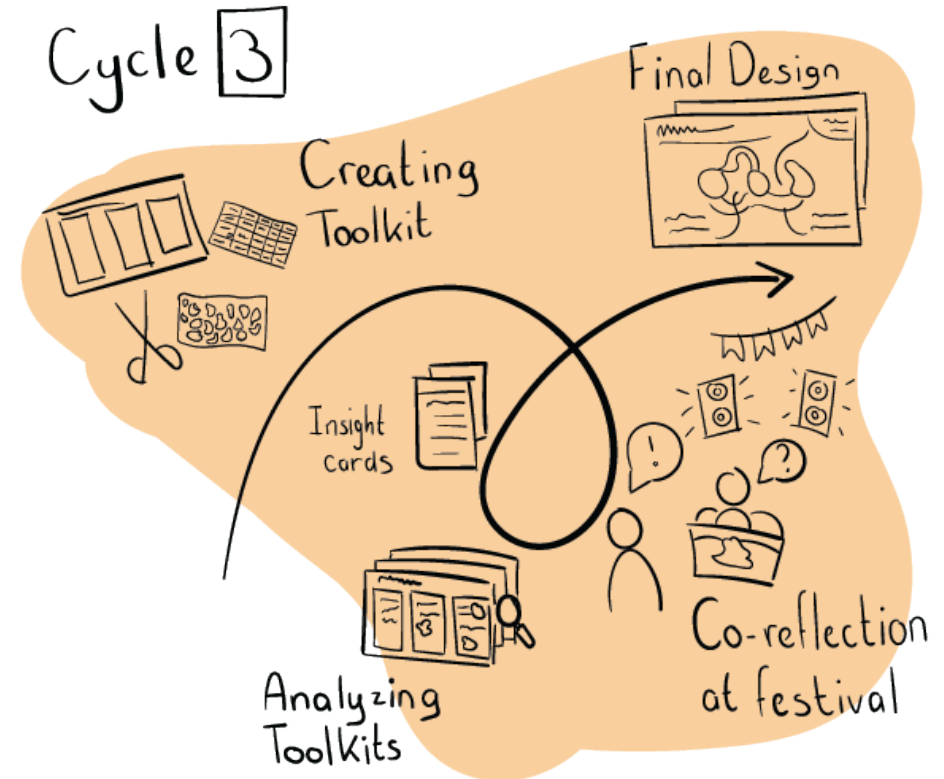


Figure 23 - Process overview of Cycle 3



Figure 24 - An impression of the atmosphere of Graceland festival and the participant discussions

Preparation before the festival

For the co-reflection, I needed generative tools for the participants. Therefore, I made my own toolkit, focused on explorations and desires regarding communities. The toolkit was split up into three sections. The first section was about the introduction of the participant, the second section was about the participants' communities, and the last section focused on the ideal type of community. See an overview of the toolkit in Appendix I.E.1.

This toolkit was supported with inspirational materials in the form of words and images (Sanders & Stappers, 2020). The words for the generative materials were formed into a word list. The wordlist was derived from the expert interviews, see Appendix II.B.9., and I added extra words that are related to some controversial themes in church discussions, like LHBTQ+ or living together before marriage. A word list can help to express abstractions or symbolic meaning. The images were picked more randomly, yet some were related to 'Christian/religious' themes, such as praying hands or an open book (bible). The images leave room for their own interpretations for the participants. The words and images are meant to inspire a participant who might come up with words or ideas themselves (Sanders & Stappers, 2020). The word list and images can be found in Appendix I.E.2. and I.E.3.

The toolkit and inspiration materials were tested twice. The first test was online, where the tester mentioned dividing the questions into blocks (using one question per space). The second test was one where the materials were tested physically. During this test, the participants mentioned including a Likert scale for the question 'Are you a believer?' as this was not an easy yes or no question for them.

For the festival, the materials were printed, and I printed the words and images as stickers, which is more convenient to use at the festival compared to using scissors and glue. I printed the toolkit on extra thick paper for convenient use as

well because it could withstand more humid conditions.

Recruitment of participants at the festival

At the festival, I approached people I thought belonged to my participant group of people between 20 and 35 years old. I asked these people whether they were members of a congregation or visited a church service on a regular basis. This way, I could easily check whether they fit my participant group.

Results

Participants

In total, I have spoken to nine people, and eight of them fit the criteria of my participant group. One did not fit it as this person was already an active congregation member. Yet, this conversation was very fruitful and of rich ideas, so I still incorporated this input. Two conversations were in a group setting with three participants at once. The other three conversations were one-on-one with the participant.

The conversations took place during the festival either at the campsite or at the festival terrain, for example, during a piano concert on the grass; see Figure 24 for an atmospheric impression of the festival. Other conversations emerged spontaneously after starting small talk. The conversations took roughly 30 to 60 minutes. Before I started discussing the toolkits with the interviewees, I explained my research goal and expectations to the interviewees. The research goal was to sensitize the interviewee with the toolkit materials to provide better feedback on my design. The transcripts of the interviews can be seen in Appendix III.C.

See figure X, for an impression of the finished toolkit by participant 9. The results of the toolkit can be found in Appendix II.C.1.

Designer's reflection

Activities at Graceland

Visiting Graceland was a really nice experience. The atmosphere there is warm and welcoming. Fortunately, on the first evening, I had the opportunity to get a taste of the program. I attended a new ritual session that focused on reflecting on life through physical experiences, such as tastings to explore different flavors. So, one can also innovate with rituals and experiences.

The second day was dedicated to meeting and talking to people to determine if they were religious wanderers. To be honest, this was quite challenging. It takes a lot of courage to approach random individuals and ask such personal questions about their church visits. You see, I was there as an individual, while most people attended the festival in groups. So, during a morning rave (yes, at 9 AM), I approached a group of young people and explained my quest. Surprisingly, it was a success!

Once I had found a few people willing to chat, they even mentioned that they knew others who met my criteria. After speaking to eight people in one day, I was entirely exhausted. In fact, I wouldn't recommend having so many conversations in a single day.

Toolkit analysis

The analysis of the toolkits is done in Miro, an online collaborative software, where one can add sticky notes for every comment made on the sheet. For example, Participant 9 answered the question 'What does a community mean for you?' with *Living Together*. Every single comment of the participants was coded on a (digital) sticky note in Miro. All codes from the results of the participants were clustered into shared themes. The code *Living Together* was included in a cluster about *sharing* and *togetherness*. This cluster was added to the group theme of *the desire how to behave with one another*; see Figure 26 for a visual representation of the clustering process. The analysis can be seen in Appendix II.C.3. The data derived from the toolkit are made into insights cards as well and added to the themes made in Cycle 2; see Appendix I.E.6. One theme was added based on the data from this cycle, namely:

Desires: What religious wanderers seek for

- *One twenty-something is not the other: diversity vs. uniformity*
- *Friends, Union, family, and small groups: The communities of religious wanderers*
- *Connectedness in proximity: sharing lives with each other*

Two extra insight cards were made and added to an existing theme:

Opportunities: The value of communities

- *Sharing life: the desire for diverse activities in a community*
- *Creating close relationships: the greatest wish of young religious wanderers*

Even voorstellen!

Ik ben 34 jaar

Ik woon in Utrecht

Ik ben kerkelijk opgevoed

Helemaal niet van toepassing ————— Helemaal wel van toepassing ☒

Ik ben gelovig

Sterk mee eens ————— Sterk mee eens ☒

Ik ga op zondag naar de kerk

Nooit ————— Altijd ☒

Jouw gemeenschapsleven

Bij welke gemeenschappen hoor jij?

Denk aan een groep vrienden, vereniging, sportclub, kerk, etc.

~~tuinclub~~ tuinclub vve
sci fi leesclubje
kerk
diensken

Wat betekent een gemeenschap voor jou?

Samen leven

ergens op touw kunnen vallen

reservesleutels in de meterkast

kennen en gekend worden, qua persoon, en wat er in het leven speelt



Welke dingen doe je met jouw gemeenschap(pen)?

sci fi lezen
tuinieren

Persoonlijke toekomstdroom

Hoe ziet jouw ideale gemeenschap er uit?

wederzijdse Aandacht

spullen delen (praktisch)

geduld en begrip voor verschillen

helpen

geen angst eerlijke gesprekken

vieren samen leven

Wat is belangrijk in deze gemeenschap?



Wat zou je willen doen in die gemeenschap?

Figure 25 - Result of toolkit made by Participant 9

Analysis on confrontation design

The feedback on the design varied per participant, but the fact that a person is allowed to discover and search for a community that fits them was appreciated.

Yes, I believe everyone believes in their own way, and everyone can find their own way in it – Participant 4

However, the need for a coach who helped them discover their personal identity was not necessary.

Someone pulling you along [to an activity] is nice. But a person who sits next to you and does some kind of research about what suits you? That is unnecessary. – Participant 2

The participants liked the metaphor of the community garden, resembling the idea of a city network. Yet there was skepticism about the idea of jumping from one community to another (cherry picking) because they argued if everyone does this, then there is no community left.

On the other hand, I also think that by giving commitment to each other, it's really about something; that's how you create a connection. And if everyone hops around, then it becomes loose sand again. – Participant 6

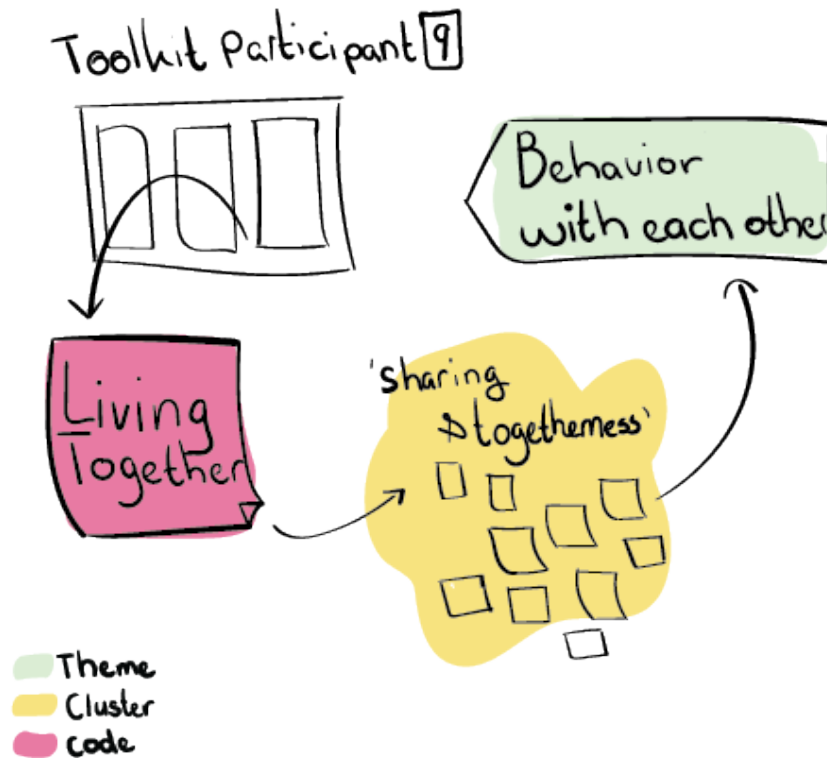


Figure 26 - A basic reconstruction of the coding of the toolkits.

Another comment on the design was adding transparency. This person found it important to know upfront if they were welcome, as they were non-binary.

Well, then anyway, what is often missing then is explicitly who all are welcome. Transparency is really the most important thing and that applies to various groups, so it also applies, for example, to migrant churches. – Participant 1

This did not mean that every congregation needed to accept them, but it needed to be clear what their opinion on this subject was. This person mentioned a website that shows a checklist for congregations to clarify what their viewpoint is. This idea was included as an insight card to the theme of Opportunities: the value of communities.

Overall, this co-reflection input on my design and the results from the toolkit were used for the final deliverable. The participants showed me what they liked, such as being able to explore different churches and the fact that everybody has a different way of practicing their faith. Yet again, they also showed their concerns about the design and whether this will work if everybody is exploring. Their support and concerns were taken on in the making of the final deliverable, which is described in the next chapter,

Designer's reflection

Graceland discussions

Some conversations took place during a concert, while at other times, they occurred at the camping on the grass. Although I was as prepared as I could be, one cannot fully anticipate everything in such situations.

In fact, during the initial conversations, we were interrupted by a news reporter who wanted to know what we were doing. We engaged in a brief conversation with the reporter, and after about 20 minutes, we resumed our discussion on my topic. However, this aspect got somewhat overshadowed due to the interview.

Insights from Cycle 3

My experience in conducting research during cycle 3 taught me that field research can be challenging. Despite this, I was able to gain valuable insights by creating a comprehensive toolkit and sensitizing materials. This toolkit helped participants understand complex concepts, such as the future of the church, which would have been difficult to discuss without prior knowledge. Even more importantly, the toolkit helped the participants to think of the values they had towards communities; it made it more explicit. Physical materials were especially useful in facilitating conceptual discussions and eliciting opinions. Additionally, using a design helped to convey the vision more effectively, as participants could easily point out specific concepts within the design. The use of metaphors further enhanced their understanding.

The results of cycle 3 confirmed the findings of cycle 2, which showed that young people are in search of a religious community. However, the participants in this cycle also demonstrated that each religious wanderer is searching for something unique. They have diverse ideas about what makes a community, but the desire to be known and to know others is universal. Thus, benevolence and security are crucial values for religious wanderers, although the outcomes of these values may differ. The participants showed their interest in the exploration of different communities; however, some had doubts whether this would be effective.

Designer's reflection

Conversations with fellow students

When I discussed the toolkits with two fellow student graduates, I noticed that they struggled to provide a straightforward answer to the question of whether they were religious or not. For them, it wasn't a simple yes or no question. So, I asked them why, and one of them shared a thought-provoking perspective:

"I think religion is somewhat like learning another language. I used to speak Mandarin, but I haven't had many opportunities to practice it, and slowly, I forgot how to speak the language. It's not that I really miss or need the language, but similar to religion, once you do understand it, it enriches your life a lot!"

Her insight resonated with me, and I found it enlightening to engage in such a meaningful conversation with individuals who do not identify as religious.

10. *A roadmap towards exploration*

Fase 3 Building infrastructure for exploration

An infrastructure for exploration, mentoring of young religious wanderers in the urban network of the Christian collective.

The final step focuses on the final vision, which is to build an infrastructure for exploration. In doing so, it is important to have information on which organizations are joined. In addition, there should be exploration opportunities and an organization should be created at a city-level.



Figure 27 - Phase 3 of the roadmap for exploration

10.1. Final Design

After completing the three design cycles, I made a final design for this project; see Figure 25 for an impression of it. In this design, I have tried to include all the necessary elements and gained insights from my research. The design goal is focused on creating a strategy for the PKN and other churches on how to be relevant again for young religious wanderers. The design challenge created during cycle 2 was focused on designing a system that helps younger people find a community that both caters to their needs and can conform to a group or community.

Design innovation roadmap

The final deliverable of this project is a design roadmap. I used the interpretation of a design roadmap according to Lianne Simonse's theory (L. Simonse, 2017). These innovative roadmaps are visual portraits of a product to be built in the future. First, the creation of a design vision is key; this is the dot on the horizon on which the roadmap is based. The roadmap consists of a market, product, and technology plan plotted on a timeline. In this roadmap, the time pacing is an essential element, where both short-term and long-term goals are synchronized (Simonse et al., 2015). This time pacing strategy is synced into three horizons, showing three steps towards the new innovation, starting with incremental changes and ending with disruptive changes for the company.

Value roadmap

However, in this research, the roadmap is a bit different from the usual theory. As this study is not focused on physical innovation, the market, product, and technology plan are not present. However, the design contains values, research results, and ideas. In my roadmap, the vision is focused on 'Building an infrastructure allowing for exploration for young Christian wanderers, to help

them find a community where they belong.'

The design is split up into four sections with the current situation: horizon 1 with incremental innovation, horizon 3 as disruptive innovation, and horizon 2 as a bridge between the first and last horizon. In this design, the metaphor of the garden is still used, as in the design of Cycle 3. The design of cycle 3 is a disruptive innovation and is seen as the last step in reaching the vision. The first horizon is focused on building connections between different organizations. Here the value of Benevolence and creating relationships is essential. As creating a network need to be build on strong relationships.

The second horizon is about creating interdependency between organizations, where they may share some facilities like an expertise center of knowledge and have inter-congregational small groups. In this phase the values trust and transparency are key. Because being transparent of who an organization is and what it has to offer is necessary for creating a city collective.

The last horizon is focused on establishing a guidance network system for religious wanderers to help them find the community they belong to. Exploration and self-direction values are most prominent in this phase. In this phase the guides for exploring different communities are established.

The roadmap is meant as a preliminary strategy plan for local organizations to start building on a network-based exploration system for young religious wanderers.

10.2. Validation of design

The roadmap is validated by three people. Interviewee 1 is a congregation board member in the city of Utrecht. Interviewee 2 is a youth worker with both religious and non-religious adolescents, and this person fits the criteria of a religious wanderer. Interviewee 3 is a church office director. Two validation sessions were online, and used Miro to comment on the design. One session was physical and used printed versions of the roadmap. The feedback sheets can be found in Appendix II.D.

Both interviewees 1 and 2 had mainly practical questions on the design roadmap, such as 'Where would this be, in which city?' Or how will the agenda from the information platform be maintained? This shows that the roadmap is only limited to an ideal plan; the practical implementation needs to be researched and tested.

Interviewee 2 mentioned that this structure is focused on people who already know that they are searching for a community, but what about those who do not seek?

'The tricky thing is that there are a lot of people who don't know they're looking for this but need it, how do you reach them?' - Interviewee 2.

So, Interviewee 2 mentions that the infrastructure of exploration is not solely for religious wanderers but would be a fit for non-wanderers as well. Yet reaching out to the non-wanderers will remain a challenge.

'Creating a network is a hell of a job, it is a continuous process.' – Interviewee 3

Interviewee 3 explicitly mentions that phase 1 is not just a phase which can be finished, this networking and building relationships need to be simultaneously throughout all phases.

Overall, the reactions towards the concept and idea of infrastructure were very positive.

'So good that you are doing this, we are so trapped into our own club and methods.' - Interviewee 1

'Very nice that you emphasize looking at the other organizations. The charm of putting it together yourself does ring true. So, it's very much focused on keeping it open.' - interviewee 2

'The drawing are a nice way to grasp your concept. I like the fact that old and new types of organization can exist at once in this design (...) I really like the idea of exploring between different communities.' – Interviewee 3

11. *Discussion*

The design project was initiated in response to the concerning trend of declining membership within the PKN, where less than 10% of active members were under the age of 35. Because of the current trend towards secularization, the PKN is facing significant challenges. As a designer, I decided to confront this challenge by concentrating on individuals who have a Christian faith but no longer attend church. To address this complex issue, I formulated the following research questions:

How can the PKN adapt its organization to serve young religious wanderers better while staying true to their core beliefs and values?

To answer this question, some sub-questions must be considered: What do religious wanderers under 40 dream of when discussing church organization? Which parts of the PKN's current organizational structure should be changed, kept the same, or eliminated to align with the expectations of religious wanderers?

How can integrating values and design principles effectively inform the process of reimagining the PKN's organizational structure?

For this research, the design goal is to develop a strategy that helps the PKN and other churches to become relevant again for young religious wanderers.

In response to the first research question, my design outcome is a visionary roadmap for constructing an infrastructure that supports community exploration within a city; see Figure 28. Rather than advocating for churches to undergo internal structural changes, my research suggests a shift in their attitude towards collaboration with other organizations. This approach enables young religious wanderers to discover communities where they can find a sense of belonging. Importantly, it recognizes that these wanderers are not seeking a one-size-fits-all community, as their desires and needs differ.

Young religious wanderers, as demonstrated in the findings from the third research cycle, yearn for communities where they can establish deep connections, feel trusted, and have their voices heard. However, the nature of these connections varies; some seek diverse cultural experiences, while others prefer communities aligned with their specific norms and values. Consequently, I believe that a single organization cannot cater to all types of wanderers. Instead, the emphasis should be on supporting these individuals in their exploration process.

Regarding the second research question, the Research through Design (RtD) and Value-Sensitive Design (VSD) processes played a crucial role in initiating the design aspect of the project right from the beginning. Even when I didn't possess all the information, the value sketches crafted by experts provided me with the confidence to begin sketching and conceptualizing a city-wide network of churches and organizations. This early design initiation was pivotal, as it steered me away from an exclusively internal focus or solutions within the PKN.

The value sketches served as a crucial tool, enabling experts to effectively

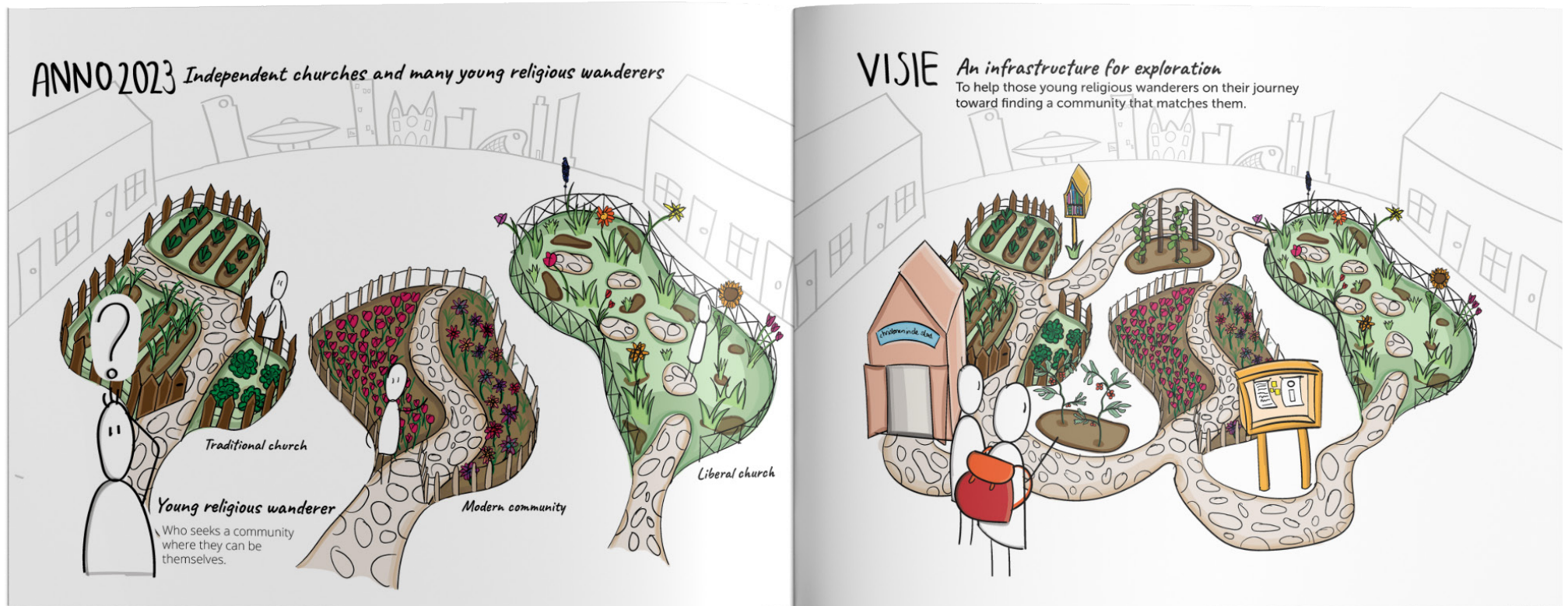


Figure 28 - Mockup design of instruction booklet of the roadmap

articulate their ideas by prompting them to delve deeper into their thoughts. Through the sketches, abstract concepts were transformed into explicit, tangible ideas.

Furthermore, the co-reflection method with participants forced me to advance my design midway through the project. This accelerated the design process, as the design needed to be coherent to participants at the festival. Without making designs, I might have lost focus amidst the numerous emerging themes and topics during the research. Designing early on helped to maintain the research's direction and purpose.

Simultaneously, during the festival, the design toolkit helped facilitating the discussions with participants. The toolkit helped participants with their perceptions of community finding. The toolkit's structured approach guided individuals to think of their own values. Incorporating visual design elements, like the stickers, enhanced participants' ability to tell about their values.

11.1. Contributions

To the Protestantse Kerk in Nederland

I have made significant contributions to the PKN through my unique design approach that focuses on networking rather than changes within the organization itself. By visually designing a vision, I have brought new perspectives to the PKN, which mainly uses thick reporting and has a high literacy culture. Showing a visual of a vision helps to make a strategy more accessible. While there are many programs focused on young religious wanderers, such as Graceland and Reisgenoten, they mainly offer one-time-only materials provided on a national level. My roadmap design asks for a strategic mindset on a local level, as my research shows that religious wanderers are actually searching for a community.

Furthermore, my insight card deck brings a new way of building up knowledge from research. My colleagues mentioned during my graduation that the PKN searches for new ways to maintain and distribute knowledge. My insight card deck can be an example for creating an easy-to-understand database on different topics. Therefore, I designed the insight cards in the same visual identity of the PKN (*Richtlijnen Identiteit*, n.d.).

To the academic world

Apart from my contributions to the PKN, I have also made contributions to the academic world. As far as I am aware, designers have set foot into the world of theology and religious institutions with design artifacts (W. Gaver et al., 2010; Wolf et al., 2023); however, they have not done so on a strategic level. Like social design, where designers have shown their relevance on a political and social level, the church and its institution provide a new field where a design approach may be used and can have a critical role. This project has shown that even though I did not have the common background of theology, using the designer methods and tooling I could devise a valuable advice, based on the

insights from the experts and field study among the young religious wanderers.

Methods such as VSD and RtD come from the technological design field, such as information technology. However, these methods can be applied in a non-technical setting, like the value sketches that were effective in this process, as the experts used their drawings to grasp their concepts.

11.2. *Limitations*

Boundary conditions of the roadmap

This design serves as the first strategic plan for cities to develop an infrastructure that caters to the needs of religious wanderers. The design roadmap provides a guide for religious organizations in the city to collaborate with other institutions. However, practical implications still need to be researched.

To ensure the effectiveness of this strategy, organizations or institutions must maintain an open and appreciative attitude toward individuals who explore different communities. Any grudges or negative attitudes towards these explorers could hinder the success of the overall structure, this was emphasized during the validation sessions. Therefore, having an appreciative and supportive attitude towards others is crucial. The infrastructure should include various types of organizations to encourage exploration. If the structure is too heterogeneous, it may discourage exploration. Networking between organizations is key to the execution of the roadmap. It cannot work if only one organization builds the infrastructure. The roadmap's execution is contextually dependent, meaning different cities may have different outcomes. Therefore, the roadmap needs to be altered to fit the local context in each place, as suggested by Interviewer 2 during the validation process.

Future implications for the PKN

I have developed an ambitious vision that requires further research and planning to create an infrastructure for exploration. Fortunately, my supervisors at PKN are actively seeking opportunities to implement this roadmap. If I had more time, I would have partnered with a city to begin constructing this infrastructure and observe it in action. While I did inquire about community preferences, I neglected to ask why some individuals no longer attend church. According to Herzberg's theory, this could be a separate "need" related to hygiene. To

strengthen the roadmap, PKN should investigate religious wanderers' hygiene and motivator needs. Additionally, it's important to consider the long-term sustainability of this infrastructure and develop a solid business model. These are areas that require further research in the future.

From the PKN perspective, this design is seen as very valuable and thus raises many follow-up questions. These are about implementation, starting questions, stakeholders, revenue model, membership, authority, consent of organization, role of guides, deployment of resources, etc. While these questions are all valid, they are not part of this design just yet. However, they can become a part of a follow-up iteration and local experimentations.

Methodological limitations

The VSD (Value Sensitive Design) circle employed in this study is not complete due to time constraints. Technical investigations were not included. While this is a common limitation in projects with a VSD approach, it should be noted that the approach, while valuable, may not have comprehensively covered all aspects. Besides, this research marked my first experience with working and researching values. Defining what constitutes a value and understanding the implications of these values was a significant challenge.

The data collected from religious wanderers was limited, possibly due to the chaotic environment and intricate nature of the topic. The difficulty in engaging with the religious wanderers may have contributed to the constraint in data collection. Conversations with both experts and user groups frequently delved deeply into theological aspects. This presented a challenge since the primary focus was design-oriented rather than theological. In hindsight, engaging experts from other research fields, such as sociology, who study social structures might have offered an alternative perspective and potentially richer insights.

12. *Reflection*

12.1. *An educational journey*

Working in the realm of faith and the church can be demanding when it becomes a job. I noticed during this project how the wonder and distinctiveness of faith can start to diminish when it becomes a daily routine. This has made me contemplate whether I'd want to pursue this as a full-time career, as it might blur the line between work and faith, making it harder to maintain a spiritual and personal perspective.

My experience as a designer in a new context has been truly enlightening. I've discovered that churches are actively engaged in innovation, particularly through pioneering initiatives. As a layperson, I was unaware of the significant organization, like the Protestant Church in the Netherlands (PKN), that stands behind it. There's a wealth of knowledge there, but there's room for more multidisciplinary collaboration to prevent knowledge from slipping away. Furthermore, I've come to appreciate the valuable contributions that designers can make to other fields. This aspect of my work excites me, although it can be challenging when you are the sole bearer of design knowledge in a project. This is another reason why I'm unsure about pursuing a career in the church. There aren't many designers in this field, and I find myself as an expert right after graduating from university.

Initially, I was apprehensive about the process due to past difficulties with my bachelor's thesis. I felt unsure and frequently found myself confused during that time. Surprisingly, this project turned out to be quite the opposite. Even though I started a collaboration with the PKN at the last minute, I got off to a strong start. Thanks to my master's degree and my experience working at a design firm, my confidence as a designer has grown, and I now have a better handle on the overall process.

Participating in experiences like Graceland has been both enlightening and exciting, marking new territory for me. While it was intense, conducting field research and approaching my target audience with confidence was invaluable.

Although I'm not used to being alone, I spent many hours walking solo, and it went surprisingly well, teaching me how to connect with new people more easily.

Additionally, I had never explored digital drawing before, and I take pride in the results I achieved. I picked up the skill rather quickly, though there's still room for improvement. I'm committed to refining my digital drawing skills after graduation.

One ongoing challenge for me has been understanding the nuances of writing and methodology. When it comes to methodology, it has sometimes been challenging to establish a strong methodological foundation, something I wasn't accustomed to. It demands a deep understanding of existing literature and its interpretation, which, admittedly, is not one of my strengths. Consequently, I often feel that I'm leaving gaps and drawing hasty conclusions in my reports. Besides, effective writing and comprehensive documentation have always been a significant challenge for me, starting from my early school years and persisting in this project. Accurately expressing my intentions and impressions on paper remains a daunting task. I also feel that much of my experiences and knowledge tend to get lost in written text. In the future, I may consider taking a writing course to strengthen this essential skill, which is still crucial in design.

In any case, I'm really proud of how I have completed my graduation and educational career. I had the desire to work on a project closely related to my own identity, which is Christianity, early in my second year. Thanks to the enthusiasm of my supervisors at TU Delft, I was encouraged to shape a meaningful assignment in this area. I'm grateful for the fantastic project experience, but it has made me realize that a full-time career in this field may not be the right fit for my personal religious journey at this moment.

13. Conclusion

In conclusion, my research delves into the challenges confronting the Protestantse Kerk in Nederland (PKN) as it copes with a declining membership, particularly among the younger generation who no longer visit churches anymore. My approach to tackling this issue stems from a designer's perspective, with the aim of reorganizing the church to accommodate both the needs of young religious wanderers and its current members.

I adopted a methodological approach that combines Value-Sensitive Design (VSD) and Research through Design (RtD), employing an iterative design process. Over the course of three cycles, I delved into values, themes, and ideas, culminating in the development of a design concept for an infrastructure that facilitates the discovery of a suitable religious community for those who are spiritually curious. This infrastructure is symbolized as a "community garden," offering various options for individuals on their religious journey.

The final outcome of my research is a roadmap, which outlines different phases for establishing an infrastructure dedicated to exploration. It underscores the importance of building relationships between organizations, fostering trust, and recognizing the value of exploration for religious wanderers. This roadmap serves as a practical guide and source of inspiration for city-based religious communities looking to adapt to evolving demographics and needs.

My research contributions are twofold: firstly, it emphasizes the necessity of restructuring the church to cater to the diverse needs of both existing members and religious wanderers. Secondly, it demonstrates how design principles and tools can be harnessed to facilitate this reorganization. Throughout the research process, value sketches, design materials, and a toolkit played pivotal roles in engaging experts and participants in meaningful discussions about values and concepts related to church communities.

In summary, my research underscores the potential for collaboration between designers and theologians to drive innovative solutions for church renewal. This collaboration offers fresh perspectives and opportunities to address the challenges that religious institutions face in an ever-changing societal landscape. Adapting the infrastructure concept to meet the specific needs of different cities may necessitate further research and refinement.

14. *References*

A

Allport, G. W. (1961). Values and our youth. *Teachers College Record*, 63, 211–219.

B

Bos-de Vos, M. (2020, September 10). *A framework for designing for divergent values*. <https://doi.org/10.21606/drs.2020.374>

Bruggink, J. W., & van Herten, M. (2009). Religie, gezondheid en leefstijl. In H. Schmeets & R. van der Bie (Eds.), *Religie aan het begin van de 21ste eeuw* (pp. 53–64). Centraal Bureau voor de Statistiek.

Burns, T., & Stalker, G. M. (1961). *The Management of Innovation*. <https://doi.org/10.2307/2230196>

C

Christie, D. B. (1993). *The Word in the Desert: Scripture and the quest for holiness in early christian monasticism*. Oxford university press.

Crilly, N. (2021). The Evolution of “Co-evolution” (Part I): Problem Solving, Problem Finding, and Their Interaction in Design and Other Creative Practices. *She Ji*, 7(3), 309–332. <https://doi.org/10.1016/j.sheji.2021.07.003>

D

de Groot, J. (2021). *Zinvolle verbinding: Een sociale infrastructuur voor zingeving onder postmoderne jongvolwassenen in Nederland* [Nyonrode Business University]. www.izb.nl

de Hart, J., & Dekker, P. (2015). Floating believers: Dutch seekers and the church. In S. Hellemans & P. Jonkers (Eds.), *A Catholic Minority Church in a World of Seekers (Christian Philosophical Studies, XI)*. The Council for Research in Values and Philosophy.

de Hart, J., van Houwelingen, & Huijnk, W. (2022). *Religie in een pluriforme samenleving: buiten kerk en moskee*. www.scp.nl

De toekomst open tegemoet. (2021).

Dorst, K. (2019). Design beyond Design. *She Ji*, 5(2), 117–127. <https://doi.org/10.1016/J.SHEJI.2019.05.001>

Dorst, K., & Lawson, B. (2009). *Design Expertise*. Elsevier Ltd.

F

Friedman, B., & Hendry, D. G. (2019). Value Sensitive Design: Shaping Technology with Moral Imagination. *Value Sensitive Design*. <https://doi.org/10.7551/MITPRESS/7585.001.0001>

Friedman, B., Hurley, D., Howe, D. C., Felten, E., & Nissenbaum, H. (2002). Users' Conceptions of Web Security: A comparative study. *CHI*.

G

Gaver, B., & Bowers, J. (2012, July). Annotated Portfolios. *Interactions*, 40–49.

Gaver, W., Blythe, M., Boucher, A., Jarvis, N., Bowers, J., & Wright, P. (2010). The Prayer Companion: Openness and Specificity, Materiality and Spirituality. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, 2055–2064. <https://doi.org/10.1145/1753326.1753640>

God in Nederland. (2020, December 18). Centraal Bureau Voor de Statistiek. <https://www.cbs.nl/nl-nl/longread/statistische-trends/2020/religie-in-nederland/5-god-in-nederland>

H

Hendry, D. G., Friedman, B., & Ballard, S. (2021). Value sensitive design as a formative framework. *Ethics and Information Technology*, 23(1), 39–44. <https://doi.org/10.1007/s10676-021-09579-x>

Höök, K., Bardzell, J., Bowen, S., Dalsgaard, peter, Reeves, S., & Waern, A. (2015, November). Framing IxD Knowledge. *Interactions*, 33–36.

Husain, A., Prof, A., & Khan, A. (2011). Human Values-A Running Commentary based on Literary Texts Reliability of Module Emotional Intelligence for Children: Building Positive Emotions of Malaysian Children View project Research scholar View project. *Man in India*, 92, 491–504. <https://www.researchgate.net/publication/236125042>

K

Kluckhohn, C. (1951). VALUES AND VALUE-ORIENTATIONS IN THE THEORY OF ACTION: AN EXPLORATION IN DEFINITION AND CLASSIFICATION. In T. Parsons & E. Shils (Eds.), *Toward a General Theory of Action: An exploration in Definition and classification* (pp. 388–433). Harvard University Press. <https://doi.org/10.4159/harvard.9780674863507.c8>

L

Lebreijia, L. (2021). *How to try: Design thinking and church*. Church Publishing.

Lochmiller, C. (2021). Conducting Thematic Analysis with Qualitative Data. *The Qualitative Report*. <https://doi.org/10.46743/2160-3715/2021.5008>

M

Maffesoli, M. (1996). *The Time of the Tribes: The Decline of Individualism in Mass Society*. SAGE Publications Ltd. <https://doi.org/10.4135/9781446222133>

Mattelmäki, T., & Matthews, B. (2009, August 29). Peeling Apples: Prototyping Design Experiments as Research. *Engaging Artefacts*. <https://doi.org/10.21606/nordes.2009.007>

Miller, J. K., Friedman, B., & Jancke, G. (2007). Value tensions in design. *Proceedings of the 2007 International ACM Conference on Conference on Supporting Group Work - GROUP '07*, 281. <https://doi.org/10.1145/1316624.1316668>

[org/10.1145/1316624.1316668](https://doi.org/10.1145/1316624.1316668)

Mintzberg, H. (1980). Structure in 5's: A Synthesis of the Research on Organization Design. *Management Science*, 26(3), 322–341.

Mintzberg, H. (1981). Organization design: fashion or fit? *Harvard Business Review*. <https://hbr.org/1981/01/organization-design-fashion-or-fit>

Mintzberg, H. (2023). *Understanding Organizations...Finally!: Structuring in Sevens*. Berret-Koehler Publishers.

N

Nagel-Herweijer, C., Sonnenberg, R., & Groen, E. (2023). *Dat je groeien mag! Een casestudy naar de wijze waarop jongeren binnen de Protestantse Kerk in Nederland leren geloven*.

P

Pardee, R. (1990). *Motivation Theories*.

R

Richtlijnen identiteit. (n.d.). Protestantse Kerk in Nederland. Retrieved October 5, 2023, from <https://protestantsekerk.nl/richtlijnen-identiteit/>

Rogier, L. J. (1947). *Geschiedenis van het katholicisme in Noord-Nederland in de 16e en de 17e eeuw*.

Rosa, H. (2016). *Leven in tijden van versnelling: een pleidooi voor resonantie*. Boom.

S

Sanders, E., & Stappers, Pieter. Jan. (2020). *Convivial toolbox: generative research for the front end of design* (5th ed.). BIS publishers.

Schiermer, B. (n.d.). Acceleration and Resonance: An Interview with Hartmut

Rosa. *SAGE Publications*, 1–7.

Schwartz, S. H. (1992). Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. *Advances in Experimental Social Psychology*, 25(C), 1–65. [https://doi.org/10.1016/S0065-2601\(08\)60281-6](https://doi.org/10.1016/S0065-2601(08)60281-6)

Schwartz, S. H. (2006). *Basic human values: An overview*. https://uranos.ch/research/references/Schwartz_2006/Schwartzpaper.pdf

Schwartz, S. H., & Huismans, S. (1995). Value Priorities and Religiosity in Four Western Religions. *Social Psychology Quarterly*, 58(2), 88. <https://doi.org/10.2307/2787148>

Simonse, L. (2017). *Design Roadmapping*. BIS Publishers.

Simonse, L. W. L., Hultink, E. J., & Buijs, J. A. (2015). Innovation Roadmapping: Building Concepts from Practitioners' Insights. *Journal of Product Innovation Management*, 32(6), 904–924. <https://doi.org/10.1111/JPIM.12208>

Stappers, P. J., & Giaccardi, E. (2017). Research through Design. In M. Soegaard & R. Friis-Dam (Eds.), *The Encyclopedia of Human-Computer Interaction* (2nd ed.). The interaction Design Foundation. <https://www.interaction-design.org/literature/book/the-encyclopedia-of-human-computer-interaction-2nd-ed/research-through-design>

Strommen, J. (2020). Reimagining "Church." *World & World*, 40(1), 59–70.

T

Tomico, O. (2009). Co-reflection: User involvement aimed at societal transformation. *Temes de Disseny : Disseny, Comunicació, Cultura*, 26, 80–89.

Tomico, O., Lu, Y., Baha, E., Lehto, P., & Hirvikoski, T. (2011). DESIGNERS INITIATING OPEN INNOVATION WITH MULTI-STAKEHOLDER THROUGH CO-REFLECTION SESSIONS. *IASDR*.

V

van Krimpen, T. (2023). *Bottom-up kerk: Zijn waar twintigers zijn*. Kok boekencentrum.

van Wijnen, H. (Harmen J. (2016). *Faith in small groups of adolescents: being together as a basic given*. Eburon.

W

Walker, W. (1985). *History of the Christian Church* (R. A. Norris, D. W. Lotz, & R. T. Handy, Eds.). Simon & Schuster Inc.

Ward, P. (2002). *Liquid Church*. Hendrickson Publishers.

Wensveen, S., & Matthews, B. (2014). Prototypes and prototyping in design research. In P. A. Rodgers & J. Yee (Eds.), *The Routledge Companion to Design Research* (pp. 262–276). Routledge. <https://doi.org/10.4324/9781315758466-25>

Woelfer, J. P., Iverson, A., Hendry, D. G., Friedman, B., & Gill, B. T. (2011). Improving the safety of homeless young people with mobile phones: Values, form and function. *Conference on Human Factors in Computing Systems - Proceedings*, 1707–1716. <https://doi.org/10.1145/1978942.1979191>

Wolf, S., Luthe, S., Baumeister, L., Moerike, F., Janakiraman, V., & Hurtienne, J. (2023). Designing for Uncontrollability: Drawing Inspiration from the Blessing Companion. *Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems*, 1–14. <https://doi.org/10.1145/3544548.3581421>

Y

Yoo, D. (2017). Stakeholder tokens: A constructive method for value sensitive design stakeholder analysis. *DIS 2017 Companion - Proceedings of the 2017 ACM Conference on Designing Interactive Systems*, 280–284. <https://doi.org/10.1145/3064857.3079161>

2

Zimmerman, J., & Forlizzi, J. (2014). Research through design in HCI. *Ways of Knowing in HCI*, 167–189. https://doi.org/10.1007/978-1-4939-0378-8_8/FIGURES/7

Zimmerman, J., Stolterman, E., & Forlizzi, J. (2010). An analysis and critique of research through design: Towards a formalization of a research approach. *DIS 2010 - Proceedings of the 8th ACM Conference on Designing Interactive Systems*, 310–319. <https://doi.org/10.1145/1858171.1858228>

Zscheile, D. (2014). *The Agile Church*.