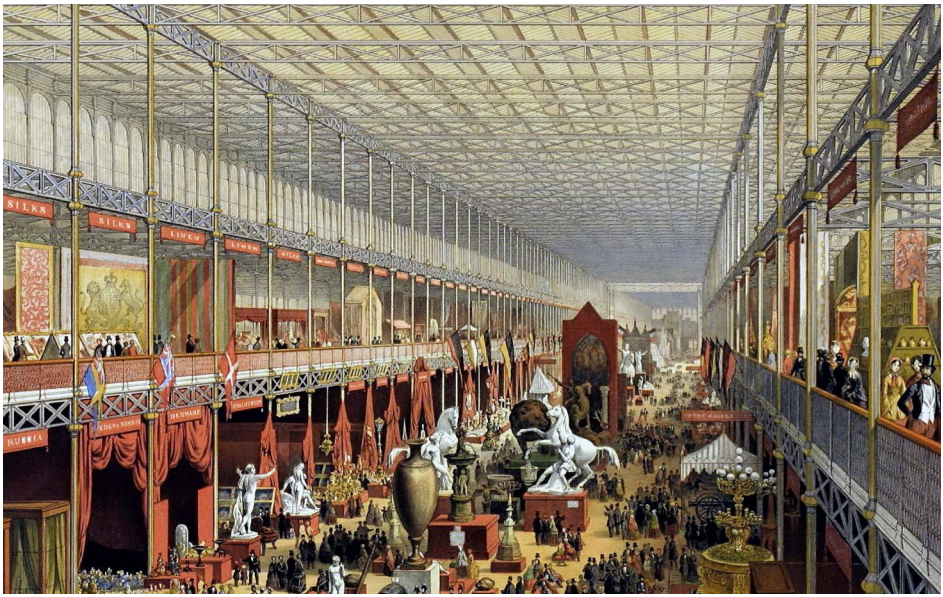
Master Thesis

Labour Reframed

SVEN GILLET

Diploma, FS 2023, ETH Zürich
Chair Caruso
Emilie Appercé Adam Caruso Claudio Schneider Chair Delbeke
Matthew Critchley Maarten Delbeke



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1- INTRODUCTION

A large number of historic structures in Switzerland are connected to industry, a reflection of the early and significant industrialisation of the country. The survival of these structures individually and in groups is related to the continuing importance of industrial production in the Swiss economy. Nonetheless, many factories, mills and storage buildings from the 20th century are underused or stand empty. The most magnificent of these, with their promise of universal and conceptually open structures are distant rela- tions to the Crystal Palace of 1851, an early and influ- ential statement of smooth, capitalist space. The colours, ornament and spatial arrangements for Joseph Paxton's endless structure were designed by Owen Jones, the author of the Grammar of Ornament a work that in 1856 laid out a paradoxical rela- tion between culturally based ornament and global capitalism.

We will engage with a collection of these underused industrial structures in the eastern part of Switzer- land, to consider how they can once more be a pro- ductive part of contemporary life at the same time as retaining their presence as historic monuments that act as instruments of continuity within an ever changing built environment.

The Chairs of Caruso and Delbeke will together en- gage with these complex themes. The research phase of the diploma will compile a new Grammar of Orna- ment where students will have the opportunity to collect, research and represent new constellations of form spanning from the ancient world to the present. This new Grammar will be guided by a written essay that each student will use to position their project within a larger argument. The preparation phase will also include a close survey of the existing buildings including an analysis and mapping of how people and processes were originally accommodated.

The second phase will apply these lessons to the de- sign of major additions and intensifications of a col- lection of existing industrial structures, adding a grammar of energy and construction to that of histo- ry and ornament. Our goal is to discover the beauty that is held within the age of upcycling.

Walzmühle, Alpenbrückli

Master Thesis
Sven Gillet

Research.

Fig. 1. Plate XXXV (35): "Arabian N° 5" from Owen Jones, The Grammar of Ornament, folio edition, London: Bernard Quaritch 1868

2- RESEARCH PHASE

2.1 Grammar of Ornement - Owen Jones & Violet-Le-Duc

Owen Jones' seminal work on the „Grammar of Ornament" had far-reaching implications for the field of architecture and design. Published in 1856, Jones' book provided a systematic approach to the analysis and classification of decorative motifs, drawing from examples across a range of cultures and historical periods. Jones argued that this approach could provide a basis for the creation of new decorative styles that were both innovative and culturally relevant. Jones' approach to ornamentation was grounded in a deep understanding of the historical and cultural context in which decorative motifs were created. He believed that decorative motifs could express the values and aspirations of a given society, and that the study of ornamentation could shed light on the broader cultural and social trends of a given period.

By providing a systematic approach to the creation of ornamentation, Jones allowed designers to create decorative motifs in a more rigorous and scientific manner, drawing on a wide range of historical and cultural examples. This approach has been influential in the development of modern design, with designers continuing to draw on historical and cultural examples to create innovative and culturally relevant ornamentation not only on a purely stylistic approach to the question of ornementation but as a medium for a better understanding of the built environment surrounding us..

Interestingly, Jones' approach to ornamentation was not dissimilar to that of his contemporary, Violet-le-Duc, who published his own influential work, the „Dictionnaire raisonné de l'architecture", in 1858. Like Jones, Violet-le-Duc believed that the study of ornamentation was central to the practice of architecture and design, and that an understanding of the historical and cultural context in which decorative motifs were created was essential to the creation of new decorative styles and significant approach to construction.

However, while Jones' work focused primarily on the analysis and classification of decorative motifs, Violet-le-Duc's „Dictionnaire raisonné de l'architecture" was a much more comprehensive

work, covering a broad range of architectural topics, from construction techniques to ornamentation. Violet-le-Duc was particularly concerned with the preservation of historical architecture, and his work was instrumental in the development of the modern conservation movement.

Despite their differences, Jones' and Violet-le-Duc's approaches to the study of architecture and ornamentation were deeply intertwined. Both believed that the study of ornamentation was essential to the practice of architecture and design, and both believed that an understanding of the historical and cultural context in which decorative motifs were created was essential to the creation of new decorative styles. Their work was instrumental in the development of modern design, and their influence can still be felt in contemporary design practice.

The current sustainability crisis is having a profound impact on the practice of construction and architecture. The building sector is responsible for around 40% of global carbon emissions, making it a significant contributor to the climate crisis. In response, architects and designers are increasingly looking for ways to create buildings that are more sustainable and environmentally friendly. However, the focus on new construction has often resulted in the neglect of the existing built environment, leading to the loss of cultural and industrial heritage that shapes our surrounding environment.

This neglect of the existing built environment is not a new phenomenon. Since the modernist era, cities have been more inclined to destroy buildings and build anew instead of renovating and attempting to promote a longer use of the existing. This approach has resulted in the loss of many historic buildings and neighborhoods, which has led to the erosion of local identity and cultural heritage. It has also contributed to a „throwaway culture," where buildings are seen as disposable and not worth preserving.

However, the importance of dealing with the existing built environment from a sustainability point of view is becoming increasingly apparent. One way to address the sustainability crisis is through the promotion of a circular economy, where resources are kept in use for as long as possible and waste is minimized. This approach requires a shift in the way we think about buildings, moving away

from a linear „take-make-dispose“ model and towards a more circular approach.

This is where the work of Owen Jones and Violet-le-Duc becomes particularly relevant. Their focus on the cultural and historical context of ornamentation and architecture highlights the importance of preserving the existing built environment as a way of maintaining cultural identity and heritage. Their work reminds us that buildings are not just physical structures but also carry cultural and social significance.

By adopting a more inclusive approach to the existing built environment, architects and designers can help to promote a more circular economy, where resources are kept in use for as long as possible. This includes renovating and repurposing existing buildings, promoting adaptive reuse, and using sustainable materials and construction methods.

The work of Owen Jones and Violet-le-Duc highlights the importance of understanding the cultural significance of the built environment and preserving it for future generations. As we face the challenges of the sustainability crisis, it is more important than ever to adopt a more inclusive approach to the existing built environment. By promoting adaptive reuse, renovating and repurposing existing buildings, and using sustainable materials and construction methods, architects and designers can help to promote a more circular economy and create a more sustainable future.

a *The Bridge Monument Showing Wooden Sidewalks*
b [*The Bridge Monument—Piling View*]
c [*The Bridge Monument—Long View*]
g [*Highway Construction—White Edge*]
h *Monument with Pontoons: The Pumping Derrick*
i *The Great Pipes Monument*
m [*Unidentified Construction—Manholes and Planks*]
n [*Unidentified Construction—Marker*]
o [*Unidentified Monument—Concrete Cube*]
s [*Unidentified Monument—Shell Facade with Statue, Close-up*]
t [*Unidentified Monument—Pearl*]
u [*Unidentified Monument—Golden Coach Diner*]

Fig. 2. Robert Smithson's „Tour of The Monuments of Passaic", Black & white photographs, New Jersey (1967).











d [*Highway Construction—Bulldozer*]

e [*Highway Construction—Concrete Abutments*]

f [*Highway Construction—Concrete Abutment*]

j *The Fountain Monument: Bird's Eye View*

k [*The Fountain Monument: Side View—Variant*]

l [*Unidentified Monument—"Passaic Boys are Hell!!!"*]

p [*Unidentified Monument—Storage Tank*]

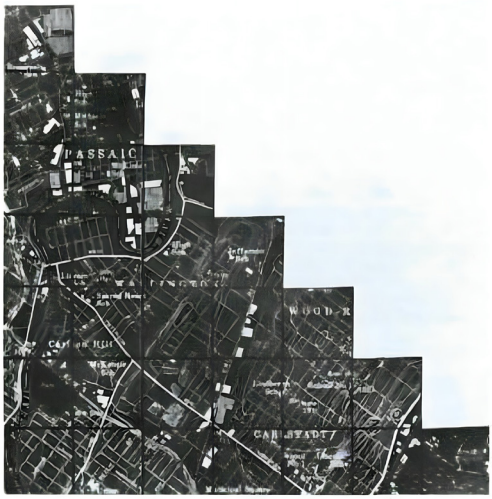
q [*Unidentified Monument—Storage Tanks*]

r [*Unidentified Monument—Shell Facade with Statue*]

v [*Unidentified Monument—Central Theatre*]

w [*Unidentified Monument—Parking Lot*]

x *The Sand-Box Monument* (also called *The Desert*)



Negative Map Showing Region of the Monuments along the Passaic River.

Fig.3. Robert Smithson in his New York City loft at 799 Greenwich St., ca. 1971 Photograph- Nancy Holt

Fig.4. Negative Map Showing Region of The Monuments of the Passaic river. (1967)

Fig.5. Robert Smithson walking on Spiral Jetty (1970) Great Salt Lake, Utah Photograph- Gianfranco Gorgoni

2.2 ROBERT SMITHSON

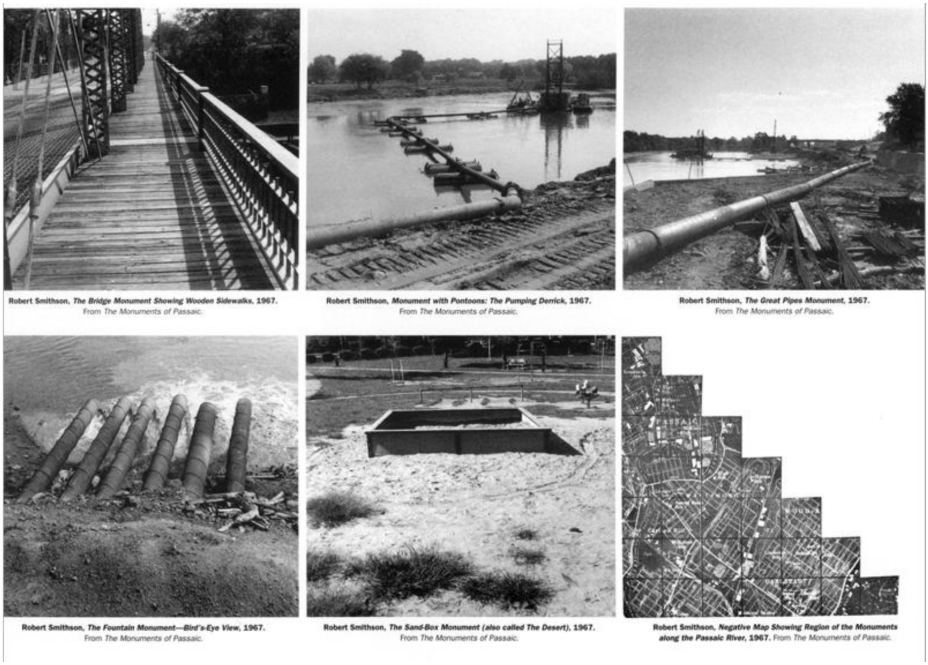
Robert Smithson was a prominent American artist who played an instrumental role in the development of the Land Art movement during the 1960s and 1970s. Born in Passaic, New Jersey in 1938, Smithson grew up in a suburban environment surrounded by industrial landscapes and abandoned sites that would come to influence his artistic vision. Smithson's work was characterized by his interest in natural and man-made landscapes, as well as his fascination with entropy, the gradual decay and disorder of physical systems over time. His artistic output included drawings, paintings, sculptures, installations, films, and photographs, all of which were marked by their geometric forms, stark contrasts, and explorations of space and time.

In 1966, Smithson began working on his most famous work, „Spiral Jetty," a 1,500-foot-long coil made of rocks and earth that stretches out into the Great Salt Lake in Utah. The piece, which is considered a masterpiece of Land Art, was created as a site-specific work that interacts with its surrounding environment and the natural processes of erosion and decay.

Smithson was also known for his Non-Site works, which involved creating a physical representation of a site within a gallery or museum space. These representations often included photographs, maps, and other documentation of the original site, becoming a new „site" that reflected the original site's physical and conceptual qualities. The Non-Site concept emphasized the importance of documentation and preservation of physical and conceptual qualities of specific sites.

In 1973, Smithson died in a plane crash while surveying a site for a new work in Texas. His death at the age of 35 cut short a career that had already left an indelible mark on the art world.

Today, Smithson's work is celebrated as a significant contribution to the Land Art movement and continues to inspire artists working in various media. His fascination with entropy, the interaction between human intervention and the natural environment, and the preservation of the physical and conceptual qualities of specific sites remain relevant and continue to shape contemporary art practices.



ROBERT SMITHSON: *THE MONUMENTS OF PASSAIC*. (1967)

In his photographic series, „The Monuments of Passaic" from 1967, Smithson documented the industrial landscapes and abandoned sites around the city of Passaic, New Jersey.

The series features twelve photographs, each depicting a different industrial structure or area, including abandoned factories, bridges, and construction sites. Smithson's images are characterized by their stark, black and white contrast and their clear focus on the geometries of the structures. In particular, the series' most iconic photograph, titled „Monument to the Great War," depicts a massive concrete structure that appears both monumental and abandoned.

Fig.6. Robert Smithson's „Tour of The Monuments of Passaic", Black & white photographs, New Jersey (1967).

Smithson's photographs of the industrial landscape of Passaic reflect his interest in the concept of entropy, which he defined as the gradual decay and disorder of physical systems over time. The structures depicted in his photographs are, for the most part, abandoned and in a state of decay, suggesting that human intervention has led to their eventual disintegration. This concept is particularly evident in Smithson's „Non-Site" theory.

In Smithson's Non-Site works, he creates a physical representation of a site within a gallery or museum space. This representation, which often includes photographs, maps, and other documentation of the original site, becomes a new „site" that reflects the original site's physical and conceptual qualities. The Non-Site concept reflects Smithson's belief in the dichotomy of Site and Non-site and how they interact with each other.

Smithson's interest in the industrial landscape and his Non-Site theory has relevance in today's context regarding the growing interest revolving around the industrial heritage. Many industrial sites have been abandoned and left to decay, and their preservation has become a significant concern. Smithson's work highlights the beauty and the potential for artistic interpretation of these sites, and his Non-Site theory emphasizes the importance of documentation and preservation of these sites' physical and conceptual qualities.

> "I am convinced that the future is lost somewhere in the dumps of the non-historical past; it is in yesterday's news-papers, in the jejune advertisements of science-fiction movies, in the false mirror of our rejected dreams. Time turns metaphors into things, and stacks them up in cold rooms, or places them in the celestial playgrounds of the suburbs."
>
> Robert Smithson "A Tour of the Monuments of Passaic, New Jersey." 1967

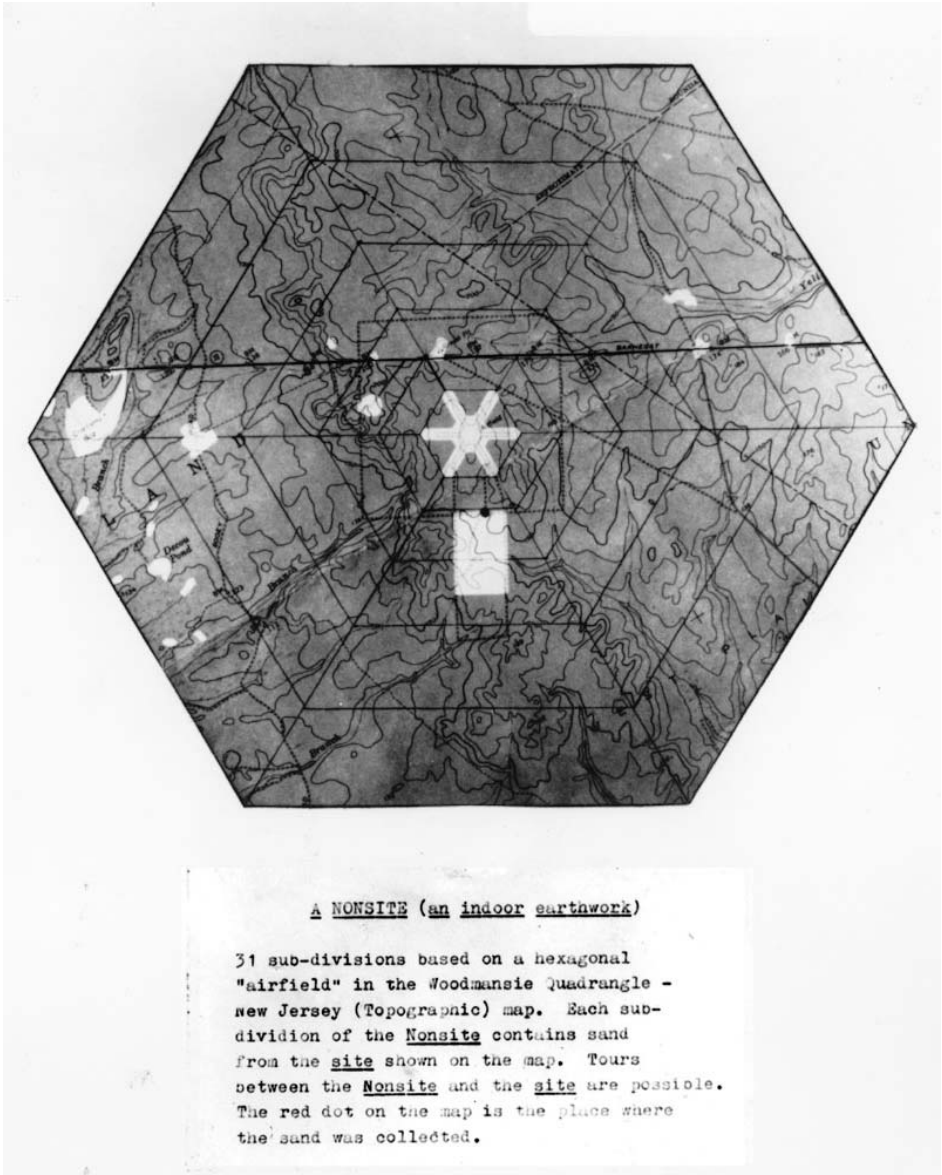
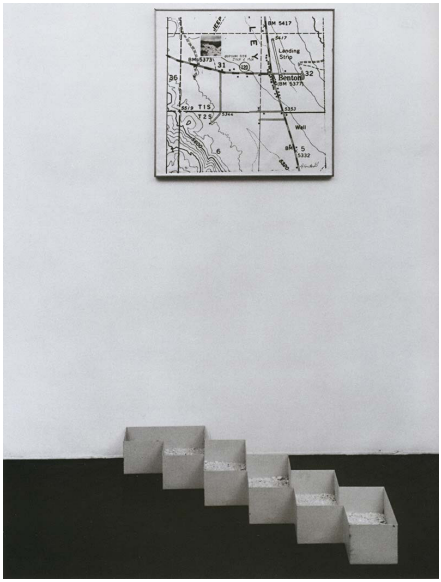


Fig.7. Robert Smithson, A Nonsite Pine Barrens, New Jersey, 1966. Photostat of map with typed text 18.4 x 27.1cm. National Gallery of Artrt, Washington DC.

Fig. 8. Robert Smithson: Oberhausen (Ruhr, Germany) Non-Site with its corresponding maps & photographs. 1964.

ROBERT SMITHSON: *A PROVISIONAL THEORY OF NON-SITE. (1968)*



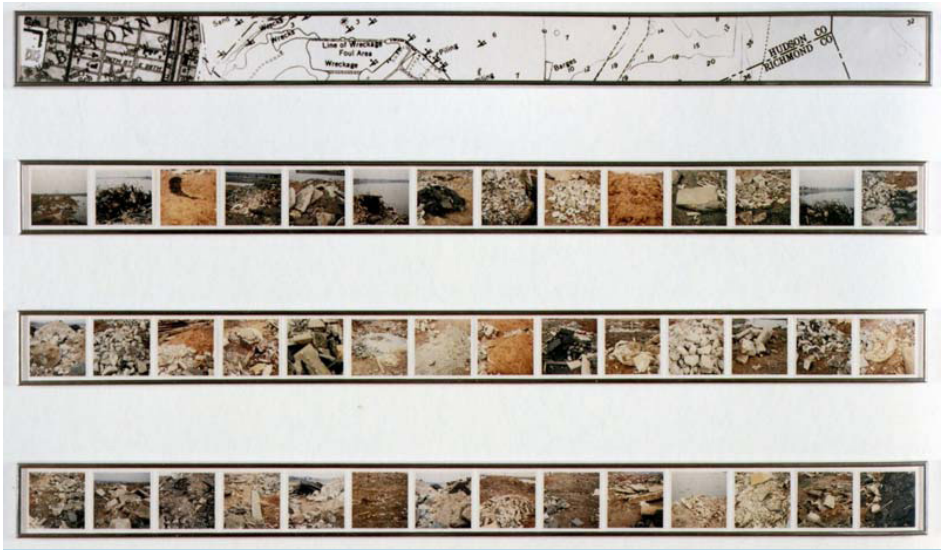


Fig.9. Robert Smithson- Palisade Edge Water New Jersey (1968)
Fig.10. Robert Smithson- Gypsum Non site Benton, Ca (1968)
Fig.11. Robert Smithson- Line of Wreckage Bayonne New-Jersey (1968)

„A provisional Theory of Non-Sites (1968), Robert Smithson
Selected writings by Robert Smithson

By Robert Smithson 1968

By drawing a diagram, a ground plan of a house, a street plan to the location of a site, or a topographic map, one draws a "logical two dimensional picture." A "logical picture" differs from a natural or realistic picture in that it rarely looks like the thing it stands for. It is a two dimensional analogy or metaphor—A is Z.

The Nonsite (an indoor earthwork) is a three dimensional logical picture that is abstract, yet it represents an actual site in N.J. (The Pine Barrens Plains). It is by this three dimensional metaphor that one site can represent another site which does not resemble it—thus The Nonsite. To understand this language of sites is to appreciate the metaphor between the syntactical construct and the complex of ideas, letting the former function as a three dimensional picture which doesn't look like a picture. "Expressive art" avoids the problem of logic; therefore it is not truly abstract. A logical intuition can develop in an entirely "new sense of metaphor" free of natural or realistic expressive content. Between the actual site in the Pine Barrens and The Nonsite itself exists a space of metaphoric significance. It could be that "travel" in this space is a vast metaphor. Everything between the two sites could become physical metaphorical material devoid of natural meanings and realistic assumptions. Let us say that one goes on a fictitious trip if one decides to go to the site of the Nonsite. The "trip" becomes invented, devised, artificial; therefore, one might call it a non- trip to a site from a Nonsite. Once one arrives at the "airfield," one discovers that it is man-made in the shape of a hexagon, and that I mapped this site in terms of esthetic boundaries rather than political or economic boundaries (31 sub-divisions—see map).

This little theory is tentative and could be abandoned at any time. Theories like things are also abandoned. That theories are eternal is doubtful. Vanished theories compose the strata of many forgotten books."

ROBERT SMITHSON: *ENTROPY AND THE NEW MONUMENTS. (1996)*

Robert Smithson's essay „Entropy and the New Monuments" was published posthumously in 1996. In this essay, Smithson explored the concept of entropy and its relationship to contemporary art and architecture. He argued that the decay that composes our surroundings could be a source of inspiration for artists and architects, leading to the creation of new monuments that embrace the process of decay and change.

Smithson's interest in entropy can be traced back to his earlier works, such as his famous earthwork Spiral Jetty (1970), which was constructed on the shore of the Great Salt Lake in Utah.

Fig.12. Cover page of Robert Smithson's essay, „Entropy and the New Monuments", published in 1996.

This work was designed to interact with the natural environment and the forces of entropy, with the spiral shape of the jetty mirroring the shape of a whirlpool. In „Entropy and the New Monuments," Smithson expanded on this concept, arguing that entropy should be seen as a positive force rather than a negative one.

According to Smithson, the traditional concept of the monument is based on the idea of permanence, with monuments designed to withstand the passage of time and resist the forces of decay. However, Smithson argued that this approach to monument-building was outdated and no longer relevant to contemporary society. Instead, he proposed a new kind of monument that embraced the process of change and decay, using the forces of entropy as a source of inspiration.

To illustrate this concept, Smithson pointed to examples of contemporary art and architecture that embraced entropy in their design. For example, he cited the work of Gordon Matta-Clark, who created architectural interventions that highlighted the decay and impermanence of urban spaces. Smithson also discussed the work of architects such as Rem Koolhaas, who embraced the chaos and disorder of contemporary cities in their designs.

Smithson's analysis of entropy and its relationship to contemporary art and architecture was groundbreaking at the time of its publication. It challenged traditional ideas about monument-building and encouraged artists and architects to embrace the forces of decay and change as a source of inspiration. However, it also raised questions about the role of the monument in contemporary society and the value of permanence in art and architecture.

Robert Smithson's essay „Entropy and the New Monuments" offers a thought-provoking analysis of the concept of entropy and its relationship to contemporary art and architecture. His interest in the decay that composes our surroundings challenges traditional ideas about monument-building and encourages artists and architects to embrace the process of change and decay in their designs. Smithson's ideas continue to influence contemporary art and architecture, reminding us of the value of impermanence and the power of entropy to inspire creativity and innovation.

Fig.13. Mark & Georgia Boyle working at the site of the Hague, Worldseries, 1970

2.3 MARK BOYLE

Mark Boyle was a Scottish-born artist who gained recognition for his unique artistic approach during the 1960s and 1970s. Boyle was a pioneer in the use of multi-media approaches to art, which included sculpture, installation, film, and performance. His work series Earthworks, in particular, showcases Boyle's innovative approach to creating art that engages with the environment and the natural world. During the 1960s and 1970s, there was a growing interest among artists to move away from traditional forms of representation and embrace new mediums of expression. The introduction of video technology, for example, allowed artists to capture and manipulate images in new ways, while the use of performance art provided a means of directly engaging with audiences in new and provocative ways. Boyle was part of this movement and sought to create a new language in art practice by exploring the possibilities of new mediums. His Earthworks series, which consisted of large-scale installations that were often created directly on the landscape, was an attempt to create an art form that was site-specific and engaged with the environment in a direct and immediate way. Boyle's approach to creating Earthworks involved a rigorous methodology that was intended to produce the most objective depiction of a site possible. He would begin by creating a detailed map of the site, which would be used to plan the installation. This map would include detailed measurements and notations about the terrain, vegetation, and other features of the site. Once the map was complete, Boyle would begin to gather materials that were indigenous to the site, such as rocks, dirt, and plants. These materials would be used to create the installation, which was often a large-scale, three-dimensional sculpture that was intended to blend seamlessly into the surrounding landscape. Boyle's Earthworks were not only an attempt to create a new language in art practice but also had implications for the world of architecture. By creating installations that engaged with the landscape in such a direct way, Boyle was challenging the traditional boundaries between art and architecture. He was suggesting that buildings could be designed to interact with the environment in a more meaningful way, rather than simply being imposed on the landscape.

Fig.14. Study from the Japan Series with Broken Blue and White Linoleum and Debris, Miyazaki Prefecture, 1990, mixed media.
Fig.15. Study from the Broken Path Series with Border Edging 1986 © Boyle Family. DACS, London 2022.
Fig.16. The Rock and Scree Series (Triptych) 1977, Earthworks, Mark Boyle.

„The most complete change an individual can effect in his environment, short of destroying it, is to change his attitude to it. This is my objective . . . From the beginning we are taught to choose, to select, to separate good from bad, best from better: our entire upbringing and education are directed towards planting the proper snobberies, the right preferences. I believe it is important to accept everything and beyond that to ‚dig' everything with the same concentrated attention that we devote to what we consider to be a good painting or a good film . . . I am certain that, as a result, we will go about so alert that we will discover the excitement of continuously ‚digging' our environment as an object/experience/drama from which we can extract an aesthetic impulse so brilliant and strong that the environment itself is transformed." (Mark Boyle, 1966).

"In the twentieth century, too, the passion for the multiform visual phenomena around us continued to be one of the main themes of art. We see this in the further development of photography and filming, but we also see it in a new technique like that of the ‚ready-made': the transformation of ordinary everyday objects into art, not by depicting them but by detaching them from their normal context and function and presenting them in such a way that they become exclusively something to look at. In various recent trends, and partly as a continuation of the ready-made approach, an even more comprehensive search is being made for reality itself.

J.L.L Locher

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Sven Gillet

Site.

3.1 INDUSTRIAL HISTORY OF SWITZERLAND

On the face of it, the prerequisites of industrialisation were lacking: Switzerland is almost entirely devoid of the basic raw materials of coal and iron, and the mountainous terrain makes agriculture above the subsistence level largely impossible. But it is precisely for these reasons that a variety of export-oriented craft workshops emerged in the 18th century. Additionally, Switzerland enjoyed a surplus of labour as a result of Europe-wide population growth. Thus, industrialisation in this tiny Alpine country got off to a surprisingly good start.

At the beginning of the 19th century, the rattle of imported English spinning machines became increasingly commonplace in St. Gallen, a traditional centre of linen production. As Napoleon' Continental System prevented the import of cheaper and better English cotton, ever more spinning and weaving works opened their doors, particularly around Zurich. Unlike in the mother country of industrialisation, these were driven by water power instead of coal-fired steam engines. As many homeworkers were unable to compete with the new factories, they turned to printing textiles with colourful patterns, silk production and embroidery. Thanks to such niche products, along with watch-making and the mechanised production of chocolate, the Swiss economy flourished. Although even more textile factories were established and watch housings were soon mass-produced, industry as a whole expanded only slowly. Many high-value goods were still made by hand, as there was no shortage of labour; entrepreneurs could pay low wages, particularly as many people also worked in agriculture on the side. The severe famines of the 19th century revealed dramatically how important the agricultural sector was for the country.

From around 1850, industry began to diversify: the machine tool industry emerged as Swiss engineers were designing their own spinning and weaving machines in place of British models, and the bleaching and dyeing of cloth gave rise to chemical plants. This development was most pronounced in the urbanised crescent extending from Geneva to Basel and Zürich and on to St.

Fig.16. Satellite view of the valley of Glarus .

Gallen on Lake Constance. For example, Escher Wyss, for many years a leader in producing machinery, was founded in Zurich; the Sulzer foundry in Winterthur was established virtually next door; and the Saurer company produced embroidery machines and later trucks in Arbon on Lake Constance. By contrast, the Mittelland and the Alpine cantons in the south long remained primarily agricultural.

The political unification of the country, commencing in 1848 and ultimately leading to the founding of the federal state in 1874, imparted a significant impetus to development. Domestic customs duties were gradually eliminated, and currency and units of measurement standardised. Education flourished as new universities in Bern, Geneva, Freibourg and Lausanne along with the Eidgenössische Polytechnikum, which went on to become today's ETH Zürich (Swiss Federal Institute of Technology in Zurich) joined the traditional universities of Basel and Zürich. Railway construction only began in 1869: a challenging and correspondingly expensive undertaking in this mountainous country which produced such technical masterpieces as the Gotthard route, the Simplon Tunnel and the Bernina Railway.

Toward the end of the 19th century, progress in energy production formed the basis of the second industrialisation. Water power was now used to produce electricity instead of mechanical energy: in 1881-82 the cities of Lausanne and St. Moritz built the first power plants to illuminate their streets. The city of Schaffhausen constructed a large power plant at the Moser Dam above the Rhine Falls; other dams, power plants and high-voltage transmission lines followed. Switzerland soon bacame a leader in the production of electrical equipment, one of the key technologies of this phase of industrialisation. One prominent example of this development is the company Brown, Boveri und Compagnie, founded in Baden in 1891.

At the same time, the large chemical factories around Basel developed into pharmaceutical manufacturers. The founding of Sandoz, the Gesellschaft für Chemische Industrie in Basel, or CIBA, and Hoffmann-La Roche in the last two decades of the 19th century

marked the rise of the well-known chemicals centre on the Upper Rhine. As the cities were also expanding and the construction industry booming, the labour market situation changed to one of a shortage of workers, leading to a rise in wages. Starting in the 1880s, Switzerland, traditionally a nation of emigration on account of the precarious agricultural conditions, became dependent on immigration.

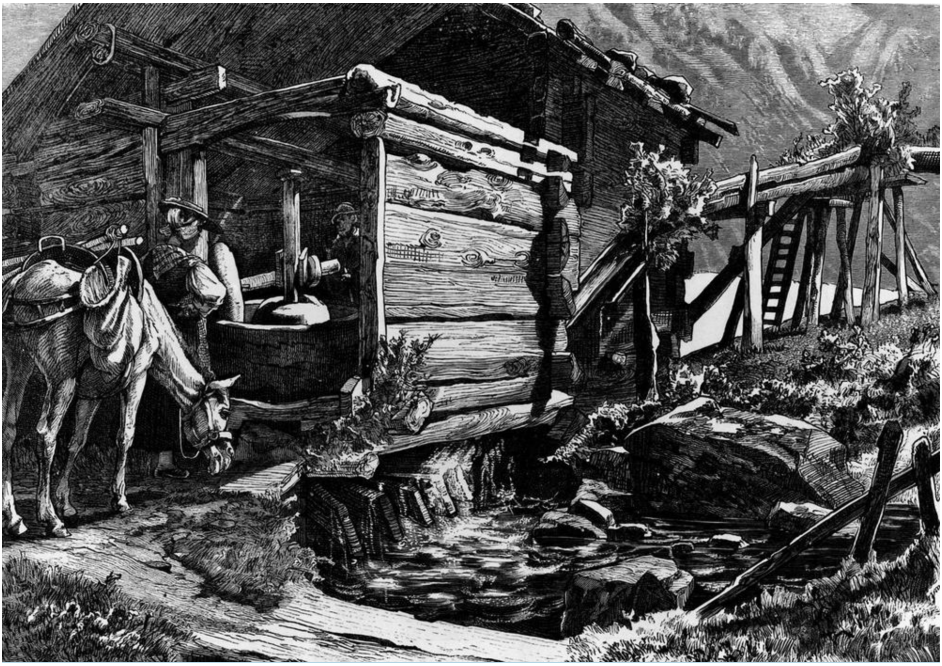


Fig.17. Mill (or ribe) in the val d'Hérens. Xylography from Ludwig Dill from the publication of Kaden Woldemar, Das Schweizerland. Eine Sommerfahrt durch Gebirg und Thal, 1875-1877 (Photographie Jean-Marc Biner).

KW WALZMÜHLE, *ALPENBRÜCKLI, ENNENDA GLARUS, SWITZERLAND*

In 1851, the brothers Albrecht Müller and Jost Müller-Wartenweiler acquired the Alpenbrückli property on the right bank of the Linth, north of today's Glarner swimming pool, but in Ennendaner Huben. They harnessed the power of water through a canal from the Linth and built a sawmill and carpentry shop, which was soon joined by an important timber trade. The Gebrüder Müller company was successful and received i.a. In mid-June 1863 the contract for the carpentry work on the gas works in the Inngrube.[1]

On January 8th, 1864 Glarus was frightened by the fire bell around noon. There was a fire in the Müller sawmill. As one hears, the outbreak of the fire was caused by the fact that the Gebr. Müller wanted to free the water wheel, which had frozen in the severe cold, by lighting a fire, but then the fire caught the nearby wood (chips, etc.) and burst into flames. Meanwhile the fire was brought under control before it could spread to the building.

In the same year, the Müller brothers submitted an offer for the wood and the carpentry work on the occasion of the construction tender for the Sernftal weaving mill (see Engi, Vorderdorf) with the praise that they were provided with timber like no other in our entire country, with regard to We can be particularly proud of its beauty, since such timber is extremely rare to find. It is not known whether they received the order.

In 1872, the two skilled craftsmen then bought the buildings of the cotton printing works that had been closed by Brunner, Hössli & Cie (see Glarus, Ygruben) west of what is now the Glarus swimming pool and converted them into a mill, the Neumühle (this location used to be once a mill was operated). In a large Gant advertisement dated June 1, 1876, because of the liquidation to be carried out, a huge timber warehouse (including 75 trunks of walnut wood) offered. Only a month later, on July 2nd, 1876, the sawmill of the Müller brothers in Alpenbrückli burned down completely; just as the procession of the cantonal singers' festival was moving to the church for the afternoon concert, the alarm sounded.

 Fig.18. Areal view & map of Alpenbrückli

In 1878 the Neumühle was put up for sale again (with or without the interior work, together with the associated two workers' apartments and space), since the Müller brothers had meanwhile built a completely new rolling mill near the Alpenbrückli. It can be assumed that with the new building a sawmill/carpenter's shop was installed again. In the late 1880s, the stationery only says Walzmühle, although the timber trade continued. Jost Müller signed the death notice of his wife Maria from October 1899 with Hölzhändler.

On July 1, 1890, Albrecht Müller resigned, and the business was now in the hands of brother Jost, who, supported by his son Hans (Johannes) Müller-Jenny (d. on August 6, 1900), continued it under the name J.Müller, Walzmühle und Holzhandlung. On 4.1.1896 a fully loaded two-horse carriage was hit in the back by a passing train on the Alpenbrücke and thrown into the Giessen together with the flour sacks - but fortunately without the horses.

After a flood on the Linth in the spring of 1897 ripped away the bridge to the mill, Jost Müller first erected a temporary wooden footbridge in order to then have an iron bridge built at his own expense. The finished stones for the foot of the bridge were already in place when Müller unexpectedly received an offer of CHF 20,000 from the United Swiss Railways (VSB) if he gave up his bridge and went the other way would ensure communication (probably along the right bank of the Linth to Ennetbühls or to Netstal). The VSB obviously wanted to abolish the level crossing. However, Müller did not respond to this suggestion, and a newspaper correspondent said: With this, the new iron bridge can hardly be thwarted. The idiosyncratic miller also turned down a contribution to the costs of the bridge from Tagwens Glarus.

Apparently, the Ygruben farm was still owned by Jost Müller at that time, as it was put up for auction by him in mid-March 1989 (three-story, with turbine, residential building, magazine and land). The obituary for Jost Müller (gest- am 04.08.1901) describes him as „one of the most striking figures from the middle of our citizenship.

On 01.01.1899, the Alpenbrückli business had been sold to Otto Enderlin of Niederhasli ZH and Felix Streiff-Hefti of Schwanden (where he had run a grocery store as a merchant together with his brother). The two traded as Enderlin & Streiff, Walzmühle &

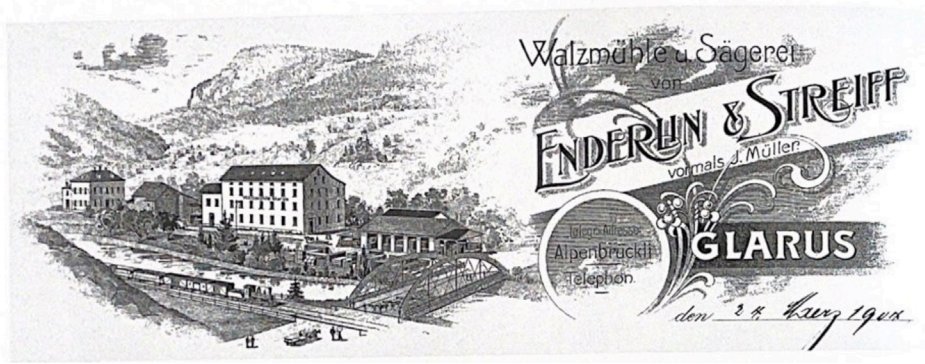


Fig.19. Invoice form from Enderlin & Streiff, formerly J.Müller, dat 03.24.1904. attachment from SW. M: large mill building. - I: residential and office building 1862, sawmill and the 1898 by Bosshard & Co, Näfels, iron bridge by A.Meyerhofer around 1900.

Fig.20. Formular von Felix Streiff's Erben, dat. 06.07.1927 Etwas zu eindrückliche Darstellung von SW. Die Sägerei ist durch ein zweistöckiges Gebäude ersetzt. -Li, um 1925. PAvA

Sägerei was changed. Felix Streiff died on 20.11.1906 only 39 years old, and the business passed into the possession of his wife Verena Streiff-Hefti, and their five minor children Verena, Elsa, Anna, Felix and Heinrich. The guardian was David Streiff, a lawyer from Glarus.

The company was then renamed Felix Streiff's Erben on 01.02.1907. The company was managed by son-in-law and authorized signatory Hans Alfred Köppel from St-Gallen. In the spring of the same year, a new turbine was installed. The floods of mid-June 1910 also submerged the mill and sawmill at Alpenbrückli, and a „Trüber Hässlicher See" formed there. In 1917, the owners had a new water catchment system built on the Linth in order to be able to make full use of the water power.

From 1921 we find the company owned by the brothers Felix and Heinrich Streiff and their brother-in-law Hans Alfred Köppel. The mill was rebuilt in 1924 and automated, and a wooden grain silo for 500 tons was built. Ten years later, a large free-standing silo made of reinforced concrete with a capacity of 1100 tons of grain was erected. As a result, the system was continuously modernized and adapted to technical developments. From January 1st, 1945 the business was called Streiff Söhne and was owned by Felix and Heinrich Streiff. Milling operations ceased in 1990. Today's company, Streiff Söhne AG, trades in baking flour and animal feed, manages a warehouse and generates electrical energy. It is owned by the company Willi Grüninger AG in Flums SG.

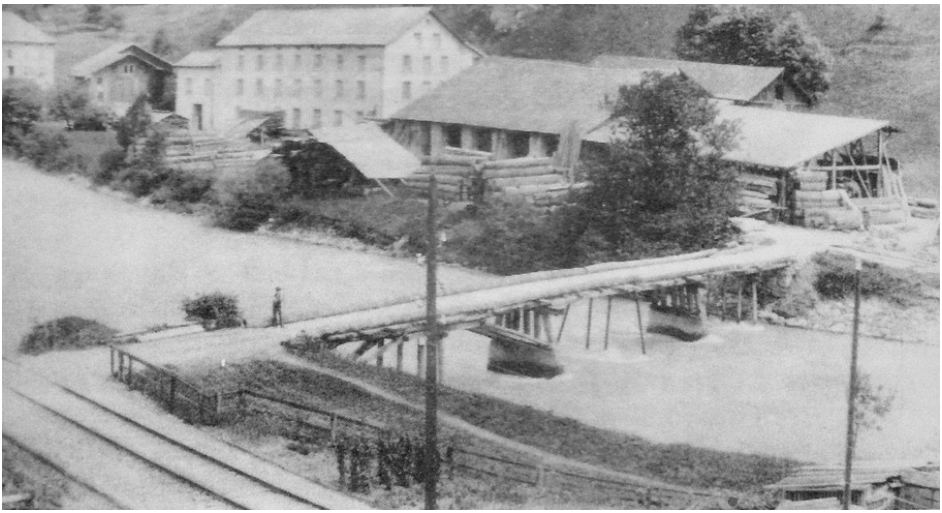


Fig.21. Archival photograph from 1915, wood processing plant
Fig.22. Archival photograph from 2005, Walzmühle

Master Thesis
Sven Gillet

Survey.

Silenced Monuments & the allegory of labour (2023)
Walzmühle

It was around 8.15 in the morning when I started walking from Seebachplatz to Oerlikon train station in order to get to my 8.43 train to Glarus from platform 32 of the Zurich Hauptbahnhof. I had just taken with me my Canon 550D camera, a notebook and a black Muji pen for spontaneous sketches as well as some readings to have during the journey. As I sat down in the train taking me to Ziegelbrücke for the first part of the trip I opened my bag and took out the text from J.L.Locher written in collaboration with the British artist Mark Boyle and his work regarding his "journey to the surface of the earth". as I glanced through the first part of the text I was struck by one particular sentence:

"The most complete change an individual can effect in his environment, short of destroying it, is to change his attitude to it. This is my objective . . . From the beginning we are taught to choose, to select, to separate good from bad, best from better: our entire upbringing and education are directed towards planting the proper snobberies, the right preferences. I believe it is important to accept everything and beyond that to‚dig' everything with the same concentrated attention that we devote to what we consider to be a good painting or a good film . . . I am certain that, as a result, we will go about so alert that we will discover the excitement of continuously‚digging' our environment as an object/experience/drama from which we can extract an aesthetic impulse so brilliant and strong that the environment itself is transformed." (Mark Boyle, 1966.)

I glanced through the train window and started reminiscing some other works that I had been studying lately regarding similar approaches to the question of the built environment, the entropic landscape described by Robert Smithson in his text "Entropy and the new monument" as well as the works from Duchamp deeply diving into the glorification of everyday common objects put on a pedestal. I think there is an attractiveness in the act of extracting the essence of a place or object by looking at its darkest corners, by becoming aware of the visible traces of time surrounding us,

that have become invisible to our biased eyes through the mass acceptance of the formal interpretation of history and what is worthy of being looked at. I believe it was Ruskin that stated: "If you can paint one leaf, you can paint the world'. As I understand it, the quite romantic attitude of Ruskin was not so much about a restrictive approach of seeking "uniformity of norms and universality of appeal like the zeal of modernism, but in the expansive sense of aiming at the apprehension and expression of every mode of human experience."The idea that the study of the particular can lead to a new understanding of a general structure, the universal, in the romantic point of view, was something emerging from the refusal of the traditional image of the universal order so that new orders could be found.

As the train was approaching the end of the journey, I was brought back from my thoughts by a deep stranger's voice: "Nächste Haltestelle Ziegelbrücke, hier bitte umsteigen auf die Servicelinie nach Linthal". The village of Linthal was in a way the origin of the name of the river running down the entire valley from Glaris Sud to Glaris Nord, before connecting to the Zurich lake then giving up the name Linth river, for the Limmat. The valley of the Linth had been developed in direct relationship with the neighbouring cities, through the gradual evolution of the roads, and railways which enabled the cities and villages to expand their industries and commercial relationships outside of the valley. Vernacular houses as well as new housing complex, factories and agricultural

buildings were passing by the windows of the train, confronting the majestic landscape with the stamp of human settlements and production. The train, which was running along the river, was connecting all the villages of the valley into one large linear network of communities & production. The train finally stopped and I got out. ZiegelBrükcke felt in a strange way like someone had decided to build a village around a bus stop and then cut the bus stop in 2 with a river running in the middle. Part of the village was part of the municipality of Glarus Nord and the other half belonged to the municipality of Schänis. The place felt like a transportation nod, but not much more, it was the melting point of the left bank of the Zurich lake, the right bank of the Walensee and the Linth Valley where I was headed.

I got on the last train that was to take me to Glarus Bahnhof, where my journey on foot would start. the trip was short and quite empty, at that time of the day most people I crossed paths with were all headed towards the city, commuters rushing to their daily routine, an anthropic procession of some kind. After 15 minutes of train ride, the valley started closing in around the tracks forming a narrow threshold leading to the central part of the Linth valley. As the train rode through, the first monument appeared on the left side of the tracks, it seemed like a majestic monolith, rising from the earth and standing upright as a concrete titan looking over the entrance of the city. It looked like a statement from the past, a tower of forgotten dreams, or rather a loud silence, part of a new

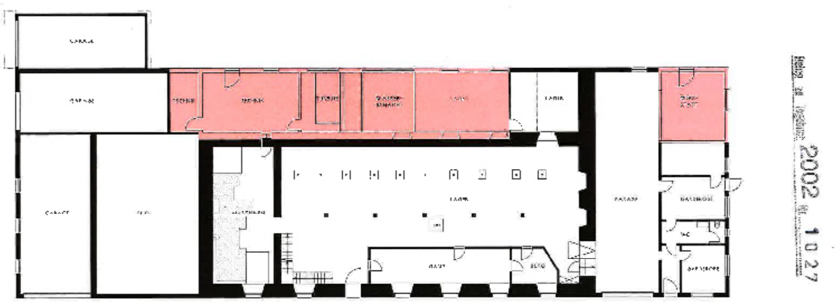
type of "entropic landscape". As I glanced at the grey monolith, I was only able to make out part of the sign that was fixed on it: "...zmühle". The first few letters had probably fallen down sometime in the past 50 years, but you could still grasp some traces of what was there before, like a blurred tanline from a bathing suit after a hot summer day at the beach. The train slowed down and stopped at Glarus Bahnhof, I went out one last time. The monument had struck my curiosity, so I decided to walk back towards the concrete giant heading north-west along the train tracks. As I was leaving the small city center, the urban landscape started to dissipate, rails on the ground, flashing lights all around, the carcass of an old truck that felt like a monument of antiquity, not vintage, but almost prehistoric, a "mechanical dinosaur". the ground changed from warm asphalt to cool gravel, the path I was walking on evolved along the river as I entered the first part of Suburbia. The sight of the ripples of the water, the sound of the stream crashing against polished rocks, the freshness of the air, became at that moment, my only company.

A few 100 meters later, there it was, a second monument. It layed across the whole width of the river, fighting against the natural forces of the stream, a pneumatic cylinder of plastic covered in spikes like a gargantuan overweight thorned dragon sunbathing on the rocks of the Linth. Its round surface was covered with a flashy green algae, forming an organic pattern establishing the passage of time and the millions of cubic meter of water that

must have attempted to roll it over throught the years. The monument was resting against a concrete installation, a fortification from which the rumbling of over-pressured water could be heard from far away as water was squirting out of the heavy metal gates trying to slow the stream down. It seemed that the structure was be used to divert water onto a parallel canal headed north as well, guiding the passers-by along the gravel path that I was walking on. As I approached the end of the pedestrian gravel road on which I crossed path with a few locals having their daily walks, I saw the third monument. It was an old metallic bridge composed of 2 rounded truces linking the western part of the city with the old Alpenbrückli mill on which stood the first monument I saw on the train ride coming here. The bridge seemed to serve as a portal between the outskirt of the city and the more natural side of the river, on which some industries had been installed over the years, away from the calm urban landscape of Glarus, but nevertheless in direct relationship with its inhabitant and the urban fabric of the area. The bridge was covered by a thin layer of asphalt enhancing the continuity between both sides of the river. The stillness of the metallic frame was in direct confrontation with the bursts of water, the fluid vortex that was passing under my feet at tens of thousand of liter per seconds. I had just arrived at Walzmühle...

Fig.23. Photographs & existings survey plans

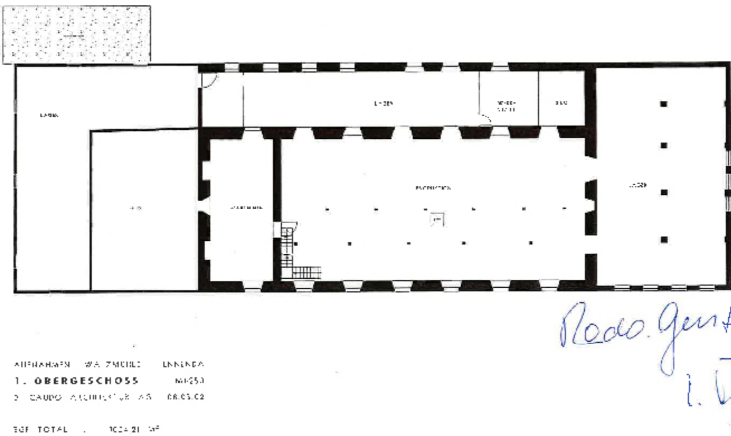

AUFNAHMEN WALZMÜHLE EMMENDA
NORDFASSADE M1:250
DI CAMPO ARCHITEKTUR AG 05.03.02
AUFNAHMEN WALZMÜHLE EMMENDA
SÜDFASSADE M1:250
DI CAMPO ARCHITEKTUR AG 15.04.02

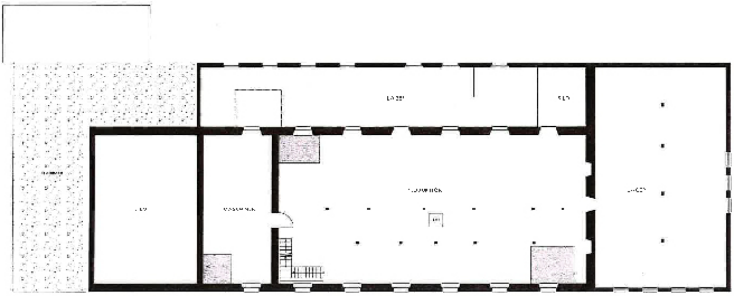


Rodo. Gentile

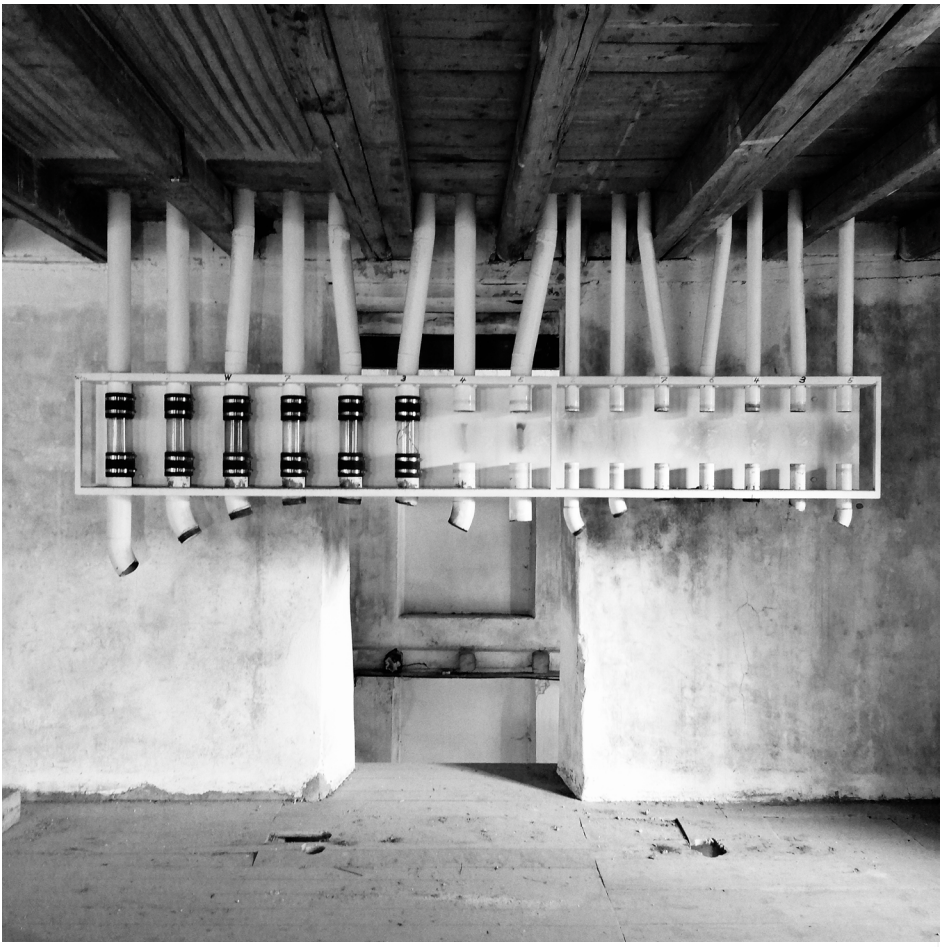
AUFNAHMEN WALZMÜHLE ENNENDA
ERDGESCHOSS M1:250
T. CALDO ARCHITEKTUR AG 19.04.02

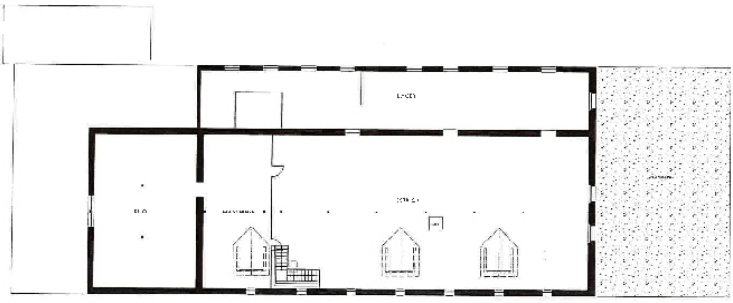
SCI TOTAL : 1079,61 M²
BGF : 155,37 M²


1. OBERGESCHOSS
TOTAL



2. OBERGESCHOSS

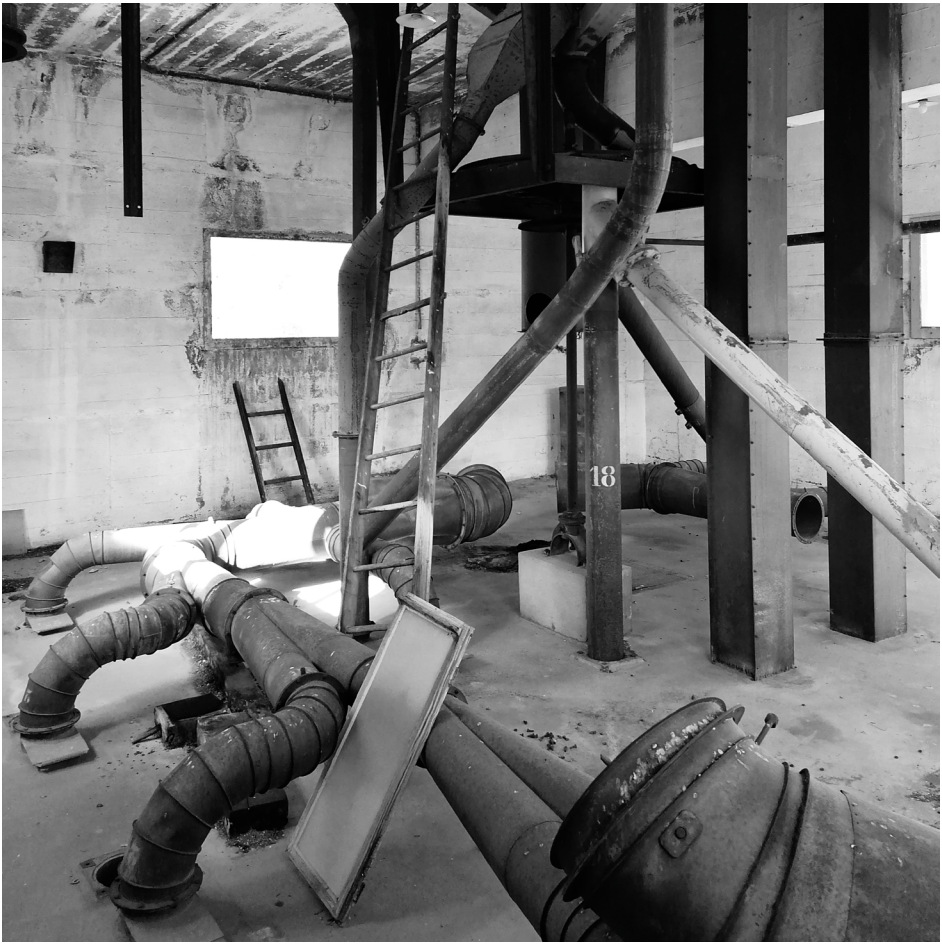




Roco. gentile

DACHGESCHOSS


MALER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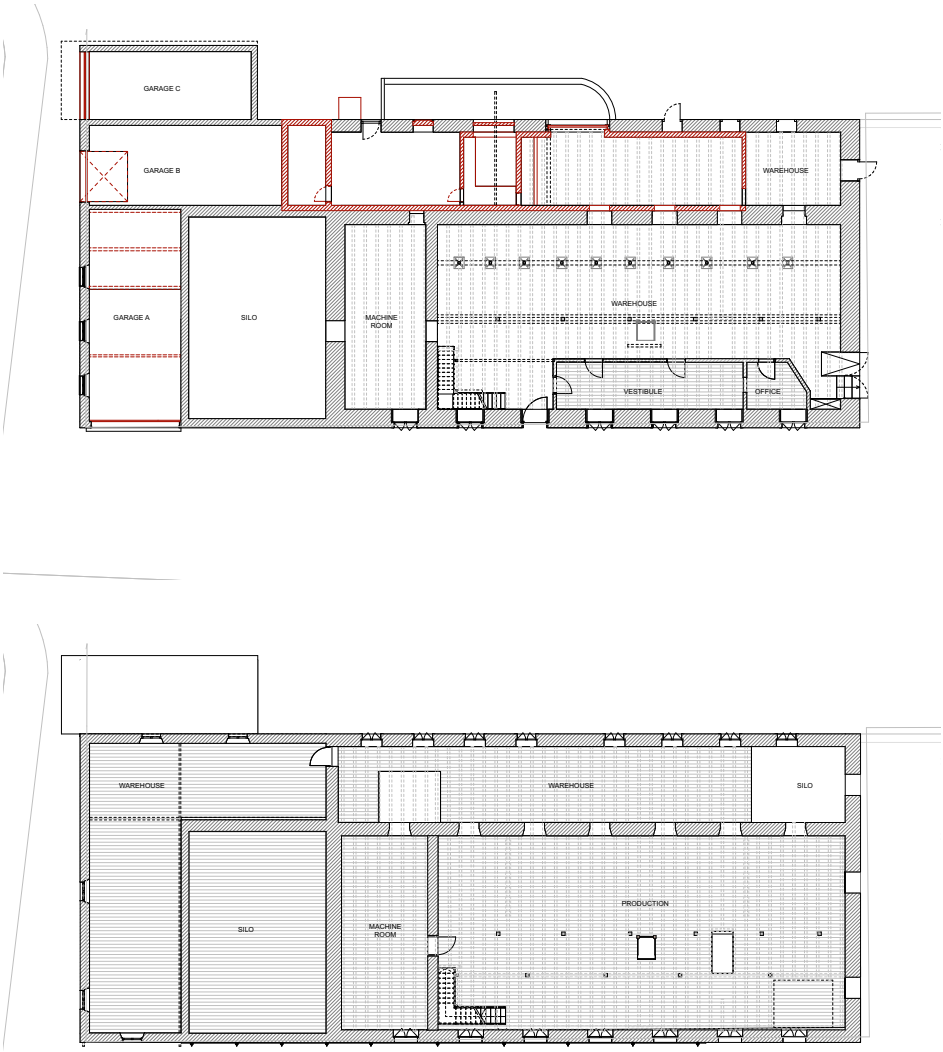
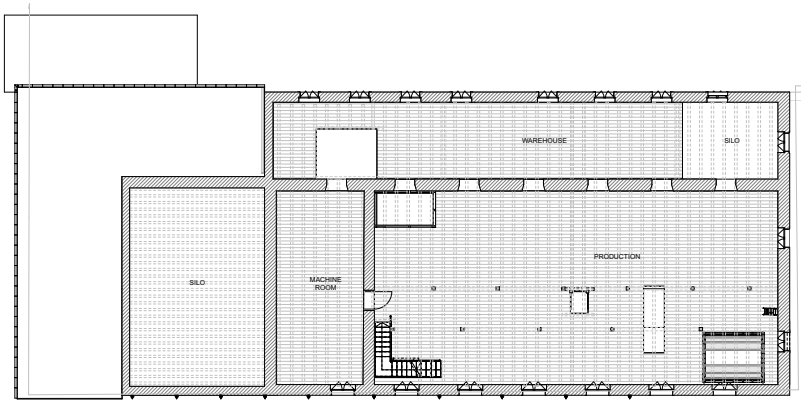
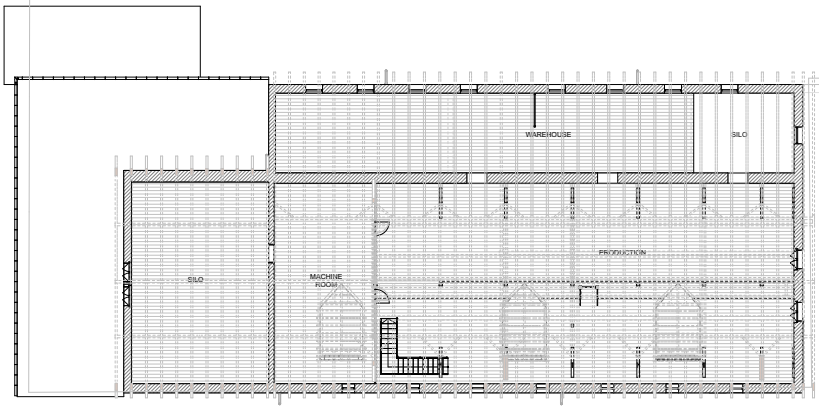


Fig.24. Suvrey drawings, program study


WAREHOUSE
SILO
SILO
MACHINE ROOM
PRODUCTION


WAREHOUSE
SILO
SILO
MACHINE ROOM
PRODUCTION

Master Thesis
Sven Gillet

Grammar of Ornement

4.0 POSITIONAL ESSAY ON LABOUR

Silenced Monuments & The Allegory of Labour

Written by Sven Gillet

" I am convinced that the future is lost somewhere in the dumps of the non-historical past; it is in yesterday's newspapers, in the jejune advertisements of science-fiction movies, in the false mirror of our rejected dreams. Time turns metaphors into things, and stacks them up in cold rooms, or places them in the celestial playgrounds of the suburbs."

Robert Smithson, The monuments of Passaic 1967

In his narrative essay titled "Tour of The monuments of Passaic" published in 1967, Robert Smithson takes the reader through his journey along the Passaic River, part of the suburban area around which he grew up in New Jersey. There, the sight of what he calls the "zero Panorama" is taking over the urban environment. The suburbs are depicted as an entropic landscape, a panorama filled with industrial remnants of a non-historical past, the leftovers of the romanticised image of the city gradually fading into the corners of Suburbia. Nevertheless, this entropic environment constitutes the centre of Smithson's attention. His particular attitude to his surroundings and his attraction to the beauty of a decaying society and environmenst forecasts in many ways the works of other influential artists of that era such as Richard Serra, Mark Boyle, Carl Andre, Micheal Heizer, Marcel Duchamp and many others. In the mid-20th century, the work of such artists inspired a renewed interest in understanding the everyday objects and spaces that are often overlooked or dismissed as unimportant and helped define a new theoretical framing to the dialectic between form and context.

In 1966, Scottish-born artist Mark Boyle, best known for his earth studies done in collaboration with Joan Hills and later their children, writes: " The most complete change an individual can effect in his environment, short of destroying it, is to change his attitude to it. This is my objective (...) I believe it is important to accept everything and beyond that to 'dig' everything with the same

concentrated attention that we devote to what we consider to be a good painting or a good film . . . I am certain that, as a result, we will go about so alert that we will discover the excitement of continuously 'digging' our environment as an object/experience/drama from which we can extract an aesthetic impulse so brilliant and strong that the environment itself is transformed."

In this sense, it seems that the multi-layered writings and art productions of Smithson came to establish similar sensibilities to the works of the Boyle family. Both, in their own ways, attempt to uncover the hidden beauty of things freed from general beliefs and prejudices, by diving into the silenced artefacts of our everyday lives which stand in the shadows cast by the historical beasts, the glorified monuments and landscapes idealised by the mass. They attempt to grasp and extract the essence of a place or object, by freeing it from its direct context, by looking at its darkest corners, at the traces of time and decay, that have since then become invisible to our biased eyes through the mass acceptance of the formal interpretation of history: the doctrines of what is worth being looked at. Even though I believe Boyle's work is meant to be read as a more objective approach to his notion of sites, far from wanting to reduce his work to this short interpretation, his care for the expression of a given locus, at the time of his visit correlates to the passion that drives Smithson to detach himself from the idea of a universal order shaping a false interpretation of reality. Here lies my attraction to their work.

Understanding the industrial heritage of our society involves looking beyond the monuments and historical sites that dominate our cultural landscape. It means acknowledging the role of industrialization in shaping our built environment and the impact it has had on the people who live and work in these spaces. The industrialization of suburban areas, as described by Smithson, can be seen as the "false mirror of our rejected dreams", the image of the anti-city, where the monumentality and historical significance are no longer embedded inside the ruins of Rome, but rather in the backstage of modernized society.

The case of the valley of Glarus is ground for a similar approach to the built environment of the suburban/rural sectors. As a case study, the evolution of the valley over the centuries and the expansion of its industries and reach towards the major cities in Switzer-

land contribute to the understanding of the industrial heritage present in the anti-cities, or rather, in the entropic landscapes surrounding us. Later on, the connexion between the major cities and collectivities established along the Linth became reinforced with the extension of the railway allowing the creation of a transportation axis linking the town of Weesen with Glarus in 1859. This new territorial intervention helped boost the introduction of industries both from the primary and secondary sectors and helped expand the reach of the valley outwards to the rest of the country as well as internationally with the development of the foreign trade. Thus, the increase of industrial infrastructures in the area generated between the 18th and 19th centuries a growing number of industrial remnants and started shaping its own kind of "celestial playground of the suburbs." As Smithson describes during his journey through Passaic, monuments are taking the shapes of pumping derricks, fountains expressed by pipes of industrial wastes pouring into the water, non-working machines, causing them "to resemble prehistoric creatures trapped in the mud, or, better, extinct machines - mechanical dinosaurs stripped of their skin."

Many other case studies, can be undertaken to grasp the effect of the industrialisation of the valley, both from a historical point of view as well as through anthropological phenomena. Nowadays, many of the past industrial infrastructures have been remodelled, re-arranged, demolished or even abandoned, nevertheless, the traces of what Flavin called the inactive history, or the "undistinguished" run of architecture, are omnipresent and contribute to our ability to "gain a clear perception of physical reality free from the general claims of purity and idealism." These interpretations of "sub-monumental" (LeWitt) artefacts, shaping the zero panorama described by Robert Smithson and his peers, form in a way a strong parallelism with the materialist dialectic first introduced by the writings of Karl Marx and Friederich Engels. Their Manifesto was born from their refusal or questioning of the idealist Hegelian dialectic, which emphasized the observation that contradictions in material phenomena could be resolved by analyzing them and synthesizing a solution whilst retaining their essence. In contrast, Marxist dialectics, as a materialist philosophy, emphasized the importance of real-world conditions and

the presence of contradictions within things, in relation to but not limited to class, labour, and socio-economic interactions. In that sense, Smithson's and Boyle's approaches to a specific site seem to attempt to devoid themselves of a linear and idealistic reading of what lies in front of them. The acceptance of the multitude of materialist phenomena, media of representations, and the contradictions embedded in their core are fundamental to challenging the understanding of the entropic landscape, the "future in reverse."

The question of the mediums of representation is a critical aspect in both Smithson's Nonsites and territorial interventions as well as in Boyle's works from his Journey to the Surface of the Earth. In the 20th century, the architectural and artistic scene seemed to gravitate closer to the passion for the study of multiform visual phenomena, rendered possible with the evolution of film, photographs and the shifts in the establishment of the new ways of creating expressive art. For Smithson's Site/Nonsite dialectic, which he establishes as a similar approach as to the linguistic dichotomy of the structuralist signifier- signified, the use of the different mediums of representation is pushed in order to express, the infinite numbers of unique experiences. He does not simply attempt to represent a site based in the physical materialist reality but rather based on the connexions emerging from the relation of the site, with its allegorical image. This objective is made possible through his use of maps, minimalist sculptures and photographs, all collaborating into shaping a rich depiction of a specific place on earth, on a higher level than any of these mediums could achieve if presented in isolation from one another. On a similar note, Boyle's Journey to the Surface of the Earth described through texts written in collaboration with the art historian J. L. Locher in the 80s, possesses a clear depiction of Boyle's process of the recording of numerous phenomena happening on each site that he visits for his earthworks. (sampling of the ground, filming of the surface, timelapse recording of the sky, etc.)

Both these different approaches, even though similar in objectives, seem to challenge not only modes of representation but seek to establish a new register of language. a new grammar of entropy, a manifesto for the mineral, mechanical and fossilised monuments of our environments.

Through Robert Smithson's research on his Provisional Theory of Nonsites, published in 1968, the idea that a site can be in direct dialectic with its allegorical self through the combination of logical two-dimensional pictures with maps, as well as logical three-dimensional pictures, gained more and more importance in his work. The Nonsite is described as an entity on its own, but which only gains its full meaning once combined with its corresponding counterparts. "In this way, the non-site can be understood literally as a reconfigured 'window' that is both vertical and horizontal, more a map than a picture, more material than visual, more diagrammatic than pictorial, and as architectural as it is sculptural." Smithson, refers to the Nonsite as "a space of metaphorical significance. It could be that "travel" in this space is a vast metaphor. Everything between the two sites could become physical metaphorical material devoid of natural meanings and realistic assumptions." Thus, his provisional theory helped pave the way for a reconfigured formalism and portrayed spatial ideas that were "specifically excluded or repressed in the dominant pictorial formalist discourse of Greenberg and Fried."(Linder) In a similar way that Boyle's primary concentration on the particularity of individual phenomena did not mean that he saw no system of order between each of them, Smithson's art pieces and exhibitions depict an extremely conscious glorification of the way individual and isolated phenomena belong together, interact with each other, and supplement each other.

I thus believe that the richness that can be gained from the theoretical heritage of the past decades through the creations of such artists, can still to this day be a key starting point to underline the presence and the history embedded inside the forgotten artefacts, silenced monuments and the remnants of Smithon's non-historical past. I believe that the concentrated attention given to common or industrial objects, similar to the ready-mades of Duchamp or with the multi-media approach of Boyle and Smithson can be the cornerstone from which a better understanding of our industrial and cultural heritage can arise, both looking at each individual phenomena as well as understanding the complex interactions that coexist between them.

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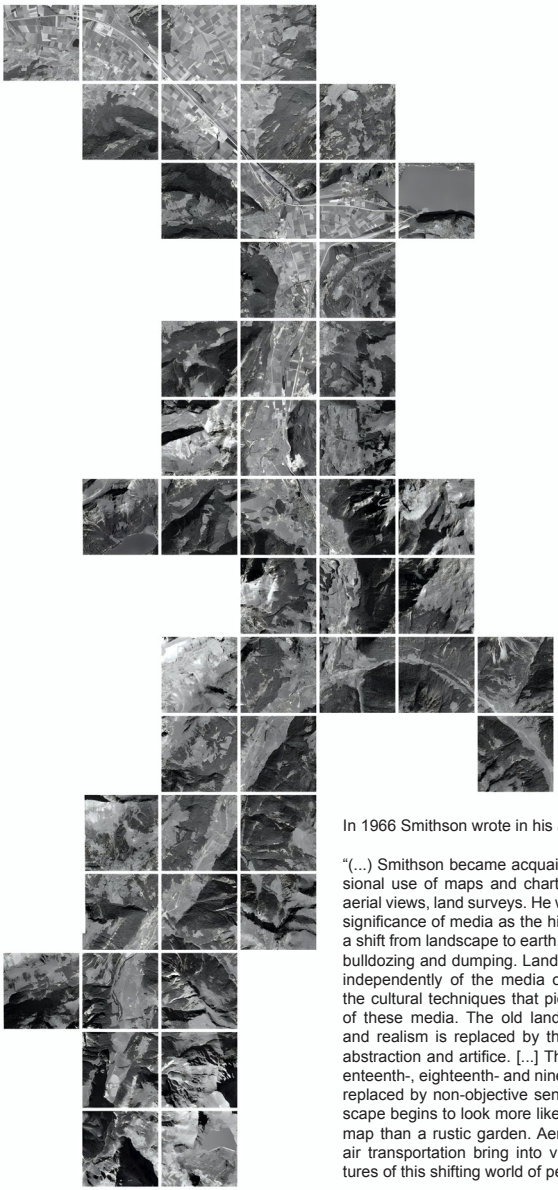


In 1966 Smithson wrote in his article ‘Aerial Art’:

“(...) Smithson became acquainted with the professional use of maps and charts of all sorts: plans, aerial views, land surveys. He was fully aware of the significance of media as the historical conditions of a shift from landscape to earth, and from painting to bulldozing and dumping. Landscape does not exist independently of the media of transportation and the cultural techniques that picture it as a function of these media. The old landscape of naturalism and realism is replaced by the new landscape of abstraction and artifice. [...] The naturalism of seventeenth-, eighteenth- and nineteenth-century art is replaced by non-objective sense of site. The landscape begins to look more like a three dimensional map than a rustic garden. Aerial photography and air transportation bring into view the surface features of this shifting world of perspectives.”

KW WALZMÜHLE, ALPENBRÜCKLI
8755 Glarus, Switzerland

Areal composition - Glarus Valley 2023

Fig.25. Areal geometric composition of the Valley of Glarus

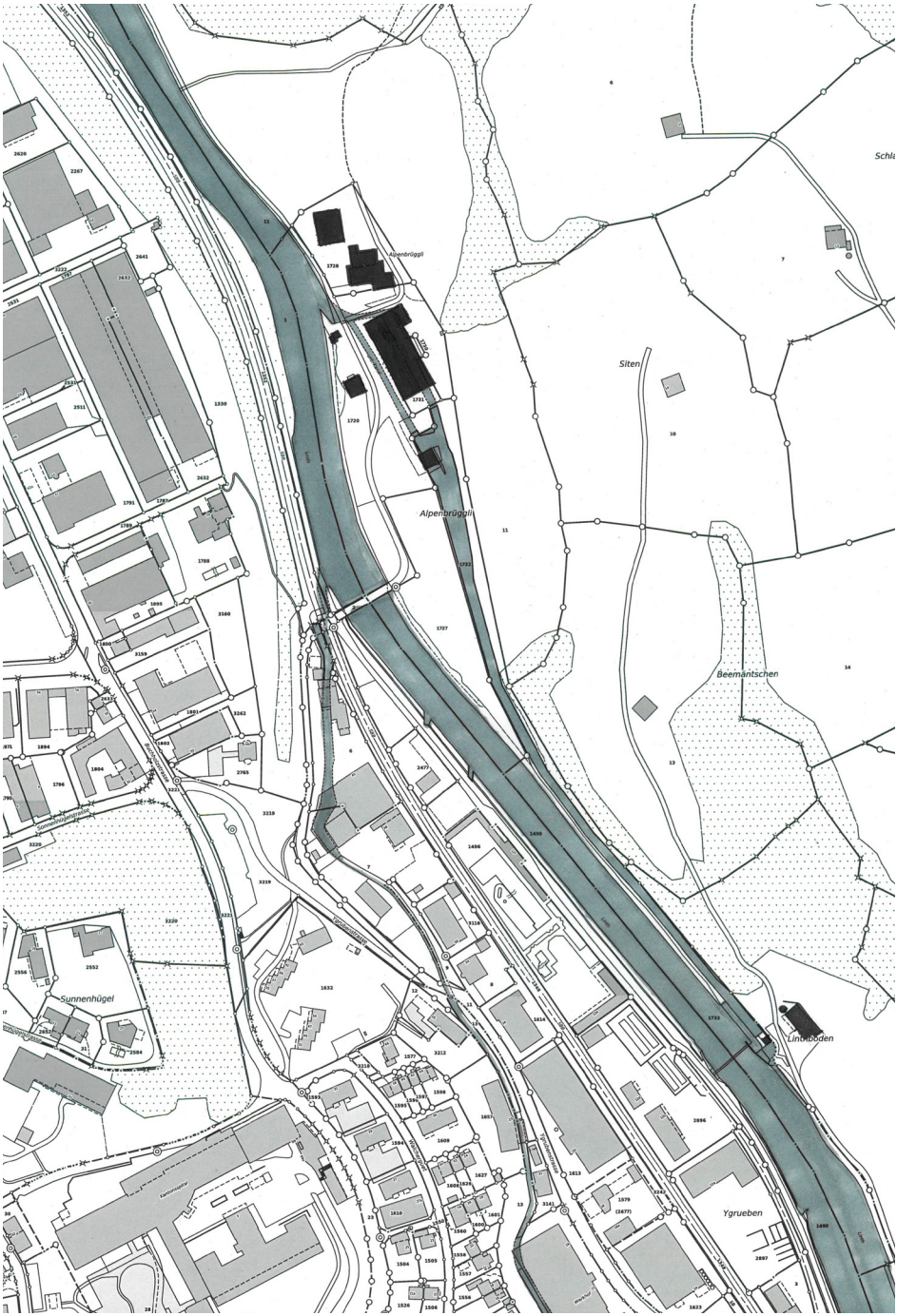


Fig.26. Urban study of the surrounding area of Walzmühle

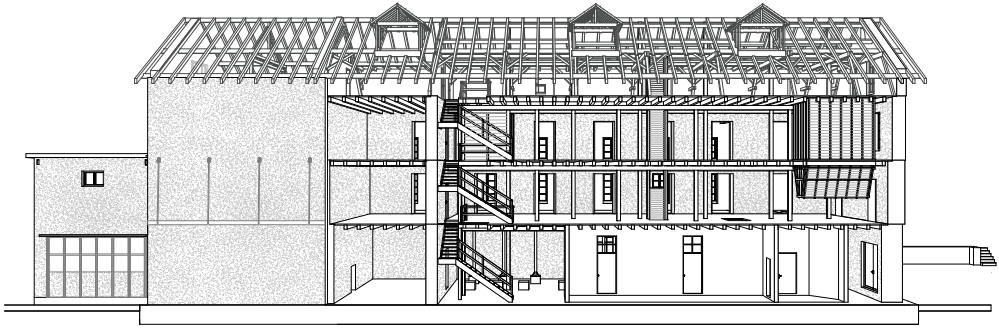


Fig.27. Structural & spatial study of the old mill, Walzmühle

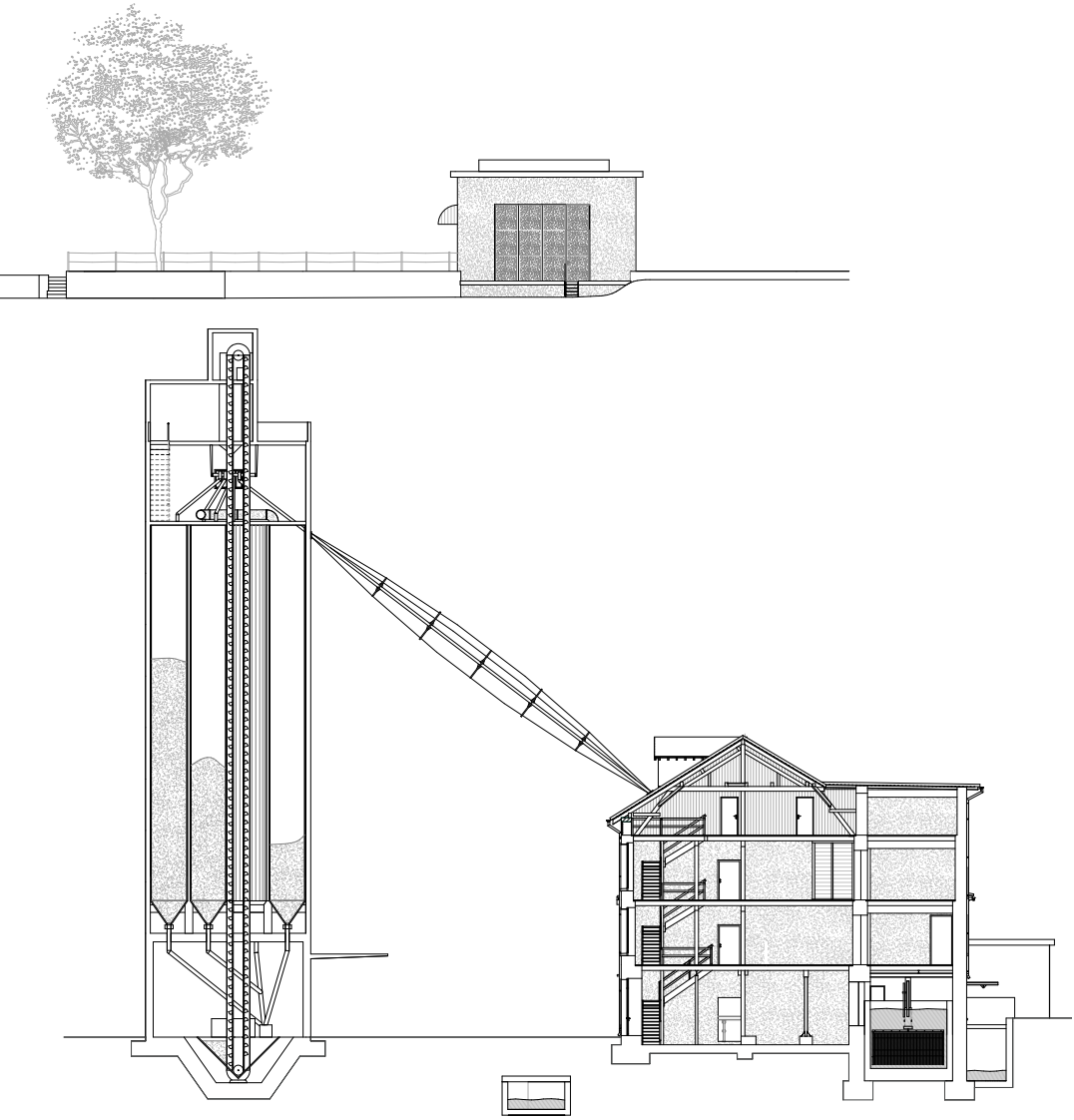


Fig.28. Old mill, ground floor pohotograph, main werkstatt

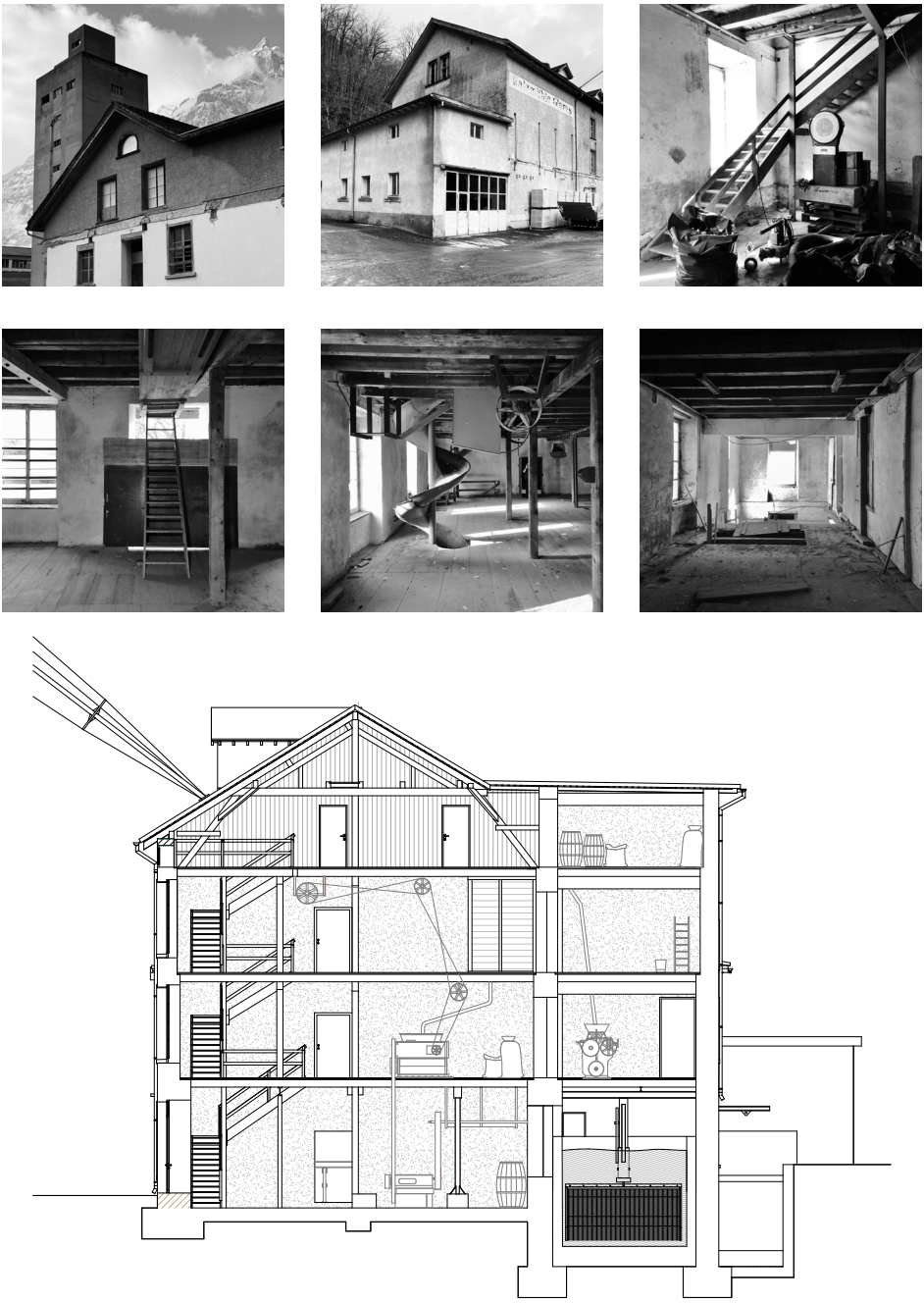


Fig.29. Composition drawing of old mill section & photographs

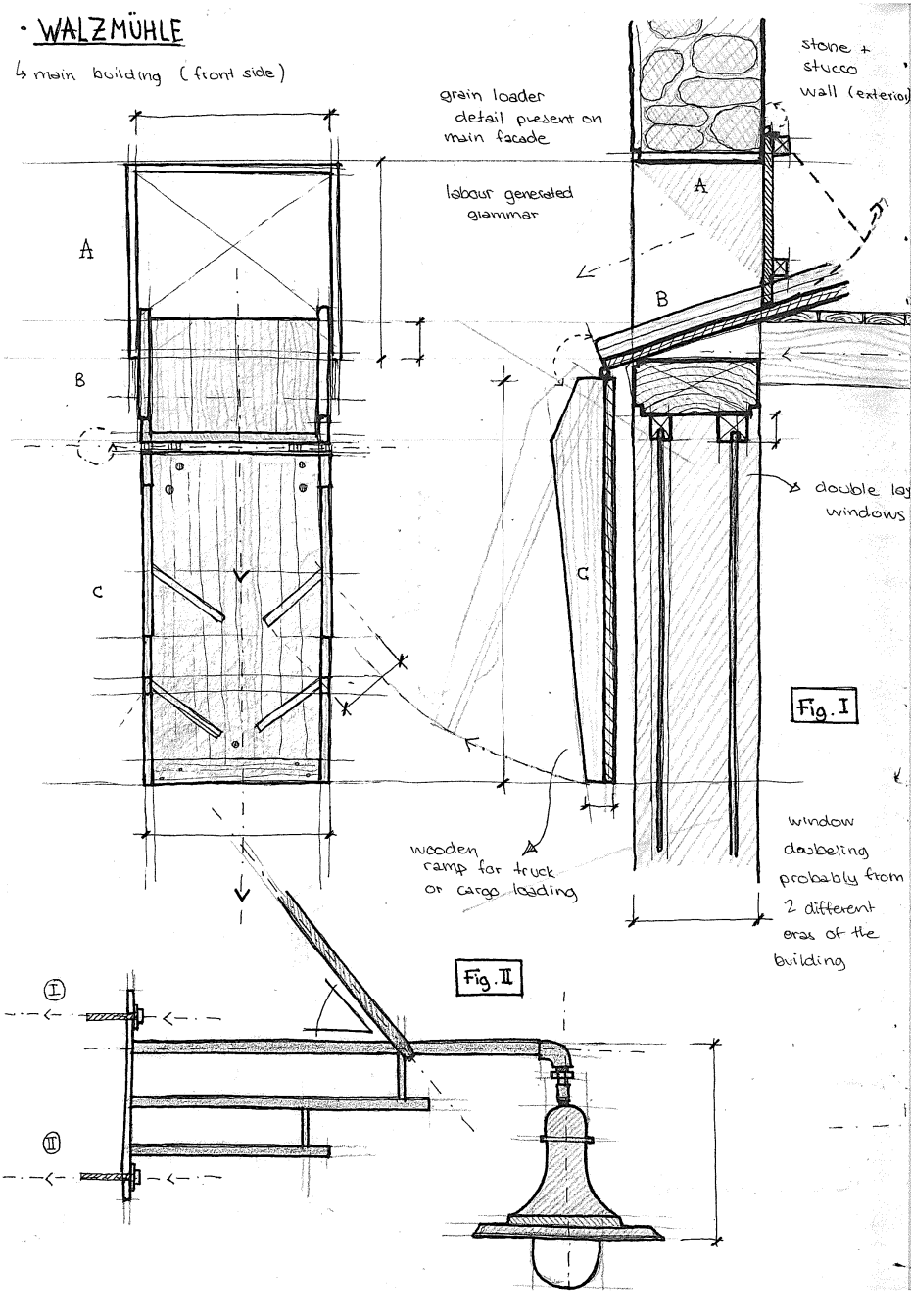


Fig.30. Research sketches, artefact studies, traces of labour

• grain pipe connecting main building with mill tower

section view of piping infrastructure

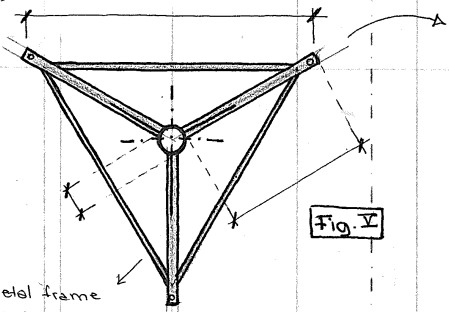
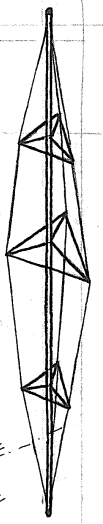


Fig. V



wooden floor construction

metal frame with tracting cables and piping

eted

• back facade I section metal beam.

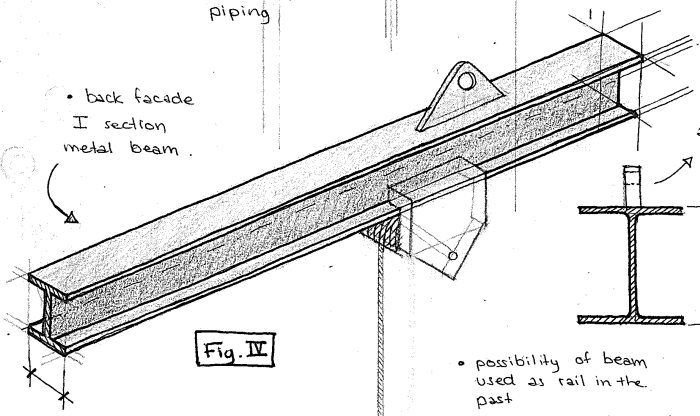
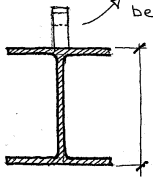


Fig. IV



anchor point on beam.

hs≅

- possibility of beam used as rail in the past
- dimension ≈ (HE-B / 120mm x 150mm)
- rusted component situated above the back canal
- probably part of the original hydrolic infrastructure

old wooden ladder laying against concrete silo

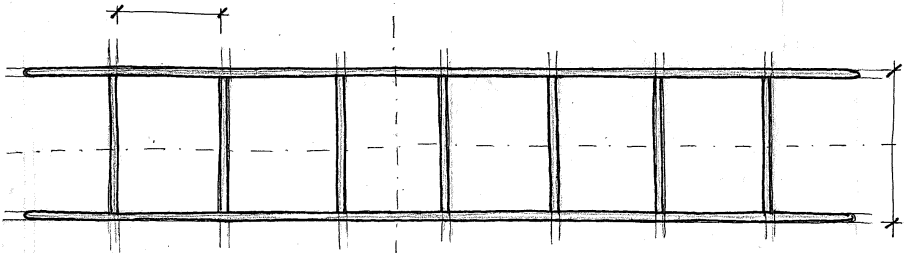
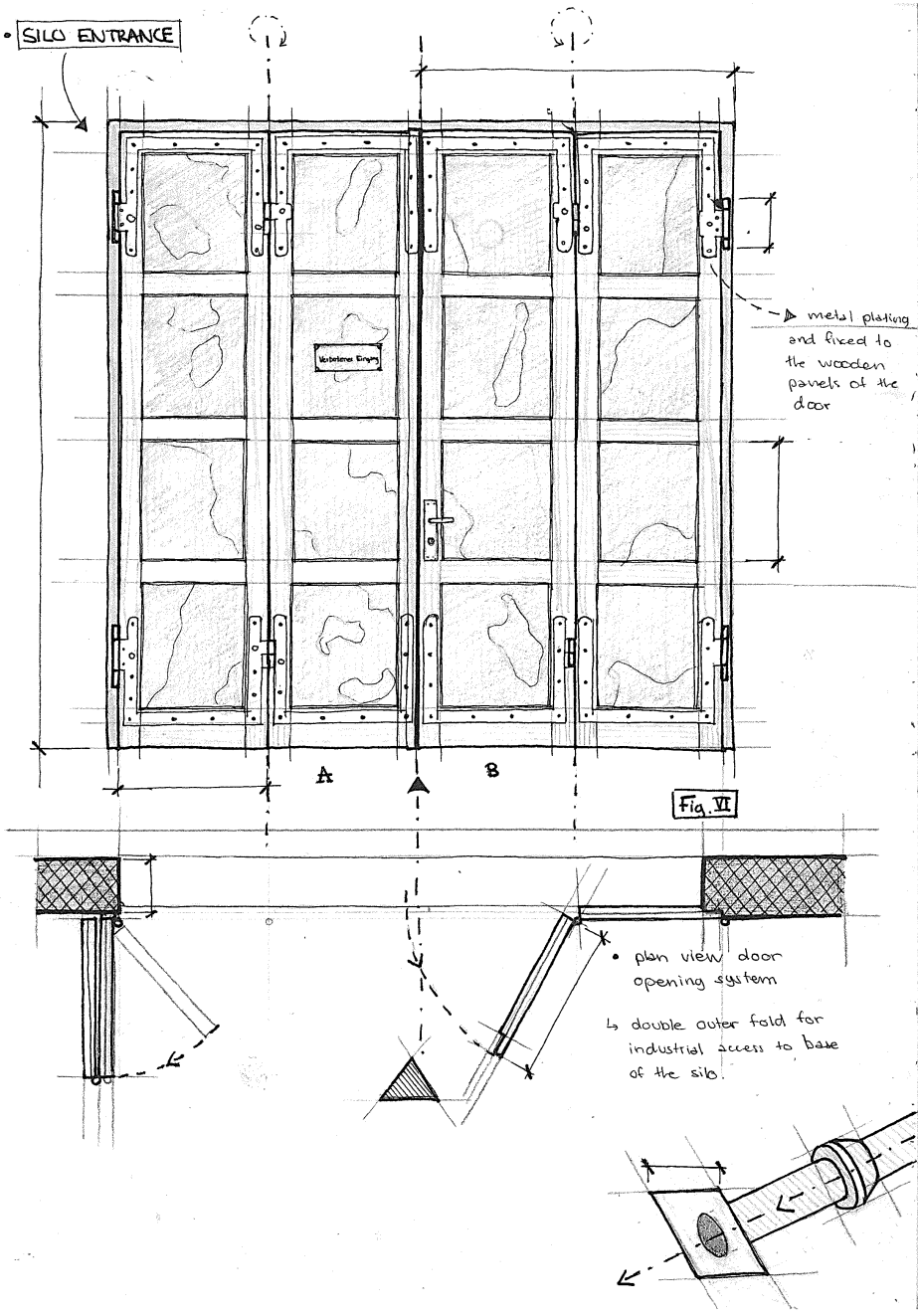


Fig. III


• SILO ENTRANCE
metal plating and fixed to the wooden panels of the door
A
B
Fig. VI
• plan view door opening system
↳ double outer fold for industrial access to base of the silo.

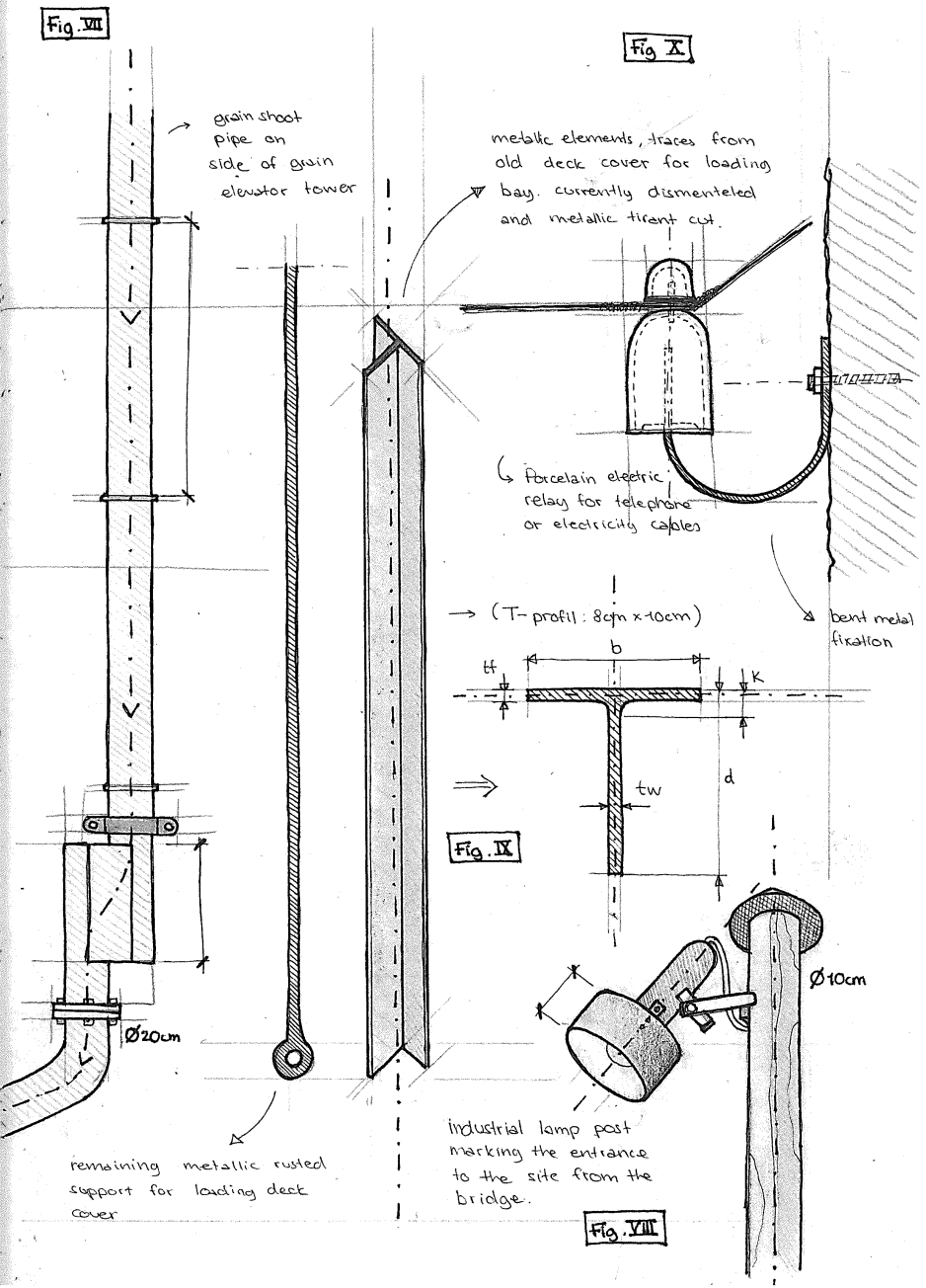


Fig. VII
grain shoot pipe on side of grain elevator tower
Ø20cm
remaining metallic rusted support for loading deck cover
Fig. X
metallic elements, traces from old deck cover for loading bay. currently dismenteled and metallic tirant cut.
porcelain electric relay for telephone or electricity cables
bent metal fixation
(T- profil : 8cm x 10cm)
b
tf
K
tw
d
Fig. IX
Ø10cm
industrial lamp post marking the entrance to the site from the bridge.
Fig. VIII

Fig. XI

STRUCTURAL DETAIL

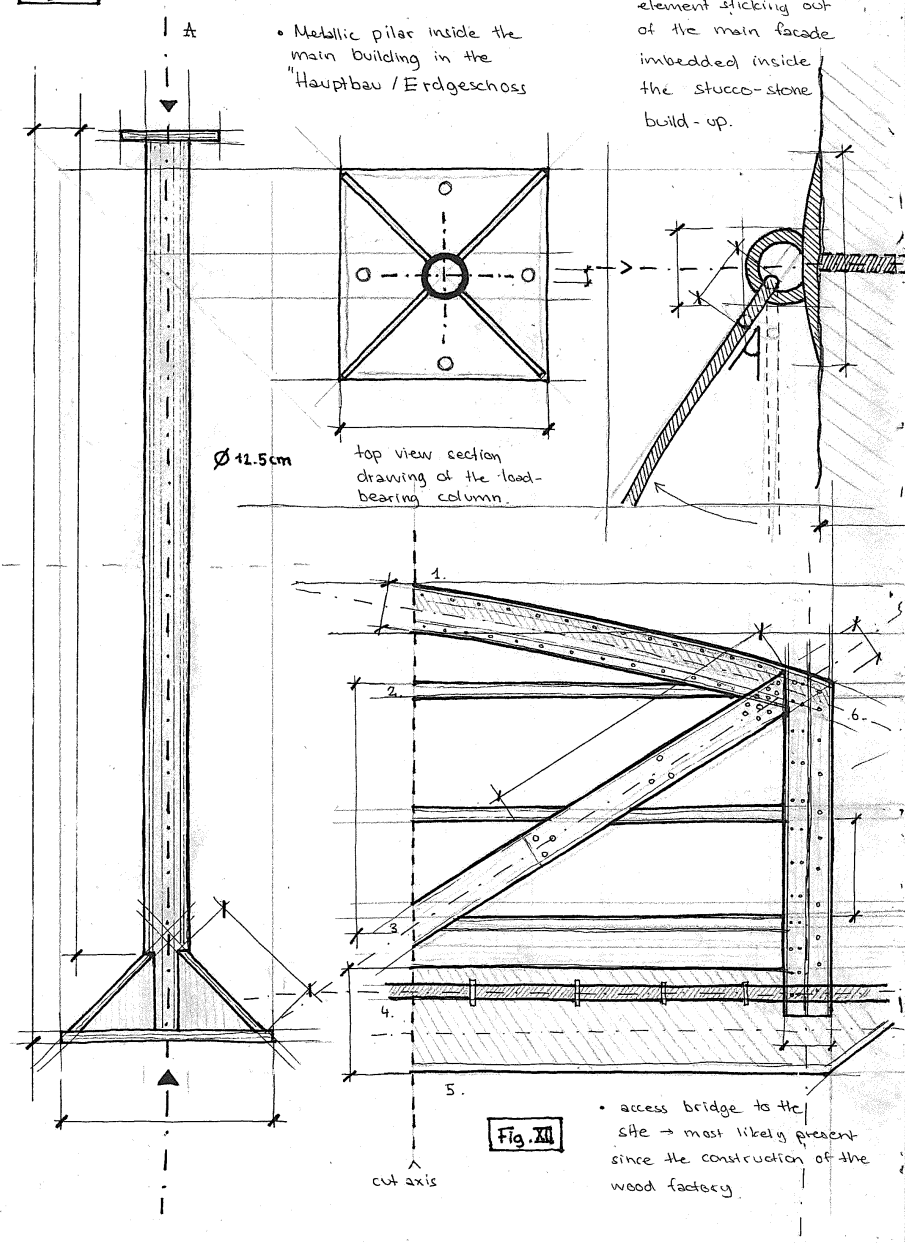


Fig. XII

Fig XIII

- attachment metal ring detail for cover along the main facade of the Walzmühle building

Ø 50cm

Dust exhaust on summit of the grain silo

rectangular metallic frame to support exhaust exit

wooden beam connexion ?

// The monument was a bridge over the Passaic River that connected Bergen County with Passaic County. Noon-day sunshine cinema-sized the site, turning the bridge and the river into an over exposed picture [...] was like photographing a photograph. [...] The glassy air of New Jersey defined the structural parts of the monument as I took snapshot after snapshot ...

(Robert Smithson)

→ silo window close up with broken glass

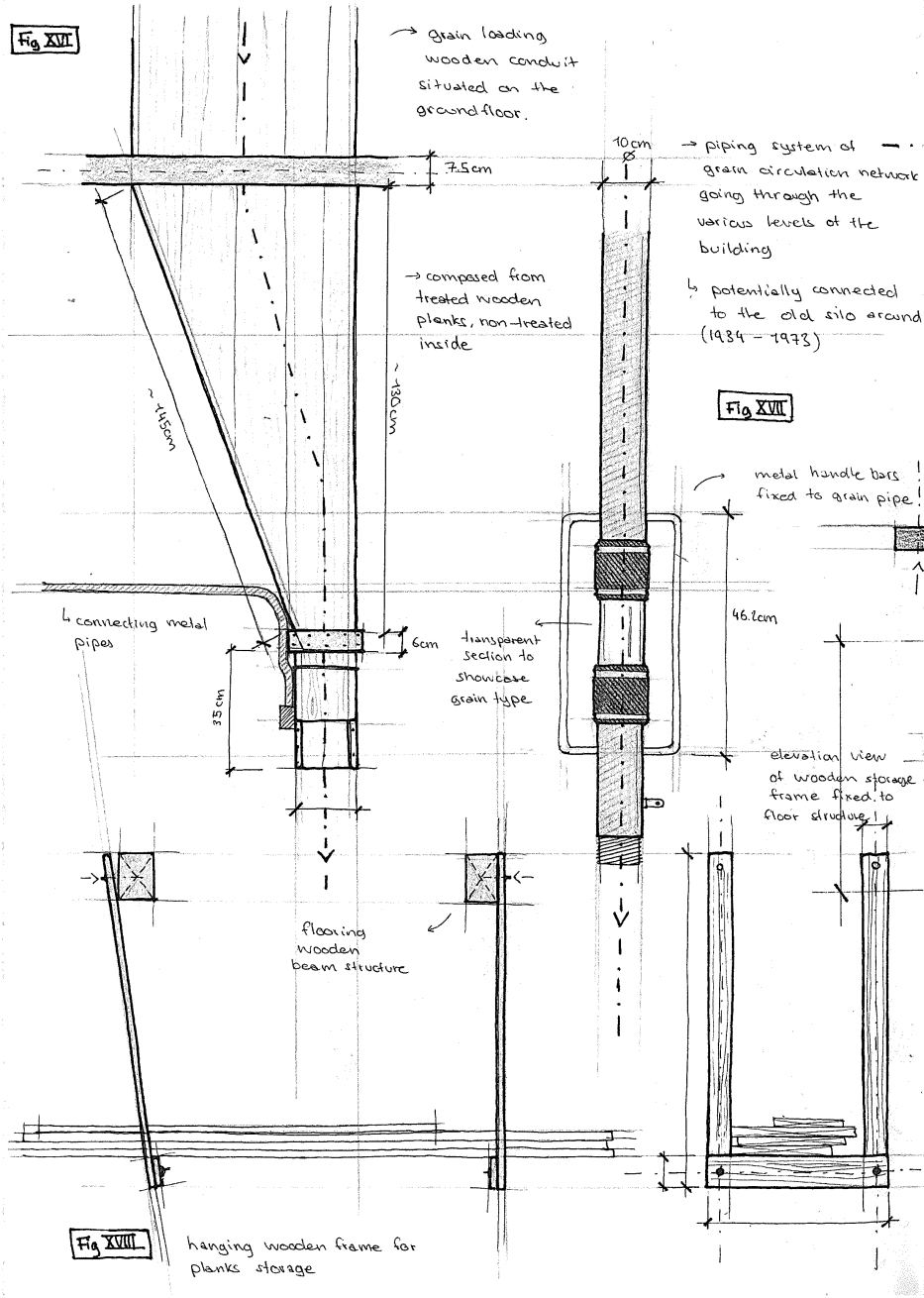
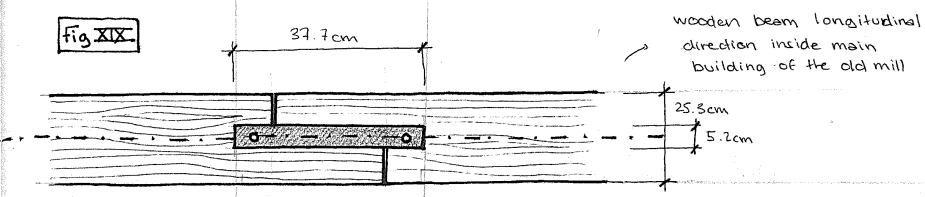


Fig XVII
→ grain loading wooden conduit situated on the ground floor.
7.5cm
10cm Ø
→ piping system of grain circulation network going through the various levels of the building
↳ potentially connected to the old silo around (1934 – 1973)
→ composed from treated wooden planks, non-treated inside
~445cm
~130cm
Fig XVII
metal handle bars fixed to grain pipe
4 connecting metal pipes
6cm
transparent section to showcase grain type
35cm
46.2cm
elevation view of wooden storage frame fixed to floor structure
flooring wooden beam structure
Fig XVIII
hanging wooden frame for planks storage

Fig XIX



wooden beam longitudinal direction inside main building of the old mill

- load bearing beam connexion for 1st floor structure.

metal plating

- mechanical belt wheel remaining structure in proximity to the helicoidal ramp for grains.

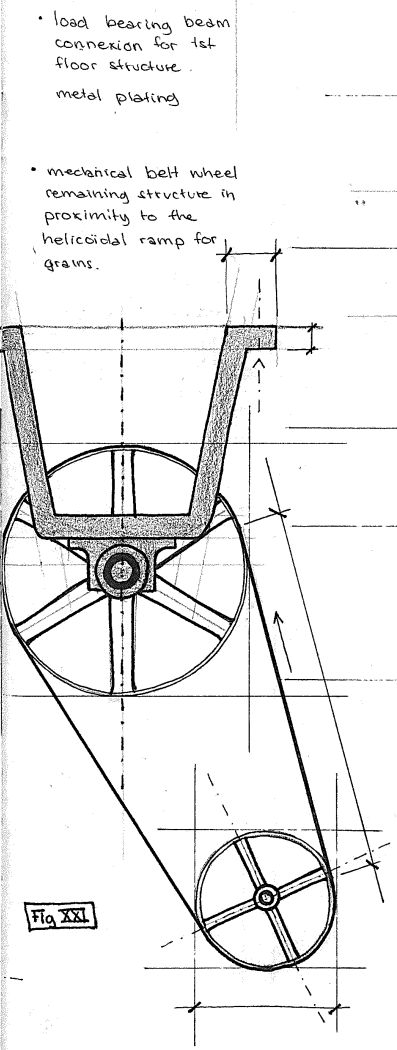


Fig XXI

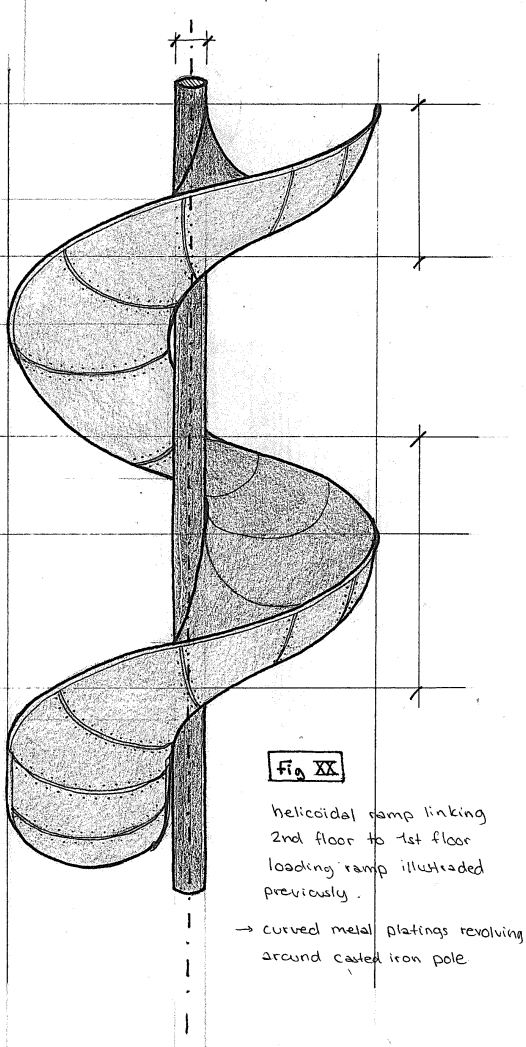


Fig XX

helicoidal ramp linking 2nd floor to 1st floor loading ramp illustrated previously.

→ curved metal platings revolving around casted iron pole

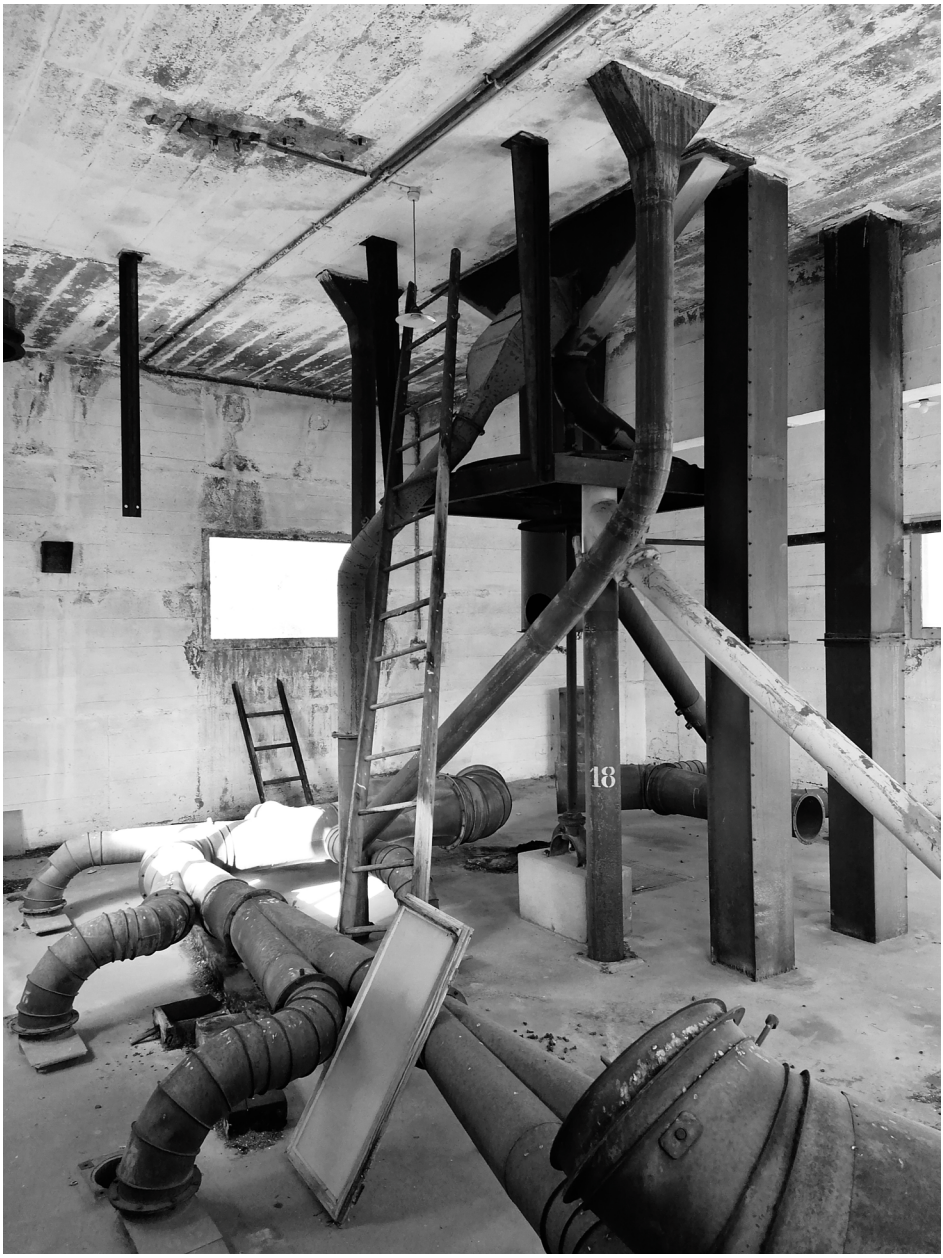


Fig.31. Interior view of the grain silo, artefacts study

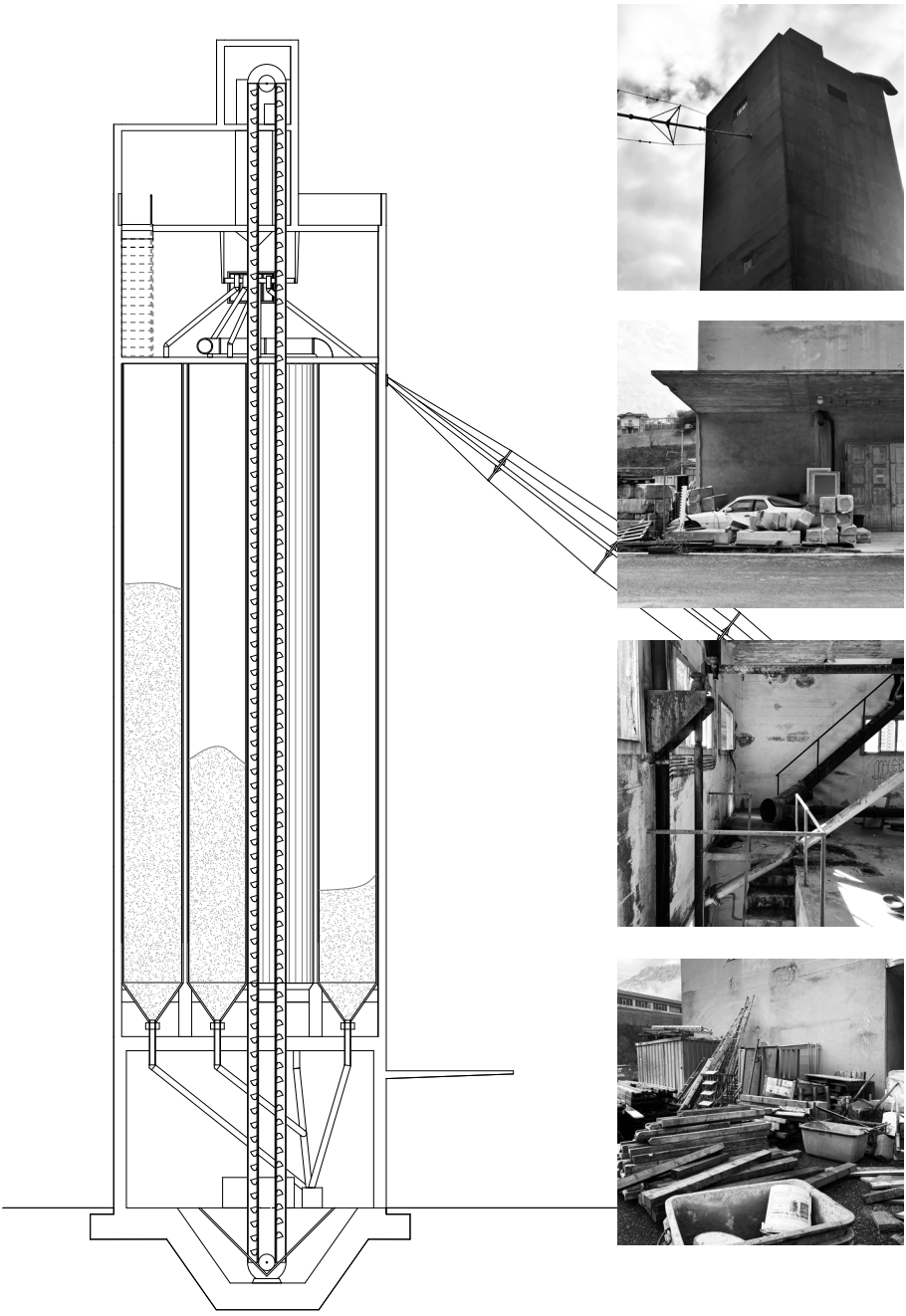


Fig.32. Composition drawing of the grain silo & photographs

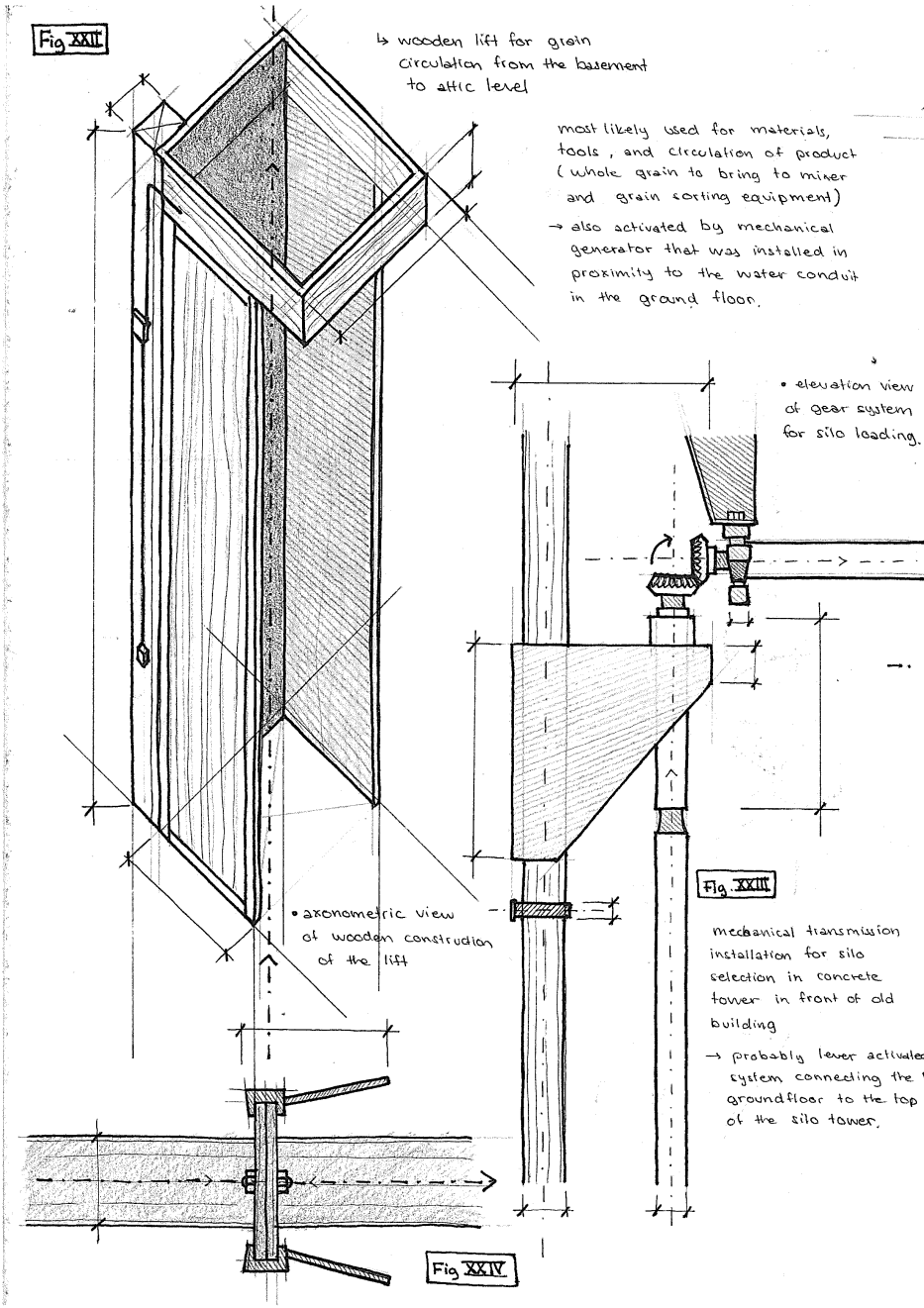
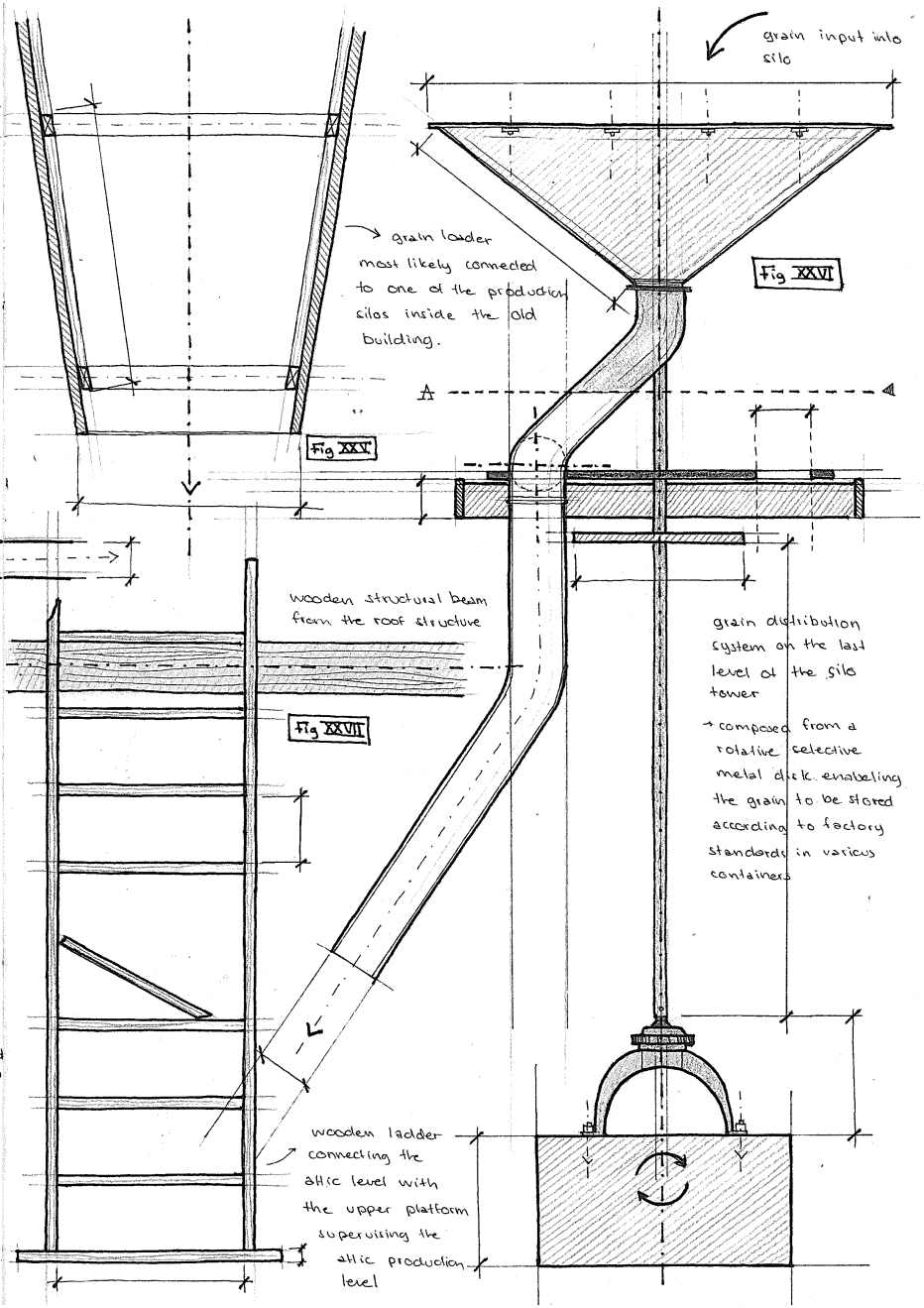


Fig.33. Research sketches, artefact studies, traces of labour


grain input into silo
grain loader most likely connected to one of the production silos inside the old building.
Fig XXVI
A
Fig XXV
wooden structural beam from the roof structure
Fig XXVII
grain distribution system on the last level of the silo tower
→ composed from a rotative selective metal disk enabeling the grain to be stored according to factory standards in various containers
wooden ladder connecting the attic level with the upper platform supervising the attic production level

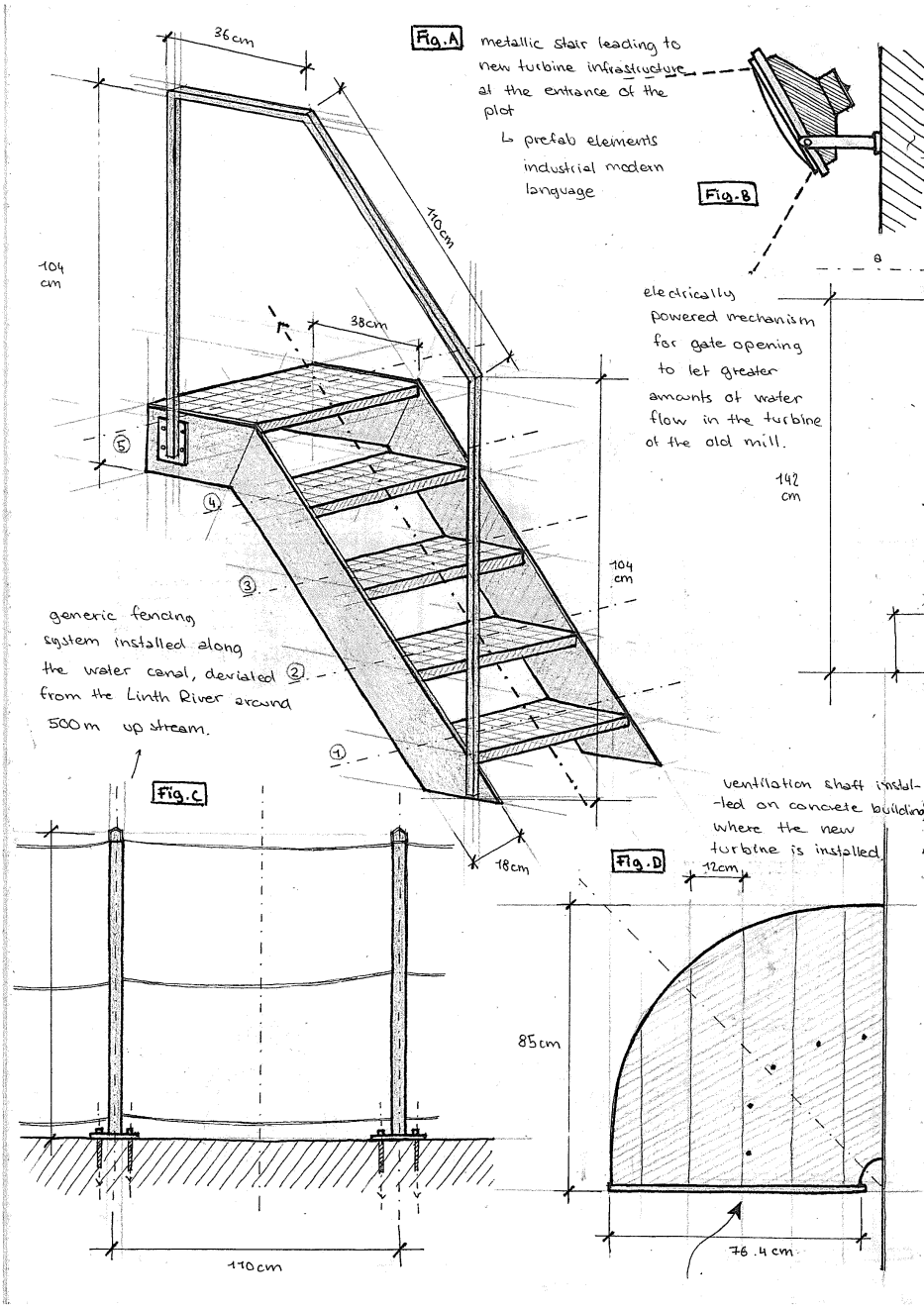
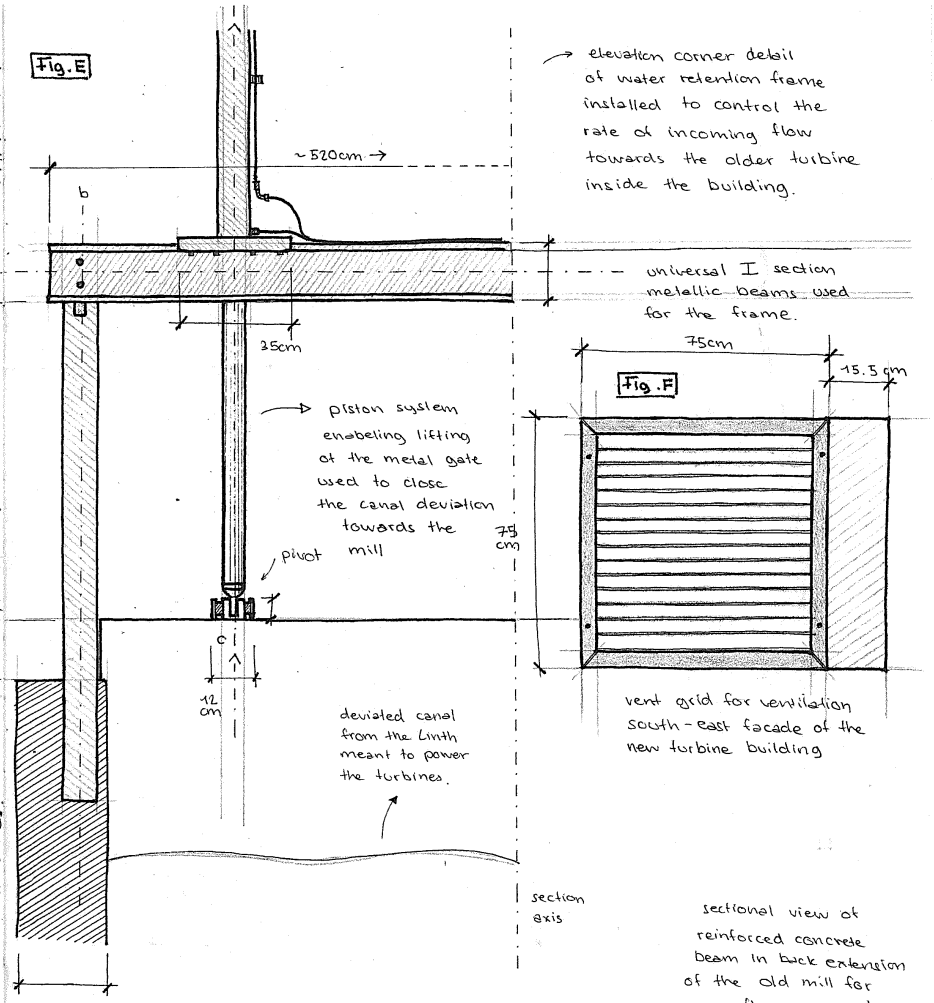


Fig.A
metallic stair leading to new turbine infrastructure at the entrance of the plot
↳ prefab elements industrial modern language
36cm
110cm
104 cm
38cm
18cm
Fig.B
electrically powered mechanism for gate opening to let greater amounts of water flow in the turbine of the old mill.
142 cm
generic fencing system installed along the water canal, deviated from the Linth River around 500m up stream.
Fig.C
110cm
ventilation shaft installed on concrete building where the new turbine is installed.
Fig.D
12cm
85cm
76.4 cm

Fig. E



elevation corner debil of water retention frame installed to control the rate of incoming flow towards the older turbine inside the building.

universal I section metallic beams used for the frame.

Fig. F

vent grid for ventilation south-east facade of the new turbine building

sectional view of reinforced concrete beam in back extension of the old mill for floor support.

Fig. G

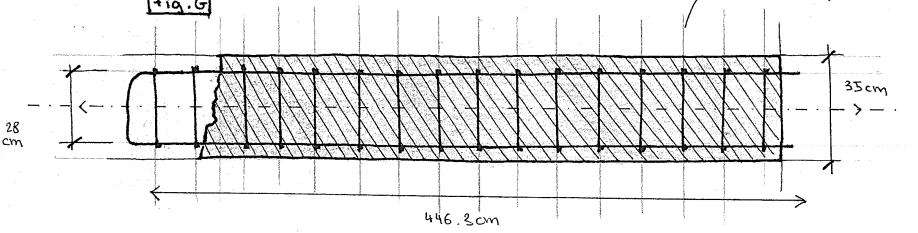
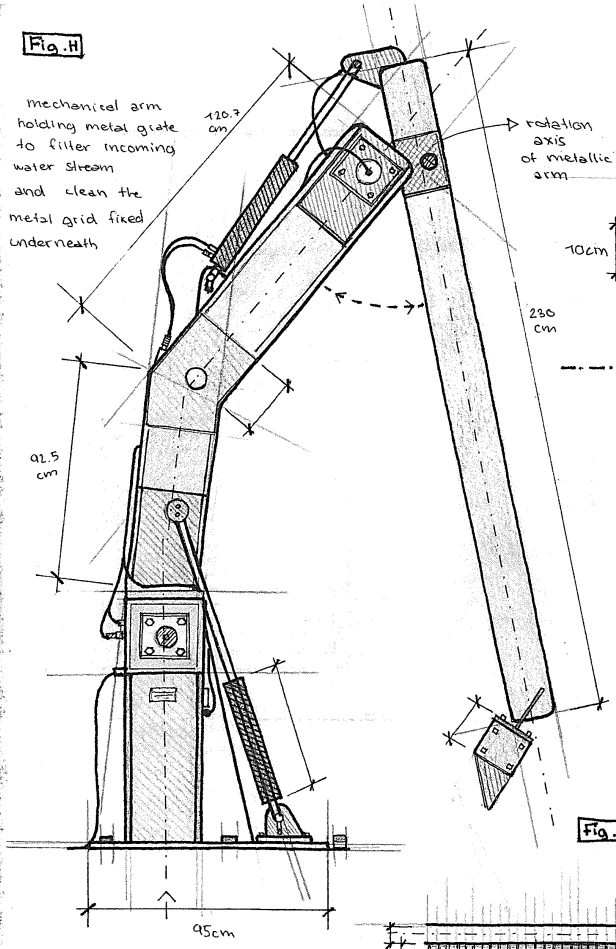


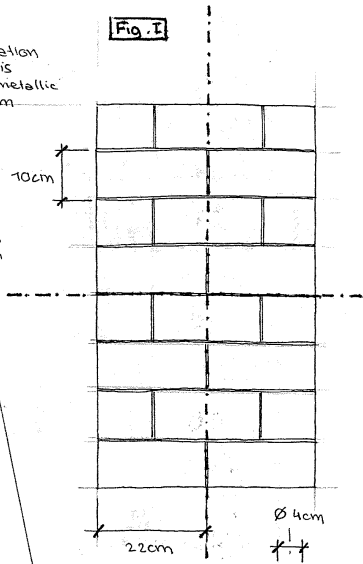
Fig.H



mechanical arm holding metal grate to filter incoming water stream and clean the metal grid fixed underneath

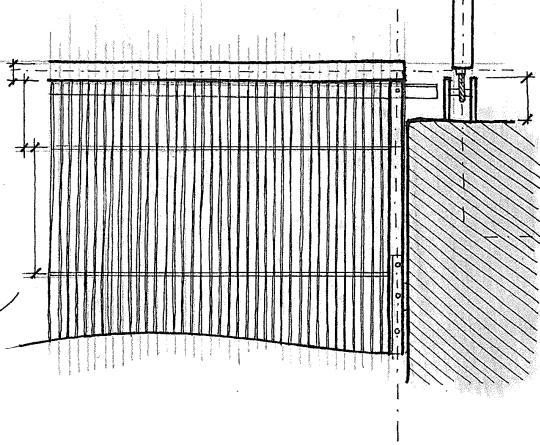
rotation axis of metallic arm

Fig.I



concrete brick elevation from condemned openings on back facade of the old mill

Fig.J



metal grid situated at the stream entrance of the new turbine. filtering process of incoming water to avoid the introduction of debris in the technical hydrolic infrastructure

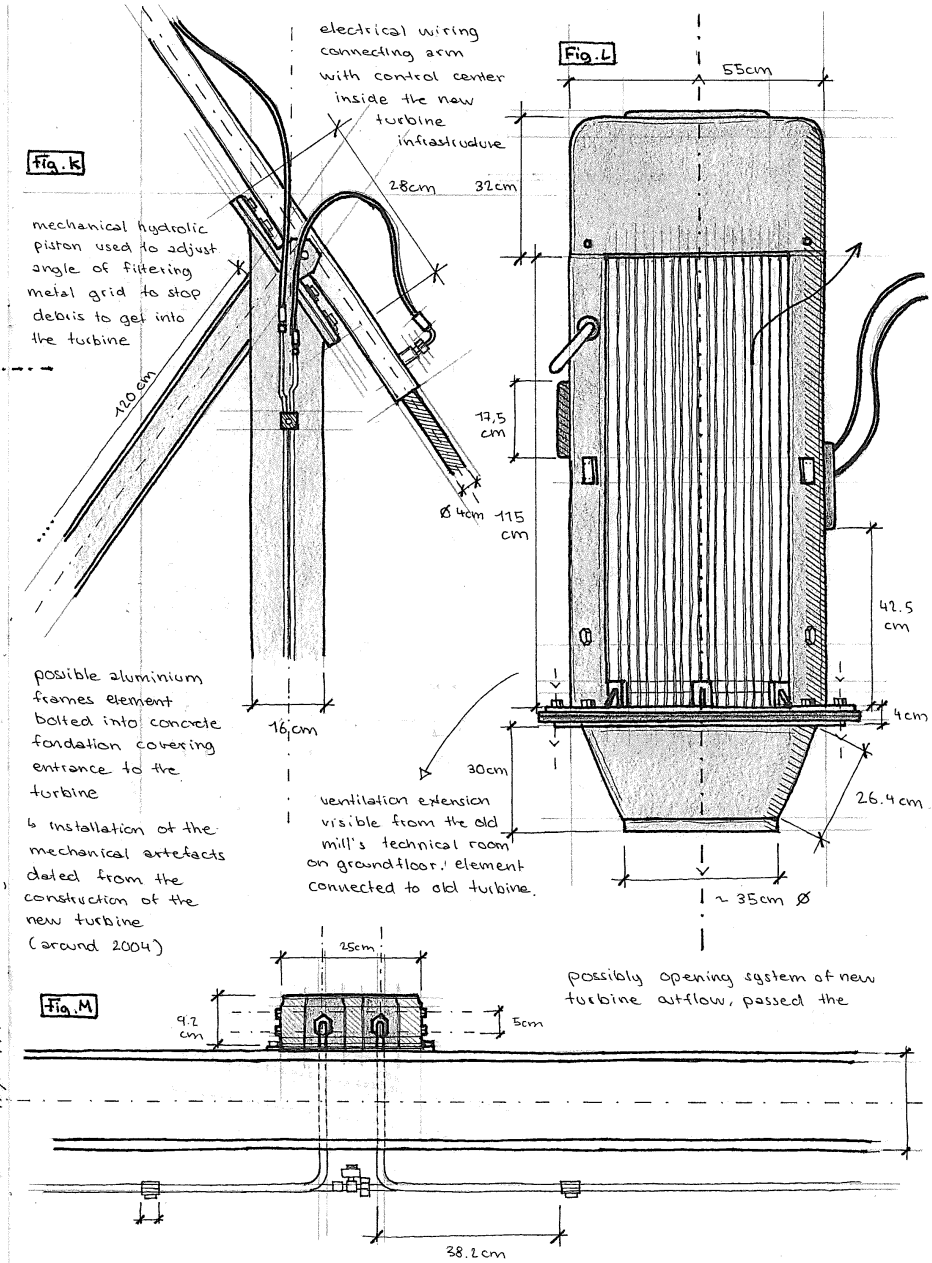


Fig.k
electrical wiring connecting arm with control center inside the new turbine infrastructure
28cm
32cm
mechanical hydrolic piston used to adjust angle of filtering metal grid to stop debris to get into the turbine
120 cm
Ø 4cm
115 cm
16 cm
possible aluminium frames element bolted into concrete fondation covering entrance to the turbine
installation of the mechanical artefacts dated from the construction of the new turbine (around 2004)
Fig.L
55cm
17,5 cm
42.5 cm
4cm
30cm
26.4cm
~ 35cm Ø
ventilation extension visible from the old mill's technical room on groundfloor. element connected to old turbine.
possibly opening system of new turbine outflow, passed the
Fig.M
25cm
9.2 cm
5cm
38.2cm

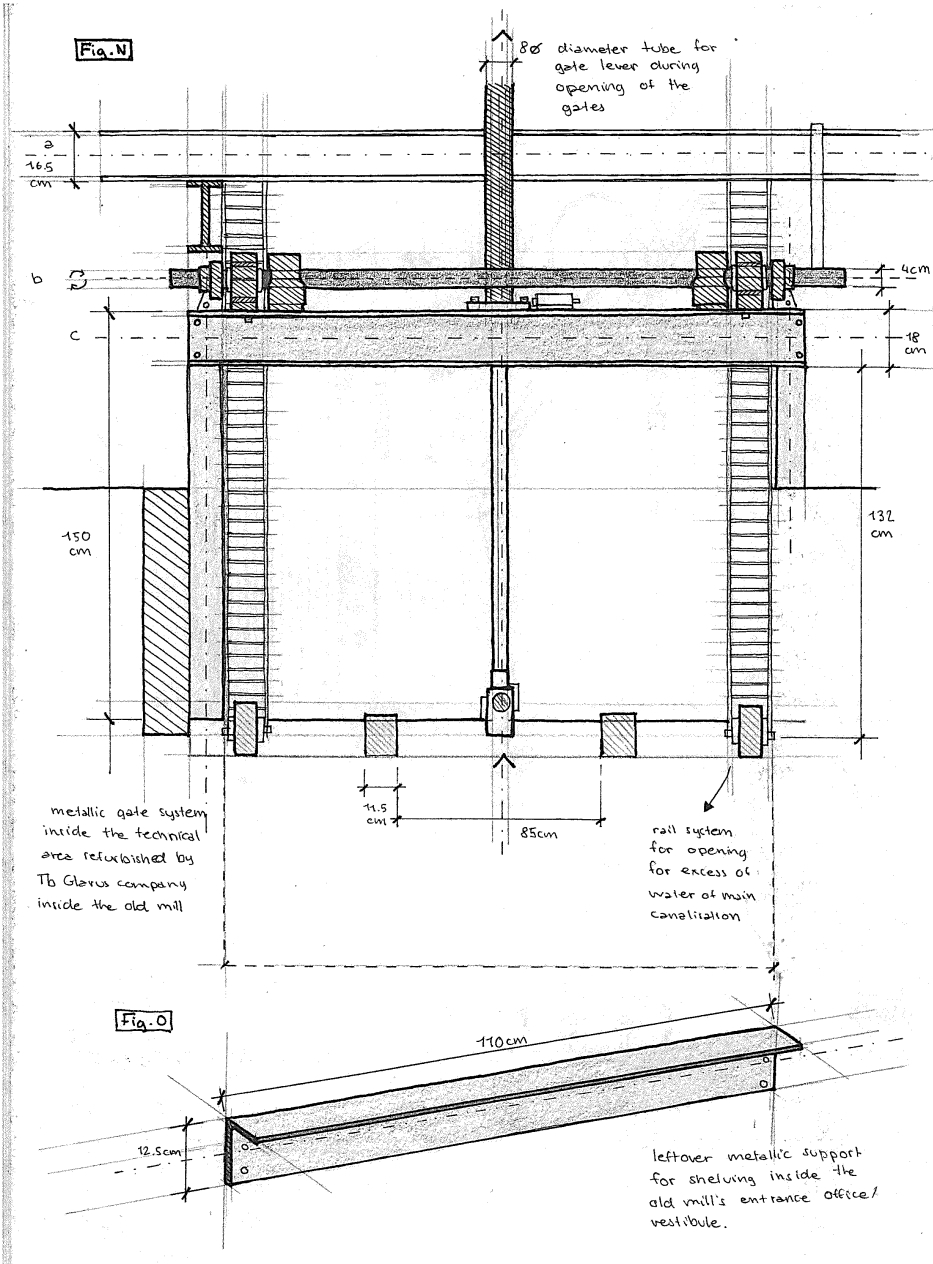


Fig.N
8ø diameter tube for gate lever during opening of the gates
a
16.5 cm
b
c
4cm
18 cm
150 cm
132 cm
11.5 cm
85cm
metallic gate system inside the technical area refurbished by Th Glarus company inside the old mill
rail system for opening for excess of water of main canalisation
Fig.O
110cm
12.5cm
leftover metallic support for shelving inside the old mill's entrance office/ vestibule.

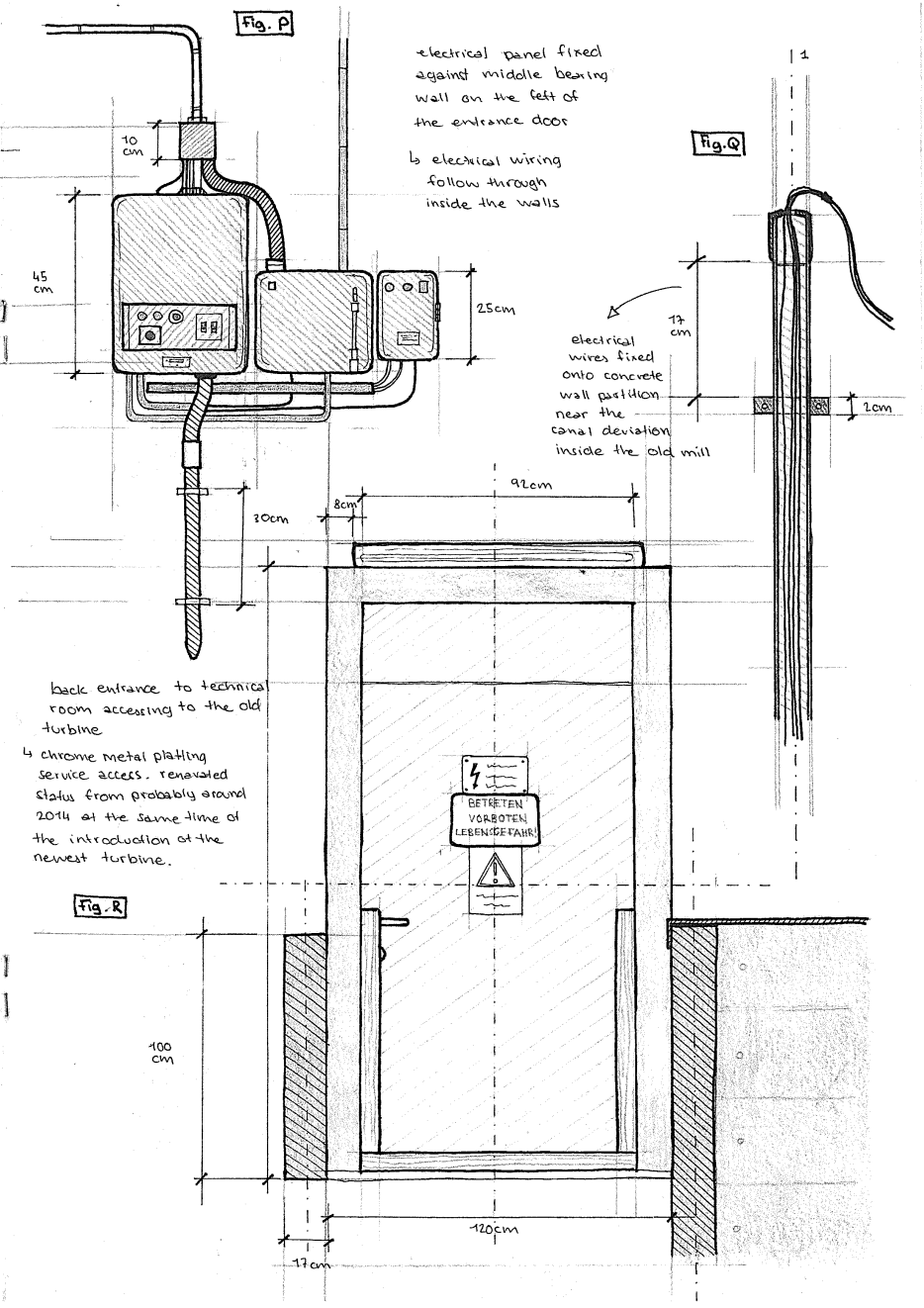


Fig. P
electrical panel fixed against middle bearing wall on the left of the entrance door
↳ electrical wiring follow through inside the walls
10 cm
45 cm
25cm
Fig.Q
1
17 cm
electrical wires fixed onto concrete wall partition near the canal deviation inside the old mill
2cm
92cm
8cm
30cm
back entrance to technical room accessing to the old turbine
↳ chrome metal plating service access. renovated status from probably around 2014 at the same time of the introduction of the newest turbine.
BETRETEN VORBOTEN LEBENSGEFAHR!
Fig. R
100 cm
120cm
17cm

Master Thesis
Sven Gillet

Data

GLARUS, *SWITZERLAND*
FACTS & FIGURES

Glarus is a city located in the canton of Glarus, Switzerland. It has a population of approximately 12,000 people and covers an area of 68.96 square kilometers. The city has a rich history and a diverse economy, with a focus on manufacturing and tourism. The following data will explore the different sectors of activities in the city, including industrial heritage and current production, tourism, and cultural activities.

1. **Accessibility** - The canton of Glarus is located in the heart of Switzerland. The economic metropolis of Zurich and Zurich International Airport can be reached in little more than an hour by car or public transport – Transportation is an important part of Glarus's infrastructure, with a focus on sustainable transportation options. The city has a modern and efficient public transportation system, with buses and trains connecting Glarus to other cities in Switzerland. Glarus is also located on the A3 motorway, which provides easy access to other parts of the country.In addition to traditional transportation options, Glarus is also investing in sustainable transportation, including cycling and electric vehicles. The city has a number of cycling paths and infrastructure and is working to become more pedestrian-friendly.

2. **Population** - Glarus is becoming more and more popular: The resident population is growing. Well over half of the total population is between 20 and 64 years old – i.e. of working age. This puts us within the Swiss average. Population (as of 2021) 41,190. The municipality of Glarus has a population (as of December 2020) of 12,539. As of 2013, 24.9% of the population are resident foreign nationals. Over the last 3 years (2010-2013) the population has changed at a rate of 2.07%. The birth rate in the municipality, in 2013, was 9.8 while the death rate was 8.4 per thousand residents. As of 2013, children and teenagers (0–19 years old) make up 20.6% of the population, while adults (20–64 years old) are 61.1% and seniors (over 64 years old) make up 18.3%.

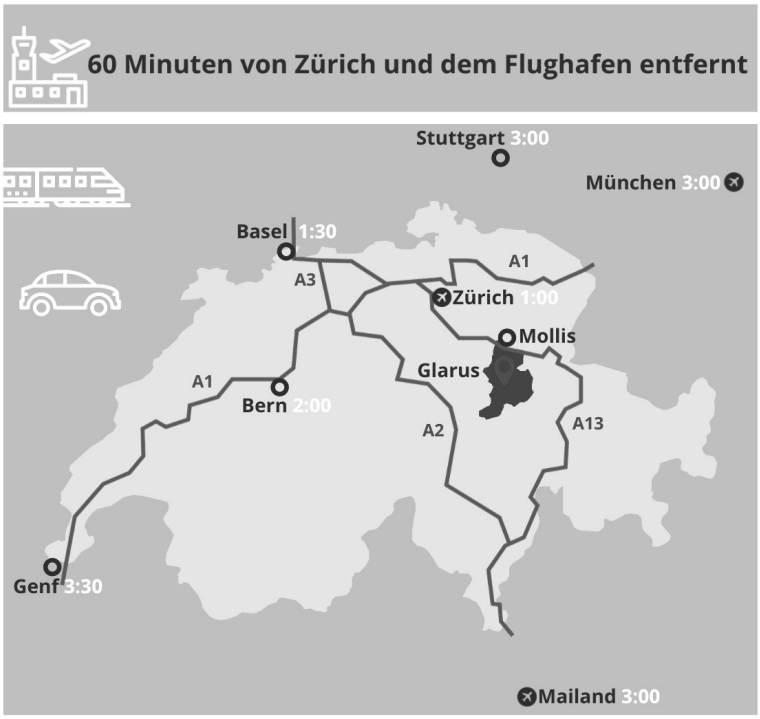


Fig.34, 35. Data from Glarus administration

3. **Work** - Glarnerland is a traditional industrial canton. In terms of percentage, the canton still employs the most people in Switzerland in the industrial sector. However, many classic industrial companies have developed into modern high-tech companies over time, and the canton is now home to leading companies in mechanical and plant engineering, plastics and electrical engineering as well as food and environmental technology. In the meantime, however, the service sector has the most employees in Glarnerland. The geography of the canton helped to establish slate works in the 17th century. The mountainous surroundings of Glarus were also an advantage in industrialisation. Cotton spinning was important in the 18th century, complementing traditional woolen spinning. Industrialisation also brought cotton printing, hydroelectric plants and later metal and machinery factories, as well as paper mills.

In 2014, about 5% of the workers in Glarus work in the primary sector (the total for all of Switzerland is 3.3%) Of these 5%, in 2008, nearly three-quarters are involved in dairy farming and cattle breeding. In 2014 the secondary sector employed 8,322 or about 38.2% of the total, which is much higher than 21.8% for the entire country. Of those in the secondary sector, over one-quarter worked in the construction industry. The tertiary sector employed 12,366 or about 56.8% of the total, which is almost 18% lower than 74.9% nationwide. Of those in the tertiary sector, 11.72% work in retail shops and 10.37% are in health care.

Economic Ties with Zurich - Glarus has strong economic ties with Zurich, which is one of the most important economic centers in Switzerland. Zurich is home to a number of multinational corporations and financial institutions, many of which have operations in Glarus. This has helped to support the city's manufacturing and service sectors, which are key drivers of the local economy. Zurich is also a major transportation hub, with an extensive network of trains, buses, and highways connecting the city to other parts of Switzerland and Europe. This has facilitated the movement of goods and people between Glarus and Zurich, and has helped to support the city's growth and development.

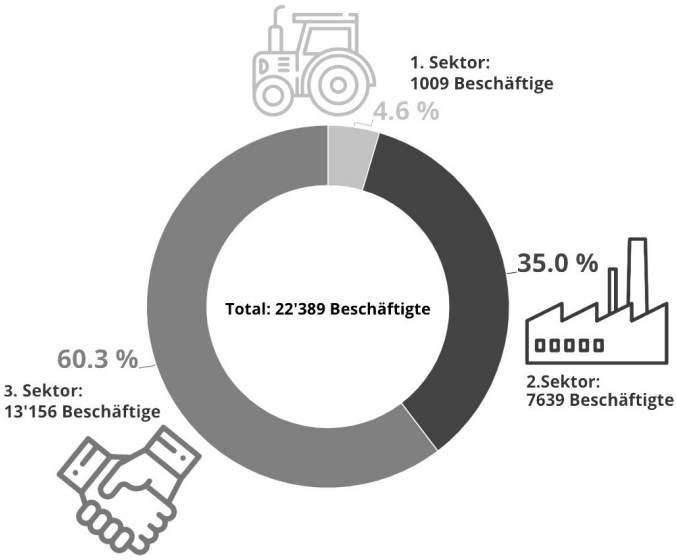


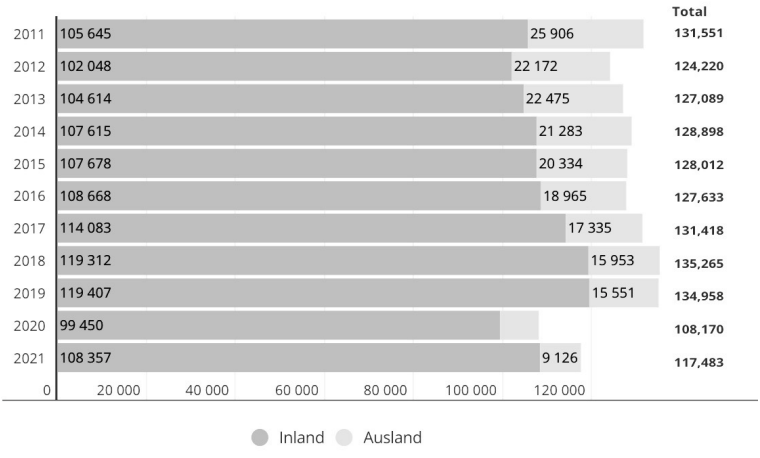
Fig.36, 37. Data from Glarus administration

4. **Tourism** - Glarus is a popular tourist destination, with attractions such as the historic Old Town and the Glarus Alps. The city's location in the foothills of the Alps makes it an ideal base for hiking and skiing. The city also has a number of cultural attractions, including museums, galleries, and festivals. In 2019, Glarus welcomed over 186,000 visitors, generating CHF 33 million in revenue. The majority of visitors came from Switzerland, Germany, and the United States. The city's tourism industry is supported by a variety of accommodations, including hotels, apartments, and campsites.

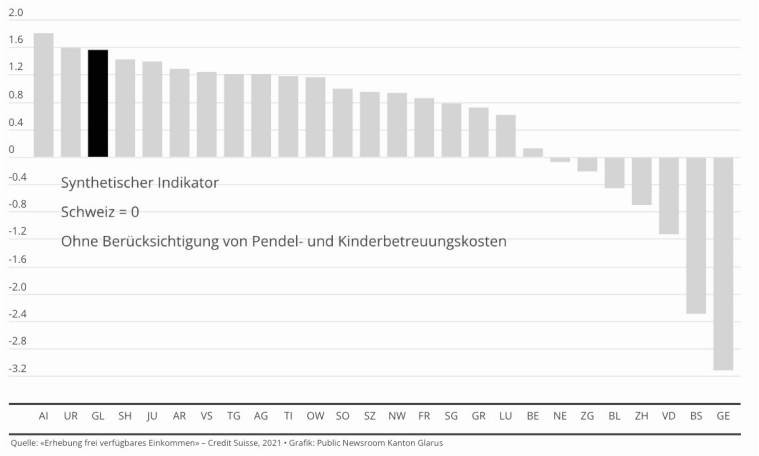
Glarus also has a rich cultural heritage, with a focus on music, theater, and the visual arts. The city is home to the Kunsthaus Glarus, which showcases contemporary art, and the Theater Glarus, which produces a variety of plays and performances throughout the year. §The city also has a number of festivals and events, including the Glarnerland Music Festival, which celebrates classical music, and the Glarus Spring Festival, which celebrates the city's heritage and culture. The Glarus Spring Festival is held every three years and attracts thousands of visitors from around the world.

In addition to these events, Glarus has a strong tradition of folk music, which is reflected in the city's many choirs and music groups. The city also has a strong tradition of sports, with a focus on ice hockey and football.

5. **Discretionary Income** - A comprehensive criterion for assessing the financial attractiveness of living in a canton is disposable income. The canton of Glarus achieves the third-highest financial residential attractiveness: In addition to low housing costs, the canton offers a moderate tax burden and comparatively low health insurance premiums. The financial residential attractiveness of regions is shown using the Credit Suisse RDI indicator . Positive values indicate higher, negative values lower disposable income compared to the national average.



Quelle: BFS – Statistischer Atlas der Schweiz, 2020 • Infografik: Public Newsroom Kanton Glarus



Quelle: «Erhebung frei verfügbares Einkommen» – Credit Suisse, 2021 • Grafik: Public Newsroom Kanton Glarus

Fig.38, 39. Data from Glarus administration

6. **Taxes** - Glarus is one of the selected areas in Switzerland that can also grant tax breaks at federal level. The entire canton area is part of the area of application for tax relief as part of the direct federal tax. Also at cantonal level, companies that are newly opened or experience a significant change in operational activity and serve the economic interest can receive tax relief for the opening year and the nine following years.

7. **BAK taxation for companies** - The BAK Taxation Index shows which locations are in good hands in international tax competition. The effective tax rates for companies and highly qualified workers and thus the tax burden for the target groups of global location competition are taken into account. In the BAK Taxation Index, Glarus is regularly in the middle of the Swiss cantons shown in the company category. In a European and global comparison, Glarus is even among the top ranked.

8. **Geographical Context** - Glarus is located in the heart of Switzerland, in the eastern part of the country. The city is situated in the Glarus Valley, which is surrounded by the Glarus Alps to the north and the Schwyzer Alps to the south. The city is located approximately 80 km southeast of Zurich. Zurich is an important economic and cultural centre, and is home to a number of multinational corporations, financial institutions, and cultural institutions. The proximity of Glarus to Zurich has played an important role in the city's growth and development, as it has facilitated economic ties and transportation connections between the two cities.

9. **Urban Planning and Development** - Glarus has a well-developed urban planning and development framework, with a number of key initiatives in place to support sustainable growth and development. The city's master plan outlines a range of goals and objectives for the city's development, including the creation of new housing and commercial developments, the expansion of public transportation infrastructure, and the preservation of the city's historic and cultural heritage. The city has also established a number of zoning regulations and building codes to ensure that new developments are consistent with the city's overall vision for growth and development.

Juristische Personen: 2021

Gewinnsteuer

7,5 % Bund, netto

5,2 % Kanton, Gemeinde, netto

12,6 % Total, netto

Maximale effektive Gewinnsteuer
Basis Gewinn vor Steuern

Kapitalsteuer

2,6 ‰

Des steuerbaren Eigenkapitals
Kanton, Gemeinde, netto

Steuererleichterungen für Neugründungen und wesentliche Änderungen der betrieblichen Tägtigkeit sind möglich.

Quelle: Departement Finanzen & Gesundheit • Grafik: Public Newsroom Kanton Glarus

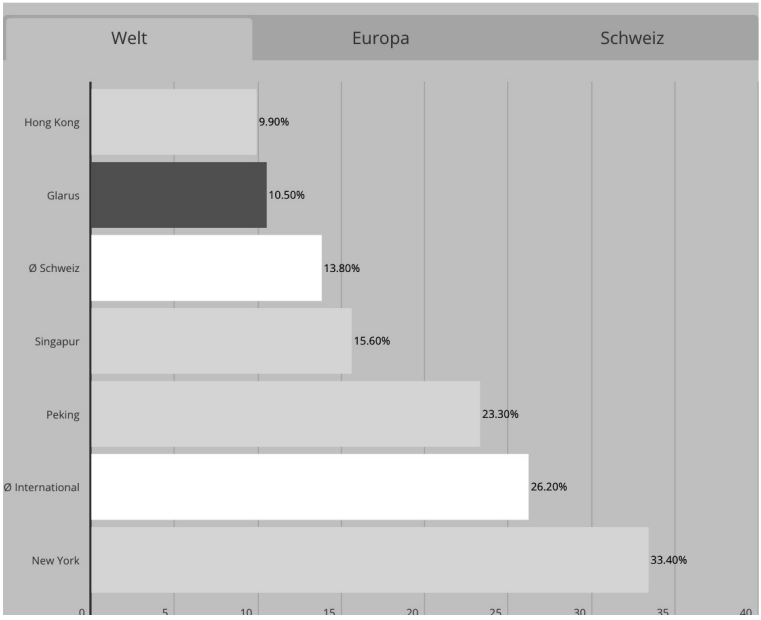
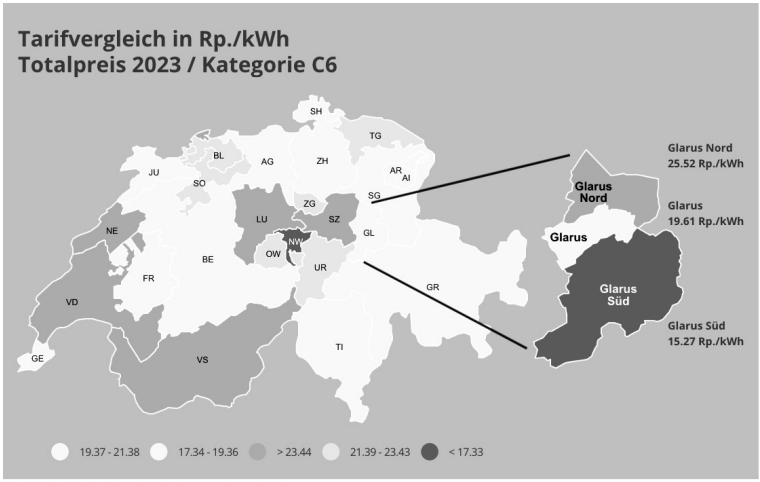


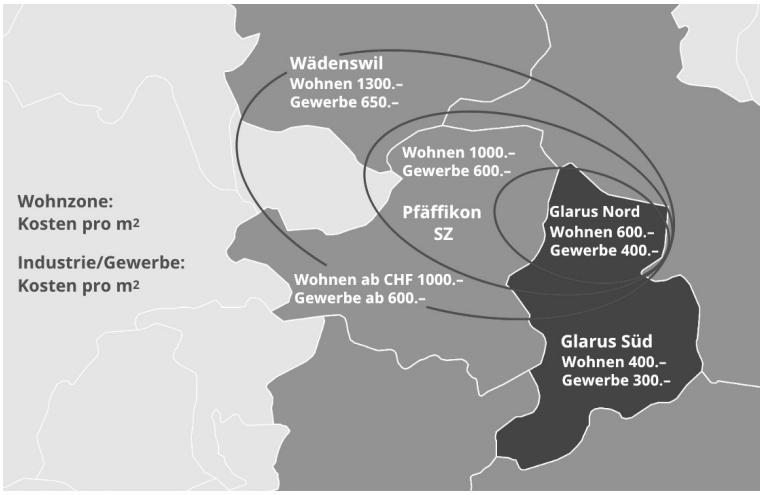
Fig.40, 41. Data from Glarus administration

10. **Electricity price** - Electricity tariff structures can be complex and vary from supplier to supplier, because many electricity suppliers do not have a standard price for all customers, but make their tariffs dependent on the amount and time of electricity consumption. The value shown here relates to consumption category C6: large operation with its own transformer station. Glarus is one of the cheapest cantons here. Land Prices - Glarus was - and is - an industrial canton. The many historic industrial and factory sites throughout Glarnerland bear witness to this. Foreigners with a valid residence permit or short-term residence permit from EU and EFTA countries can buy land and commercial real estate, as can foreign or foreign-controlled companies that need the land or real estate to fulfill their business purposes. You do not need a special permit for this.

- Glarus has a population of approximately 13,000 people, with a population density of 72 people per square kilometer.
- The city's population has grown steadily over the past decade, increasing by approximately 3.4% between 2010 and 2020.
- Glarus has a highly educated population, with a high proportion of residents holding university degrees.
- The city's economy is diverse, with a strong focus on manufacturing and tourism. The manufacturing sector accounts for approximately 35% of the city's GDP, while the tourism sector accounts for approximately 8% of the city's GDP.
- Glarus has a modern and efficient transportation infrastructure, including a well-developed network of trains, buses, and highways. The city is located on the A3 motorway, which provides easy access to other parts of Switzerland.
- The city is committed to sustainability and environmental protection and has implemented a range of initiatives to reduce its carbon footprint and promote sustainable development. Glarus has also invested in renewable energy infrastructure, including solar panels and wind turbines.
- Glarus has a rich cultural heritage, with a number of historic and cultural attractions that draw visitors from across Switzerland and beyond. The city is home to a number of museums, art galleries, and cultural institutions, which provide important cultural and educational resources for residents and visitors alike.



Source: ELCom, 2022 • Infografic: Public Newsroom Kanton Glarus (mae)



Quelle: Eigene Schätzung • Infografik: Public Newsroom Kanton Glarus

Fig.42, 43. Data from Glarus administration

Master Thesis
Sven Gillet

PROJECT

KW WALZMÜHLE PROJECT

The aim of the KW Walzmühle project is to restore the existing buildings of the Alpenbrückli complex and introduce new infrastructures in order to re-activate the site and its reach onto the surrounding area and its population. The implementation of a bold communal hall linking the former grain silo and the old mill is meant to generate an intermediate space that could be used by the new users of the complex as well as the daily passers-by from the region. The site is in close proximity to the centre of Glarus as well as the train tracks and stands on a pedestrian path that sees a daily flux of users crossing the old mill factory thus making it a place with a high potential for social & commercial gatherings as well as a distribution node for locally produced goods.

The new site would offer a new commercial hub for the city of Glarus, allowing local producers & suppliers to gather in a centralised environment where each could benefit from the experience and networks of each other. The goal is to introduce a variety of co-working spaces, showrooms as well as storage facilities that could enable national and international investors and distributors to come and meet in person with a broader range of small to medium-scale producers in order to facilitate the export of locally produced goods across the rest of the country as well as beyond our borders. The importance of the local economy and locally sourced productions is becoming a critical part of fair trade policies as well as the development of suburban regions that develop products further away from economic centres such as Zurich.

Diverse state entities and private companies have already taken the challenge to boost the economy of smaller companies and expand the reach of new start-ups and producers outwards of the valley in order to bring the region to a more competitive state in opposition to the country's leading food distributors like Coop and Migros. These mega companies control the majority of Switzerland's food market and thus possess an essential influence on the prices and distribution networks of goods across the country making it very difficult for smaller companies to maintain a sustainable business and push their products onto the Swiss market on their own.

The goal of the project is to offer, on one side, spaces for collaboration and exchange, and on the other side, a training and joint platform from which small-scale producers could advertise and showcase their products by sharing resources, marketing tools and services offered by the cooperative of Walzmühle. The idea is to reinforce the stance of smaller-scale entities and offer them a collaborative platform to boost their respective industries and give them a place to flourish.

"I am convinced that the future is lost somewhere in the dumps of the non-historical past; it is in yesterday's news-papers, in the jejune advertisements of science-fiction movies, in the false mirror of our rejected dreams. Time turns metaphors into things, and stacks them up in cold rooms, or places them in the celestial playgrounds of the suburbs."

Robert Smithson "A Tour of the Monuments of Passaic, New Jersey."

„The most complete change an individual can effect in his environment, short of destroying it, is to change his attitude to it. This is my objective . . . From the beginning we are taught to choose, to select, to separate good from bad, best from better: our entire upbringing and education are directed towards planting the proper snobberies, the right preferences. I believe it is important to accept everything and beyond that to ‚dig' everything with the same concentrated at- tention that we devote to what we consider to be a good painting or a good film . . . I am certain that, as a result, we will go about so alert that we will discover the excitement of continuously ‚digging' our environment as an object/experience/drama from which we can extract an aesthetic impulse so brilliant and strong that the environ- ment itself is transformed."

Mark Boyle, 1966

Fig.44. Areal view of the valley of Glarus, 2020

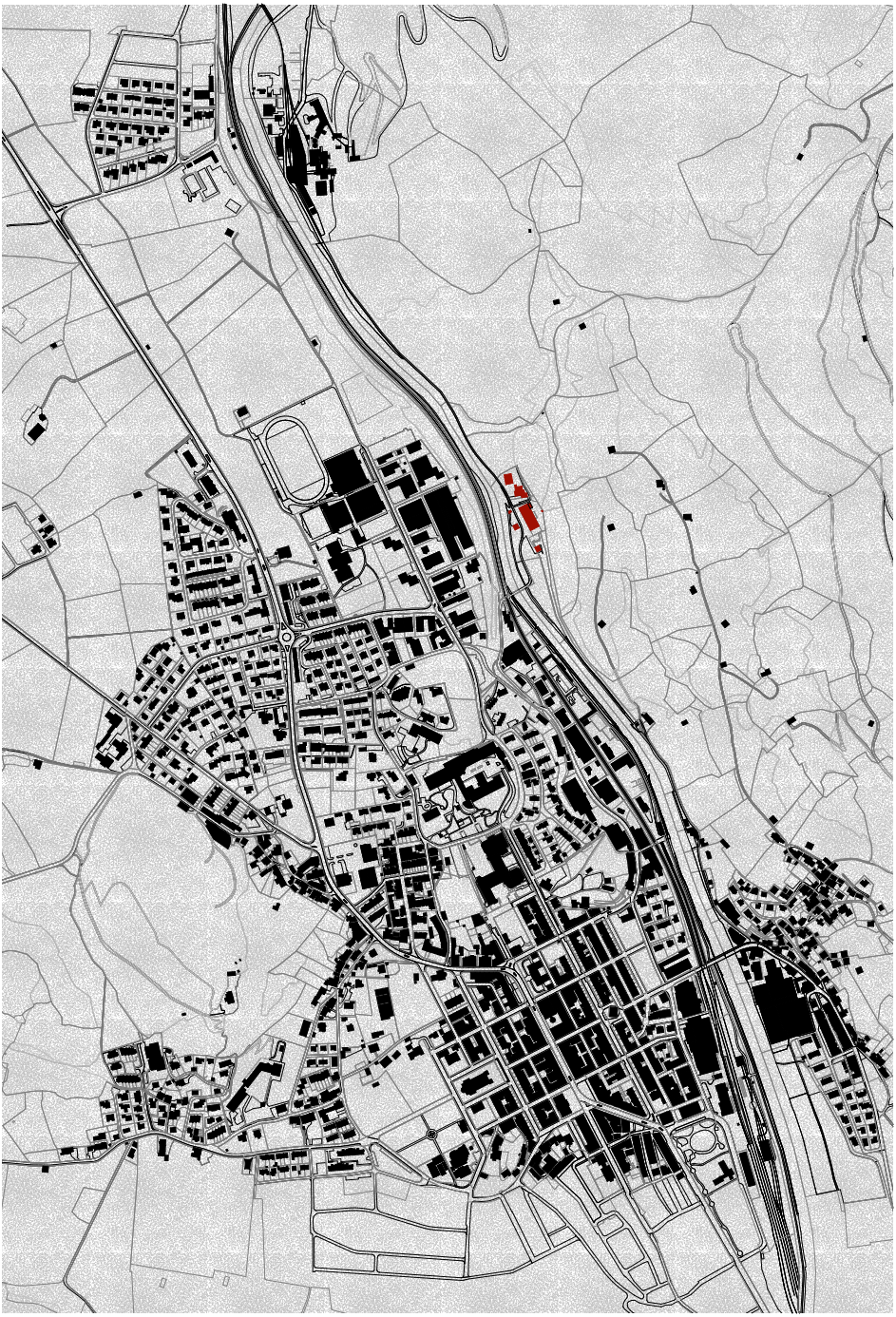
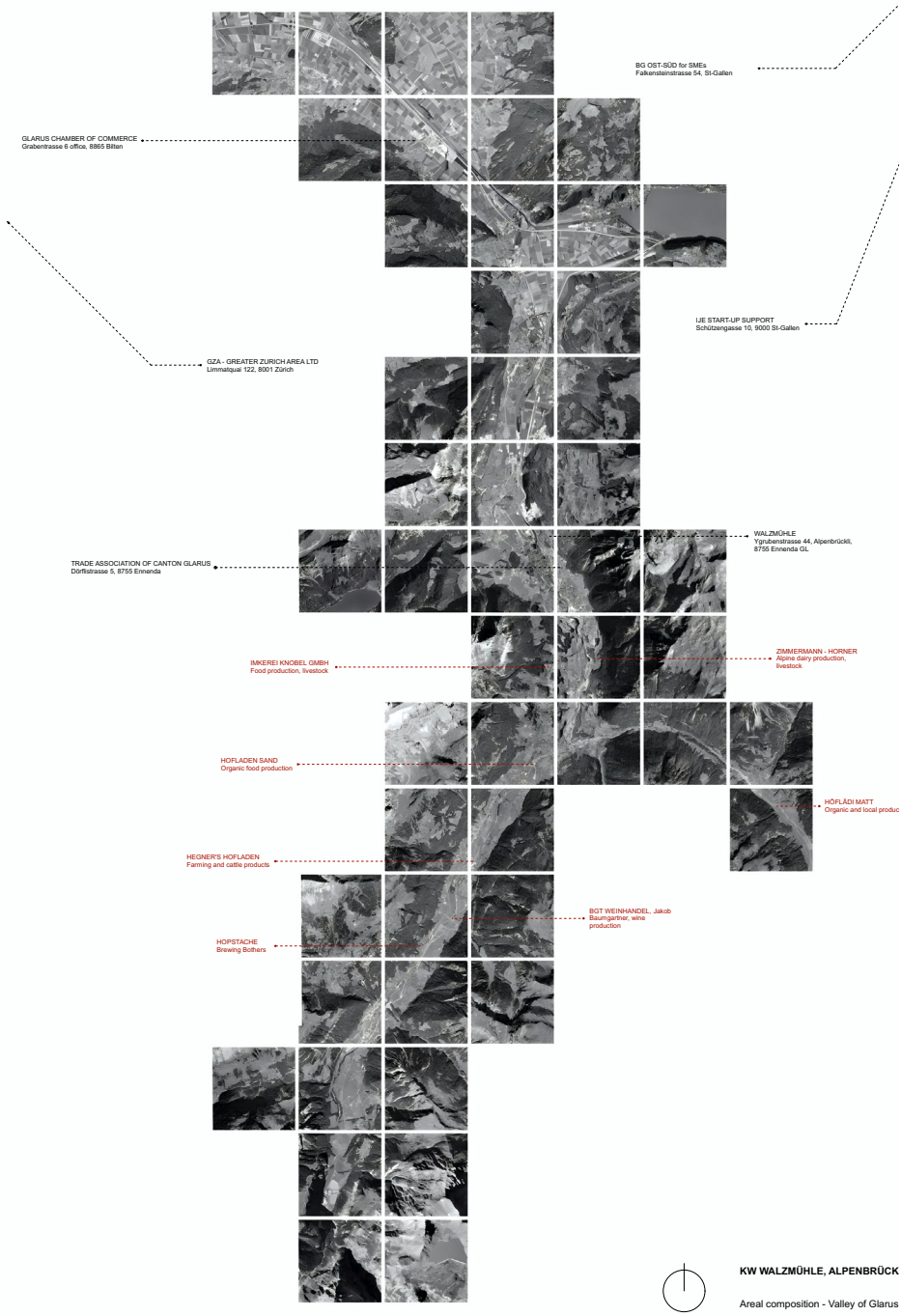


Fig.45. Site plan of Glarus & the Alpenbrückli complex

Fig.46. Site plan of the KW Walzmühle adaptation



113 Fig.47. Areal composition of the valley of Glarus & local organisation

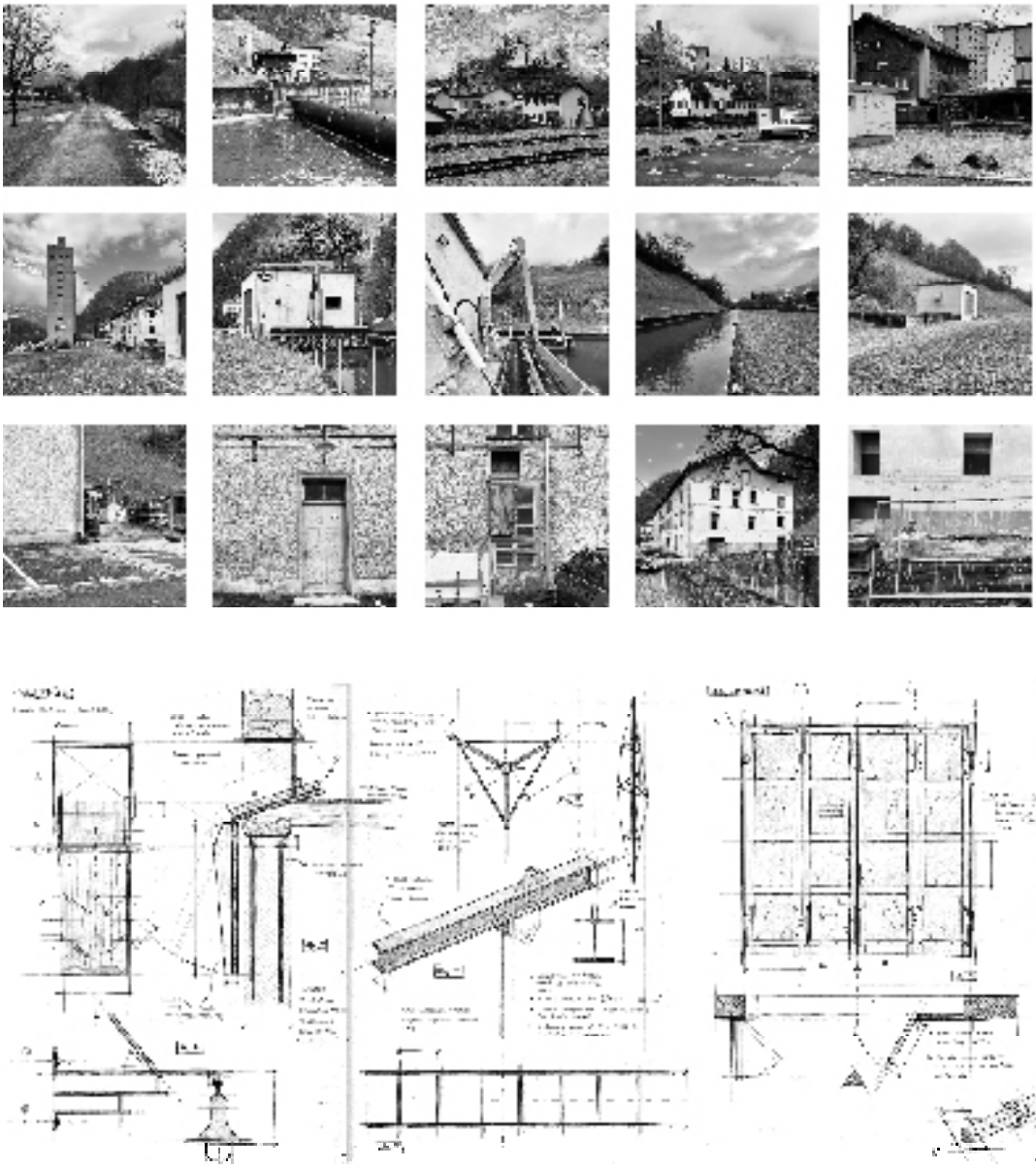


Fig.48. Research board of the industrial heritage of Walzmühle





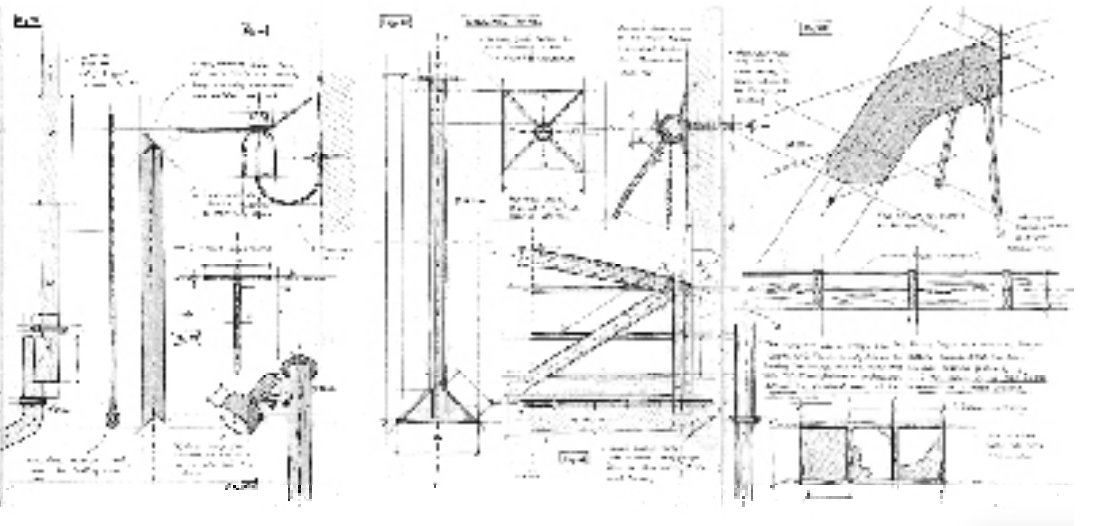










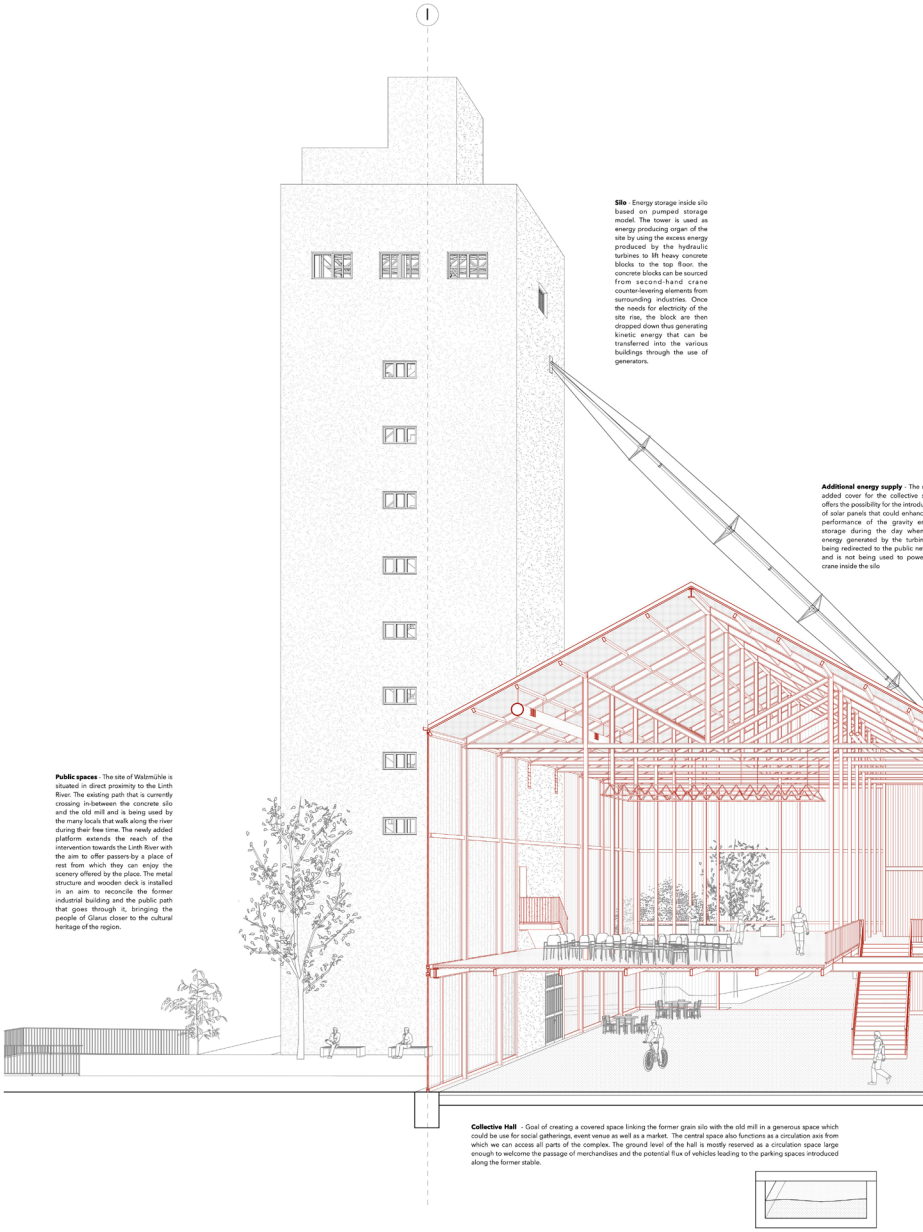
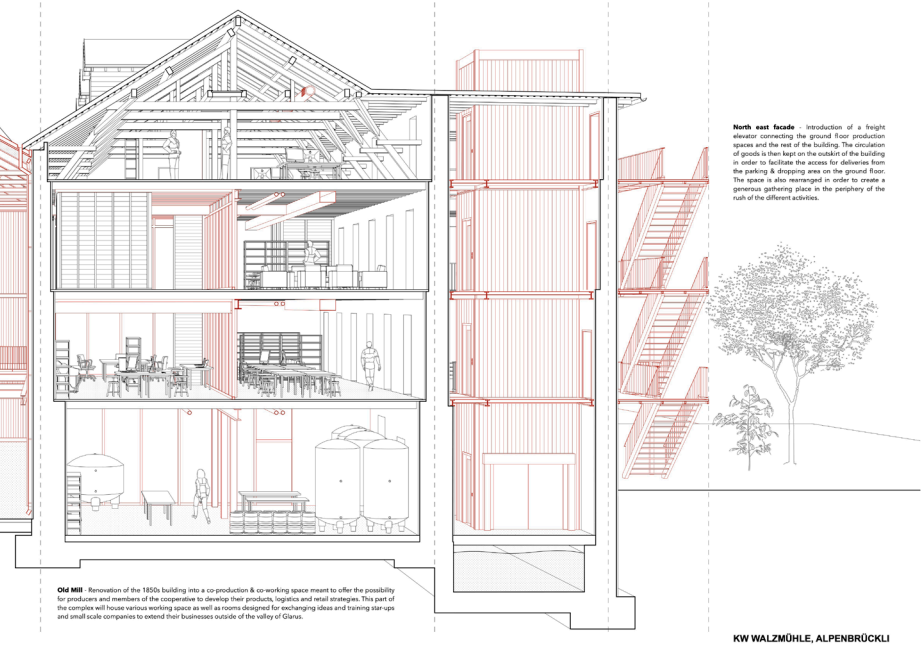


Fig.49. Perspective section

II III IV V

Roof - Preservation of the existing wooden roof structure inside of the old mill as a statement of the Swiss industrial building heritage of the region. The different wooden floors of the building are reinforced with the replacement of the main beam-pillar system by additional metallic elements in order to open up the space inside and create a continuity between the structure of the collective hall and the old mill. The intervention inside of the historic building is kept to a minimal degree in order to preserve to the best extent the industrial heritage character of the construction.



North east facade - Introduction of a freight elevator connecting the ground floor production spaces and the rest of the building. The circulation of goods is then kept on the outskirt of the building in order to facilitate the access for deliveries from the parking & dropping area on the ground floor. The space is also rearranged in order to create a generous gathering place in the periphery of the rush of the different activities.

Old Mill - Renovation of the 1850s building into a co-production & co-working space meant to offer the possibility for producers and members of the cooperative to develop their products, logistics and retail strategies. This part of the complex will house various working space as well as rooms designed for exchanging ideas and training star-ups and small scale companies to extend their businesses outside of the valley of Glarus.

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Perspective section

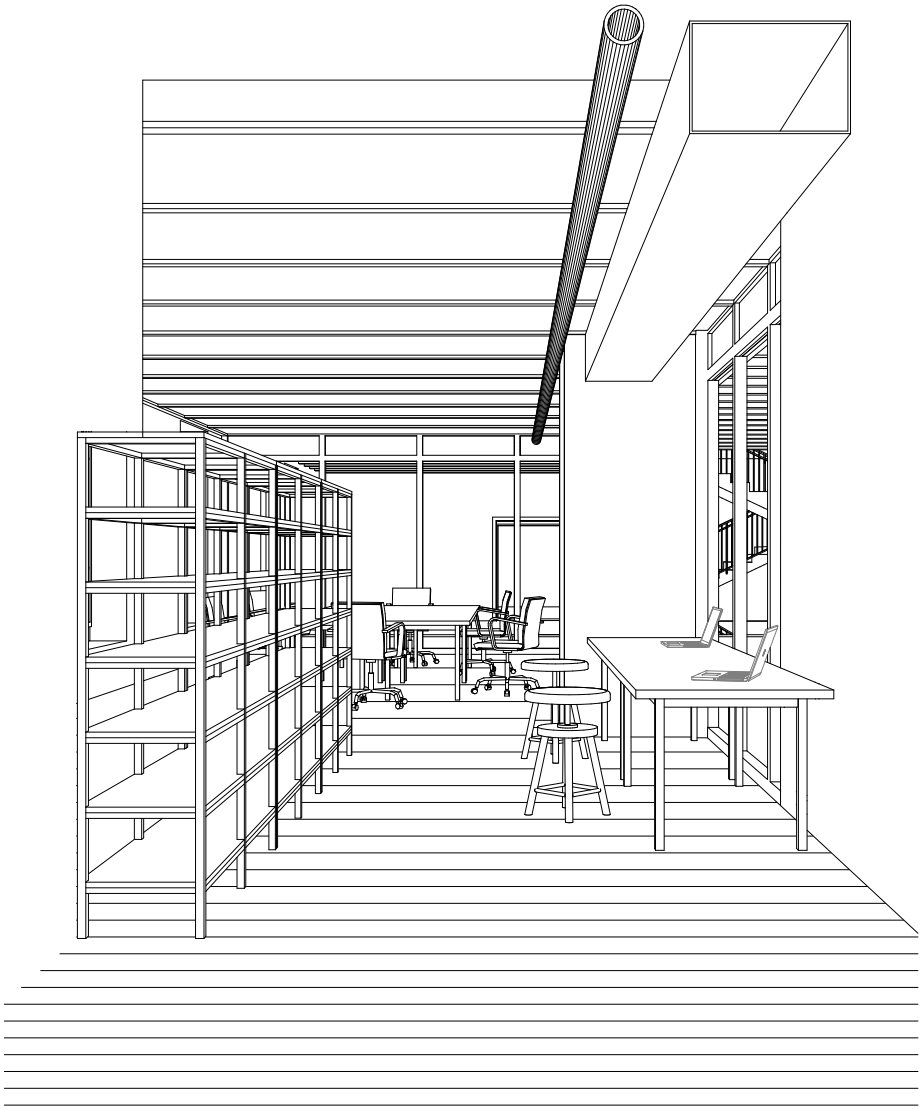
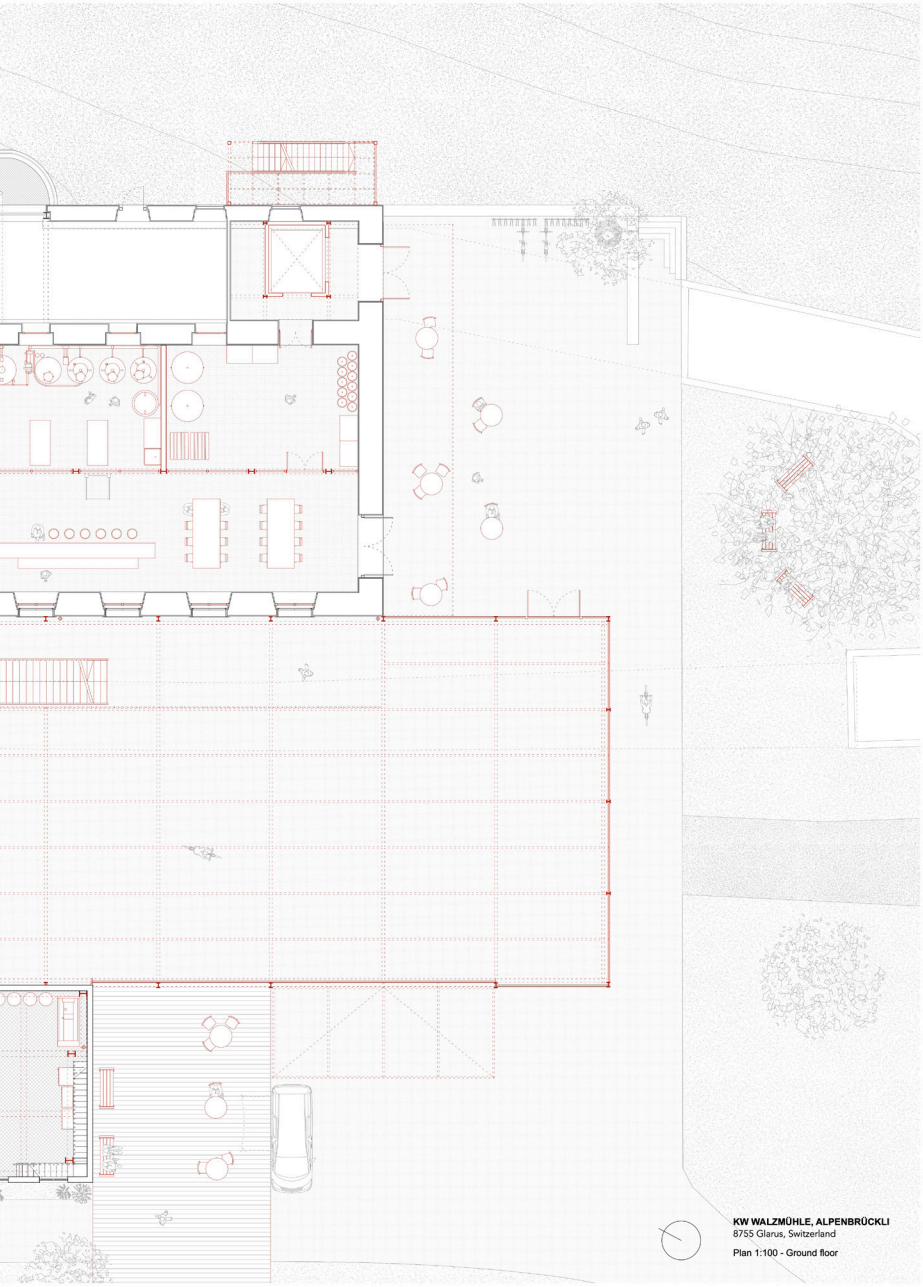


Fig.50. Interior view, coworking spaces

Fig. 51. Interior view, collective break area

Fig.52. Ground floor plan



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Plan 1:100 - Ground floor

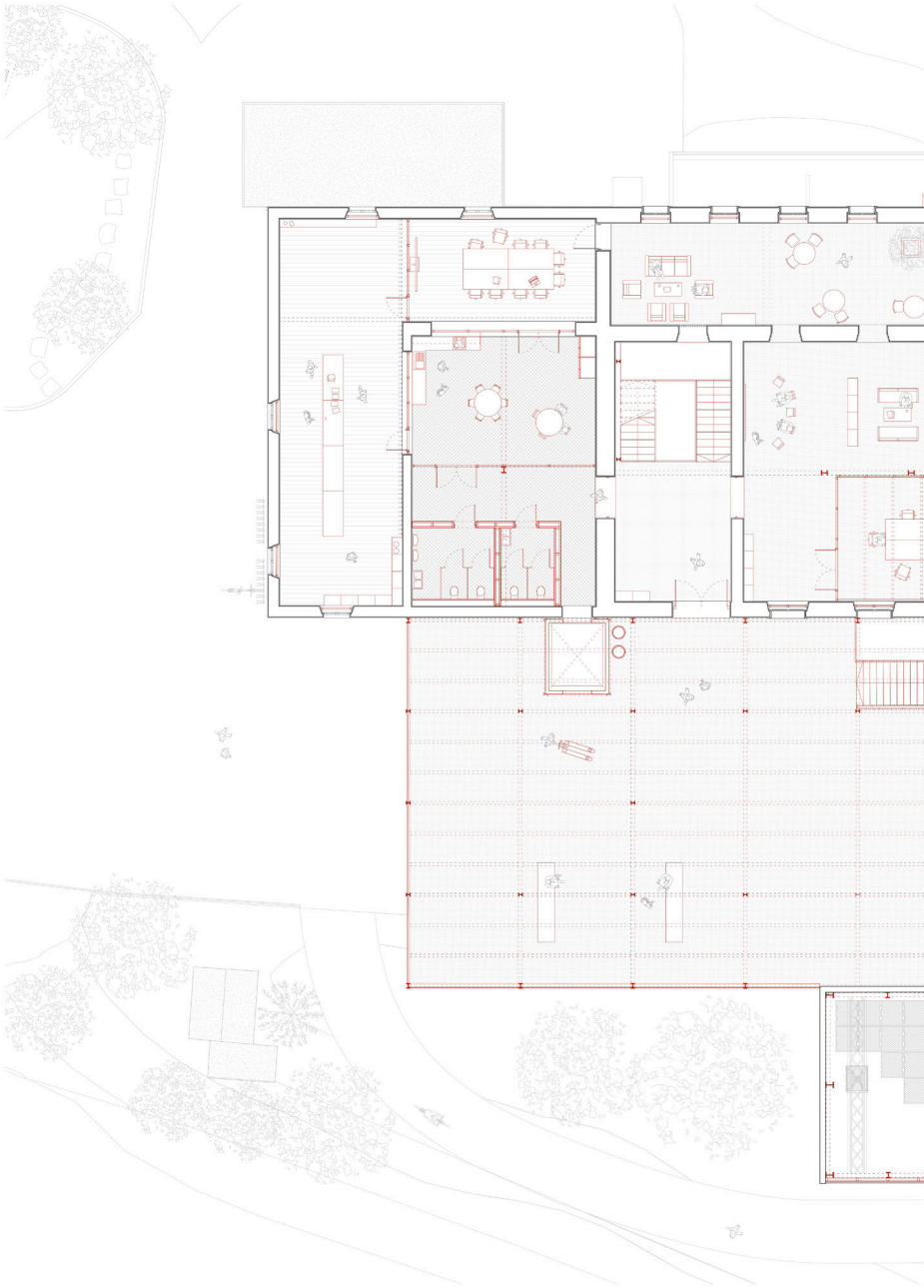
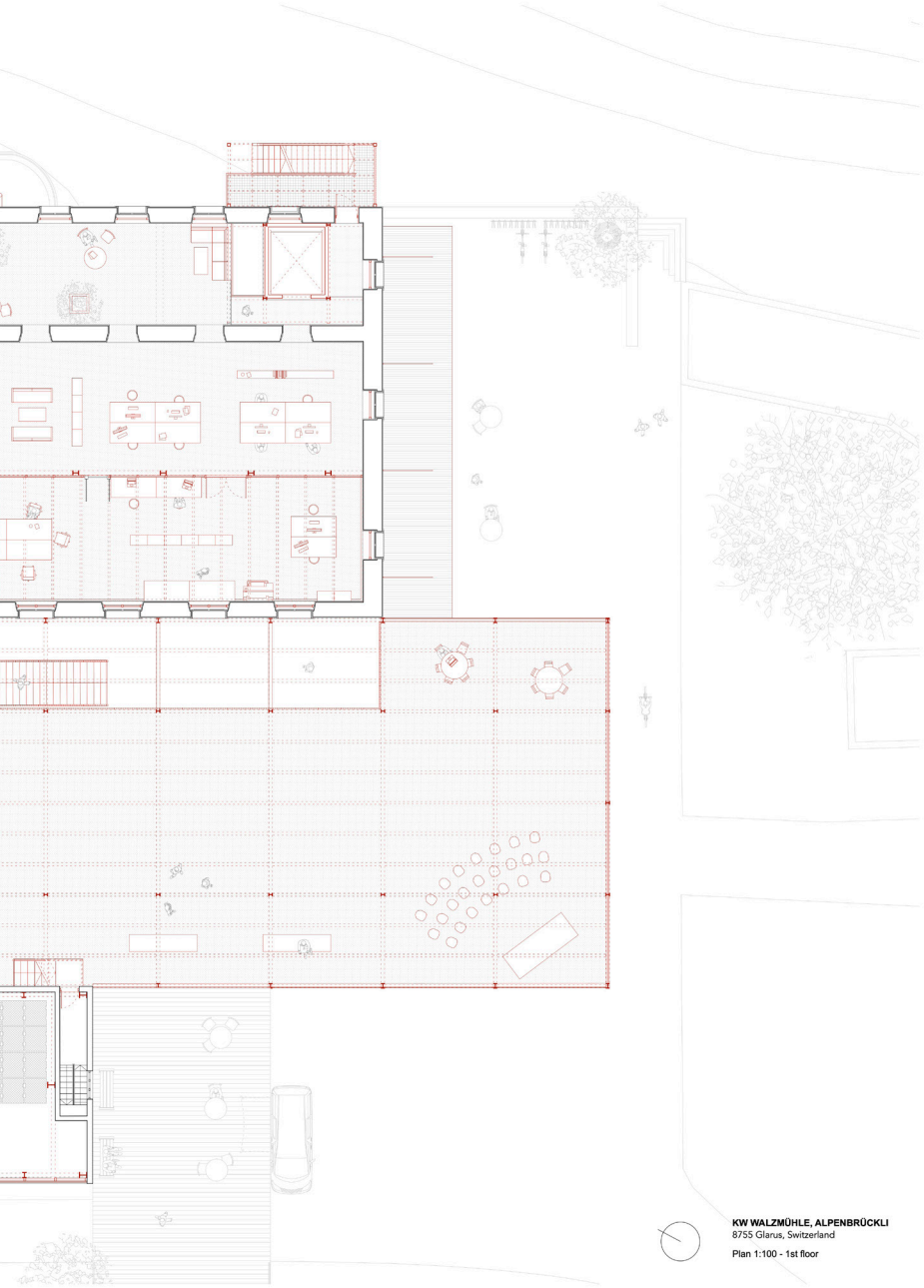


Fig.53. 1st floor plan



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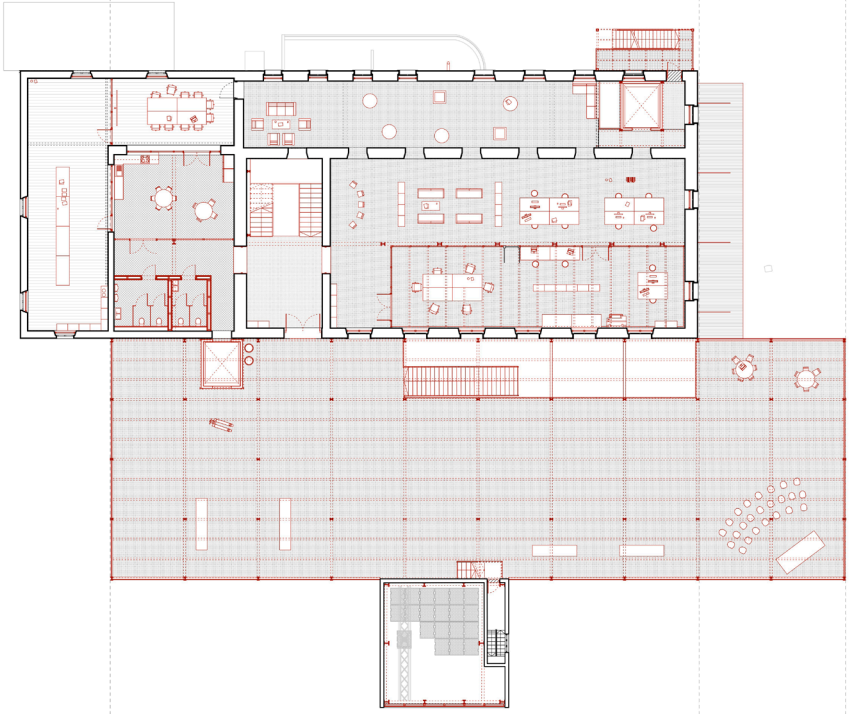
Plan 1:100 - 1st floor

Fig.54. Sythesis drawing



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Composition drawing - Sythesis

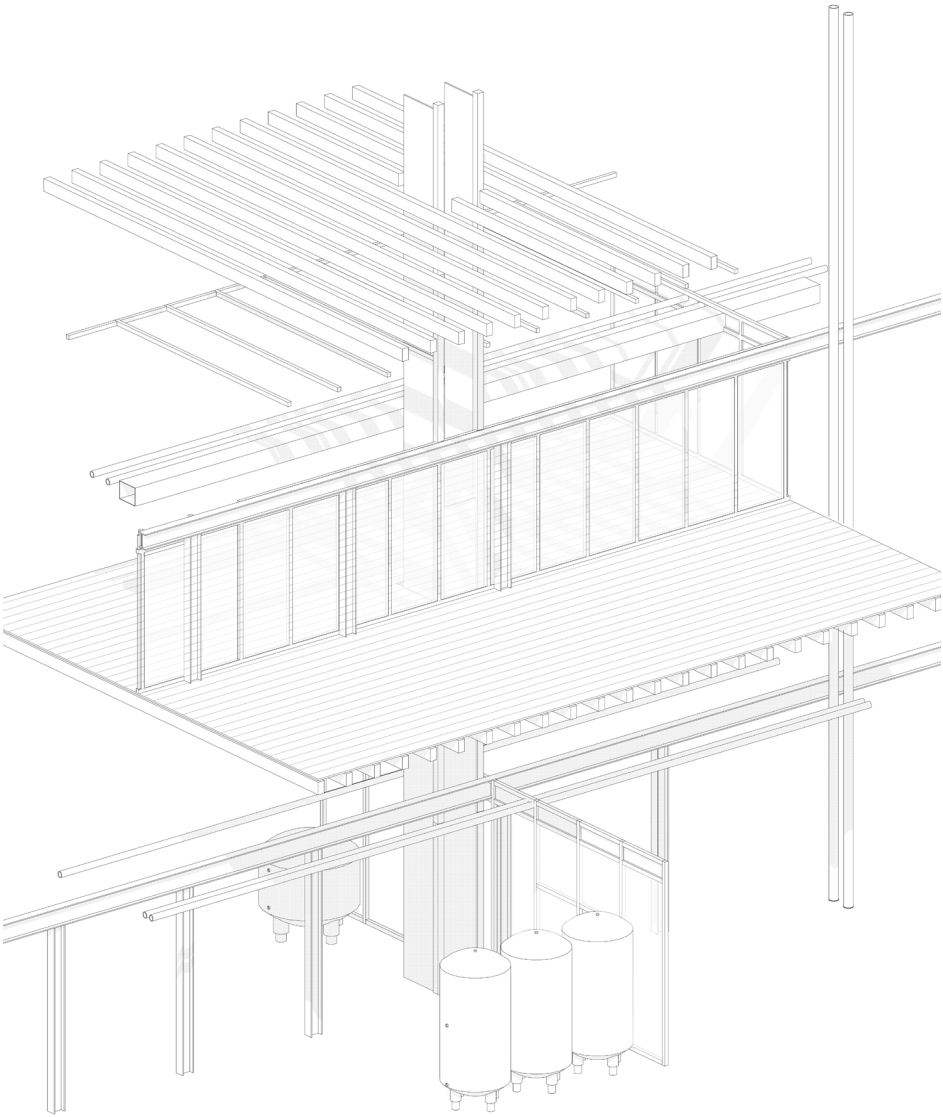

Fig.55. Axonometric detail of old mill intervention

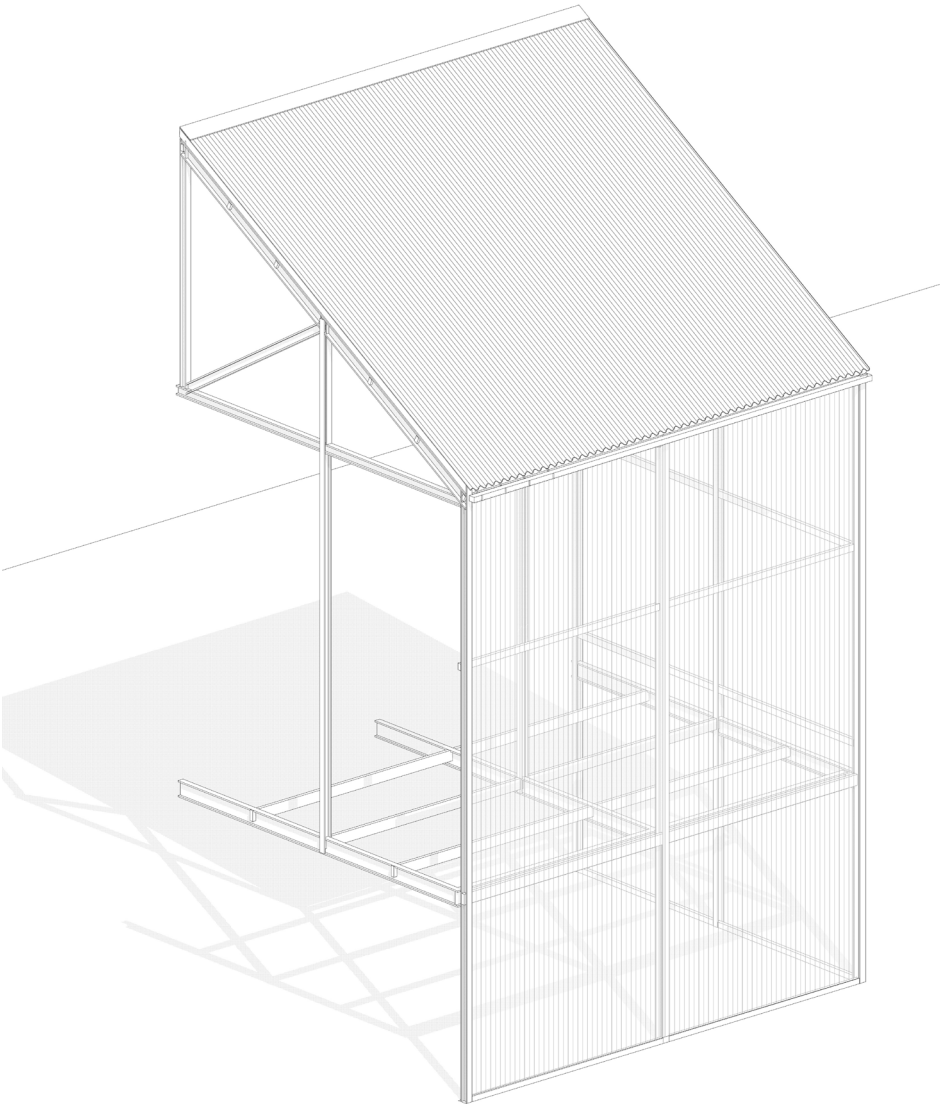

Fig.56. Axonometric detail of the Hall intervention

Fig.57. Perspective view of the south-west facade

Fig.58. Interior view of the main Hall

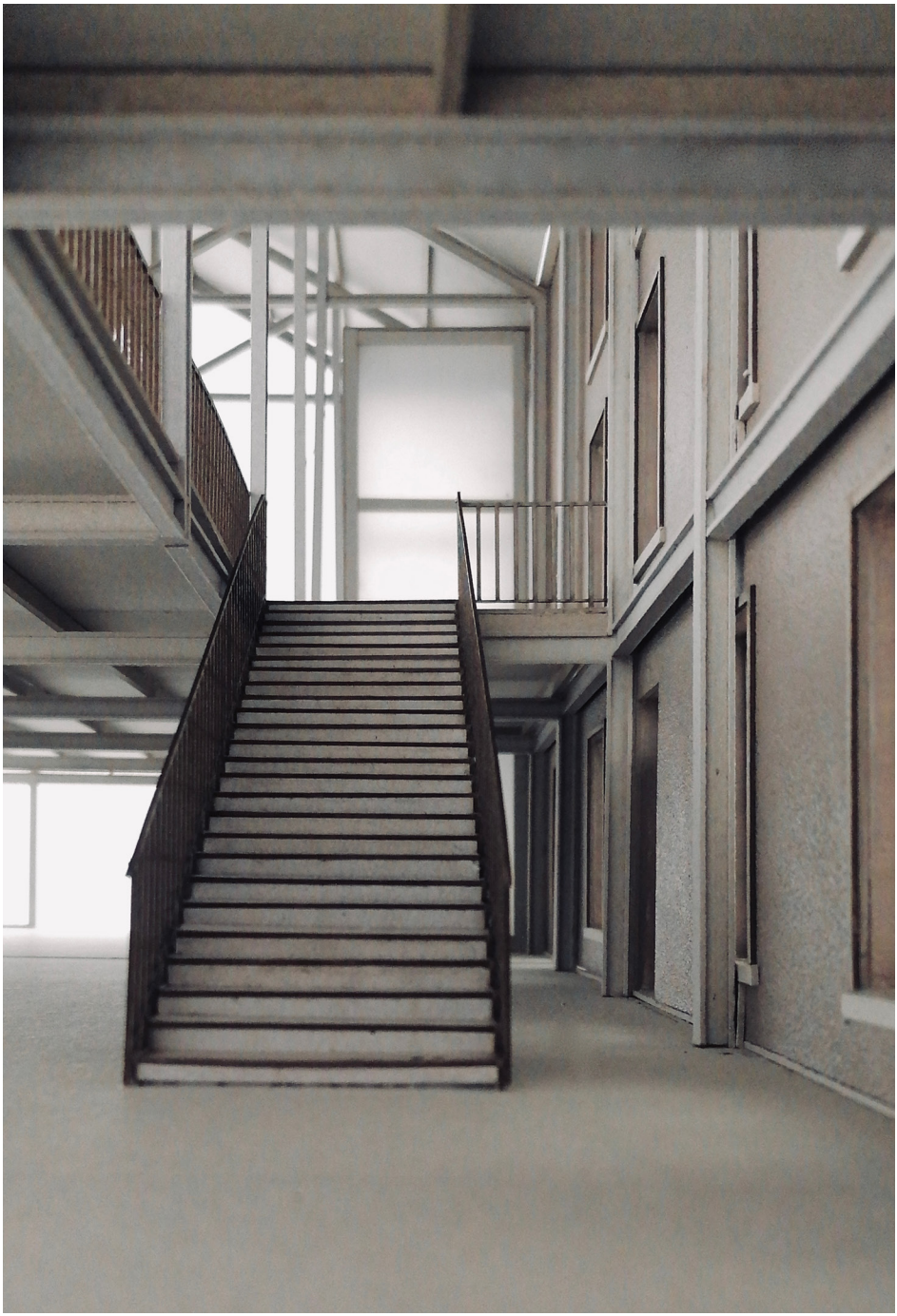

Fig.59. Interior view of the ground floor connexion of the hall

Fig.60. Interior view of the main Hall

Fig.61. Interior view of the main hall space

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