Layers Become Scenes:
The Sketch as an Active Mediator in the Early Thinking Process of Adaptive Reuse for Churches

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Abstract: When developing a design proposal for an adaptive reuse project, analysis of the host space and concepts for new interventions often need to be communicated simultaneously to different user groups and specialists through images. Which type of graphical representation(s) can we use methodologically during this process? Moreover, how can we build up a common understanding between different stakeholders, including non-specialists by using these representational images? There are several options that are discussed in literature: the handmade sketch, the render, or the collage, for example. All these methods have some side effects. The presentation of the new reality in an early stage of the thinking process, for example by a realistic render, is often perceived as a non-negotiable idea. It seems that everything is decided already. The handmade sketch, in contrast, is often positively categorized as an expression of a first idea open for discussion but also somehow stigmatized as an image that is not completely trustable on the level of scale, proportion, and viewpoint. However, is this division between techniques too obvious and maybe outdated? Can we indicate new combinations and what are the specific components? Exactly on this friction of the systematic working with architectural scenarios, we introduce a new type of representation: the controlled architectural sketch as a mediator. First, we start with a confrontation between the literature on sketching and the representation processes in adaptive reuse to understand the tension. Then we will illustrate and discuss our new method of working for the specific case studies of the adaptive reuse of churches through the layered combination and confrontation of the sketch with photography.

Introduction

Freehand architectural drawings (sketches) often evoke a sense of authenticity and craftsmanship in the process of visual communication through the combination of an inherent dialectic process (Goldschmidt 1991), visual reasoning in observation (Unwin 1996, Ching 2014), and the artistic embodied architectural gesture (Andrews 2015). These aspects have already been extensively studied in the cognitive psychology. Vistisen (2015) goes a step further in this field and zooms out. After an extensive overview, he defines a new important contemporary perspective on the use of the sketch besides the role of the visual thinking through sketching: the understudied specific use of communication by the sketch with other stakeholders. Based on the genres of sketching by Olofsson (Olofsson E Sjöflen 2005), he

indicates four important aspects that interact in this process: the explanatory, the investigative, the explorative, and the persuasive element of the sketch.

The representation of adaptive reuse projects is always connected with an intense process of communication, and actually the same four areas indicated by Vistisens' overview of the communicative use of a sketch occur. How do we explain, investigate, and explore all the possibilities for the host space? Which type of representation—and on which moment—do we follow? The question about the persuasive power is answered in a recent study (Leandri et al. 2022): the handmade drawing as a final image of representation scores better than what the computer renders in the category of the professional and the general public. They point out that: "objective qualities of communication were assessed as belonging more to hand-drawn images than photorealistic renders" (Leandri et al. 2022, 804). Each mode of representation carries distinct implications for how stakeholders will engage with the project. Besides the communication aspect on a technical level, the literature also shows that the unique imperfections inherent in hand-drawn representations can reflect the character of the existing structure, thus enhancing the narrative of the building's history and its transformation and process of complex decision-making (Eray et al. 2019; Bullen and Love 2011). Eray specifically studied the complex situation of "the interface" within the process of communication in adaptive reuse and stipulates that the type of interface can change during the process. Furthermore, handmade drawings can facilitate a more personal interpretation of the design, allowing viewers to engage with the project on a subjective level, which is often crucial in adaptive reuse contexts where heritage and community values are at stake (Mısırlısoy and Günçe 2016).

In contrast, other literature shows that computer-generated renders provide a high degree of precision and realism, which can be particularly effective in conveying the potential of adaptive reuse projects to stakeholders who prioritize clarity and detail in visual communication. Moreover, this is often an end-user. These renders can simulate lighting, textures, and spatial relationships with remarkable accuracy, thereby allowing stakeholders to visualize the completed project in a more tangible way (Bates-Brkljac 2009). The photorealistic quality of computer-generated images can also enhance the perceived viability of a project, making it easier for investors and decision-makers to grasp the economic and functional benefits of adaptive reuse in a circular context (Remoy and Wilkinson 2017). However, this reliance on technology may sometimes lead to a disconnect between the representation and the actual experience of the space, as the digital medium can obscure the subtleties of materiality and context that are more apparent in handmade drawings (Trinh and Elverum 2019). The choice between these two modes of representation can thus shape stakeholder perceptions in significant ways. For example, while computer renders may be more persuasive in formal presentations aimed at securing funding or approvals, handmade drawings might be more effective in community engagement scenarios where emotional resonance and historical context are paramount (Tayyebi 2020; Hassanain and Hamida 2023). An important element is

that in the comparison between digital and handmade, we always have to face the complexity of a diverse world and architects have to make a choice (Arat 2015) in a context where adaptive reuse is an upcoming discipline (Chiacchiera and Mondaini 2023).

However, should we keep this division (manual or photorealistic) so strict? Is there a third possible path where elements and types of actions can be combined? In addition, can we take the process of layering thinking as often used in the technical field of adaptive reuse into the drawing technique itself? Our objective is to make this clear through a case with a delicate charge: the adaptive reuse of churches. We will first introduce the case(s) and then zoom in on the drawing methodology process in detail of the presentation sketches we made and the intrinsic qualities through scenarios in the exploration, the investigation, and the explorative aspect of the host space.

Problem Statement: Complex Communication of Adaptive Reuse

For centuries, Roman Catholic fate defined the social and cultural life in Belgian society. This is also reflected in its spatial organization of towns and villages, with the church literally in the center of the community. Like many regions in the Western world, Belgium is currently undergoing a process of secularization. This results in diminishing numbers of people attending mass regularly and decreasing numbers of priests. Consequently, many church buildings have become abandoned or underused. In addition, church communities increasingly experience difficulties in yielding finances to cover exploitation costs (e.g., maintenance and restoration of their existing building stock).

In Belgium, as a result of the Napoleonic decision in the past to confiscate all religious properties, ownership, and financial responsibility of parish churches, they usually belong to the local municipality. For churches that are protected as a monument, restoration and maintenance costs are shared with the regional government. In Flanders, the Northern region of Belgium, the government launched a research program in 2018 to study the potential of parish churches to house new or additional functions. The program, called Projectbureau Herbestemming Kerken (Project Office Adaptive Reuse of Churches), is coordinated by the Team Flemish Building Master, in collaboration with the agency Immovable Heritage. A selection of design teams conduct feasibility studies in which they draw several spatial scenarios for the transformation and reorganization of the church building. In the period 2016 to 2021, 142 studies have been conducted by eight design teams (Somers 2021). In other words, nearly 8% of the Flemish parish churches have been investigated by the Projectbureau.

One team, of which the author of this article was a member, conducted such feasibility studies; eighteen churches have been studied over a period of four years (2016–2020). The applied methodology is called "research by design." Each project followed the same protocol, moderated by the Projectbureau, which included three stakeholder meetings. In the first meeting, local stakeholders presented their ideas to the design team, often combined with a

joint visit to the church and other relevant locations in the surroundings. Following this, the design team translated these ideas into spatial scenarios and images. Usually, three possible scenarios were investigated. In the second meeting, these scenarios were presented to the stakeholders and discussed. Next, one scenario—or a combination of the different scenarios—was selected by the stakeholders to be further investigated by the design team. This further investigation included a cost estimation. The results were presented to the stakeholders in the final meeting.

In this contribution, we focus on one of the tools that we used to communicate the scenarios with the local stakeholders during this trajectory: the sketch. Often, the discussion on the future of the church building was very emotional. Sometimes a completely new function (library, art school, or kindergarten) was proposed. To steer a positive debate, we felt that it was important to work with images (drawings and visualizations) that were open for interpretation but also crystal clear in their appearance. Where a realistic render is often perceived as a non-negotiable idea, the handmade sketch, by contrast, is interpreted as an expression of a first idea, open for discussion. In what follows, we elaborate on the use of sketching in this early process and more specifically the direct combination with photos.

Methodology: A Reportage of Old and New Viewpoints

Three Steps

For each of the churches that we studied, an average of five final sketches were produced. We produced at least one exterior view, one central interior view looking from the nave toward the choir, and one interior view looking from the nave toward the side nave; additional sketches showed the most important interventions from other interior or exterior perspectives. In total, circa ninety sketches were produced following the same methodology and technique.

At the start of each project, a photo report of the church and its surroundings was conducted by the design team. The photographs formed the basis for the sketches that were produced through the technique of tracing. Figure 1 shows the different steps in the production of the sketch for a traditional, Gothic Revival church with a cross-shaped plan, transformed into a cultural center with performance space. One can see that the windows became doors and that the interaction between inside and outside is completely different. It becomes an open interface with the garden. On the stage, musicians are preparing their show and the details of cables for the instruments and soundboxes illustrate this atmosphere. The introduction of a new level in the church is visible with the person standing on the end of the new circulation zone (and tribune) in the right-hand corner.
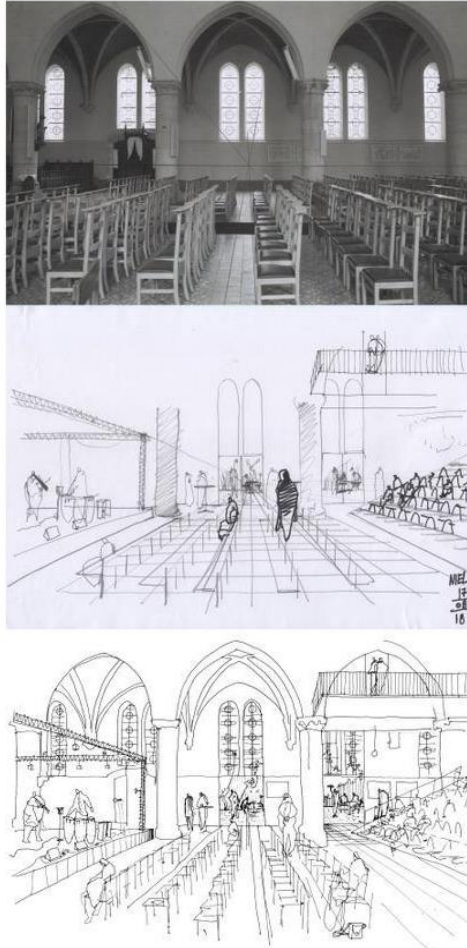
Figure 1: Sketchwork in Three Steps: Neo-Gothic Church Starting from Reportage Picture Toward Final Sketch

We followed these sketch steps very systematically; one can see (with differences) three steps, in general:

- on the top (step 1): **picture of the existing situation** with eyeline and vanishing points on this line.
- in the middle (step 2): **rough sketch**, indicating the most characterizing elements in the space, including the existing building, new architectural interventions, furniture if defining the character and layout of the space, a rough indication of users. This sketch was not used in the communication, it is purely a work document and is not a brainstorm sketch, and it is the representation of an idea in plan and section in the perspective of the picture.

- at the bottom (step 3): **final sketch**, indicating more detailed architectural features of the existing building (e.g., capitals, vault ribbons, stained glass windows, confession chair), the suggestion of materiality (e.g., dark/light surfaces, textures), more differentiation in human figures (e.g., male, female, children, elderly), the relationship between spaces (e.g., view toward exterior through open door or window).
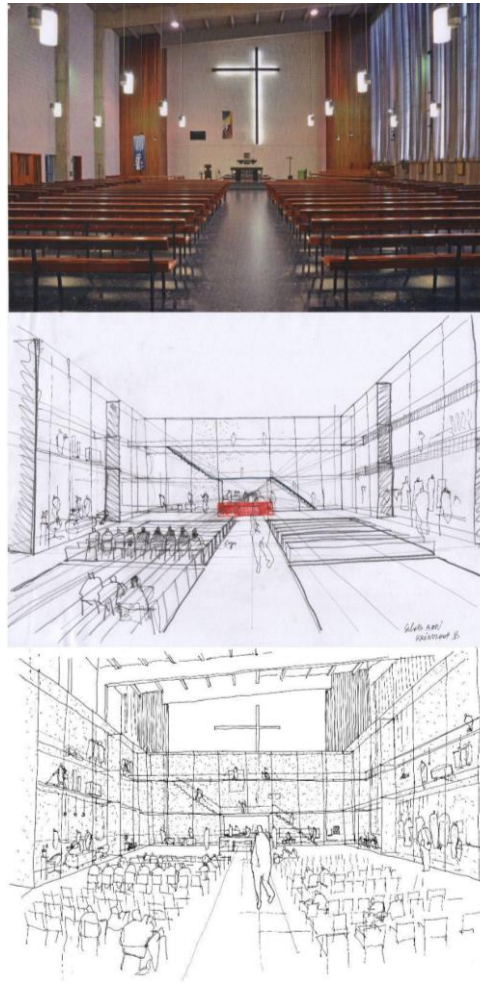

Figure 2: Sketchwork in Three Steps: Modern Church Starting from Reportage Picture Toward Final Sketch
Source: Author + tvTRACE Researchgroup 2019

Figure 2 shows the same process for a modern church with a rectangular floor plan, transformed into a second-hand store (one of the studied scenarios) in combination with still a central room for the service. In each step of the process, the picture is used as an underlay for the whole drawing process. There is a strong suggestion of objects and a subtle indication

that behind the semi-transparent screen, people also walk around to look at the objects. The level of detailing in every part of the sketch is not the same. The chairs, for example, are only partly drawn completely (with four legs); in other areas of the sketch, some vertical lines indicate the rhythm. The vertical effect of the space and the tracing of lines of the curtains— or is it another material?—in the same direction has the same grandeur as the initial interior.

Selection of Viewpoints

The viewpoints for the sketches in the projects were never selected randomly. In the typical plan of a church with the main nave and the transepts, the orientation of the interior on the axes is strongly present. The architectural plan coincides with the important experience and tradition of the Catholic service and its specific rituals. Both the altar and the choir are for example focus points in the plan. The "actions" that happen there, presiding over the celebration and accompanying the service, are connected with the memory of the place. The image of the father bringing his daughter to the altar or the coffin during a funeral service surrounded by flowers are moments of completely different uses and adaptations of the interior in the same space. Moreover, they are meaningful interpretations of the space; both photos in Figures 1 and 2 are strong viewports of the space. The two possible directions through the viewpoint, the priest or the churchgoers, are automatically connected with the human scale.

Due to our memory—and we understand this can be considered as a bias—of the rituals in these types of places, the focus on the axes was always spontaneously included during the photography session. The researchers, all of whom grew up in a context where the use of this space is and was known, therefore have a form of prior knowledge. That is an important first observation. The observation and registration of the place are not free from insider information. Therefore, we can define the whole reportage, with also a focus on details and materiality, as a systematic compilation of meaningful viewports. Furthermore, we will demonstrate how the construction of new images of a possible future, the so-called scenarios, of space are connected with the installation of a new interiority in the church and can be demonstrated with variants through a viewpoint.

An inspirational book for us to see how the notion of time and the position of a viewpoint in a place are connected was "Here" by Richard Mcguire. In this graphic novel, the same position in a space is taken and redrawn again and again through time (McGuire 2014). The history of a place is extremely evoked by taking a time frame of thousands of years. Both the primeval forest and the 1950s room pass by in this way. Mcguire then combines these images. Pieces of a certain period can be found in other drawings. A close family photo from the 1970s is incorporated into an interior from two centuries earlier. By elaborating on each period with a drawing code (color pencil, watercolor, line drawing), you can read the history. You make the collage in your head and get many extra connections. He chooses a corner of

the room. Two walls that in reality are perpendicular to each other create a perspectival setting where the story of the place takes place. Windows and doors and the furniture are also allowed into this scene as characters. The pulpit and confessional are also fixed furniture elements in a church, sometimes already disappearing and even more often moved within the church in the context of previous enlargements or adaptations. The interior of churches has never been a fixed scene and has experienced a whole series of reconfigurations over time, just as in Mcguire's stunning series of overlapping images of the past and the future.

Role of the Sketch: Presentation and Confrontation

The sketches were not produced on the spot, as a field note. Nor were they produced as the first architectural idea during the early phase of the design process. Instead, the sketches were produced in the final stage of the design process, as a 3D representation of the design that was developed in plans and sections. Hence, for the designers, the sketches were used to test and communicate the design proposal. Only the final sketches were used together with the initial photo in black and white.

More importantly, the purpose of the sketches is the representation of the design toward the stakeholders. Is the idea clear and does it show a new reality? Many of the stakeholders (politicians, church fabrics, future users, etc.) have no experience in reading architectural plans and sections. As the sketches were built based on photographs, they were easy to read for a broad audience. By showing first the picture of the existing situation, followed by the sketch of the new proposal, people could imagine more easily how the proposed intervention would work within the space that is so familiar to them. In the projection of the presentation, we often flipped from the sketch to the photograph and vice versa. The photograph is a known element to the viewer, the reality is precipitated as it is known, and every detail is visible. The color of a chair and the brightness of the light through the glass-stained windows come together in one image.

Alberto Pérez-Gómez and Louise Pelletier already made it very clear that within the representation of architecture, there is a difference between the transition of an architectural idea and its transcription. They refer to the so-called hinge that arises through the perspective and the drawing. The building world uses all kinds of documents to capture every angle and detail. Bringing these documents together would be an accurate method of arriving at an architectural project. However, they make it very clear that often something is lost. The transfer of meaning by the architect may just be to tell a deeper story, an intention within the architecture. This intention is always connected to the purpose of the architectural study—in this case, the recalibration of the architectural potential of churches with different programs. The drawing can enable this leap in the imagination for every participant in the project. Pérez-Gómez and Pelletier state that in architectural representation, the "dualistic opposition" between the "visible and invisible" must be put aside (Pérez-Gómez and Pelletier 2000, 330).

Thus, the making of architectural drawings is based on cognitive representations of known objectivity. A circular procedure is involved here: the understanding of a part is achieved by considering the whole and the whole through consideration of its parts (Frascari 2011).

In the context of adaptive reuse—the transformation of existing buildings for a new or continued use—this technique of sketching through tracing photographs of the existing condition has been used before. Carlo Scarpa's sketches illustrate an intense search process where section, plan, and view are constantly confronted. Operating in an existing context, Scarpa's projects are always a search for new solutions for problems on various scales. Small sketches accompany the thought process and nestle around the ground plan. This method or approach by Scarpa throughout the sketching process has been discussed in the literature (Emmons et al. 2016). Less well-known are the collage technique and sketch images that also departed from a photograph (Murphy 2017). Carlo Scarpa's archives of his design for the Castelvecchio museum in Verona show how he used a technique that is similar to our technique described earlier, where we produced the sketches by tracing photographs, Scarpa sketched directly on photographs of the existing building. The contours are first set by the photo point of view. The search for the escape point is done by tracing over the photograph. Where in Scarpa's sketches details are highlighted or recur in their smooth iteration and repetition, the photograph is a more strict starting point. Bringing information through the photograph is not only a confrontation with reality but also connects the drawing-thinking process. The purpose of his sketches was to steer the design process and test ideas, rather than to present his design to a non-expert audience.
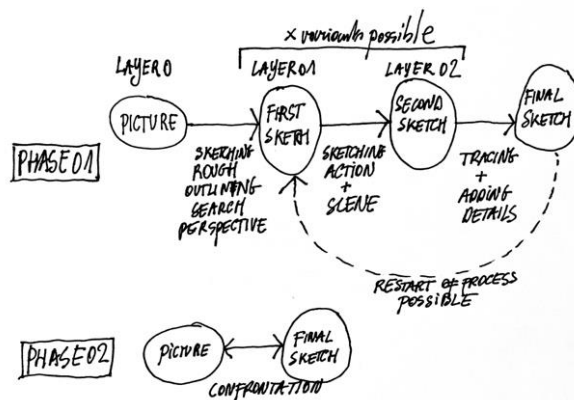

Figure 3: Process of the Sketchwork and Actions, the Making in (First Phase) and the Presentation to the Stakeholders (Second Phase)
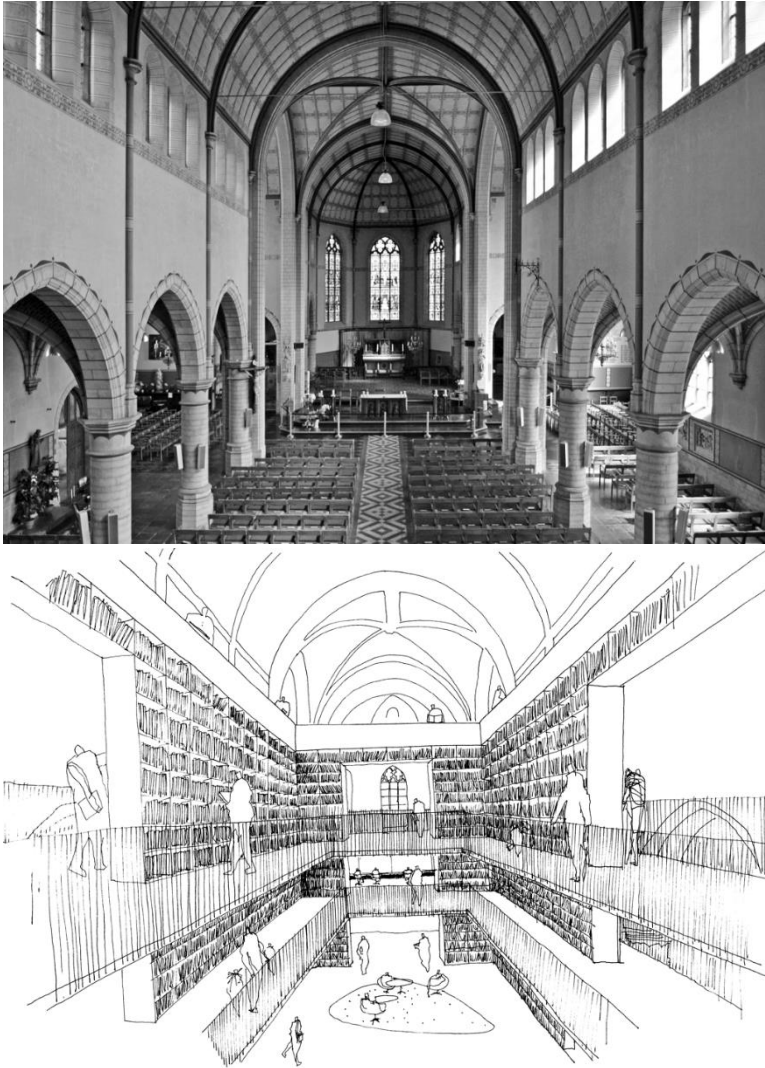
Figure 4: Presentation Image in Two Parts: (a) Photo of the Church Interior Taken from a Higher Point and (b) the Sketch from the Same Point Representing the Proposal of a Library by the Insertion of a Big Piece of Furniture
Source: Author + tvTRACE Researchgroup 2017

When drawing the perspectives of the churches, it was clear that the practical method, the apparatus, also played a role. No use was made of a computer when drawing according to the three mentioned steps for the 3D visualization in a line sketch. Each photo was printed in A3 size and used as a base layer on a standard light box. The search for the contours of the perspective reality was then completed by literally placing a new sheet of paper on this photo and drawing on the sheet of paper (see Figure 3). The photo still lights up, but because of the number of versions, the photo disappears more and more into the background. Holding on

to the photograph is holding on to the present reality of the church at that moment. The action of drawing by hand is situated on the friction of economic production (delivery of reports on the church) and the "non-productive expenditure," a term used by Helen Thomas (Thomas 2020, 126). The very time-consuming activity of drawing, nowadays often on a computer, is stored in the final product. Every drawing gets an economical cost.

However, by focusing on the economical aspect, we lose the tangible connection with space. Helen Thomas points out that we have to look at these tangible hidden qualities and processes of the drawing. Meditation and reflection can be incorporated during the process of making the drawing—in this case, the layers of the sketch. As a final reflection, the sketch had to tell the whole story. For example, in Figure 4a and b, one can see the activities in a library in one glance, situated on different levels of the new insertion. All the sketches for the project (more than ninety) were done by the same person. In several cases of churches, this draftsman was not directly involved in the study of the project; he only had to illustrate the scenarios. In other cases, he also worked on the scenarios.

The Sketch as a Palimpsest?

The parallel between the method of layers on top of each other, with the final drawing as a result can be seen as a palimpsest. In his seminal text *Old Buildings as Palimpsest*, Rodolfo Machado introduced the concept of the palimpsest in adaptive reuse theory (Machado 1976). A palimpsest is an inscribed surface from which one text has been removed so that it can be used again for another text. It was a frequent practice for parchment, which was expensive and of which the material was often considered more valuable than the inscribed text. According to Machado, some architectural drawings could be regarded as the equivalent of a palimpsest. He refers to Japelli's remodeling of a garden at Castelgomberto where he drew over the original drawings, redrawing some of the elements that had to remain, while erasing elements that he intended to remove. Resonating Machado's argument, Carlo Scarpa's sketches made directly on photographs of Castelvecchio could also be called a palimpsest.

Machado uses the metaphor of the palimpsest not only to describe the architectural drawing but also to describe the process of transformation of an existing building in which certain layers are removed and new layers are added to the building. Moreover, this is a deeper connection with the idea of a palimpsest: layers are not only attached to the past but for sure also to the future. Rodrigo Pérez de Arce, in his book *Urban Transformations and the Architecture of Additions*, defined drawing as a tool to investigate the accumulation of historic layers in buildings and urban entities (De Arce 2014). His drawings are partly based on in situ observations of the existing fabric, partly on sound historical documentation, but also include a certain level of speculation. His thinking aims to show the rich narratives embedded in the existing fabric as well as the evolution of urban form through time are valuable. The set of drawings produced by Pérez de Arche works as a palimpsest in reverse: the drawing serves as a tool to unravel different layers and shows these layers separately. Amphitheaters of

the Roman period for example often evolved toward zones in a city. Walls and openings were used in a new configuration and incorporated into the fabric. It is interesting to see that the slow process of urban transformation over decades is not perceived as shocking, in general. The churches we worked on in the studies do not have this advantage of a slow evolution; the additive transformation is often very young and we deal with the interior.

Bearing in mind that the confrontation with the church space is a very sensitive issue for the current users of this space, the drawing technique can be a system to forget for a moment the overwhelming and confusing context. We noticed that after some time every detail in the church space becomes a valuable item for the users. This over-appreciation is very intelligible. The interiors in the parish churches are often a mixture of elements from different periods and often with sometimes questionable quality. Outdated techniques that were not always carefully incorporated into the interior (heating systems, lighting) or very pragmatic choices with the available resources (choice of furniture, screens) often clogged up the interior. Over time, the users have become accustomed to these modifications and often no longer realize that the basic quality of the historical interior has been lost, one cannot look through the space. Interiors are always a collection of layers, but daring to leave out meaningless ones can only be done by an external specialist and the process of drawing by sketch a new interior with leaving elements out is fast and easy.

In Flanders for instance, there is a strong tradition of postcards of important buildings and townscapes. These frozen images are very useful in researching the genesis and transformation of churches. Pictures of the interiors of churches can also be found. Analysis of these images shows that these spaces have very often changed very little. One can almost punctuate on a time frame the addition of technology (loudspeakers, lighting) or the replacement of individual chairs. This shows again how precarious it is to formulate radically new ideas in this environment.

From Photo to Sketch

Working with sketches also holds a certain risk. A common mistake when using only sketches in presenting a design process is that proportion and depth are not correctly estimated. They are either exaggerated or just not shown. This distortion has another, less-favorable characteristic in addition to its noncommittal nature: the dimensions are not verifiable.
On a meta-level, one can find a classification of the different roles of sketching in a design process in the study by Purcell and Gero. They identify several themes in the broad literature about sketching (Purcell and Gero 1998):

- Sketching is a reinterpretation and creates new ways of seeing.
- Sketching uses a focus shift through ambiguity.
- Sketching constructs continuous thoughts in a problem-solving process.
- Sketching is a cyclic, dialectic process.

Although a design sketch, a loose idea while thinking about the project and in discussion with your team members cannot be used in a discussion with an untrained audience. The danger of presenting loose sketch material is that only the noncommittal remains and not the combination of all necessary ingredients. We situate our (presentation) work with sketches as a fundamental element in point 4, a cyclic and dialectic process but we add something: a cyclic, dialectic process **through the use of layers**. These layers must coincide. How can we do that? Can we find a connection in the form language of the interior and the overlap through the lines with the new reality? At that moment, the ambiguity can be tempered in a visible way and the dialectic process can start.
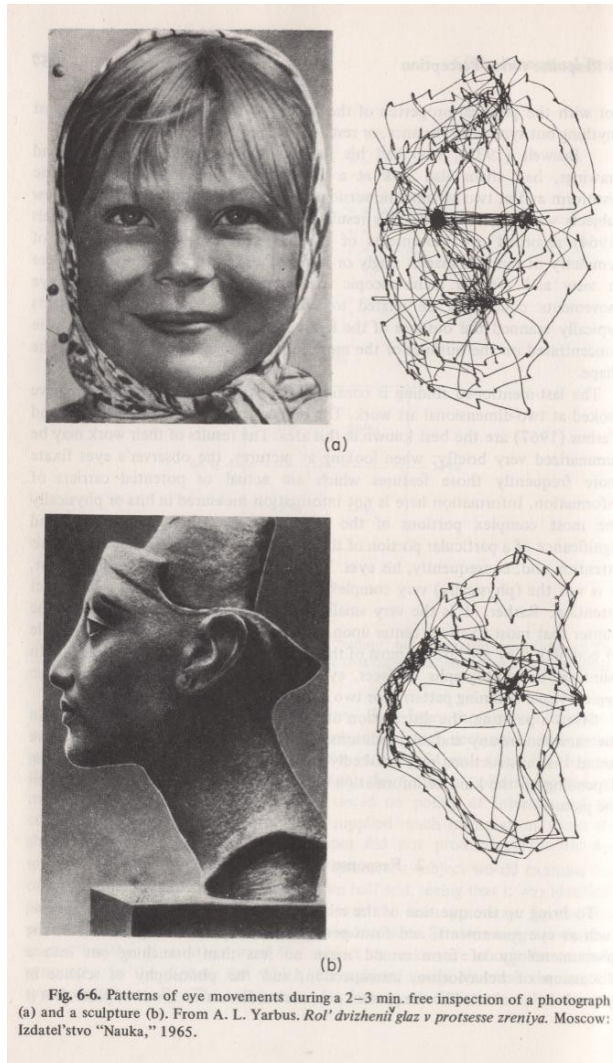

Fig. 6-6. Patterns of eye movements during a 2–3 min. free inspection of a photograph (a) and a sculpture (b). From A. L. Yarbus. *Rol' dvizhenii glaz v protsesse zreniya.* Moscow: Izdatel'stvo "Nauka," 1965.

Figure 5: Perception and Outlines of Form
Source: Zusne 1970—Spread Book

The perception of form in a space is the starting point to understanding the space. Leonard Zusne defines all the different meanings for "forms" in his standard work *The visual perception of form*. A possible definition of the word "form" by Zusne is (a) the corporeal quality of an object in three-dimensional space but also (b) the projection of such an object on a two-dimensional surface. Recognition and identification are important elements in the process of understanding form. For example, the physiological basis of contour perception follows several steps (Zusne 1970). Through recognition of the form, there will be an identification with the object. The eye scans the surface, and these so-called drifts (Zusne 1970) are a framework of the object. All the points are scanned by the eye, and in the mind, a reduction of this data occurs, as one can see in Figure 5. The same process occurs when you see an Egyptian statue or the face of a child. By eliminating details and reducing the form to its bare essence, the framework stores the same pattern of information. The framework in our mind becomes the key to remembering the initial image or form.

The reduction in the sketch, in our case used in a representation process, and the elimination of objects are a reverse example of this process of recognition and identification. The viewer who knows the image of his church very well often recognizes the frame of lines and takes in the old and new information. The contours of the existing are inextricably linked to the new and form a new image. Hence, it was very important to give this identification a name, so each sketch of a scenario was given its title.

Figure 6: Layers in the Urban Fabric by Sketch
Source: Conrad 1974—Spread Book

The human eye is conditioned to perceive depth. Depth is created by a succession of elements in the scene. The foreground, intermediate scene, and background work together, and the scenery defines a space. By separating the layers of information (structure and infill), different aspects can be studied separately or in combination. Layers overlap but have a specific topic. This technique has been used for some time in the analysis of urban development projects, but always in plan form. In Ulrich Conrad's analysis of the urban environment and man's perception of that environment, the unraveling of information is also applied to perspective images and photographs (Conrad 1974).

In the example of Figure 6, there is a classic urban corner in an urban fabric. The daytime and nighttime photographic record on the left shows that activities change throughout the day. In the three drawings on the right, the former anchors of the facades are connected to information layers. Showing the location on the façade of the architecture, the ornamentation, the illuminated signs, and the literal graphic message are filtered into separate layers. The interplay between formal surfaces and infill becomes clear. Neon advertising has historically nestled itself on the façade and sought out zones that lent themselves to it. Open areas are filled in, and the edge of the roof becomes the pedestal of advertising. Where in the photograph the interplay is clear and the quality of the environment is in a total image, it becomes more clear. The layers are quantifiable and even more so, zones of intervention can be detected. The lines form surfaces, the idea of form as a corporeal quality as we saw before in the study by Zusne.

Figure 7: Visual Combination of Layer Sketch and Initial Picture—Working Material During the Process on a Light Table, One Can See That Not All the Lines Are Traced, the Memory Reconstructs the Missing Parts
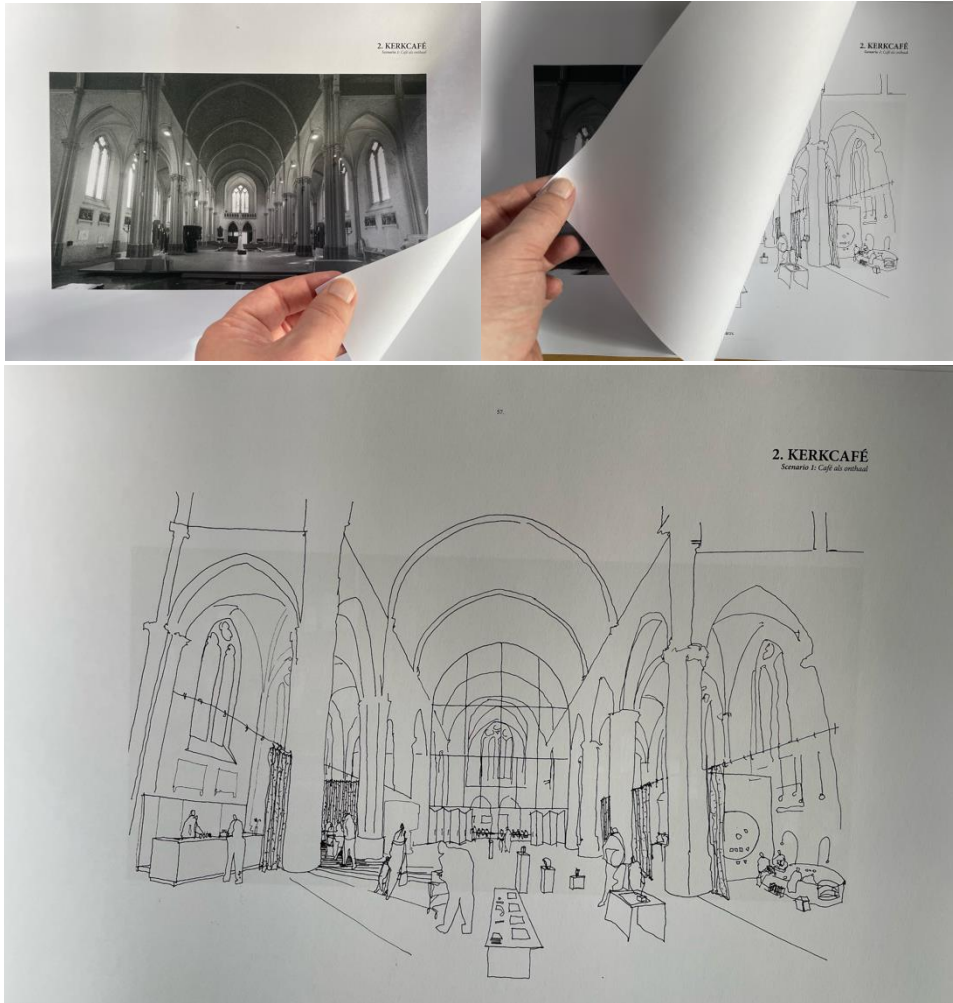
Figure 8: Example of a Photograph and Sketch in the Final Printed Study, Juxtaposition of the Viewpoint Page by Page, with a Proposal of an Art Exhibition

Human Presence in the Representation

Let us go back to the interior and the construction of new ideas in the scenery. After establishing the eye line, it is relatively easy to introduce human figures into the scene. In every drawing, it was the clear intention to install a human presence in the foreground, the intermediate scene, and the background. The persons are always engaged in action, and on purpose, there is a well-chosen diversity. People in wheelchairs, children, or musicians act in the scene. The new activity is always vivid. Whether it is a library where one can get lost among books or an activity in a child care center, the new introduction can be discussed by linking it to the existing photograph. Differences are highlighted and, more importantly, superfluous elements that have entered the interior over time (previous renovations,

disruptive furniture, etc.) can be mentally removed. In Figure 7, one can see this superposition of the different layers in one perspective: photo and sketch are presented together. In Figure 8, the pacing through the final study shows the same effect.

There is an "engagement in composition," a concept launched by Suzie Attiwill. In Attiwill's work, the process of interiorization is linked to actions in space. She defines this as tactics. She makes a distinction between the fixed scheme of an interior and the action of making "finding tactics and tools which open up the concept of interior beyond representation and reflection, engaging interior as a dynamic process of making, of interiorization, of interior design" (Attiwill 2013, 11).

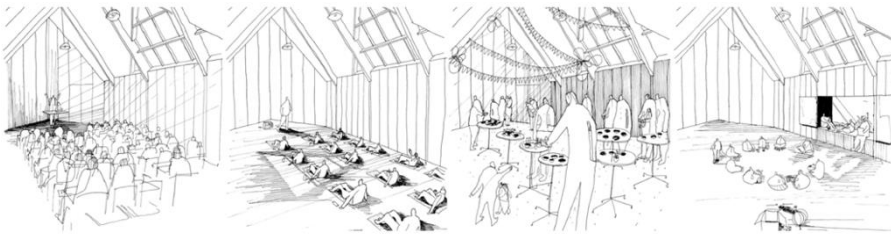## A Debatable Temporality: Scenarios and Variants

Figure 9: Example of Four Activities on Different Moments in the Same Place: A Lecture, a Yoga Session, a Birthday Party for Children Playing in a Former Church with Sloping Roof
Source: Author + tvTRACE Researchgroup 2018

In the presentation of the reports to the stakeholders, the reports were always considered as a finished whole, the switching between photo and sketch (two slides in a row with the same size) could make the narrative approach clear. By switching between the photo image and the sketch during the presentation, the sketch is imprinted in the mind as a new reality. However, this reality is not fixed. In the methodology we used, no single scenario was put forward as an imperative. We created very diverse possible dioramas to unlock the interior, as seen in Figure 9.

A diorama is a frozen action in a perfectly constructed environment. In the world of model construction and representation, it is frequently used to bring reality to the viewer in a scene. In drawing or sketching, we often speak of scenery. In these dioramas, the context is so well defined that there is no doubt where the action is taking place and which action occurs. In the project of the churches, the familiarity or veracity of the location is obtained through the confrontation with the photograph. Photo and sketch work together to create a scene. The authenticity of the location is the starting point and memory complements it into a diorama. One can imagine at that moment being present in the action of the diorama. Without determining every color, and every choice of material, it works better to let the lines

form the contours of the "new memory." Essential parts between the two images (photo and sketch) are very similar and overlap. Elements in the image can then work as a "hook." In the sketches, we only used black lines and white surfaces. Surfaces are not colored but pop up through variants in tracing.

The purpose of a study and, more specifically, the study of the feasibility of repurposing a church is not to deliver a finished design. A design that starts from a take-it-or-leave-it mentality and without the possibility of modifications stops the process. In a very recent book, Nalina Moses calls it "the unmediated nature" of the design process and also points out that "the alluring unfinished quality" of a sketch more and more will be combined with other forms of knowledge transfer in contemporary architecture (Moses 2019, 12).

Conclusion

A very thorough history of the design process and the tools associated with the practice of architectural offices were depicted by Christian Gänshirt (Gänshirt 2007). He explains that thinking, expression, tools, and perception are situated in a never-ending cycle. The tools can be visual or verbal. In the process of the churches, it was clear that there was a drawing/thinking process by the architects with a verbal/graphical explanation of it to the stakeholders but also an exchange within the team. The cycle was always open to others for reflection. However, we do not conclude that other systems cannot obtain this open cycle in an early design of the research phase. We must say we were especially intrigued by the combination of three mechanisms that occur in the described process at the same time on the level of the draftsman and stakeholder (see Figure 10):

1. The mechanism of **reduction and abstraction**: visual memory connections are possible with rather simple techniques: lines on paper and an overlap on a light table with the host space as a stable base that is not touched but expanded.
2. The mechanism of **confrontation**: sketching and photography (as a first layer) can be combined in a direct and systematic way during the making (tracing by the sketcher) and presentation (for everyone), with the advantage of no distortion/proportional misleading of the host space.
3. The mechanism of **implementation**: the thinking in scenarios and layers of possibilities becomes a system and installs reflections between projects (program) and stakeholders (choice of scenarios to work further on): the explanatory element and the explorative element (as discussed in detail earlier) of the sketch intertwine in the representation of a project and tests the host space. Scenarios sometimes go back to the drawing board (1) to restart the process.
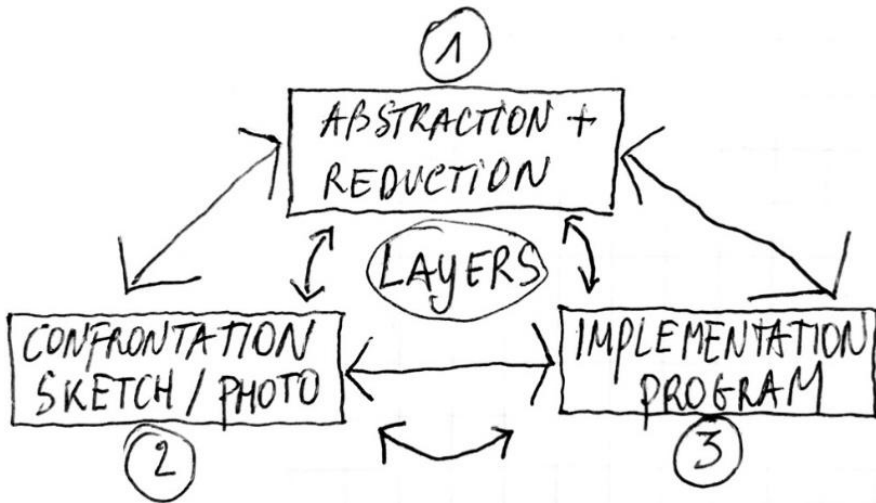
Figure 10: Scheme of the Cyclic Process of the Adaptive Reuse Projects and the Interaction

Throughout the studies, it became clear that it was precisely through this process of sketching and the scenarios with the same graphical language that the scenarios evolved toward a generous typology of interventions for further thinking. The naming of a scenario (kindergarten with garden, café scenario, small library, etc.) was picked up by current users. Often, after providing stakeholders with a vocabulary of scenarios, they made combinations and came up with new solutions. They explicitly referred to the sketches as eye-openers. The sketches are at that moment active meditators. Under the surface of the study of scenarios, the strategic combination of the photo (from the start) as a memory connector and the sketch as a tangible comprehensible display system makes the scenario conceivable. Exactly at that moment, the richness of layers is translated into scenes for the future.

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Informed Consent

The authors declare that informed consent was not required as there were no human participants involved.

Conflict of Interest

The author declares that there is no conflict of interest.

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