

This dissertation I want to dedicate to Enrique Suelves Montes, and all the other persons born in La Calle Mayor, 38, Peralta de Alcofea, Spain.

It is the synthesis of an intense research and debate over the course of one year and, luckily, also became the chance to get to know a very familiar context anew: To appreciate it not for orthodox clichés and images, but for what it really is; the natural and cultural object, shaped by its people, and vice-versa. The pragmatic attitude of these people can be an inspiration to make use of what's available, and only that.

This context - filled with history, values, culture, materials, and changes - was, however, also the chance to challenge to find answers to the theoretical questions architects nowadays are confronted with every day. Therefore, the small village of Peralta de Alcofea in the north of Spain, is not only the site for the design of a master graduate in Architecture, but an illustration of the necessity and difficulty of interweaving thinking and making. For that reason, this work consists of two parts, one theoretical the other an architectural design, which, while not explicitly referring to one another, are put into a close tension in this paper. They both seek practical answers for the serious questions raised in our field, but at the same time aim on breaking up this seriousness, so often answered with the dogmatic nature of idealized truth.

I want to thank Johannes Berry who instead of giving answers raised more questions. Having accompanied me over the last semesters, he encouraged me to not conform to any answer but to read instead the next article or book. I want to thank Johan Nielsen who, actually, helped me answer some of those questions raised and for his positive, pragmatic attitude, so fitting to this project's intentions. I also want to thank those other teachers that helped me shape my critical position over the last years such as Rolf Hughes, Steven Schenk and Harold Fallon.

I want to thank my parents who ensured our liberty by making our independence possible and encouraging us to follow our passion. I want to thank my grandparents who did the same, knowing I won't be with them.

I want to thank Mari for her hospitality every year, allowing this context to be a constant in my life. I want to thank Pili and Clemente for telling me about and showing me around the context. And I want to thank all the other siblings for tolerating and welcoming us every year anew.

I want to thank Carlos who always offered his help being on site, Aiken who helped me to materialize this work into a presentable form in the last hours, and I want to thank all my other friends who supported me over the course of the last years, and without whom I would have probably dropped out in the first semester of my academic career.

stoffwechsel of peralta de alcofea paths to contextuality

Confronted with the fragility of our planet's ecology, we are now starting to realize that the modern separation of human and nature was merely a wrong concept and that our neo-liberal hyper-consumerism had an immense impact on nature. At the same time the Western World is coping with the realization that its value system is not the only one prevalent in the globalized society.

In the book *Non-Referential Architecture*, Markus Breitschmid and Valerio Olgiati, take this multi-cultural society and the lack of common ideals as main reason to promote a non-referential architecture as only possible response: An architecture, legitimated solely from within, without being the vessel of any meaning coming from the outside – ergo reference-less. The concept of reference-lessness has become influential in actual architecture-theoretical debates.

Has contextuality as a modern concept lost its importance? Or how can contextuality be achieved when biases through socio-historical references are increasingly questioned?

The postmodernist interregnum failed to give an adequate answer to the complexity of the global context. Architects and designers are still struggling nowadays with the definition of what is contemporarily relevant for architecture. Nonetheless, contemporary practices all over the world are taking the new millennium and even the momentum of the imminent ecological disaster as opportunity to 'forage' this (not postmodern but) a modern world we're living in, in the search for new hybrid forms.

And also the debate between critical and post-critical thinkers is not preventing them from 'tracking' (in the means of the forgotten language to read and interpret animal tracks and other signs) inside the formally diverse spectrum of resulting architecture a common cause: Architecture as "a cultural product" but also as "discrete autonomous discipline" with the capacity to "effect" inside a network of both physical and meta-physical relations. Bruno Latour describes this in his Actor-Network Theory, K. Michael Hays illustrates it as "material nexus of jouissance and signification", and Graham Harman straightforwardly names this network the "Theory of Everything".

premise

context

context

material

material

construction

construction

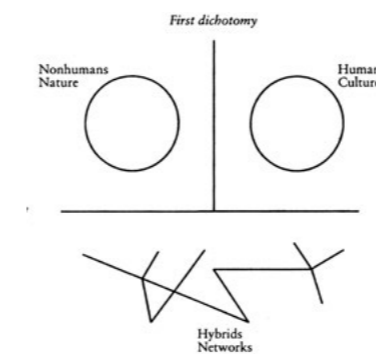
detail

conclusion**I. PREMISE**

Confronted with the fragility of our planet's ecology, we are now starting to realize that the modern separation of human and nature was merely a wrong concept and that our neo-liberal hyper-consumerism had an immense impact on nature. At the same time the Western World is coping with the realization that its value system is not the only one prevalent in the globalized society.

The Great Divide

These two issues, both major concerns of our times, are described by Bruno Latour in his book "We have never been modern" (1), calling the first one Great Internal Divide and the latter Great External Divide. As the title of the book already anticipates Latour's primary concern is the ending of the modern age, which obliges us Moderns – by which I mean Western Society – to re-orientate ourselves.



Eventually, we might have to realize that centuries of scientific purification, separating Nonhuman Nature from Human Culture (Ibid. pp.10-15), led us into the environmental crisis. And it is exactly this Great Internal Divide to which Latour points as the origin of the failure of the Modernist Project: The Modern people – priding themselves

as being objective, rational and realist – were unable to anticipate the impact of their activities and "progress" with the empirical instruments and equations that were at their disposal. The Modernist's self-understanding, of human independent from the "disenchanted" (Ibid, p.114) natural world they created, prevented them from seeing the destiny of their so-called 'progress'.

And it is this scientific primacy, which according to Latour, led the External Great Divide between Western Society and all the other cultures, since "We" with our invention of science understand nature as it is, while "They" mistake – in the words of Lévi-Strauss – "mere manifestations of physical determinism for messages", cultural signs (Ibid, pp.97-100):

***"scientific knowledge lies entirely outside culture. It is the transcendence of science - conflated with Nature - that makes it possible to relativize all cultures, theirs and ours alike."* – Bruno Latour (Ibid., p.98)**

And it is this transcendence of science which made us lose focus from the bigger network. A gap that must be bridged, according to Latour, by hybridization, such as the one Moravanszky in his book about materialism proposes:

***"If it is true that – as Latour claims – we never were modern, then it is high time to become modern and to bridge the gap between material research, with its philosophically unconsidered yet concrete technological results, and a theoretical debate for which these results are generally something to be ignored."* – Ákos Moravánszky (2)**

Epistemological Interregnum

The postmodernist interregnum failed to give an adequate answer to the complexity of this new global context. Architects and designers are still struggling nowadays with the finding of contemporary form and – worse even – with the naming of the contemporary relevant.

Functionalism, as architectural child of the Modern idea, shaped the cities of the 20th centuries, especially during the post-war period as effective response to the housing-crisis. The negative effects on the city were soon recognized, namely the formal impoverishment and loss of identity through serial production, the functional segregation of housing and productive activities which was not able to respond to the dynamics of the post-modern society, and not least the negative effects on the environment. Additionally, globalization and digital technologies led to an immense flux of cultures and information, which made any attempt to define a society's values and culture exponentially more complex. In fact, the static system-boundaries of modern thinking and acting weren't applicable anymore to the dynamic globalized society. (3)

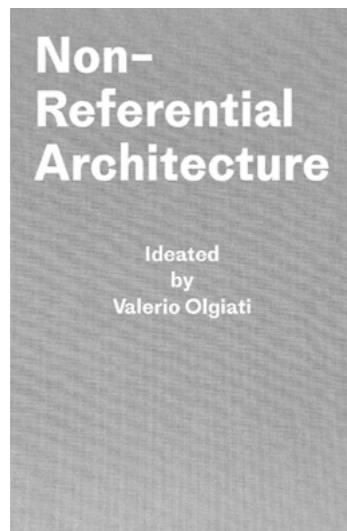
A diversity of architectural schools and styles appeared between the 50s and 80s as response to this developments: While Charles Moore's and Venturi's Postmodernism is using (intentionally or unintentionally) contradiction to provoke confusion, and the Deconstructivist movement questions the architecture through fragmentation and a pathological vocabulary, and the critical regionalists are hoping to instrumentalize regional materials & techniques to generate tactility without falling for pre-modern narratives, they all are attempting to fill out an epistemological vacu-

um with extra-architectural values borrowed from politics, sciences, or linguistics.

Reflecting how often during my studies I've been confronted with the CO2-emissions related to the construction industry, it seems quite predictable which new ideology we architects are going to fall for in high numbers.

Non-Referential Architecture

From the limited perspective of a western undergraduate in Architecture sometimes it might have seemed as if the theoretical debate took solely place in North America, while in Europe it was preferred to build than to write. This was at least the case until 2018 when for the first time me and my fellow students heard about these 141 pages of bold written text without (almost) any figures or citations in a minimalist baby-blue cover. The book written by two Swiss architects has the provocative title "Non-referential Architecture". (4)



The aim of the book is to guide architects to find an adequate architectural answer to the world we're living in. This world is, first, inhabited by an increasingly heterogeneous society due to global-

ization, which lacks common ideals and values (p.13) and therefore also common rules and guidelines (Ibid, p.18). Second, this world is the result of the disenchantment described by Bruno Latour. Since neither the church nor the state nor any other institution is able to hold together the society under one narrative, this age is supposedly characterized by the impossibility to believe in anything – no matter if religious, scientific, political, or artistic (Ibid, p.18).

For the two authors of the book the response can therefore only be a Non-Referential Architecture: An architecture, legitimated solely from within, without being the vessel of any meaning coming from extra-architectural sources – ergo reference-less. Architecture as a symbol of something existing outside of architecture, was possible when common ideals existed, but nowadays it only engages those educated about the meaning referred to and has therefore no longer a general validity (Ibid, p.14). Worse even, is the effect of Referential Architecture to "trap" our imagination in the reference's theme, hindering imagination regarding "the world at large" (Ibid, p.25)

Having no fixed meaning, this new world demands from each person "to constantly align themselves with the world anew" (Ibid, p.15). And architecture has the important task to help orientating through a "mind-generating act of conceiving" – meaning that architecture must stimulate imagination and challenge the human to question her or his being in the world. This orientation inside the 'original context' is further explored in the next chapter of this paper.

This loss of common values has already been recognized, lamented,

and critically responded to by Post-modern movements. Non-Referential Architecture, though, claims to be the first architectural thesis to recognize this as an opportunity: "in no other previous age did architecture have to be as purely architectonic". With architectonic Olgiati and Breitschmid mean everything belonging to the spatial realm exclusive to the subject of architecture, such as "conception, construction, and building of rooms, [...] scenography and movements through rooms" (Ibid, p.14). It is those spatial aspects that, when legitimately applied alone, already have the capacity to be sense-making: "Rooms trigger both an experience of space as well as a common human yearning to make sense out of that basic experience". (Ibid, p.14) It is this "subjective universality" (Ibid, p.26) of experience of space and form which gives (non-referential) architecture sense.

So far, the deduction of authors seems logical and correct and would probably be confirmed by most theorists nowadays, even if the book aims for a simple language and is dedicated to architectural practitioners, not theorists. However, there can also be found some contradictions and uncertainties regarding the notions of 'context' and 'authorship' both subjects of interest of this paper. The latter is granted to every human being, since our "aligning with the world" means simultaneously "to build our [own] world" (Ibid, p.15) referring to our creative ability to form our life-context and the expanded notion of 'artist' in philosophy. Or to put it in the words credited to German artist Joseph Beuys:

"Every human being is an artist, a freedom being, called to participate in

transforming and reshaping the conditions, thinking and structures that shape and inform our lives." - Joseph Beuys

However, I'm questioning this argumentation: One could argue, that if the Non-Referential World is as universal as the authors proclaim, then shouldn't this new episteme arrive inevitably in the common society in given time. The disbelief in the capacity of others than the Author-Architect, to see the ultimate truth, seems rather to be a product of what Bruno Latour describes as Westerners' tendency to "think they are radically different from other" (5). As a young prospecting architect of a new generation, I am questioning the role of the architect in our near future, which is why the paradoxical notion of 'Authorship' given in the book "Non-Referential Architecture" will be further investigated in Chapter IV of this paper.

Context, another essential theme of this work, is also mentioned – albeit briefly – in a short retrospective: It is described as a phenomenon that appeared over the last decades in Architectural practice and is now an omnipresent ethical demand. But in the same sentence it is devaluated almost ironically as "ubiquitous" and "paramount" "morality" (6). Why is context not further investigated (or at least criticized) at this point? Because as a mind-child of Postmodernism it doesn't belong in the Non-Referential World? Or because its omnipresence in the Architectural world – even in practices that haven't yet incorporated the non-referential shift and approach it with wrong means – makes it less relevant? Or just because it would hurt the straight-forward narrative of this book?

This paper questions if Contextuality couldn't be an a-modern rather than post-modern response, and therefore be still relevant – maybe even a valuable design-principle for the Non-Referential 'Projection' of Architecture.

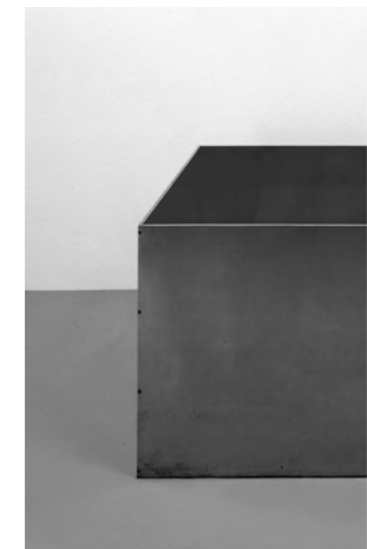
As last and most important critical reaction to this non-referential 'manual', it seems reasonable to ask ourselves if it is even possible to create something non-referential – even if we agree with the reasoning about socio-cultural meaning being obsolete. There must be a reason the book is not called "Non-Semantic Architecture", or not? The second chapter of the book is called "Genealogy of Architecture" and already reveals that the study of historical references doesn't seem to be a tabu, even for the most talented 'Architect-Authors'. However, this methodology proposed in the book, is, not surprisingly, focusing solely on spatial elements and ordering systems of those references, disregarding their social, political, economic, and cultural motifs.

Attempt to erase the Socio-Cultural

This leaves us with the question if at least it is possible to liberate the architectural object from any socio-cultural semantics. As mentioned in the book itself, attempts have been made, especially during the Postmodern era. But as critique or extension they are all reactions to the Modernist ideology and therefore destined to fail their liberation. (Ibid, pp.19-20) Recognizing the cultural complexities, the process of building is embedded in, it might make sense, to start looking for solutions to this quest in the art world, which – one could argue – has less socio-economic constraints. Ákos Moravánszky

does so in the book "Metamorphosis" (7), when – next to the phenomenological philosopher Heidegger and the critical-regionalist architect Peter Zumthor – he lists the already mentioned Joseph Beuys and the Minimalists Donald Judd and Robert Morris, all trying to erase the dualistic separation between matter and spirit.

The two minimalist artists try to eradicate any immaterial ideas from their art pieces altogether, meaning that this by Donald Judd titled "Specific Object" holds no semantic, symbolic, socio-cultural connotation. In their attempt to achieve this ultimate reference-lessness of this Specific Object they used solely industrial materials such as plywood and concrete, which show no sign of "growth, deposits, and organic processes". However, Moravánszky is correct, when he points out that even these attempts cannot escape their process of enactment: Even when using those materials in the most minimalist attitude, "anonymity and serial production also have to be recognized as qualities" relating them to their origin, making them Cultural Objects of an industrialized society. (Ibid, pp.55-56)



So, if even the Specific Object, created by these talented and determined artist, cannot get rid of its last bit cultural meaning related to its materialist existence, then we must accept our incapacity as humans to create anything non-cultural, let it alone be an Architectural Object, with all its socio-economic, physical, climatic, expressive etc. relations to its context and the 'world at large'.

This paper questions the meaning of these relations for the Contemporary Practice of Architecture. Following the deduction of this first chapter, but also the Materialist Momentum of our times (some might call fashion but, actually, is triggered by the 'existential crises' described in the introduction), and following also a certain intuition as architect, this paper will more than once take in a materialist perspective. Especially, Chapter III is dedicated to the exploration of material use as an architectonic tool. But first we are going to explore the prevalence of contextuality in the next Chapter.

1 Latour, B. (2012). *We Have Never Been Modern*. Harvard University Press.

2 Moravánszky, A. (2018). *Metamorphism: Material Change in Architecture*. Birkhäuser. p.57

3 Fischer, G., Fromm, L., Gruber, R., Gert Kähler and Klaus-Dieter Weiß (1987). *Abschied von der Postmoderne*. Birkhäuser.

4 Olgiati V. and Breitschmid, M. (2018). *Nicht-Referenzielle Architektur*. Basel] Simonett & Baer.

5 Latour, B. (2012). *We Have Never Been Modern*. Harvard University Press. p.114

6 Olgiati V. and Breitschmid, M. (2018). *Nicht-Referenzielle Architektur*. Basel] Simonett & Baer. p.31

7 Moravánszky, A. (2018). *Metamorphism: Material Change in Architecture*. Birkhäuser.



The house, my father and his six siblings were born, was recently demolished, to avoid any damage of adjacent buildings. The house was constructed in the traditional hybrid manner, exterior walls being massive out of bricks and adobe, while partly it was reinforced with a skeleton of bricks, stones and - as can be seen on this picture - some beams which consisted basically of entire tree trunks.

Two of the latter as well as the blue self-crafted truss work pillar, visible on the right of the photo, have been preserved.

stoffwechsel of peralta de alcofea

The village of interest of this thesis is located inside the county of (comarca de) Somontano de Barbastro. It belongs to the Province of Huesca, which is the northernmost territory of the Autonomous Community of Aragon – therefore also named Alto Aragon.

As its latin name already indicates, is situated beneath the last mountain chain formed by the orogenesis of the Pyrenees – south of the Sierras Exteriores. It is therefore part of the relatively flat topography forming the Cuenca del Ebro.

The visible relief of the area of interest, laying south of the Pre-Pyrenees and north of the river Ebro, was mostly shaped by the fluvial accumulation (up to 8 km of thickness) of sediments coming from the Pyrenees during the Cenozoic era; and then again remodeled to the current state by the erosive processes of rivers and streams during the Quaternary period.

The climate is characterized by cold winters with persistent fog and some days with frost, rainy springs and very hot and dry summers. The yearly intermediate temperature is approximately 15°C, while the temperatures of this climate, which could be called continental, oscillates strongly during the time of the day and the year. Also the winds are quite strong canalized by the Sierra de Guara when they come cold and dry from north-east, or when coming from the Pyrenees' north (cierzo) and humid and warm when they come from south-eastern Mediterranean sea (bochorno). The usual precipitation is ca 440 mm.

This is not sufficient for growing much more than cereals. However, the dams built in the Pyrenees by the Frano-regime and former governments, as well as the canal-infrastructure, allow for extensive plantation of high-performative agriculture, such as corn and pig-farms. This animal-farming is the main economy settled in this rural area. The environmental consequences of this monocultural agriculture with over-fertilization are desertation as well as contamination of ground-water and rivers.

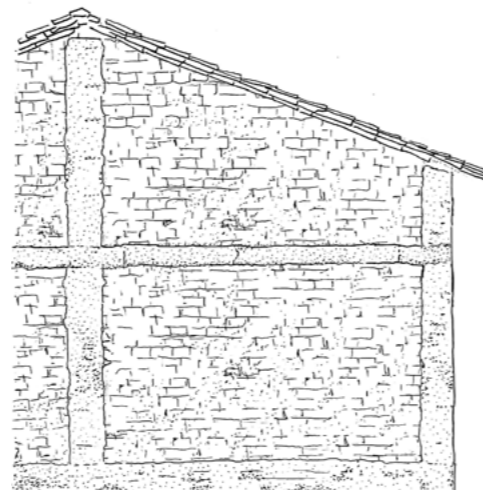
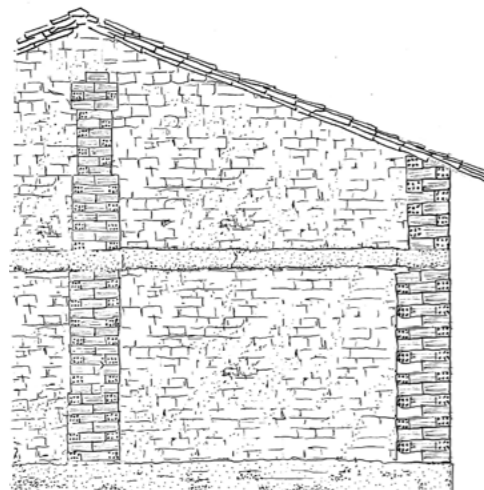
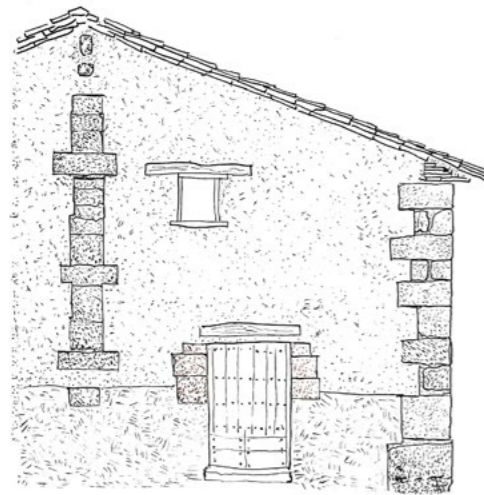
The preserved architecture of the Somontano can hardly be described as thoroughly planned nor is it spontaneous architecture. Over the centuries elements from noble architecture are being adapted to represent the prestige respectively to what one could afford. At the same time a certain austere pragmatism and aesthetic unites the results into a regional style, despite its diverse use of materials. By doing so the resulting architecture is not only witness of the oscillating prosperity and distribution of power in history, but also witness of a certain type of living and thinking, characteristic to the inhabitants of this region till nowadays.

Even if houses have been conserved that are 200 years old, some even 400, the appearance of modern materials has become visible here almost stronger than anywhere else. Sometimes, it feels hard to find those traditional materials that have been used for centuries. Nonetheless, we could ask ourselves if this "new" architecture, is really destroying the aesthetics of this urban landscape, or more importantly, if it is not representing the people living here anymore.

In the book 'Architecture – From Prehistory to Climate Emergency' Barnabas Calder analyzes and reads the history of architecture with an emphasis on the use of energy as indicator for a society, its world-view and its distribution of power. In the first chapter he takes the Dogon and their architecture in Mali as exemplary Farming Society to explain what the fundamental principles of such an economy.

The comparison of Aragon with the Dogon or even Uruk might seem far-fetched. But all the described principles of a Farming Society can also be observed in the Case-Study, since its economy and landscape have throughout history been shaped by agriculture and livestock farming. Even nowadays almost half of the surface of Aragon is agriculturally exploded. Even the architecture of the typical Aragonese house represents a productive and pragmatic Farming-Society, while other activities (apart from religion) and the display of prestige had only a limited importance.

Since the beginning of the Reconquista the royal properties of reconquered land have been distributed between a growing number of privileged persons, to assure that the extensive and sparsely populated area holds up to counter attacks. And even if for centuries the feudal system resulted in a clearly privileged minority and a bigger hard-working, suffering population, this diversification of agricultural properties continued over the centuries when powerful families acquired and inherited them further. A development which can be observed in the casa aragonesa when elements of prestigious palaces are adopted by a less wealthy population. This trend will continue till the middle of the 20th century when the development of agricultural technology will change the structure of this still rural society.



stoffwechsel of peralta de alcofea

Antonio Naval Mas is a historian and architect with specialization in heritage and is native to our context. With his (for the heritage of this region immensely valuable) book 'Arquitectura Domestica del Somontano en el Alto Aragon' he created an extensive analysis of the unique architecture of the region, using meticulous etymological, archeological as well as anthropological findings, connecting the natural and built environment to the cultural identity and character of the local inhabitants.

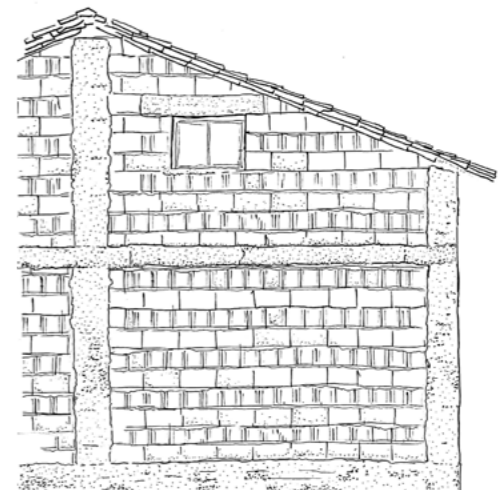
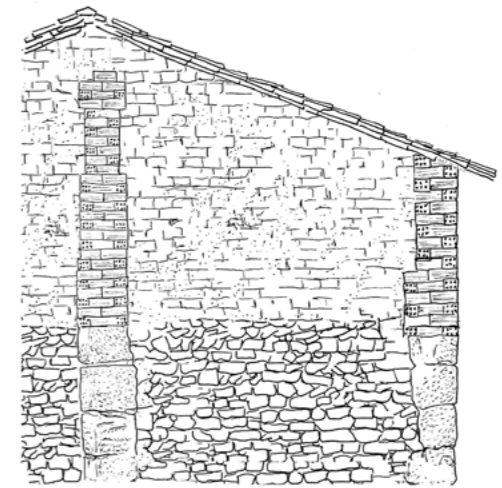
He recognizes the hidden value of this anonymous - but not vernacular architecture - by making continuous use of historic know-how while adapting it to their changing needs and availability of materials:

"The people of the Somontano at all times needed to renew their habitat and adapt it to the demands of their way of living and working and this they achieved with integrating achievements that surpassed in visual plasticity the constructions of other regions of our country by assuming forms and solutions that had been outlined by previous generations without the fear to adapt them to their tastes and needs. The result is an optimization that without interruption was updated continuously till recent days." (p.8, own translation)

However, seeing how this environment changes, he laments recent developments, through an uncontrolled suburban agricultural construction, introduction of exotic ornaments and styles, as well as the introduction of modern materials:

"With the sum of the individualized actions in each village, the panoramic profile they presented and their secular insertion into the geographic landscape have been altered. There are many causes that have ceased to offer the mimetic connection that blended [the architecture] in tones and textures with the fields and lands in which they were situated[...]. It is perhaps the most ungrateful transformation of our natural landscape and one of the most regrettable losses of the visual identity of our villages. [...] In the surroundings of a good part of them, large warehouses of prefabricated materials have been erected, sometimes huge, which in no way coordinate with their surroundings. [...]" (pp.273-274, own translation)

At this point, one could question if recent developments are really so different from the historical ones Naval Mas values so much, or if they are not the result of the same pragmatism in a new world?



context

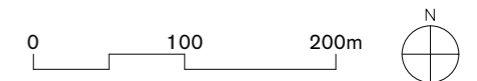
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Peralta de Alcofea, Provincia de Huesca, Spain 1:5000





context

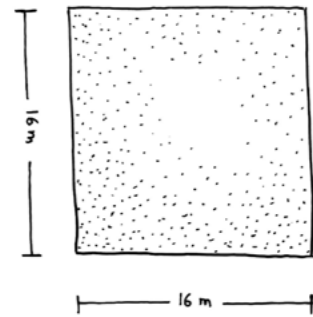
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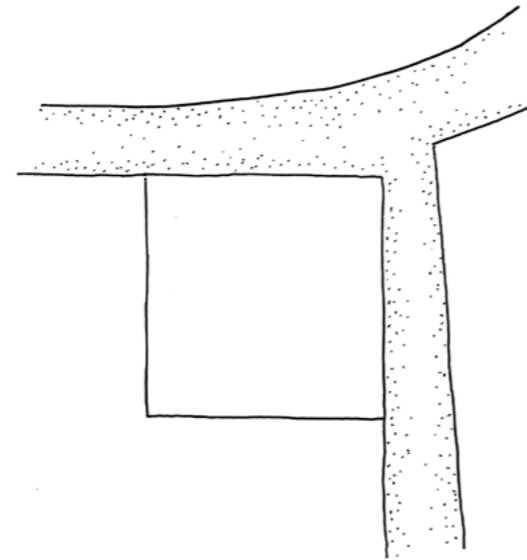
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Peralta de Alcofea, Provincia de Huesca 1:1000

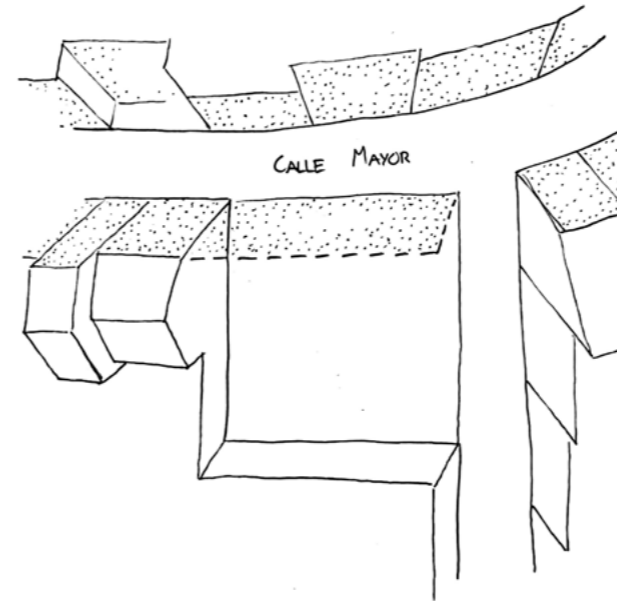




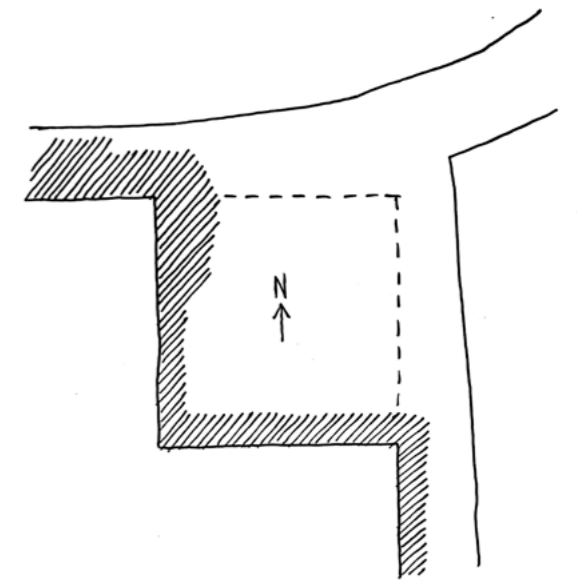
The plot is almost a square 16x16 meters. More space than needed for the program.



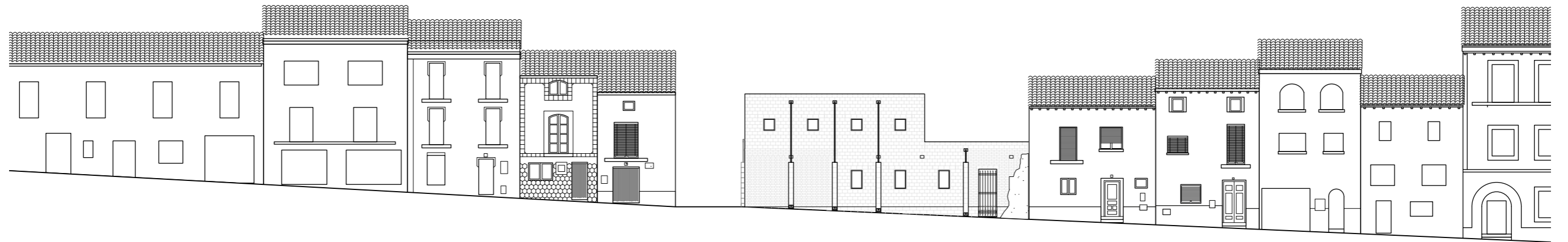
Furthermore, the plot is situated on a corner between two streets. A symmetrical placement on the corner could be considered, to mark the corner.



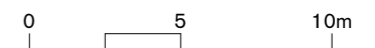
However, is there a clear hierarchy between the two streets, since one is the village's main street, demanding almost to close again the continuous line of facades.



The orientation can further be differentiated due to the exposition to the sun and height of adjacent constructions. A clear opportunity exists, of creating a sunny garden on the southern half of the plot.



Elevation Nord, along Calle Mayor 1:250





My aunt, retired, owns the plot and plans on building a house. She lives in a smaller city nearby. But as is usual, a lot of Spanish people follow the wish to escape the hectic city life and want to return to the countryside, from which the majority of the population emigrated in the last century. This phenomenon is called Neoruralismo.

The house must be able to house her and her husband the entire year. But typically the population of the village duplicates during the summer months, due to holidays. The new house shall be able to respond to this, by allowing to host a considerable amount of visitors during the summer. Furtheron, it has to be climatically adapted to the continental climate with the extreme temperature fluctuations both during the year and during the time of the day.

II. CONTEXT

At the beginning of this paper the leading question about contextuality is raised. Despite any criticism, Olgiati and Breitschmitt are correct, when mentioning the imprudent almost generic use of the word “contextuality” (1), as if a clear definition would exist and as if the knowledge about this complex subject would be self-evident. However, a certain seminal literature exists, that every architect has heard about, which deals with this subject among other things.

This chapter aims on filling this gap with a short and non-exhaustive retrospective about how the subject of contextuality appeared and how it was dealt with over the last century in a non-chronological manner, but rather dissecting for didactic reasons this so generically used vocabulary into three (probably too simplified) dimensions of contextuality, in the hope to approximate the complexity in a comprehensible way. The first dimension is the spatial one, dealing with the impact of form on the context and its flow of voids, introducing the tool of the figure-ground diagram borrowed from the Gestalt-psychology. The second dimension is the cultural one dealing with the challenge of creating architecture for a fast-changing society in a context that’s semantically filled with historical, social and political premises. The last dimension is dealing with the human perception when creating a habitat in the infinite chaos of nature, and analyses examples in how far this phenomenology was materialised in the architectural practice. Nonetheless, all three dimensions are very much interrelated and cannot be applied practically in an isolated manner.

Figure-Ground Diagrams (Spatial Contextuality)

The Plan of Rome made by Giovanni Battista Nolli has found special interest, in the urbanistic theory of the 20th century. The plan renders private spaces and buildings as black solids while the public space (in white) is represented as continuous void flowing through the medieval city, even into the publicly accessible churches, which were commonplace for social encounter and activities. Instead of emphasizing the individuality of buildings like in most maps so far, this innovative map shows the city as a unifying, organic whole. It is exactly this contextual view of a city which critiques of modernism seem to miss in the Modern City as materialized for example in Brasilia or in the dystopic design for Paris by Corbusier.



The figure-ground diagram, the Nolli-Map is based on, is only one of many laws, by which the human senses interact and the human mind orders its physical surroundings. These laws were discovered in the early 20th century and defined by the psychological school now commonly known as Gestalt psychology. While human perception of their surroundings and order have been questioned throughout

history – and while also the Modernist Architects were probably intuitively aware of these principles while shaping the Modern City – it is interesting that phenomenological argumentations appeared in the spatial and artistic realms simultaneously to the beginning of the philosophical school.

So was the figure-ground diagram for example the preferable tool of Camillo Sitte (1) to analyse and compare the public space of the medieval and modern city, regretting that the formal impoverishment of these spaces and the vanishing relationship between plaza and buildings led also to a functional impoverishment of public space:

“During the Middle Ages and Renaissance public squares were often used for practical purposes, and that they formed an entirety with the buildings which enclosed them. Today they serve at best as places for stationing vehicles, and they have no relation to the buildings which dominate them.” - Camillo Sitte (Ibid, p.24)

Another critique is the additive and non-contextual way of designing, also criticized by Coline Rowe and even by Valerio Olgiati: By not understanding the city as whole and leaving the block, street, city out of sight, rest-spaces are left over generating no further qualities and obstructing even- by not considering the gestalt-psychological effects – the perception of the city as a whole organism.

“Modern city building completely reverses the proper relationship between built up area and open space. In former times the open spaces - streets and plazas - de-

signed to have an enclosed character for a definite effect. Today we normally begin by parcelling out building sites, and whatever is left over is turned unto streets and plazas.” (Ibid, p.55)

The same observation is made by Colin Rowe and Fred Koetter in their book “Collage City” (3) where they also use Gestalt-psychology and the figure-ground-diagram as research-tool. In fact they see a potential in the tool that goes beyond Sitté’s analytical comparison of 2-dimensional, simplified archaeological artifacts of cities: Wiesbaden’s figure-ground plan becomes a diagram for the a reconciliation and coexistence of the historical and modern city. With various figure-ground plan comparisons of historical examples (some built others not) the implications of the two prevalent ideologies of designing a city are analysed and evaluated.



On one side there is the abstract cartasian grid as imagined by Superstudio, eliminating any formal structure of power in favor of a uniform “non-oppressive egalitarianism”. On the contrary, Disney World as analysed by Venturi, attempts to “furnish the resulting vacuum” through a commercial exploitation of the needs. (Ibid, p.44)

However, both examples seem to relativise themselves, when brought to life as actual attempts trying to compensate their deficiencies: While the quantification through multiplication of the traditional city during the 18th century in the suburbs led to “disorientation by repetition” of the ever-same facades and streets, it is in the medieval cities’ core (here exemplified through the plan of Parma) where we can find the virtues of such an organically grown “solid and continuous matrix” (Ibid, p.62) where specific situations generate legibility, while at the same time the preservation of the continuum allows for transformation to changing needs. On the other hand, “the spatial continuum [as imagined for the Modern City] can only facilitate the demands of freedom, nature and spirit” (Ibid, p.58)) when it recognizes its “dilemma of the free-standing building” (Ibid, p.60) unable to define space, and contradicts its initial idea through “some notions of centrality and hierarchy” as can be seen in Le Corbusier’s project for Saint-Dié.

It is therefore, that Rowe and Koetter propose the Collage City as an alternative, which is aware of the perceptual performances of Gestalt-psychology, such as the object’s need for a sort of ground or frame of reference to be perceived and appreciated (Ibid, p.64): Aware of the ambiguous instable percep-

“Neither object nor space fixation are, in themselves, any longer representative of valuable attitudes. The one may, indeed, characterize the ‘new’ city and the other the old; but, if these are situations which must be transcended rather than emulated, the situation to be hoped for should be recognized as one in which both buildings and spaces exist in an equality of sustained debate. A debate in which victory consists in each component emerging undefeated, the imagined condition is a type of solid-void dialectic which might allow for the joint existence of the overtly planned and the genuinely unplanned, of the set-piece and the accident, of the public and the private, of the state and the individual.” (Ibid, p.83)

tion of the two states of Rubin’s vase (either a black vase or two white faces), which cannot coexist at the same time but between which the human mind can switch easily, the Collage City makes analogously use of this so called Multistability: The poché, defined as the black imprint representing walls and pillars on the floorplan (= itself a figure-ground diagram) of a massive structure such like a church, were therefore scaled up to the urban scale:

“a building itself may become a type of poché, for certain purposes a solid assisting the legibility of adjacent spaces. And thus, for instance, such buildings as the Palazzo Borghese [in Rome] may be taken as types if habitable poché which articulate the transition of external voids.” - Rowe and Koetter (Ibid, p.79)

This means that a building itself, when designed accordingly, could gain the Multistability and be perceived both as autonomous entity as well as articulate the transition of negative spaces such as streets and plazas. And the hypothesis made is, that – recognizing the value of both methods and without discarding any extremes of the spectrum – the modern city needed to regain a balance between

space-fixation and object-fixation, since the latter was obviously used without exception to emphasize the reconstructed Modern society arising from the ashes of the old world – or as can be seen in Corbusier’s dystopic urban proposal for Paris, out of the ashes of the Marais.



Collective Memory (Cultural Contextuality)

As the example of Corbusier’s proposal for Paris shows the contextual reception is not only dependent on spatiality and formalism but also on the semantics and the socio-political implications of form. Most aware of this was Aldo Rossi whose seminal book “L’architettura della città” or “The architecture of the city” (4) was published in 1966, twelve years before Collage City. Rossi reasons that the observation and the empirical study of the built environment, exemplify the cities of Athens, Rome and Paris, is according to him the ideal method to understand the complexity of the city, since he sees in the materialized form the manifestation of a collective life, inseparable from another.

Rossi describes the city not only as “the sum of its different architectures”, but as a dynamic construction over time, therefore emphasizing its temporal dimension. With the help of economic and political studies like the ones by Halbwachs about expropriation (Ibid, pp.141) or the one by Bernoulli about land-

ownership (Ibid, p.152) he renders an image of a city composed by aesthetic intention (Ibid, p.21), yes, but each intention being the child of corresponding events (Ibid, p.127). It is therefore, that he argues in a postmodern manner for a correspondence of sign and event, and even the importance of style: While the context is “impediment to research” the monument as object that has been designed and can be seen “opposed to the idea” of context, requires “a style. Only the existence of an architectural style permits fundamental choices, and from these choices the city develops.” (Ibid, p.126)

The project of this book gets synthesized in the fantastic image Rossi draws of the city as “Collective Memory”: It is through this memory materialized as architecture through which “great ideas flow” (Ibid, p.130). New ideas are influenced by the history of the city and at the same time make new artifacts emerge, shaping reciprocally the city. Some disappear others more permanent creating what he calls “locus” and furtheron in this essay returns as “genius loci”. However, it must be pointed out that in the same paragraph depicting this collective memory, Rossi also quotes Halbwachs, defending the materials tendency to resist. Rossi doesn’t seem to foresee yet the relevance this materialist perspective is about to have 60 years later.

“When a group is introduced into a part of space, it transforms it to its images, but at the same time, it yields and adapts itself to certain material things, which resist it.” - Aldo Rossi (Ibid, p.21)

Instead, Rossi continuously guarding the primacy of form, when he describes the analysis of urban artifacts, which are those parts

of the urban fabric, those unique local situations (like monuments or the Italian piazza) which resist the dynamic forces of the city and thereby characterize the bigger image of the city: For him the principal moment of these artifacts lies in the moment of “technical and artistic formation”, since in this solution he can with his empirical methods read the “actual solution that each architect gives to his encounter with reality” (Ibid, p.127). However, the individuality of such an object depends according to him, “more on its form than on its material” (Ibid, p.29), while I would argue at this point that material is essential to the “artistic formation”. And also the function doesn’t seem relevant as he proves with the example of the Palazzo della Ragione in Padua, which hosted a “multiplicity of functions [...] over time and how these functions are entirely independent of the form that impresses us”. He then clarifies: “we live it [form] and experience it, and in turn it struc In the third chapter of the book Aldo Rossi tries to find an answer for the “singularity of an artifact”, or what we might as well call the autonomy of an architecture in general. A reflection of the authorial intention to create something new, “to make an artifact which precedes style” (compare with K. Michael Hays’ “Architecture before Speech” in last chapter of this essay), reminds him of those ancient Greek artists, that while search for “the sublime [...] learned to eliminate the contingent from form.” Rossi (also a child of his time) seems to surrender to the modern narrative and to what Dalibor Vesely calls “the poetic paradigm of design” (see next chapter), that the “original element” of architecture have “seemingly [been] resolved forever” in antiquity (Ibid, p.107). According to him everything subsequent was merely a re-proposal

of the same original elements, each time anew according to the place. While the argumentation of the universality of ancient architecture as original is highly questionable, more than a surrender to dogmatic narratives, it must be read as surrender to contextuality, that as Rossi might already suspect, goes beyond socio-political contingencies and cultural ornamentation:

“this idea, which goes beyond a building’s functions and its history, but not beyond the particularity of the place in which it exists.”
- Aldo Rossi (*Ibid*, p.107)

The original context (Phenomenological Contextuality)

Till now we’ve thought a lot about the Urban Context. But what about the nature surrounding us? The Case-Study accompanying this paper is situated in a village of around 500 inhabitants – a Dwelling, certainly. But also, far from what for example Georg Simmel calls Metropolis.

Somebody who logically and comprehensibly analysed this archaic relation between the built and the natural was the Dutch monk, mathematician and architect Dom Hans van der Laan. For Van der Laan the habitat is a “piece of habitable space” separated “from the natural environment by means of walls”. What sounds almost trivial, has in fact existential importance for our survival, not only in physical terms, but also as orientation for our metaphysical situation: Van der Laan, tracking with his experiments the importance of order for human perception, recognizes that between the infinite, incomprehensible chaos of nature and human’s ordered way of perceiving and producing, “the house appears as reconciling element”. (5)

“When God said to Adam: ‘You shall be a fugitive and a wanderer on the Earth’; he put man in front of his most basic problem: to cross the threshold and regain the lost place.” (6)

While Dom Hans van der Laan creates very logical deductions without making any metaphysical premises (which you would expect from somebody who spent half a century in monastic seclusion) this almost mathematical thinking could be complemented by Heidegger’s philosophy of dwelling. In 1951 Heidegger was invited to hold a lecture in the Darmstädter Gespräche. For the 2nd convention holding the title “Mensch und Raum” Heidegger presented his essay “Building Dwelling Thinking” in which he deduces the original meaning of the phenomenon of Dwelling. (7)



As typical in the praxis of philosophy of the 20th century he searches for the meaning of Dwelling in the every-day language. Linguistically he deduces the original meaning of the English word to “dwell” he finds in the Old Norse word *dvelja* meaning to linger or to remain; the German word for dwelling “*wohnen*” means originally to stay or to hang out; in the Gothic word *wunian* he finds the meaning of being in peace, which finally leads him to the old German word “*Frye*” meaning freedom and to spare, to save and to conserve: For Heidegger dwelling means to be at peace in a protected place. This is also reflected in the High German word for the act of building, “*buan*”, which originally is synonym of the word to be, of existing itself; According to Heidegger, these original meanings of words got lost since our habitat, in which we dwell every day, has the integral purpose of becoming habitual, a habit even (*gewohnt* in German). He argues that, nonetheless, these are the original phenomenon the human confronts when arriving on earth / under the sky / mortal / in front of God with the need to dwell. For Heidegger, dwelling in essence must gather this four-fold.

In the second half of the lecture Heidegger elaborates on the act of building and gives an example to illustrate the human capacity to create a place to dwell – in this case a bridge: The bridge doesn’t just connect two opposite riverbanks functionally, but it makes the riverbanks appear as such. The riverbanks, formerly hidden in the natural landscape, appear and even the earth of the land behind them seems now connected to the river. At the same time the pillars of the bridge, shaped ergonomically by technical understanding, allow the sky’s floods to pass unobstructed,

while granting way to the mortals. The bridge gathers manifoldly the fourfold and becomes thereby, as a human-made thing, a symbol for all the things it is and does. It becomes a place.

With his lecture Heidegger introduced a big range of architects to the subject of phenomenology, which had an impact on both theory and practice till nowadays. One influential book “*Genius Loci: towards a phenomenology of architecture*” (8) was written by Christian Norberg-Schulz and was heavily influenced by Heidegger’s ontology. As response to the difficulties of the Modern project to generate identity he developed the concept of Spirit of Place, borrowing the Ancient Roman term, for the title of his book. According to Norberg-Schulz every place has its own spirit defined by the totality of its characteristics, which can be perceived by humans not only in a physical but also in a psychic sense. He then visualizes this, using examples like the ancient Egypt:

“In ancient Egypt, for instance, the country was not only cultivated in accordance with the Nile floods, but the very structure of the landscape served as a model for the lay-out of the “public” buildings which should give man a sense of security by symbolizing an eternal environmental order.” – Norberg-Schulz (*Ibid*, p.18)

By analysing natural as well as human-made places he searches for concrete ways to apply Heidegger’s concept of phenomenological place in architecture and urbanism. He therefore dissects place further into Space and Character (which are interrelated, but the lack of one is not preventing to perceive the other). The two psychological functions

involved are therefore Orientation and Identification. Arguing that the modern city is formed in a way that generates only Orientation he describes this first phenomenon by referring to the Gestalt-psychology, and other attempts from recent architectural theory trying to define space, most and foremost Kevin Lynch’s concept of “node”, “path” and “district”.

He then emphasizes the importance of Identity, supposedly lost in the Modern Project. Identification is defined by Norberg-Schulz as the becoming friendly with an environment, meaning getting acquainted by developing perceptual schemata, which are locally determined and culturally conditioned. Moreover, it must be emphasized that human identity is developed and perceived through concrete Objects found in the environment, as visualized by Gerhard Kallmann’s story of revisiting his old home in Berlin, retold in the book:

“Visiting at the end of the Second World War his native Berlin after many years of absence, he wanted to see the house where he had grown up. As must be expected in Berlin, the house had disappeared, and Mr. Kallmann felt somewhat lost. Then he suddenly recognized the typical pavement of the sidewalk: the floor on which he had played as a child. And he experienced a strong feeling of having returned home.”
- Gerhard Kallmann (*Ibid*, p.21)

This means that objects – and thereby also architecture – have the power to communicate with and act on us, which is further explored by the end of the century in the so-called Object-Oriented Ontology

(see Chapter III of this paper).

In chapter “VII. Place 3. History Norberg-Schulz” finally tries to shed some light on the social implications a phenomenologically contextual design approach has, and how this could be used as an opportunity to introduce the new globalized society into this design process. Unfortunately, that is not enough anymore: The premise of prioritizing the phenomenological experience above all other realms (legitimized by philosophical and therefore extra-architectural metaphysics), the treating of cultural semantics as a simplified almost modern dichotomy between human and nature without addressing issues of power and inequality, and the Eurocentric understanding of spirit and identity underestimates the danger of such regionalist understanding, which could reinforce static cultural narratives and exclude marginalized groups.

Nonetheless, as an architect there is an important lesson to learn from the phenomenological writings so far: What van der Laan describes as the ordered habitable space confronting the infinite chaos of nature, and Heidegger calls gathering of the four-fold in the dwelling, Norberg-Schulz describes as “concretization of the complexities of the lived-world” into a Cultural object, with the aim to bring them “close to man” – the fundamental function of art. When Norberg-Schulz “recognize[s] the fact that [hu]man is an integral part of the environment and that it can only lead to human alienation and environmental disruption if he forgets that.” (*Ibid*, p.23), then it is not up to architecture to solve the problems of alienation and environmental disaster, but to remind.

A more practical revelation about applied phenomenology is

the essay “Critical regionalism: modern architecture and cultural identity” (9) by Kenneth Frampton in his critical retrospective “A critical history”. At the beginning of his essay, he quotes the philosopher Paul Ricoeur describing the uneasy feeling of recognizing the achievements of modernism and rationality, while the growing certainty of cultural loss during the process prevented the resumption of former enthusiasm:

“Whence the paradox: on the one hand, it [the nation] has to root itself in the soil of its past, forge a national spirit, and unfurl this spiritual and cultural revendication before the colonialist’s personality. But in order to take part in modern civilization, it is necessary at the same time to take part in scientific, technical, and political rationality, something which very often requires the pure and simple abandon of a whole cultural past.” - Paul Ricoeur (Ibid, p.314)

As one of several architectural methods that applied phenomenological thinking in their practice, Critical Regionalism committed to the paradox Paul Ricoeur described, but a whole generation of architects felt. Not necessarily organized as a movement, but certainly influenced by each other’s work, all over the globe architects of the 20th century developed certain features, to which Frampton draws attention with a multitude of built and unbuilt examples, which undeniably are related, if not by a common style, then at least by the lasting effect these architects had on following generations.

The use of the Regional and Vernacular as inspiration is a recur-

ring theme since this architecture without architects always found pragmatic solutions by making use of the limited local resources, generating unavoidably a contextual connection with the materials and forms found in the natural environment. That this method can be socio-critical or even political, show the examples of the Catalan nationalist movement, dealing with the complex political responsibility to create rational, anti-Fascist architecture in accordance with the GATEPAC (pre-war Spanish wing of CIAM), while also assuring the appropriation of the architecture by the population through a regional identity. The result is a hybrid Modernismo assimilating the Catalan tradition of brick. Frampton warns at this point from the danger of falling for romanticism, kitsch or even temporally limited high-fashion, using as an example Coderch’s Walden 7 that, when compared to its former Catalan role models becomes an highly photogenic scenography – a “narcissist seduction” instead of an sensitively universal critique. (Ibid, p.316-317)

With an ambivalently critical approach towards Modernism unifying all mentioned architects, the use of references didn’t limit itself to the local: The Bagsværd Church in Copenhagen by Jørn Utzon which through “assimilation and reinterpretation” of themes from both the rooted local context, in this case the symbolism of the skylight laying on the curved surface of a vaulted ceiling reminding us of Christian churches, as well as elements from exotic cultures, in this case the anomaly shaped vaults revealing themselves as a variation of an oriental Pagoda roof, aims for the creation of formal identity which is not bound to the locally dominant culture, but free to be appropriated by a heterogeneous and dynamic society of the new

“world culture”. The use of diverse, sometimes unexpected, or even opposed materials or construction techniques (in this case a combination of pre-cast concrete elements and in-situ reinforced concrete) for the sake of expressiveness, dialogue, symbolism, provocation etc. reminds us of Venturi’s contradiction. (Ibid, p.315)

Another very direct method to generate contextuality, is the direct use of vegetation and topography: Luis Barragán, reminding in a phenomenological manner the pueblo of his childhood, paints his rational neo-plastic planes in warm earth-bound colours, to then place them between water courses and lush vegetation. Álvaro Siza Vieira embeds his public swimming pool into the rocky, maritime landscape of Quinta da Conceição, the Residential Complex at Quinta da Malagueira follows respectfully the topography, and sometimes the buildings itself becomes a canyon like the Bouça Housing Project. The Casa Beires – probably inspired by Alvar Aalto’s Säynätsalo Town Hall – becomes literally a modern ruin breaking open the rationally designed rectangular volume, to welcome back light and context into the interior. (Ibid, p.317-318)

Light is a major concern for the Regionalists, recognizing that it differs all around the globe. This starts with pragmatic decisions of wall openings according to the climate (as opposed to modernism exposing the technological innovations of glazing), over Baragán’s use of half-light to impose privacy and tranquillity, to Tadao Ando’s poetic use of light, stressing the concrete’s homogeneous surface and thereby the limits of space itself. Tadao’s sensitivity for light is evidently based on his experiences of traditional Japanese architecture.

Nonetheless, he is convinced about the universal applicability of this methodology:

“Spaces of this kind are overlooked in utilitarian affairs of everyday and rarely make themselves known. Still, they are capable of stimulating and recollection of their own innermost forms and stimulating new discoveries. This is the aim of what I call closed modern architecture. Architecture of this kind I likely to alter with the region in which it sends out roots and to grow in various distinctive individual ways. Still, though closed, I feel convinced that as a methodology it is open in the direction of universality.” - Tadao Ando (Ibid, p.324-325)

Peter Zumthor is very aware of this sensuous dimension of materials. For his material approach rooted in traditional Swiss craft and for his recurring in later writings of Frampton such as “Minimal Moralia” (10) and “Rappel À L’ordre: The Case for the Tectonic” (11), he is often depicted as Critical Regionalist, despite him being part of a younger generation and having a far more attuned conceptual position. However, his architecture, which is exemplary for making use of phenomenological methods such as a purist material use, a tectonic honesty, and immersive atmospheres (which will be further analysed in the next chapter), can hardly be denied a self-awareness of its situation in the world, or can it?

Irina Davidovici, an expert for Swiss Architecture and Phenomenology in Architecture in general, critically assesses the perception of contextuality (12) in the works of Zumthor and Herzog de Meuron,

which are contrasted by Frampton in “Minimal Moralia”: Frampton appreciates Zumthor’s architecture for its “ontological focus” and the concreteness of his materialized “human dwellings”, and also Davidovici appreciates his “not traditional but attuned” use of local materials, favouring purely architectural principles such as “surface qualities, rhythm etc.”



However, she unmasks the perfection of the cultural object as “fear of a deeper cultural disorientation”, therefore, risking to favour a “nostalgic and prescriptive worldview”. The Architectural, meaning the purely architecture-related, is by Zumthor’s virtuosity refined to such a degree, that the object, despite being enacted with local materials, ultimately isolates itself from its context.

Herzog and de Meuron’s graphically enhanced texture-based skins are criticised by Frampton for prioritizing the dramatic scenography over the inhabited space – being well aware of sensuous capacities of materials, but consciously negating any philosophical constructs such as Heideggerian ontologies. However, it is exactly this will to “divorce their increasingly sculptural buildings from the tangible claims

of a local culture”, which according to Davidovici makes their work more contextual:

“Their capacity to acknowledge and work with ambivalent conditions (which in themselves may be source of deep concern) is more contextual in a general sense than is any effort to save us from them through a radical – in fact private – aesthetics.” - Irina Davidovici (Ibid.)



Instead of falling for any romanticism their sobriety when approaching a fast changing world, who’s contextuality seems to be partly shifting from the geographical local to a dynamic, digitalized, cosmopolitan time-space, has to be acknowledged. However, Davidovici questions strongly HdM’s conforming “perception of context in which the individual can have no grater participation than opportunistic attachment to transitory references. Each building as a whole contains the potential for reference, but not that of becoming an integral part of a civic order.”

Davidovici (or better said Contemporary Architecture) leaves us with a “fundamental dimension of estrangement [...] which neither

the objectified building nor the strategy of construction-worship, can redress.” But she also refers to a text by Peter Carl, in which he proposes a contextuality based on praxis (in its original sense of mediator between thinking and making) as opposed to a reliance of the flattening generalization of concepts (13). In the following chapter, we are going to return to our premise by investigating material’s resistance to lose their contingent relationships with their natural and cultural context. We do so, in search for opportunities, to situate ourself as designers in a Materialist world.

1 Olgiati V. and Breitschmid, M. (2018). Nicht-Referenzielle Architektur. Basel] Simonett & Baer. p.31

2 Sitte, C. (1979). The Art of Building Cities. Ravenio Books.

3 Rowe, C. and Koetter, F. (1978). Collage City. MIT Press.

4 Rossi, A. (1984). The architecture of the city. Cambridge, Mass: Mit Press.

5 Laan, H. van der (1983). Architectonic space. Fifteen Lessons on the Disposition of the Human Habitat. Leiden: E.J. Brill. p.11-12

6 Norberg-Schulz, C. (1979). Genius loci : towards a phenomenology of architecture. New York: Rizzoli. p.23

7 Heidegger M. (1951). ‘Bauen Wohnen Denken’ (Transcript of Lecture). in Conrads U. and Neitzke P. (1991). Bauwelt Fundamente 94: Mensch und Raum. Vieweg. p.88-102

8 Norberg-Schulz, C. (1979). Genius loci : towards a phenomenology of architecture. New York: Rizzoli.

9 Frampton, K. (1980). ‘Critical Regionalism: modern architecture and cultural identity’. in

Frampton, K. (1996). Modern Architecture : A Critical History. London: Thames & Hudson.

10 Frampton, K. (1997). ‘Minimal Moralia: Reflections on Recent Swiss German Production.’ in Scroope Cambridge Architecture Journal. no. 9 (1996). pp.19-25.

11 Frampton, K. (2002) ‘Rappel À L’ordre: The Case for the Tectonic.’ in Labour, Work and Architecture. Collected Essays in Architecture and Design. London: Phaidon, 2002 pp.91-103

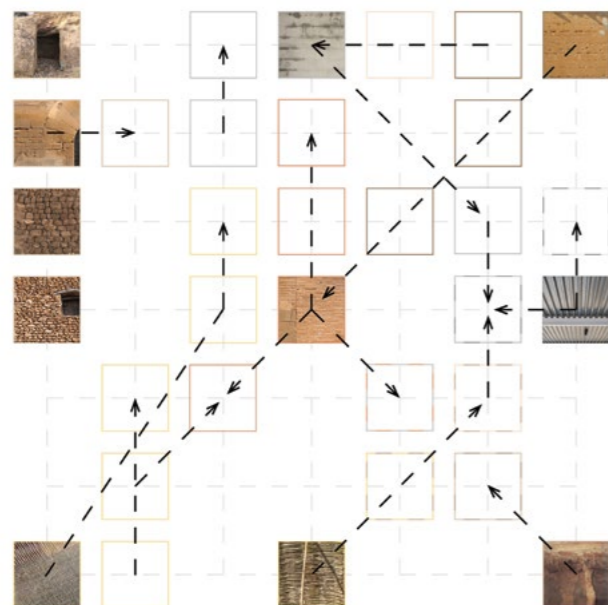
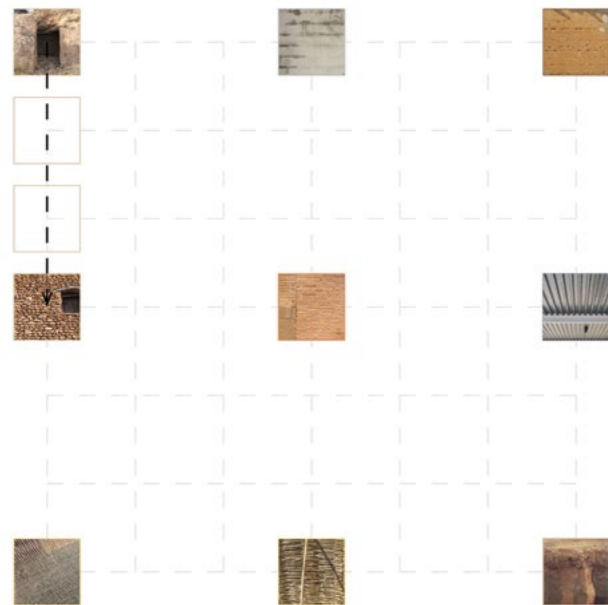
12 Davidovici, I. (2007) Context perceptions: the dilemma of authenticity in the architecture of Herzog and de Meuron and Peter Zumthor.

13 Carl P. (2000). City-image versus Topography of Praxis in (2001). Were Cities Built as Images?. Cambridge University Press. pp.328-335



All the materials I found in a 2km radius around the site (except the clay I found a bit further). On the map you can see the itinerary for my photo-diary.

Peralta de Alcofea and surroundings 1:20.000



A bit overwhelmed with all the found materials, I first tried to get a grasp on them, not concerning myself too deeply with economic values, physical properties, social connotations, etc. yet.

Instead I followed Gottfried Semper's liberating concepts. In this case, I tried to categorize them according to their tectonic properties, or the way I saw them applied in the context, by assigning them to Semper's archaic categories of making: Textile, Ceramic, Tectonic and Stereotomy.

This might seem useless, but in fact, this absurd process helped me see the impossibility to assign a single category to a material. Instead, the liberating revelation - which I tried to illustrate here in what I call Semper's matrix - is that all materials are in their vitality and changing properties shifting in between the categories, and by certain techniques/refinement-processes/or varried assemblies the characteristics of one and the same material can differ strongly.

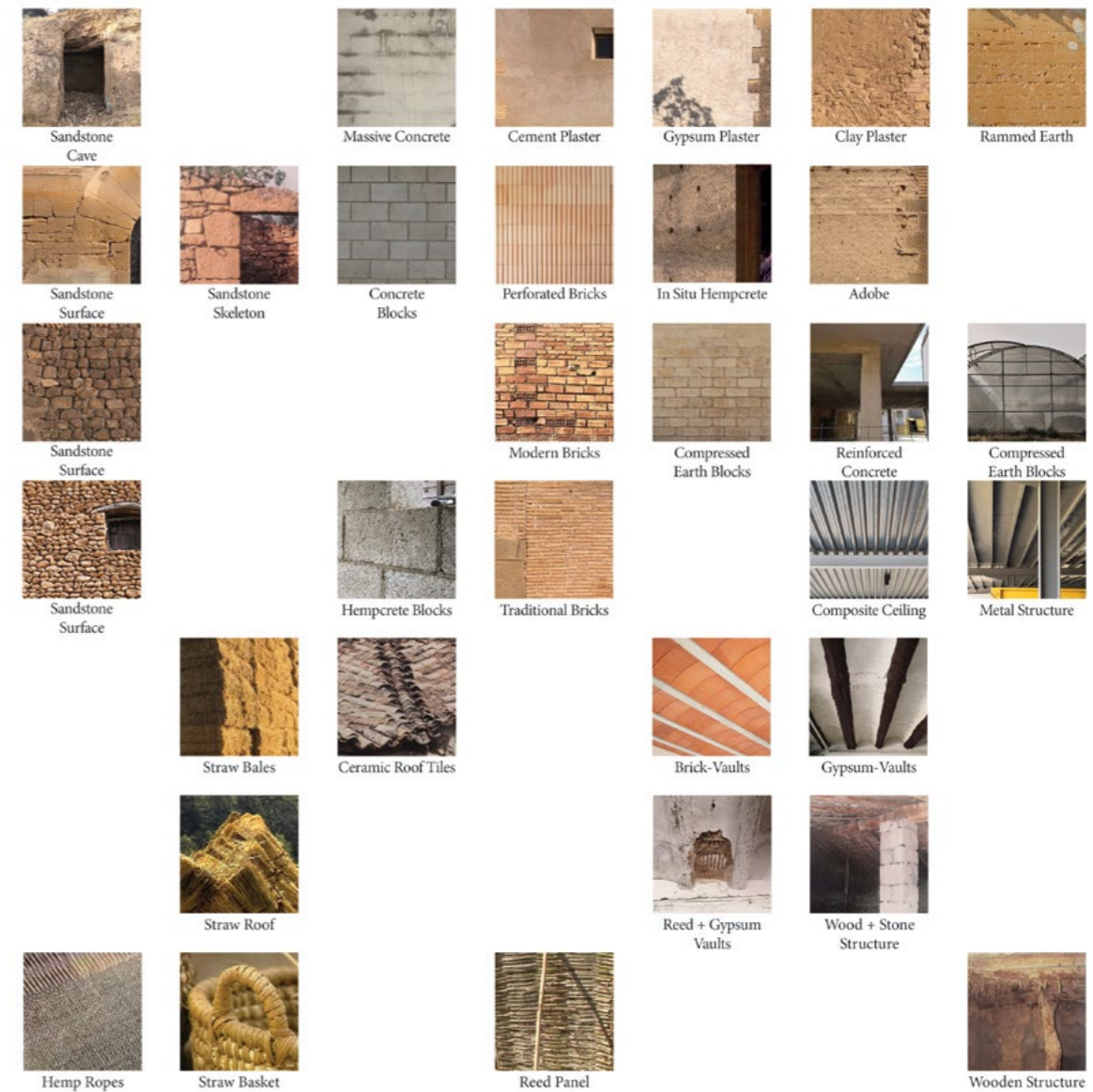
From here on, I had to pursue this insight further, and set out on an odyssey to grasp the materiality of this context.

STEREOTOMY

"strong, densely aggregated, resistant to reactive strenght like crushing and compression"

CERAMIC

"soft, malleable (plastic) capable of bieng hardened"

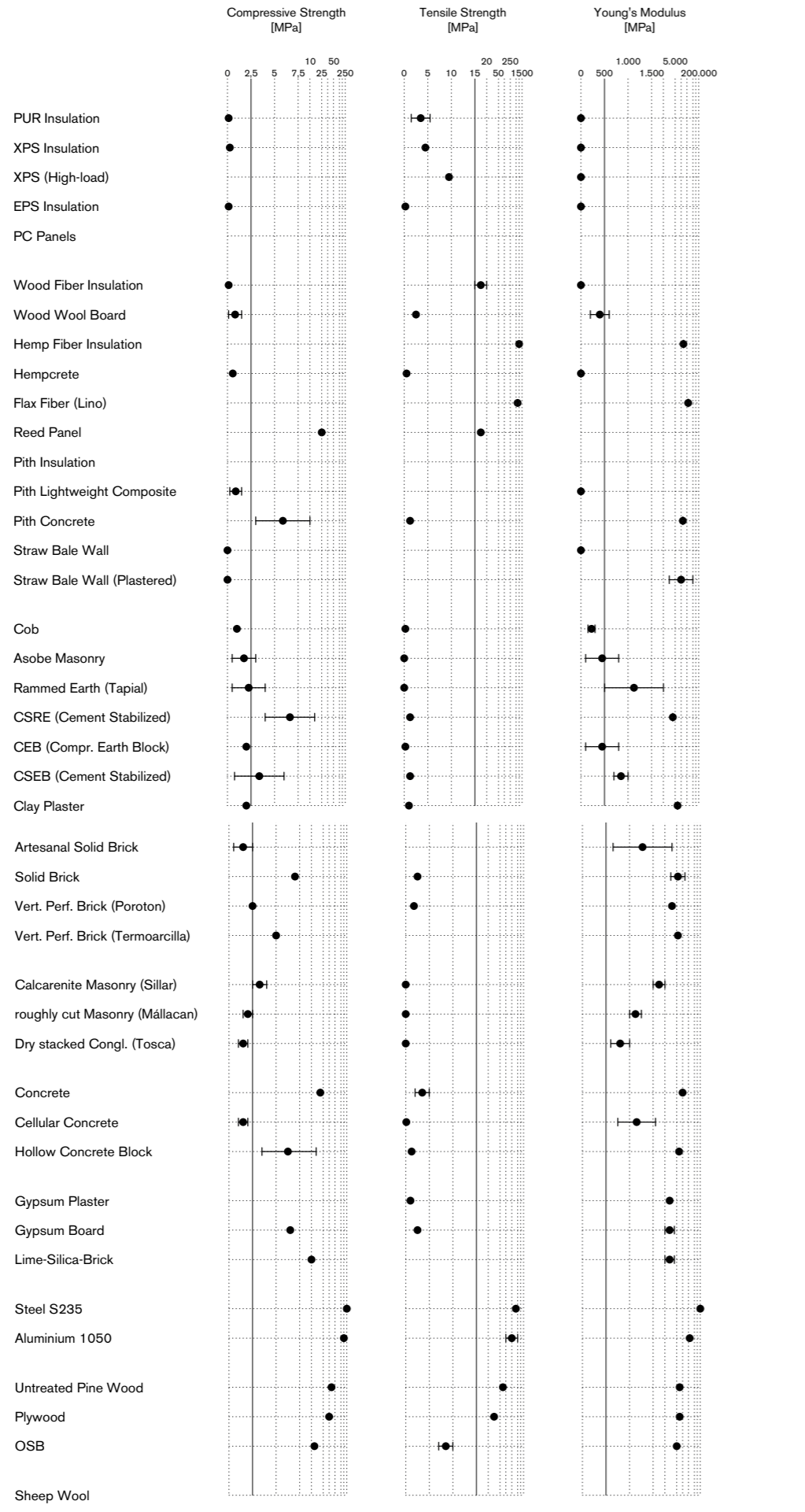


TEXTILE

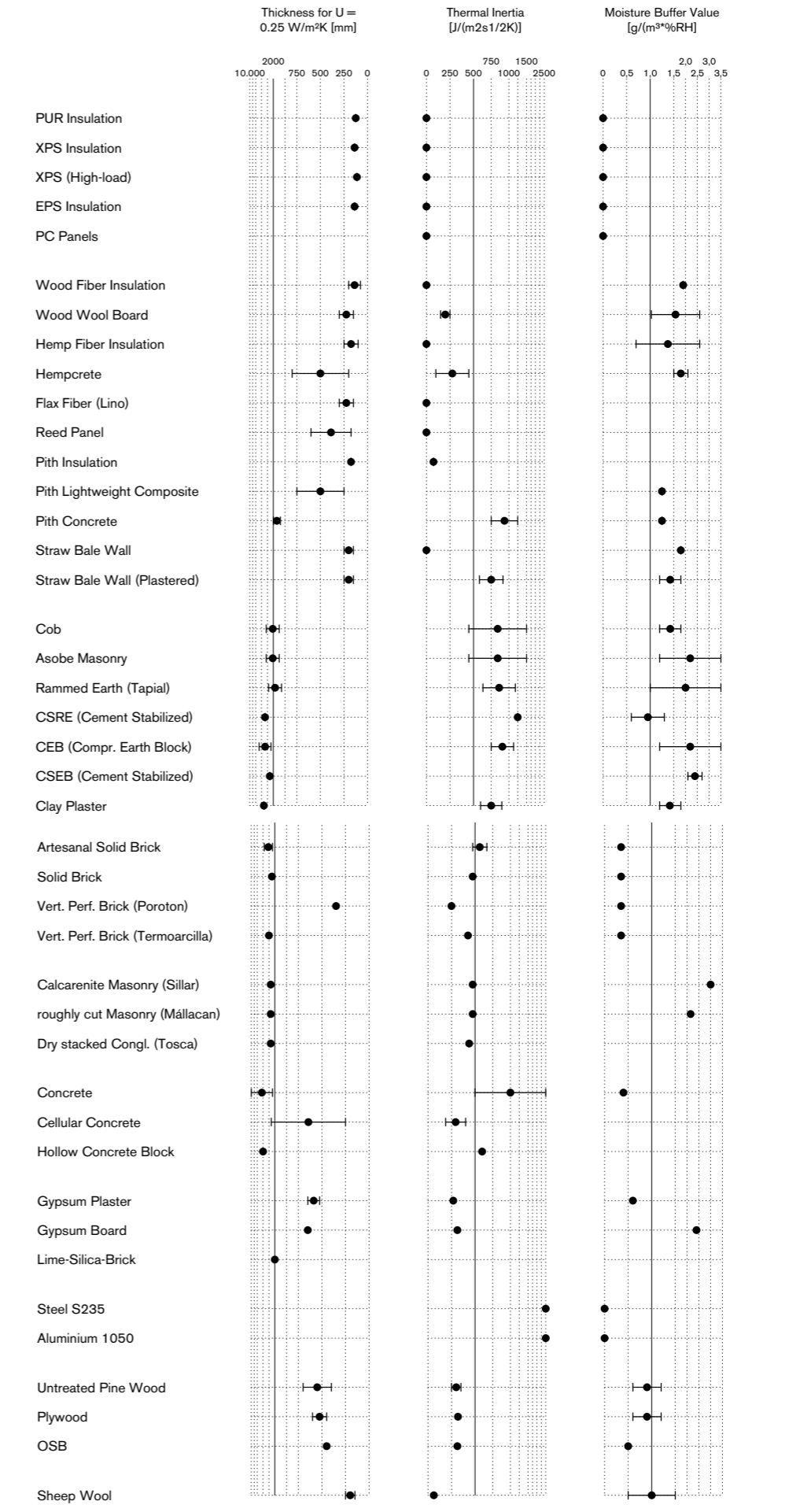
"pliable, tough, higly resistant to tearing, of great absolute strenght"

TECTONIC

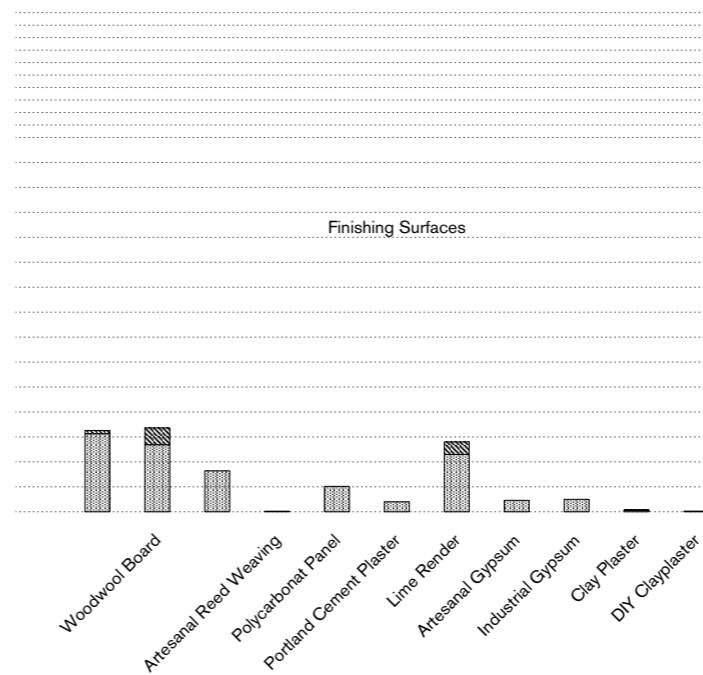
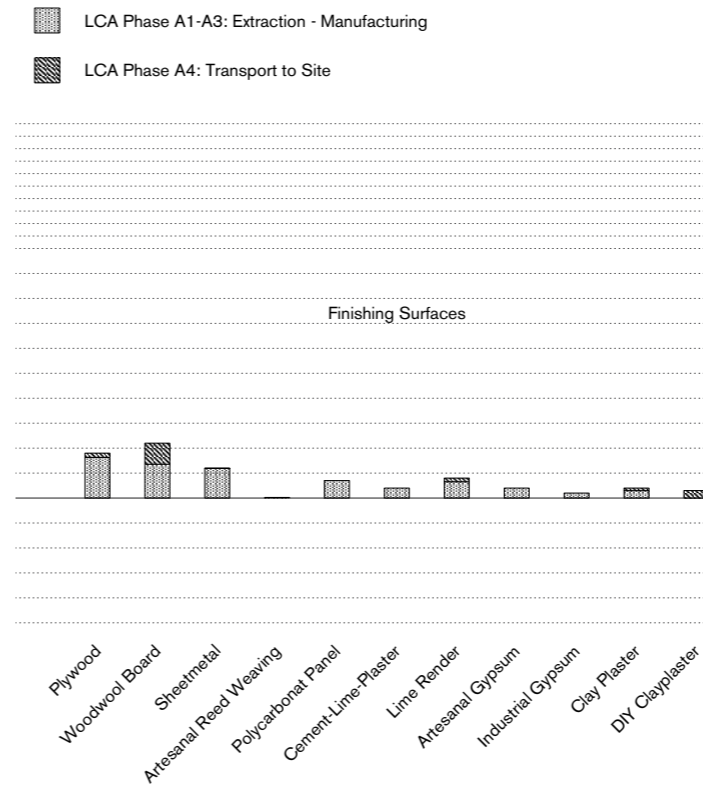
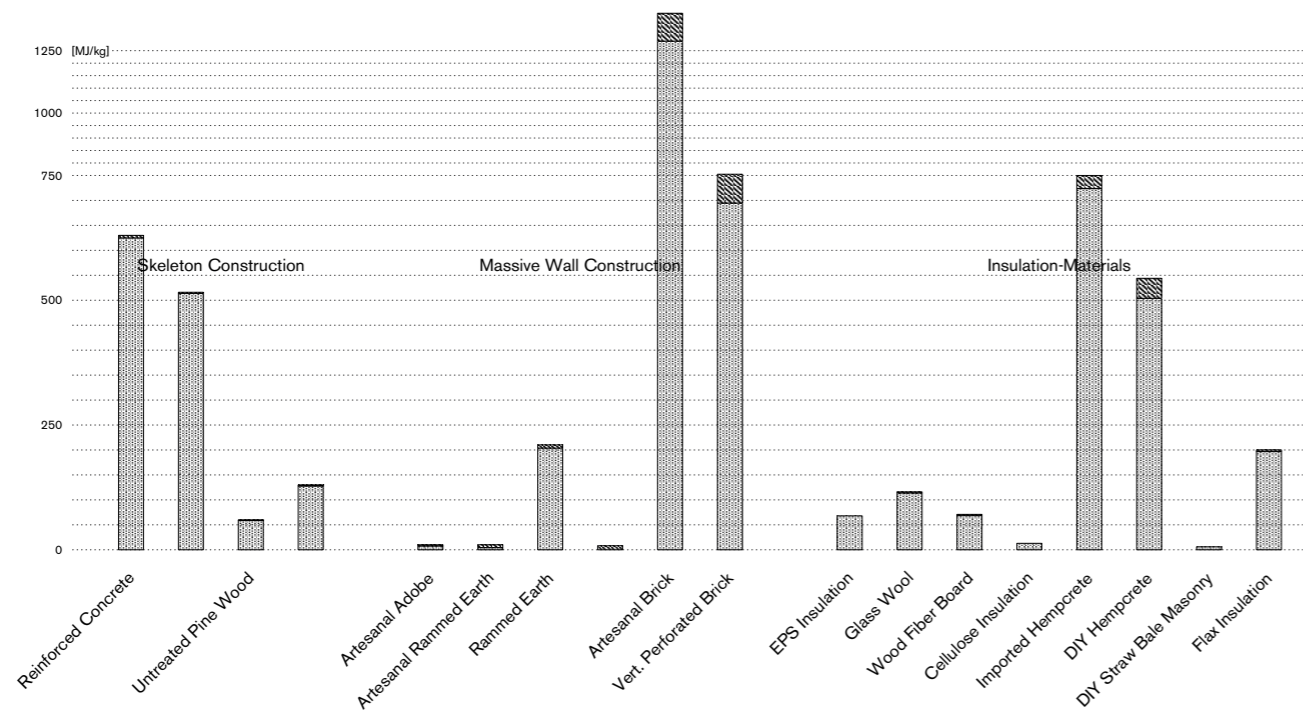
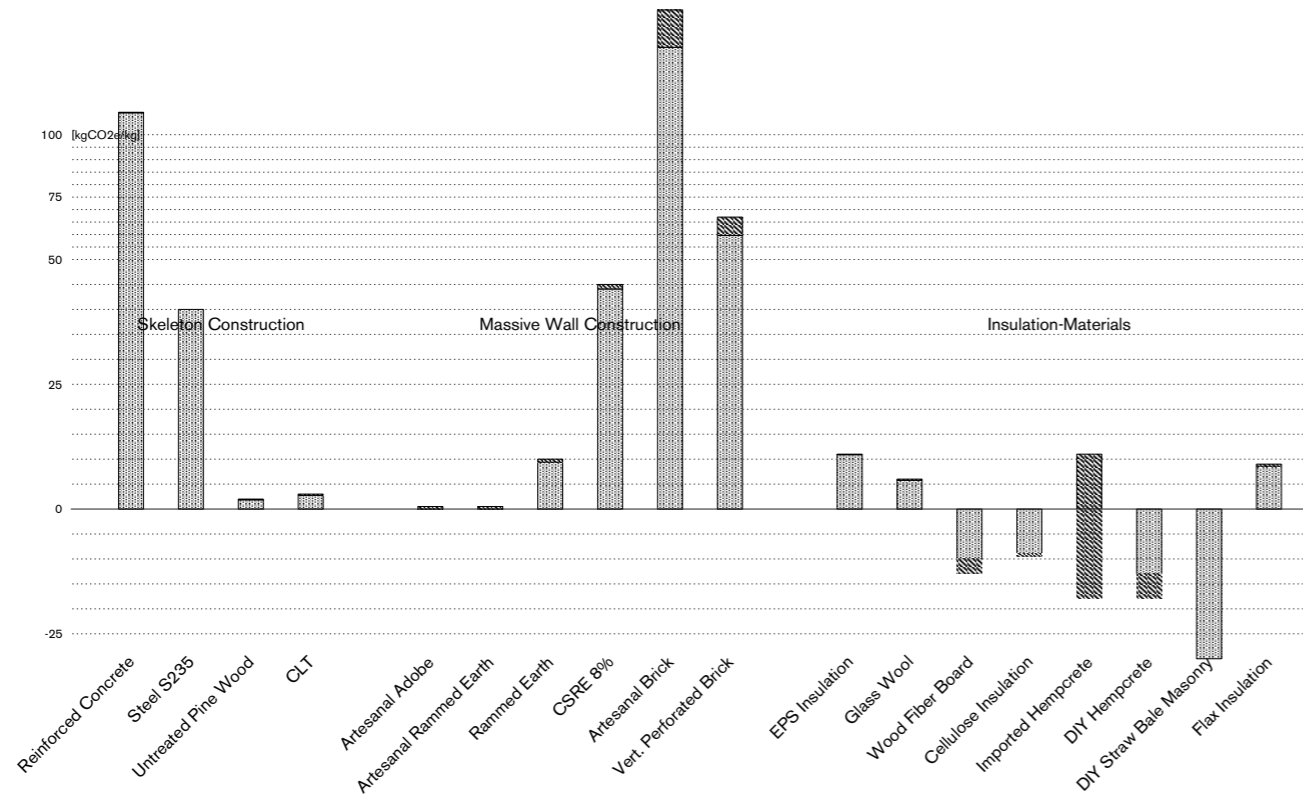
"stick-shaped, elastic, resistant to relative strength working vertically along the length"



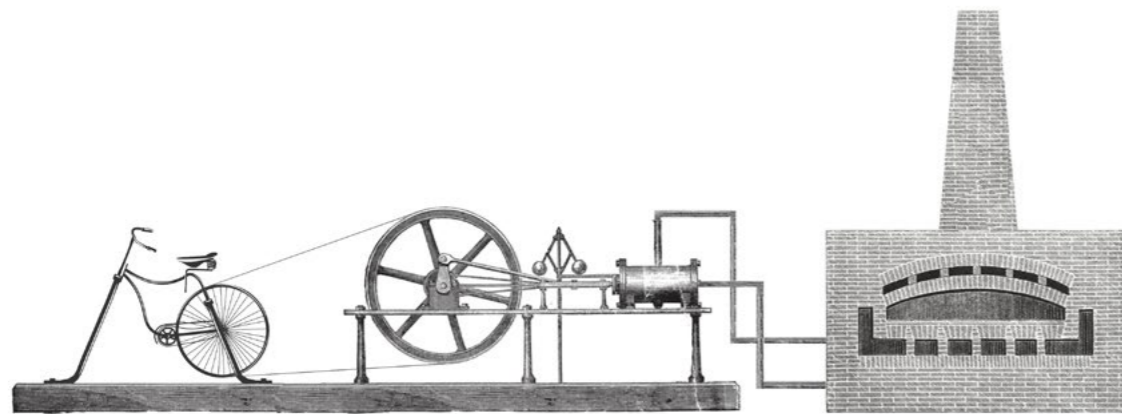
Found Materials: Physical Properties



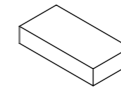
Found Materials: Hygro-thermal Properties







In a near future in a fictional village fossil fuels and wood are not available anymore, people could consider to re-evaluate the materials that appeared over the course of their village's history. Instead they stick to their modern material culture combined with a current ecological ideology: To transform the available clay into highly resistant bricks, they invented a machine, that can transform human work into heat and thereby fuel the brick-kiln without burning any fuels



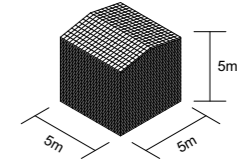
=

16 MJ
are embodied in 1 brick



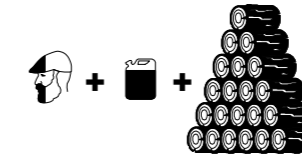
=

1314 MJ
are embodied in 1m² of bricks



=

105.132 MJ
are embodied in a small brick-house



before the invention of the machine 2 hours of work + 0,8 liters of diesel + 80 kg of wood (or 20 logs) were necessary to produce 1m² bricks

=



with the machine it takes one worker 8,75 hours to bake 1 brick

9 hours

=

2.738 cal
to feed the worker

=



it takes 1,1 kg pork meat to gain those calories

=

3,5 kg



a pig needs to be fed 3,5 kg of maize for each kg it gains in weight

=

2,7 m³ water
is needed for irrigation apart from the yearly precipitation



88 shifts (8-hours) to bake 1 m² of bricks

=

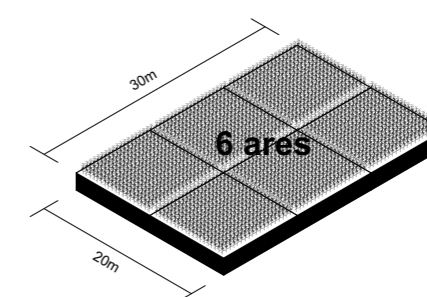
219.015 cal
to feed all the workers

=



it takes the meat from two pigs to gain those calories

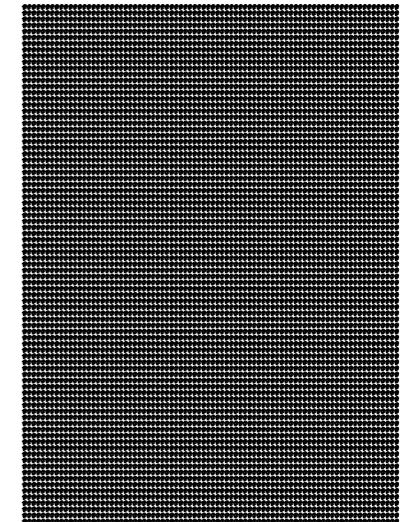
=



it takes 6 ares of maize crops to feed those pigs

=

214 m³ water
is needed for irrigation apart from the yearly precipitation

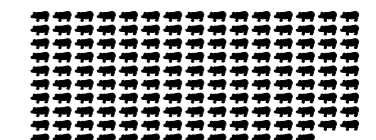


7009 shifts (8-hours) to bake enough bricks for a small house

=

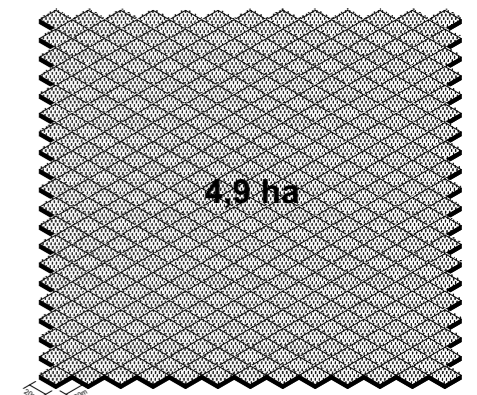
17.522.000 cal
to feed all the workers

=



it takes the meat from 148 pigs to gain those calories

=



it takes 4,9 hectare of maize crops to feed those pigs

=

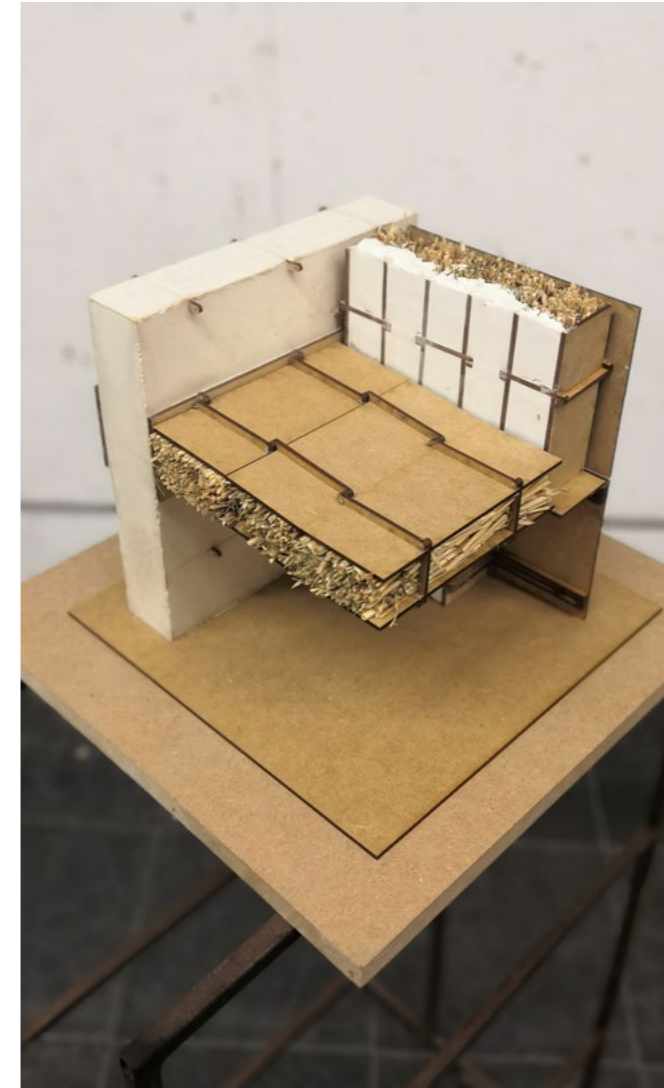
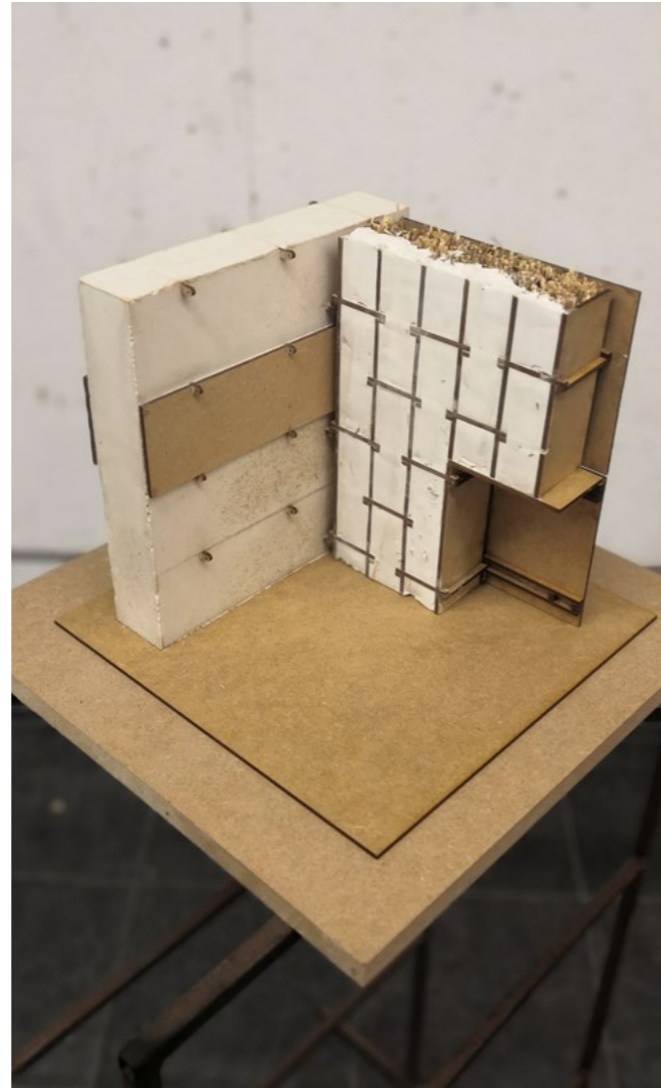
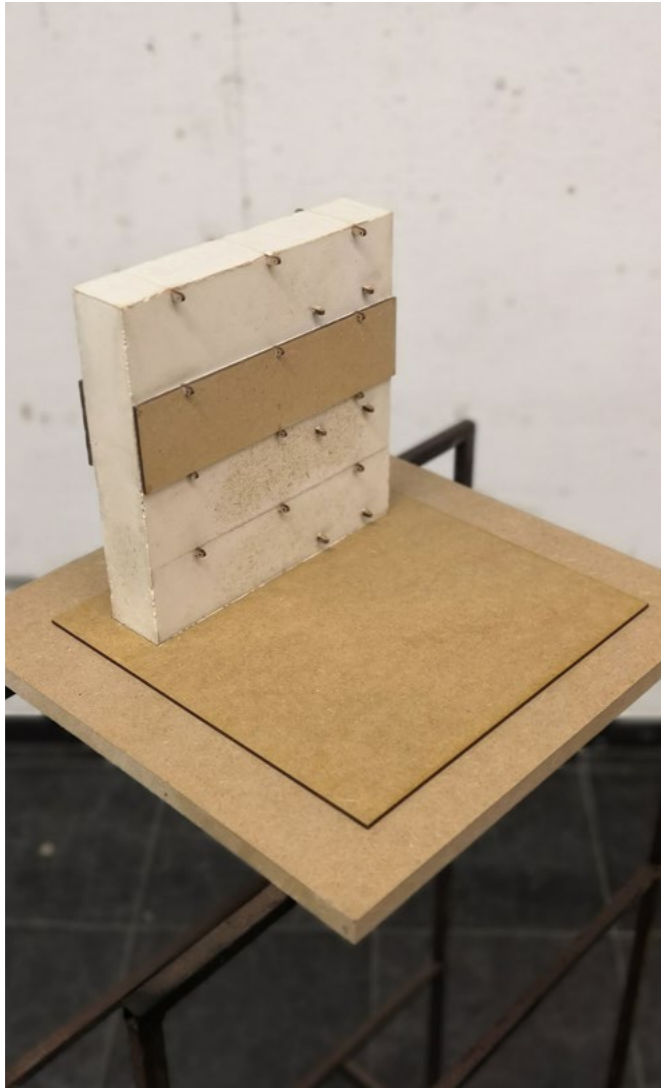
17.149 m³ water
is needed for irrigation apart from the yearly precipitation



Selection and Overview of some found materials



So there is a whole range of materials to our disposal. Where to start then? In a first attempt (Last Semester) I didn't concern myself too deeply with economic values, physical properties or social connotations, and rather searched for a design language, which could make the tectonics readable and was at the same time able to blur them, following Sempers fantastic thoughts. I tried to push found materials to their limits by designing a modular system - inspired from the local rammed earth technique - to create walls and ceilings that change their effects and aesthetics according to the tectonics, orientation, assemblage of the materials.



The global system consists, first, of a rammed earth wall. As can be seen, the plywood-panels used as formwork, are disassembled, and re-used for other parts of the building. However, the cross-beams stay inside the wall, to generate an ambiguous ornament which according to the situation can be functional or also just aesthetic. So can this ornament be used to attach furniture, doors, lamps, hang clothes, etc.

Or it is used to connect the adjacent wall and ceiling. In this case the northern wall, which reuses the formwork in another orientation to pre-stress straw-bales. This way the straw-bales can act as insulation as well as to stiffen the earth walls against horizontal wind forces - but it is also just a fun way to assemble a building without any glue completely reversible.

With the ceiling I tried to push the limits of the system: The modular crossbeams are here hung horizontally in a row from one earth wall to the next, while the plywood panels on the earth wall distribute horizontal forces on a big surface. At the same time vertical beams prestress the straw bales vertically, thereby creating a stable system, in which it is not entirely clear or calculable which material does which job.



While I truly believe this system could function and be assembled easily by, let's say, my father, the question, how realistic this project is, stays open. Retrospectively, I must admit, though, that the selection of materials seems to be caught up with the all too common ecological ideal - or at least, with the revived curiosity of how these natural materials can be used in different ways. This can be seen when in my collage of the storage space/garage/atelier polycarbonate panels are applied to create a new wall typology, however, with much less care than the former materials, and not respecting the strengths of the system. The blue, sculptural stairs added in the last minute, can be seen as a similar symptom of contemporary formalism.

III. MATERIAL

Materialist ideas can be traced back to the beginnings of Western Philosophy and probably further. Therefore, a history of materialism itself would go way beyond the scope of this paper and more importantly a holistic overview of philosophic theories wouldn't necessarily help us finding the significance of materials in generating contextuality within Contemporary Architecture. Nonetheless, it is necessary to get a broad understanding of how Modern Architecture failed to address the complexity of the modern world and how subsequently materials - some of which had been forgotten - moved back into the focus of our society. Most interestingly this didn't happen by the emphasis of any narratives or paradigms, but almost un-noticed by the materials (and the power of their agencies) themselves. However, this regained attention of materials over the last century, culminating in new materialist philosophy, led subsequently to a variety of Architectural 'styles'. This chapter, again, doesn't try to be exhaustive since some works in contemporary literature treat this complex subject with much more care than this paper ever could. Instead, this chapter shall give a critical overview over the last century's materialist ideas as they increasingly appeared in the context of architectural praxis and theory.

Semper's Materialism

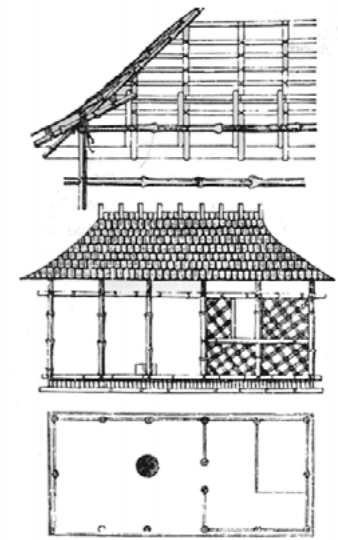
Even if not a thinker of the last century, it seems unavoidable to start this overview without mentioning Gottfried Semper, since he was convinced about a readable continuity - and therefore also a contextuality - of the use of

materials in the history of architecture, which he synthesizes in his theory of "Stoffwechsel". Stoffwechsel is German for metabolism, a vocabulary borrowed from the natural science of biochemistry and sometimes his arguments make even reference to Darwinism itself. However, Semper is aware of the difference of "laws of natural selection, heredity, and adaptation [...] in the realm of organic creation" (1) and a material refined and formed by the creative human power, adopting a language of modernity preceding the first steel-framed skyscrapers in Chicago:

We can quite rightly describe the old monuments as fossilized receptacles of extinct social organizations, but these did not grow on the backs of society like shells on the backs of snails, nor did they spring forth from blind natural processes, like coral reefs. They are the free creations of man, on which he employed his understanding, observation of nature, genius, will, knowledge, and power. - Gottfried Semper (2)

In his main work "Style in the Technical and Tectonic Arts, Or, Practical Aesthetics" (3) Semper creates a classification of technical arts into which raw materials can be classified. This system is the development of techniques he found in the Caribbean hut, an ethnological example which combines "all the elements of antique architecture in their pure and most original form". The first category are textiles, pliable, though resistant to tearing. Moravánszky emphasizes the astonishing fact, "that Semper connects the most important element in architecture with a light, inherently instable material" (4), hinting that the primary aim of

architecture is not to resist gravity or protect from weather, but rather to delimit and form space.



The second category are ceramics, soft, plastic materials that can be hardened, such as ceramics, glassware, metalware and even stoneware. The third category is called tectonics and includes stick-shaped, elastic, elements resistant to forces working vertically along the length such as used in carpentry. And finally, stereotomy includes all those densely aggregated materials, resistant to crushing and compression, which are used for example in masonry. Metal, however, he didn't categorize and wrote instead an additional chapter about it, since it "unites all the properties of the raw materials listed above". (Ibid.)

This is in so far interesting, since this exception ironically proves the beauty of the system: Semper's four categories are not bound to specific materials, allowing to create unexpected, non-trivial associations between a category and a material. For example, could a weaved basket be associated with the textile as well as with the ceramic archetype, or the tiles on a wall could be associated with the stereotomy

as well as with a textile. This is not only compatible with his theory of Stoffwechsel – generating (maybe an archaeological but at least an applicable) truth – but it also emphasizes the liberating possibility of hybrids. Paradoxically, the categorization you would expect from a rationalist and modern mind, ultimately fuels a liberating creativity which can lead to contradictory but beautiful outcomes. This kind of openness towards materials, however, got (either intentionally or un-intentionally) lost for the sake of the modern narrative.

Modern Materialism

Neue Sachlichkeit was the artistic movement of the Weimarer Republic during the interbellum called that's was quickly adopted by architects to change the global landscape. The most prominent figure of this group was Mies van der Rohe, who, as Joseph Rykwert describes in *The Dancing Column's* last chapter, "explicitly rejected any attempts at innovation not directly dependent on new materials." Rykwert continues describing Mies' almost ironic "contempt 'for all aesthetic speculation, every doctrine, every formalism'" (5). Semper's liberating metaphor of Stoffwechsel seems fully replaced, by the metaphor of "a skin-and-bone construction" (6), if metaphors haven't been even erased fully.

This dogmatic Materialism is best represented in the confrontation of two settlements having been erected in the city of Stuttgart in the late twenties, early thirties. On one side, the Weißenhofsiedlung, is a housing estate and showcase of modern rational housing, built under the guidance of Ludwig Mies van der Rohe, including designs by many prestigious Modernist architects such as L. Mies himself, Le Corbusier, Peter Behren, Bruno Taut, Hans Scharoun, only to name



a few. Only a year later the CIAM was founded in 1928. Most and foremost the aim of the settlement was to exhibit both the new rational forms developed in the European schools of New Objectivity to a wide public, and the application of the newly developed, sometimes experimental, materials. Steel, Concrete, and the wide horizontal panorama glazing, became not only symbols of a rational, fast and economic way of constructing, but also for the universality, for which these forms have been praised for and for which reason they've been applied all around the globe, known as the International Style.



What first was jokingly derided on postcards as "Swabian Casablanca", out of place of the Southern German cultural context, soon will start eroding local identities in metropolises all around the world, as described retrospectively by Paul Ricoeur in the former chapter of this paper. It is this fear which led

to controversial debates and only a few years after to the erection of the Kochenhofsiedlung as urbanistic and architectural response and deliberately traditional counter-model. Led under successful architect Paul Schmitthener and with the participation of Paul Bonatz, among other representatives of the Stuttgarter School, an architectural school that, while rejecting historicism, still favoured conservative motifs and forms arising from the use of traditional crafts and natural materials. In this case the buildings had to follow traditional urbanistic rules like the use of a saddle roof and a wooden construction.

Robert Venturi is not rooting for any of the both extremes materialized in Stuttgart, which is reflected in his ambivalent opinion about the simpleness and clarity of the movement, when he writes "Mies' exquisite pavilions have had valuable implications for architecture, but their selectiveness of content

and language is their limitation as well as their strength." (7) Probably, he would even subscribe to Siegfried Giedeon's motto from 1949: "There can be no creative architect today who has not passed through the eye of the needle of modern art." Nonetheless, his critique is clear: Modern architects were highly selective when choosing the problems, they wanted to solve. And the exclusion of important considerations like the complex programs the new century demanded come with the "risk of separating architecture from the experience of life and the needs of society". (Ibid.)

Another such reduction is described in "The Metropolis and Mental Life" Georg Simmel in which he laments a whole range of negative symptoms of the life in the modern city, one of them the "blasé attitude" (8) in which an object's (or in our case a material's) characteristics are disregarded and its "qualities are annulled in their money value" (9).

Ecological Movement

This raises the important question of value of materials, which we are used to quantify with economic units like their price. However, the question stands, if the price represents the real value, and how this value can be grasped in the first place. Apart from physical units describing the material's physical characteristics, new empirical units appear such as Embodied Energy or the Global Warming Potential of materials, which, even if they stay highly abstract to the common society, testify to (at least) a partial distribution of our attention from the primacy of economy to other dimensions such as ecology. But even so it is highly questionable if the complexity of our ecological di-

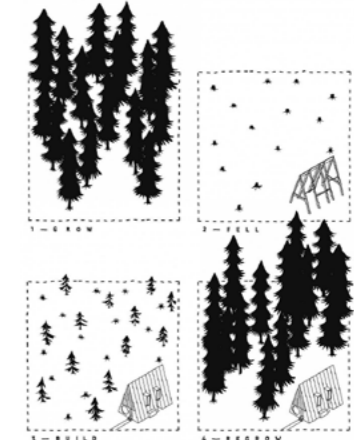
saster can be reduced to two numbers, without having even started to consider other complex topics such as social equality, remaining hardly quantifiable.

The same critique is applicable to Life-Cycle Assessments, the most established tool available in the construction industry and for us architects to assure the ecology of construction: The limited accuracy and availability of data as well as the incapacity to account for harder quantifiable social factors, show the limits of such modernist system thinking (10). One might argue that this only is due to missing data and that it is only a matter of time, till those system boundaries could be widened or challenged by artificial intelligence. However, one could also question this strongly parametrical approach and promote to re-learn a creative qualitative thinking able to account for contingencies beyond system boundaries; or better even one could question, the necessities to construct new buildings in the first place. (11)

As a consequence of the "Mental Life of the Metropolis" so well described by Simmel, a "back to the land" movement appeared through which a whole range of experimental settlement of so-called ecovillages emerged since the sixties, approaching ecology in a more holistic sense. However, they're by definition and by spatial limits destined to not grow beyond certain limits, and ambitious projects like Auroville fail to give a perspective for a large-scale take-off of the "ecological utopia". While thinking globally but acting locally is commonly recognized as effective model to reduce our environmental impact in developments, it still seems as if these rural examples are not able to answer the quantity of inhabitants and the diversity of

needs of the global society and are therefore not a universal answer. The potential of these projects might even be limited due to the ideologic rejection of certain materials, ways of thinking, or even due to segregation. Nonetheless, these places can become melting pots for the development of sustainable technologies.

More interesting for architects is the understanding of both theoretical and practical concepts like Sustainability, Circularity, Cradle-to-Cradle, Adaptive-Reuse, Urban Mining, etc. that are developed rapidly in the last decades, growing even their own niche-markets. These leave enough freedom to respond to individual situations in a creative attitude that deals with the natural and urban context in a pragmatic and respectful way.



While the modern dichotomy of human and natural world slowly seems to dissolve – not least due to the activism of the ecological movement (and the political momentum this materialism comes with) – the truth is, that there is still a long way to go, especially for the construction industry. However, I want to also emphasize the danger for us architects of falling for yet just another idealism, which could make us disregard a whole range of materials and opportuni-

ties, hidden in the particular contingencies of each site, and thereby hinder us in our real responsibility of finding new contemporary forms with whatever is available.

“Not long ago, architects would bemoan their powerlessness by citing that they were involved with only 5% of buildings constructed, while today, they would assume responsibility for the greenhouse effects of the remaining 95%.” - R. E. Somol (12)

Material's Effect

In the face of the (eventually till recently) ongoing debate in the USA between advocates of a Critical Architecture such as Peter Eisenmann and K. Michael Hays and the Post-Critical camp around Robert E. Somol and Sarah Whiting, it might be worth having a short retrospective of how the already mentioned Critical Regionalist had an effect-based approach to materialism, as well as the ontological material approach the subsequent generation of German-Swiss Architects had.

Tadao Ando is fully aware of the potential of materials, to “transcend the initial preception of its geometric order” (p.325), as Frampton writes. In fact, a considerable amount of Regionalist architects seems conscious about material's agency to generate images, especially when related to memories. Tadao Ando's subtle use of light, Álvaro Siza's use of fine-grained textures found in the immediate context, Luis Baragán's use of water and plants for climatic, acoustic, and even olfactory reasons; all these examples testify to an awareness of the human's multisensory experience of context and architecture. Juhani Pallasmaa dedicates

with “The eyes of the skin” a whole book to the experience of architecture beyond the visual sense.

“History has accumulated in them, and spirit permeates them.” - Theodor W. Adorno about materials (14)

Pallasmaa ends his book describing the Task of Architecture, to “create embodied and lived existential metaphors that concretise and structure our being in the world. [...] Buildings and towns enable us to structure, understand and remember the shapeless flow of reality” (15), in coherence with both Heidegger's original phenomenological approach and Rossi's collective memory. However, when he continues describing architecture's role “representing and structuring action and power, societal and cultural order, interaction and separation, identity and memory” it becomes clearly visible that the postmodern Zeitgeist is still very present and eventually even opposed to the global changes of society.

Frampton remind us of the dangers of “falling into sentimentality” (16) on one side as well as the abuse of material's effects for mere visual scenographies (Ibid.), following the logics of our market-led society. As described in the last chapter of this work, the latter has proven to become true in the form of a misunderstood Post-Critical Architecture. For Frampton the solution to these problems is an authenticity secured through “rational form and modern technique” (Ibid.) or what I will call in the following “Tectonic Truth”.

Tectonic Truth Lie

“Truth of Materials” is a pre-modernist plaidoyer for a technical aesthetic rendering visibly the

materials used and how they're connected, giving the detail of the joint the protagonist role of “ontological condensation rather than a mere connection” (17). Still taught nowadays, like in my case in the Bachelor of Architecture and Urbanism at the University of Stuttgart, it was up to me myself to tediously un-learn this rigid ontology and free myself from a solely “honest application” of materials leaving little to no room for doubt or interpretation. Today, no architect, considering her- or himself truly contemporary, would agree to an exclusively technical materialism, since Critical Architectural theory made aware of material-implications beyond their physics.

In the book *Metamorphism* Ákos Moránvánszky revisits the theory of Gottfried Semper in the search for new, materialist insight to Contemporary Architecture, and does so successfully. Especially revealing is the introductory chapter “Knitting on” in which he demonstrates the material's semantic and sensory capacities by means of comparing Postmodern attempts to Semper's “Practical Aesthetics”. (18)

The actuality of Semper's theory is surprising, considering that it was formulated by the end of the 19th century. By then his writings were an “inspiring alternative to technical treatises on questions of aesthetics and design” as they were breaking up the boundaries of the mentioned codified “truth” creating with his anthropological speculations room for playful associations. The joint – or in his case the “knot” of the textile metaphor – plays for him a primary role like for the technocrats too. However, in his case the knot is “less about disclosure than about disguise” (Ibid., p.16) implying a “suggestive” or even “symbolic” power.

Materials are here described as a “collective memory [...] full of images of [...] sensory qualities” like the memory inscribed in another scale into the city as described by Aldo Rossi. While we seem to have almost overcome the postmodern methods of iconology (the reading of expressive potential of materials (Ibid., p.17)) and semiotics (the analysis of cultures as a system of signs often abused to interpret cultural productions such as architecture according to almost any possible end (Ibid., p.18) with all its reductive shortcomings (Ibid., p.18), we still cannot ignore the general ability of materials to bear meaning and the impossibility of separating one from the other (Ibid., p.19). This acceptance is necessary not only to avoid unintentional effects on the user, but to recognize the potential (or agency) that lies in “raw material, as something which cannot be broken up by communication networks, becoming a talisman of resistance”. (Ibid., p.17) A resistance more important than ever in what Davidovici calls the “haphazard storms of consumer culture”. (19)

While by now we are hopefully quite convinced that every attempt to separate meaning from the object is most probably doomed to fail, nonetheless, a last important example shall be made. It was by the end of the 60s that a new generation of architects appeared, who's self-understanding rooted in “craft and production quality” due to their natural and cultural contingencies. These “German Swiss Architects” shifted the focus of their predecessors away from the architectural object “seeking an exploration of the world through the medium of architecture”. And indeed, what seems to unite them is a certain austerity as result of the rejection of “formalistic justification” as well as a conceptual discipline

“uniting all circumstantial aspects” in the hope to make more universal findings able to “withstand the currents of prevailing [postmodernist] arbitrariness”. (Ibid., p.1)

Bruno Reichlin, Swiss architect and historian, writes in 2001 an essay titled “Beyond Symbols” referring to a subchapter of the same name in Peter Zumthor's “Thinking Architecture”. Showing empathy with a new post-critical generation, criticizing those postmodern intellectual constructs mentioned above such as semiotics, while at the same time sensing the danger of a primacy of the recently liberated conceptualism, if “driven by anti-intellectualism”. Consequent developments in the Swiss scene seem to have justified this fear, as further described below. However, Reichlin uses this argumentation also to attack his great contemporaries, as the title of his paper already suggested (20):

“[...] certain artists are awarded the almost shamanic role of creating such objects using their intuition rather than the knowledge of a technician and scientist.” – Bruno Reichlin (21)

While such critique would be quite appropriate when addressed to certain contemporary architects mentioned in this paper, at the beginning of the millennial when Reichlin describes the impression Zumthor leaves us of the “physical/material characteristics of the object” as a “purely sensory impression, which is experienced beyond any cultural and cognitive influence”, seems to be rather the consequence of a misunderstanding of Phenomenological Hermeneutics quite common in the field of architecture. The impact of such misunderstanding becomes visible when applied by such prominent

figures as Kenneth Frampton when defending his “ontological tectonics” as exemplified by the work of Zumthor while attacking the “representational tectonics” of the later works of Herzog & de Meuron first in “Minimal moralia: Reflections on Recent Swiss German Production” and later in his “Rappel À L'ordre: The Case for the Tectonic” influencing a whole generation of architects by recycling the old narrative of a “Truth of Materials”.

Phenomenological Corrections: The mimetic purpose of Architecture

Irina Davidovici, resolves the whole confusion about phenomenological hermeneutics of design in her papers about “The Dilemma of Authenticity” (19). She does so by quoting philosophers like Paul Ricoeur, Maurice Merleau-Ponty, Hans-Georg Gadamer and historian Dalibor Vesely as well as by placing built examples used isolated in Frampton's argumentation back into their cultural context.

According to Davidovici the truth of Frampton's tectonics is only half the truth of what Dalibor Vesely calls “the poetic paradigm of design” and what she simply calls the “architectonics” as correction to “tectonics”. Vesely emphasizes the practical nature of design as opposed to “inconclusive play with abstract forms and functions” referring to the replacement of architecture's mimetic purpose of imitating (in a classical sense) “praxis and poetics” with the modern imitation of “rationally formulated standards and theoretical knowledge”. (22)

Mimesis is understood by Vesely and Davidovici in its classical sense meaning “the fundamental constitution of human beings and their situation in the world”

(23), closing thereby the circle to Heidegger's original concept of "building, dwelling, thinking". Phenomenology was misunderstood by a wide range of architects as excuse to search for authenticity in the isolated architectural artefact, generating effect and atmosphere, while Davidovici reminds us, quoting Gadamer, that "Architecture, like all art, 'belongs to the world to which it represents itself.'" (24)

"It is not in the rapture of experience but in the grounding in 'situation' that phenomenology offers an understanding of the deeper context in which phenomena take place." (22)

Also Moravánszky comes in his essay to a similar conclusion about the mimetic nature of Architecture. He takes Zumthor's Gugalun House as an example to proof the impossibility to separate material and meaning, and to visualize how far-reaching (but not far-fetched) Semper's textile-metaphor can be interpreted. (18) For instance was the 17th-century farmhouse extended by using the construction of horizontal planks to connect old and new in a continuous way (in the most formal but also constructive sense) while keeping their age at the same time visible – literally "knitting-on" the history of the building in a tangible way.

Furtheron, Moravánszky explains how the archaic technique of log-constructions, or "Strickbauten" (german for "knitted buildings"), is not only evidently connected to its imminent natural context, but can moreover bring up memories of the ancient stone architecture of classical Mediterranean. An association which seems only far fetched if the visitor hasn't grown up in the Mediterranean region and then only until he finds

the inscription "Et in Gugalun ego" engraved into the flat stone forming the threshold.

This observation of references, some of them conscious others unpredictable, is in so far interesting, as the initial intention of Zumthor and his Swiss colleagues, as formulated in his essay "The hard core of beauty" (written during the construction of the Gugalun house) was, in the search for authenticity, to bring out the "materia prima" or what Frampton calls the "thingness of things", the very essence hidden in materials through a "consistent elimination of figurative details, a radical reduction" leading to the austerity often misinterpreted as Minimalism.



However, the "seam" visible in the construction, apart from its more evident function to connect old and new, has the capacity to provoke – depending on the social and cultural experience of the subject – orientation beyond the imminent context and time, making the intervention at the Gugalun house truly contemporary. It seems almost as if Zumthor gave up his initial obsession of searching "beauty" in isolated "settings, in clearly delimited pieces of reality, object-like or in the manner of a still life or like

a self-contained scene, composed to perfection" eventually leading to abstraction and reduction, and surrenders himself instead to the contingencies of context:

"The virtual impossibility of separating the search for an architecture which is 'beyond signs' and its opposite, the 'cascade effect of references,' is demonstrated by Zumthor's architecture." – Ákos Moravánszky (Ibid., p.21)

Or as Davidovici would put it:

"One cannot abstract architecture from human situations. Regardless of its accomplishments, architecture's focus on the object and its presence ultimately denies its subject, and the universal conditions which ground human existence." (19)

New Materialism

Finally, the relatively recent appearance of the so-called New Materialism can be observed in a wide range of disciplines such as humanities, social sciences, and arts. Based on the Object-Oriented Ontology (1999) of speculative philosopher Graham Harman, which in turn is related to Heideggerian concepts, this new ontology maintains an existence of non-humans – such as animals but most importantly also objects – from human perception, thereby shifting the human from the centre of attention, and overcoming the Modern Dichotomy. This philosophy can therefore be considered post-humanist.

As opposed to Euro-Western philosophy, one might at first hesitate in accepting the capacity of objects

to "inflect the direction of events" (27), let alone attribute them a certain vitality as Jane Bennett does in "Vibrant Matter" (28) or grant them even rights as Bruno Latour does with his conceptual "Parliament of Things" (29). However, does this eco-centric return to 'matter' not only have theoretical but most and foremost immense practical implications; as we architects, who we base our daily decisions on the properties and values of materials, should know best. And not only we are impacted by material's agencies but also the future inhabitants, the people involved in the extraction and refinement of the material, the topography from which the material is extracted, the animals living in this environment, the market in which the material is sold, etc.

This simple example shows how plural, complex, and relational this New Materialism can be. To surrender to its logic and pragmatism, means also taking responsibility, for a whole chain of relations, for which one can only account through effort-full examination.

But then again, it would also be an opportunity: This would make the choice of material our most far-reaching tool as architects: to act spatially by forming, connecting, separating, opening, closing, moving... to act physically by growing, mining, transforming, assembling, destroying, feeding, by letting deteriorate... to act socio-economic by directing money, by determining the workers, by involving... to act socio-political by drawing attention, explaining, voting, teaching... to act meta-physical by creating atmospheres, letting vibrate, remind, embrace, expose, contradict... Is this true? Can we do all this with architecture alone? Without the use of anything extra-architectural,

but with the maximum possible awareness of it?

Material's agency is highly relevant for the practical approaches of exemplary architects discussed in the next chapter, as well as for the consideration of the authorial role of both humans and non-humans in design and construction.

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3 Gottfried, S. (1860 Volume 1 and 1983 Volume 2). *Der Stil in den technischen und tektonischen Künsten, Or, Praktische Aesthetik*. Munich: Friedrich Bruckmann's Verlag

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7 Venturi, R. and Scully, V. (1966). *Complexity and contradiction in architecture*. New York: The Museum Of Modern Art. pp.16-17

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10 Werner U. (2000). 'Reflec-

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11 Pouzenc, J. et al. (2023) 'A Moratorium on New Construction'. in *Planlibre*, Vol.200.

12 R. E. Somol. (2009) 'Poli-Fi' in *Journal of Architectural Education*. pp.32–33

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17 Frampton, K. (2002) 'Rappel À l'ordre: The Case for the Tectonic.' in *Labour, Work and Architecture*. *Collected Essays in Architecture and Design*. London: Phaidon, 2002 p.95

18 Moravánszky, A. (2018). *Metamorphism: Material Change in Architecture*. Birkhäuser. pp.15–27.

19 Davidovici, I. (2006) *The Dilemma of Authenticity I: Swiss architecture between ethical intent and aesthetic object*.

20 Moravánszky, A. (2018). *Metamorphism: Material Change in Architecture*. Birkhäuser.

21 Reichlin B., "Jenseits der Zeichen", in: *Der Architekt*, March

2001, pp. 61–69, here p. 62. Translation by R. H.

22 Dalibor Vesely (2004). *Architecture in the age of divided representation : the question of creativity in the shadow of production*. Cambridge, Mass.: Mit Press. pp.391-397.

23 Davidovici, I. (2006) *The Dilemma of Authenticity I: Swiss architecture between ethical intent and aesthetic object*. p.9

24 Gadamer, H.-G. *Truth and Method*. Translated by Weinsheimer J. and Marshall D. G. Second revised ed. London, New York: Continuum, 2004.

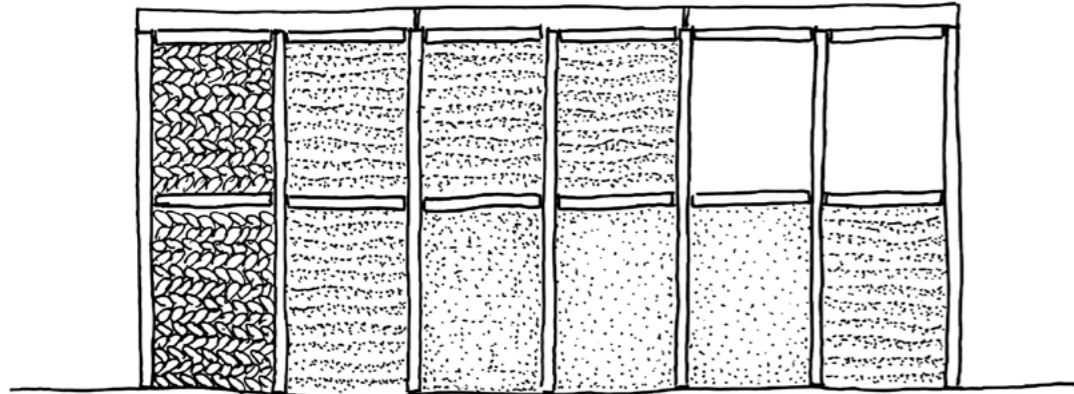
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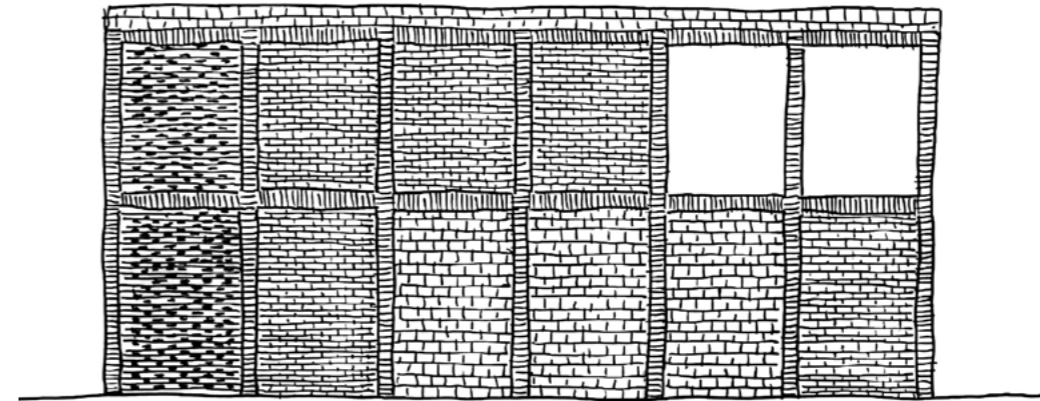


View Entrance from Calle Mayor



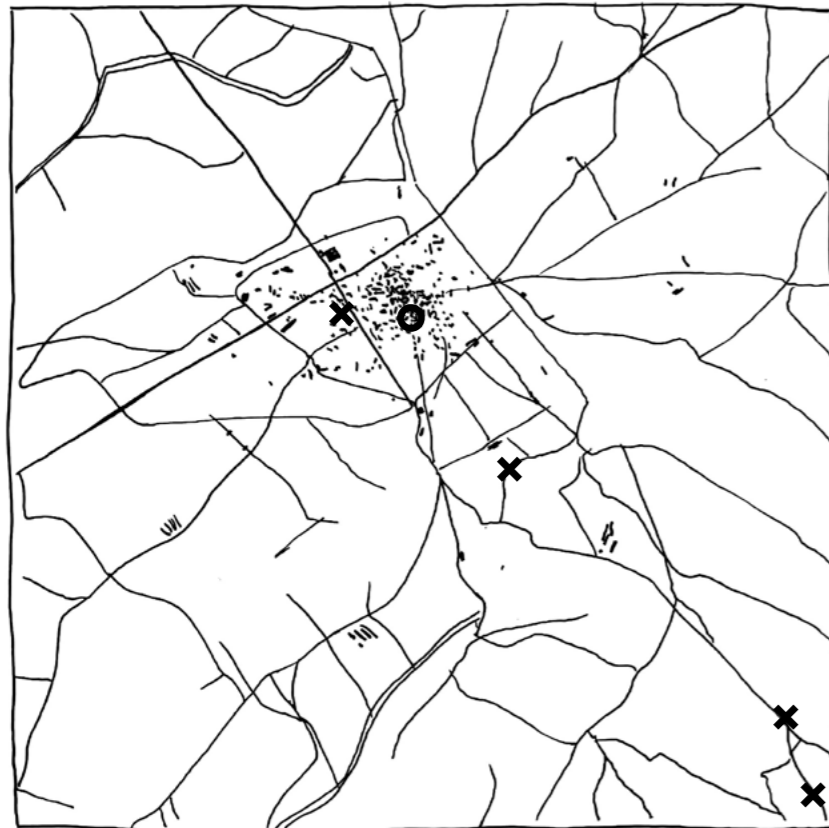
Dry stacked stones ? MJ	Rammed Earth 169 MJ/m ²	plastered Straw Bales 5,6 MJ/m ²	Steel Skeleton 844 MJ/m
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61.743 MJ



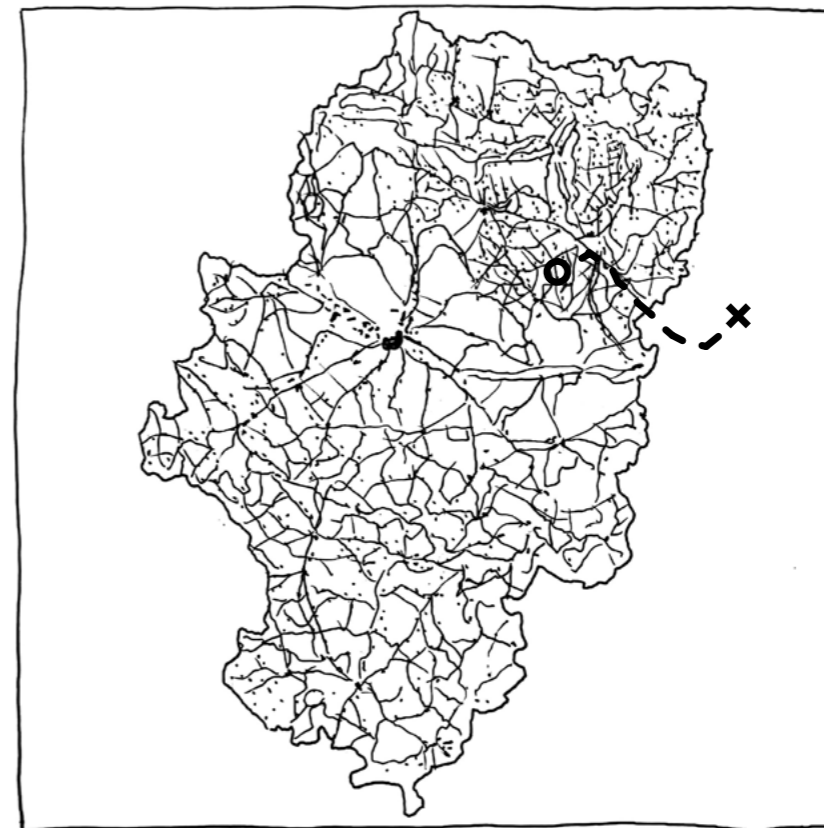
stapled with holes 333 MJ/m ²	halfbaked Bricks 25cm 1000 MJ/m ²	Thermal Bricks 29cm 696 MJ/m ²	Concrete Skeleton 144 MJ/m
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108.198 MJ



5 km

So which material to choose? From looking at the comparison of the previous page, the answer seems clear, doesn't it? To be honest, the ambitious material research I did over the last two semesters seems to fail at this point. There doesn't seem to be a conclusion to this question at all. In fact, the only way of getting an answer, would be to commit to a certain truth, like the energetic one rendered. But taking that position would also mean being biased. Let's for example continue with this example and consider the primacy of this ecologic idealism.



105 km

Then we could find all the materials in a 2km radius and start building a performative, ecological home. Easier said than done. Those materials are distributed on different plots, owned by different people, some materials not even being at a specific site at all, meaning they would have to tediously be picked up over a spread area. Further on, this material-decadence demand a whole range of skills to assemble them, making the construction more complicated or at least, slower, and more laborious.



construction

Instead, I chose another option: Yes, slightly higher in embodied energy, and by that probably less ecologic. But already the distance of solely 100 km is relativised when you consider that all materials can be brought in one truck load. They can even be ordered on the same web-site, since they're produced by the same company. At this point I could continue this energetic agrumentation even for the second option.

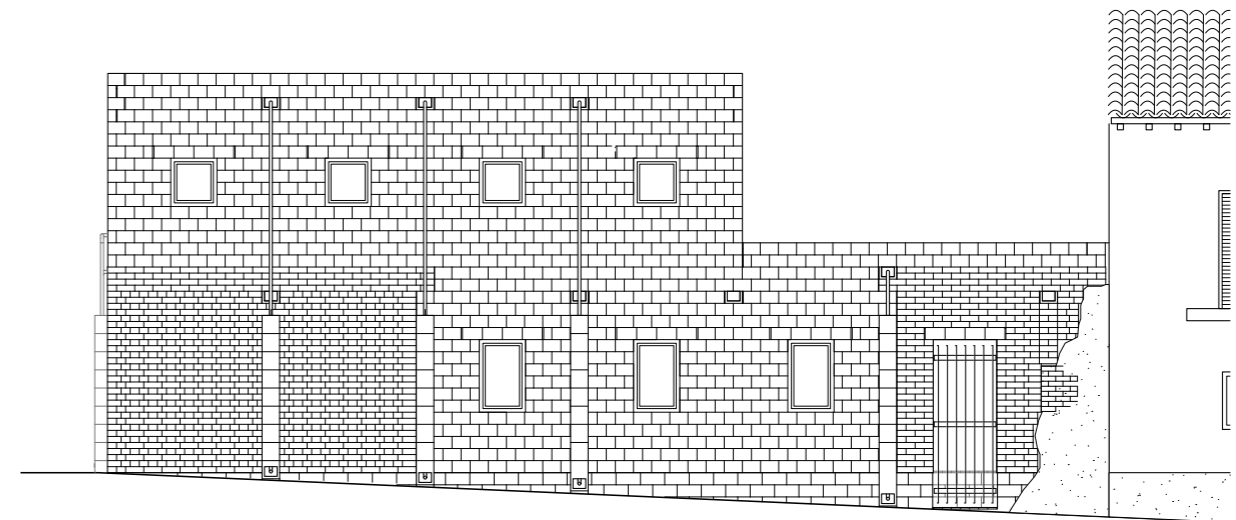
Instead, I want to emphasize the importance of not falling for any kind of idealism or reference of an a-priori, because you might miss out a great practical opportunity. Instead, we have to look out for what's currently available in each context anew. So even if bricks and concrete were the final choice of my project, the material-research I did, was not a waste of energy! When Pauline Lefebvre talks about Pragmatism in the last theoretical chapter of this paper, she explicitly points out that pragmatism, doesn't mean less effort. On the contrary, it takes effort to get to know all the available options, to be able to make considered decisions according to the availabilities of each individual site.

Because there is no formula or methodology as offices like advvt and bast sometimes want to make us believe. They have their strict methods, and their projects have a strict structure, so that they can be broken. It is those contradictions, inside the existing structure, that prove that you can do things differently and it will be even more joyful. And it is not even a mystery how to achieve that, but clearly readable in the architecture itself.

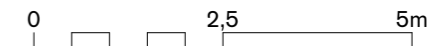
stoffwechsel of peralta de alcofea

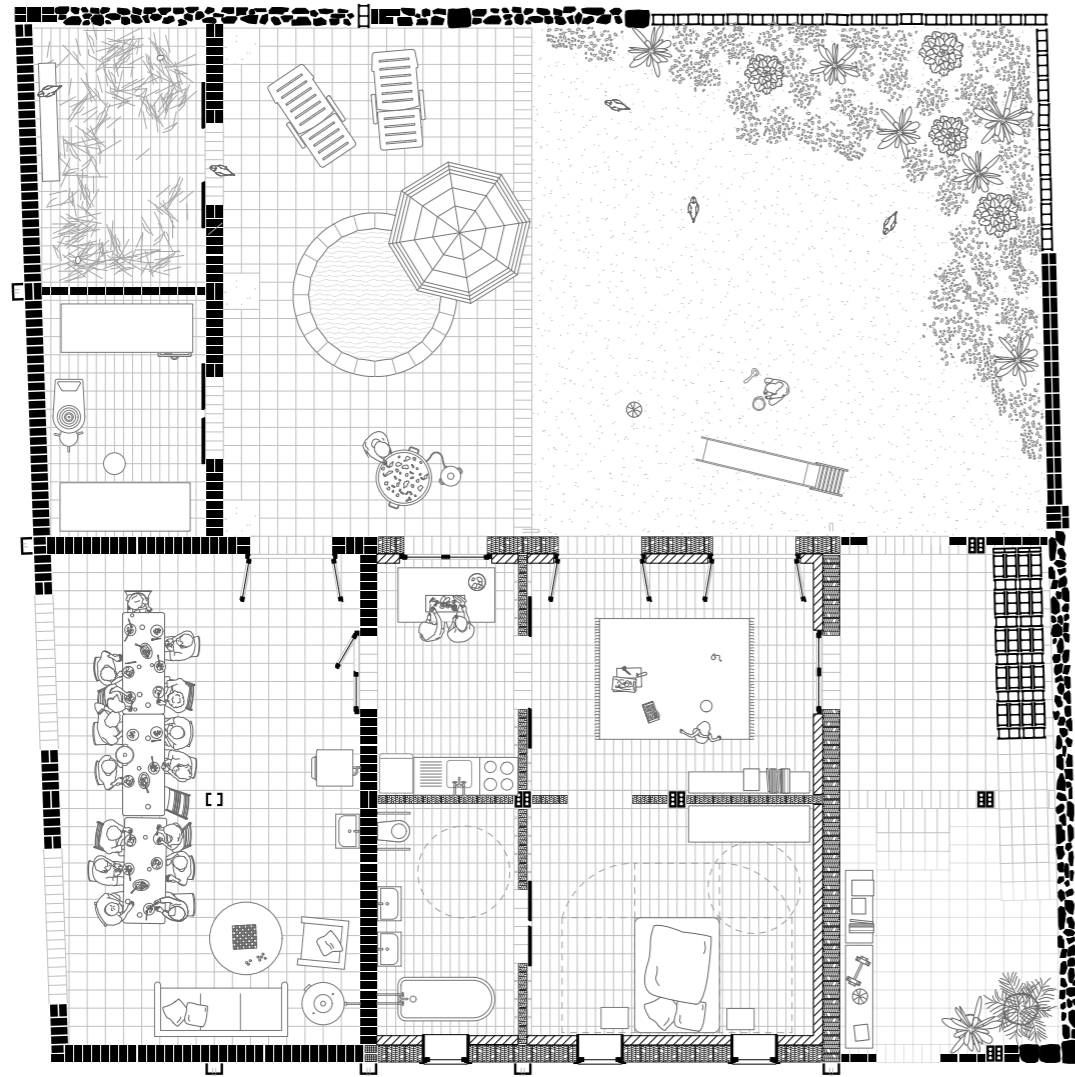


Elevation South from Garden 1:100



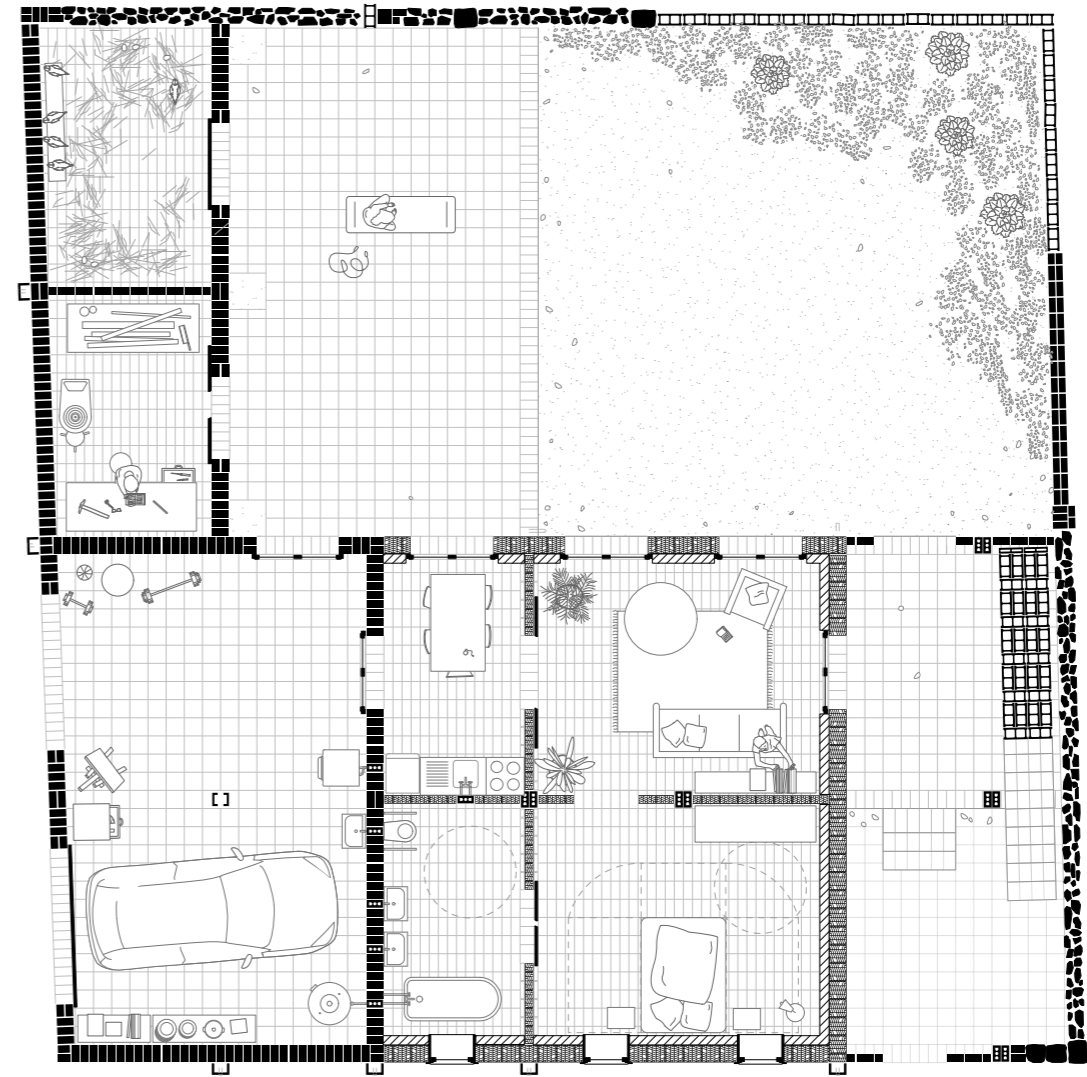
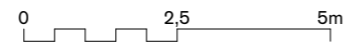
Elevation Nord from Calle Mayor 1:100





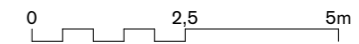
Summer:
6 Inhabitants + several Guest

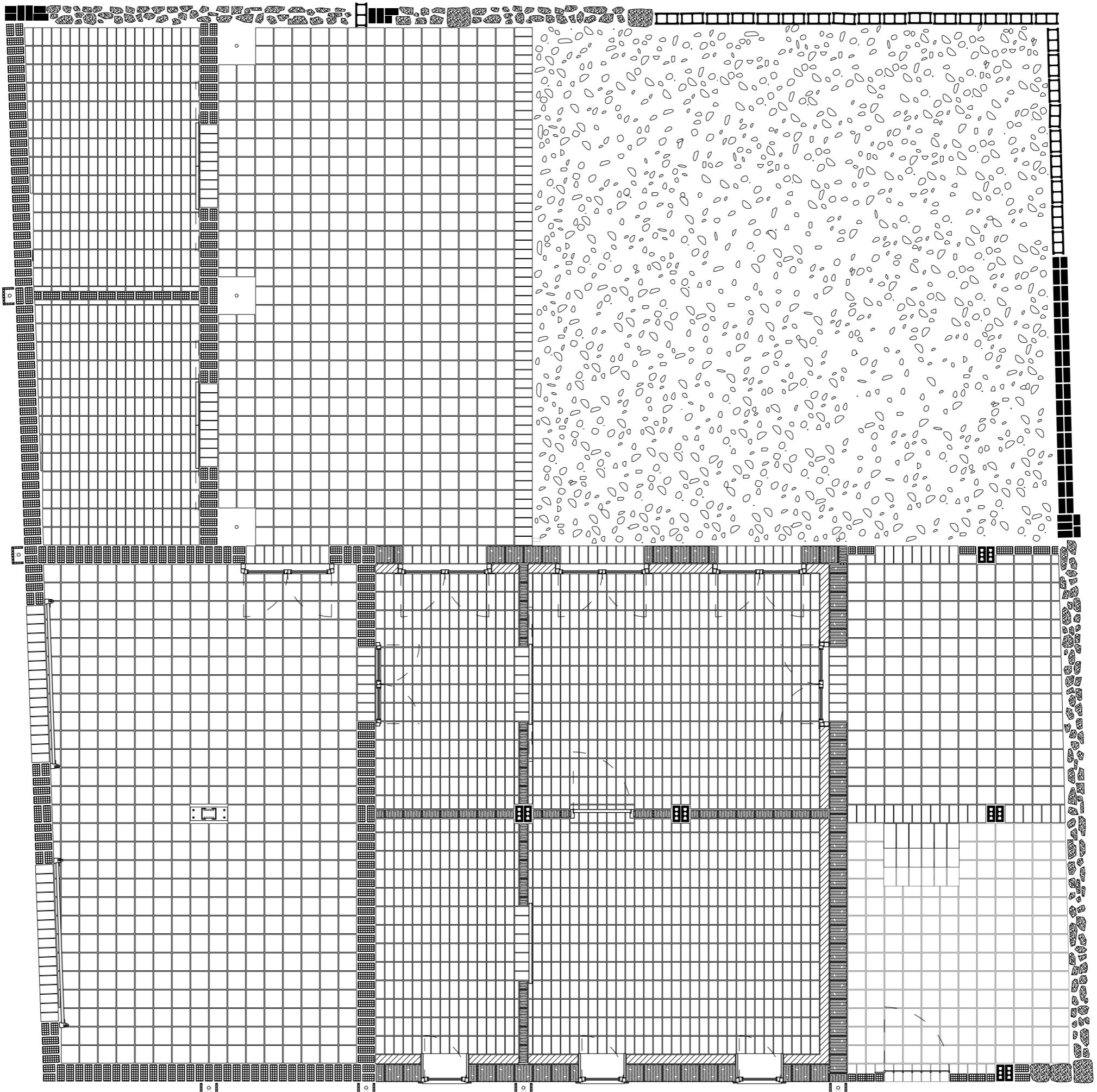
Groundfloor in Summer 1:125



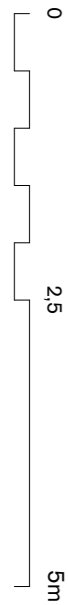
Winter:
2 Inhabitants + 1Guest

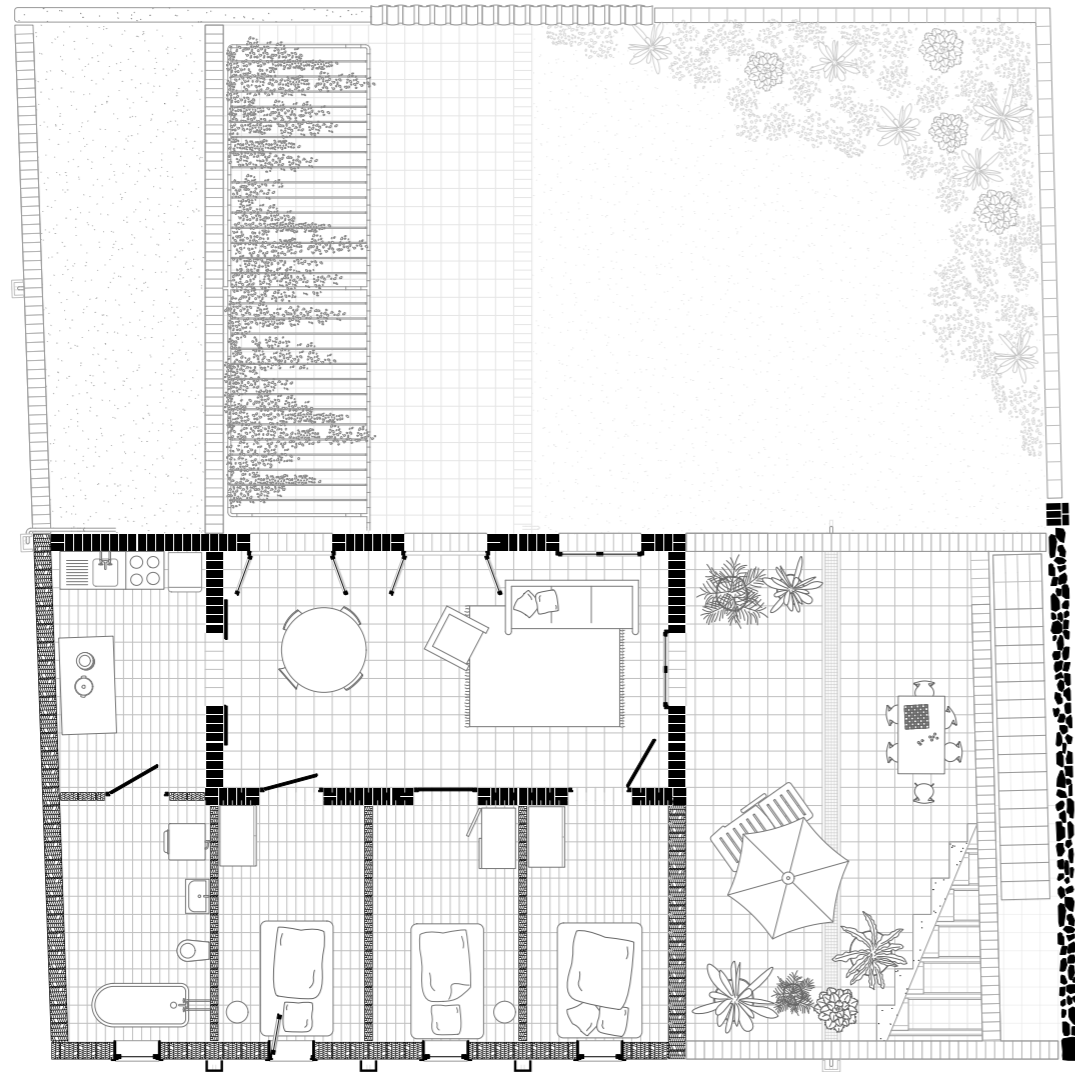
Groundfloor in Winter 1:125





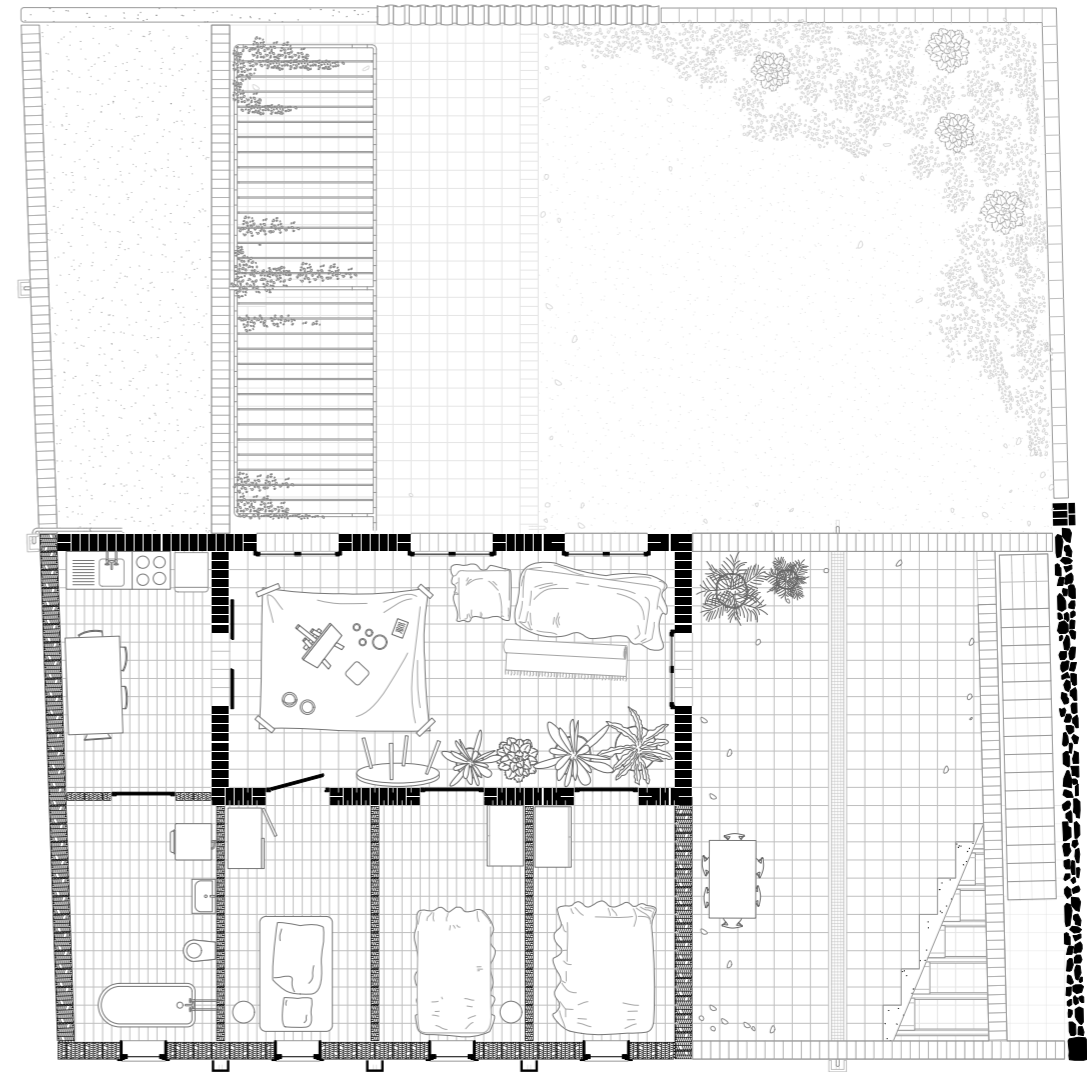
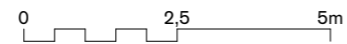
1:66





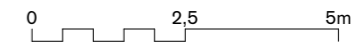
Summer:
6 Inhabitants + several Guest

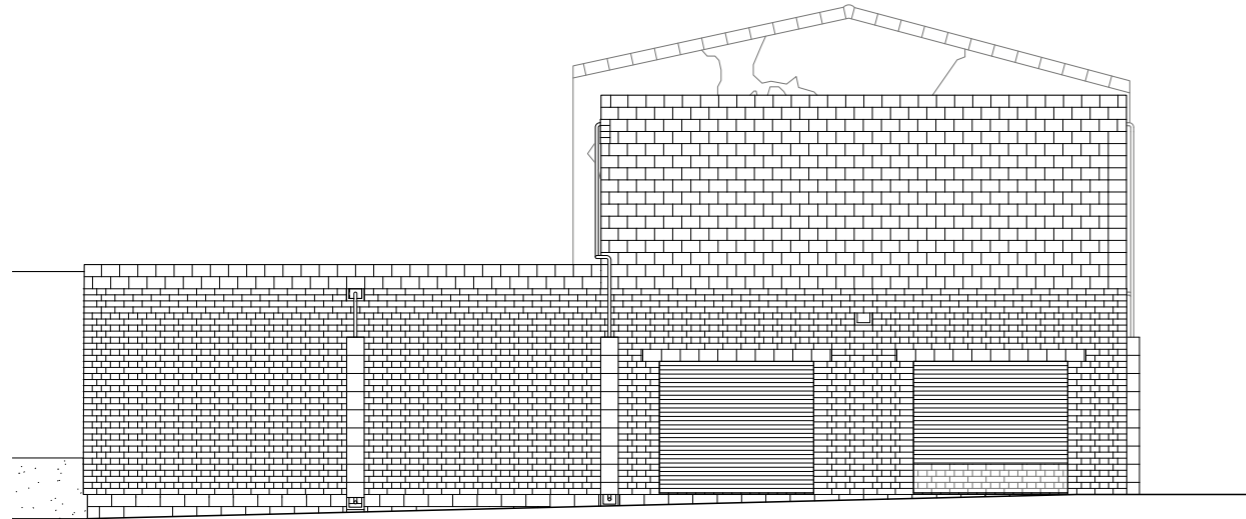
First Floor in Summer 1:125



Winter:
2 Inhabitants + 1 Guest

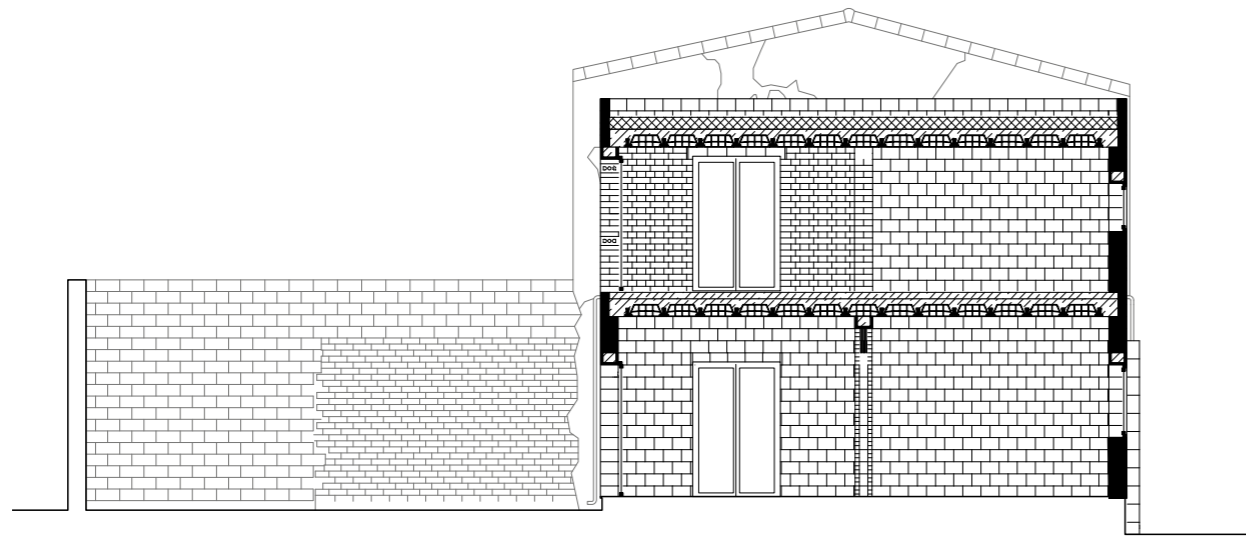
First Floor in Winter 1:125



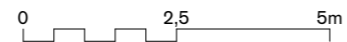


Elevation East from Calle de la Fuente 1:125

What's my position for this project then? I know my aunt. And I know she would not consider making any experiments with prestressed straw bales and rammed earth with me. I might be able to convince her. But instead, I chose a way of building which is very realistic and respects the contingencies of the context, since it is very aware of what is available and what's at stake. In fact, I use the same materials as all the other newly built houses too. But I'm rendering the materials as well as the structure of the building, and the exceptions visible.



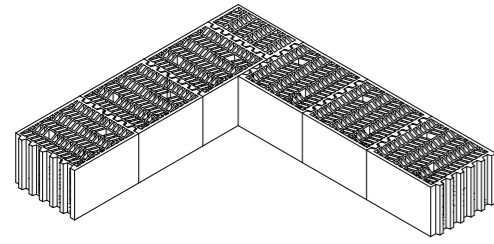
Section North-South 1:125



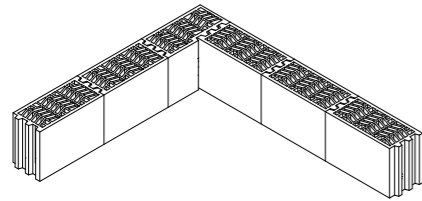
The internal structure of the project, starting from the grid, over the materials I order in one place, till the way I assemble them, is my modus operandi. It helps me designing while generating readability. My decisions might not always be the most functional, the cheapest, the most ecological solutions, but there is another dimension to this materiality. An expressiveness situated in the Cultural Realm, maybe even a certain symbolism, a lot of the people quoted in this paper attempt to describe much better than I could. However, I hope this project shows that sometimes rationality must be broken, so playful joy can emerge.

construction

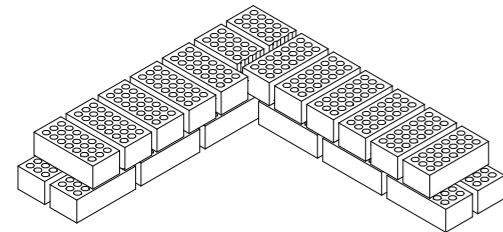
70



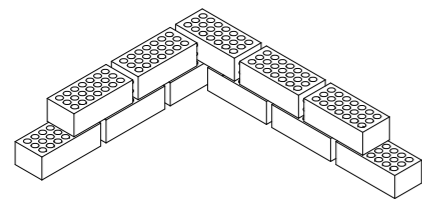
Comp.Strength [N/mm]	5
Price [€]	68,73
Embodied Energy [MJ/m ²]	1091
Globwal Warming P. [kgCO ₂ e/m ²]	128
Thermal Conductivity [W/(m*K)]	0,5
Thermal Intertia [J/(m ² s ^{1/2} K)]	900



Comp.Strength [N/mm]	5
Price [€]	37,98
Embodied Energy [MJ/m ²]	523
Globwal Warming P. [kgCO ₂ e/m ²]	62
Thermal Conductivity [W/(m*K)]	0,5
Thermal Intertia [J/(m ² s ^{1/2} K)]	900



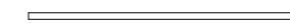
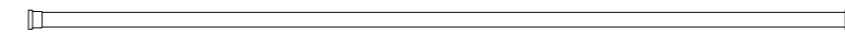
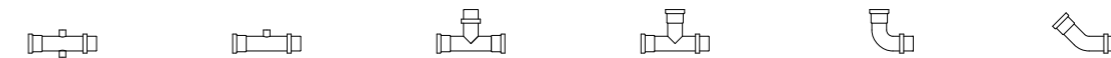
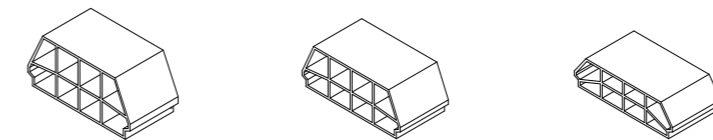
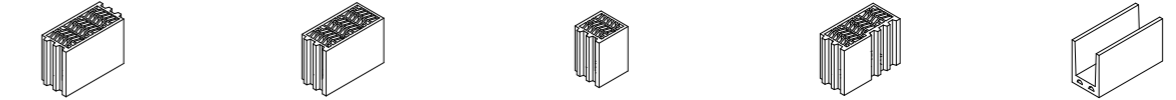
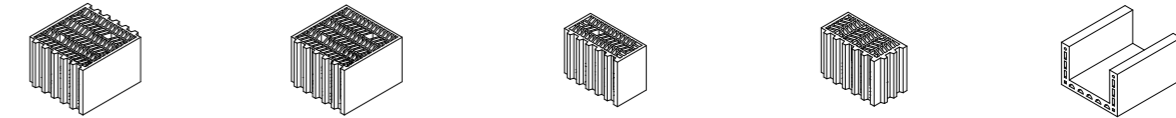
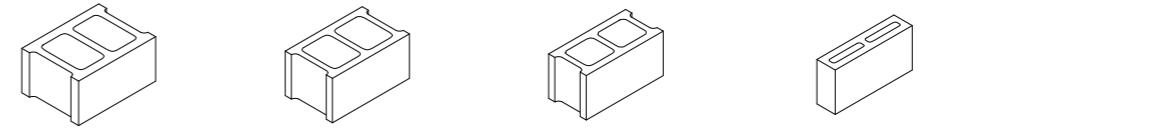
Comp.Strength [N/mm]	10
Price [€]	41,60
Embodied Energy [MJ/m ²]	696
Globwal Warming P. [kgCO ₂ e/m ²]	60
Thermal Conductivity [W/(m*K)]	0,2
Thermal Intertia [J/(m ² s ^{1/2} K)]	389



Comp.Strength [N/mm]	10
Price [€]	25,08
Embodied Energy [MJ/m ²]	315
Globwal Warming P. [kgCO ₂ e/m ²]	27
Thermal Conductivity [W/(m*K)]	0,2
Thermal Intertia [J/(m ² s ^{1/2} K)]	389

Comparison: Used Wall Types

stoffwechsel of peralta de alcofea



Overview: Utilized Blocks



View: Living Room in Summer / Atelier in Winter

IV. CONSTRUCTION

Construction's Agencies

It is the Agency described in the last chapter which also historian Robert Hahn outlines in his book *Anaximander and the Architects* when he depicts how the site of the temple was incorporating the pre-Socratic cosmos itself. He summarizes and renders a convincing anthropological picture of the complex network of the Archaic Greek period, pointing out developments that might not be pinned to singular findings or events – even if Hahn is well capable of using those with an archaeological discipline to prove his argumentation. However, he manages to interweave the common historical understanding of that age including socio-political, economic, and military developments over centuries with the, then, newly philosophical achievements of Anaximander as well as with technological innovations, such as applied on the construction site of temples. (1)

He even makes the hypothesis that the organization and cooperation of the operating workers during the construction process eroded and (in combination with a new philosophical and social world-view) finally led to the destruction of the power of those aristocratic patrons that intended those temples to secure their authorities in the first place. This narration may seem far-fetched but is this development towards an egalitarian and democratic society over those centuries an undeniable fact, and the flourishing of these visions, happened in a complex network of agencies, of which the construction site of the temple was undeniably a part of. Therefore, this historic example visualizes in an almost

fantastic dimension how the social act of building can aspire to impact its context and society.

“Il n’y pas d’innocence du bâti.” (2)

If we are aware of it or not, construction impacts the environment, nonetheless. A *Moratorium on New Construction* published in the monthly journal *Plan Libre* Issue 200 is a critical almost dystopic reflection on the same agency as it is applied nowadays in a large scale: “Each building represents a yawning abyss of materials torn from the earth” and an “exploitation of bodies”. (2) While Robert Hahn’s workers on the construction site of the temple managed to free themselves over centuries by restructuring the global structure of their society, such a change is not yet visible on the horizon of our construction industry and the real estate market.

Nowadays, contemporary Architects all over the world increasingly try to make aware of these effects of construction on its immediate and global context and, moreover, to make use of this agency as a potential opportunity to have a positive effect, as reflected in the call for political involvement in this moratorium. While the latter ambition can be questioned, the ‘making visible’ became a common method in contemporary practice leading even to a certain ‘brut’ aesthetic, aiming for transparency of human and non-human actors involved. In this chapter we explore the relevance of such methods taking place not only on the architect’s desk but especially on the construction site. But we also critically question in how far

the resulting aesthetics favour or damage the original intention and also what implications this growing importance of the act of making has on the role of the architect and authorship in general.

How dead is the author?

During the whole reading of the book “*Non-Referential Architecture*” the reader tries to figure out how to achieve the primary goal of (an ill-defined and obscure) Sense-Making. The very last chapter of the book about authorship, might give the disappointing answer: The authors defend here in a Modernist manner the architects position as mastermind blessed by genius (3) and, thereby, also the postmodern phenomenon of “star-ification”. It seems almost as if one of the book’s intentions (apart from a whole series of very valuable thoughts formulated) is to legitimize the authors’ own architectural practice. Such a conservative notion of authorship is not only highly questionable on ethical terms, since it negates the multiplicity of actors involved in the process and their merit, but it also has very practical and formal consequences for the architectural object itself.

Already in antiquity Vitruvius differentiated *fabrica* (“the manual-material aspects of design”) from *ratiocinatio* (linguistic-immaterial aspects) (4), thereby differentiating the act of making from the act of thinking. While for Vitruvius both acts were intrinsic to the design process and inseparable (making the architects involvement on the construction site indispensable), at latest with the Renaissance the division was fully implemented in the building industry. But its climax it reached, as Bart Decroos arguments in “How Gothic is Contemporary Architecture” pub-

lished in Pauline Lefevbre's book "Penser-Faire. Thinking-Making", during the age of industrialization of Europe. (5)

Decroos' text is a re-reading of Ruskin's critique on industrial production, as opportunity to re-evaluate the process of 'making' in architecture – especially interesting in the scope of a growing interest and even romanticization of craftsmanship in the present. He reminds us of the book "The Stones of Venice" by John Ruskin (6), a celebration of gothic architecture and a critique on modernization already published in the middle of the 19th century. According to Ruskin it is precisely due to industrial production that the disconnection between thinking and making has been catalysed, not only distancing further the job of the making "workman" from the job of the thinking "gentleman", but moreover by alienating the artisan as mere operative, stolen almost of his humanity. A phenomenon which is still visible in the reputation of certain jobs nowadays.

While there are certain similarities between Ruskin's critique and Marxist philosophy, Decroos points out that most interestingly (for the debate in this paper at least), however, Ruskin's concerns weren't primarily politically motivated, but rather part of the search for a new modern aesthetic, to which we will come back later.

In the fifties and sixties of the last century a range of essays appeared criticizing – in the postmodern manner of Semiotics – the Modern conception of authorship. Next to Wimsatt and Beardsley's "The Intentional Fallacy" (1946), Michel Foucault's "What is an Author" (1969), and Jaques Derrida's deconstructivist concept of "Différance" (1963), "The Death of

the Author" is an essay written in 1967 by the literary critic Roland Barthes, in which he criticizes the focus of literary criticism on the author, limiting the possibilities of interpretation – speaking even of a tyranny. Instead, he emphasizes the importance of the reader, since it is only in the reader's impression, that the meaning(s) of the text can be found. Following his argumentation, the text, cannot have solely one meaning, be solely the message of the author, since it is the result of an interdependence of a variety of texts originating in the complexity of human culture. These texts – none of them original – are colliding, blending, and interweaving: "The text is a tissue of quotations drawn from the innumerable centres of culture." (7)

It is therefore, that Barthes is longing for a liberation from meaning and criticism – a few decades before the rise of post-criticism in Architectural Theory – replacing the author by the [literally] Modern inscriptor, with no means to express since he knows that "the inner 'thing' he thinks to 'translate' is itself only a ready-formed dictionary, its words only explainable through other words, and so on indefinitely" (Ibid., p.146). According to Barthes the true giver of meaning to the text is the reader (or beholder), since in him all the interpretations, all the cultures and texts of Modern Society are united.

***"Thus is revealed the total existence of writing: a text is made of multiple writings, drawn from many cultures and entering into mutual relations of dialogue, parody, contestation, but there is one place where this multiplicity is focused and that place is the reader."* (Ibid., p.146)**

The shortcomings of reducing architecture to its communicative act, such as the overshadowing of other crucial aspects as spatial quality, functionality and phenomenological aspects have already been shortly mentioned in the previous chapter and are clearly visible in the architecture of Michael Graves or Charles Moore, which triggered the search for universality by the end of the century. But in how far is the shift of origin of meaning to the beholder, or more generally to the subject, problematic? Walter Benn Michaels, a literary theorist with a special interest in photography and arts in general is since a longer time occupied with the meaning of texts and the ethical implications of form and aesthetics. In his writings which range from the literary theoretical essay "The Shape of the Signifier" over socio-political matters of inequality in his book "The Trouble with Diversity" to the very subject of art in his book "The Beauty of a Social Problem", he coherently questions the idea that the reader or the beholder or the subject's perspective contribute to the meaning of a work of art.

In the essay "The Shape of the Signifier" (8) he doesn't directly criticize Derrida, Barthes and co. but continues their deduction ad absurdum: When Derrida avoids the term utterance and replaces it by marks, he does so because for him an utterance or a sign has always the same signified. Which would mean that if different subjects use the same marks to say something different it is only due to the primacy of their subjectiveness (or for them not speaking the same language or for their diverse cultural background etc.). Following this argumentation, the primacy of the subject and identity makes – masked under the political disguise of multiculturalism – disagreement

about meaning impossible, since it turns it into a matter of subject-position and therefore there would be as many meanings as beholders. Walter Benn Michaels points out how uncanny the imagination of such a truth would be.

Instead, he insists on the importance of the internal structure of a work, rather than our subjective feelings about it (8). Benn Walter Michaels illustrates this best with his political examples: In a lecture at Harvard he confronts the students with their pride of being such an ethnically diverse group, while at the same time this diversity is just disguising the homogeneity of the group in a socio-economic sense due to the structural inequality of the highly stratified American educational system. Another example he gives in a conversation with architect Sebastián López Cardozo titled "Uninterested/Unequal/Understood: Architecture's Class Aesthetics" (9) are Uber-drivers, that no matter if they feel exploited or empowered by the neoliberal structure, either way they're being paid less than the value of their labour. It is the truth intrinsic to the objective structure, which allows contradictions and subjective disagreement about meaning (instead of their feelings). And it is precisely in that moment that the beholders are "making claims about the world and on each other" (Ibid., p.12), which in the case of art or architecture would mean fulfilling the mimetic purpose.

Regarding authorship this would mean that meaning derives from the intrinsic structure of the object and is not gifted by the formal idea of an architect's genius. In defence of Olgiati and Breitschmid, however, the designer would have the important role of formulating an intention and rendering it visibly through the materialist process of

enactment of the work inside the structure.

Ethics vs Aesthetics 1 (minimalism vs cosmopolitanism)

"Minimal Moralia", the title of Frampton's essay quoted repeatedly in the previous chapter, refers to Adorno's "Minima Moralia", itself a tribute to Aristotle's "Magna Moralia" implying an ethical responsibility of the architect. In the following pages we will with the help of a few critical texts take a look unto some specific contemporary practices very relevant for our discussion. Our aim is to critically compare their architectural production with their narrative, the latter usually sketching a certain ethical position legitimizing the methods of form-finding, in the hope to find some answers of how Contemporary Aesthetics should look like and why.

For the new German-Swiss architect scene this ethics equalled authenticity, as reaction to post-modern disorientation. The search for this endangered authenticity as anchor in "the primacy, and rapid consumption of ephemeral images in the context of a market-led society" (10) became the common basis for Swiss architects even if their methods diverged. This also explains why most of these architects searched rescue in phenomenological hermeneutics, since they explore the universality of being human in this world.

For Frampton with his conviction about tectonic truth it was clear that authenticity meant an ontological approach to architecture's tectonics with a legible construction, as opposed to what he called representational or scenographic. In the above-mentioned publication he, therefore, defends Zumthor's craftsman-approach, while harshly

criticising Herzog and de Meuron's artistic sophistication in later works. Davidovici, in her second part of "The Dilemma of Authenticity" makes us aware that the "subsequent descent into formalism [of the latter office] confirms Frampton's fears". (Ibid., p.7)

On the other hand, Marcel Meili describes authenticity as conceptual coherence, which definitely cannot be denied from Herzog and de Meuron. (11) In fact Hans Frei goes even further by reversing Frampton's argument, criticising Zumthor as the real "artist-architect, who merely produces theatrically his exhausted passion" by hiding all functional contingencies in Vaals for the sake of the pure artefact. (12)

***"If Swiss architecture commands interest through the notion of building with integrity, then the culmination of visual and constructional integrity tends towards a radical simplicity that is in itself aesthetic."* - Irina Davidovici (10)**

This confrontation points out a common problem in contemporary aesthetics: While Herzog and de Meuron consciously rejected Frampton's minimalism and morals, getting immersed and making use of the cosmopolitan consumer culture, also Zumthor's puristic austerity couldn't withstand the consumerist branding. The minimalism to which the title of "Minimal Moralia" alluded probably catalysed this devastating effect in the professional field. Davidovici therefore emphasizes that in the "mute" formalism of the romanticized Swiss temple with its purist "aesthetic experience" cannot be found the universal gravity searched for, and that the "isolat[ion] from the contingency

of the chance conditions in which [architecture] appears” must be broken up. It seems as if the only authenticity left then would be Vesely’s “poetic paradigm of design” meaning the mimetic purpose of architecture to relate to praxis and eventually to a wider context.

Ethics vs Aesthetics 2 (aesthetic of imperfection)

Like between the 60s and 80s swiss architecture suffered labeling as ‘minimalist aesthetic’ undermining their original concern, a similar development can now be seen with the ‘aesthetic of imperfection’ as visible especially in the Belgium scene but also other continental practices. And this seems, again, due to the symptoms of post-modern consumer culture, such as the starification of founding partners such as Jan de Vylder or the fetishisation of “instagramable” scenographies such as the designs of the more anonymously titled Portuguese practice of Fala Atelier. The need to overcome these symptoms by rethinking the role of architect as author seems still to be as relevant as 30 years ago, not only as ethical concern in a world of ever-increasing inequality, but most and foremost since these structures have inevitable consequences on the Architectural Object, as the following cited essays and examples demonstrate.

The already mentioned paper “How Gothic is Contemporary Architecture” (5) written by the former collaborator of the office “architecten de vylder vinck taillieu”, or just advvt, must be read in a critical manner. The author defends both the attitude of the office as well as the projects used as a reference. He recognizes the problematic of a fetishized aesthetic, but without taking any responsibility for it. Instead, the problem

is blamed on the media culture and the office’s success. Nonetheless, the essay is very valuable since its rereading of Ruskin’s gothic architecture gives inspiration for a new ontology of ‘making’ in contemporary architecture:

Ruskin’s critique of an industrial production of perfect serial objects, alienating workmen as mere operators, robbed them of their capacity to think and to exercise their agency, as opposed to the medieval production of gothic architecture, where each craftsman involved in the process was given the freedom of their own creativity and even of imperfection and errors, pointing out Gothic Architecture’s ability to render the participation of these human actors (beyond the architect) visibly. Further on, Ruskin seems to be even aware of agents beyond human actors such as the vitality of materials, arguing against “mathematical exactitude” when restoring Gothic Churches, since this would hide all those agents formerly visible in the Aesthetic of Gothic Architecture.

“The process of industrialization did not only solidify the distance between thinking and making, between the intellectual gentleman and the artisan-turned-operative, but also enforced an aesthetics of perfection that denied the vital materiality of architecture.” – Bart Decroos (Ibid., p.118)

Decroos points out how Ruskin’s object-oriented ontology is directly connected to his appreciation of contextuality: “Ruskin argues that a building is never constructed in a spatial or temporal vacuum, but always already intervenes in an existing situation, weather architectural, historical or environmental.”

When Decroos asks the question of “How Gothic is Contemporary Architecture” he doesn’t mean gothic as a style but rather as “logic of design” (Ibid., p.127). With a series of projects by advvt this logic is then demonstrated in a practical sense: Engineers, contractors and clients are integrated into the process of form-finding of the Podium Pile Pavilion for the Horst festival; the office’s archaeology during the restoration of the abbey in Groot-Bijgaarden isn’t concerned solely with the original state, but all the accumulated “dirt” shall be made visible; and finally in the Caritas project in Melle materials are allowed to live and decay, even if this means a bigger effort of maintenance. According to these exemplary projects, the office’s strategy is to open space for other human actors, the traces of time, and the vitality of materials to exercise their agencies, in a manner that prevents an alienation of actors and the “apparent lifelessness” (Ibid., p.118) of the dominant formal logic of modernism.

The result is an “aesthetic of imperfection” oscillating between bareness and baroque, between greyness and colour, between human and non-human vitality. Also, Dutch architectural theorist Lars Spuybroek, quoted in the paper, describes the inseparability of things as “veil of strange intermediate being [...] fundamentally entangled.” (13) gain, the metaphor of the network seems to reconcile the modern dichotomy between human and nature lamented by Latour at the very beginning of this work. Mike Anusas and Tim Ingold propose in their book “Designing Environmental Relations: From Opacity to Textility” even to replace form altogether by textility:

“Our suggestion is to consider form as textilic, the ma-

terial world as comprising energetic lines, and design as a practice of enriching the weaves that bind people and their environments.” – Mike Anusas & Tim Ingold (14)

Ethics vs Aesthetics 3 (objectivity vs formalism)

A more critical stance on the work of advvt is taken in the essay “(In)visible Authors” by Bureau FL.5.2. (15) The conceptual approach described here by means of the unique façade of the Ballet C de la B & LOD project is very similar to the one described by Decroos: The façade is the result of a long, complex, and even expensive finding process involving a diversity of human actors such as engineers, clients, authorities etc. as well as non-human actors such as structural considerations, constructive elements, materials, conflicts and errors – a “formal incarnation” of collective authorship as well as material encounters. The assemblage as product of an operational logic seems evident especially when it results in functional conflicts such as a hindering column in front of a doorway.

On the other hand, this logic is sometimes rejected in favour of seemingly arbitrary or solely formal aspirations. Recognized by the authors as aesthetic endeavour to create a whole, by connecting visually elements “otherwise left to their eclecticism”, they criticize less the breaking of self-established rules than the “tendency to submerge the subjective origin of their aesthetic choices in a discursive fog of ethical pretensions”.

Another example given is the M24 project by Toulouse-based firm BAST. In this essay they’re presented as opposed to advvt since their

approach is to erase any subjective expression of individual actors, instead of the endeavour of the Belgium firm to render them visible. Formal decisions are therefore legitimated by a “chain of logical deduction” in respect of exterior agencies such as client’s wishes, economy, rational implementation, delivery capacities etc. Even if the emphasis is focusing here mainly on non-human actors, the general approach of both offices seems quite identical. As pointed out they even have in common the formalism undermining their narrative. According to Bureau FL.5.2. the narrative is most and foremost used as a *modus operandi*, to secure the horizontal internal structure of the office as well as a certain objectivity (even if an artificial one) for making decisions.

The paper recognizes the used architectural examples for their achievements in creating a wholeness, as a result of, both, objective deductions and formal aspirations, criticizing particularly the dishonesty, resulting from a “creed that holds that a perfect, literal translation exists between the work process and the formal language”. (Ibid., p.63) It almost seems as if the “Tectonic Truth” was replaced in Contemporary Practices by a “Process-based” or “Metabolist Truth”. Apart from questioning the “intellectual honesty” of this linkage, they warn from falling for any of both extremes, of either fetishizing their aesthetic “stripped of ethical and circumstantial origins” or of a “castrating objectivity” incapable of expressiveness.

This leaves us with the same old question about aesthetics and the right approach to contemporary architecture. Bureau FL.5.2. advocates for a new “aesthetic engagement” freed from dogmatic postures of critical theory and for-

malism, instead exploring validity in an aesthetic and interpretable disorder. (Ibid., p.65) While in such wishes there always seems a certain tiredness or even anti-intellectualism audible, the authors here especially refer to Venturi, advocating for a practice of anchored, nuanced and hierarchically ordered choices and the “coherence of the whole”.

Ethics vs Aesthetics 4 (theatrical vs absorptive)

Paul Preissner, practicing architect, goes beyond coherence by proposing an architecture that is “Not interesting” or even “Kind of Boring” (16) As already described literary critic Walter Benn Michaels also advocates for coherence, or what he would call and internal structure in the process of making art, in this way consciously disregarding subjective opinions. In his conversation with architect Sebastián López Cardozo titled “Uninterested/Unequal/ Understood: Architecture’s Class Aesthetics” (9) Michaels questions the need of ‘interesting’ architecture to seek our attention. ‘Uninteresting’ architecture instead doesn’t “seek to produce any effect on you” and is therefore “indifferent” to the beholder’s attention (Ibid. p.8). To describe these two poles, he uses the adjectives “theatrical” and its opposite “absorptive”, a vocabulary introduced by art critic and art historian Michael Fried in the early 80s referring to Diderot’s admiration of 18th century painting which depict an unawareness of the beholder and to criticize the “theatricality” of his contemporaries’ Minimalist art.

What fascinates Fried and Michaels about the depicted indifferent to the beholder’s reaction, is two-folded: First of all the refusal of trying to affect the beholder grants the

boring art autonomy, since its meaning is embodied intrinsically rather than derived from the beholders reaction. For Preissner the issue is the same in the realm of architecture: His boring architecture refuses insists on its meaning regardless of subjective responses. It is meant to be seen as architecture. In fact, he seems politically motivated, when he opposed his architecture to the subjective 'interesting' which works "within the conservative model of 'taste'" (16), as if it would in some way represent a "intellectual or moral superiority" while at the same time "only serv[ing] the status quo interests of the generationally wealthy and powerful."

Second, absorptive art leaves space to the beholder to question the meaning, as opposed to theatrical performances that aim on evoking specific reactions. For Walter Benn Michaels it is precisely the "insistence on the internal structure" which opens space for disagreement and contradiction. (15, p.9) A conceptual space of reflection he recognizes between Preissner's Architectural Object and the beholder. Now, one could question why the meaning of architecture shouldn't be clear. Like the painting which obviously has the function to be looked at, while at the same time gaining its autonomy through an indifference to the beholder's reaction, also architecture can be functional without having to dictate the inhabitant any usage. Michaels points out that it is "the critique of the interesting to be precisely a critique of the architect trying to control the user" (Ibid., p.11), as if after a century since the beginning of Modern Architecture we would still believe that meaning derives solely from functionality.

Reflecting on Preissner's architecture it has to be emphasized that

between the 'interesting' of Frank Gehry's Guggenheim and the replication of acontextual buildings according to normalizing regulations there is a wide spectrum. And while Preissner's critique of a "peacock-like demonstrations of individuality in which someone doesn't resist the world they pretend to be against, but simply celebrates the cultural hierarchy of material" (16), which when considering that this hierarchy has recently also been inversed can eventually also be used against some of the above mentioned offices, one must recognize that luckily even Preissner's boring architecture testifies for a joyful play with materials, details and context. That said, it seems to me that an awareness of the theatrical might help in finding an aesthetic resistant to exploitation through our neoliberal system and media culture, but that ultimately only a reciprocal self-actualisation for each context might be truly resilient.

Network of Actors

It is intent that gives the architect authority. K. Michael Hays claims that this intent is even necessary to resist dominant external realities – may their origin be cultural or formal: As the title of his semi-nary essay "Between Culture and Form" (1984) (17) already anticipates he cuts his way through the postmodern jungle by sketching a "pervasive dichotomy" between two prevalent perspectives in architectural theory and practice. One architecture is self-justifying its existence through the perpetuating hegemony of the culture it was erected in, the other through an internal coherence of a formal system. While the danger of the representation of cultural contingencies has already been discussed, most interestingly Hays finds a similar critique for the latter architecture

too: By ignoring its situation in a cultural context this architecture risks to be interpreted with solely positivist methodologies obscuring its worldly interrelations, with the possibility of impoverishing into a rigid formalisms or becoming even a potential victim for dominant cultures such as neoliberalism.

It is for those reasons that Hays proposes a Critical Architecture, which resists any authorial a priori (cultural or formal) but refers only to its own origin and conventions or – as I will call it in the words of Benn Walter Michaels for the sake of coherence – to its own structure. Most importantly though Critical Architecture doesn't negate its situation and embedding in a cultural context, and furthermore even "contingent and worldly circumstances exist at the same level of surface particularity as the object itself." (Ibid., p.27) One must understand the system to oppose it. It is this awareness, which gives the architect not only the sensitive authority but especially the responsibility to become an active actor inside those contingencies.

***"It is precisely the responsibility of criticism that this cultural meaning be continually decided."* – K. Michael Hays (Ibid., p.27)**

Robert Somol and Sarah Whiting are "tired of meaning" and even more so of such semiologic deductions as the on described by Walter Benn Michaels above. And Richard Anderson reminds us, that already at the beginning of the 20th century such references from literature have been criticised: "According to [Geoffrey] Scott, such a view 'neglects the fact that in literature meaning, or fixed association, is the universal term; while in architecture the universal term is the sensuous

experience of substance and form", pointing out the importance of the phenomenological dimension of architecture for this Post-Critical movement. (18) The more recent critique in the form of the essay "Notes around the Doppler Effect and Other Moods of Modernism" (2002) by Somol and Whiting directly attacking Michael Hays' and Peter Eisenmann's Critical Theory, makes use of sensational terms such as "effect", "sensibility" and "atmosphere". They propose as an alternative, Projective Architecture, which "stems from design and its effects rather than a language of means and materials". (19)

Architecture's autonomy is here simply emphasized as a design-discipline, relieved from its theoretical ballast and its Heideggerian universality. The role of the architect is hereby described as 'expert on design': "So when architects engage topics that are seemingly outside of architecture's historically defined scope [...] they don't engage those topics as experts on economics or civic politics but rather as experts on design and how design may affect economics and politics." (Ibid., p.75) When, further on, describing the architectural design as "atmospheric interaction" they seem almost convinced by the ontology of new materialism, indicating that Projective Architecture – at least as originally intended – is not at all antitheoretical.

"It foregrounds the belief that both the subject and the object carry and exchange information and energy". - Robert Somol & Sarah Whiting (Ibid., p.76)

Nonetheless, Michael Hays' fear of a Non-Critical Architecture becoming the victim of external authorities such as the liberal market seems to have proven

itself in recent decades. And also, Pauline Lefebvre, taking a guardian role advocating for the original Post-Critical intention in her paper "What Difference Could Pragmatism Have Made" (20), laments the anti-intellectual direction architectural practice took in the early 2000s. She exemplifies the danger of an apolitical supremacy of effect with the UNStudio's office complex for La Defense in Almere, which's skin "acts as a cosmetic, a 'hypnotic seducer", not representing anything but its "capitulation to market forces". (Ibid., p.29)

Pauline Lefebvre proposes, not as an alternative but rather as a correction of the Post-Critical term, a New Pragmatism, rooted in American Pragmatist Philosophy. This Architecture replaces 'effects' by 'consequences' therefore going beyond the articulation of affect. By looking for constraints in a larger and more demanding sense the neglect of site, user, economy etc. – or in other words the context – is prevented. However, this rescuing of meaning as result of interactions comes with responsibility: It doesn't liberate the architect from theory through its dismissal but rather demands a profound debate and the investigation of all those contingencies forming the broader complex context.

The title of Michael Hays' most recent book, 'Inscriptions: Architecture before Speech' (21), reminding us of Derrida's and Barthes' deconstructivist literary critic, seems to prove Hays' commitment to postmodern philosophical concepts in the search for the autonomy of architecture. However, when opening the book, these "inscriptions" are revealed as the works of some selected Architectural practices, illustrated with the considerable amount of 750 coloured images. While sticking to

the inscribing role of the architect, the critique Hays had to suffer from the Post-Critical camp seems to have left traces in so far, that he shifted his focus from semiology to contemporary architectural practice to prove his concerns.

The title of the book is therefore giving a hint of what Michael Hays and Andrew Holder are trying to 'track' in the vast landscape of seemingly unrelated forms, that can be found in Contemporary Architectural Practice: A common effort of "reconstitution of the Architectural subject after the demise of the architectural symbolic." With Architectural Symbolic Hays means the subjective épistémè of each epoch which lends it's architecture a meaningful symbolic authority. As examples he names "antiquity, nature, reason, epochal will, technology, and, from the 1960s until recently, language itself." The use of the terms "until recently" by this theorist closes the semiological chapter definitively. (Ibid., p.565)

However, the reconstitution of the subject stays the primary aim of the book since according to Hays the symbolic is "the site of all social support, adjudications of historical injustices and inequalities, and articulations of relationships between the self and the Other" referring to our political, social, but also phenomenological (in its original sense) responsibility to act in a wider context. Moreover, the "bits of the Real in the Symbolic" prevent us of ignoring consequences and realities that lay "beyond our representational systems" such as the system boundaries of our empirical tools. (Ibid., p.570) K. Michael Hays proposes to give the subject a new consistency with an "Architecture before Speech":

It would then be the task of the Contemporary Architect to create these “material marks” preceding the actual moment of meaning. A sign, a hint, a confrontation, which hasn’t become figural or even symbolic yet, but nonetheless traces and challenges our human being and acting in a bigger network. It must be emphasized at this point that for Hays these inscriptions (or materialized marks) don’t represent any political, social, ecological or any other ideological apriori, since the subjective interpretation/agreement/debate about their meaning has yet to be made and then reciprocally questioned by human and non-human actors. And secondly, at the same time, the materiality of these marks preserves an awareness of their worldliness and their situation in a wider context, without granting the performative (however it might be defined) any primacy.

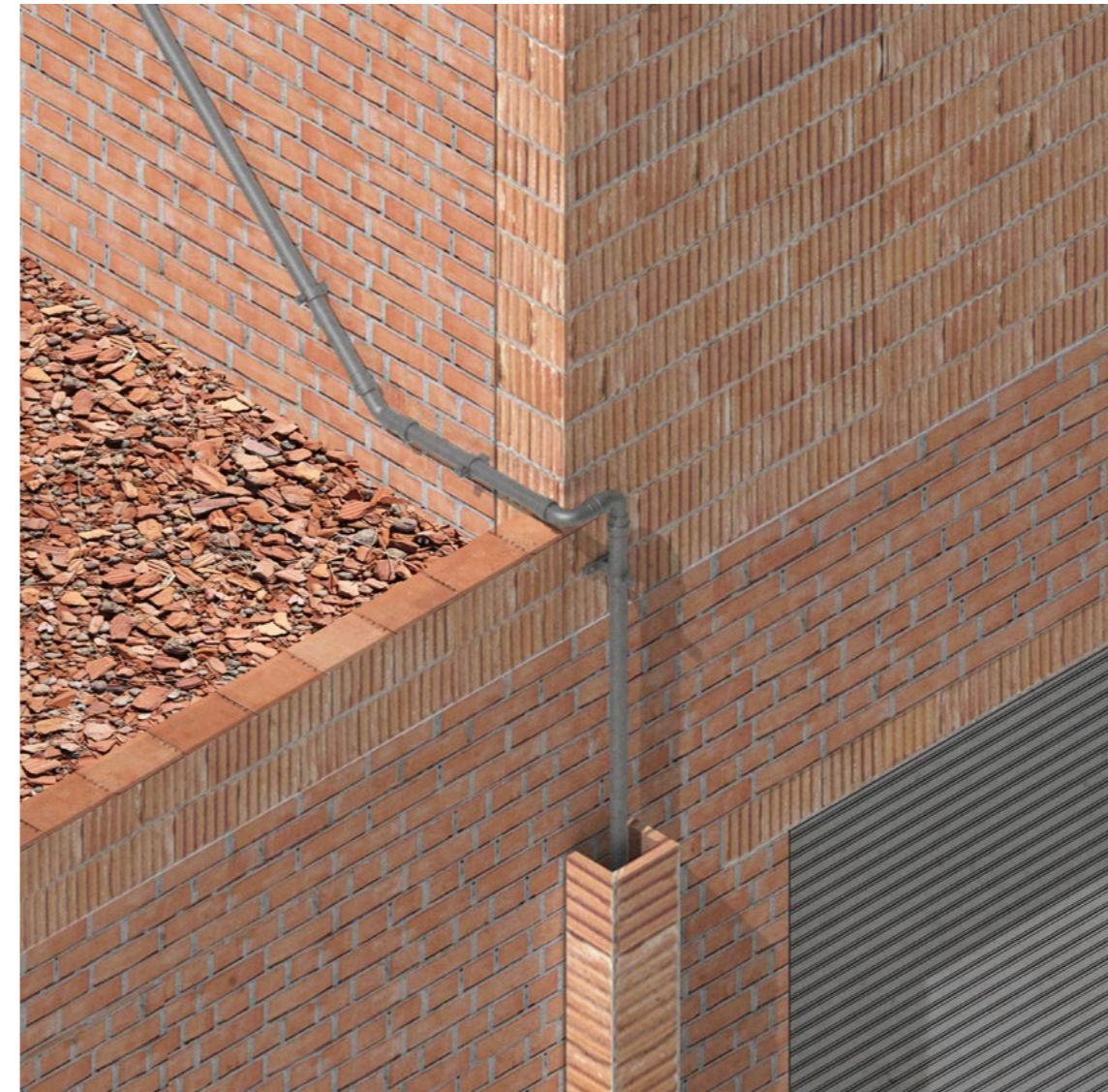
It is this conceptual space (eventually the same Walter Benn Michaels mentioned) between unfinalized signification and materialized reality embedded in contextual contingencies, which triggers us to ponder and question. And it is this tension between logic and contradiction which gives us joy, and potentially even liberates us from the seriousness of our search of universality:

“enjoyment [...] emerges from a material nexus of jouissance and signification – a kind of mnemographics, the forces of which precedes and destabilizes meaning.” - K. Michael Hays (Ibid., p.572)

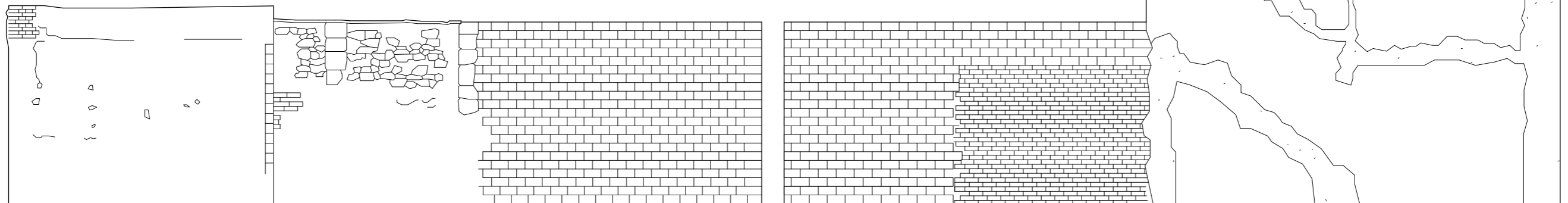
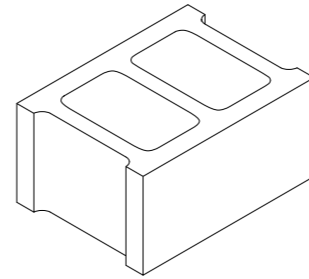
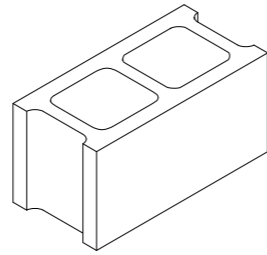
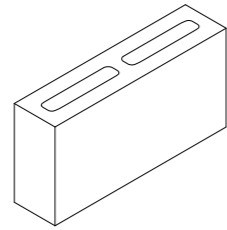
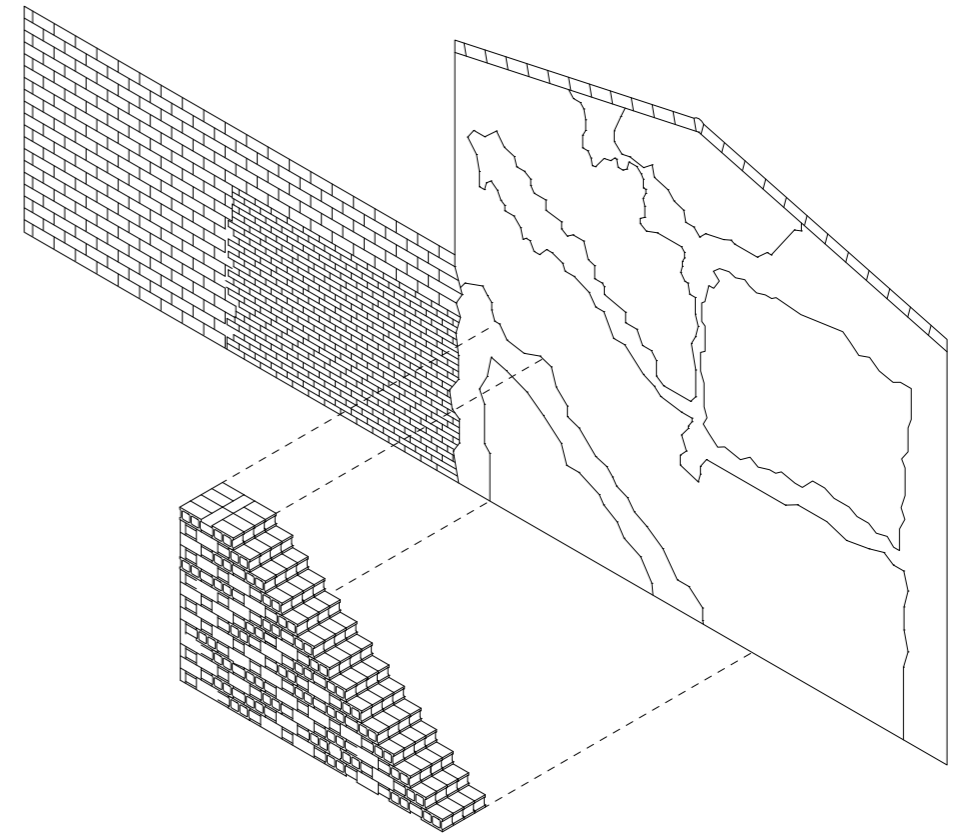
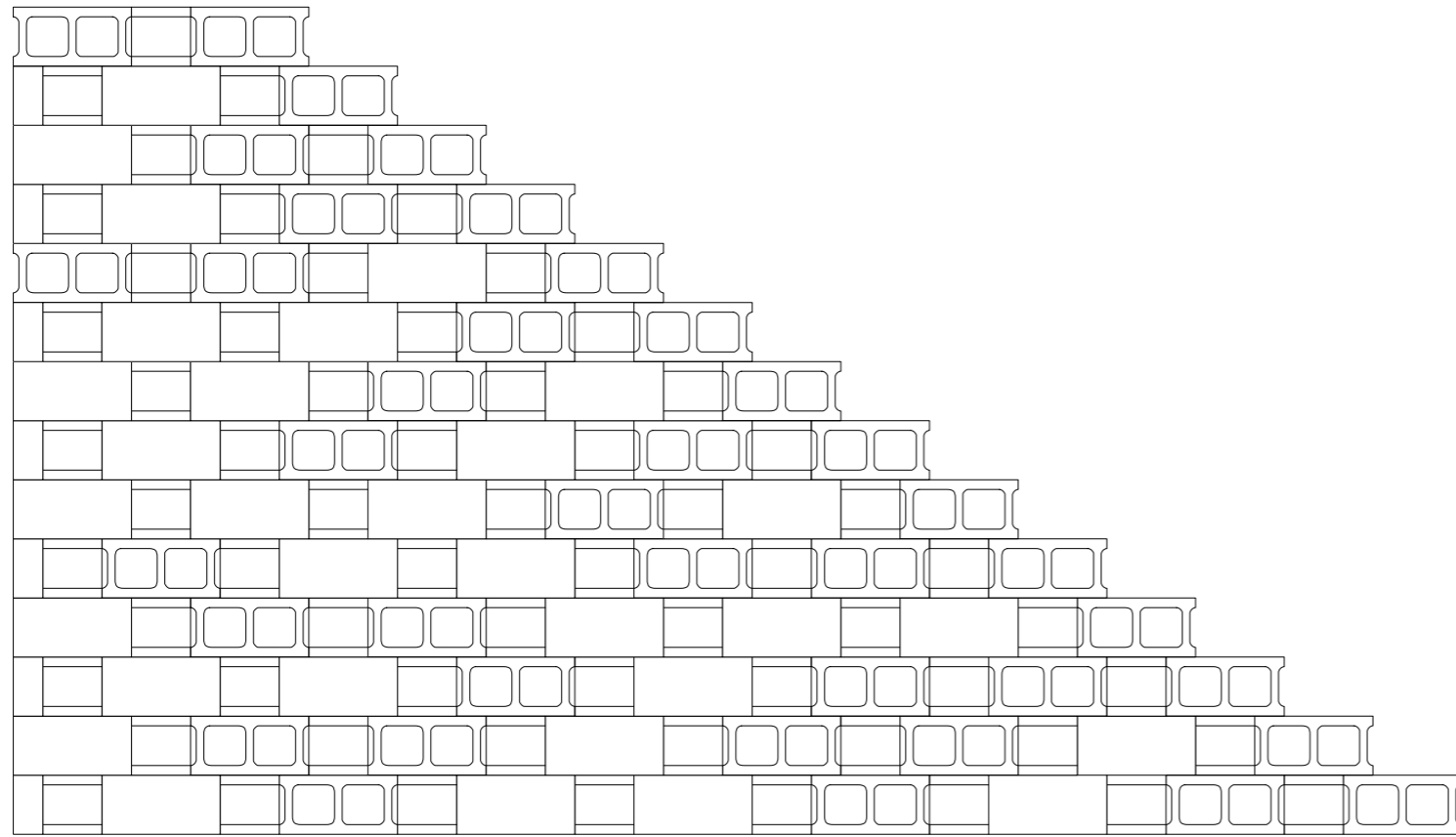
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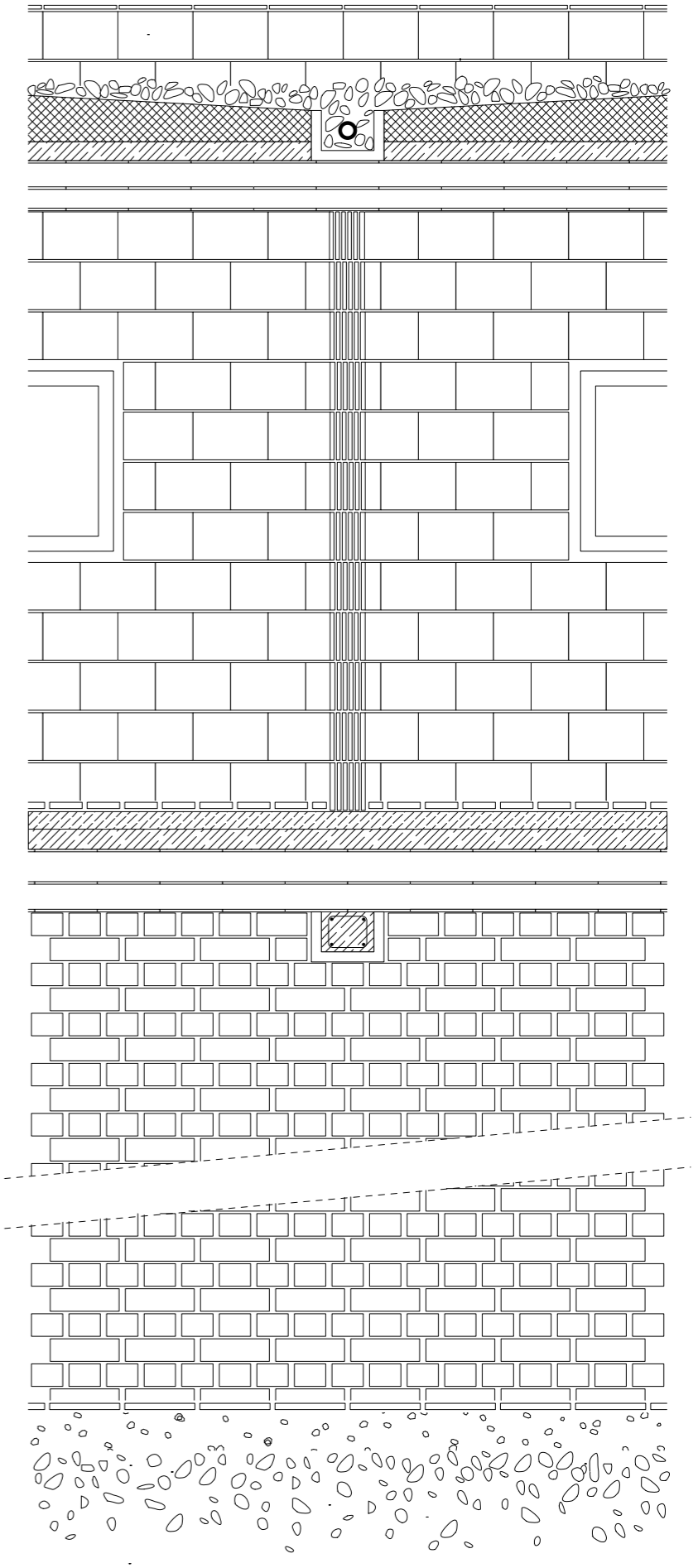
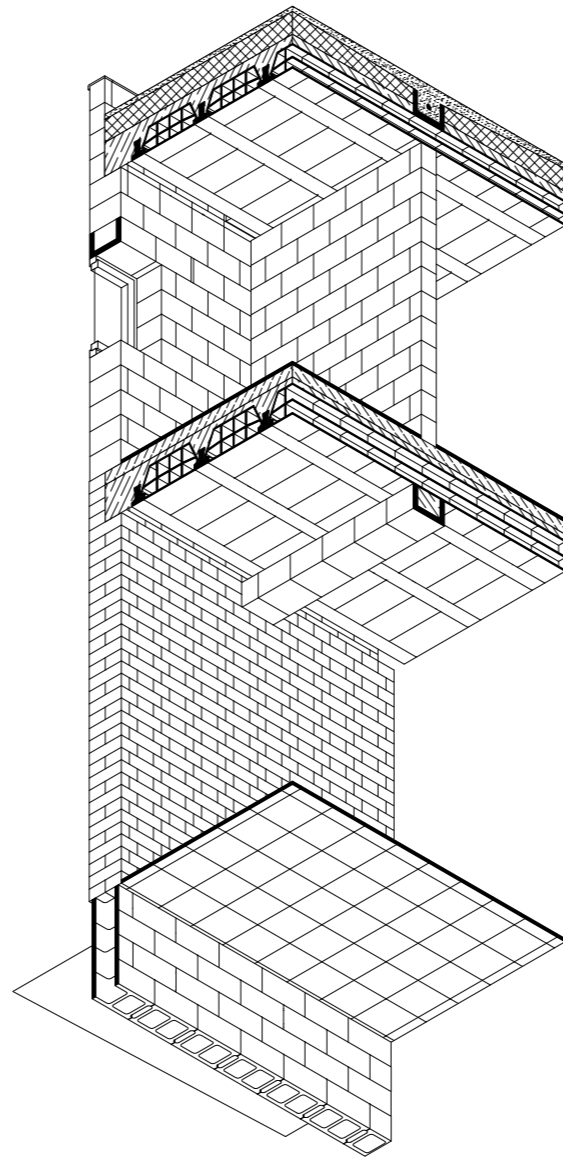
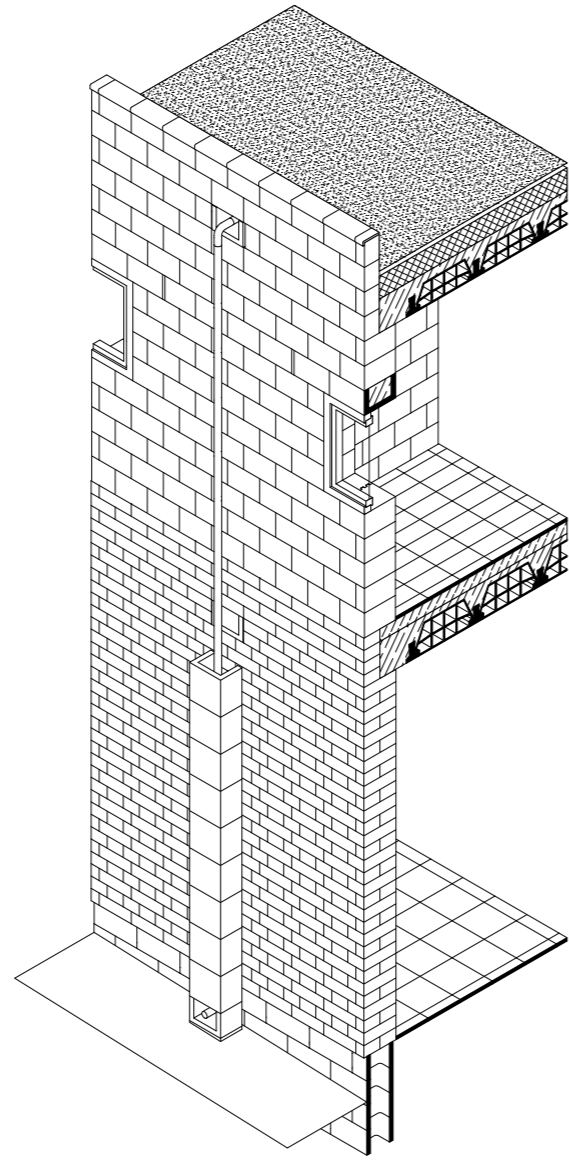
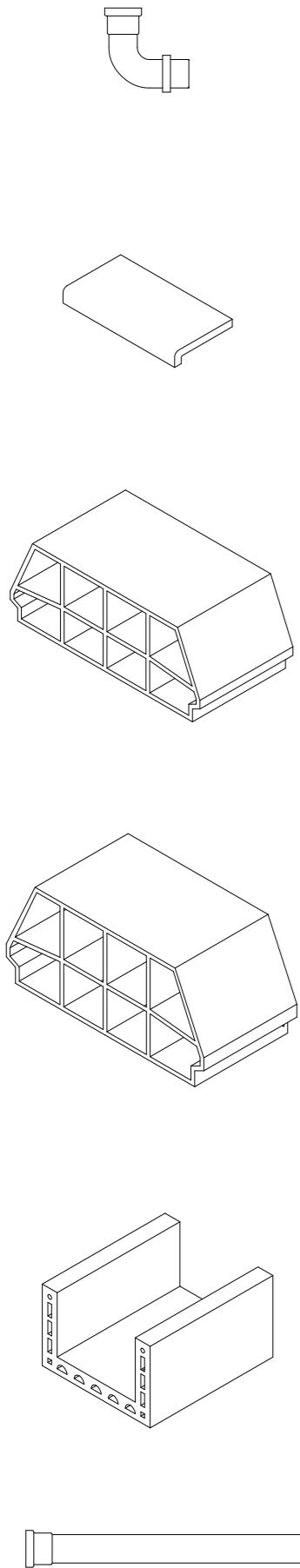
“Architectural inscriptions defines this project [of reconstitution of the subject], and it appears in these practices [the exemplary practices in the book] as highly varied organizations of material marks designed not to usher in immediate references or direct meanings but rather to enact a displacement of these by what perhaps precedes figuration: the event or encounter, the mnemonic trace, a network of signification, and a material support presupposed by the act of inscription that then brings the figural into being.” (Ibid., p.566)

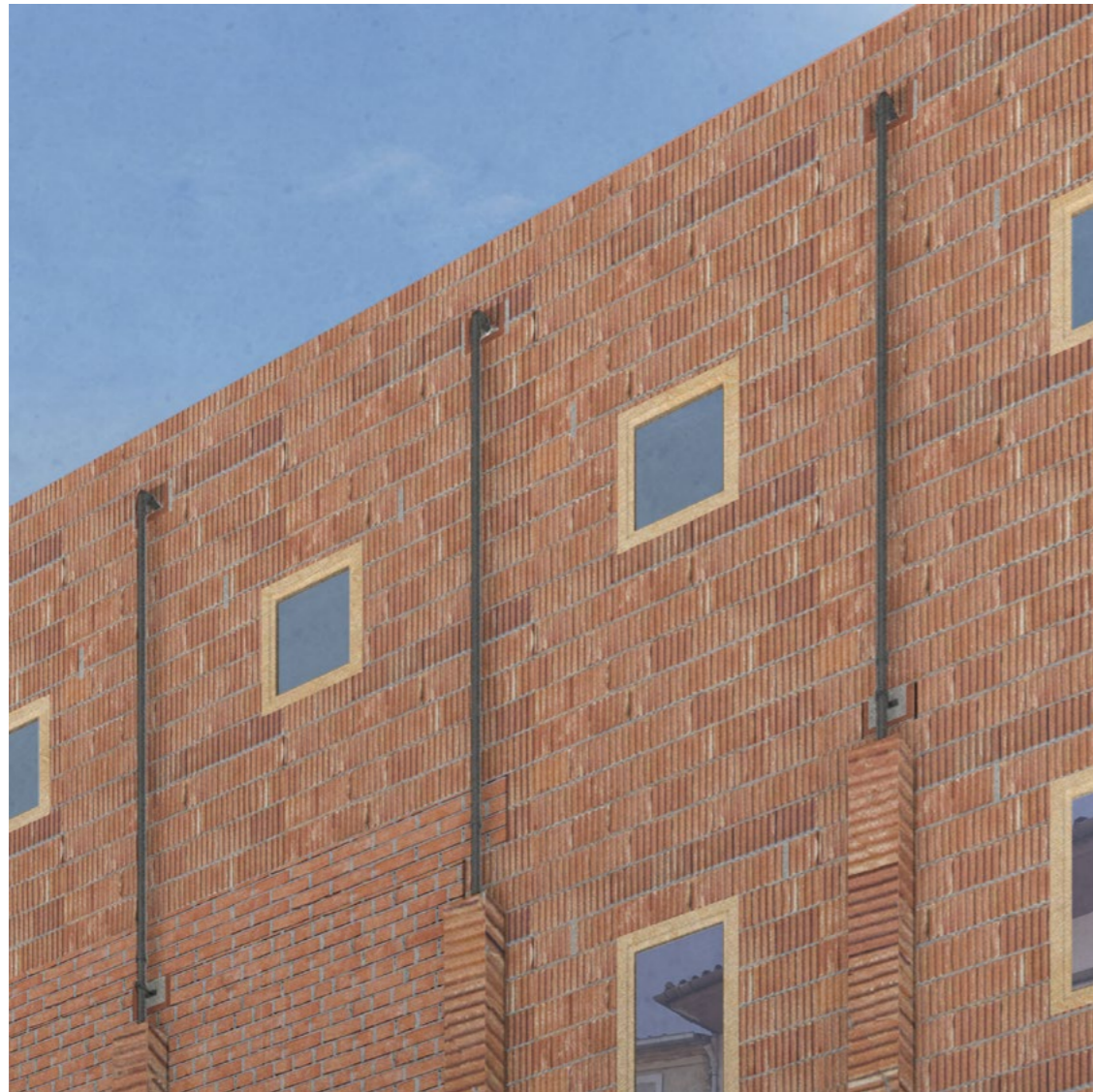
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Detail Gutter



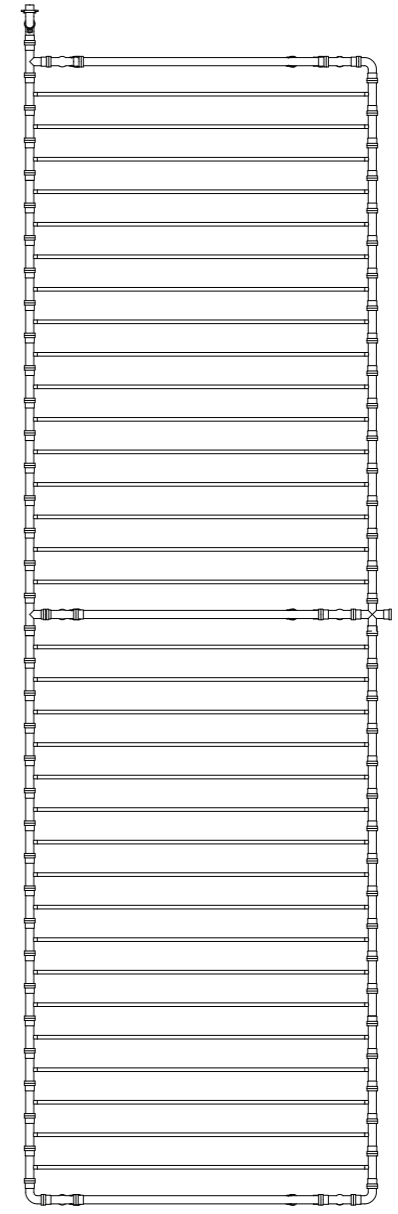
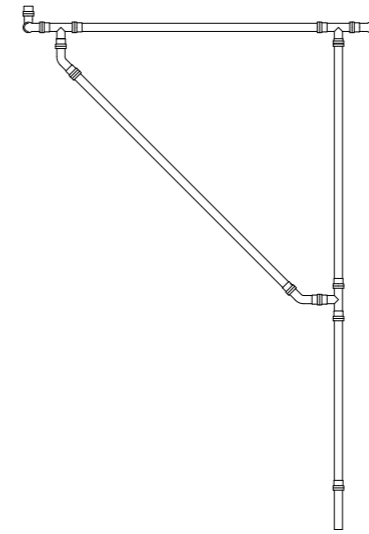
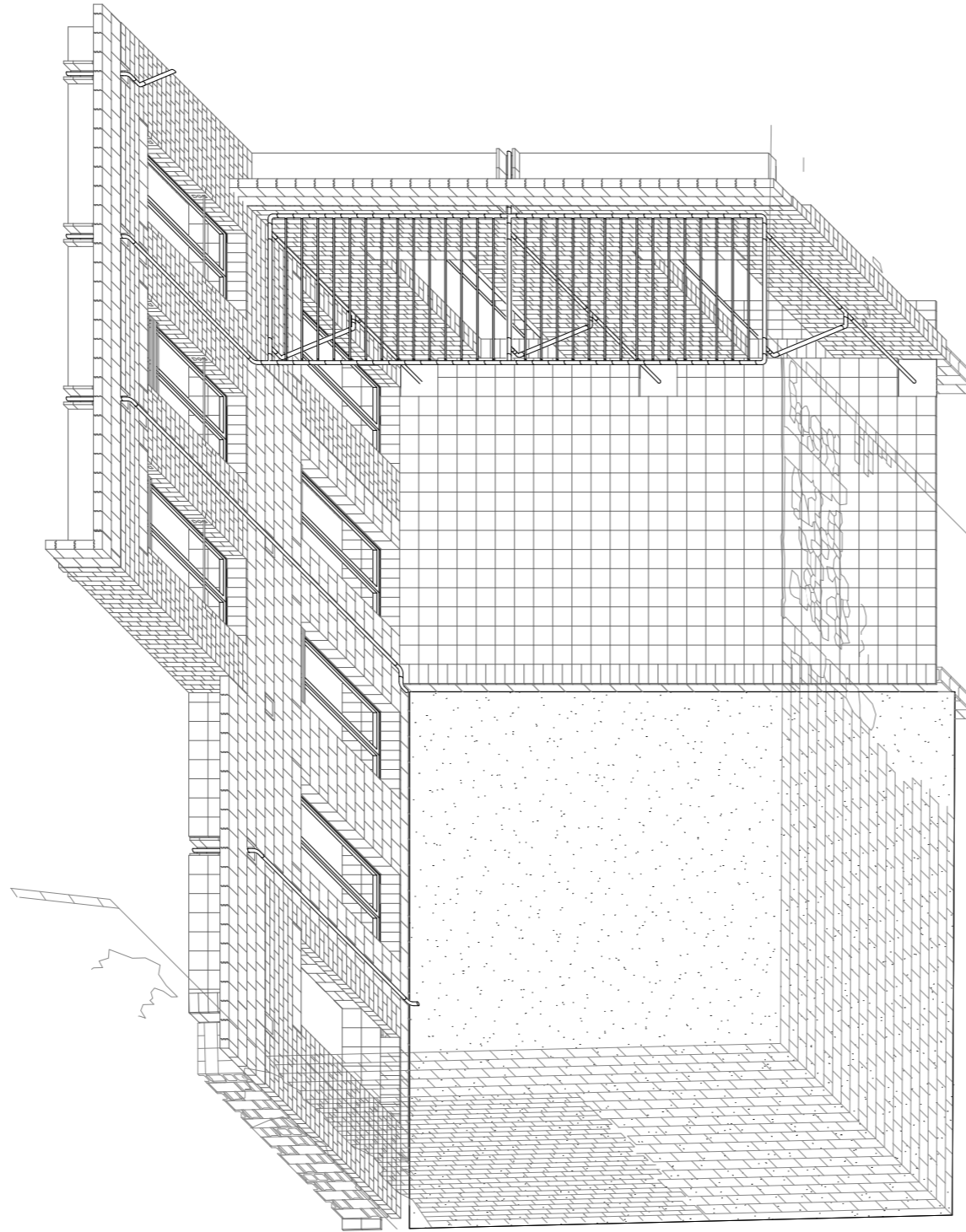
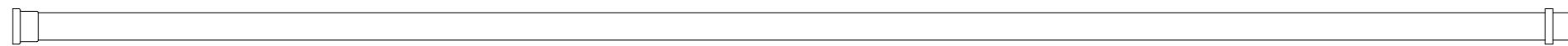
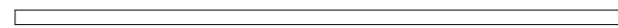
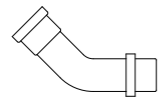
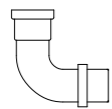
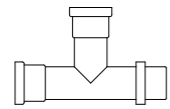
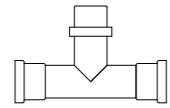
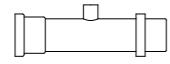


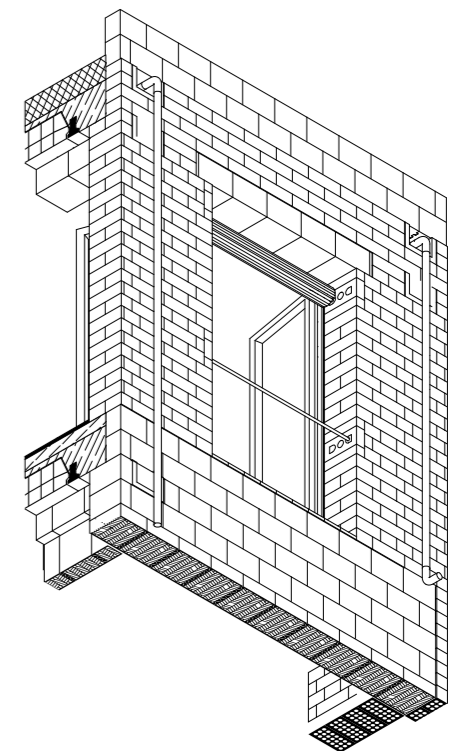
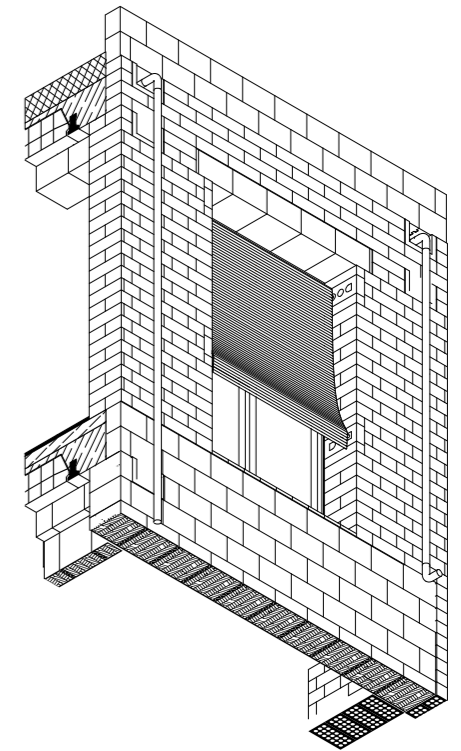
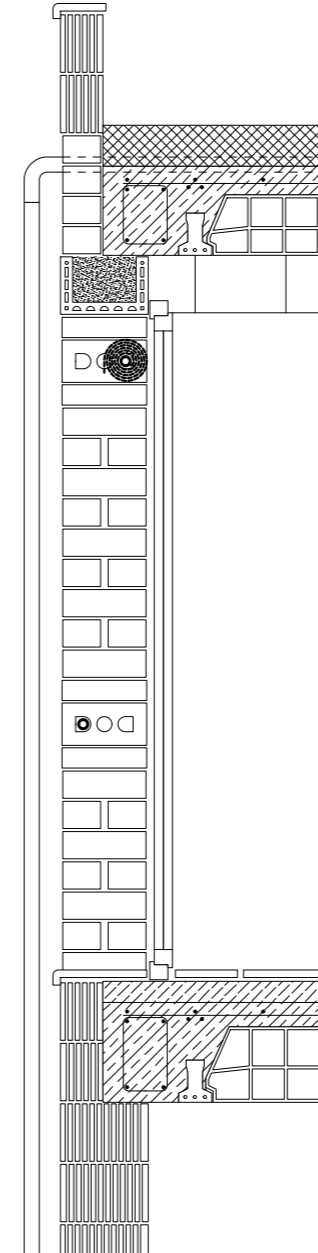
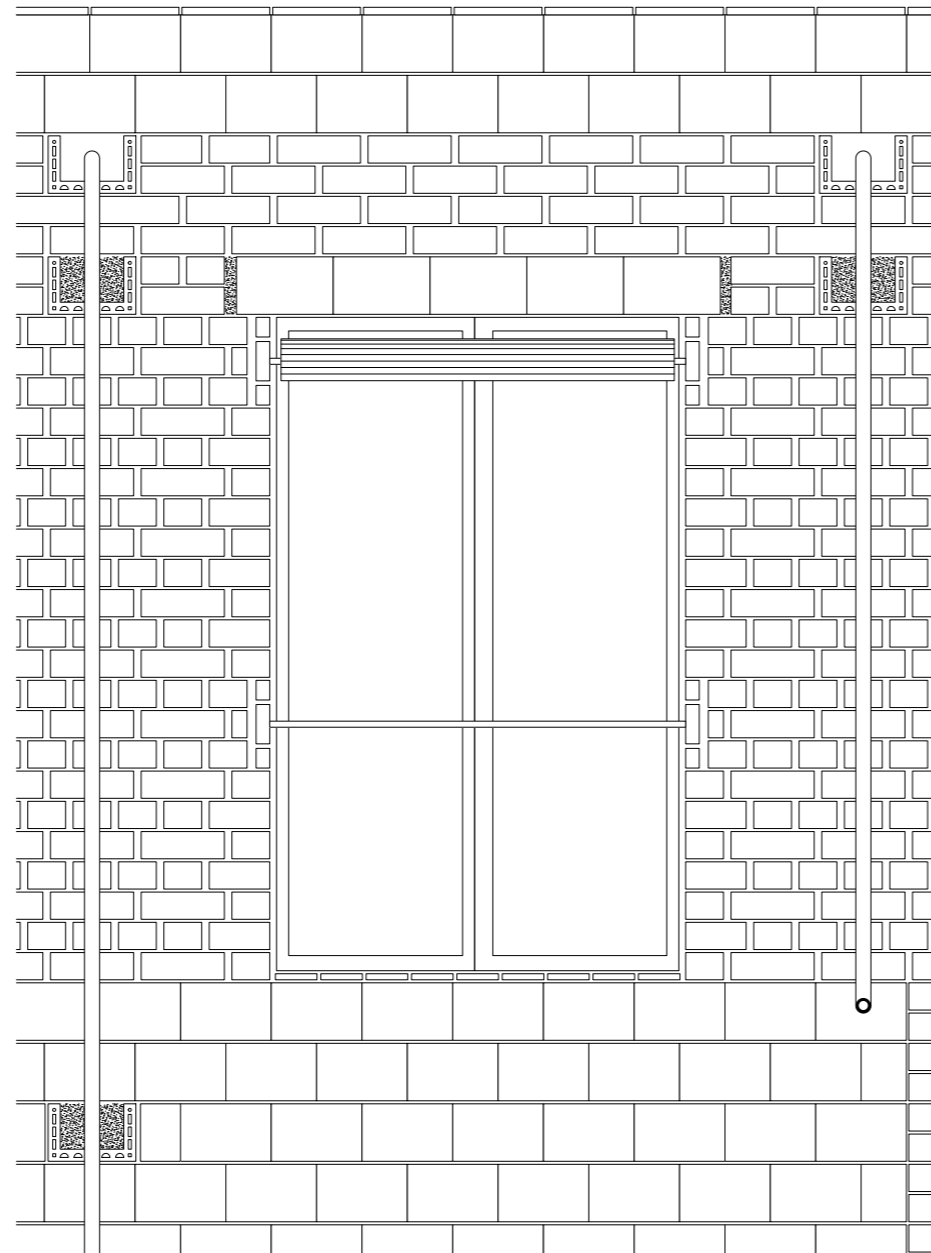
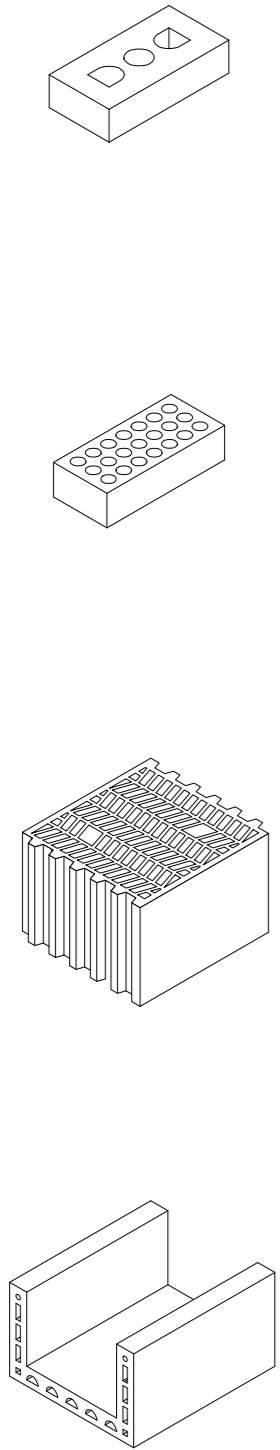


Detail Street Facade



Detail Terrace







Detail: Heritage & Terrace

At this point one could question in how far K. Michael Hays' "material nexus of jouissance and signification" differs from the vital "exchange [of] information and energy [between] subject and the object" as described by Robert Somol and Sarah Whiting. While for Hays Critical Architecture is situated in a limbo between critical resistance to cultural authorship and a formalist autonomy, Somol and Whiting emphasize the importance of shifting this autonomy from critique towards a "performative [meaning effect-ive or even pragmatic] practice". One could even argue that after the dispute between Critical and Post-Critical theorists over the last decades, they finally seem to have found their way back onto the same 'track' – eventually even pointing into the same direction: Neither of them tries – like Donald Judd (and eventually Olgiati) – to erase the cultural "contingencies" inherent to architecture but emphasize instead the autonomy of architecture's discipline as a critical awareness of being part of a bigger network.

After having introduced the wider theoretical struggle of Contemporary Architecture in the first Chapter, as well as the conscious or unconscious re-focus on the object's materiality, as a consequence of our globally visible existential, environmental and epistemological challenges, in the second chapter I have tried to introduce a contextuality that goes beyond the anthropo-centric definition with psychological and cultural terms. Semper's Textile Metaphor originating in the middle of the 19th century – but still visible in contemporary notions such as "network", "textility", "material exchange", "nexus", even "con-text" itself – anticipates, how it is paradoxically the materialist perspective, which gives us access to a metaphysical dimension which lays beyond our empirical representational systems. After recapturing some important materialist views of the last century in the third chapter, I finalize the chapter with the original phenomenological definition of Architecture's mimetic purpose of situating us in a complex world.



Detail: Garage in Winter / Living Room in Summer

After having built up the historical and theoretical foundation on which the terms used in our lead question stand, it is not until the fourth and last chapter that we point out some relevant theoretical positions used by contemporary architects to legitimise their practice. By looking into a few built examples and comparing the resulting aesthetics to their architect's narrative, we must surrender to the impossibility of finding one right methodology of design, adequate to any context. However, it is the architect's intention to render visibly contextual contingencies and responsible actors, that starts to shimmer through a contradictory panorama of contemporary practices.

The notion of "Network of Actors" I gave is meant to relativise the authorial role of the architect, when it is exactly not the autonomous architectural creation originating from a creative mind which gives meaning, but the embedding of the architectural object into a wider and not solely physical context to which it relates, which triggers subjective responses. The architect has in all this the important responsibility of tracking and moderating those authorial agencies, which through the architecture's complex interrelations to the non-architectural context is not an easy effort and demands a wide understanding of the context and what's at stake at the specific location. However, as Pauline Lefebvre points out, those "constraints are not obstacles against creativity, but opportunities."

Meaning then, embedded in a clear structure of an object, is materialized as marks - or what I prefer to call playful details - in which signification condensates. This meaning, not a self-disarming representation of an a-priori, but a sign of critical intention, lays in the imaginary space between materialized object and subjective beholder. And it is the architecture's self-awareness of independence from exterior primacies, while at the same time being materialistically embedded in the bigger system, which liberates the designer from questionable 'universalities' of ideology and formalism, but allows for an agile response and, more importantly, for a joyful play in each context anew.

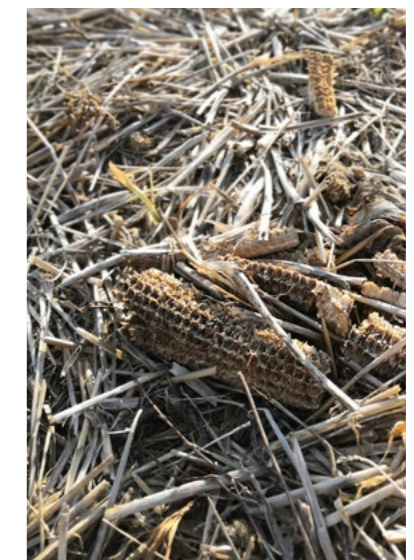
“What are we looking for?” my brother asks. I feel that if I am not able to explain to him, it will be impossible to make my spanish aunts and uncles understand. “Construction materials”, I say. Maybe I should have said “inspiration”? “Opportunities”? But after taking only a few photos, he seems to have an idea already, and helps me foraging.

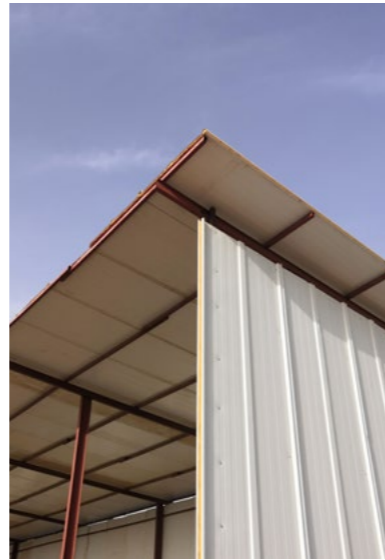
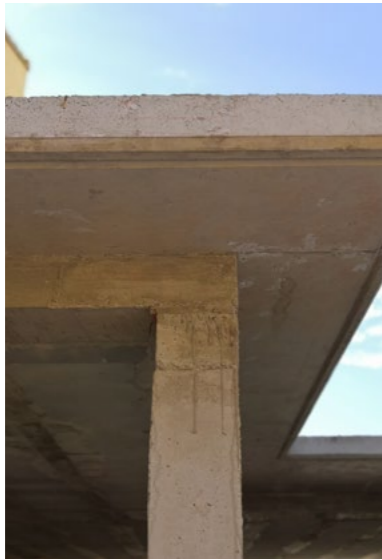


We can also see a thunderstorm approaching on the horizon. Having in mind how severe these storms can be in August we don't waste time and continue our walk. We stumble down the hill and find our way back unto a path leading us away from the storm and towards the village.



*Further on we reach the creek. All around the water there is growing a very common type of cane which is used here since hundreds of years as construction material, while wood is rather rare here. A technique that is slowly being lost since cheaper **modern materials** are replacing the time-consuming **handcraft**.*

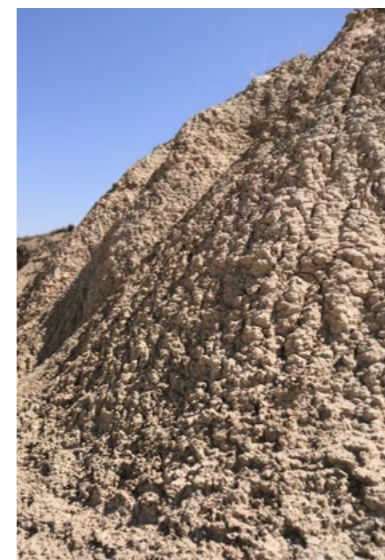
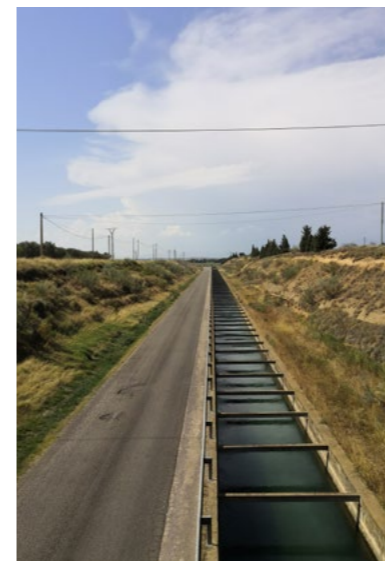




A form-brick with a light curvature. **Metabolism** as described by Semper has taken place here due to industrialization. The traditional vaulted ceiling consisting of wooden beams with small vaults made of a mixture of fibers and gypsum, has been replaced by modern materials such as iron-beams, form-bricks creating a hollow vault, topped with a concrete layer keeping everything in place and under pressure.



In this industrial area of the village, we can also find the metal workshop. Since the local metal worker is moving the business to a new more spacious warehouse there is not much left here. Nonetheless, the leftovers here confirm us the existence of **know-how** for the use of profile steel, aluminium-profiles, metal plates and sandwich panels.



My aunt told me, how when she was young she had a cyst in her breast, so they went to the priest for consultance. He sent them to get clay, which she should put on her skin. It's funny how certain **values** (in this case healing) are attributed to materials. Wait. Clay is actually healthy for the skin, isn't it? Anyhow...I have to find the location she described. This pure clay might be a perfect construction material.

a master dissertation by marcos suelles