

Identifying
sublime religious
architecture



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Abstract

The increasing decommissioning of churches in the Netherlands due to secularization raises concerns about the neglect of religious heritage buildings. Adaptive reuse is a solution for their sustainable future, however, it is crucial that repurposing of religious heritage is approached with respect for the building's historical significance and its intrinsic values, encompassing both tangible and intangible aspects.

This paper presents research that focuses on sublime architecture found in monumental and religious structures, which evokes overwhelming emotions of awe, transcendence, and even terror. Preserving sublime architecture during the adaptive reuse of religious heritage is crucial for its positive impact on mental well-being.

Maintaining the powerful architectural experience during the transformation process is challenging due to limited knowledge on sublime architecture and the relevant architectural characteristics. An extensive investigation was conducted which resulted in the production of an identification framework to help designers recognize and preserve sublime architectural characteristics when dealing with adaptive reuse of religious edifices. The Sint Augustinuskerk in Nieuwendammerdijk, Amsterdam-North, a neo-gothic church built in 1889 served as a case study exemplifying adaptive reuse that opts to preserve sublimity.

The study has highlighted architectural qualities such as scale, height, depth, rarity, dramatic lighting, uniformity, complexity and more as key factors in creating a profound architectural experience. Preserving or enhancing these attributes during the transformative process can maintain the richness of sublimity even after repurposing.

While this paper is a step in the right direction, further extensive research on a broader scale is needed to validate the study's conclusion.

Key words: Sublime architecture, religious heritage, adaptive reuse, heritage preservation

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I. Introduction

Presently, a considerable majority (over 75%) of the Dutch population rarely or never engages in religious gatherings within church premises, underscoring the influence of secularization (Centraal Bureau voor de Statistiek, 2020). Consequently, numerous churches in the Netherlands have fallen into disuse, with a mere 2.7% of church members attending services on a regular basis (Mersbergen, 2022). Nevertheless, the Dutch authorities accord interest to the preservation and adaptive reuse of these religious edifices as part of their commitment to safeguarding religious heritage (Wallis de Vries, 2012, p.6).

Religious structures possess the inherent capability to confront individuals with the remarkable boundaries of architectural expression, thereby evoking profound spiritual and transcendental sentiments (Wallis de Vries, 2012, p.6). This architectural encounter often aligns with the philosophical construct of the sublime, encompassing sensations of awe, terror, pleasure, and transcendence (Bethelmy & Corraliza, 2019).

While extensive inquiry has been conducted on the sublime within the context of natural landscapes, exploration of its manifestation in architecture, particularly in religious settings, remains relatively limited. When addressing adaptive reuse of religious heritage, the limited awareness often results in transformative interventions that inadvertently diminish or eradicate the sublime experience. A starting point of the research that the paper presents is that this lack of awareness or knowledge is problematic, due to the possible positive effects preserving the sublime experience within a religious structure can have on mental health (M. Arcangell et al., 2020). This is especially relevant in today's society where mental health is decreasing worldwide (Yasgur, 2022) and deprivation of nature and wilderness is growing (Crawford, 2019). An integral heritage approach where the value assessment includes the sublime experience and the spatial qualities related to it could benefit the preservation of architecture which benefits overall well-being.

Identifying the sublime in a religious structure can result in additional value preservation during adaptive re-use, causing for a more valuable project with improved societal impact. Additionally, the broader value analyses including the sublime will improve preservation and therefore reduce waste produce during transformation. Furthermore, structures possessing notable aesthetic significance and architectural impact frequently engender heightened public favor, thus potentially

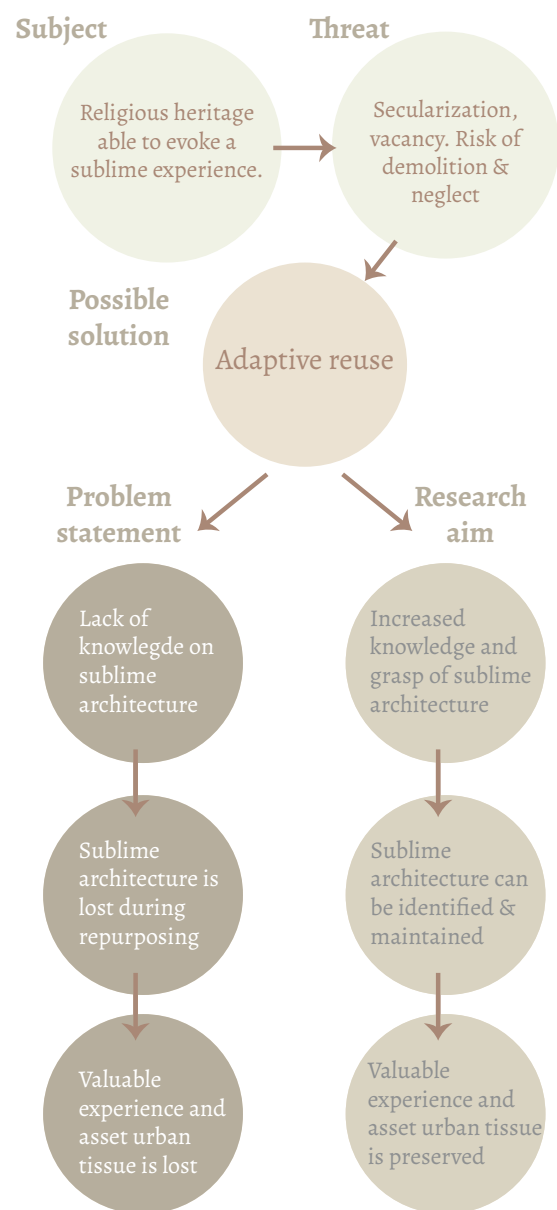


Fig 1. The scheme summarizes the aim of the research and the problem statement which is presented within this paper (own illustration).

easing their long-term preservation and durability. (Scruton, 2013).

The primary objective of the paper is to present the identification framework which can equip the architectural field with a comprehensive framework for preserving the sublime during the process of religious heritage transformation. Figure 1 shows an overview of the aim and problem statement of this paper. While acknowledging the considerable stylistic and substantive diversity across religious structures, this paper endeavors to discern general architectural features that contribute to the sublime experience. It is important to note that the study does not assert the omnipresence of the sublime within all religious buildings. Rather, it commences from the premise that churches serve as a robust foundation for sublime architecture due to their historical association with grandeur and transcendence and their objective to profoundly impress the visitor (Doudouh & Van Ginderen, 2012).

Sublime architecture stands as a rare phenomenon in the modern era, with religious structures serving as one of the few urban compounds capable of engendering such an experience (Wierenga, 2011). The architecture of the sublime is much more present on paper and canvas, especially within the

era of romanticism (see fig. 5,6) (Davey, 2020).

To discern the architectural characteristics relevant to the sublime, the paper will focus on a specific case study: the Sint Augustinuskerk situated on the Nieuwendammerdijk in Amsterdam-North. An impression of the church is shown in figure 2-4. This unoccupied church represents a typical example of neo-Gothic architecture in the Netherlands and has been selected due to its imperative need for adaptive reuse as well as its substantial significance within the local community (De Vree, n.d.; Kieft, 2019). Ultimately, by establishing a lucid comprehension of sublime architecture and experience, the paper aims to address the principal research inquiry: How can architectural characteristics able to evoke a sublime experience in religious structures be identified for the process of adaptive reuse?



Fig 2. A picture of the entrance of the Sint Augustinuskerk in Amsterdam-North (own image).



Fig 3. The church tower as seen from a street behind the church (own image).



Fig 4. Interior of the Sint Augustinuskerk as seen from the entresol of the organ (own image).

II. Methodology

The methodology of the paper involves exploring the definition of sublime architecture through an extensive literature review, investigating the specific architectural characteristics that evoke the sublime experience, and delving into the historical context of religious structures in relation to sublime architecture.

The comprehensive literature review aims to establish a conclusive comprehension of sublime architecture and construct a framework for its discernment within religious edifices. This process primarily involves the examination of pertinent academic papers, articles, and scholarly publications. Each source contributes pertinent information to shape the identification framework and elucidate the concept of the sublime. Illustrative examples will further contribute to this framework. The identification framework will then be verified through analyses of the case study. This will result in a clear overview and understanding of the architectural characteristics able to evoke a sublime experience. Preserving the characteristics will then ensure the perpetuation of the sublime experience after the transformation of religious structures.

To gain insight into the current presence of the sublime experience, a questionnaire will be administered to randomized church visitors. The questionnaire entails four questions concerning the emotional experience, intensity and related architectural features. Figure 7 illustrates the questionnaire and the methodology. The sublime can be identified in architecture through its ability to create transformative and immersive experiences, which encourages the viewer to transcend their everyday experience, engaging with their surroundings in a more profound way (Roncken, 2018). The questionnaire attempts to establish through simple questions whether this is the case in the Sint Augustinuskerk. By providing multiple-choice questions, the outcome is more easily quantifiable. The choices given will be based on the literature review (sublime emotions) and the case study itself (characteristics of the church).

Ultimately, the sublime characteristics of the Sint Augustinuskerk are analyzed and evaluated, supported by the outcome of the questionnaire



Fig 5. Etching by famous Italian artist Piranesi. His drawings are often connected to the sublime, as they portray ruins, complex building, monumentality and certain terror (Piranesi, 1760).



Fig 6. The timelessness and historical gravity of ruins are often connected to the sublime, which is why this painting of the ruins of Tintern Abbey serves as an example of the romantics' view on the sublime (Turner, 1794).

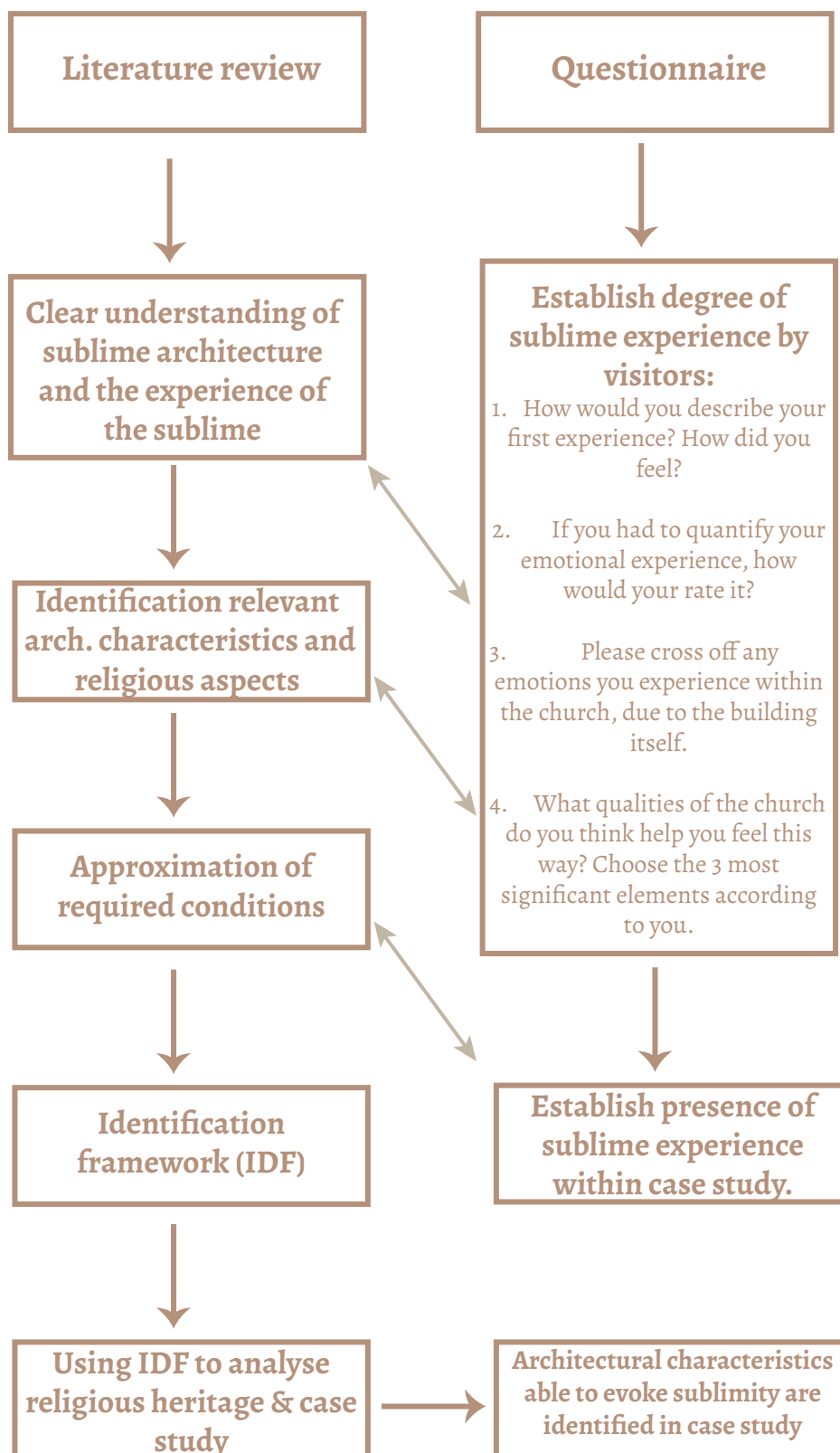


Fig 7. Scheme illustrating the formation of the identification framework (IDF) and the questionnaire (own illustration).

III. Literature review

Sublime: A historical overview

The origins of the sublime can be traced back as far as 1 year B.C., when Longinus wrote his philosophical manuscript called Peri Hupsous (Brady, 2013). The Peri Hupsous describes the so-called sublime style of writing, which involves applying five rules to reach a higher, lofty level in both the writer and the reader’s experience. Longinus kept the meaning of the sublime fairly vague (Roberts, 2019). However, centuries later, in the 17th century, translations of Peri Hupsous were published which led to renewed interest in the topic. Edmund Burke, a prominent philosopher in 1757, discussed the passion and power of the sublime in nature, describing the suspension of all thoughts and the overwhelming focus on the object, resulting in astonishment and, to some extent, horror (Burke, 1757). Immanuel Kant, in 1790, responded to Burke’s writings by stating that the sublime represents encountering something so overwhelming, powerful and frightening that it briefly overpowers the imagination, only to be later understood through reason (Kant & Zweig, 2001). During the 18th and 19th centuries, the sublime was often associated with nature, vastness, and wilderness (Brady, 2013).

When the mind is unable to grasp the situation, astonishment and curiosity are a natural response. Once the mind is able to determine it is not in any imminent danger, awe, wonder and admiration

come in to play. Kant therefore concludes that we, through our capability of reasoning, originate the sublime, which displays the seeming omnipotence of the human mind over matter (Kant & Zweig, 2001).

An overview of the history of the sublime and some of the most established philosophers that contributed extensive writings to this subject is presented in figure 8.

In architecture, the idea of the sublime is often linked to the French “visionary architects” of the late 18th century: Étienne Louis-Boullée, Claude-Nicolas Ledoux, Jean-Jacques Lequeu (Baaske, 2017). The sublime can be expressed in architectural drawings and designs that push the boundaries of imagination, as happened in Boullée’s Design for a Monument to Isaac Newton (1784) (see figure 9) (Baaske, 2017).

The emotional experience

The emotions related to the sublime experience are a mix of positive and negative emotions. There is no consensus on the exact role negative emotions play. In contrast to what Burke believed, recent research shows hardly any significance of negative emotions (Arcangeli et al., 2020) (Hur et al., 2020) (Ishizu, 2014). Some theorists (Baillie, Gerard and Priestley) describe responses to vastness as characterized by sedateness (Costelloe, 2012).

The spatial characteristics

According to John Baillie, only **vast** or large objects have the potential to induce the sublime (1747).

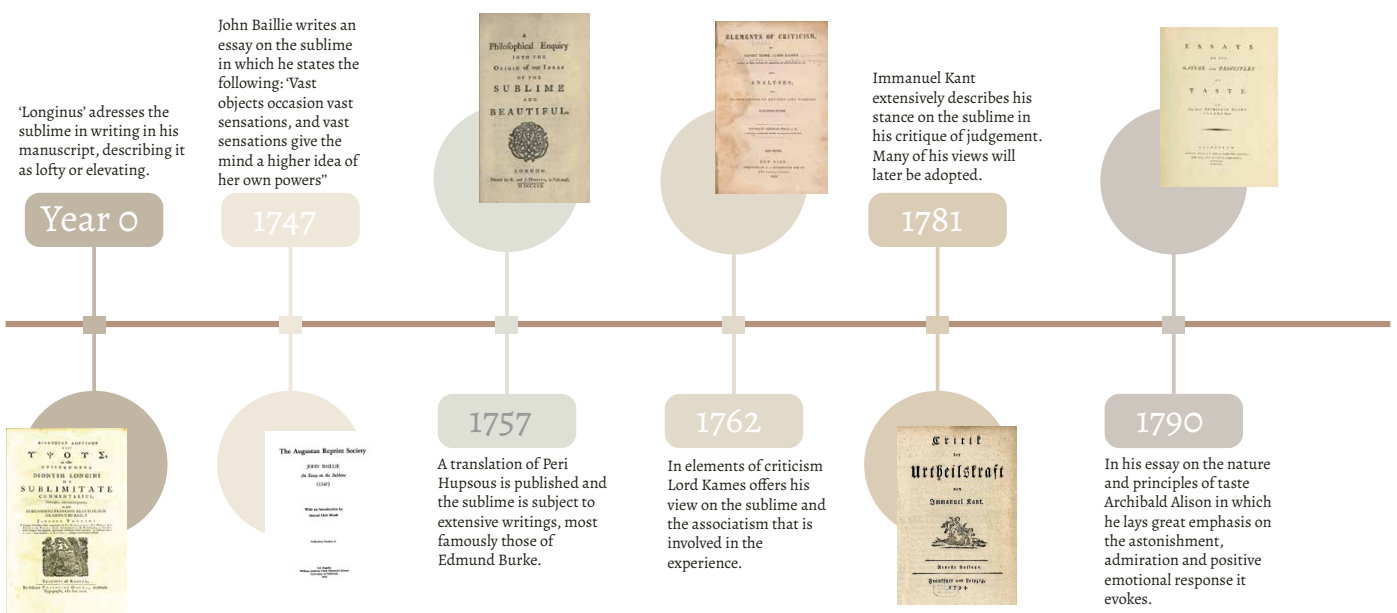


Fig 8. An overview of the historical order in which the sublime has been discussed by several philosophers (own image).

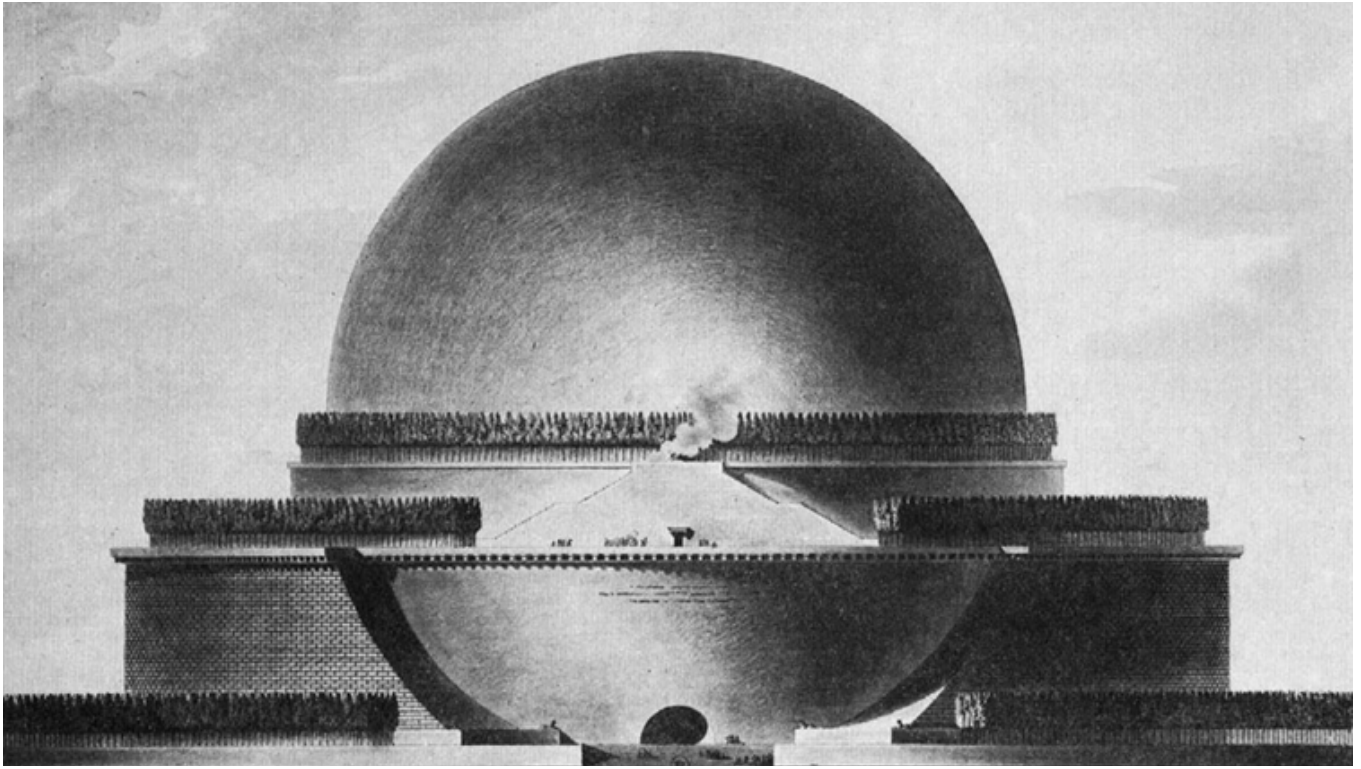


Fig 9. Rendering of the Cenotaph for Isaac Newton. One of the most well-known example of architecture Parlante by Boullée (1784).

Other important features mentioned by Baillie are **uniformity** and **uncommonness** (Townsend, 2019). When something becomes more and more familiar, the effect diminishes. The object of the sublime must remain uniform and cannot be broken up to ensure sublimity (Costelloe, 2012).

Burke's emphasis on the terror of the sublime is supported by characteristics like **infinity, vastness, extreme light or darkness, obscurity, uniformity, succession and difficulty**. Association with **power** or **grandeur** is a key ingredient in sublimity: 'I know of nothing sublime which is not some modification of power.' (Burke, 1757).

Archibald Alison emphasizes in his essay on *the nature and principles of taste* (1790) that the sublime is only possible with the imaginative association. Forms associated with **power or danger** tend to be sublime (old rocks, ruins, weapons). Alison picks architecture as the most sublime of all artifacts. He names **magnitude** and **vastness** as significant factors in sublime objects such as pyramids, stairs, waterfalls. Alison's associatism highlights the importance of context and cultural setting and the subjectivity of a sublime experience (Alison, 1968). David Hume describes the **imaginative power** of the sublime as the mind elevated by the vastness of its objects, which is further elevated by the difficulty of the conception (Brady, 2013).

Objects associated with immaterial things like **eternity, ancient history, religious ideas and power** can evoke sublimity (Costelloe, 2012). Kant introduces the idea of a mathematical sublime in architecture, where the eye scans a horizontal magnitude and generates a sense of veneration for distant times (Brady, 2013).

In his dissertation, *Shades of sublime* (2018), Roncken suggests that **scale** manipulation is a vital strategy for creating sublime experiences, such as oversized forms or voids. He adds that **materials** rich in texture, such as stone or wood add to the sense of **depth** and **complexity** of a structure, in which he agrees with Nesbitt (1995).

To explore the inherent capacities of architecture at any given historical juncture, an examination of religious heritage becomes imperative. Generally, structures dedicated to worship, such as mosques, churches, and temples, tend to have to the power to evoke a strong emotional response and transcend the mind (Bermúdez, 2015). This includes for example **scale, uniformity, obscurity, intricate detailing, interplay of light and darkness, and sequential progression**. In their work, Doudouh and Van Ginderen (2012) substantiate the notion that places of worship have been deliberately designed to facilitate the experience of the sublime. Their analysis of religious edifices reveals that characteristics associated with sublime

architecture are ingrained in their **construction, envelopment, volume, and proportion** (Doudouh & Van Ginderen, 2012).

Stance on the sublime in architecture

The background research has resulted in the following statements that are at the basis of the IDF and the questionnaire, concerning that which encompasses the sublime:

- The sublime is a conceptual framework that elicits profound emotional responses, encompassing sensations of awe, transcendence, serenity, calmness, inspiration, and astonishment. It represents a complex cognitive-emotional experience that consists of multiple interconnected elements, each contributing to its unique nature. Notably, the sublime is characterized by a quality that transcends the sum of its individual components, highlighting its distinctiveness and separateness from the constituent parts. (Ishizu, 2014).

- The sublime can be triggered by various things (art, music, rhetoric, architecture, ancient history, religion), the most powerful being nature. It can be experienced in certain degrees. Sublime architecture is able to evoke sublime emotions in a lesser degree than nature, but in a higher degree than art (Brady, 2013).

- The sublime is dependent on novelty, uncommonness and characteristics of the subject: state of mind, frame of reference, capability (Costelloe, 2012).

- An object can be inherently sublime (wilderness) or sublime by association (power, great riches, grandeur) (Kames & Voitle, 1970).

- Sublime architecture possesses specific characteristics that can evoke sublime emotions (Pallasmaa, 2012). The project & research are based on the fact that aesthetics can produce emotions (Griffero & Tedeschini, 2020). However, it is left open whether this is due to association or not.

- Religious architecture, like churches, often possess sublime characteristics. Reason being is that the architectural aim of such structures was to evoke transcendence, awe, belief of a higher power, fear and peace (Doudouh & Van Ginderen, 2012).

- Although Burke lays great emphasis on terror and fear, research has shown negative emotions hardly play a significant role (Arcangeli et al., 2020) and this thought will be adopted.

- Sublimity opens out to an awareness of our freedom as autonomous beings. The imagination is expanded through attempting to present an image of the object to the mind. The vast sensations following give the mind a higher idea of her own

IV. Results

The results entail the identification framework, insight in specific aspects connected to religious structures that induce sublimity and the questionnaire as described in the methodology.

Identification framework

In figure 10 the architectural characteristics and corresponding conditions that have resulted from the literature review are shown. Per characteristic, an analysis can be done by the architect or expert to determine if this characteristic is a vital part in the sublimity of the structure.

The sublime in religious heritage

A thorough investigation was conducted to explore the shared attributes prevalent in religious structures. This ensues more than architectural or spatial elements, rather it entails specific aspects that make religious heritage more likely to induce a sublime experience. The ensuing analysis of existing literature on the topic of sublime architecture revealed some of the most noticeable aspects that align with the characteristics associated with the sublime:

- *Association with religious ideology:* Religious edifices, encompassing mosques, churches, and temples, embody a profound religious significance, symbolizing the devotion to a higher spiritual authority. This imbues them with a palpable spiritual potency and significance capable of evoking sentiments of awe and sublimity.

- *Scale:* Many churches are conceived on a monumental scale with the explicit intent of evoking a profound sense of magnificence and awe.

Their vast proportions and soaring heights have the potential to instigate transcendent experiences, uplifting both one's visual gaze and spiritual essence. Notably, these dimensions often surpass conventional standards, encompassing substantial depths, widths, and heights intrinsic to religious heritage.

- *Ornamentation and embellishment:* Religious structures often showcase intricate embellishments, including elaborate carvings, stained glass windows, sculptures, and an array of decorative elements. This opulent adornment fosters a visual overload that contributes to an overarching sense of obscurity and overwhelming grandeur inherent in these architectural marvels.

- *Historical objects and artifacts:* Numerous churches boast a storied history, steeped in eminence and historical significance. Their age and enduring legacy endow them with a timeless and enduring quality that can evoke a profound sense of awe and sublimity, serving as testaments to their enduring cultural and spiritual relevance.

- *Dramatic lighting:* The strategic placement of windows within religious spaces, combined with minimal utilization of artificial lighting, establishes an evocative ambiance characterized by somber darkness. This deliberate interplay between light and shadow serves to accentuate the brilliance of stained glass windows, creating an ethereal and otherworldly atmosphere. The intricate details and vibrant hues further enhance the immersive and sublime experience within these sacred settings

In figure 11, 12 a schematic overview of religious architectural characteristics connected to the sublime is presented. Here, the identification framework as well as the results mentioned above are incorporated. In the appendix (figure A,B,) more detailed visual examples of relevant architectural characteristics in the sublime experience can be found. All analysed structures were chosen due to their existing apparent sublimity according to various sources that were examined during the research.

Questionnaire

The questionnaire was conducted amongst 10 individual visitors of the church. The following results came out of the questionnaire (see appendix figure C):

- Most visitors would rate the emotional intensity of their experience visiting the church fairly high (7 or higher).
 - Overwhelm and admiration were the top emotions that came out of the questionnaire.
 - Fear was not experienced at all, as well as feelings of unsafety or peace.
 - Awe, feeling small or insignificant and inspired were experienced to a lesser degree.
 - The height of the church was attributed at the number one reason for the intense emotional experience.
 - The stained glass windows and the lighting in the church came second and third.
 - Colour, ornaments, darkness & the length were also named.
- Materiality was deemed not responsible for the reaction.

Analysis of the Sint Augustinuskerk

Utilizing the identification framework, a targeted spatial analysis of the church was performed. The comprehensive findings of this analysis can be accessed in figure 13. Consequently, six key architectural features emerged prominently from the analysis: height, dramatic lighting, depth, contrast, scale, and sequential progression. While uniformity, boundlessness, obscurity/complexity, and intricate detailing manifested to a lesser extent, the analysis shed light on the architectural and spatial qualities that warrant preservation during the repurposing process. Interestingly, the analysis reveals similar outcomes to the questionnaire, which enforces its accuracy.

Architectural characteristics	Elaboration on conditions
<u>Height/loftiness</u>	The significant height of the structure stands out in its context. The eye of the individual is drawn upwards, making the individual feel small or less significant in the context.
<u>Uniformity</u>	The structure exhibits a uniform architectural language, creating a coherent spatial context that forms one whole.
<u>Repetition/rhythm</u>	The structure exhibits extensive repetition of one or more architectural elements, creating a sense of infinity or boundlessness. The endless repetition of elements can also contribute to the overall complexity and obscurity of the structure.
<u>Scale/vastness</u>	The overall scale of the object or space seems oversized or very dramatic in comparison to its context. The individual can feel insignificant, overwhelmed or astonished by the amount of void or materiality.
<u>Contrast/tension</u>	Contrast, in this context, refers to the juxtaposition or interplay of elements that differ significantly in terms of their characteristics, such as scale, form, texture, or spatial qualities. Tension, on the other hand, represents the dynamic relationship or interaction between contrasting elements within the architectural composition. By introducing the individual to noticeable disparities between architectural elements, the design can generate a sense of dynamism, complexity, and create a visual and spatial dialogue that stimulates curiosity, intrigue, and a sense of wonder.
<u>Dramatic lighting</u>	By intense contrast between lighting and darkness within the space, specific architectural features are accentuated which can evoke a heightened sense of drama and visual interest. What is dramatic lighting is context-sensitive and depends on the overall spatial qualities, which should be judged by the designer/expert.
<u>Complexity/obscurity</u>	The overall interplay of all architectural characteristics of the structure, including ornamentation and artifacts, results in a complexity or obscurity of the space. The sublime, in this case, emerges from the confrontation with something that surpasses our cognitive capacities to measure or quantify. The structure exceeds the boundaries of what our minds can fully comprehend, leading to a sense of awe, wonder, and sometimes discomfort.
<u>Uncommonness/novelty</u>	The structure is uncommon in its context. It stand out and offers a different architectural experience as compared to other structures in the environment or daily life.
<u>Materiality</u>	The structure possesses richly textured, often natural materials such as natural stone, brickwork or wood. The texture adds to a sense of depth and complexity. Heavy (looking) materials exemplify the structures power or stature. Both can help in creating a profound architectural experience for the individual.
<u>Depth</u>	The depth of the structure is significant in that it offers extraordinarily far sightlines. The depth exemplifies the overall large scale of the space. The depth of the structure is uncommon in the build environment.
<u>Spatial sequencing</u>	The structure reveals spatial arrangements that lead visitors through a series of experiences and reveal dramatic vistas or focal points can heighten the sublime experience. Spatial sequencing is not often present in religious heritage, but it could contribute to a sublime experience.
<u>Timelessness</u>	The structure is able to evoke a sense of timelessness by showing its age (like ruins for example) or historical narrative. The spaces has the potential to evoke a sense of timelessness, where the occupants feel a connection to something eternal or beyond the present moment.

Fig 10. Identification framework that presents architectural characteristics that can contribute to a space able to evoke the sublime experience. The elaboration of the characteristics reveals conditions which the characteristics must meet in some degree to be able to effectively impacts sublimity (own illustration).

Legend

- X** Architectural characteristic linked to sublimity
- Link religious structure to sublime architecture

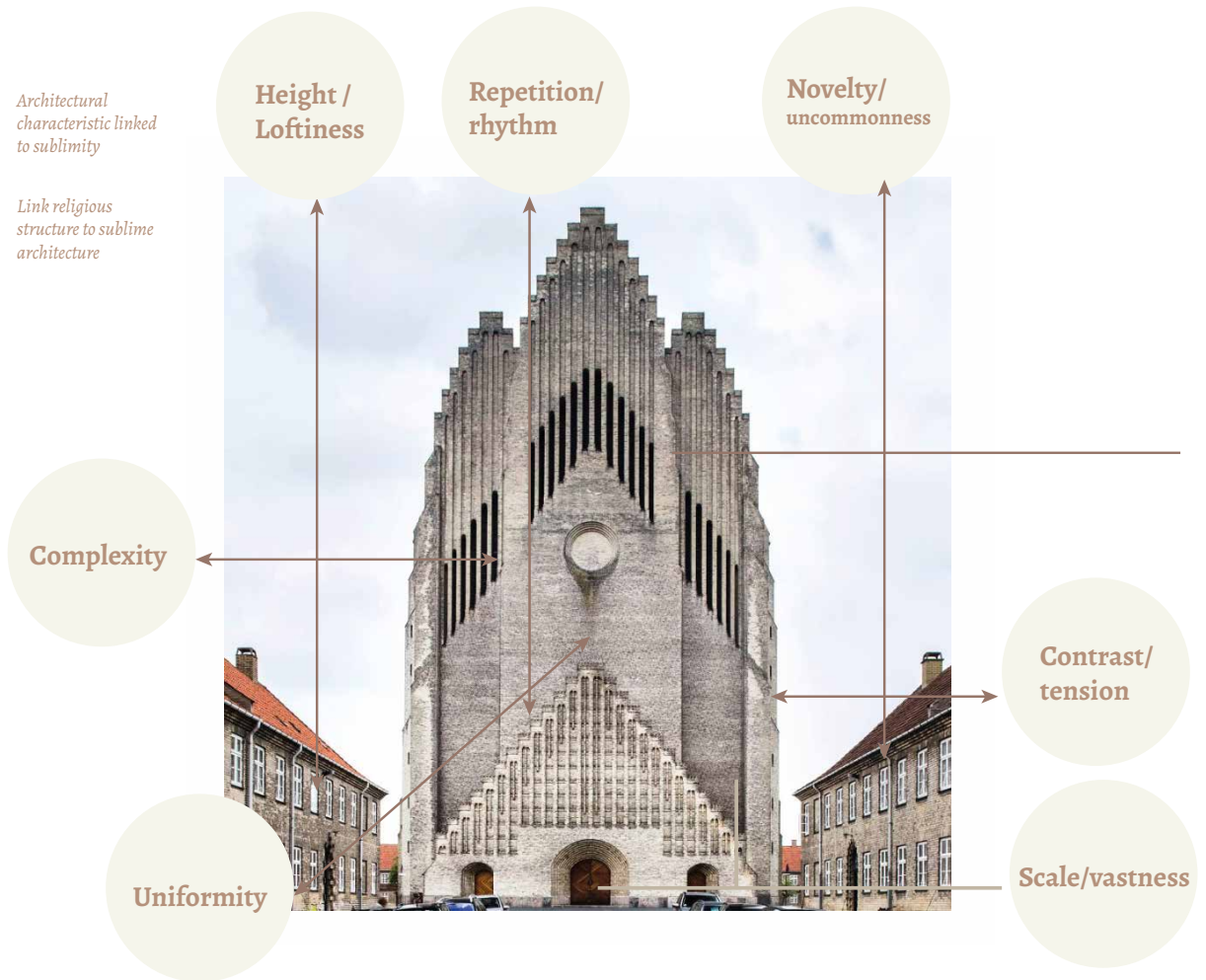


Fig 11. Exterior characteristics of the Grundtvigs church in Copenhagen that can contribute to a sublime experience (own image).

Legend

- X** Architectural characteristic linked to sublimity
- Link religious structure to sublime architecture

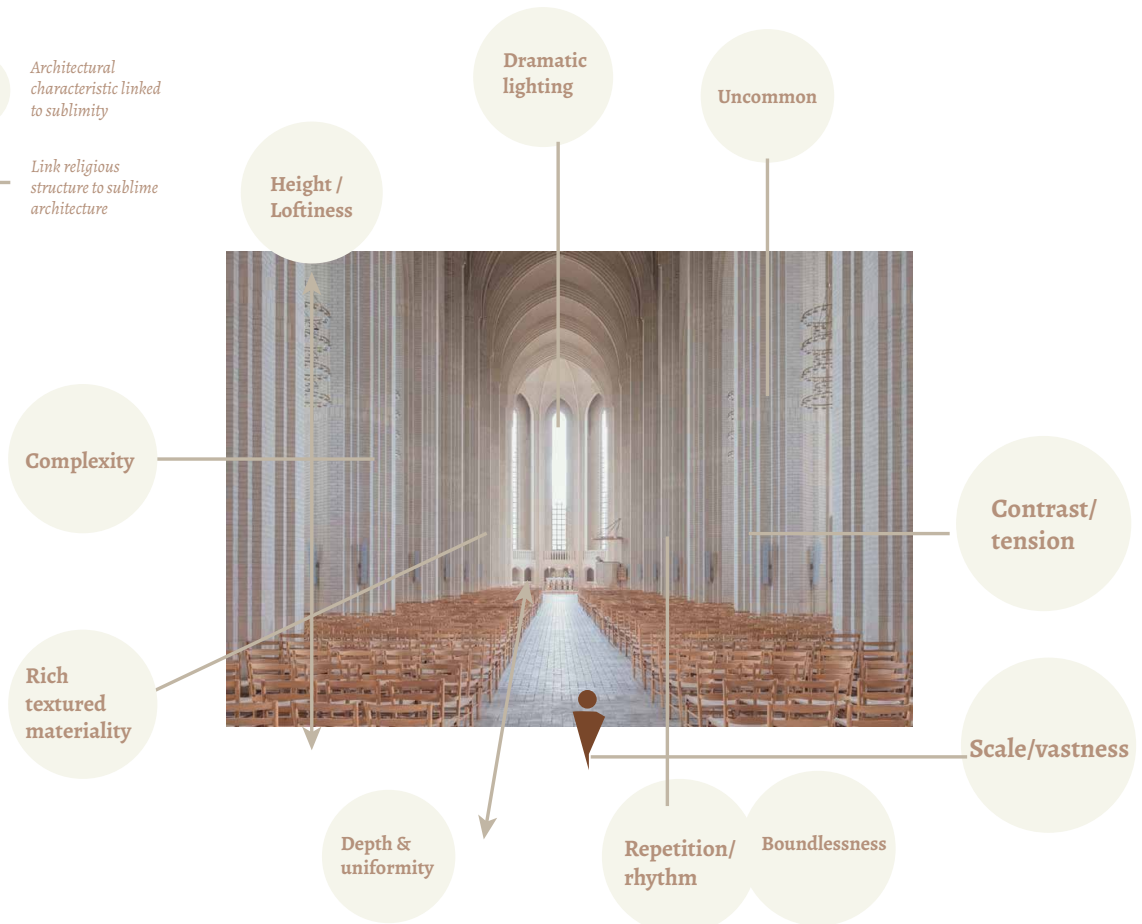


Fig 12. Interior characteristics of the Grundtvigs church in Copenhagen that can contribute to a sublime experience (own image).

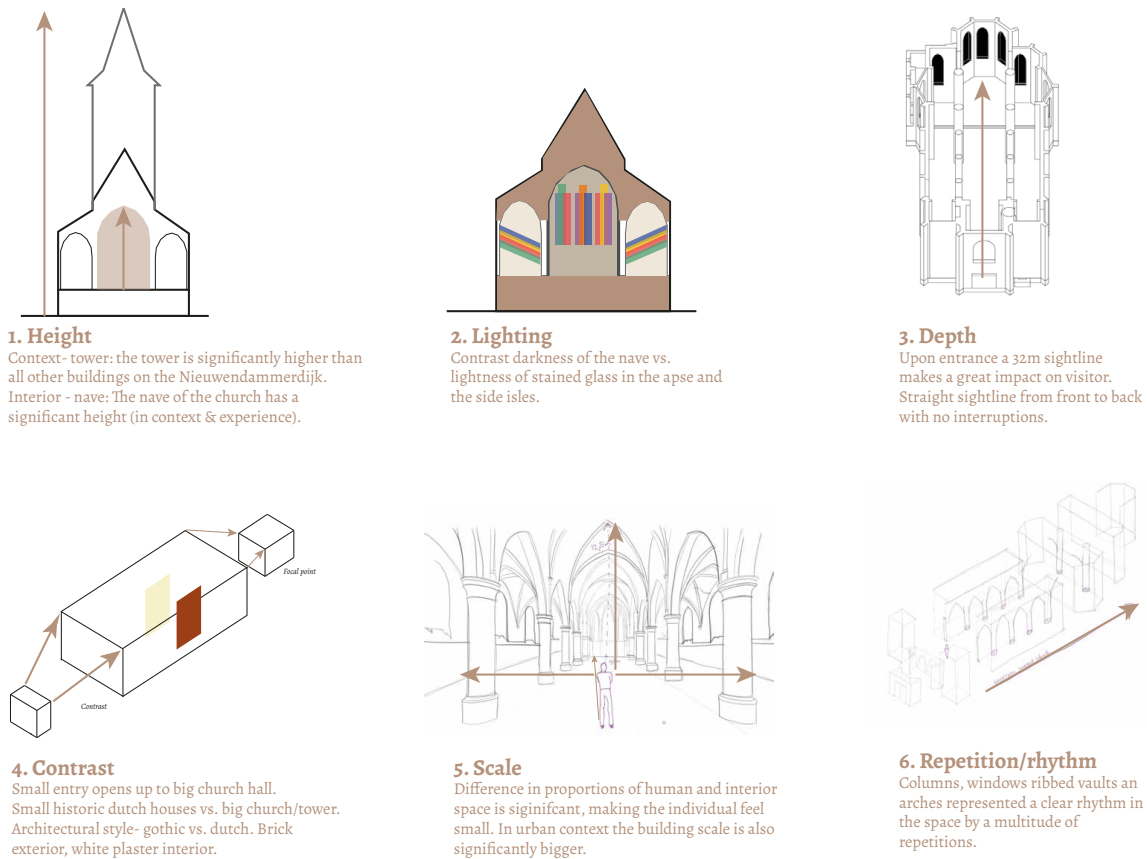


Fig 13. Results of the analyses of the Sint Augustinuskerk, Nieuwendammerdijk. The results show the most important architectural characteristics found in the church that can contribute to the sublime experience. The results are presented through simplified diagrams (own image).

V. Conclusion & discussion

The presented research paper aims to identify the architectural attributes associated with the sublime within the realm of religious heritage. Analysing the characteristics through the scope of the sublime has influenced the value assessment of said characteristics. Through the lens of the sublime, the different attributes are seen as having more value due to their positive effect on the visitor's experience. This goes beyond a traditional heritage approach, as elements are valued on their ability to evoke intense emotions. It must be noted that both approaches encounter the same elements, and can assign value on different or similar basis. However an approach involving sublimity is adding new knowledge and new awareness to the current heritage terminology. It has provided me personally with an expanded outlook on heritage structures and the significance of how they interact with the environment and the visitors. A methodical framework has been devised to systematically examine and evaluate the presence of these attributes in a given architectural structure.

Religious edifices exhibit architectural elements that align with the sublime, evoking sentiments of awe and grandeur. Characteristics such as their association with religious ideology, substantial scale, ornamental and decorative elements, historical significance, height, and the skillful use of dramatic lighting contribute to the experience of sublimity.

Additionally, the incorporation of historical objects and artifacts within these structures imparts a timeless and enduring quality, evoking a deep sense of historical importance and prominence. The strategic employment of lighting techniques and the contrast with overall darkness generates an ethereal and otherworldly atmosphere within the sacred spaces.

The results obtained from the administered questionnaire provide valuable empirical evidence regarding the influence of architectural features on the emotional experiences of individuals visiting churches. It must be noted that the scope of the questionnaire was minimal. To provide

more reliable results the number of participants should be highly increased in follow-up research. Understanding the architectural characteristics associated with the sublime in religious heritage carries implications for the preservation and repurposing of such structures. Architects can ensure the perpetuation of the sublime experience for future visitors by recognizing and safeguarding key features, such as height, dramatic lighting, and scale.

The identification framework ensured an analysis which specifically targets those characteristics able to induce sublimity, which gives new insights on why the characteristics present might be important to preserve. The application of the identification framework to the analysis of the Sint Augustinuskerk revealed six prominent architectural features: height, dramatic lighting, depth, contrast, scale, and sequential progression. Preservation of these features is considered essential during the repurposing process.

In the analysis it becomes clear how all different elements work together: succession leads to a sense of infinity or boundlessness, intricate detailing leads to a complexity or obscurity of the structure, scale is influenced by height and depth, as well as the contrast that is created by use of dramatic lighting. The individual characteristics work together as a whole and the whole is able to evoke feelings of sublimity.

The research paper contributes to a better understanding of the emotional and psychological effects that architecture can have on individuals and how this can be used as a strength during the design process. It also addresses sustainability and preservation within the field of architectural heritage, as it opts for preservation of the characteristics involved in sublimity. Subsequently, this can aid the preservation of the identity and character of the building and its cultural, historical and emotional significance for future generations. The identification framework aids in the creation of guidelines and principles for architects and designers to follow when working on religious heritage sites. With these guidelines implemented, societies can benefit as a whole by providing spaces that promote mental and spiritual well-being.

It should be noted that the findings of this study may not be readily generalizable to all religious structures. The conditions found in

the identification framework aim to give a more concise evaluation of the characteristics able to evoke sublimity. However, the judgement of the expert involved, combined with an assessment of the actual experience of visitors, will provide a more accurate result in terms of establishing whether the architectural characteristic involved is partly responsible for the sublime experience.

To further validate and expand upon the identified architectural characteristics, future research endeavors could encompass a broader array of religious structures and human experiences. Such studies should contribute to a more comprehensive understanding of the architectural attributes associated with the sublime in religious heritage. Other factors, like the effect of forms and their association with power or stature and acoustics (silence or loud noise, reverberation) are not addressed in the paper and require further research on the role they play in sublime architecture.

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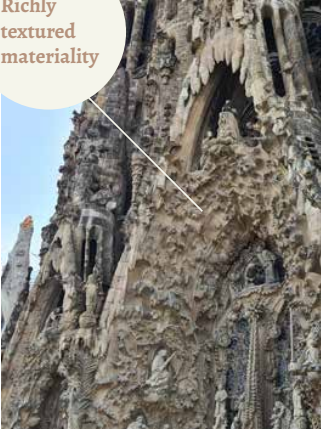
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Appendix

Figure A

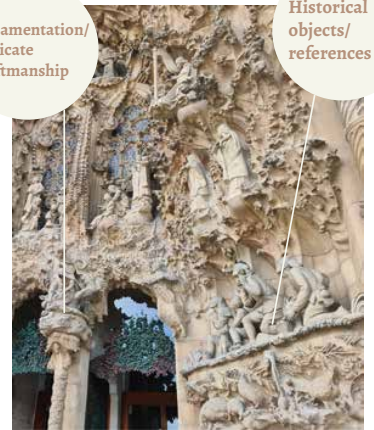
Richly textured materiality



Complexity



Ornamentation/ intricate craftsmanship



Historical objects/ references

Depth & uniformity



Scale/ vastness

Repetition/ rhythm

Novelty

Height / Loftiness



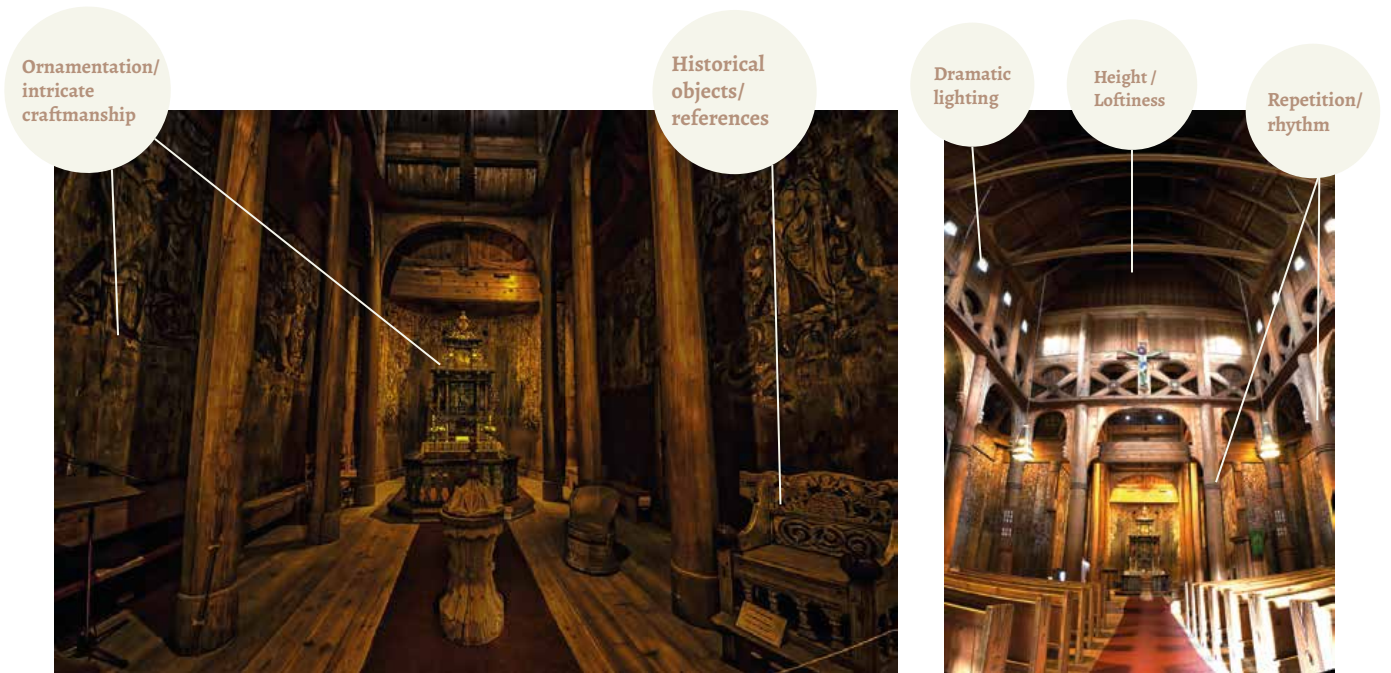
Contrast/ tension

Dramatic lighting



Architectural characteristics in the Sagrada Família, Barcelona that can contribute to a sublime experience (own photos).

Figure B



Architctural characteristics in the Heddal Stavkirke, Notodden that can contribute to a sublime experience (own image).

Figure C

Questions Sint Augustinuskerk

1. Have you ever visited the church? If yes, continue. The following questions concern the church building, apart from religion. It includes the interior and the exterior of the church.
2. How would you describe your first experience? How did you feel?

Very little emotion **0** ————— **10** Intense emotions

3. Please cross off any emotions you experience within the church, due to the building itself. (So not because of services or social experiences.) This is really about how the design of the church impacts the visitor.
 - In Awe
 - Astonished
 - A slight sense of terror
 - Small or insignificant
 - Inspired
 - Peaceful (a quiet mind)
 - Content
 - Happy
 - Admiration
 - Fear
 - Overwhelmed
 - Uncomfortable
 - Very conscious of the self
 - Unsafe
 - Else, namely..
4. What qualities of the church do you think help you feel this way? Choose the 3 most significant elements according to you.
 - Height
 - Length
 - Scale (in general)
 - Large windows
 - Stained glass windows
 - Darkness
 - Ornaments
 - Craftmanship
 - Colors (white, green & gold)
 - Lighting
 - Materials (brick, plaster, flooring etc.)

The questionnaire which was used as a way to verify the emotional experience of the visitors of the case study and attribute this to certain elements.