

PASTNESS



PERFORMANCE &



PIANOS



How can ephemeral architecture expand our sustainability practices regarding waste?



Dara Nerweyi



Abstract

This thesis navigates three seemingly disparate topics, finding their middle ground in an exploratory fashion and attempting to expand our understanding of sustainable building practices by comparing them to the event-space notions which parallel them.

Firstly, there is the question of use and obsolescence, and its relation to event. Secondly there is the notion of performance, its architectural definitions, and its link to ephemerality. Thirdly there is the connection of this use to recycling, and in extension to spoliation and historicity. This theme is also expanded by performance through notions of pastness, narrative, and meaning.

The first theme, use and event, are integral to considering obsolescence. Currently, architecture almost always features a loss of function far preceding a loss of structural integrity, and so architectural obsolescence exists in the lack of function or use, or event. Pianos as well suffer from obsolescence in the same way, where they are difficult to physically dispose of despite being functional.

Event and event-space naturally lead to questions of performance, which is a valid consideration when dealing with reclaimed material, objects that had a past life that one can read into. The notion of pastness and its quasi-narrative presence in architectural performativity means that reclaimed and recycled materials can be treated with greater in-

tellectual care. Pianos through their recognisable parts can convey this pastness easily, as well as facilitate event as a tool for music and gathering.

Recycling can help with obsolescence. Architecturally this happens in 3 main forms, reuse, recycling, and upcycling, paralleled in Tschumi's event-space relations of *with*, *without*, and *against*. Traditionally, architecture has also navigated recycling through spoliation, where the donated pieces aren't as trivial as the refuse used in recycling. Pianos as recycled material exists in between these terms of recycling and spoliation, since they aren't architectural and historical, but aren't as common and forgettable as recycled waste. Their upcycling allows for interesting forms of architectural communication which can influence a user's appropriation of a space.

After the theory is discussed, its potential application to the recycling of pianos is considered. The theory is meant to be applicable to other recycling practices, however pianos do make this more exciting. The site chosen is that of Pyhäjärvenkatu, the derelict infectious disease hospital now dubbed Pyynikin Aikamatkat, a public space democratically organised in a site which itself had become obsolete.

What is proposed is a public building complimenting the uses of this site, giving flexible spaces to the users of the site, allowing for interpretative ephemeral events to be organised within. The project explores notions of waste and value, of ephemeral uses of architecture and transient structures.

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Dara Nerweyi
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School of Architecture
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Supervisors:
University Lecturer Pekka Passinmäki, Tampere University
University Instructor Iida Kalakoski, Tampere University

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1.0 INTRODUCTION

This thesis is split into two parts. First there is part A, focusing on the theory. Following this is part B where these theories are negotiated in a design for a flexible public building in Pynikki.

Part A will begin with introducing the core topics of obsolescence and its relation to event and event-space, performance, reuse and recycling, ending with pianos.

These are contemporary questions as we are more pressured than ever to find methods of building that are sustainable particularly in their connection to time. A building that lasts forever is not necessarily more sustainable than one that is designed to come apart after 20 years. Architectural obsolescence is a unique issue as it produces waste buildings that can't be easily disposed of like typical household waste.

The methods to combat wasteful design are discussed, and their connections to theoretical discourses surrounding events and performances are examined. What we can learn from this marriage is a more nuanced approach to these sustainable design and building practices, highlighting the importance of, among other things, the creation of temporal continuity and how to navigate the design of a building that shouldn't become cum-

bersome and monumental, becoming therefore a problem at the inevitable end of its life.

Drawing from Bernard Tschumi, Dorita Hannah, Nietzsche, and others the philosophical ramifications of recycled material and building lifespans can be explored and expanded on, developing a framework that can be followed in projects that wish to focus on architectural lifespans both practically and conceptually.



PART A: THEORY AND BACKGROUND

2.0 OBSOLESCENCE

2.1 LIFESPAN, USE, USELESSNESS

Obsolescence over the years since its identification in the 1960s as either a potent threat or powerful enabler to architecture has received much speculation and particularly many strategies in its preven-

tion. Thomsen and van der Flier (2011: 354) observed that the reasons for something becoming obsolete were numerous and confusing in their varied terminology. They proposed the following graph (fig. 1) for simplifying the complex forces leading to obsolescence:

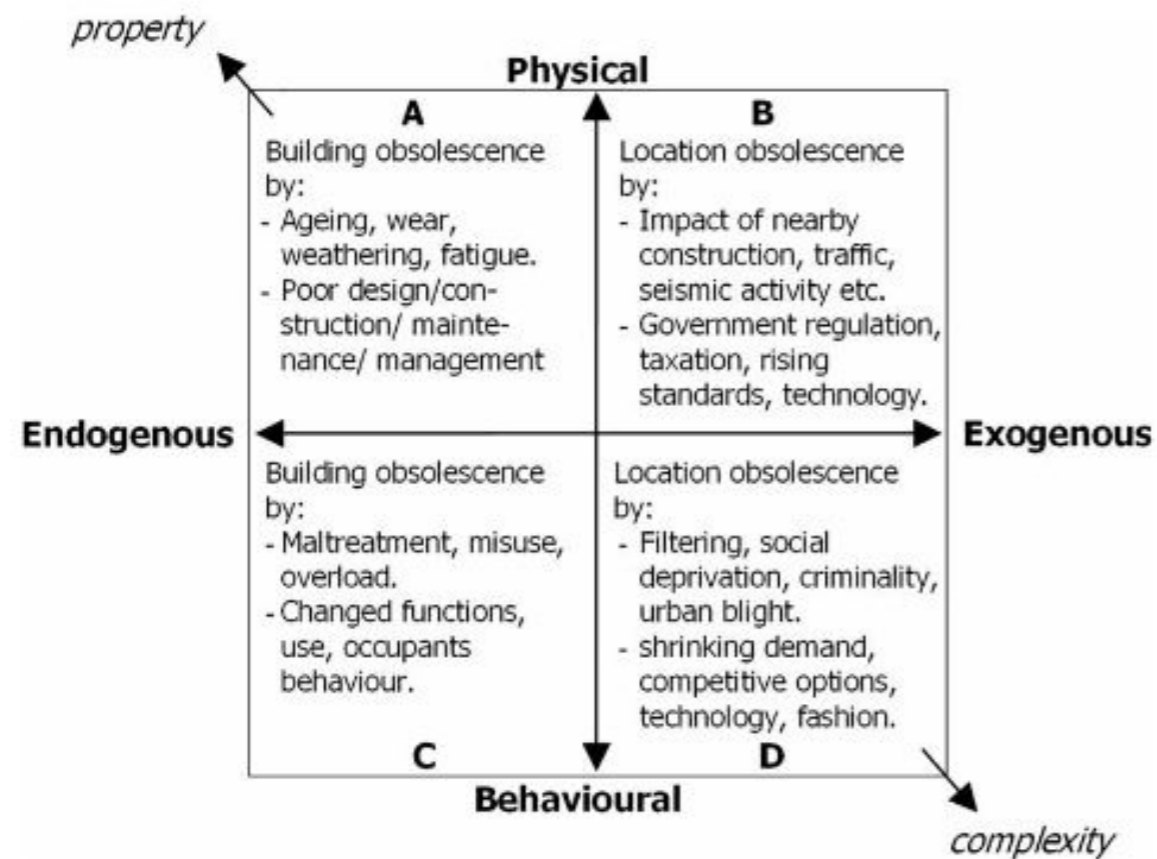


Fig. 1: Reasons for obsolescence according to Thomsen and van der Flier

What they had essentially summarised was that obsolescence came about on one hand from physical or behavioural changes, and on the other from internal or external causes (ibid, 2011: 355). Abramson (2016), however, makes some distinctions that allow us to separate material that has become obsolete from material that has become waste. Abramson (2016: 15-16) presents the dichotomy of obsolescing and depreciation. What the former implies is a sudden and unexpected change that, regardless of any of the product's capacity for performance, has made it no longer profitable or as profitable as an alternative product. This change then is a change in context; the decisive factor is external to qualities of the product. Depreciation, however, is the gradual loss of value a product sees as this capacity to perform suffers from physical wear and tear: an internal change. Buildings aren't easily discarded like appliances or clothing, so if they become outdated in their use or fashion they are typically demolished, however many remain upright simply because their destruction is not a straightforward and inexpensive procedure. Our modern understanding of obsolescence revolves entirely around economics, and by extension capitalism which is fundamental to obsolescence (Abramson, 2016: 6). When an opportunity to produce more capital is seen, the obsolescing object is discarded in favor of the newer model with more market value. Essentially, something that isn't producing as much capital as it could be is quickly on its way to becoming trash. A simple definition for obsolescence is "no longer in use", however Abramson (2016) gives a more detailed account of the changing history of

the word. In English obsolete derives from the Latin *obsolescere* meaning to grow old. It was eventually used to refer to machinery, though more in the context of the object being replaced by newer versions. The 'old' machine was in fact perfectly young, and worked as intended, it just wasn't as efficient or economical as the object that came to replace it (Abramson, 2016). In this same vein, if demolition isn't an absolute necessity then it is more cost-effective to just leave the building standing until it can't be avoided any longer. Inaction can just as well be fuelled by concerns of profit.

Many of us are familiar with the term "planned obsolescence", forcing us to buy new phones or computers because the software surpasses our hardware, and if we want to keep using the programs and services we've grown accustomed to, we have to upgrade. Despite the phone still working in most regards, at some point the system updates demand specifications that an out-dated phone can't provide. The external factors make the phone useless before it breaks. At the same time, device batteries fall apart despite us having the technology for long-lasting batteries. These products are designed with a lifespan that keeps consumers purchasing annually. In a spin on Marx's famous quote: Sell a man a fish and he eats for a day, but teach a man to fish and you ruin a perfectly good business opportunity.

Obsolescence as a term used by Abramson stresses the capacity for use of the object that is discarded for more profitable alternatives, however the term

generally does refer to objects' physical deterioration as well. If the boundaries between obsolescence and waste seem blurry, that is because they are. Hebel (et al. 2014: 12) offers the definition of waste as "unwanted or undesired materials"—much like the Merriam-Webster definition of obsolete as "no longer in use or no longer useful"—while at the same time pointing out that the concept of waste is so complex that what is undesired by one party may not be for another. Osseo-Asare and Abbas (2019:179) proclaim that waste is a construct, born of western notions of productivity, profit, efficiency. The definition offered by them instead is a dichotomy of 'scrap' and 'waste', the latter approaching zero in monetary value and resisting exploitation, the former still enabling some financial gain through its recycling or upcycling.

Paradoxically, the solution—or at least the only solution we can imagine—lies in the systems that produce the problem. In circular waste economies surrounding landfills of e-waste such as Agbogbloshie in Ghana, improvisational bricolage-type



Scavenging for valuable metals in Agbogbloshie

reinvention of waste leads to numerous products becoming available to local economies that depend so much on the "waste" that they must resist legislative efforts to control or shut down the trade of waste in the area. What they achieve, in essence, is the transformation of waste (no monetary value) into scrap (reintroduced into the market, producing capital)(Osseo-Asare & Abbas, 2019: 180-181).

The moral of the story then is very little of what we throw out is actually 'waste' in that it has no use or value. It just needs to find the right people. As Oscar Wilde once said, there are those who know "the price of everything, and the value of nothing." Demolition, furthermore, is not the logical end of a valueless building, as forgotten barns on derelict and worthless plots of land stay up past their material lifespans, and monuments and buildings of heritage stay up despite producing no extra capital (Thomsen & van der Flier, 2011: 353). Buildings we value don't lose this value over time, and in fact can appreciate as they get older, with older properties depreciating more slowly than newer ones (Cheshire, 2014: 19, 23).

The problem of obsolescence is particularly intense in architecture given its scale, and hence its difficulty of being disposed of (Abramson, 2016: 6). There have been many attitudes springing from this, with some like Reyner Banham exalting and embracing obsolescence, and characters like Llewelyn Davies simply trying to design for its inevitability. Some, such as Peter Eisenman, went as far as divorcing form from function, therefore eliminating anything

for obsolescence to strike at; without function, there can be no loss of function (Abramson, 2016).

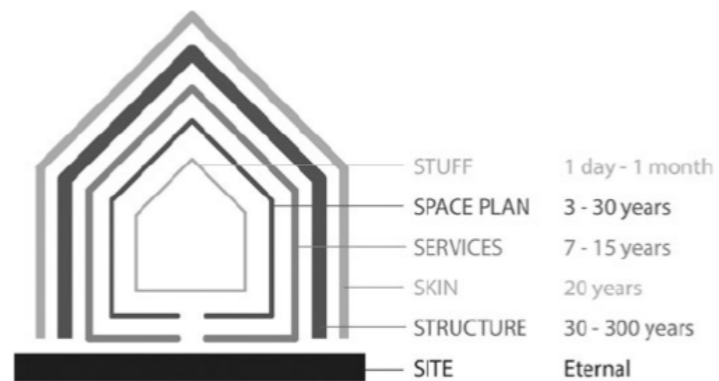
In one fascinating byproduct of rapid architectural obsolescence we get some delightfully strange experimental houses in Japan. With architectural obsolescence out of control real estate in Japan is resold and parceled off so often that buildings are not expected to last longer than 22 years (Alexander, 2021). This ephemerality coupled with some strict regulations regarding sunlight, taxation, and distance from power lines (Reeve, 2019), architects take more risks, creating more experimental housing as they know the buildings won't last very long anyway. Construction companies will cut corners, doing a poor job and clients will have very little incentive to maintain a building that will be demolished by the buyer of the property anyway (Alexander, 2021). While this is highly wasteful, what results are stunning and at times surreal homes that would not or could not have been built anywhere else, with Japanese architects having global renown because of the creative freedom given to them by this hyper-obsolescing property market. Cheshire (2016: 22) further points out that eastern philosophy accepts the impermanence of all things, seeing it as an inherent quality of the world, and where the west tries for an aesthetic of eternity, the east has an aesthetic of death. Here we can see why Banham may have been excited by obsolescence, and because Japan doesn't have the same culture of valuing an old house they aren't preserved as precious as in the west, to the chagrin of architectural historians there (Alexander, 2021). While there are advantages

Yasutaka Yoshimura's *Window House*



to having such ephemeral buildings, the waste cannot be overlooked, but if the end of a building's life can be neatly planned for without wasteful demolition, many of the downsides are mitigated.

With this complicated notion of waste and value established, the reasons for buildings becoming obsolete revolves around the capital they can produce. If a building physically degrades to the point of poor performance (which does not need to be the case in architectural obsolescence), or suffers

Fig. 2: Brand and Duffy's *Shearing Layers* diagram

from redundancy due to regulatory changes, shifts in market forces, or advances in technology, the building already has a proverbial foot in the grave as it is no longer profitable to keep it around (Cheshire, 2014: 22). Is-

elin and Lemer (Thomsen & van der Flier, 2011: 356) observe that obsolescence is “the extending divergence over time between declining performance and steadily rising expectations.” This does not mean that demolition and obsolescence go hand in hand, however (ibid. 2011: 359), and while derelict buildings no longer produce profits, that doesn't mean they aren't appreciated or even essential to urban explorers or squatters. When a building is considered worthless is up to the owner, not the users.

As has been pointed out by Duffy and expanded on by Brand, buildings don't as a whole degrade or fail. Their different layers wear and tear at different rates, and as Meagher (2014) observes when these layers with different lifespans start to intersect, as in the case of high-tech performative facades, the problem of obsolescence becomes more pronounced. Proper maintenance can be made, or upgrades or replacements, as long as these layers remain independently accessible. If damage to the structure, typically considered the most permanent layer (Cheshire, 2014: 36), is required for maintenance of

fittings, or 'services', then this building will physically degrade much faster.

A diagram that commonly accompanies Brand's discussions is his and Frank Duffy's *Shearing Layers* di-

agram (fig. 2). What it shows is the incongruity of a building's different parts, calling for adaptability. They imply that the site is eternal, which provokes some questions. If the site is merely the ground the building stands on, its foundation, then it's not eternal as it can be removed and was transported there. If the site is the physical earth, this does change as well with coastal erosion, rising sea levels, and more gradual processes of tectonic shifts. If the site is the context as a variety of social, economic, political, and environmental forces among many others, these obviously change quite rapidly as well. Indeed, if the site was truly eternal no building would become obsolete through a change in fashion or economics.

Ultimately, this exploration of waste, worth, and death has underscored the importance of the creation of circular economies. Whether ephemerality is something to be embraced or impeded, the demolition of a building needn't become a wasteful practice. If the building simply can't be reused, its parts should at least be salvaged. If these parts are the reason for its poor performance, they should be

replaced instead of throwing out the whole structure. The critical stage at which countermeasures for obsolescence should be implemented is the design stage (Thomsen & van der Flier, 2011: 357), putting a lot of responsibility in the hands of architects.

2.2 PREVENTION STRATEGIES

There has been over the years much research devoted to the lengthening of buildings' lifespans. In short, the ones summarised here are reuse/renovation, adaptability, designing for disassembly, and by extension repair, and recycling/upcycling (which is covered more thoroughly in a different chapter). Fundamentally though, there are two strategies. Either the building as a whole has its lifespan extended, or its parts have their independent lifespans extended.

The strategy tackling this is to create buildings that allow for reinvention and adaptation, following the first and most effective R of the three, that being reduce. By ensuring that buildings can be easily retrofitted or even disassembled, the polluting and costly practice of demolition can be minimized. Through a process of architectural Darwinism, vernacular buildings are some of the most accommodating to change as identified by Schneider and Till (Schmidt III & Austin, 2016: 14), with the list consisting of Victorian terraced housing, nineteenth century industrial buildings, and 1960s office buildings. In a Victorian terraced house, many rooms are roughly the same size, and therefore can be fitted

to different uses; a hierarchy of spaces isn't obvious, so any room can house any core function, with smaller support rooms existing on the sides to help in this (Schmidt III & Austin, 2016).

Within the built environment, the most effective form of reduction of waste is through refurbishing older redundant buildings. It is projected that by 2050 80% of the building stock will consist of buildings existing today (James, 2021). This is partly the motivation to finding 24/7 use for spaces whose main program would only utilize the space for some 8-10 hours on workdays (Pelsmakers et al., 2020: 271). If spaces were more available for multiple uses, program can be scheduled to make sure everyone has a space for activities at any given time of day without the need to construct new buildings which themselves stay unused for most of the day. This of course means that many of the new programs demanded in the future will have to be plugged into buildings that are already here, not necessarily having been planned for a radical change in function. While vernacular buildings are notable examples of naturally adaptable architecture, not all buildings can accommodate future change as fluidly. The Netherlands, for example, are struggling because their building stock isn't satisfactory for the increasing demands of the market (Durmisevic, 2018:344). Ultimately, there will be a clash of new functions and old buildings in the architecture that hadn't thought that far ahead, or wasn't designed to make these changes at all.

Through much of the 20th century, staving off ob-

solescence in new constructions became a major concern to many designers, with varying approaches being adopted. Fundamentally the problem to solve was that a building mustn't become irrelevant before its material life was over, and because prophets are few and far between in our current age the only strategy left was to understand that future changes are mercurial, unpredictable, and inevitable. Regardless of which camp a designer belonged in, love it or hate it, times change and buildings will need to deal with obsolescence somehow (Abramson, 2017:70). So how does one expect the unexpected?

Largely, the approach to creating flexible buildings centred around the building typology of barns, sheds, or warehouses according to Abramson (2016: 80). He explains how warehouse structures were chosen for their open layout and exteriorized structure, leaving the space to be organized how the occupant likes, not needing to worry about supporting walls. He cites Venturi and Scott-Brown as seeing the decorated shed as a similar answer, where the ephemeral element is the signage or decoration. If the building were to become obsolete, one can simply erect new signage and plug in a new function, bringing the low-maintenance structure back to life (ibid., 72).

In essence, allowing occupants to adapt their spaces creates flexibility that extends a building's life. This adaptation can be more physical, such as through isolating structure and partitions so as to allow freedom in spatial organisations, or just gen-

erally leaving larger open spaces which occupants can fill with their own events. Too much looseness of design is however also not conducive to good flexibility. One mustn't restrict occupants to a single use, but rather "eliminate the improbable" and allow for the probable (Schmidt III & Austin, 2016). Expansion must of course be planned for, and this implies that it must be somehow supported through the design, rather than leaving the inhabitants to figure it out themselves. Hertzberger in his Centraal Beheer office project observed that if one creates a general structure but leaves spaces open, users will fill these voids with their own furniture and function. These 'empty' spaces need to be designated at the design stage then, not just assuming that residual space will be opportunistically used but giving it a central position.

This isn't to say that a "loose-fit" approach is the only valid one, as other architects insist that a good building with character that a generic and easily adapted building may lack will be kept around because people keep what delights them (Schmidt III & Austin, 2016: 52). It is unhelpful to think that the building needs to adapt to everything, or that the occupants are the ones adapting (ibid:54). The key is certainly in the middle of the two, allowing building and occupant to co-act and demanding from both some flexibility. It takes two to tango, after all.

However, one building can't do everything and demolition sometimes is inevitable. Demolishing a building is a very linear process however, and produces waste as well as dust and unwanted noise.

The best strategy to reduce this waste is to design for disassembly, neatly allowing things to be unpacked and sent somewhere for reprocessing, reuse, or remanufacturing. Buildings aren't forever, but the end of their life can be, at the very least, neat and unproblematic.

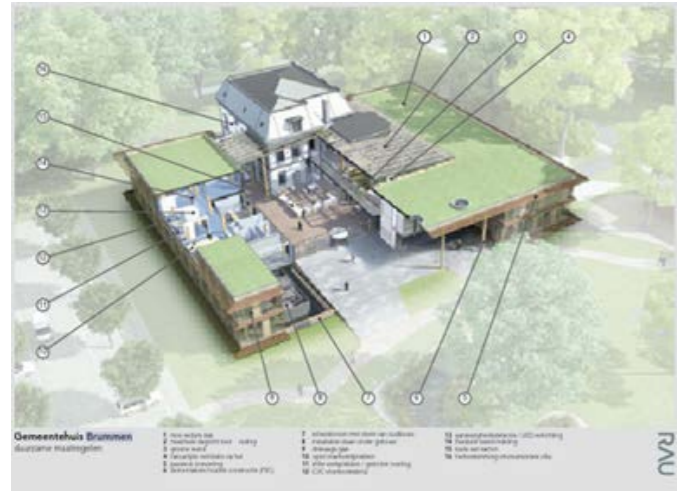
We can see that disassembly becomes a viable end-of-life solution for a building, as the layers are independent of one another, and can be neatly dismantled and perhaps reused elsewhere. Just because the building fails, its parts don't need to be wasted, and if the parts fail, that doesn't mean the building should be torn down. Another important factor is having reversible mechanical connections that are accessible, with these structural elements not having been coated with resins or adhesives (Cheshire, 2014: 66). Beginning from the smaller scale of components and following the shearing layers diagram, if different aspects of a building are made accessible they can be more easily maintained or replaced without disturbing the whole, extending the building's lifespan through methods designed to make its death less polluting.

Reversibility as defined by Durmisevic (2018:345) is "transforming buildings or dismantling its systems, products and materials without causing damage". Waste for her is also a construct, as these materials have considerable value beyond their performative life as building materials which is typically cut shorter than their full physical lifespan. She lists two factors in being key to reversible building design, namely a high reuse potential, and a high transfor-

mation capacity. What transformation capacity refers to is the flexibility of a space or its systems and materials, so how possible it is to reconfigure or adjust them to new uses. Reuse potential, on the other hand, refers to the breadth of options for reuse the systems or materials have, for example can they be reused directly, can they be reconfigured, or can they be remanufactured (Durmisevic, 2018:353)? The difference being for transformation capacity the question is "how possible is it to change this?" while for reuse potential it is "how many things can this change into?".

This as a strategy integrates the end of a building's life into its design, which has led to some examples that place a lot of focus on how strict this lifespan is. The Brummen Town Hall in The Netherlands was designed around its 20-year lifespan. In this case it was known well in advance that after these two decades municipal borders would change, and the buildings would become obsolete. The design was built around prefab components leased from the supplier with the intention of returning them after the 20 years were over (Gorgolewski, 2017 :52). In this case the clients had the good fortune to know what effects would lead to the building's destruction, and so it was sensible to plan around it. Because we don't typically have this prescience, it's easy to think that whatever events will force the building to be knocked down will be so beyond us and so far in the future that it becomes difficult to worry oneself to the point of planning for it. Besides there being little disadvantage outside perceived costs of implementing these strategies to every design,

Brummen Town Hall, RAU



even if the building is never demolished this style of construction leads to other conveniences.

She goes on to list the advantages of reversible building design, such as ease and therefore lower cost of maintenance and repair, its parts being updateable and not as easily made obsolete by changes in fashion and aesthetics, or the non-destructive processes allowing the parts to be reused in different parts of the same building or different projects altogether (Durmisevic, 2018:358).

In a similar gesture to what Thomsen and van der Flier made in their diagram on obsolescence, the different results of extending lifespans on either the building scale or component scale can be arranged into a square (fig. 3). Incorporating components into a circular economy often aligns with what would simply be called recycling. Recycling as an umbrella term doesn't encapsulate the nuances of all the different approaches, but the core strategy is simply to return functional objects or components as they

are into the economy, remanufacturing them by for example refilling a soda can and resealing it, or breaking it down into raw materials which can then be used in the manufacturing process again. This strategy is expanded on in its own chapter however, as it raises other questions about lifespans, pastness, and authenticity.

While this isn't an exhaustive list of every strategy undertaken to try to prevent obsolescence and wasteful construction/deconstruction strategies, it sets the groundwork for future observations and application. Furthermore, it is worth noting that an adaptable building needn't apply every single strategy for it to be flexible, as that is unrealistic and numerous buildings accommodating change well have been studied and found to possess only a fraction of these qualities. Moving forward, this section will provide a body of reference literature to compare newly introduced concepts of performance, event, and ephemerality against.

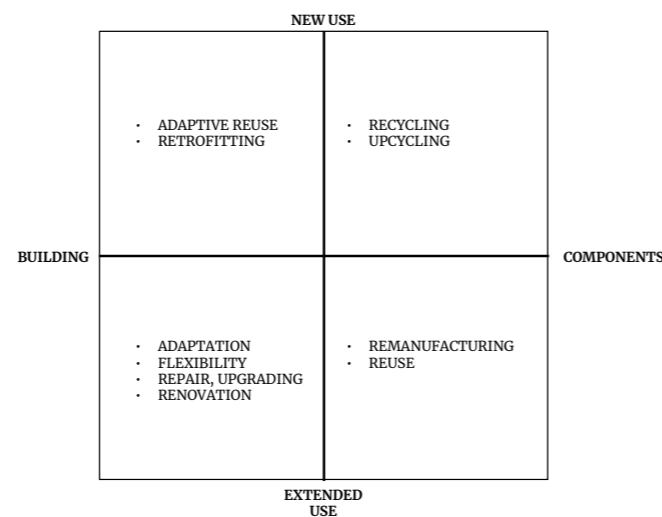


Fig. 3: Strategies combatting obsolescence

2.3 EVENT, EVENT-SPACE

Architecture without use is on its way to demolition, being reduced to nothing. This statement is not a far cry from Tschumi's immortal words "there is no architecture without event". The flexible use of architecture, be it designed for it or not, is something both Tschumi and Brand observe and expand on, albeit in their own territories. When one compares the observations of the two, one can find enriching material for the consideration of lifespans in architecture. This will be done following the previous section's structure, moving through the list of reuse/renovation, adaptability, designing for disassembly and repair.

Before starting any comparison, the meaning and relevance of the term "event" should be clarified. The Merriam-Webster dictionary provides definitions such as "a noteworthy happening", "a postulated outcome, condition, or eventuality", and "the fundamental entity of observed physical reality represented by a point designated by three coordinates of place and one of time in the space-time continuum postulated by the theory of relativity". Regardless of the complexity of the definition, time is apparently an intrinsic quality of an event. If something can be defined in time the implication is its boundaries can be determined, meaning that its beginning and end can be defined. The temporality, and hence ephemerality of an event does bring into light notable ideas about obsolescence, as a building without a use is considered a waste, but a use is fundamentally temporally limited.

Tschumi's writings are highly concerned with time, as well as with transgression. These two merge in the overarching theme of his work: questioning the limits of architecture particularly in regards to the position ascribed to it through its long history. Around the 60s and 70s many architects began an interdisciplinary exploration into the intersection of performance and architecture. Performance art was keenly interested in the role of a body in space, which quickly bled into architectural circles. Characters like Bernard Tschumi, Peter Cook, and their followers essentially spearheaded the architectural movement, drawing from sources like literature or film (Kaji-O'Brady, 2008). The juxtaposition of the temporality of performance with the supposed eternity of architecture was part of this transgression, of finding the limits of the field and exploring them. Controversial opinions were thrown in an attempt to question and break from architectures' presuppositions, such as his fascination with decay (Tschumi, 1996:77) standing in stark contrast with the modernists' rhetoric of purity and hygiene (Hebel et. al., 2014:14). When the death of a building takes the front stage, its lifespan becomes accentuated, and with this the consideration arises of what defines a building's life and what happens when that ends?

Dorita Hannah and Tschumi both make the statement that the event that activates a space is equally important architecturally as the space itself. Event, as a term, can nebulously describe virtually anything that takes place inside said space, regardless how banal or grand (Hannah, 2011:6). Any func-

tion is, therefore, an event, and every event has a unique relationship with the space encapsulating it, which co-acts on it and begins to define it as well. The precedence that event takes over the space or shell that it inhabits is highly relevant to any study of architectural obsolescence. Brand (Muncie, 1997) gives an example of a derelict airplane hangar/warehouse being repurposed as an office for a toy company. An old airplane hangar turned office carries traces of its past use, however through the ritual use of the space as office its identity changes. An abandoned space given use through a singular event wouldn't, therefore, change the building's identity, it would just be one-off appropriation. The repetition here is key, as continuity through precedent clarifies genre (Morgan, 2010).

So one can see there is inevitably a contradiction between design and use, between concept and experience. What the occupants will do can't be fully predicted, so the design will potentially be undermined. Tschumi surmises that while events and spaces inform one another, their relationship can fall into one of three categories of *with*, *without*, *against* (Tschumi, 1996:159) and can be understood as follows: (1) the event works with the space, and there is harmony; (2) the event works despite the space, and there are neither problems nor unique opportunities; (3) the event works against the space, and there is disjunction.

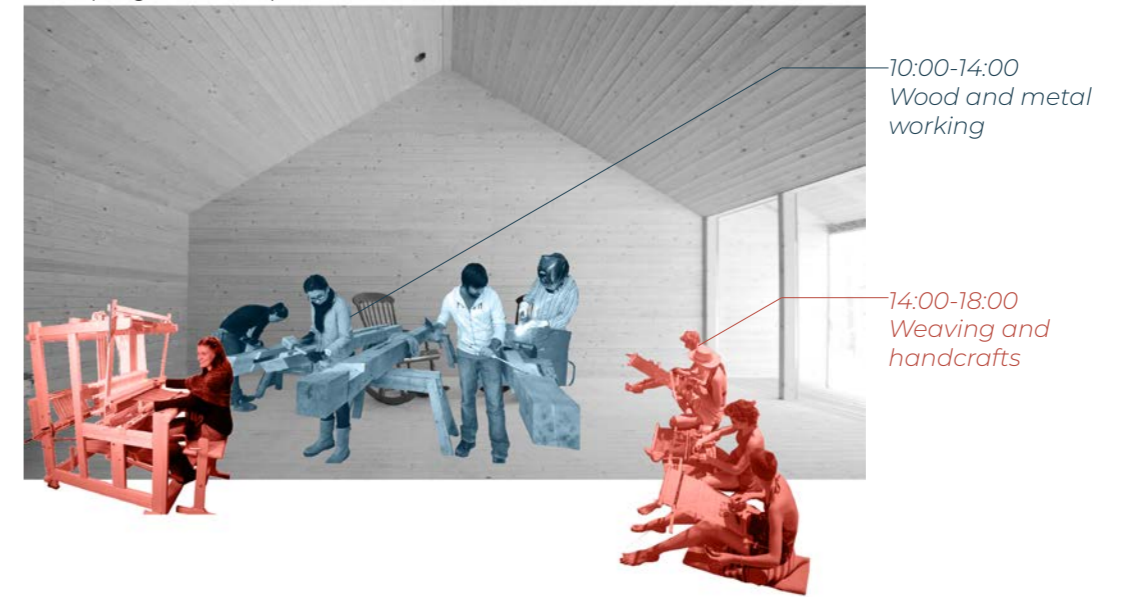
Tschumi's categories of with, despite, and against can also be considered in the relationship between events to other events (fig. 4). If one were to have

a rave in a warehouse that was clearly recently in use as a church, that rave takes on new qualities of transgression. A wake held in a space that just prior housed a child's birthday will have occupants reflect on life quite differently if that past use can be conveyed into the present.

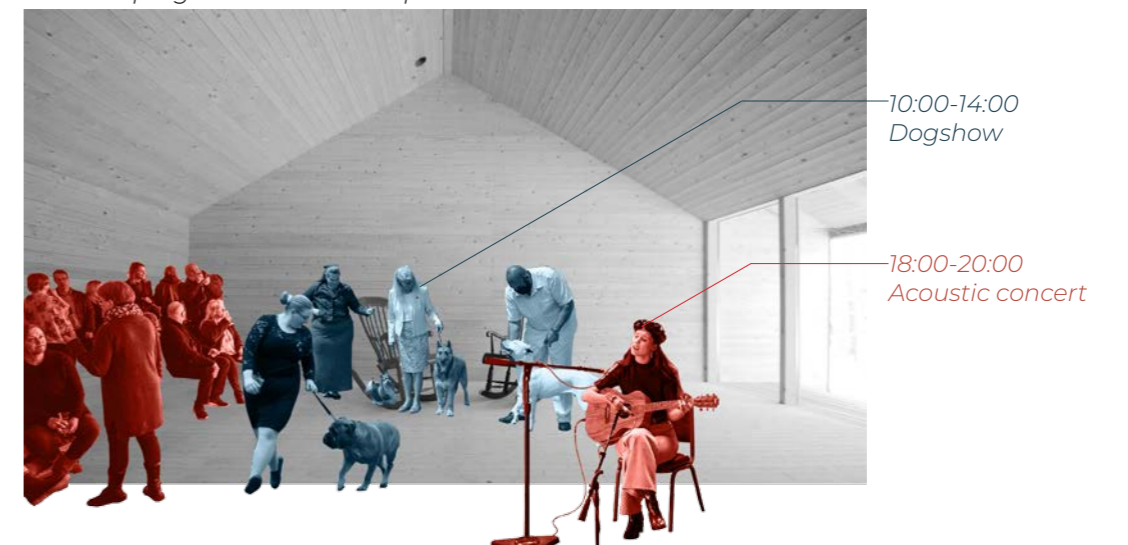
The occupant is given more agency in defining the architecture, and this bottom-up structure was embraced by performance-architecture deconstructivists of that era, as this was a time where the authoritarian role of architecture was being questioned and attacked. What fed this change in perspective was largely a criticism of modernism and architecture as a manifestation of a top-down power structure. The appropriation of a space by its inhabitants, such as the appropriation of a Paris boulevard through barricading during the student riots (Tschumi, 1996:), is what became the primary focus for new architects advocating for more bottom-up structures for architecture. Nietzsche had the same reaction (echoed in Phillips' call for a Dionysian approach to architecture) upon seeing Wagner's Bayreuth Festspielhaus which hadn't, as the philosopher had expected, broken down barriers between audience and performance:

[Wagner's] emphasis on the illusory distance of the constructed scene and the immobility of the audience destroyed the choric realm advocated by Nietzsche in The Birth of Tragedy while exemplifying the pure Apollonian, which the philosopher spurned. (Hannah, 2017:25)

With: programs compliment each other



Without: programs neither compliment nor contradict



Against: programs contradict each other

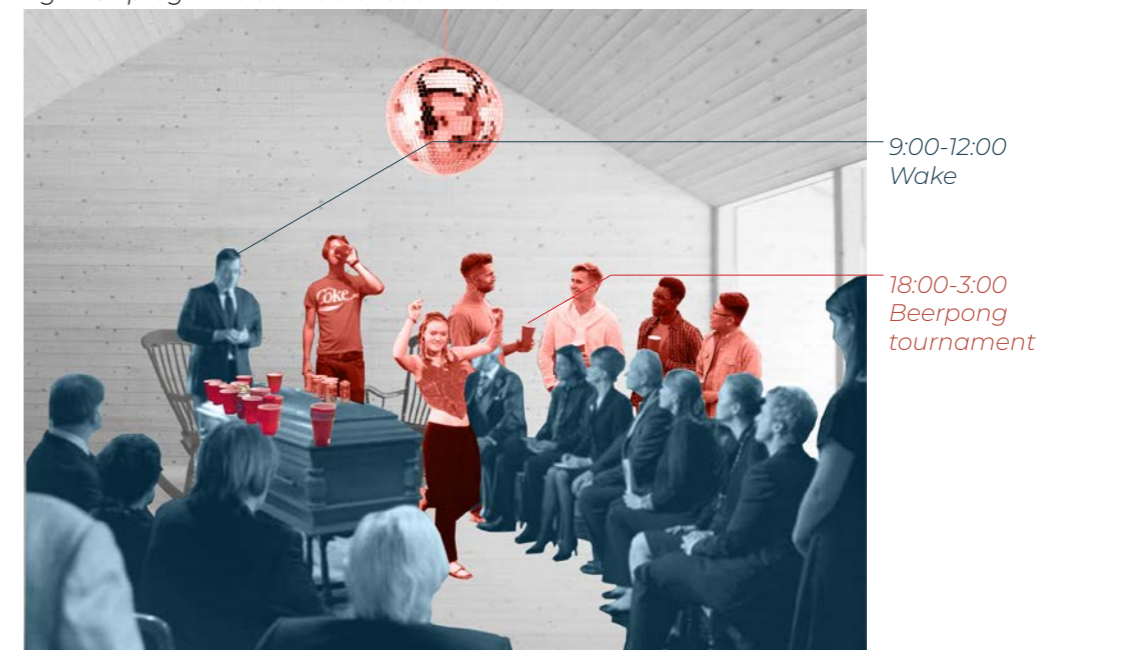


Fig. 4

Nietzsche called for the weakening of this Apollonian, permanent, static monumentality in favor of Dionysian frenzy (Ibid: 25), an ephemeral architecture “bound up with the lingering resonance of poetry after it has been heard, with the recollection of architecture after it has been seen”(de Sola-Morales, 1997:71.) The notion of ‘weak’ architecture is called for by Pallasmaa (1998:57), claiming that it is weak architecture that connects us to the earth through being contextual and responsive. In opposition to architecture with a strong image that intends to impress, much like the static monumentality of what Brand categorizes as “architecture”, architecture of a weak image interacts sensorily. The Japanese can attest not only for an architecture of ephemerality over eternity, but an architecture of flexibility over rigidity. In such an earthquake prone area, buildings must sway and bend to stay upright, moving in tandem with the forces acting on them instead of resisting them. It’s perhaps no coincidence that the metabolist movement, where architectural flexibility was explored in every conceivable scale, was concentrated in Japan.

This Nietzschean criticism of theatre architecture, and perhaps performative architecture at large, can be summed up in 3 points. First, the architecture mustn’t be static and permanent, but ephemeral and diffuse. Second, it mustn’t distance the audience but invite them closer. Third, drawing more from Dan Phillips (2010), it mustn’t strive for perfection but should allow for or even feature imperfection.

To expand on what Phillips claims here it helps to understand that his *modus operandi* is reusing waste material typically without much reprocessing. He points out that the Apollonian mindset to building makes mountains of waste (ibid. 2010), while if we were more ready to be a little messy and Dionysian we could reuse this waste. If materials weren’t chosen in an attempt to fit to an ideal, we may see an opportunity to enjoy the world as it is (Luyster, 2001:12).

It is fruitful to examine closer what this Dionysian quality is as it is referred to explicitly by Hannah and Phillips, and has informed deconstructivists like Tschumi. The generally accepted image of the Dionysian hero is that of controlled passion, at least as defined by Kaufmann (Luyster, 2001:23), but through the philosopher’s life his expressions of Dionysus changed radically. In *Birth of Tragedy*, a text exploring the origins of poetry and therefore of the classic Greek tragedy, Nietzsche (1910:21) ascribes different qualities of art to either Apollo or Dionysus, the former residing over the ‘plastic’ arts like painting and sculpture, and the latter over transient, ephemeral art like music and dance. Apollo is also emblematic of the individual who against the horrors of the world fights and triumphs, maintaining the self. Dionysus, on the other hand, is the dissolution of the self, the melding together in brotherhood of man and man, but also man and nature (ibid.:26). While at first the Dionysian quality looks beyond phenomena and tries to return to a truer core of metaphysical existence, later Nietzsche strongly emphasizes this sensuousness as his con-

cept changes into a form embodied by Zarathustra and his love of the earth (Luyster, 2001:12). Here, more present in *Thus Spoke Zarathustra*, his expression of Dionysus in the ecstatic Zarathustra is one that delights in the phenomena of the earth, not even needing intoxication, hysteria, or “narcotic draughts” to experience this ecstasy (ibid.:15). Later, such as in *Beyond Good and Evil*, Nietzsche pivots entirely and calls for an interpretation of Dionysus as a harbinger of war and conflict, with qualities of sadism, egomania, and brutality as put by Luyster (2001:20): “life itself is essentially appropriation, injury, overpowering of what is alien and weaker, suppression, hardness, [...] and at least, at its mildest, exploitation.” Clearly, this image of Dionysus is far from what he began with, many scholars contending that he had at this point contradicted his deity and betrayed it, though perhaps there is something to be gleaned from the duality of this figure (ibid.:25). This harkens back to notions of waste, and how a material with no value cannot be exploited, but the only available solution is to transfer it to a context where it *can* be exploited.

We can see where Hannah and Phillips derive their connections to Dionysus from, and how this calls for more transient architecture. Furthermore we can notice the translation from what Nietzsche posits to what was explored by the broad group of varying architects termed the deconstructivists. That being to separate oneself from oneself, or specifically in our case to separate the architect from the process in an attempt to break from institutionalization and uncover a truer exploration of architecture (Gold-

blatt, 1991: 337). With this framework one can begin to expand on understandings of sustainability practices, building on what was earlier mentioned in regards to lifespans and value.

2.4 CONNECTIONS TO SUSTAINABILITY

Architecture without use is on its way to demolition, being reduced to nothing. “There is no architecture without event”. The flexible use of architecture, be it designed for it or not, is something both Tschumi and Brand observe and expand on, albeit in their own territories. When one compares the observations of the two, one can find enriching material for the consideration of lifespans in architecture. This will be done following the previous section’s structure, moving through the list of reuse/renovation, adaptability, designing for disassembly and repair.

Already we see the connection of event to reuse or renovation. As was previously cited, Stewart Brand (Muncie, 1997) makes his stand against superficial inflexible and unhelpful “architecture”, advocating for the retention of unpretentious, vernacular, readily modifiable “buildings” which don’t resist change as monumental “starchitecture” would. Within these arguments one can hear echoes of what Tschumi had posited, stemming from the same observation involving the designed function versus the actual appropriation of a space, as well as the inevitable disjunction that comes from these combinations of events and space (Tschumi, 1996).

What both authors highlight is the potential and in a sense necessary disconnect between a building's form and its function. Without this disconnect, buildings don't adapt in Brand's sense, and without this disconnect we can't have disjunction, and it is this disjunction that is so apparent in the tensions that underlie adaptive reuse projects. Repurposing the form of, for example, a livestock market into a cinema brings about complications because the original building wasn't made for that new use. What this disjunction shows is a jarring change in program, which is simply an expression of truth. A cinema-livestock market-abattoir is fundamentally pretty bizarre.

Brand goes on to claim that what he understands to be architecture is "allergic to time", meaning that they are designed to be monumental, unalterable, and everlasting. This supposed fixation is also underlined by Tschumi (1996:p74) in reference to works by Le Corbusier, for example the Villa Savoye which was "never so moving as when plaster fell off its concrete blocks". Both Tschumi and Brand see architects as people who detest decay and natural change, and the only tolerable relationship they can have with it is in a static form of bleached white bones such as those of the Parthenon (which, it's worth mentioning, is now known to have been painted bright colors.) Le Corbusier's purist white buildings are prime examples of buildings dead from the start; once the final tile is laid, nothing is to be done to it, and its life is essentially over. It's perhaps no wonder that a building's structure is also called a "carcass", dead before the construction is

even finished. When the only constant is change, designing for stasis becomes somewhat disingenuous.

What the inevitable introduction of new events into old spaces brings with it is the potential for jarring disconnects between the event and the space. An example of a space that has probably had a bunch of different programs in it is a typical canal-house in Holland where each building has undergone a functional change 5-8 times (Durmisevic, Oct 2021). Them being houses beforehand does leave an effect on the 'event' happening inside. If that event is many smaller apartments, it is appropriate and works with the space. If the work inside is a hospital, it works despite. If the event inside is munitions storage, that might work against a space for living in. The more sustainable practice, and indeed the one that allows buildings to remain upright and relevant several hundred years after their initial construction, is to create structures that invite the audience closer, as was previously pointed out, with the audience in this case being the occupant. An authoritarian, top-down approach was criticized by Nietzsche, Tschumi, and Brand, all encouraging a deeper relationship between the user and the space. While a perfectly flexible building may not be possible, a balance can be struck with adaptation required on the side of the occupant and the building. This co-acting echoes back to Nietzsche's early formulation of the Dionysian spirit, of being connected to one's surroundings and other people, regardless if this revelry stands with, without, or against the space itself.

This ceaseless exchange between building and occupant reiterates the importance of time in architecture. Authors have made comparisons of adaptable architecture to ephemeral architecture in their constant state of flux. Instead of being a finished building, they are eternally in a state of becoming (Schmidt III & Austin, 2016). Herzberger (Schmidt III & Austin, 2016) makes the connection between musical instruments and architecture, where the device is malleable enough to be applied to a user's interpretation. Brand similarly calls for the intentional leaving of certain parts 'raw' or 'uncooked' so as to be later finished by occupants. Rogers in the same text says the following:

One of the things we are searching for is a form of architecture which[...] is not perfect and finite upon completion[...] like some music and poetry which can actually be changed by the users, an architecture of improvisation. (Schmidt III & Austin, 2016)

While it is debatable if poetry and music really are alterable by its users (are the users then the audience or the musicians/poets?), the sentiment still stands. It is important to allow for change of architecture by the people, as Dionysus was "demotikos, the god of the people" (Goldblatt, 1991:341). Therefore, designing for adaptability not only reverses the traditional hierarchy of architecture from top-down to bottom up, aligning with Tschumi's observation, it gives control to its occupants and allows for changes that prolong its lifespan, reducing waste.

Participation also becomes a concern of ephemeral, sustainable architecture, as it is the intersection of Nietzsche, contemporary theatre pieces, and Brand (through an occupant's adapting of a space to their needs). If one begins to consider the relationship between users and designers, one will find temporal problems. In the creation of adaptability, the building of course needs to be able to change because we can't predict who all the stakeholders will be and how they will appropriate the spaces. Instead of a project that represents an object-to-be, Bjögvinsson (2012:106) suggests collaborative architectural events where the project as a changing process is presented instead by a cooperative network of professional designers, laypeople (non-professional designers), and non-human design devices. This methodology of design through use or design through play enforces that the infrastructural role of the architect's design is more a question of time than place (ibid.:108). The key issue is, therefore, the creation of a system that allows users to continue to design it after the official design work is already done, keeping in mind the userbase of resource-weak stakeholders who are highly effected by the design but traditionally have little say in its form. This sort of participation aligns with that earlier Nietzschean criticism of theatre architecture, where the audience should no longer be a passive bystander to a finished piece but instead be drawn closer and become part of the art itself.

Designing for disassembly raises new interesting connections to the previously mentioned notions of Dionysian architecture and performativity. It is fit-

ting that designing for disassembly should adhere so closely to a style of architecture named after a god characterised by dismemberment, scattering, and rebirths. When the parts of a building that are found to be redundant are dismantled and moved elsewhere, taking on a new life through reinvention, this emphasizes a transience and ephemerality of the building in accordance to the first Nietzschean criticism of theatre architecture. Secondly, we have the emphasis on not distancing an audience, as DfD (design for disassembly) allows for easy repair and therefore gives more power to the inhabitants.

Another form of rebirth is that of recycling, which in its own ways lends nuance to the understanding of Dionysian architecture as defined before. The motivations for it are expanded on in their own chapter, and while it is important to consider recycling and upcycling in modern projects, this doesn't come without criticism. In our need for recycling we see the symptoms of what Luyster (2001:20) identified as the monstrous Dionysius, describing Nietzsche's more pessimistic worldview in his later renditions of the god: "life itself is essentially appropriation, injury, overpowering of what is alien and weaker, suppression, hardness,... and at least, at its mildest, exploitation." Through our opportunistic mining of the earth for resources, we began to overpower our surroundings and nature. Brutal as that may be, the seemingly opposite stance of recycling is still exploitative. We are taking something deemed as valueless and trying to revalorize it (Osseo-Assare & Abbas, 2019:179), typically at a loss of capital for whoever does at a construction scale (Devlieger,

2019:39). While this circular use of materials of course helps ease the pressure put on natural resources, it is worth seeing that the real struggle shouldn't be the revalorization of objects without value, but the criticality towards a system that deemed valueless so much material that never lost its worth to begin with:

'All these proposals are nothing more than a sophisticated green-washing and commodification of a space from which a fierce attack upon the hegemony of the capitalist mode of production and its (and our) alienated relation to nature can be mounted': in their attempt to be 'just' and to eliminate or at least constrain exploitation, such actions merely enforce an even stronger, all-encompassing commodification. Although they try to be 'just' at the level of content (what counts as value), they fail to problematize the very form of commodification...' (Žižek, 2018:30).

It is important moving forward to have expressed this, despite continuing to work within this framework of valorization. The difficulty is working towards a solution within the confines of a system that produced the problem, and obsolescence and waste are fundamentally capitalistic constructs (Abramson, 2016:6), because value production necessitates its own negation of non-value (Žižek, 2018:30). Inherent in the ecstatic Dionysian of sustainability and adaptability is the monstrous Dionysian of exploitation and appropriation, exhibiting the philosophical complexity of the matter.

In conclusion, we can see that Brand and Tschumi made numerous similar observations as they were highly interested in the appropriation of spaces by their inhabitants. Each can lend nuance to a framework that explores the intersection of performance and sustainability. The continued use of a building, either through its designed purpose or through an improvised reuse, is an evental/performative concern as well as a sustainability one. Furthermore, three "Dionysian" qualities of performance architecture, paralleled in sustainable architecture, were identified. These were embracing time as fleeting, embracing imperfection, and embracing the audience/occupant instead of distancing them.

When observing sustainability practices one can see that these three qualities are present in many of them. As they share similar origins, sustainability and performative/evental architecture share many sensibilities as well. In order to expand on this knowledge it is worth looking into ephemeral/performative architecture in more detail, and then to see what nuances it can offer in itself, and to sustainable design.

3.0 EPHEMERA, PERFORMANCE

3.1 DEFINITIONS

Now that the original theories relating to performative architecture have been established, it is worth looking into the category of architecture often referred to as “ephemeral architecture”. These transient, transforming designs spark new notions of what architecture can do, typically quite explicit in the transformations that a building undergoes, made tangible by mechanical components that shift facade elements or walls. Many of them aren’t intended for long term use, however there are more sober constructions like the Brummen town hall that have equally limited timespans before their dissolution. If an event is an organized ‘happening’ with a defined timespan, then a building with a strict 20-year lifespan is therefore an event.

Events, like performances, are strictly defined by time and timespans. A dance or musical performance is, simplified, a sequence of actions at set points in time. All but the most radical performances have an end, which is why they are easily labeled as ephemeral. Ephemera are simply objects defined by their transience, their transformation over time into what is typically understood to be a state of immateriality. Streams or plants which quickly phase into non-existence are defined as ephemeral, although the term sees plenty of use outside bi-

ological processes especially in today’s technologically dominated landscape, where web-goers are bombarded so constantly by transient images that most couldn’t possibly be retained, despite having a notable impact on the viewer. On the somewhat lower-tech side are theatre tickets or posters, designed with the intention to be discarded after their singular use (Merriam-Webster). While they don’t evaporate after use, they can be redeemed only once, after which they are useless. What’s then interesting is the physical object remains, yet they are still linked to ephemerality which implies that the term ephemera is not referring to the physical ticket but what the ticket signifies: passage to an event. The physical object which outlives its function is all that’s left to indicate any existence of this abstract, immaterial use. It makes sense then that analysis into ephemeral architecture often is interested in ruins or abandoned spaces, signifiers of a now expired use.

What is also worth noting is ephemera broadly encapsulates the terms obsolescence and waste, each having their own nuances. What “waste” further implies is something which isn’t being used, or not being used to its full capacity, but also a gradual deterioration or decay as well as the physical result of these processes (dictionary.com). Ephemerality is therefore the physical traces of time, the gradual

loss of function, and the artifacts left by these transformations.

Returning for a moment to de Sola-Morales’ (1997:71) take on monumentality, the transience of ephemerality in architecture is expressed well: “bound up with the lingering resonance of poetry after it has been heard, with the recollection of architecture after it has been seen”. It is then further fitting to move architecture away from Apollo, who resides over plastic art like sculpting, and move towards Dionysus who emblemized song and dance, both temporal arts typically ‘performed’ rather than ‘finished’ as a painting or sculpture would be. The curated motions over time, not random and therefore re-performable, give these arts the structure of performance.

Architecture’s relationship to performance can be categorised into 4 groups (Karandinou, 2013:92-94):

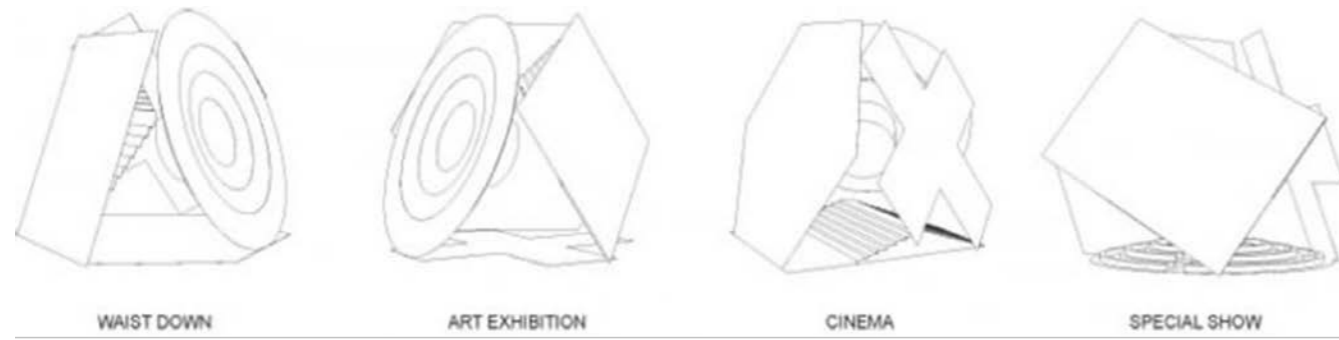
1. Performance through the physical change of form, or form as sign
2. Performance through necessitating collaborative procedures through socio-economic networks in construction
3. Performance through the events/performances facilitated within the architecture, through the performance of the occupants
4. Performance through mapping, interpretation, and re-experiencing a place

3.2 CASE STUDIES

By going into some more detail through examples, these definitions can be compared to what has been established about sustainable architecture earlier. Parallels will be drawn where they can be found, and where there are none one can perhaps find opportunity to expand what tactics are available to sustainable architecture.

The first category entails much more than the bullet-point would suggest. A design can signify something outside itself, acting as a symbol or conveying a narrative. A performative building, therefore, can be something like the Pantheon. Formally, it exists as an analogy to the firmament, placing the occupants in a larger cosmos unchanged by death and decay (Harries, 1998:5) by acting as a scale-replica of it. Performance through the physical change in a building’s form has also inspired numerous buildings and pavilions, often seen in high-tech performative facades like that of Jean Nouvel’s Institut du Monde Arabe (Meagher, 2014).

Still relating to the first category, performative architecture has at times been translated into literally moving buildings, making changes in their form over the course of a day or several weeks. The Prada Transformer is an example of this, as is Diller Scofidio + Renfro’s Blur Building. OMA’s Prada Transformer is a very direct translation of the movement of a body in space into an architectural scale, being rotated by several cranes to lie on different faces to allow for a variety of functions. Blur Building treats

Fig. 5: OMA's *Prada Transformer* in its different positions

this a little differently. The building structure itself is in fact static, and what changes are its spatial qualities through the water vapor jetted into the air and covering the building in a thick fog. The misty envelope surrounding the physical building resists definition, with the architects resisting as well attempts to represent it as the icon of a cloud (Rendell in Karandinou, 2013:99).

Adaptable buildings, therefore, perform as well, albeit over a larger timespan than *Blur* or *Prada Transformer*. Like the *Transformer*, they change physically, their spaces becoming rearranged through the addition or removal of partitions. They can function similar to *Blur* as well, if the partitions and general form of the building remains the same but new uses are plugged in. The furniture and activity begins to define the qualities of the space, subtly but unmistakably shifting like a cloud of vapor surrounding a static structure.

Diller+Scofidio's *Blur*

While *Blur* transforms at a much higher rate, the *Prada Transformer* through its physical rigidity displays its other floor areas as walls, hinting at past functions throughout all its shifts (figure 5). This, once again, is ephemeral as it displays parts of the building that were in use once before and no longer. The temporal continuity this creates is conducive to the narrative aspects of performance as well, conveying the history of the building in reference to itself rather than its site. Adaptable buildings may at times do this, but rarely is it explicitly designed for. To take these designs a step further, the past changes should be visible and this continuity should be created.

This of course is something already navigated in adaptive reuse, where a building's past function needs to be addressed. In new builds, however, where buildings are designed for adaptability or disassembly, each change in function, each change in

event adds to the total continuity of the building's multifunctional history. If authentic connection to a site's history is an important impetus for any design project, how do we navigate a building's relationship to its own history? When each event defines the spaces it takes place in, do these not affect the following events? Shouldn't they?

The second category is exemplified by the natural ebb and flow of any design project. As any architect can attest, a design project goes through innumerable changes before it is even built. Because of all the different parties involved, each having their own agenda for the design, the systems surrounding a building project while it's still in its drafting stages are highly complex and multifaceted. Throughout the meetings with clients, contractors, legal parties, engineers, the architects themselves, concerned locals, and many others, the drawings change and change again (Latour & Yaneva, 2008), forced to contort into new forms to appease everybody and becoming predictable to nobody. Once construction starts, the more hectic last-minute changes begin. Material availability inevitably contradicts specifications, incongruences between the architects' and engineers' drawings come to light and need to be addressed, and larger geopolitical situations might make finances or materials suddenly scarce. Once the keys are handed over to the client, the typical attitude is the building is 'done', and while the architect is responsible for issues occurring within the next 6 years, they don't often return to check on the building as it is "too discouraging" (Muncie, 1997). The building does change

though, and has something of a life of its own once all the prior mentioned parties dust their hands of the entire affair. Occupants put holes into the walls, rearrange rooms, improvise, adapt, and opportunistically restructure these environments to fit their needs which often weren't or couldn't possibly be predicted at the design stages.

Furthermore, the performance aspect is fortified when the occupants have more say in the design. Like what was claimed by Björgvinsson, being able to "design after design" gives more agency to those typically marginalized but most affected by a building. When the change of a building is orchestrated by its users, the performance of the architecture as a collaboration of different parties is reinforced. As was observed earlier, buildings will change after their construction finishes regardless if it was planned for or not, so the better strategy is to accommodate this change and design for this performance.

The third category is what most typically comes to mind when one hears of performative architecture, namely a building that houses performances. Theatres are the primary type, but there are of course auditoriums which adapt to facilitate dramaturgical productions as well as more mundane assemblies, and even school gyms often double as some kind of assembly hall. What gives this category a greater potential depth is its applicability to virtually any space depending on one's definition of performance. Without getting into more complex themes of social performance, we can understand perfor-

Fig. 6: Photographed by Marcus Buck, *Restarchitektur*, 2017

mance as being the repeated, rehearsed actions that constitute an event. Without needing to be formally theatrical, these performances then turn a building into a performative space. If, for instance, a building sees varying uses through 24/7 scheduling like Pelsmakers and Poutanen (2020:271) suggest, the end of one use marks the beginning of another. Are these not numerous performances taking place within the building, each changing the space physically to fit their needs and qualitatively by virtue of their events? Despite the envelope seeing no dramatic alterations, the building has changed because the event has changed. For this to happen many times in a day is a testament to how dynamic a building truly is. If every event-space combination

defines a new and unique architecture, how many ends does this building see? How many ephemeral buildings exist in a day within the envelope of the construction?

The final category is not as clear as the others, but can potentially be understood through studies into space through performative tools. Žugić and Zeković explore this notion through the term ephemera, finding an abandoned school and imposing new performances and narrative workshops into the derelict interiors of the building (Palinhos et al, 2020). This exploratory interaction with a school aims to uncover some of the mnemonic potential of an abandoned space, observing how spatial

Fig. 7: OMA's Prada Transformer interior, waist-down position



evidence can lead us to interpret or reinterpret a space's history. The resulting narratives written by the students brought into these spaces are partly mediated through the interpretational work done by the authors, and partly through the traces evident in the space itself; one party alone, namely the students or the building, could not have produced these narratives, it was the co-action of the two that led to the unique results displayed in the article.

This interaction with a building's past or pastness, of reinterpreting or re-experiencing traces of history leads to other considerations. Because ephemera is interested in time, architecturally it begins to have complex interactions with the many events surrounding a building throughout its typically long life. An example of this are traces of the past which allow a viewer (or in a sense, audience) to

construct a potential past. This is clearly expressed through the imprints left by demolished buildings, where even the colors of the walls of a room can be seen in the color blocks left on the side of the still remaining building (figure 6). This trace of a past building, and by extension the signifying of the processes that lead to its destruction, is ephemera. Architecture is a process, and traces of past processes are ephemera, and perform through narrative.

Returning to OMA's Prada Transformer once again, we can analyse it as a highly temporal building, not only because it changes over time, but even without witnessing the change itself the traces of this change are visible through the translation of what was once a floor to what is now a wall (figure 7). With the building in its "waist-down" position, the fashion show spreads across the surfaces of the in-

terior, suggesting to the visitor that these walls are in fact floors, which we know to be true because of the design's ability to rotate and facilitate other uses (Cole, 2009). The occupant's opportunity to spot the unique sides of this volume, particularly through the easy legibility of its simple and identifiable shapes, allows for a creation of continuity through which the visitors can piece together a history of transformations of the building, given that they revisit the space in each of its different phases. This of course is a dramatic way to display change in a building, and draws a lot of attention to its tectonic shifts, but in a much more subtle form this happens in any building we occupy. Any scratch on the floor tells of some banal movement of furniture, and minuscule holes in a wall tell of picture frames, in Tschumi's (1996:77) words, "the soiled remnants of everyday life, the inscriptions of man or of the elements." In order to create this same continuity, perhaps these scratches and holes shouldn't be covered up but displayed and emphasized, showing how our buildings don't and shouldn't come fresh from a box.

The mapping, interpretation, and re-experience of a space may exist more soberly in preservation projects, where the past is kept unchanged and communicated into the present for visitors to see. Beyond this, it is difficult to find a strong parallel in specifically sustainability projects. One can argue the stasis that preserved buildings are put in is more anesthesia than the mercurial life a building would have. Moving forward, strategies for how this could be translated into architecture that oth-

erwise bases itself on sustainability will be explored and established. It is worth looking into the notion of pastness in architecture, as interpretation, and re-experience both imply working with something that you have experienced already.

3.3 PASTNESS, MEMORY

The fourth category of performance, namely of mapping, interpreting and re-experiencing a space, merits further examination, as does the notion of spatial memory by Žugić and Zeković. They advocate for an understanding of architecture as process, taking a radical stance of believing that everything that a building witnesses has a lasting and significant effect (Žugić & Zeković, 2021). Suspending one's disbelief, the potential considerations this brings are notable. Tschumi (1996:) as well posits that architecture is witness to many events, as it serves as a backdrop to most of life. Of course, one can't expect to be able to read every minute detail off the surfaces that, for the most part, experience fairly banal quotidian moments. Remembering, however, doesn't need to be treated as the recording and retrieving of information that today is often relegated to computers and phones (Casey, 2000: 2). Human remembering is a much more complicated and meaningful process according to Casey.

Architectural history, and the legible pastness of a physical building as was demonstrated in some previous examples, is an important part of establishing temporal continuity. This connection to

time, as Pallasmaa observes, isn't as present or as considered in modern buildings. Without it, we face disconnection from human existential reality (Pallasmaa, 1998: 55). So, in order to place people in time and to welcome time as a perceptible, at times even tangible element of our environment, we need to allow buildings to exhibit the effects of time and their traces in time. We do know that spaces are important co-actors in our processes of memory.

Casey makes important observations on our relationship to memory. For instance, he points out that recall or retrieval, as in tasks relegated to computers, is only part of what we do when we remember (ibid: 2). A large part of what remembering is in a human experience is interpretation and re-experience, with the ancient Greeks attributing the work of poets to interpretation of the past, as opposed to prophets who interpret the future (ibid.: 12). Furthermore, the recollection of past events is filtered through an individual's perceptions, and the act of remembering is not one of perfect recall, but of "creative transformation of experience" (ibid.: 15). Remembering can extend to events that we ourselves haven't witnessed, such as 'Caesar crossed the Rubicon', or perhaps the events retraced for us by our grandparents (ibid.: 54). While we can in an intellectual capacity imagine the details of this kind of remembering, true sensuous remembering is impossible. This sensuousness is additionally the kind of architectural experience advocated for by Pallasmaa (1998: 57), framing it in terms similar to de Sola Morales, as "weak" and fragile. Casey (2000:

312) goes on to expand on these ideas of memory's malleability and the value of non-total recall:

Instead, remembering can be said to be going on between the embodied human rememberer and the place he or she is in as well as with the others he or she is in the presence of.

So, clearly, what is remembered is not each time the same, as this depends on one's surroundings and company. Zumthor makes a similar observation when recalling an experience of sitting at a square, where the whole experience was more moving than any sum of its individual sensuous parts. Without the square, he attests, he could not have had these feelings (Passinmäki, 2015: 329). In this same vein, Žugić and Zeković observe that without their abandoned school, they could not have conjured up the memories that they did. Whether or not they are entirely factual becomes irrelevant, they are semi-fictitious and based on evidence of past event. One cannot architecturally provide full accounts of the past, just as one cannot provide perfectly flexible space as we can't predict the future. We can provide frameworks that 'eliminate the improbable', just as traces of the past steer us in a direction of interpretation but can't predict the exact content of what we will remember.

Remembering, Casey (2000: 5) explains, weighs us down and connects us to the earth. As we interact and participate with our surroundings, we participate and co-act with the world, as Levy-Bruhl states:

Memory registers modes of participation between animate and inanimate things, minds and bodies, selves and others, persons and places; it also contributes its own re-enlivening capacities to the festival of cosmic participation. (Casey, 2000: 312)

So fundamentally, pastness and particularly this interpretation of spatial pastness follows the previously mentioned fourth category of performance. Additionally, this performance connects us to the earth, allows us to inhabit and re-experience time, with our built environment acting as a mnemonic tool, or co-acting in our materialization of memory.

Typically in architectural designs the negotiation of pastness is linked strongly to the history of the site. Through the use of vernacular techniques, or formal references to buildings no longer present at the site but indispensable in the creation of the location's current character, a connection is made between the 'then' and 'now' of the site. Today the prevailing understanding is we can't afford to design buildings to be demolished, their lifespans in one form or another need to be extended considerably if we expect to offset the emissions produced by their construction and their destruction. If we are expecting to be dealing with buildings with long lives stretching out before any given occupant or architect arrives on the scene, this of course encourages us to create temporal continuity. It becomes a question of preservation rather than manufacturing continuity.

Nietzsche observes that there is a lightness in forgetting, ascribing this to less noble beasts that graze and don't stress themselves with knowledge of the past (Casey, 2000:5), and indeed it is only possible to remember once something has been forgotten, dubbed 'secondary remembering' when what we are recalling has already passed out of our consciousness (ibid.:50). As value necessitates non-value, remembering necessitates forgetting.

So, we can only remember what has been forgotten, and when this is done it is not perfect recall but an interpretation of the event or object. If this were translated into the context of a building and its pastness, like what Žugić and Zeković observed, the traces of the past allow for creative reinterpretation rather than objective recollection. Perfect preservation, therefore, isn't analogous to human remembering, and just as translations of literary works are in themselves new works building materials that are salvaged and recycled can't be perfectly preserved but must undergo some change.

It is worth adding that Nietzsche makes a similar point on *The Use and Abuse of History*, where antiquarian history risks fetishizing the old simply for being old and not for its content. Critical history can be useful, although it is important not to reject the past but to inspect it and apply it in so far as it is useful to life. The synthesis is then to find what is old and historic and not to be so precious in its reuse, but not be harsh and apathetic in its handling. These objects of the past, when recycled, have the risk of losing their 'memory', so to speak, as they are

transformed beyond recognition. Examples of what this transformation may look like are given with the further exploration of recycling, which follows this chapter.

To conclude this chapter, this investigation of the terms ephemera and performance reveals that the terms are multifaceted and can produce interesting approaches to the overlapping territory of sustainability and performance. It has also revealed the complex relationship a building can have to a site's history if not its own history. Events are ephemera in the sense of being things with a set lifespan after which they vanish, but we know that an event also leaves traces which should be considered, as these are also ephemera. Some examples were given of how these considerations have been manifested in architecture.

The connections of sustainability to ephemera were numerous, however on Karandinou's 4th category the parallels were difficult to draw. There is then an opportunity for expansion of sustainability, particularly through questions of spatial memory and how this can be communicated to create continuity in the built environment. Here are some examples of this:

- showing the past life of recycled material
- leaving traces of past use
 - through marks on floors, walls, etc
 - arrangements of space
 - arrangements of furniture, presence of specific objects or tools

- schedule on door
- different new and old buildings or building parts
- some ambiguity allowing for investigation
- when programs shift, seeing previous group packing up

Moving on to consider the relationship of recycling to this, one can make an observation about recycling's connection to Karandinou's 1st category, that of change in form or form as sign. Because recycling and upcycling works with many smaller objects sometimes being combined into one larger object or material, their forms must change and they change much more dramatically than a building could. It's best to explore how this happens in recycled material and see what implications it has in a performative capacity, as well as a mnemonic capacity.

In the end, the goal is clear: to allow time into our spaces, to create temporal continuity. Traditionally in for example an adaptive reuse project, the original and current uses are somehow negotiated and synthesized into the new building. In the case of Holland's canal houses, wouldn't the most honest navigation of pastness take into account all these different uses? Furthermore, in the case of recycled materials, don't these bring with them their own histories that should then also be given space and be allowed to speak?

4.0 REUSE, RECYCLING

4.1 QUANTITATIVE MOTIVATIONS

As Dan Phillips alongside many published scholars will tell you, the construction industry operates on systems that are highly wasteful and pollutive. The core criticism, as Congdon (2000) observes, is that efficient waste management produces very little capital and is therefore not prioritized. The environmental responsibility which should be falling on producers instead trickles down to designers like Lendager Group who look for innovative strategies and solutions for reclaiming waste. By valorizing waste products, they are returned into a system that produced said waste to begin with. What is truly required is a fundamental change in our thinking and the processes that create this much waste.

The recycling of urban material necessitates a less destructive, non-reversible form of disposing of our buildings. Rotor, and their deconstruction and consultancy branch Rotor DC are one of the offices taking up this task. With little to no profit margins, the job is to find an office space slated for demolition and to salvage what can be salvaged. Despite offices often being built of modular systems allowing for adaptation such as curtain glass partitions, carpet tiles, suspended ceilings, these materials are torn

out and destroyed when the space needs renovation for new occupants (Devlieger, 2019: 39). Obviously, these materials can be resold simply to keep them from piling into a landfill. As more and more pressure is put on raw materials, the extraction of which is becoming more and more resource-intensive, it is worth looking into forms of recycling and urban mining (Cheshire, 2016: 17).

A Japanese company, Taisei Corporation, has developed a quiet, low pollution system of deconstructing buildings. By taking apart the building from the inside floor by floor starting from the top, erecting temporary structures to keep the roof up, the process gradually moves down the length of buildings over 100m tall while preserving their outward appearance, albeit somewhat shrunk. The advantages of this system are that it can take place under any weather conditions, any salvageable components inside are carefully removed and lowered, 85% less CO₂ is emitted, 90% less dust is created, and 17-25db less noise is produced (Clark, 2013). The visual effect on the cityscape of this technique is also minimized, as the lack of scaffolding and obvious boundaries of a demolition site aren't disrupting the continuity of the city.

The products of these disassembly practices also have greater value through careful reclaiming. By

finding new use for old materials, the energy and carbon costs of producing fresh materials can be avoided. One has the choice of breaking these materials down and reusing them in what Hebel (2014:63-64) calls reconfigured waste materials, where a uniform waste material is broken down and rearranged into a new material as seen in the upcycling of Tetra Pak cartons into corrugated roofing sheets.

Gorgolewski (2017:27) also makes the point that reuse as opposed to recycling is a less energy-intensive process. Thomas E. Graedel (Hebel et al, 2014) states that recycling aluminium would spend only 5% of the energy originally used in its production, but this depends on the product with aluminium cans needing up to 25% of the original emissions (Gorgolewski, 2017:27). Refilling these cans and recirculating them spends less energy, and reuse processes produce more jobs than recycling (9x) and landfills (38x).

Furthermore, the advantage of urban mining and recycling is the creation of circular economies, which are more resource efficient than our currently widespread "cradle to grave" systems. If parts are reused, the energy that went into producing them wouldn't need to be spent a second time to create the same product. Wood products are often chosen for their carbon negative qualities, however if this is not paired with a circular economy based on efficient reuse, all the embodied carbon in wooden products that end up in a landfill is released into the atmosphere anyway.

This is particularly true of construction and the built environment. We are reaching a point where useful materials such as copper are more common in buildings than in the earth itself (Hebel et al, 2014). Simultaneously, our cities produce staggering amounts of garbage, with New York City creating enough waste to fill the Statue of Liberty each hour (Joachim, 2014: 22). The logical intersection is to use these resources, if we can redefine waste as such, as the raw materials our cities need to keep growing.

If this waste, particularly in the case of obsolete objects which become waste not through wear and tear but through redundancy, can be repurposed as a resource, then a great deal of pressure can be lifted off the environment. One of the potential problems of converting waste to a building material is people's image of waste. If not revulsed, they may react in another negative way such as associating it with poverty, desperation, or otherwise (Hebel et al, 2014: 12). This, would certainly be true of a building made of food waste, for example, where any performance advantages would be eclipsed by the sight of compost (hence they are typically hidden, as their authentic form can be offensive). The advantage of the upcycling of obsolete objects is that they themselves aren't old and rotten but actually fairly new and typically functional, albeit not as functional as the product that came to replace them. Upcycling differs from recycling in that it tries to reinvent waste objects without much reprocessing. It is a low-energy, hygienic alternative to recycling and reuse.

4.2 QUALITATIVE MOTIVATIONS

The overarching theme of lifespans and their extension logically includes recycling. This is a worthwhile consideration for construction materials, particularly timber or bricks, which would simply end up in a landfill if not reclaimed somehow. There are those who argue that recycling isn't inherently ecological, and in fact only benefits a small group of the upper class (Congdon, 2000). The ecological argument, then, is that we are more closely connected to the objects that surround us (Congdon, 2000), or the waste that defines us (Schwitters, cited in Bro-yard, 1985). Dan Phillips (2010) is an American architect who advocates for the use of scrap and litter as building material. Referencing Nietzsche, Phillips develops a Dionysian approach as opposed to the Apollonian of 'magazine' architecture. The idea to him is simply to have fun, and not to worry if things don't fit perfectly. This doesn't mean he advocates for chaotic or clumsy building, and he does establish patterns in his arrays of slightly differing elements:

If we have a wall of windowpanes and one pane is cracked we go "oh dear. That's cracked. Let's repair it. Let's take it out, throw it away so nobody can use it, and put a new one in because that's what you do with a cracked pane". Never mind that it doesn't affect our lives at all. It only rattles that expected pattern and unity of structural features. However, if we

took a small hammer and we added cracks to all the other windows... then we have a pattern. Because Gestalt psychology emphasizes the recognition of pattern over parts that comprise a pattern [...]repetition creates pattern.

Recycling, reuse, and upcycling obviously fit into the theme of obsolescence and ephemerality as it gives new life to discarded material. Within architecture there are different notable forms that this can take. Reclaimed brick and timber is in a sense a resurrection, the material being put back into the same use as its 'past life'. There are then materials which are given a 'new life' through change, which happens in two forms. The more functional and easy to deal with is that of breaking down a large number of objects (such as aluminium cans or plastic bottles) into a homogenous material which can be molded to the required dimensions. The second choice (which typically involves quite some creativity, prime examples being Dan Phillips and Mike Reynolds) is to use the discarded objects as they are. Reynolds creates walls of bottles or tires and fills the gaps with mortar, Phillips uses gnarled but strong branches to support stairs and banisters. What both create is quite unique because of this, not breaking down waste to look more like typical architectural materials, but allowing these objects to be seen and for the viewer to understand the transformation that has taken place, which exhibits its authenticity. This also harkens back to the ecstatic Dionysus as personified by Zarathustra, who loves the world and praises it for being perfect just as it is (Luyster, 2001:12). In a move away from the

Apollonian, the work of Phillips and Reynolds don't impose on waste an aesthetic domination by transforming it into a more palatable form.

Furthermore, by creatively reusing local waste materials the energy demands of forging and transporting raw materials to the site is reduced. In qualitative terms, however, there is a greater authenticity in using aged materials with a true patina rather than trying to mimic this weathering in new materials. In addition, the use of locally sourced upcycled materials is contextually authentic as it draws literally from a physical history of the broader site.

There is the question of connecting the 'then' to the 'now' through the act of spoliation. Alongside this, authenticity, and allowing the spoliated element to express its 'true nature' against the rest of the building is also important (Kalakoski & Huuhka, 2018). With recycled material comes a sense of translation. Reclaimed brick exhibits a patina from its previous life, which carries over into giving its new space character. With the approach of Reynolds or Phillips, the transformation or reinterpretation of the recycled materials is so obvious that it evokes in the viewer a sense of temporality. Building off of what Pallasmaa states, materials need to show their age. He does, however, point out that modern materials may not exhibit the traces of time on their surfaces, or don't do so with charisma. How time can be conveyed through these materials may simply be through using obviously reclaimed materials, showing the transformation that occurred through their old and new use.

Although spolia is a term exclusive to architecture (Kalakoski & Huuhka, 2018), there might be value in its application to recycled materials. Spolia is by definition an architectural fragment which is re-contextualized as a structural part of a new building, not fitting in with its new surroundings and emphasizing a disconnect between a new structure with old elements; what Dan Phillips and Mike Reynolds do results in an effect similar to spoliation. The act of spoliating does require redefining the donated object beyond just relocation (Ibid, 2018:), which implies rebirth, the end of one ephemeral life and the beginning of a new one. It also echoes the previously established fact that human memory is not information retrieval but interpretation. Were spolia to be reused exactly as they were originally, there wouldn't be the same evident temporality present. The transformation, therefore, is important to spoliation and to the creation of a mnemonic space.

4.3 STRATEGIES: WITH, WITHOUT, AGAINST

The three terms introduced in this chapter were reuse, recycling, and upcycling. Reuse tries not to change much of the object's qualities once it is appropriated, extending its lifespan rather than giving it a new one. Recycling, however, often entails a breaking down of many objects of a similar material into a new homogenous substance that can be used in a new way. The original life is discarded and a new one is imposed which can be totally un-

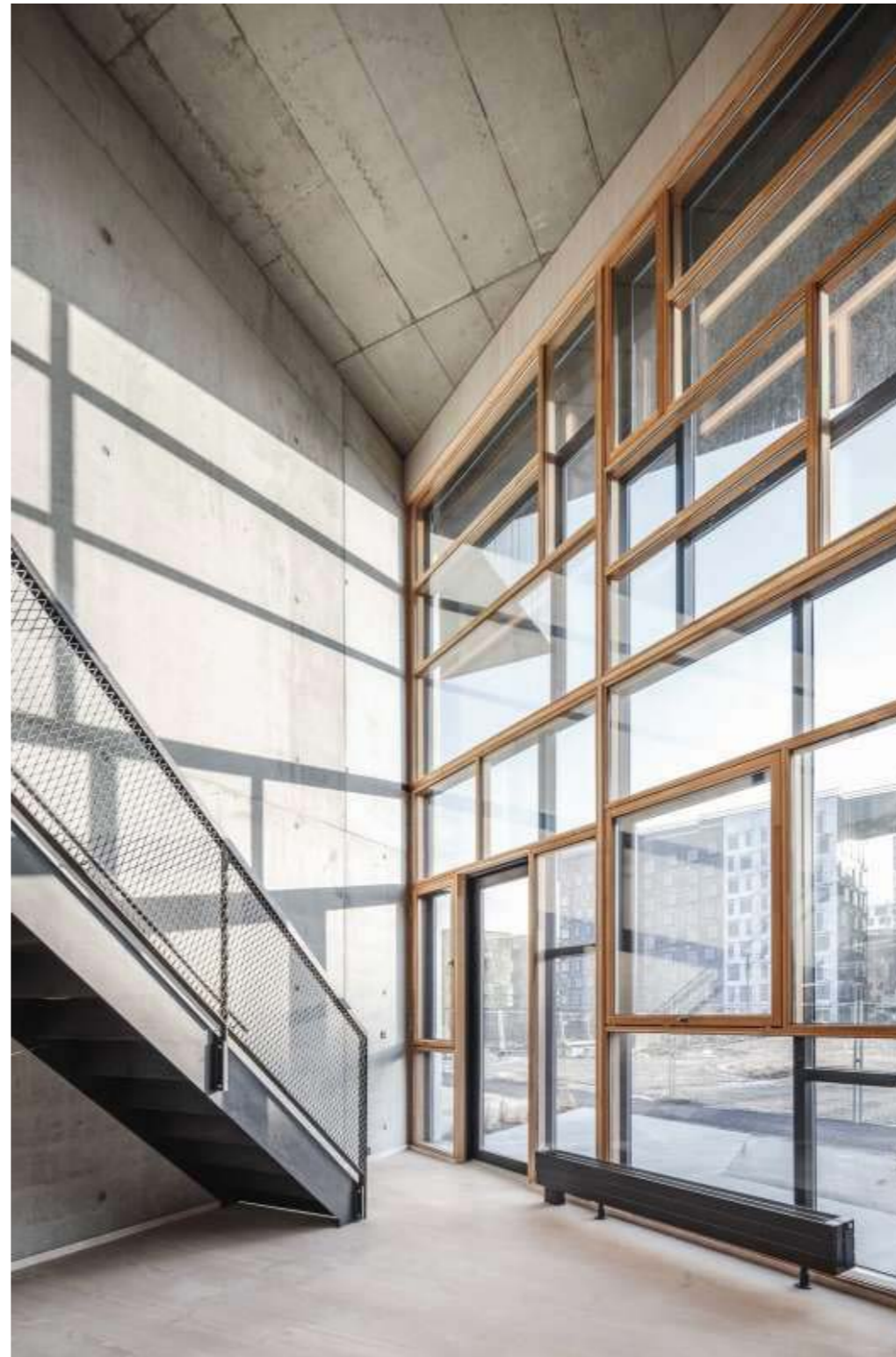
related to the original objects, but we would have no way of knowing. Upcycling implies a change in function but little material processing. Typically some unwanted household object is given a new role, though one can see it wasn't made for it, such as collecting thrown-out skis and building a fence out of them. Their old life is still visible despite having undergone a transformation, and the disconnect between these two lives is what often makes upcycling in this form seen as kitsch.

When one considers these three modes of lifespan extension, parallels can be drawn to Tschumi's three relationships of an event to a space: with, without, against. Reuse works in harmony with the 'past life'; recycling despite, as it ends one life and starts a new one that is supposed to be influenced by said past life as little as possible for efficiency's sake; and upcycling which through evident disconnects between past and present use produces tension, aligning with 'against'. Here are some examples:

Upcycle Studio by Lendager group is an example of reuse working with its past function. The translation is from window to window, albeit in different organizations and obviously a little out of place. Their non-custom size facilitates this new treatment of windows in the project, giving it a unique quality. It also saves on treatment costs, as largely the windows remain unchanged. There is, however, some level of reinterpretation as the windows aren't completely unchanged so as to create a look of homogeneity. The European Council headquarters also use a similar method, which despite seeming like a

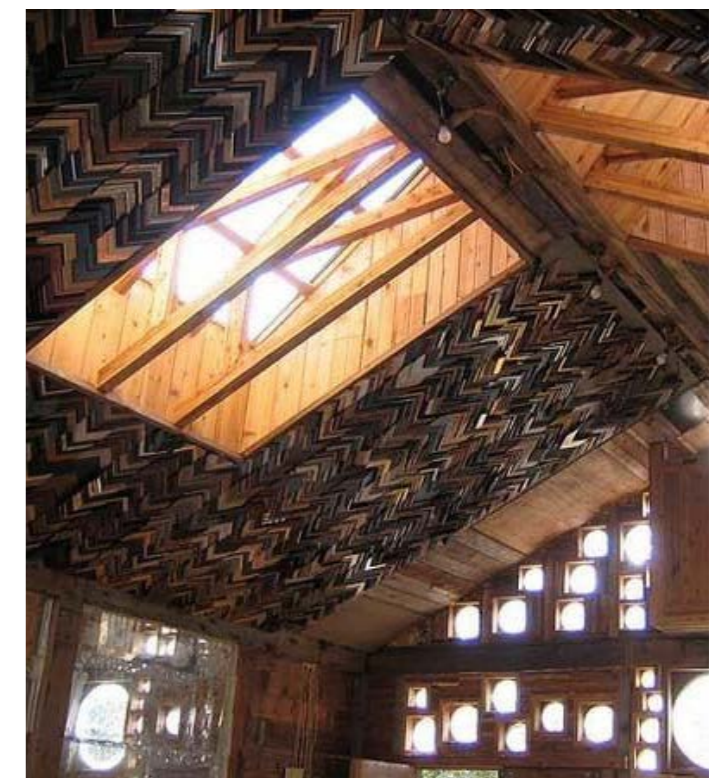
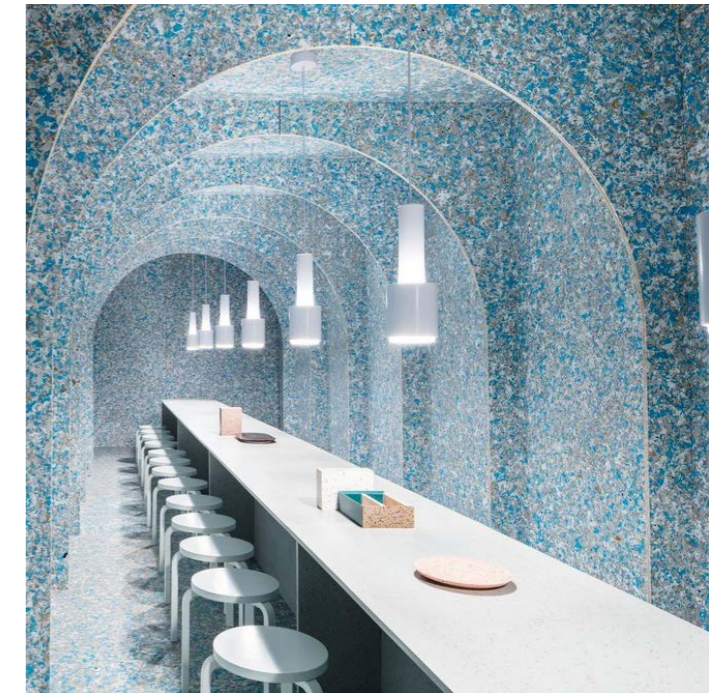
straightforward translation, entails some complicated negotiations of codes, proportions, engineering, and aesthetics. The windows were still sanded and treated for waterproofing, and all were fitted with new glass, with some frames receiving new mechanical fixings (Gorgolewski, 2017:130). Lendager group also had to treat their windows, as a totally unchanged set of windows wouldn't aesthetically form a consistent look, and certainly wouldn't fit together properly enough to be up to code.

Zero Waste Bistro, a temporary installation by Linda Bergroth is an example of recycled material working despite its past function. The walls are made of a mix of non-plastics coming from cartons, giving it a unique blue tint until one looks closer and sees the mix of many other colors and barcodes (Gonzalez, 2019). The cartons themselves don't feature here, nor does any of the original sources of the materials recycled to create the entire zero waste pavilion. They were broken down and reshaped to facilitate the creation of this space without compromise past its strong color. What makes this



Lendager Group's *Upcycle Studios*

Linda Bergroth's *Zero Waste Bistro*



Home designed by Dan Phillips

fit into a category of despite is that the original cartons are not present in a form that suggests their past life. Essentially what was needed was a partition, and what was available were a large enough amount of cartons that they could be broken down and reformed into said wall. Unlike in the case of the recycled windows, the design process forces the material to fit its own needs rather than being flexible according to what the salvaged components call for.

The work and philosophy of Dan Phillips aligns with recycled material working against its past use. In the image above, pieces of trashed picture frames were cut and reassembled as ceiling cladding. Many circular windows of different radii are arranged loosely to create a unique and chaotic facade. Because the wood of the picture frames wasn't broken down into one homogenous material, the result is evocative and maybe more controversial than previous examples. Because the design doesn't fit a 'standard' and expresses almost amateurish sensibilities, it's certainly not a house for everyone. However, it does reflect a certain authenticity that the zero waste pavilion does not. If the building is made of recycled material, why not show it? Why not allow this material to show its 'true nature'? What makes this approach fit to the against category rather than despite—since it can be argued that these picture frames are being used despite their past function—is that there is a disjunction between the frames' current use and past use. The cartons used in the Zero Waste Bistro are broken down, removing any trace of a past life, and changed to fit

the new use demanded of them. This is in a sense an attitude of indifference, that regardless of what this past life may have been, it is now a partition. Phillips' approach exhibits tension between things that are serving as building material that seemingly shouldn't be. Instead of hiding it, being indifferent to it, it is shown honestly, warts and all.

There is, furthermore, the consideration that upcycling is a strategy available to individual users without the need for expensive machinery and chemical processes. This bringing of the audience closer was previously cited as being another Dionysian quality, as well as a sustainable quality, as the bottom-up structure of it gives power to the users.

This same communication is true of the first category, where a window is still true to being a window. The second category is in a sense inauthentic, as the materials are mass produced, artificially transformed into a homogenous surface that expresses neither craft nor pastness. This isn't to say that inauthenticity doesn't have a use, as it creates an obviously more coherent space. If this past life is also hidden from the occupant, it may illicit less precious responses. Since the materials are already so broken down, hammering a nail into it doesn't seem too bad. If the wall were made up of picture frames, there would more likely be a cautiousness, since these picture frames could potentially be reclaimed and used as frames if the need calls for it, like what Schwartz (2010: 48-49) referred to with "the link to the myth of miraculous recovery of what is lost", not wanting to dispose of her piano because

there is still perhaps a chance of recovering the talent of her youth.

Recycling is a process layered with meaning (Congdon, 2000), and performs through creating networks between its different co-actors. Even the architecturally uninitiated can see a ceiling made of recycled picture frames and understand the connection made between the construction process and the 'resources' produced by the anthropocene. The picture frames embody a specific set of processes (no two being interchangeable either, a quality that comes with scavenging unique items) which then are forced against the ceiling of a building, itself embodying a different set of operations. The clash emphasizes the difference between the two, communicating the new process of bringing distinct practices and elements together and transforming both.

While it was mentioned that spolia is a term exclusive to architecture, it is potentially fruitful to consider it in regards to objects that aren't architectural, in a similar vein to how Tschumi advocates not for 'collaboration' as it treats disciplines as independent, but to explore the overlaps and similarities between seemingly different fields so as to enrich both. Spolia, of course, carry with them a lot of history and this is performative by what they signify and sustainable in the case of recycling material and preventing wastefulness. As with performance/event, these create a new relationship of space and function, either working with, without, or against each other.

Brand as well has encouraged the improvisational attitude that architects like Phillips or Reynolds use in their scavenging architecture, with Phillips labeling his approach as Dionysian like Nietzsche calls for.

5.0 PIANOS

Here marks the point where this thesis will be moving into a more concrete application of the concepts established previously. While those explorations could be implemented with other materials in other sites, the focus here will be on pianos as a case study. The connections of a piano to the aforementioned theory will be established, some logistics will be discussed, and the tactics with which the pianos can be recycled, reused, or upcycled will be established. Once the catalogue of techniques is established, they can proceed to inform the design process to define a proposal in more detail.

5.1 HISTORY, ARCHITECTURAL CONNECTIONS

At time of writing there are 90 pianos listed on Tori.fi as free to be collected, most of them located in the Uusimaa region. While this is one of the more populous regions of Finland, Helsinki and later Pornainen were also the centres of Fazer's piano production in the 1950s (f-musiikki.fi) explaining this particular concentration. In Finland pianos and guitars are the most popular instruments, and playing instruments is still as popular a hobby as in the 90s, with some of the most likely to play being students and those living around the capital (stat), further explaining the collection in the Uusimaa region.

What connects pianos to architecture? The first and perhaps most artless connection is that the term piano, through its longer original name *gravicembalo col piano e forte*, shares Latin roots with plan (as in plan drawing) through *planus* (etymonline). The modern piano transformed from the gravicembalo or harpsichord by changing the action from plucking to striking, thus allowing for dynamic lows and highs (*piano e forte*) in volume. Gradually the piano changed from the horizontal grand piano to the vertical upright piano through innovations by Domenico del Mela and later John Hawkins, drastically reducing the instrument's footprint and allowing it to be fit into most households and schools (Coles-Aldridge, 2019).

Pianos and architecture both went through a process of being made available for common workers, as the industrial revolution made cheaper many of the processes that went into constructing either. Through more cost-effective mass production, high quality houses and pianos became available to the masses. They both suffer from their physical form being quite robust and therefore difficult to dispose of, which resist and force us to confront our own wasteful practices. Buildings, at least, are dealt with economically at a scale where demolition is feasible, but the pianos collecting dust in many households across the country have only private owners



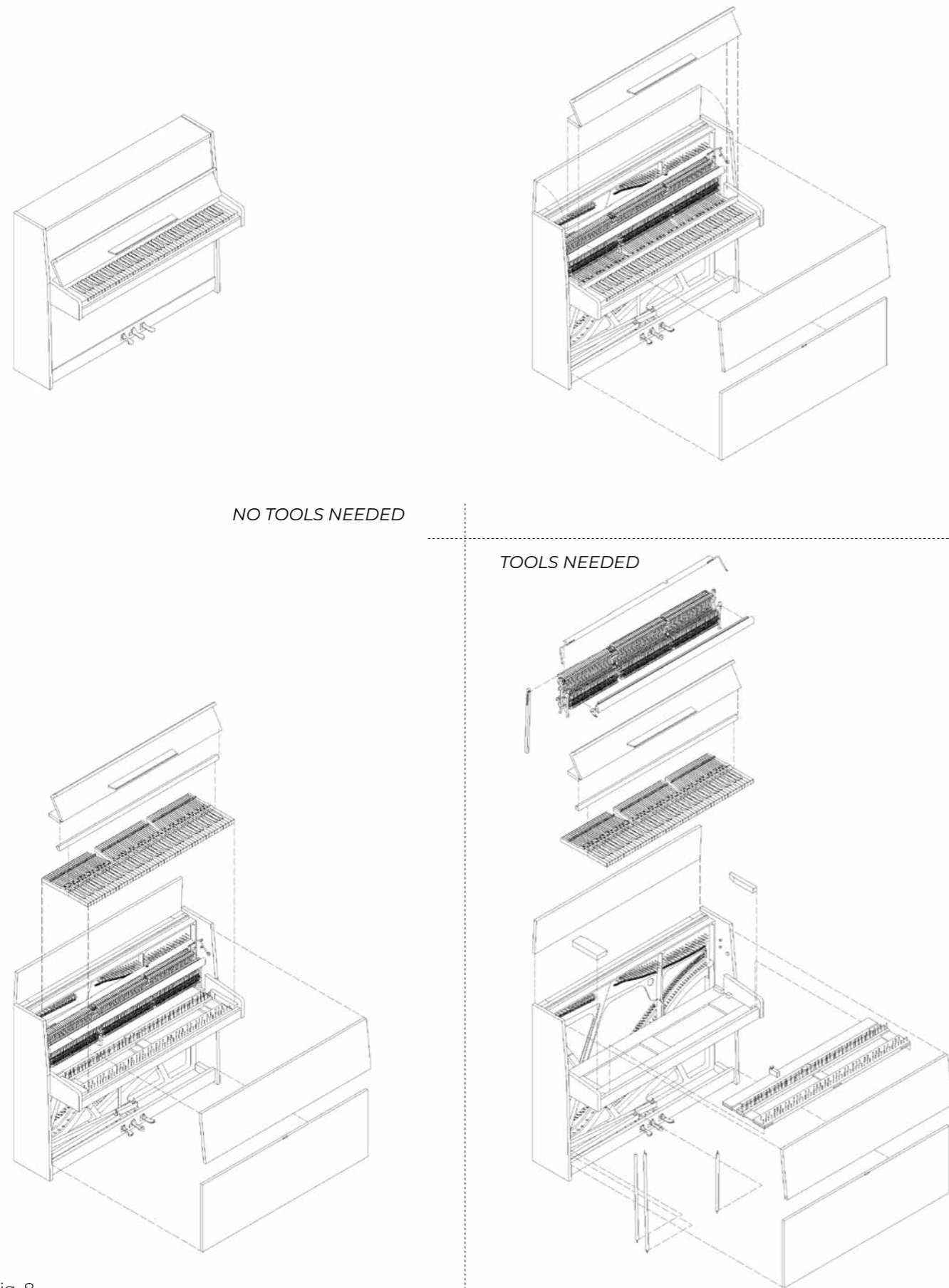


Fig. 8

without the disposable income that makes piano removal easier.

Beyond similarities in their histories, pianos and architecture do have other more performative similarities. For one, their solidity forces us to navigate them as though they were static elements of the environment; a piano is one of the rarer instruments which can't be transported along with a band without considerable difficulty. A piano is typically provided at location, and so the quality of all the pianos a player might encounter through a tour varies from location to location. There is a certain amount of site-specificity involved in each, and when compared to other instruments which are manipulated in our hands, a piano forces us to navigate their own space.

Drawing on the previously established theory a piano is a solid, fairly permanent object that facilitates events and is activated to provide an ephemeral performance. Its outward appearance is a handsome piece of furniture (Apollonian) but its function through music is purely fleeting and transient (Dionysian). In the process of making them compact, playing piano was democratized. The audience was invited closer. They appeal to the senses, with their visual qualities being secondary to how they feel and sound (Schwartz, 2010:45), much like how architecture is encouraged to be sensuous rather than image-based (Pallasmaa, 1998:57).

While architecture is now seeing a call for the design for disassembly, pianos have this quality built

in. They are surprisingly easy to take apart, with the larger panels being removable without even the use of a screwdriver (fig. 8). The keys also don't require any tools, and can be pulled out at will once the other panels are out of the way, and any pieces that are mechanically fastened can be undone with simple tools. This is most likely to allow for easy re-tuning, with only a few pieces being glued and needing blunt force or some kind of solvent to remove, permanently damaging the instrument. Vernacular architecture, as claimed by Stewart Brand, has these potentials for disassembly which allow for reparations and maintenance by its users. If a piano's key breaks there are replacements to be found, as a lot of manufacturers share pieces.

While these connections don't immediately make pianos an obvious choice for reuse in an architectural role, the qualities shared between the two can start to make interesting intersections and allow for unique moments that other materials certainly couldn't accomplish.

5.2 QUANTITATIVE MOTIVATIONS

Part of what makes pianos potentially suitable for reuse in an architectural context is their scale. The casework of an upright piano measures roughly 1.5 by 1.2 meters, and if dismantled carefully they can be rearranged to act as the cladding on a small shed of 7x7.5x3.5m. Were these panels left to decompose, all of the embodied CO₂ that the wood has stored

would be released into the atmosphere. By reusing these panels, this CO2 can be kept trapped.

This scale also translates into the high amount of compression forces that the frame has to endure. By some estimates, around 18 tonnes of force are exerted through the strings onto the frame of an upright piano (concertpitchpiano). This would be more than enough to support a roof, as long as a suitable joint could be fashioned between frames.

5.3 QUALITATIVE MOTIVATIONS

Play Me, I'm Yours is an art project by UK artist Luke Jerram, where over 400 'street pianos' were placed in cities around the world, all inciting spontaneous public interactions and some even attracting users who would take nearly an hour to travel to them (streetpianos). Some were elaborately painted, others were left plain, all seemed to attract performers, regardless of skill, and audiences (Glenwood). What these urban pianos accomplish is to activate urban spaces through music performances. Tschumi does claim that architecture is about activating spaces (Khan, 2008).

Pianos have been imposing and effective interior decor elements for a very long time, instantly adding an air of sophistication or intellect to a typical living room. While a grand piano is rather impressive, a modest upright piano can do the same task, with many apartments featured on Architectural Digest

exhibiting them (Luckel, 2020). Pianos, therefore, do communicate something about a room or its owner.

What is clear is pianos are prime examples of the complexities of value. They are scrap, as Osseo-Asare and Abbas define, being given away for €0, worth nothing monetarily. Despite being 'worthless', they resist the exploitation of linear economies through their robustness. They must, however, also retain some value beyond a financial one. Lynne Sharon Schwartz gives an interesting account on her relationship to a baby grand piano given to her by her parents in her teens. Despite it being a cumbersome instrument, she continues to bring it with her whenever she moves, not entirely sure why as she doesn't play it with much enthusiasm anymore (Schwartz, 2010:44). She tries to pin down what might be the reason she can't let it go, and even her blind piano tuner insists that despite it increasing in value over the years she mustn't sell it and rather should keep it preserved, probably to the point of outlasting Schwartz herself (ibid.:47). Loss-aversion, it seems, is a strong motivator for keeping things as they are, and Schwartz observes what might be keeping her from selling the instrument:

Altogether I have too much to lose: the tangible, audible link to those early gratifying hours at the piano, feeling the happy sense of proficiency; the link to the myth of miraculous recovery of what is lost; and the link to my parents, who gave the piano its first home and listened to me play it. (Schwartz: 2010:48-49)

It is, on one hand, a desire to preserve a memory of either her parents or of her own talent which she insists has long ago disappeared. On the other hand it is a hopeful expectation that it will return, that this lost talent isn't truly lost and is actually just dormant, waiting for her to practice more consistently. As charming and personal an account this may be, we can see that there is among many people a desire to keep things from changing due to nostalgia, in hopes that some former glory wouldn't be lost entirely. Whatever the strict reason, it is clear many piano owners across the country don't simply want to throw away the piano despite it having no resale value. There is some kind of loss-aversion behind the scenes, even if it's not a loss for themselves, and any preserved value would be inherited by the person who comes and collects the instrument.

Romain Thiery in his photography project *Requiem for the Piano* shows how pianos accentuate a sense of loneliness and dereliction in the forgotten, pala-

tial salons which he photographs. A grand piano lying collapsed in the dust of an ornate windowed hall emphasizes the fall from grace and loss of value the space has experienced, but even the upright pianos hiding under quotidian staircases conjure a stark contrast between the dusty silence of today and the jovial song and dance that we can only imagine enveloped the instrument once before.

When considered in regards to their authenticity, as Gilmore and Pine (cited in Kalakoski & Huuhka, 2018: 14) categorised, a piano stands apart from standard litter and it shows in people's persistence on keeping them at home until someone claims them instead of throwing them out. Pianos, as opposed to bottles and tires, have some cultural significance which allows for this treatment as spolia. Bottles, and by extension buildings made of bottles, don't communicate a past significance like a more precious object such as a piano does. Viewers can more readily appreciate visible piano pieces rather



Photographed by Theo Westenberger, Architectural Digest, October 2004



Photographed by Romain Thiery, *Requiem Pour Pianos*, 2008

than bottles, because the pieces reflect authenticity in terms of craftsmanship, design, material, and influence. Handmade, wooden components unique to pianos, and instruments associated with high-class and culture, are perceived to be more authentic than mass produced disposable glass bottles devoid of use past their commodified fluid contents. One can fairly argue, as conservationists would, that to transform a piano into architecture has fundamentally changed the piano and therefore stripped it of its original value. “in practice, the admiration for material evidence is usually expressed as a strong inclination to minimize physical losses”(Kemp, cited in Kalakoski & Huuhka, 2018).

One can however also argue that pianos that are essentially waiting to be thrown away, without any use in themselves, are simply refuse rather than pianos. At least in an upcycled spatial role they can perform in the multitude of ways a piano can: reverberating and creating sound, communicating class and culture, being tactile mechanisms intended for interaction, facilitating gatherings through performance. Without event there is no architecture, and without playing there is no piano.

It is not unreasonable to cringe at the thought of dismantling something as delicate and valuable as a piano and nailing its pieces to a wall, as a removal of an artifact from its original context entails in the eyes of conservationists a loss of value (Kalakoski & Huuhka, 2018). While it can't be denied that as a gesture this would be rather violent, any act of appropriation is inherently violent (Kinney, 2014a[2011]:

6). Any body in space is an act of violence (Tschumi, 1996). That is not to say that only change brings with it violence, as a great deal of violence can be exerted exactly to keep things from changing, as in the case of counterrevolution. Either decision entails violence, so the real decision becomes which kind of violence are we willing to accept? Is it better to keep mining the geo-ecosphere for raw materials, or to try and reclaim some of the materials produced by the anthroposphere?

5.4 STRATEGIES, LOGISTICS

Dean Petrich has a website where he discusses some of the potential uses for a piano that has passed “a point of no return,” and is in too bad a condition to continue its life as a piano, but can still be transformed into something else. While this sort of reuse is often labelled “upcycling”, one can question whether or not the transformation from unused piano to planter is a movement upwards in quality. In fact, most uses would probably be a step down from the grandeur of a musical instrument with so much cultural heritage. Certainly they can easily fall into kitsch, as a bookshelf that is visibly a piano does seem to be in poor taste.

When considered through the 3 categories of with, despite, against, a piano of course can be reused as a piano and work with its past life. It can also be broken down into wood chips and recycled as a simple partition wall, gaining this new architectural quality despite its intended function. If used against

their past use, there is a lot of potential as they are more complex than objects like picture frames. An ‘authentic’ form of upcycling a piano would need to nod to their original function as an instrument meant to be touched, meant to facilitate events.

Considering these three strategies further, it should be noted the level of reversibility of each approach. Shredding anything down and restructuring it into a chipboard wall obviously means the end of the original object's life, though the walls can be strategically reused many times in the future. Simply carrying a piano into a new space is the most unproblematic form of reuse. Dismantling a piano into its parts and inventing new functions for them can be entirely reversible depending how far one goes with the dismantling. Much of the piano can be taken apart and reused with the intention of re-assembly later.

It is of course important to recognize that because of their intended use indoors, the materials used in their construction weren't chosen to withstand the weather. Much of these elements, therefore, are confined to the interior unless they are expected to rot, which of course would release the embodied CO2 previously mentioned. This isn't to say that only the interior can be considered when upcycling, as materials more suitable for the outside can be salvaged from elsewhere, materials that were from their inception intended for outdoor use like bricks and treated timber. Even new materials can be used, but of course with the consideration that if they become obsolete they have to be reversible enough

to be used in a different way in the same project, or be salvaged by a different building project all together. The key takeaway is that sustainable building isn't as constricting as building a house entirely out of salvaged materials. It is an attitude that can be applied to salvaged, recycled, renovated, or new materials. To limit oneself to a puritan ideal of sustainability would be doing a disservice to the environment, as a building that is not cherished or does not perform up to code won't last long and more waste would simply be made.

While the arguments preceding this chapter lead to a framework that can be applied to any recycled material, the qualities or history shared between architecture and pianos makes the reinvention of these instruments particularly interesting. Pianos, like buildings, are cumbersome and perceived to be of high value and craft. They tend to be cherished for their beauty or at least because they're quite expensive. They are both intended to be sensuous, and can appeal to a variety of senses. They both can facilitate events and performances, and both have spatial qualities whose rigidity forces us to adapt around them, while simultaneously offering enough flexibility to allow for different uses (functions in the case of architecture, musical styles in piano).

6.0 CONCLUSION

In these previous chapters numerous topics were discussed and their connections to one another highlighted. These topics were scrap, waste, and obsolescence; event spaces and eventual architecture; architectural performance, its definitions, and spatial memory; reuse, recycling, and upcycling paralleling Tschumi's *with, without, and against*; pianos, their history, and their connections to some of the aforementioned topics.

First the nuances of waste, scrap, and obsolescence were explored. The conclusion drawn was that obsolescence is typically a result of economic growth, not of the building becoming so worn that it loses its capacity to perform. Waste was shown to be a human construct, with the terms waste and scrap introduced to highlight the importance of monetary value in the perception of a material as waste or not.

Event-space and eventual architecture was explained and shown to be in line with much of Stewart Brand's claims on obsolescence. A building should change its functions and should allow its users to dictate much of this change. Because we can't design for every conceivable use, disjunction is inevitable if not essential.

Performance in architecture was defined in numer-

ous terms, showing the agency architecture has beyond simply facilitating events. The role of the inhabitant or audience is important in co-acting with the building. Architectural performance and its ability to express its past was highlighted as important especially when considering programmatic flexibility and material recycling.

Accompanying the discussion on performance was the related topic of ephemera. The term refers to something that fades out of existence in a set time (like an event), but it can also refer to the physical remnants of an expired event.

It was also established that performative architecture should be ephemeral and weak, democratic and open, and imperfect.

Tschumi's assertion that program exists either working with, without, or against the space it takes place in was shown to apply to recycled materials. The terms reuse, recycling, and upcycling were proposed to parallel with, without, and against respectively. The greater complexity of recycled material was highlighted in regards to its performative capacity.

All of this being said reuse and recycling is not unproblematic, however the counterattack on the sys-

tems producing our crisis of waste must be mounted from within the delineations of this system.

Pianos, therefore, are interesting because their reuse architecturally would fall into the category of against, which leads to disjunction. Furthermore, pianos were shown to be of relevance to this exploration as they inhabit an intersection of many of these topics. They are seen as having no value and are given away for free, emphasizing the fallacy of measuring something's worth through monetary scales alone. Pianos facilitate events, creating social gathering points, but perform beyond this in their expression of social class or wealth.

These considerations leave pianos in a fruitful position to be integrated into an architectural exploration at the design stage. Their transformation can leave piano parts as ephemera of a past life as a piano. This reflects a larger truth of the anthropocene, conveying that we can be defined by the waste we produce.

As much of this theory as possible will be transferred into the following section where a design will be based on the discussions in part A.

7.0 INTRODUCTION



PART B: DESIGN

FROM THEORY TO PRACTICE

Now marks the transition of the thesis to a concrete design proposal taking into account the previously mentioned theoretical observations. The site of Pyhäjärvenkatu 7, and the site of the former infectious disease hospital in general, was chosen and this decision is then justified through the site's connections to the aforementioned theory, and to the opportunities it offers for a design proposal.

Mika Pettissalo, caretaker of the site and its buildings, in an interview mentioned how "waste is just material in the wrong place". This will be a key consideration in analysing the site's qualities and how they expand on notions of obsolescence, ephemerality, and performance.

Pianos and their recycling help bridge the gap between the theory of this thesis and the reality of the site. By navigating themes of waste and obsolescence, we can see parallels in pianos being left untouched in hopes of something being done with them and the infectious disease hospital being abandoned by the city in hopes that someone will conveniently fix the problem.

Pianos recycled into building material is an exam-

ple of what Pallasmaa called architecture of the "weak image", catering to sensory experience rather than a visual one. These piano parts are clearly out of place, a quality more easily read by the iconic look of many of its parts, such as the keys and fall board. By emphasising how out of place these pieces are, a conversation about waste and value can be started.

Furthermore, in the same vein as how pianos resist capitalistic exploitation through cradle-to-grave design through their robustness, the site is resisting exploitation through the creation of spaces and events free to the public.

The proposal can be interpreted as a celebration of "junk" (bearing in mind one man's trash is another man's art supplies). Things of no monetary value can be collected here, and continue to thrive explicitly *for* their lack of monetary value.

Inevitably there will be a discrepancy between the theory and the design, but the proposal will relate as much as possible to the aforementioned conceptual considerations.

8.0 SITE

Contrary to how design proposals typically flow, a site can instead be chosen to fit the concept. In order to highlight the potentials of the previously established ways of thinking a site must be chosen with the three Nietzschean qualities of architecture, namely:

1. It must be ephemeral, diffuse, and weak
2. It must invite the audience closer and be for the people
3. It must embrace imperfection

Thematically, it would be beneficial to find a site that has undergone functional changes through appropriation. Logistically, it should be accessible to the Uusimaa region.

8.1 THE INFECTIOUS DISEASE HOSPITAL

This site, formerly Tampere's infectious disease hospital, fits many of these themes. Currently the site is derelict, being appropriated by locals for make-shift events and constructions. Originally it was designed for use as a hospital and over the years had buildings added and removed, the oldest being from the 1890s (Lyytinen, 2009). The city of Tampere

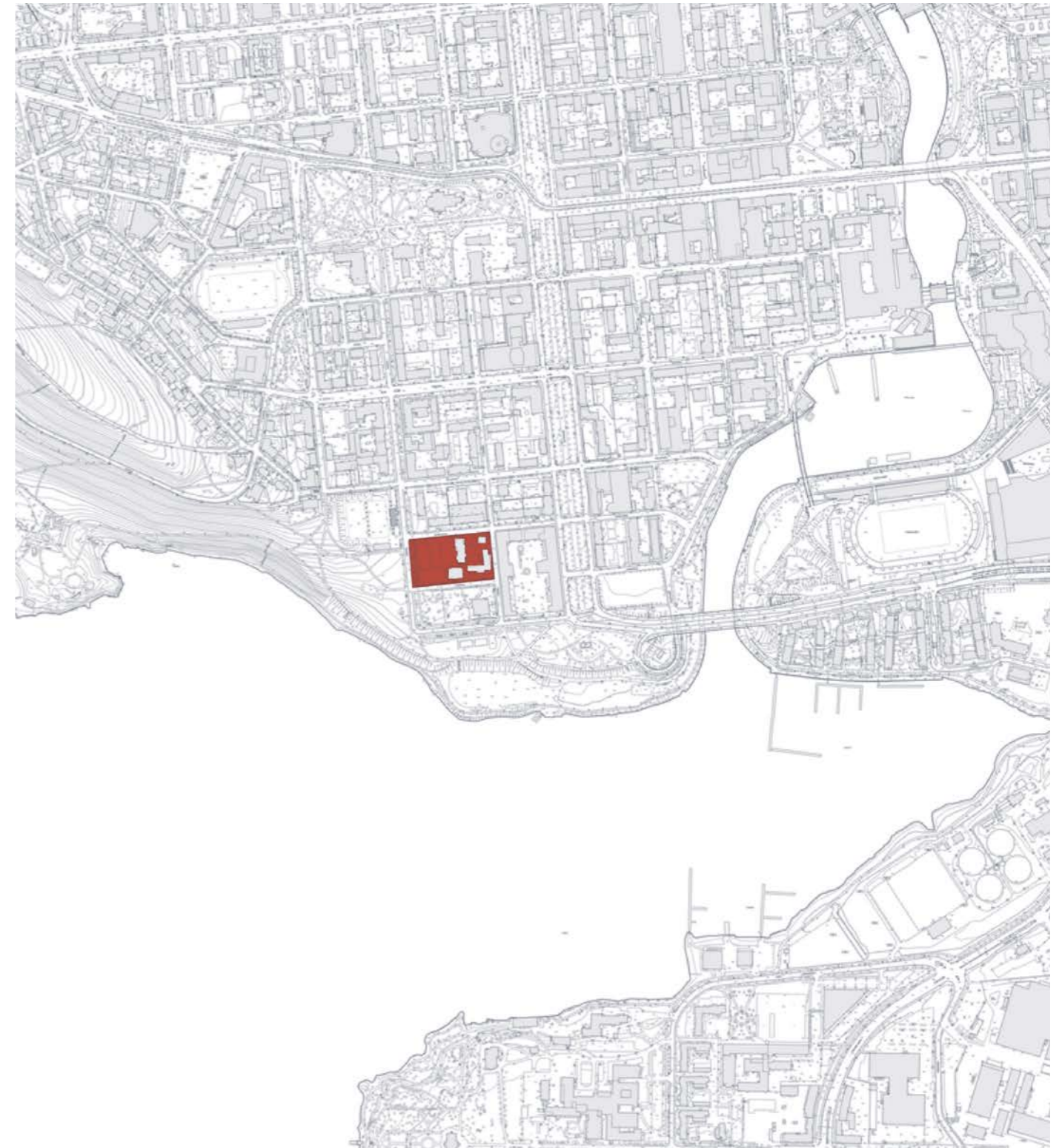
has planned residential developments for the area, with the main hospital building being demolished to make way for apartment buildings. Currently the project is on hold, and many locals are rejecting the proposed plans to build on top of Eteläpuisto. As of now, the plans are on hold.

This site offers a unique temporal situation where we can know not only the plot's past and present, but we also have a glimpse of its possible future. Designing so as to let time into the building, we have many temporal qualities to draw from.

There is a logistical advantage to choosing a site in a large, well-connected locale as well. Since the pianos are scattered around households in different parts of Finland, though largely concentrated in the Southern regions, it would require many trips by truck to collect them all. By bringing them to the nearest train station, the individual trips can be minimized and they can be transported most of the way by train.

8.2 PAST

The first construction phase to this hospital plot finished in 1897, and included two hospital structures,



a morgue, a diagnosis building, a disinfection building, and an administrative building (Lyytinen, 2009: 14).

The original plan had included 4 hospital pavilions, but only two were built. These pavilions were also designed to be adaptable, needing to be subdividable to avoid spreading contagious diseases. The room sizes are roughly the same, each having its own entrance as well as connections to each other. This redundancy allows for reinterpretation.

In 1909 the sauna and scarlet fever ward were added, with the sauna acting as a disinfection space as well (ibid.:19). In the 1950s another structure was added and the scarlet fever ward was expanded by adding several storeys. This was the site at its most developed stage. Later in the 80s the older hospital pavilions were demolished, as well as the morgue and the diagnosis building. By 1985 the remaining buildings were in total disuse because of changed in what was demanded from hospital spaces.

8.3 PRESENT

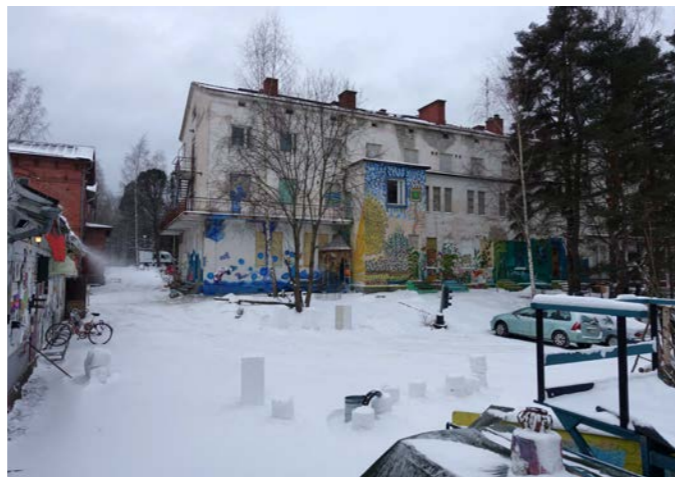
Ephemerality can be seen in the site's multiple changes, and the clear end of the lifespans of multiple buildings, some having been demolished but a central one still remaining as evidence to the site's past. The events taking place here are transient, and because the userbase and organisers aren't well-equipped and funded they tend to be small and light; murals, prints plastered onto walls, makeshift wooden structures and salvaged car parts all stand



Main building, view from street



Main building, murals and appropriation of spaces



Ice sculptures and scavenged traffic light

as traces of these interventions, few of which are so permanently in position as to make deconstruction difficult. Everything was done by hand, and so can be taken apart by hand.

The manual labour that has gone into these events also links to the second category: these interventions are democratic, bottom-up gestures which invite participants rather than a passive, distanced audience. It is a community space, with regulars as well as transient visitors.

Furthermore, the handmade, salvaged quality of many of the structures there are rough around the edges. Again, the bottom-up strategies and low-budget appropriation of scrap leaves little room for the high level of polish expected from commercial projects. Had they the facilities to transform scrap into more 'polished' materials, it would simply remove any trace of pastness from them. The transformation wouldn't be clear, and time wouldn't be highlighted.

8.4 FUTURE



At time of writing, after having run a competition for masterplans to develop the Eteläpuisto area, the city of Tampere gave a joint first prize to two entries. Later they were both deliberated and it was decided that the implemented masterplan would follow the designs of the entry titled "Seelake". It features many residential buildings, encroaching on the southern park space that many locals have protest-

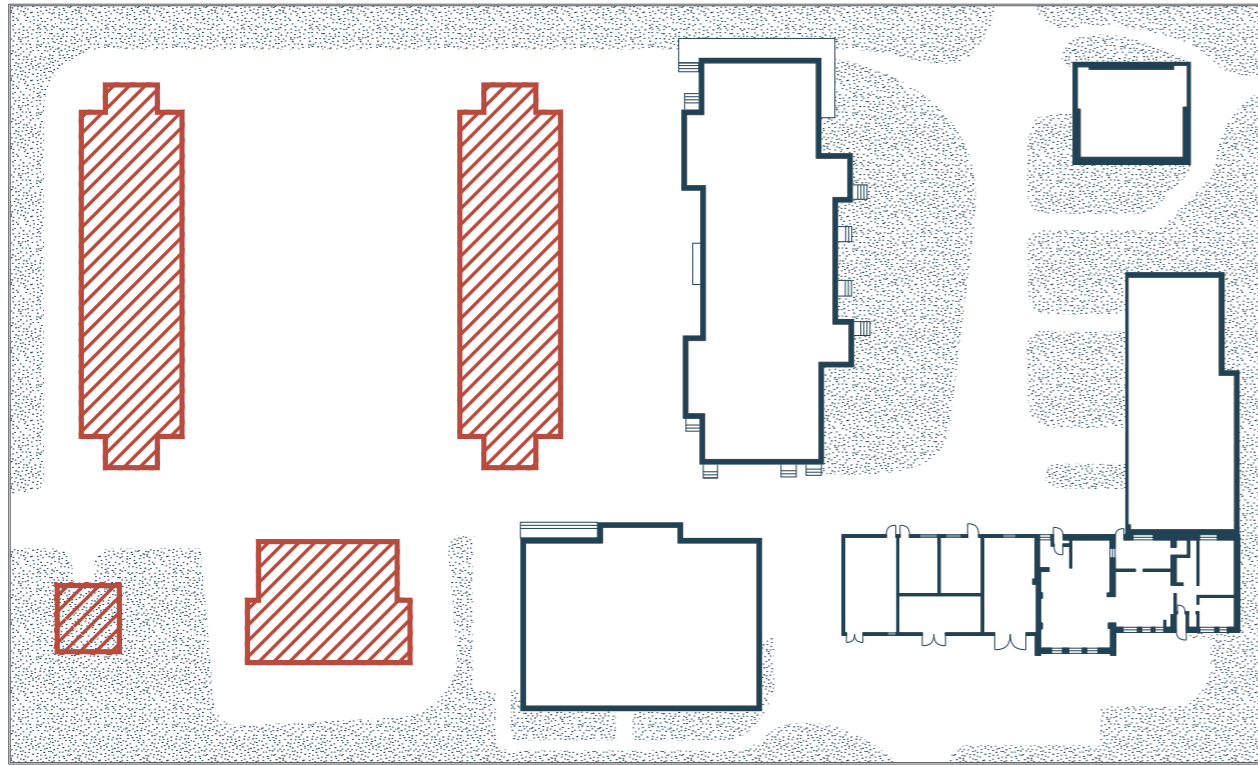
ed. The larger masterplan was later split, with the site of the hospital being treated as a separate project. As of now, plans to develop the area are on hold.

It's somewhat unclear what will happen in the site of the infectious disease hospital. There has been a developed proposal for a large residential building on the West side of the site. The disinfection pavilion would be torn down and replaced with a similarly shaped but much taller residential structure as well.

The site, dubbed "Koko Kylän Piha" (A Yard for the Whole Town) by its users, is an important case study in democratic and free space. To let it be turned into a residential courtyard would be a loss for the cultural fabric of the city. Here is another example of the complexity of waste. The site has no monetary value, at least to the city. We can see, however, that it has value to its users, partly *because* it resists monetary valorization. The pianos are the same, having no market value but being too precious to simply discard.

The defacto caretaker Mika Pettissalo has recently managed to secure his position as the official caretaker of the site after nearly twenty years of maintaining and using the dilapidated buildings. This of course throws a spanner into the works of developing the site into a residential block. From the interview with Mika one can see that there is still some pressure being exerted to transform the site into something more commercially viable. As for now, the site stays as is with Mika enjoying

-  Demolished buildings
-  Present buildings

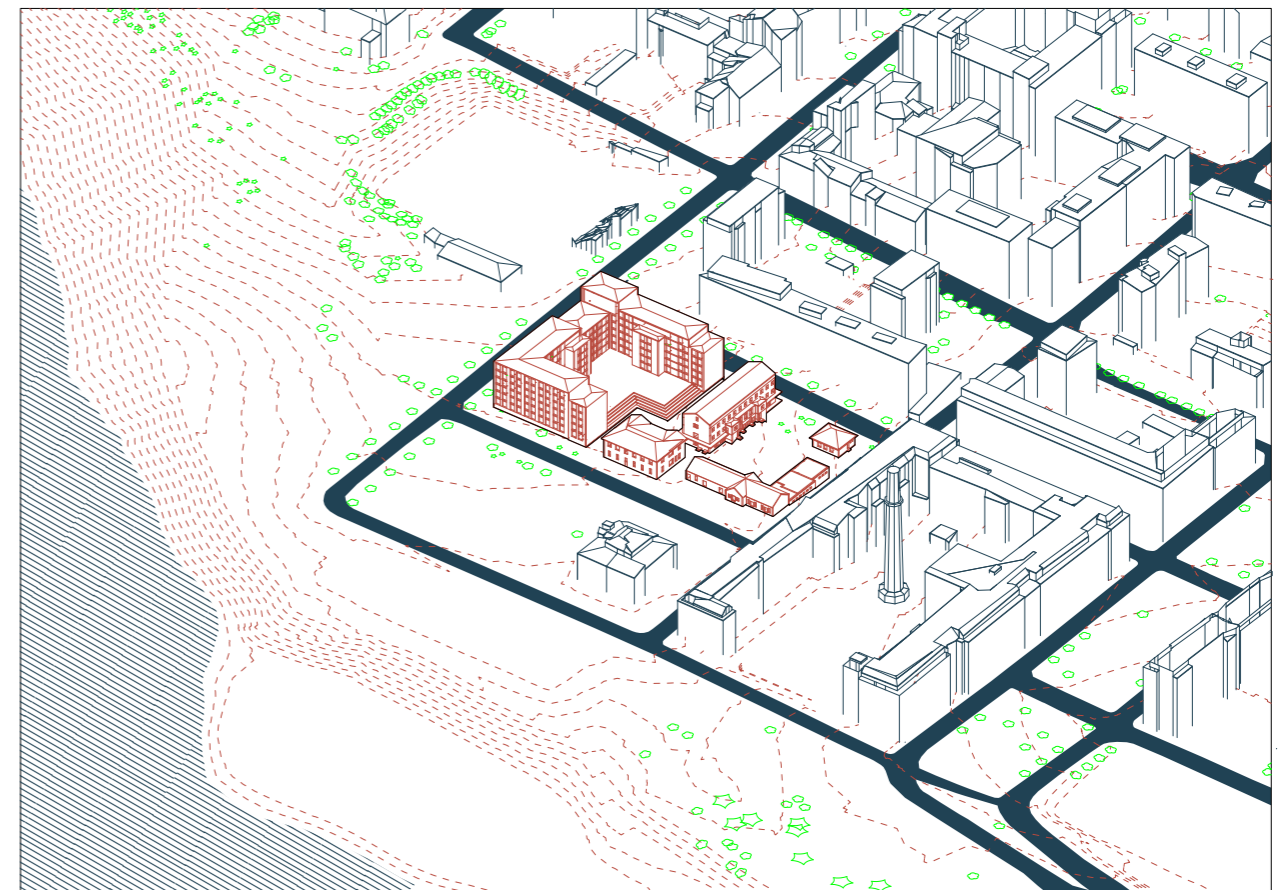
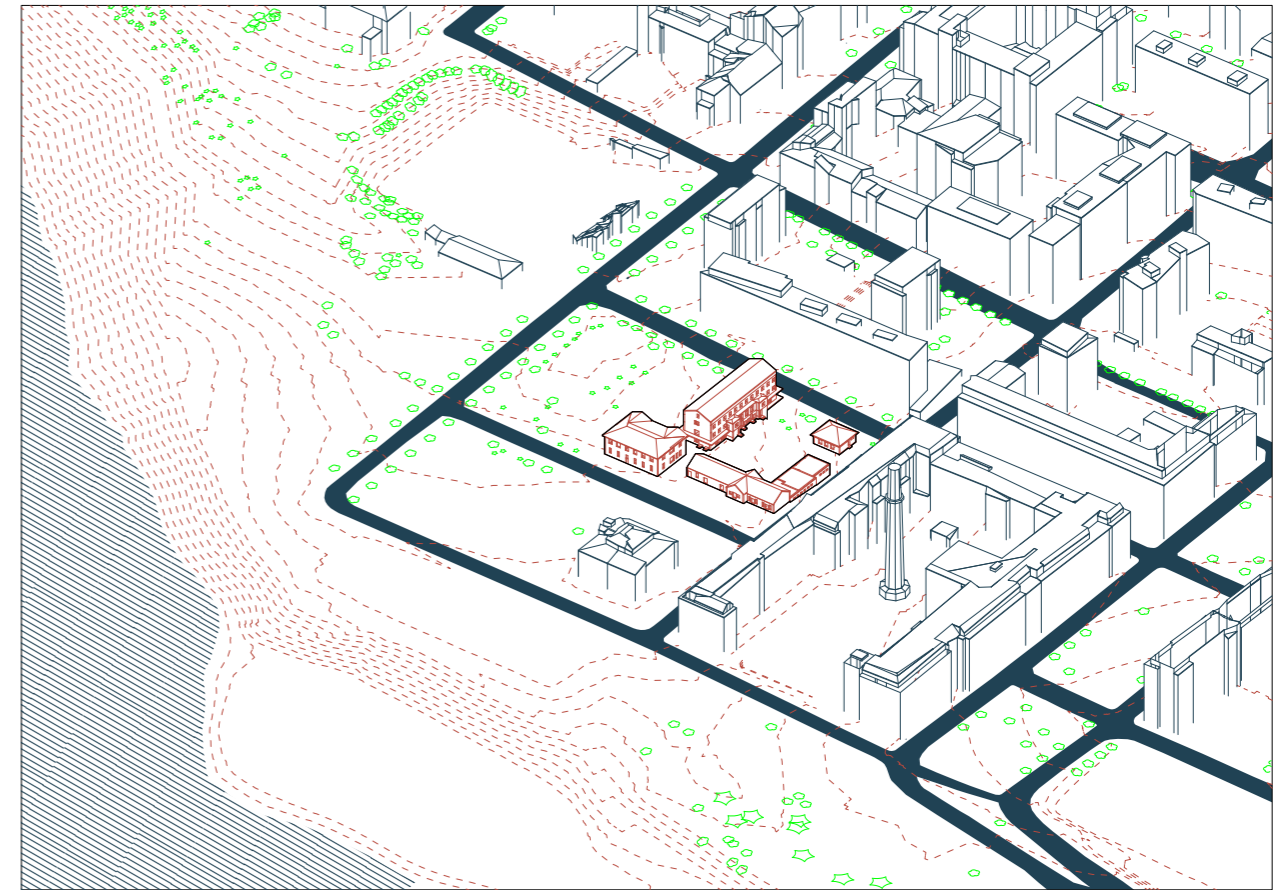


some security from having a contract with the city. Tampere seeing more pressure to grow does produce some stress for the site to eventually be claimed and leveled, so any proposal on site should take this into account. There may or may not be an expiration date, so were one to suddenly arrive the proposal is best designed to be dismantled without the creation of needless waste.

In choosing a specific position for the design proposal on the site, longevity can be ensured by placing it so that it interferes as little as possible with the current and future forms of the site. The adaptable building can then flexibly take on new functions as demographics change. By designing it to fit for the present as well as the future, the building can mediate between the two and serve as a re-

minder for the structure that once existed on the site before the residential developments took over. To further underline this, it should in the future display marks of past use while it was occupied in the present day. To carry this forward starts to create links between the 'then' and the 'now', but in this more speculative case the 'now' and the 'tomorrow'.

The site now (top), and a potential future (bottom)



1:1500

8.5 PROGRAM

The site hosts many different kinds of happenings, flexibly adapting interior and exterior spaces to facilitate a range of creative work and events.

The goings-on can be roughly grouped into 6 categories:

1. Painting
2. Sculptures and installations
3. Events, music, and filming scenes or music videos
4. Festivals or events with a mix of hands-on work and performances
5. Snow and ice-sculpting, particularly the now somewhat famous ice slide that is built yearly.
6. Gardening, planting flowers, or yard maintenance

Going through the last 3 years of posts on the official Facebook page of Pyynikin Aikamatkat, one can use the pictures taken to better understand where these events tend to take place. Mapping them (fig. 9) with each point representing the location of a photographed and posted event, it becomes clear that they focus around the old disinfection ward and the main hospital building. Being that the disinfection ward is still in continual use, that concentration makes sense as any indoor events would need to take place there, and the storage space directly nextdoor makes it convenient to simply bring materials outside in front of that building.

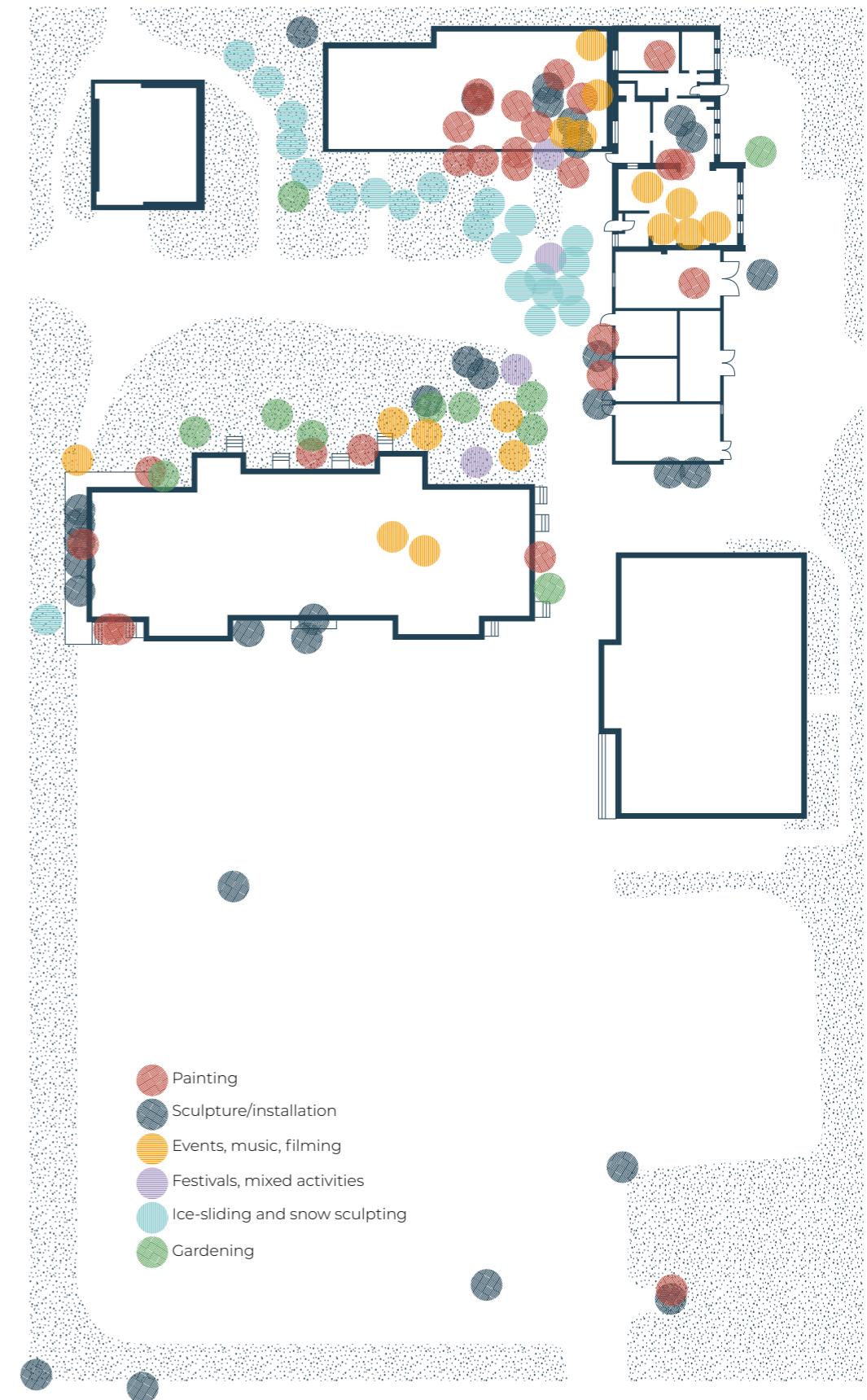
The hospital, however, is deemed unfit for real use and the interiors are in a state of abandon. Occasionally music videos and other film segments will be shot there, but other than this it is mostly on the outer surfaces that the paintings and sculptures find their place. This suggests that it's the presence of a building, not necessarily an inhabited one, that allows for program. The nature of the events is that of appropriation, and so any external surfaces will be taken advantage of, however interior spaces would also be an added benefit.

It is worth noting as well that posts during the winter months are dominated by ice and snow sculpting and the ice slide. The potential lack of larger interior spaces may make many other programs difficult to maintain during the colder seasons of the year. This is another motivation to adding another structure to the site.

There are scattered points on the west side of the site which show attempts at taking advantage of this space as well, but an added structure there may help more properly utilize this space. With more and more paintings and sculptures being constructed in the space between the disinfection ward and hospital building, the space is becoming more full and an expansion may be necessary.

Having spoken to the self-titled "artistic caretaker" of the site, Mika Pettissalo, some functions that would be needed on site include a public bathroom, a livingroom or working space, storage, and a stable.

Figure 9: Programmatic mapping of events in Pyynikin Aikamatkat



9.0 DESIGN GESTURES

9.1 POSITION ON SITE

Finding the exact position for the building on site would require a more detailed examination of the plot and its qualities.

Historically, the entirety of the site was in use for at least one period of time, but more recently only the Eastern half of the plot has any of its buildings left. There are opportunities to create continuity through the site's history by considering the position of the proposal and its relation to what may have been there before, particularly in terms of program.

The entire Western half of the site has none of its original buildings there. This of course means there is an opportunity in the free space, but there is beyond this a chance to play with the connection of the present building and a past structure.

The buildings that existed there were the three hospital buildings, the morgue, and the diagnosis building. To refer to this past use, particularly if one subscribes to Žugić and Zeković's school of thought where "space remembers", would establish continuity through the respecting of an existing genius loci.

There is also the consideration of what may be there in the future. The city's current plan is to develop the area with apartment buildings ranging from 6 to 8 storeys tall, dwarfing many of the structures existing there. There is little chance of preserving anything placed on that half of the site were the project to go through. The apartment block features an underground parking area, which of course means that the earth beneath it will all be upturned. Any more permanent foundations for the proposal would be unsustainable and costly to demolish.

With that in mind, several conclusions may be drawn. Firstly, the Western portion of the site should be exploited. It is largely untapped, and seeing as the Eastern portion of the site is becoming more filled with sculptures and murals it becomes necessary to expand. Secondly, the past hospital buildings that occupied this part of the site allow for temporal connections to the site's past and its present. This can lead to interesting disjunctions or harmonies with the site in reference to itself. Thirdly, because the enormous proposed residential structure would take up the entirety of that side of the site, it is essential to keep in mind the end of the design's life. To design for disassembly here means that were the residential structure to go through, the proposal can be neatly deconstructed and its parts reused elsewhere.

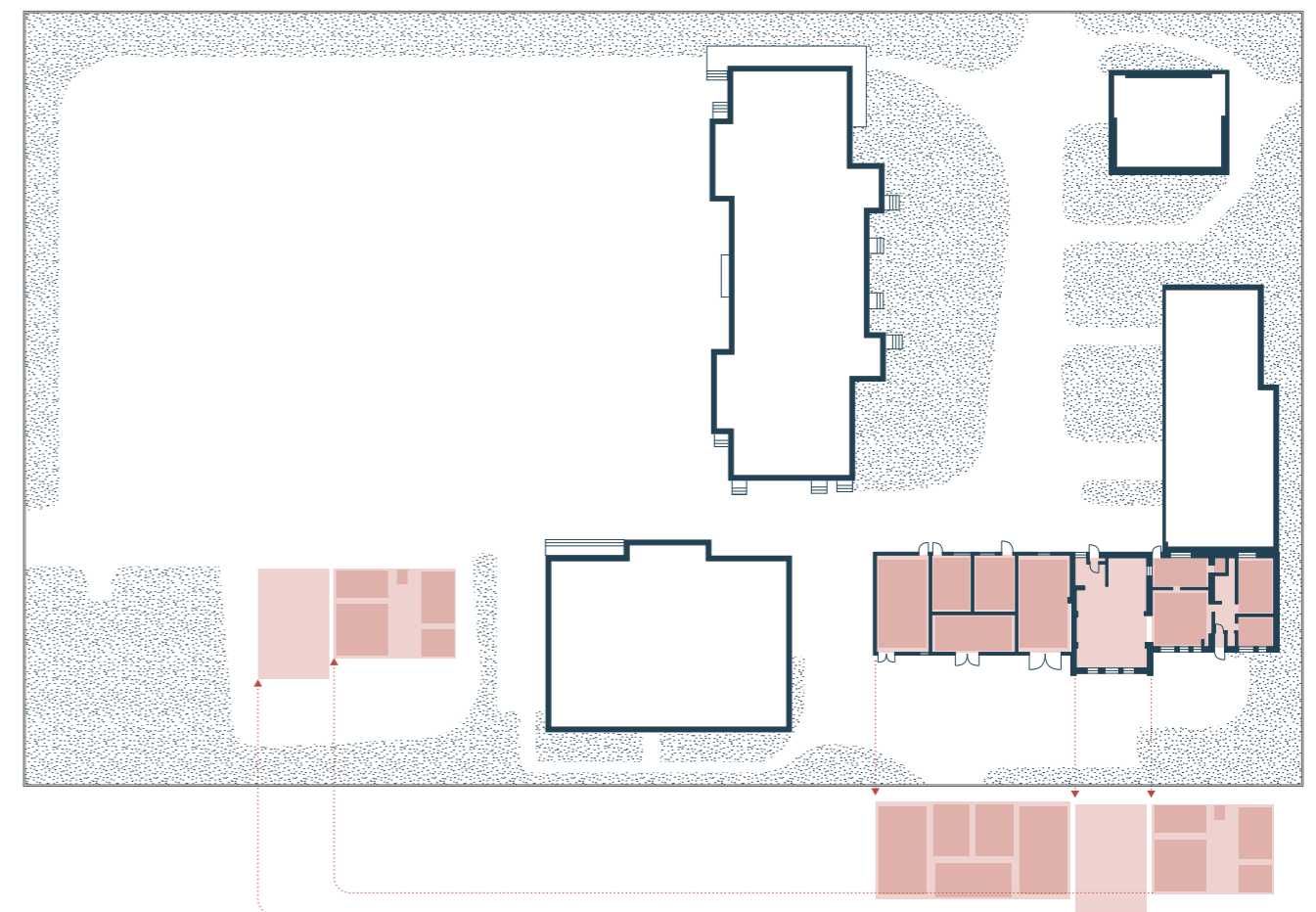
The positioning of the proposal on the Western side of the site is both practical and creates opportunities to interface with the last two points. Therefore, it is valuable to consider the building being placed there.

are contagious. This is what Brand referred to as a naturally evolved trait of good buildings, and while other structures were demolished (fig x), this building remains perhaps because of its rooms' dimensions. It would therefore be wise to appropriate this.

Another motivation for this is that this act or recycling can further emphasize the site's continuity. Drawing from the surrounding buildings' qualities, the proposal can be better suited to the site. Taking into account all that was mentioned before, the ideal position for this proposal would be in the space of the old diagnosis ward, as it has good access to natural light, creates historical continuity replacing a past building, and exploiting the empty Western side of the site which needs buildings to facilitate events and artistic works.

9.2 DIMENSIONS

As was observed earlier, flexibility is a product of ambiguity regarding room sizes. Looking at the floorplans of the most used building on site (the disinfection pavilion), one can see some of these qualities. The building was designed for adaptability, having multiple redundant entryways so that different areas can be sequestered if the patients



9.3 FORM FINDING

One of the main strategies is the democratization of the space, bringing the audience closer in the Nietzschean sense. As he had previously criticized, a typical theatre building does divide the audience from the stage quite clearly through the proscenium arch and Wagner's *Festspielhaus* is no exception.

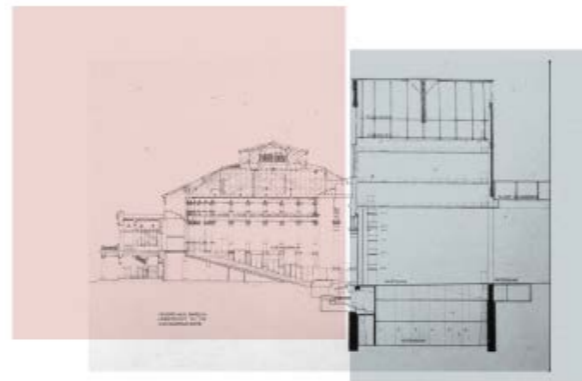
Of course, the scale of the project and limited materials don't allow for the monumental structure of Wagner's theatre, but even if that weren't an issue the advantage of the modest space of for example OOPEAA's *Puuhi* create this merger of audience and stage. Because of the minimalist interior, the architecture doesn't exude a clear purpose and activities can be better improvised within. These activities, given their appropriative character, work outside top-down codifications of space.

Beyond this, a democratized space flattens the hierarchy and many roles become melded together. The organizers are often a mix of performers and audience members, so the "event" and the actors that define it is a mixed room of event organisers, participants, volunteers, passersby, and performers. Architecturally this can be expressed through a singular, mixed use space that encourages if not forces everyone to exist on the same field.

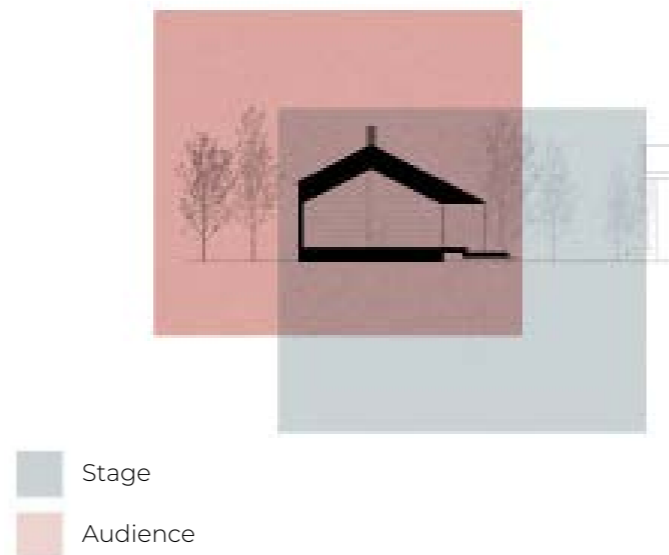
This extends to the construction of the building. If the building is a performance, it develops as it is

constructed. Those physically erecting the structure are part of the performance, or at the very least co-actors. To bring the 'audience' closer here would be to involve the inhabitant in the construction of the building. Creating a democratic construction process is therefore also important in the same way merging spectator and spectacle was for Nietzsche.

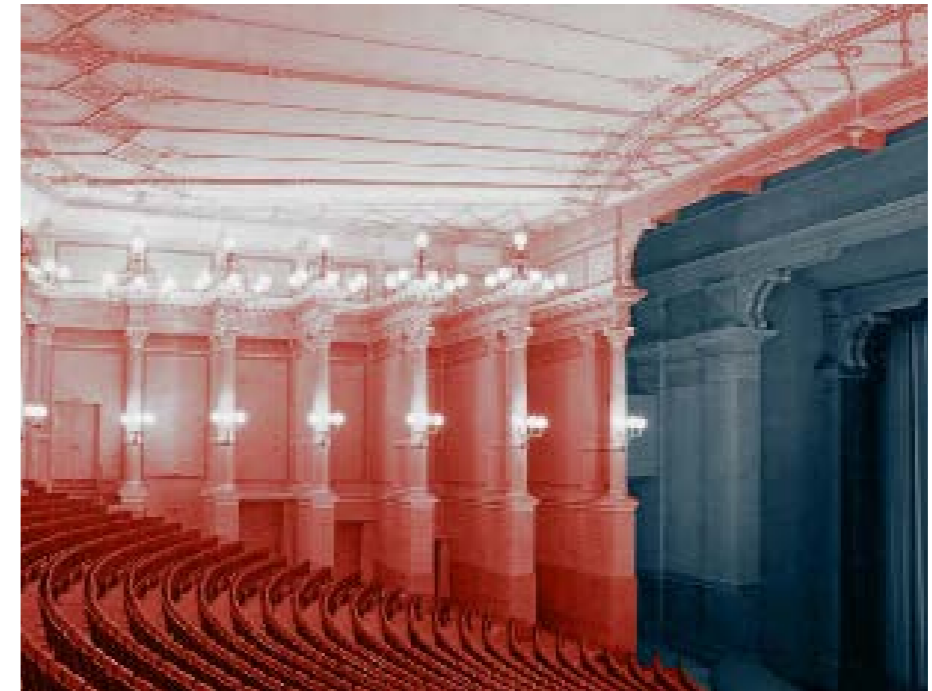
Wagner's *Festspielhaus*



OOPEAA's *Puuhi* Community Space



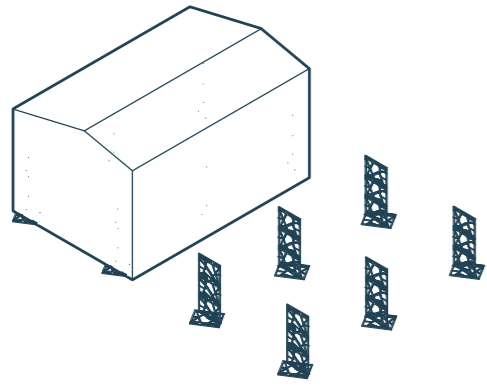
Wagner's *Festspielhaus*



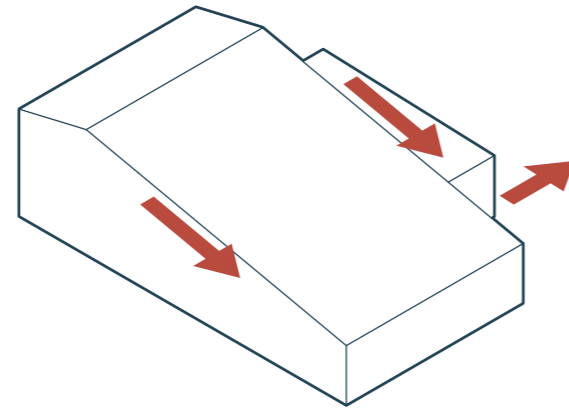
OOPEAA's *Puuhi* Community Space



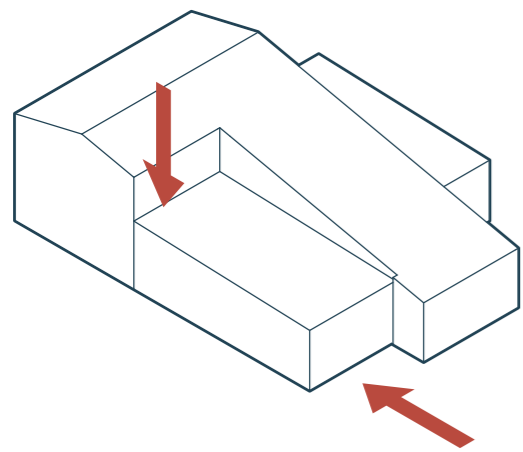
FORM FINDING



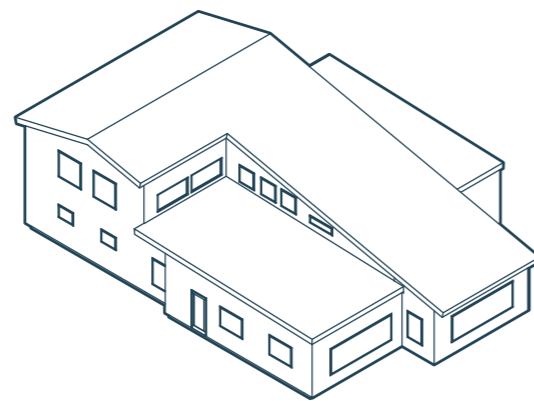
A simple 2-storey barn structure is erected using a grid of structural elements.



The slope of the barn is extended, facilities are added to the north.

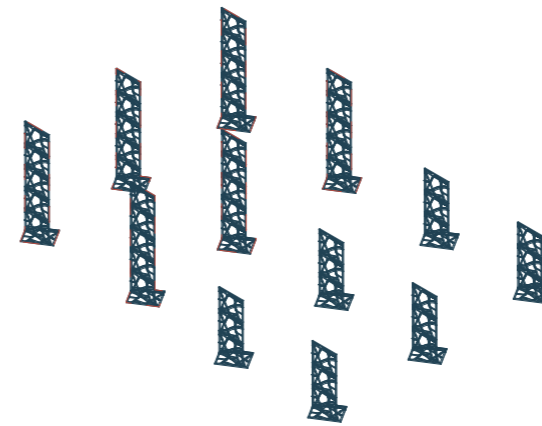


For better sunlight, parts of the volume are shifted

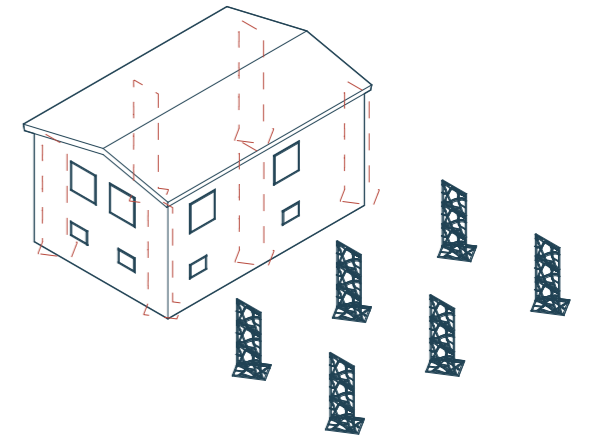


Windows bring natural light to all spaces inside despite the design's depth.

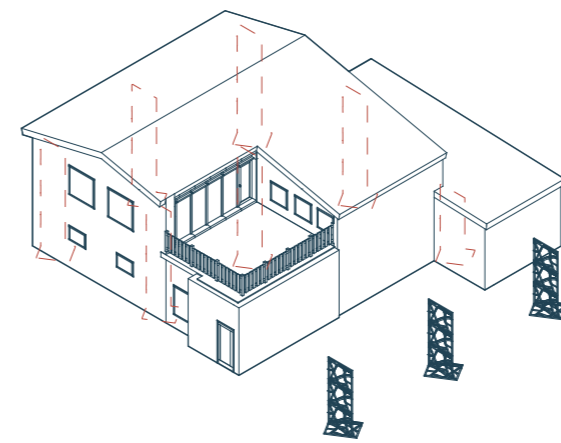
CONSTRUCTION STAGES



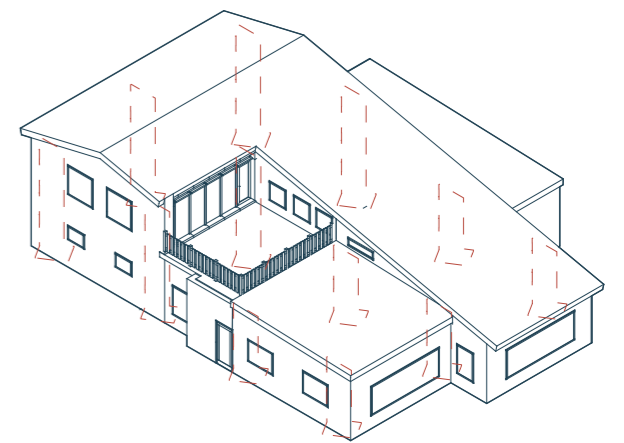
Stage 0: The structural elements are laid out in a grid, which can be used for makeshift constructions. Their presence suggests the future construction and its height differences.



Stage 1: A two-storey storage building is made, evoking the simple shape of a barn. The taller columns are used to best take advantage of the piano frames' strength. The remaining columns suggest a direction for expansion.



Stage 2: The storage space is expanded with added facilities like bathrooms and a balcony. There are still three columns remaining outside for improvisational use.



Stage 3: The building has fully expanded, taking up all the remaining space. Were it to shrink later, these columns would be evidence of a past use, bearing traces of walls or floors that used to envelope them.

9.4 USERS

In developing user profiles, four characters are developed and noted for what spaces they occupy and at what times. The characters are as follows:

- Assistants: Mika had mentioned the need for assistance running the site. The jobs of these assistants would be administrative as well as physical, helping in the organizing and at times construction of events on site.
- Parents & kids: Next door to the site is a music school where youths will have music lessons. Mostly lasting around an hour, the parents are left with too little time to return home before picking the kids up again. Before and after these lessons, the children can be given opportunities to socialise and develop music skills by practicing with friends.
- Locals: The regular users of the site are set apart into their own category as they are the lifeblood of the events on site. They are the major audience as well as the impetus for organizing new events. They occupy a liminal space between audience and performer, as they are the consistent userbase and are most likely to attend happenings on site, however given the democratic nature of the community their preferences will dictate what kinds of events can be expected on site.

- Visitors: What separates visitors from locals is the former is constituted by a large body of transients, only occasionally stopping at the site. As they are there relatively rarely, they won't participate as much in organising the events, and will partake in a more passive role.

The opposite page gives an example of what a day on site may look like with the intersections of all these characters. The goal would be to track the ebb and flow of different user groups and see where they overlap, but also where they separate as this shows which spaces can be used by one when left unused by another.



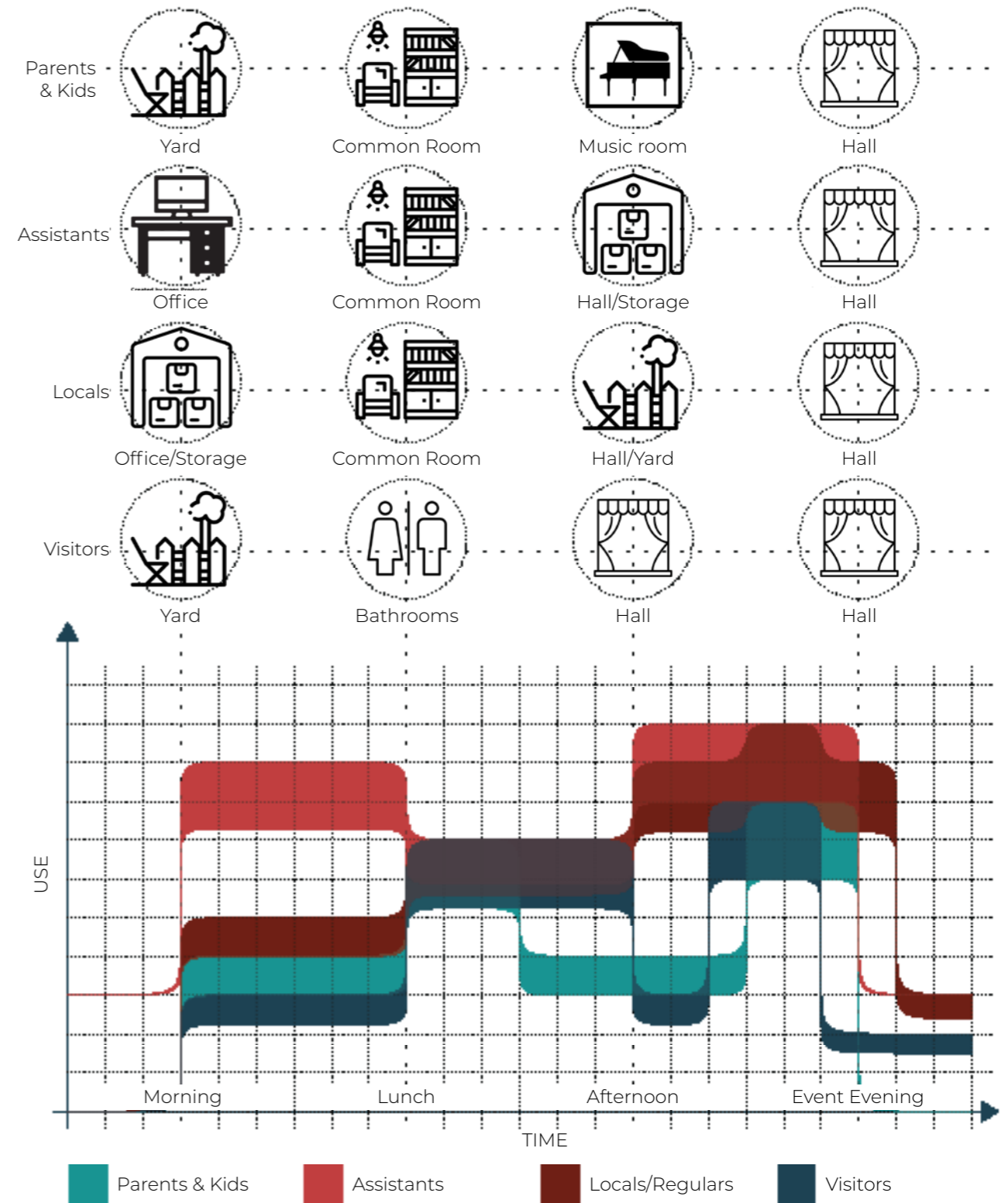
Assistants

Parents & Kids



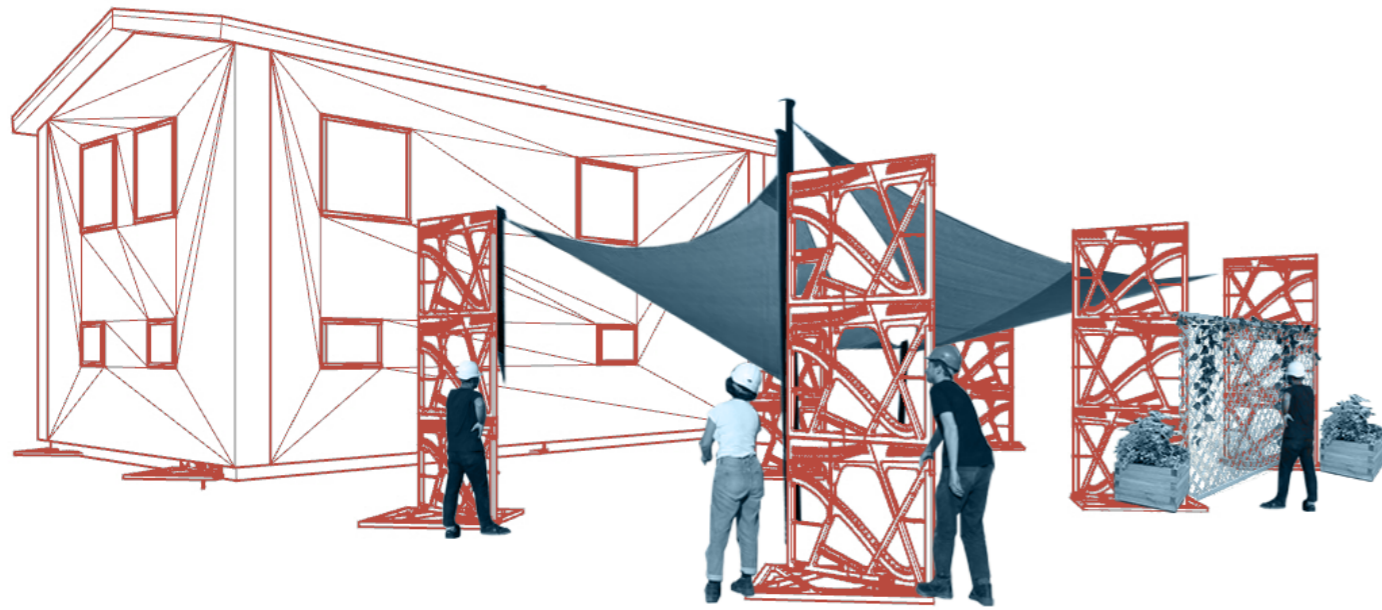
Locals

Visitors



9.5 BRINGING THE AUDIENCE CLOSER

Co-acting in the event of architecture



The image above shows how the structure can be appropriated in the building's different stages. The first stage is that of a barn, and the reason for this is twofold. First, the barn and warehouse typology has been shown to be highly adaptable (Abramson, 2016: 80), therefore being a fitting starting point. Second, storage is the primary use of the first stage of the building, storage being stated by Mika Pettisalo to be one of the more needed functions on the site. An archetypal barn also fits the other buildings on site, displaying a pitched roof and traditional wooden siding.

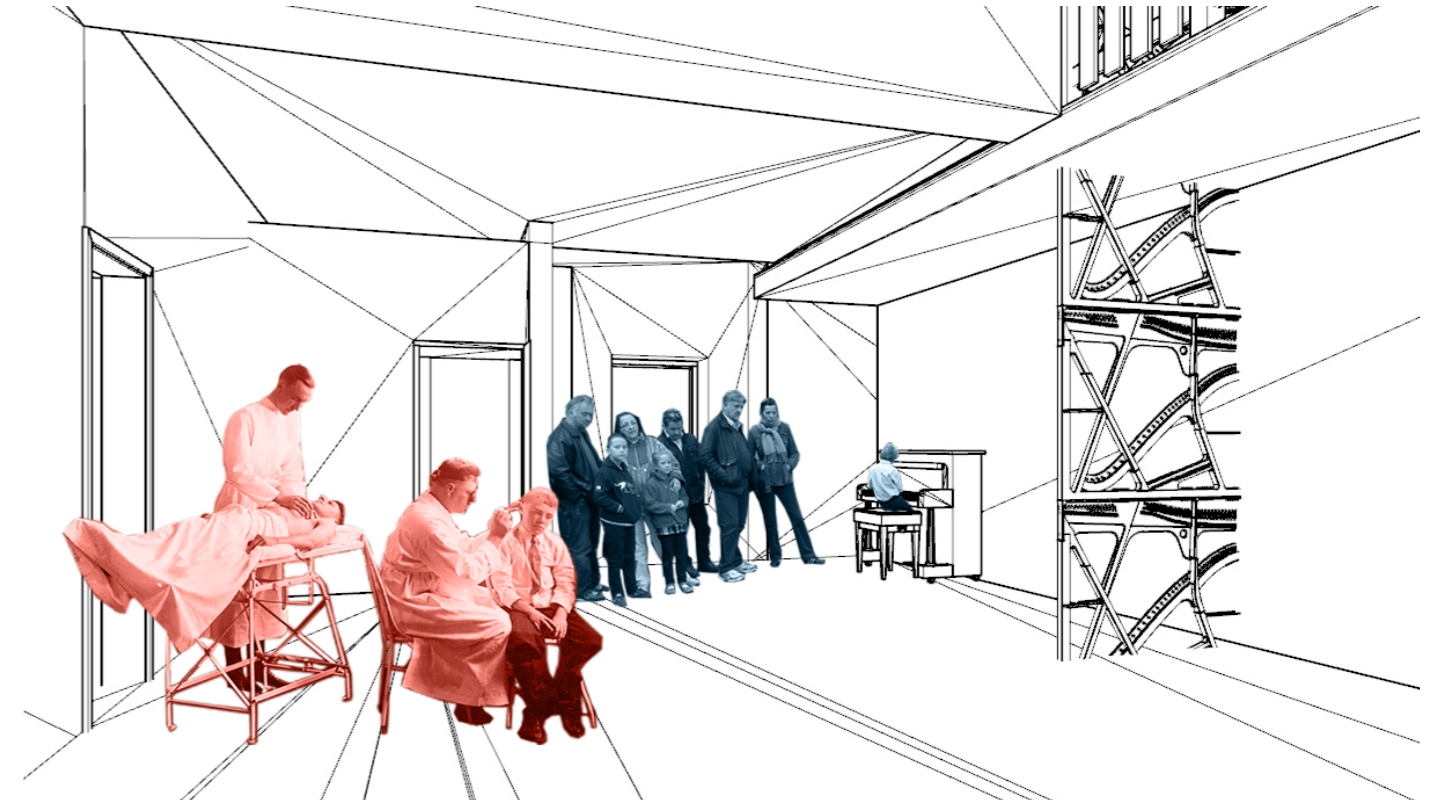
As the building expands, this function evolves into different notions of storage. What storage implies

is a temporary state of inaction, with the intention of finding a use later for whatever is being stored. An ephemeral building can be considered material storage like the Brummen townhall. There are no poured foundations as there still seem to be plans to build the 7-story apartment buildings on this site, so the potential removal of this proposal should be facilitated through lightweight structures largely made of wood and no concrete.

While the building is there and the structural grid exposed, users can adapt it to different uses, becoming more involved as co-actors in the performance of the building process.

9.6 DISJUNCTION BETWEEN PAST AND PRESENT

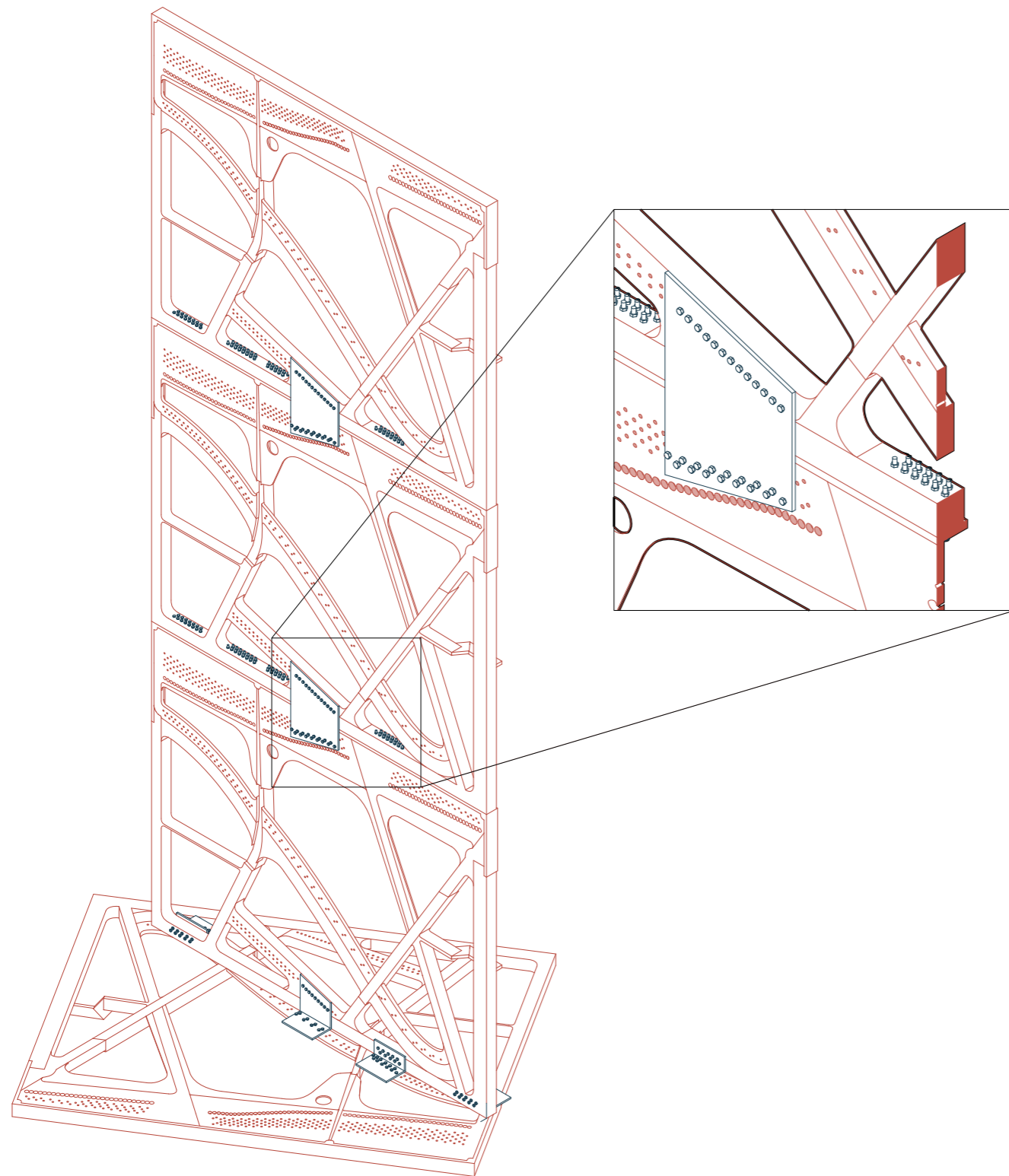
"The Observation room"



The location of the design was at one point an examination room (tarkastuspaviljonki). To create continuity, the central space of the proposal will be an assembly hall which can host performances. As it is essentially one large empty room, there lacks a hierarchy to establish a divide between audience and performer. The physical proximity of the "spectator" and "performer" reflects on the past function of the site, creating jarring comparisons.

As a sort of tongue-in-cheek reference to the historical function of medical examination, the central assembly hall is meant to create a flattened stage-audience hierarchy. It takes the action of examination

and recontextualises it. The new event of performance is juxtaposed to the past event of diagnosis, creating a self-referential relationship between the site's present and past. Fitting for a site dubbed Pyynikin Aikamatkat or Pyynikki's Time Travels.



The pianos are fastened mechanically using high strength bolts through the existing holes in the frame where possible

9.7 RECYCLED MATERIALS

The proposal would require 60 pianos to be entirely dismantled to build enough structural elements. This would produce a fair bit of wood shards which are chemically bonded to the iron frame, which would then be processed into chipboard walls. The remaining pieces, mostly the casework and keys which can be removed neatly, can be used elsewhere in the project. The design presented would use 43 pianos worth of wooden panels, 13 worth of keys, and 5 in action brackets. 2 pianos would be included as they are, bringing the total up to 62. The remaining unused parts can be kept in storage, awaiting further use in other parts of the site.

The frame of a piano is typically a single cast-iron element, 50mm thick at its thickest point in the case of the studied piano. They are designed to withstand the staggering compression forces resulting from string tension. The solution lies in forms that somewhat resemble trusses; minimal amounts of material are used to create a strong structure resisting compressive forces.

The logical appropriation of this quality is in the building's structure, where this strength in compression can be used by stacking the elements as a sort of column. Assuming a strong enough joint between them can be made, ideally not through welding as that creates non-reversible, chemical joints, the problem is in lateral stability. When combined with a lightweight wooden structure, later-

al stability can be achieved by preventing bending around these newly created joints. The resulting structure is far too strong for a small building, so there is a motivation to create a second story.

The recycling of pianos is a case study in the differences between recycling and upcycling. The former would manifest in the chipboard walls, grinding waste into a homogenous surface that is interchangeable with another chipboard wall. Upcycling gives us components that we would be more careful with because they retain their original quality. How directly we translate these piano parts, therefore, determines how much perceived value they retain, and whether users will be more or less comfortable cutting through them.



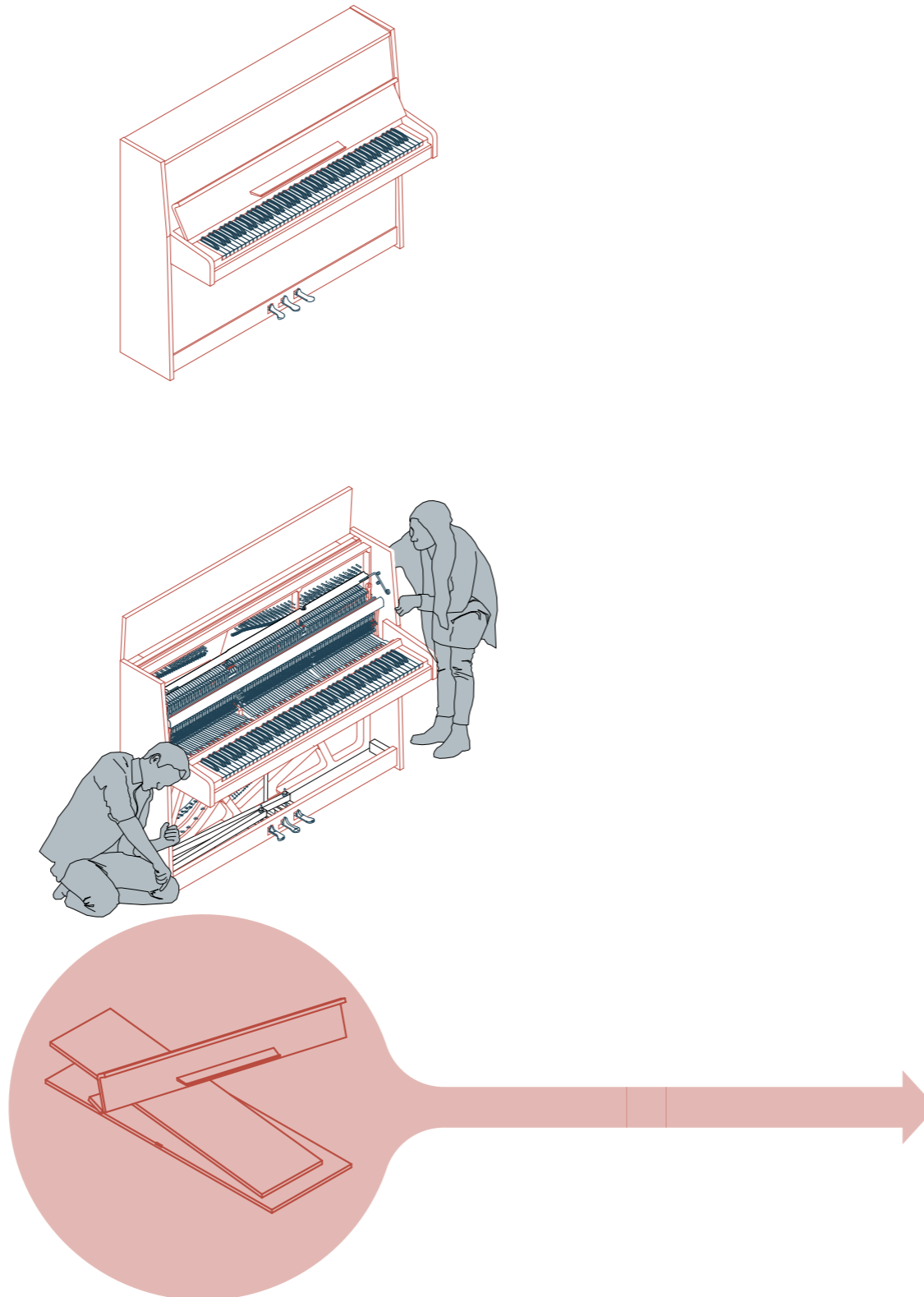
An action bracket in use as a door handle

9.8 CODIFIED MATERIALS

Reused, upcycled, and recycled materials all have their place within the design regarding their roles as framing continuity in time. By codifying surfaces as working with, without, and against their past life, their intrinsic values can be communicated. As was mentioned by Kalakoski and Huuhka, people tend towards loss-aversion, and if a surface seems to have some kind of artistic quality or maybe retains some value in history or craft, this will more likely be left undisturbed. If a wall is not clearly special or seems to have lost any past value through its processing of once valuable materials, this wall will more likely be treated as disposable.

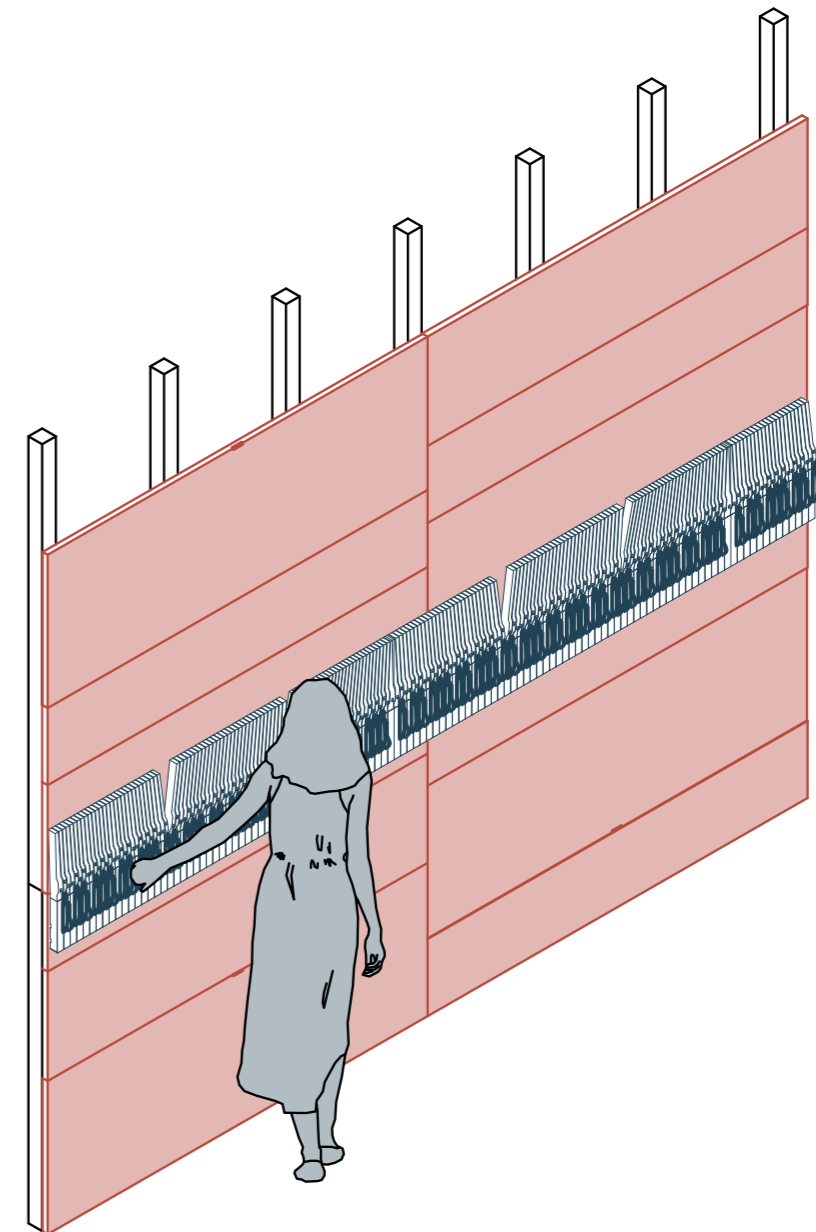
Brand describes buildings as needing to be “half-baked”, so some parts are deliberately left unfinished, and this can be done by using cheap materials that anyone would feel comfortable putting a hole through if the need arises. The finished, “fully-baked” sections of the building have a quality that is too refined for people to feel comfortable destroying or altering.

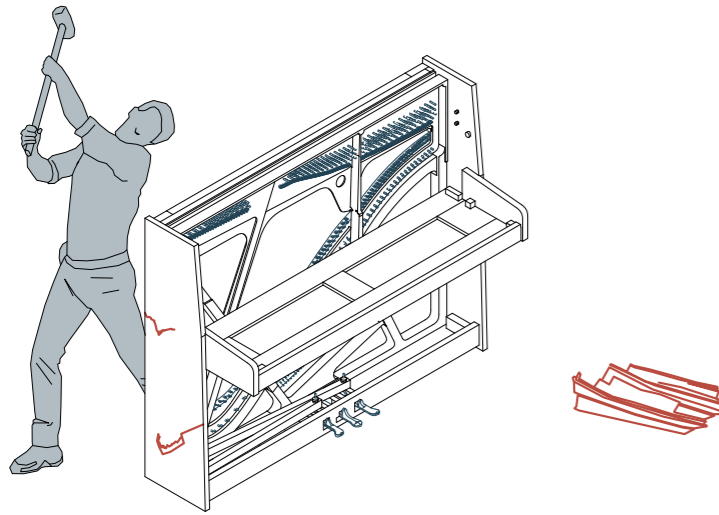
What this kind of codifying can achieve is communicating flexibility and adaptability in more than just spatial arrangements or events. A “core” with refined, spoliated materials can be treated as less flexible and more permanent, while the extremities can be coded as cheap and replaceable, therefore open to being cut, torn, pierced, removed, or whatever else is needed.



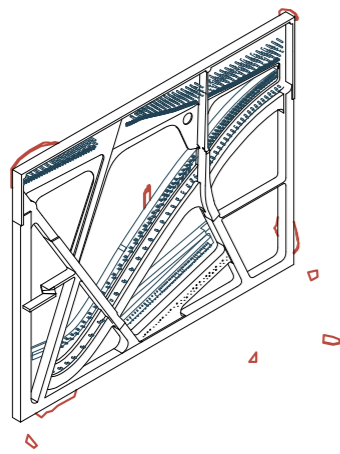
The piano is first taken apart, carefully removing the pieces that can be removed without any tools. The panels and keys can be pulled out without the need for a screwdriver, for instance.

After this, one is left with pieces that are fastened by mechanical connections. These can be unscrewed and removed, and dismantled further to find other uses for them.

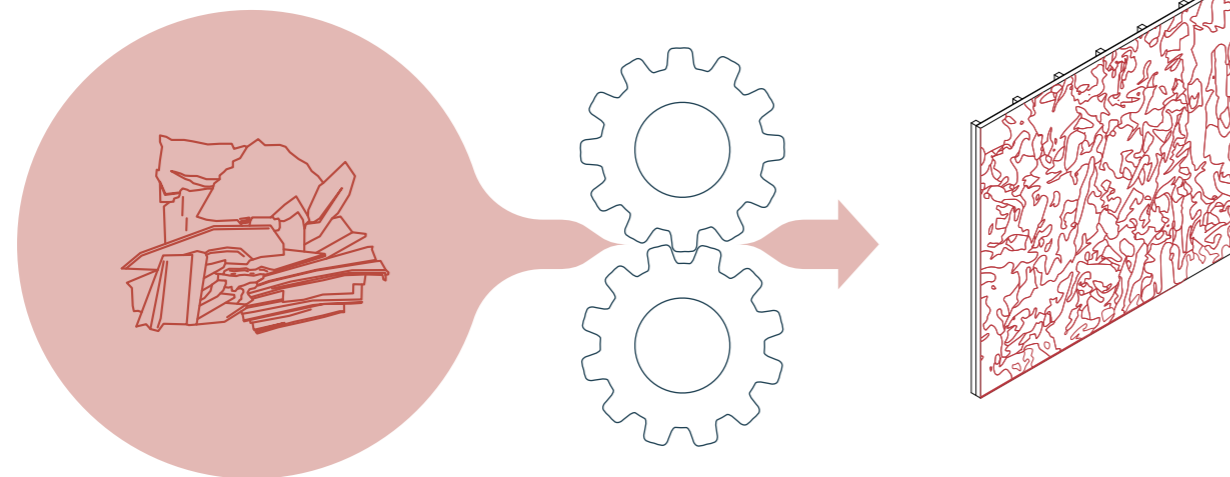




After the careful disassembly of the piano, what is left are the parts of the casework that are stuck by chemical means to the frame. These connections could be cleared somehow with the use of chemical solvents but blunt force works as well.



The frame stripped of its other parts can be reused as a structural element. The broken shards of the casework can be processed into, for example, a chipboard wall as the pieces can no longer be returned to their original quality anymore.



Despite the chipboard walls being "inauthentic" as they do not express their original use or show a level of craft or material quality, they are valuable because they are more flexible than the piano panels. They do not enforce a rigidity through our desire not to damage them.

This begins to show that waste when reused through minimal transformation is valuable, and even if broken down and reshaped entirely into a fungible chipboard wall isn't "a waste of material". One may think that it would be a waste to break a piano into a wall like this, however as it becomes injected with new performative capacities it becomes more useful and therefore more valuable to the users. Value and waste, once again, are shown to be complicatedly intertwined, as even seemingly more valuable waste, that is waste that seems too precious to lose and should be preserved, doesn't embody the same value as a cheap and replaceable wall component might. What makes something valuable should also include what it enables us to do.

10.0 PROPOSAL

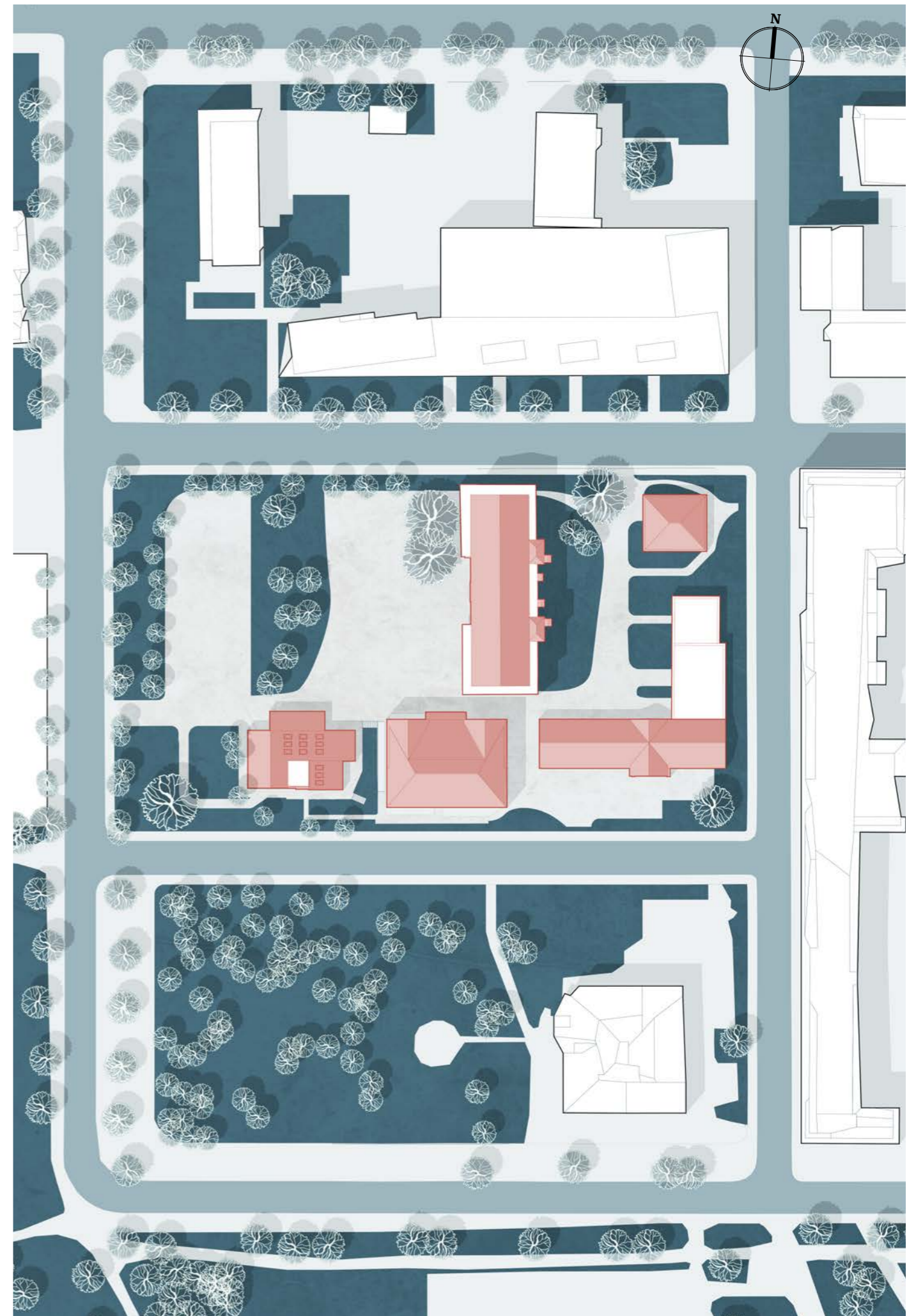
As was previously mentioned architecture can perform through analogy to the earth, as is the case with the Parthenon. Instead of invoking the firmament, what can instead be invoked through recycled materials is on one hand the site itself which is a bricolage of scavenged materials. On the other one can create a connection to a larger world order by displaying the strange forms of waste produced in the anthropocene. If architecture reflects the world or acts as a scale model of it, this fact should somehow be expressed. We are defined by what we throw away is what Schwitters claimed, and what we deem to be without value can express architecturally a great deal about where our priorities lie.

The operations carried out on the pianos leave us with two strategies in their use: upcycling and recycling. Both have their roles in the design, with the less valuable recycled walls being open to cutting and changing, and piano panels being more rigid. Piano parts are iconic, with anyone being able to identify the unique shape of, for instance, piano keys. Keeping this iconic quality as building materials undermines what Pallasmaa calls architecture of the strong image, confusing the semantics of the building. Piano parts are also made to be touched, and this tactility feeds into Pallasmaa's weak image, catering more to the senses.

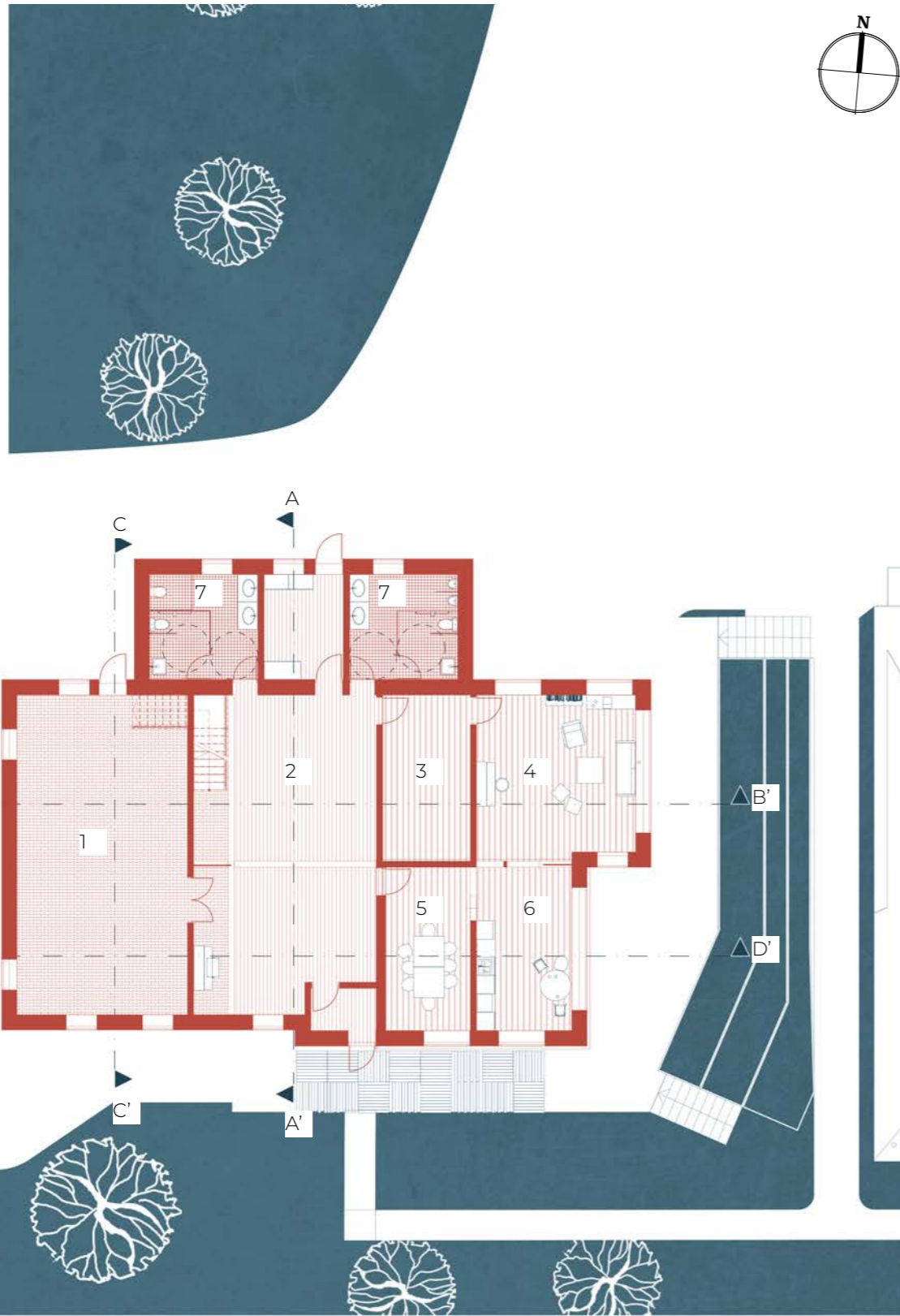
The application of these materials will follow Phillips' tactics of structured bricolage where mismatched materials are given a pattern, creating a more intentional aesthetic.

Pallasmaa had mentioned that modern materials don't show their age as well, but perhaps a recycled materials can. Derived strongly from the anthropocene, recycled materials are highly contemporary. They don't age as gracefully, but their transformation can express the passage of time, as they become ephemeral traces of a translation from non-architecture to architecture.

The three points of Nietzschean architecture will be kept in mind: the proposal aims to be weak and ephemeral, using only reversible constructions and invoking the past through performative materials. It will be imperfect as the pieces won't all fit together and there are in a sense missing elements. It will draw the audience closer in its construction stages and by creating a free, democratic space.



- 1. Storage
- 2. Multipurpose Hall
- 3. Exhibition space
- 4. Common Room
- 5. Meeting/Dining Room
- 6. Kitchen
- 7. Accessible Toilets

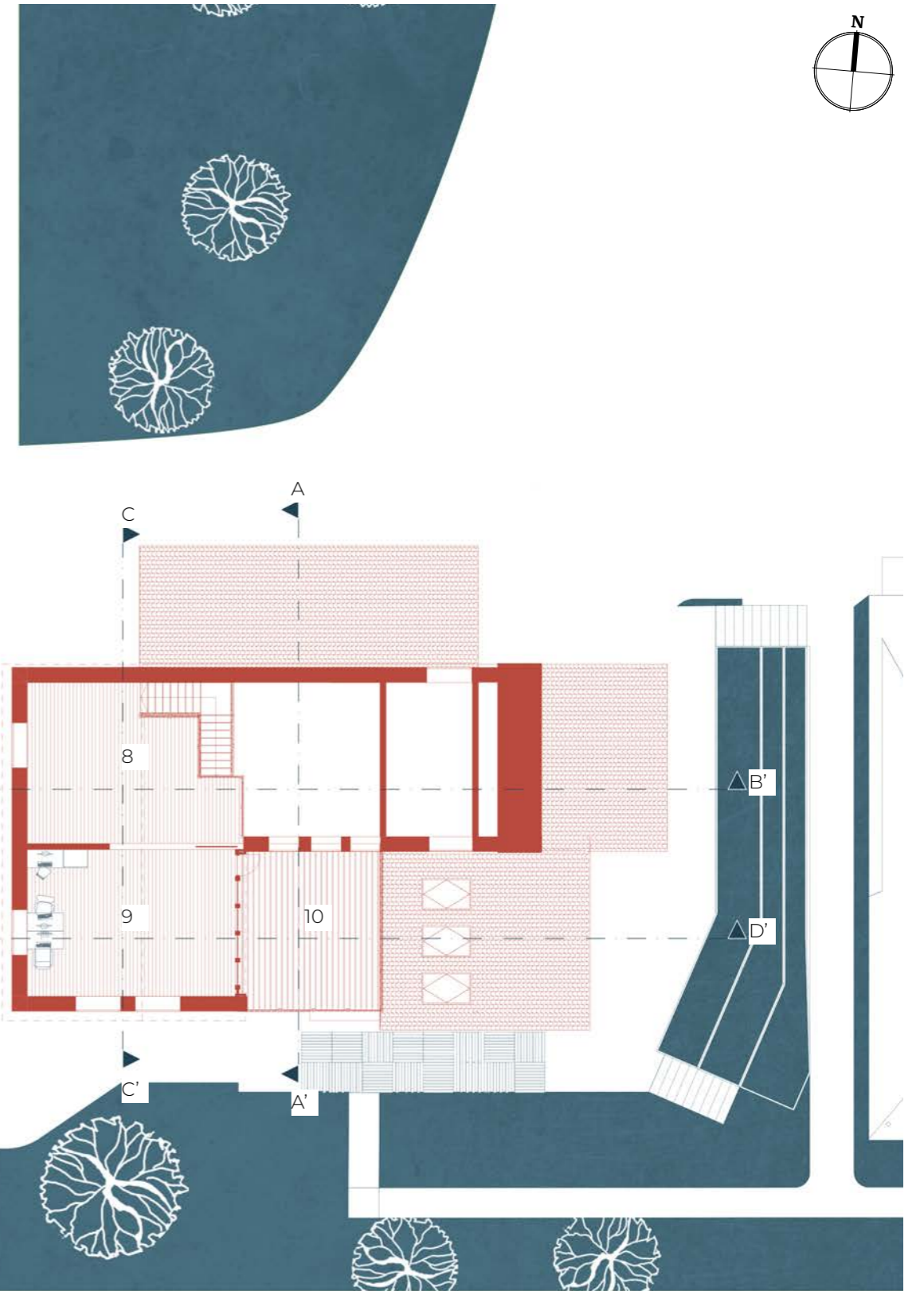


Floor 01

Floor materials change between construction stages, with the storage area having reclaimed block paving to allow the scavenged material to be washed without damaging the floor.

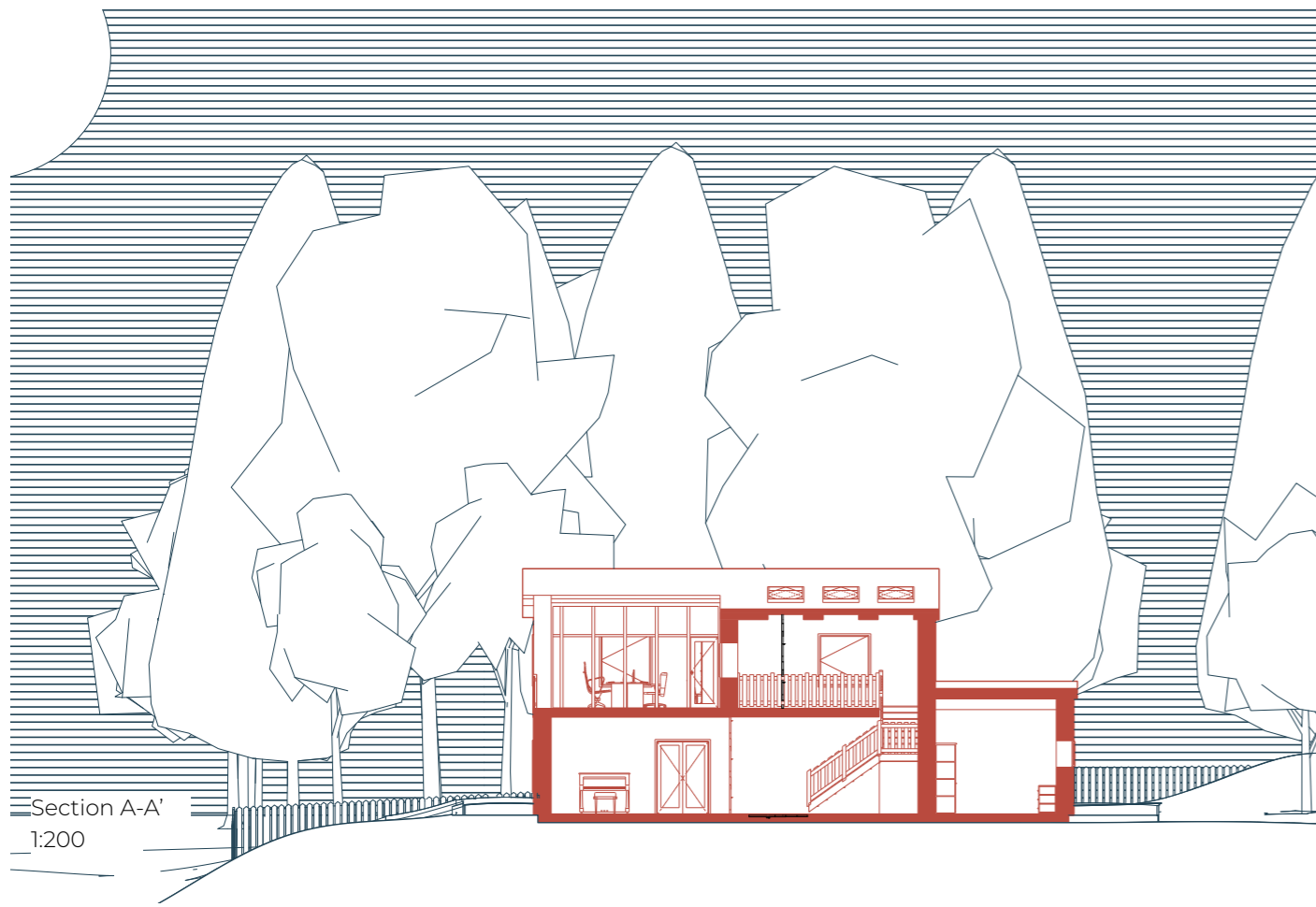
1:200

- 8. Workshop space
- 9. Office space
- 10. Balcony

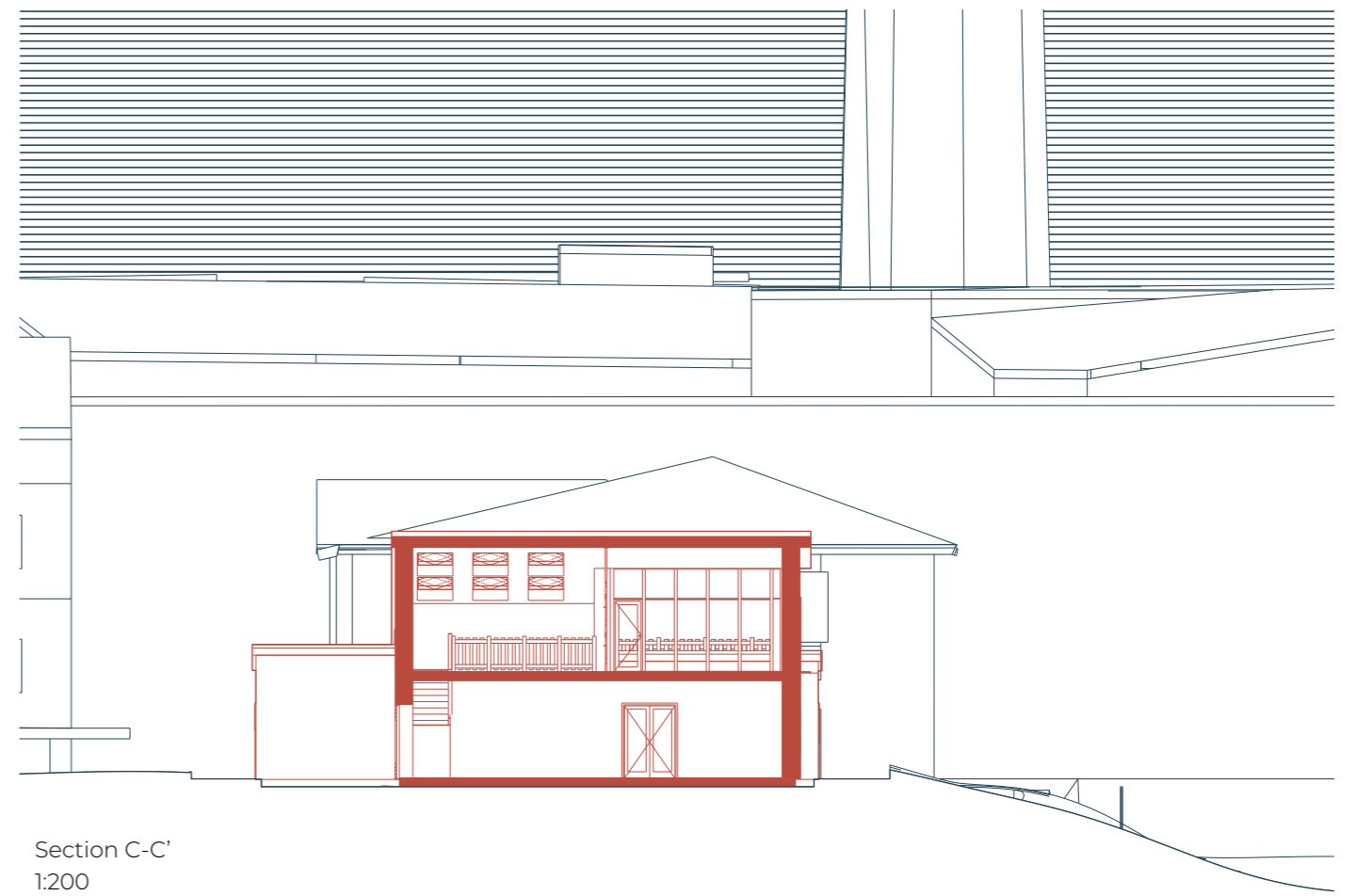


Floor 02

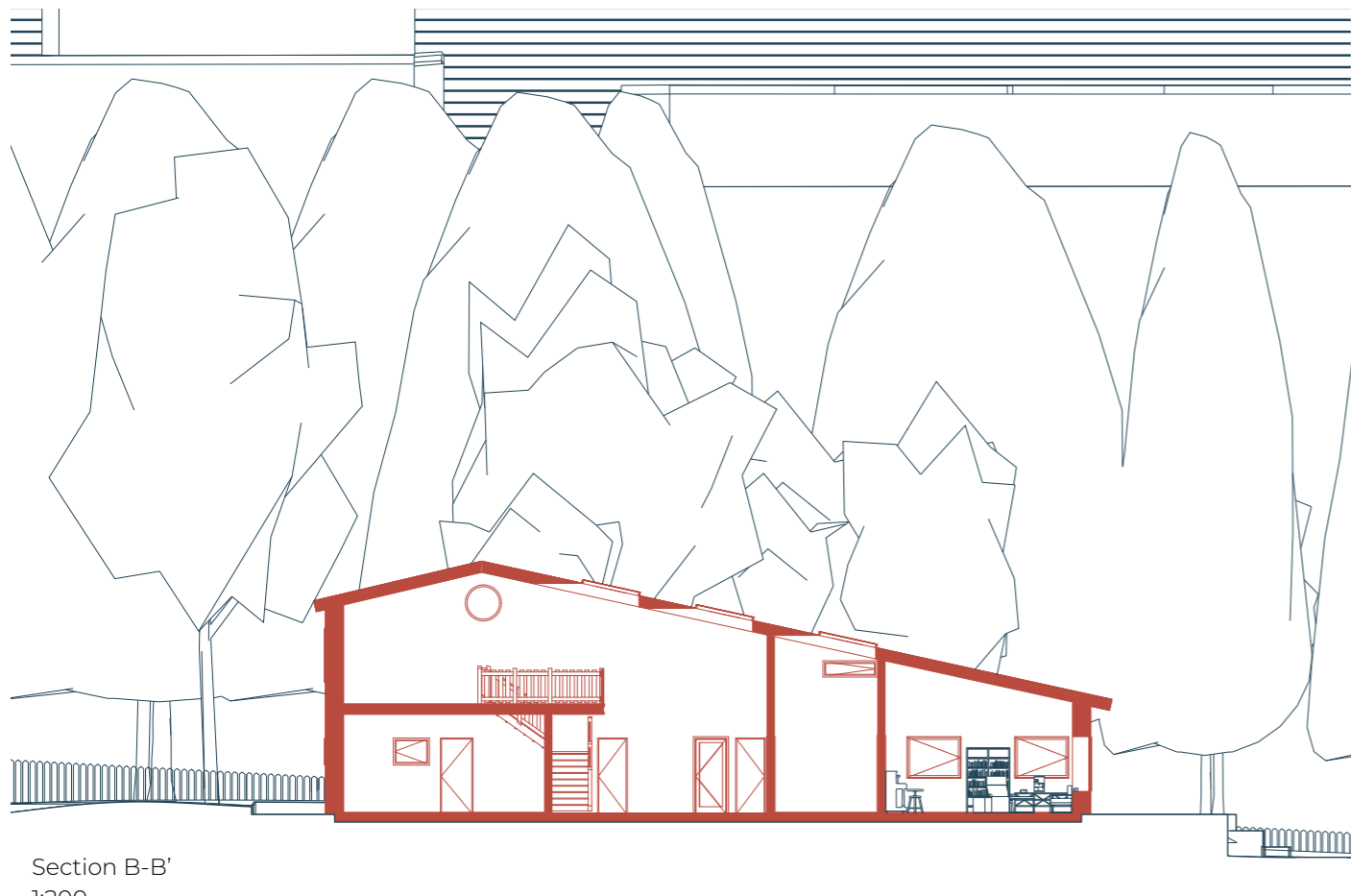
1:200



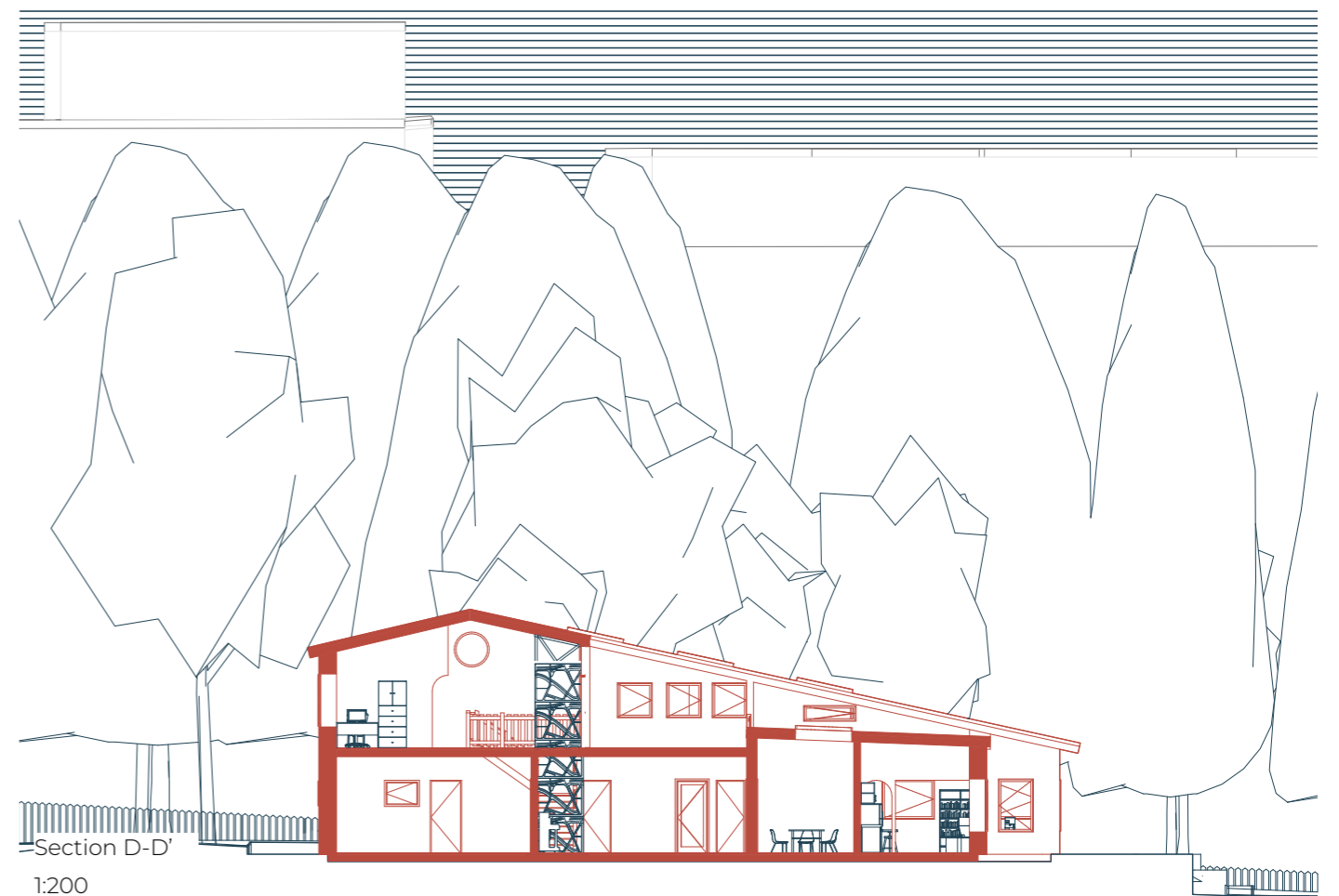
Section A-A'
1:200



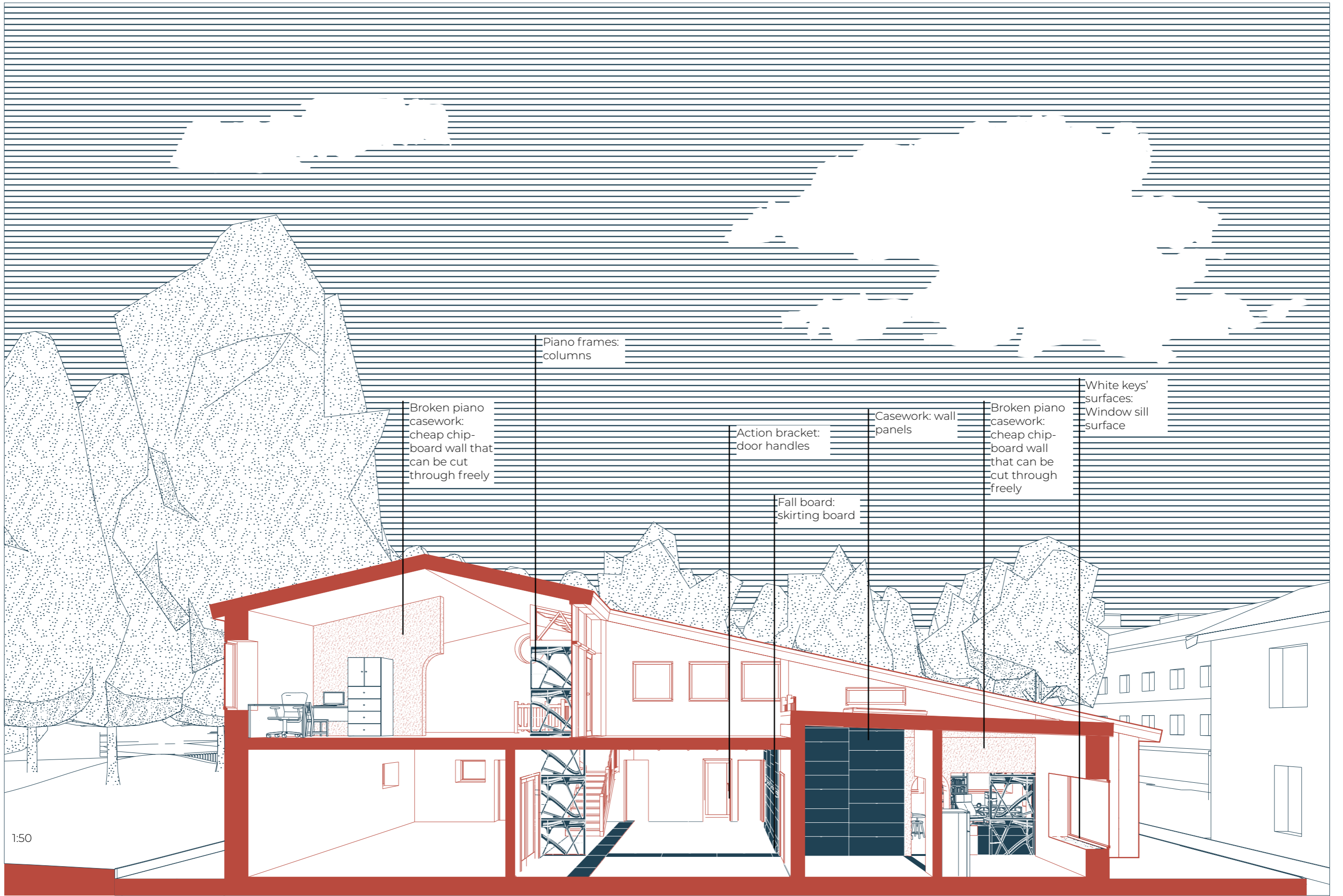
Section C-C'
1:200



Section B-B'
1:200



Section D-D'
1:200



Piano frames:
columns

Broken piano
casework:
cheap chip-
board wall that
can be cut
through freely

Action bracket:
door handles

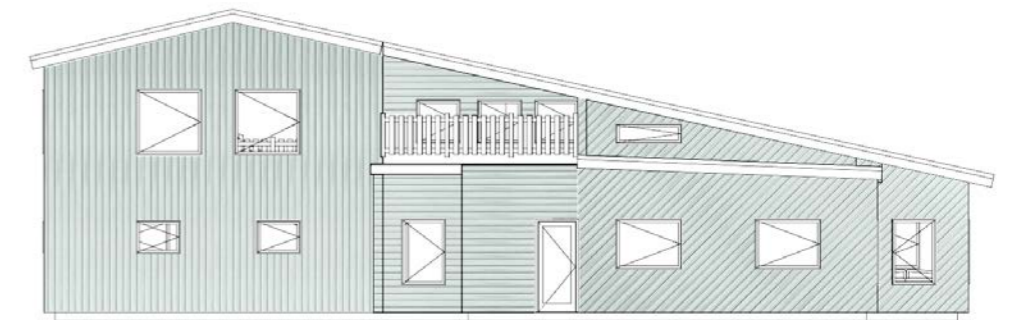
Casework: wall
panels

Broken piano
casework:
cheap chip-
board wall
that can be
cut through
freely

White keys'
surfaces:
Window sill
surface

Fall board:
skirting board

1:50



EXTERIOR

The facade materials reflect the stages that the building would be constructed in. Imperfection is expressed through the consistent but incompatible pattern of the wood cladding, as well as the different rates of aging in the wood.



INTERIORS

Reclaimed piano casework would perform as walls that house a lot of ductwork, pipes, and cables. These materials are more refined and less likely to be cut through freely, damaging the components within. The chipboard, on the other hand, is cheap and replaceable. This incentivises free transformations and cutting, creating connections between spaces as needed.

Piano panels will also indicate the positions of past walls along the ground, suggesting where partitions were once made and could be made again. They mark a border between building stages, with different floor materials being visible beneath





As was mentioned, the building should be a process, open to interpretation and reinterpretation. A half-door as shown above implies a past division, but also suggests potential future partitions. By codifying the surfaces as valuable or discardable, operations of appropriation can be more controlled and designated to certain walls.

Ultimately there should be freedom of choice for the users, and as the piano-walls are reversible, they don't resist appropriation entirely.

11.0 CONCLUSION

This exploration has shown some of the complicated dynamics surrounding architecture and waste. Architecture is a double agent, both the manifestation of politico-economic forces and the structure that influences these forces. It is the event, and its traces once it has finished.

The site chosen is emblematic of these forces. The derelict hospital has been left unused for a long time because it wasn't an economic necessity to demolish it. The buildings present stand as traces of the past use of the site, and have undergone transformations to become the public art-garden that it is currently. This use is very improvisational, showing the value in reusing scrap materials and how they can inspire creative new uses. The users here don't have the luxury to start *carte blanche*, but this shows that the overlaying of past functions, of foreign materials, of improvisational reuse that decontextualises and clashes with its backdrop is valuable in the complex interrelations created. The proposal intends to mirror this.

Dirt is just material in the wrong place, which means if recontextualized it can become valuable once again. The materials used in this design would be reclaimed, bringing with them their pasts and introducing disjunction into the designed spaces. Not all of the materials need or even should be recycled, as long as the construction techniques used are reversible, allowing the parts to be reclaimed

and reused elsewhere. The important consideration is, therefore, how can recycling materials help sustainable design beyond their embodied carbon.

By treating the building as a process, ephemeral qualities can be highlighted and can bring unique moments to a design project, bringing the user-base or "audience" closer to the performance of the building.

Ultimately not all of the theory could be perfectly translated into the design, however the three main Nietzschean points were. Beyond this the proposal was intended to be fairly grounded, so more experimental approaches could be valuable but weren't in line with the goals of this design.

The theory section of this thesis does not rely on the design, and can be taken separately and expanded on, or another design can be developed using these principles. The connections between obsolescence and event architecture is a topic producing many questions, only some of which were mentioned here. Some potential avenues to explore further are the connections between recycled material and the semantics of architecture, seeing if creating ambiguous readings of a building can be achieved through recycled material rather than form alone. Many of the introduced concepts can be developed more thoroughly, as a deeper dive into any one of them was not in the scope of this thesis.

In the end, this thesis aims to explore themes of event, waste, obsolescence, value, and performance

in order to find what intricacies, and therefore what opportunities lie beneath our purely financial understanding of value and waste. The choice of site as well as much of the treatment of the recycled materials show that once we separate trash from our preconception of it having outlived its use, and seeing that waste is only called so because it can't be resold, we find that waste and rubbish is in fact rich with possibilities.

This project celebrates waste and the things that don't belong. The material out of place which needs recontextualising to find value. If we as designers can develop an appreciation for these things, we can move forward in seeing recycling not as a necessary substitute for fresh products but instead as a process that can offer its own unique qualities, despite them being rough around the edges.

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<https://romainthiery.fr/albums/europe-de-louest/>

http://www.marcusbuck.com/freiearbeiten_re-starchitektur_en.php

https://images.adsttc.com/media/images/5359/cf23/c07a/8004/8200/0057/large_jpg/Prada_Transformer_09.jpg?1398394620

INTERVIEW

Interviews were conducted in English. The interviewees have granted permission for the use of the material verbally in the beginning of the recording.

Interviewer:

Dara Nerweyi (D)

Interviewees:

Mika Pettissalo (M)

Interview location and time:

24.08.2022

Kurilankatu, Tampere, Finland

Duration of recording:

40:15

D: But okay, so I guess we can start with that [the permission to use the interview material]. Dara Nerweyi, I'm recording an interview with Mika Pettissalo, for sustainability and ephemerality and thesis things and do I have your permission, Mika, to I guess publish this by the time its done which will be in November or something?

M: Yes. I Mika, Pettissalo, give you full permission to use all the materials which generates from this interview.

D: OK, thank you. Yeah, we can just start with basic things like... we have your name, maybe birth year, how you ended up here, maybe some of your backstory?

M: So, I'm now 45 years old, and I've been on this same block now 19 years. I came to Tampere 2003 to study art. And beside sculpturing, painting, and drawing I started to notice that it could be anything at all, where I can use art, and my parents lived across the street so I naturally ended up on this block when I was walking my dog, and the big hospital building was a student dormitory, so it became my student home and little by little I started to take care of the surroundings when I noticed that there was birches growing on the balcony and the whole block was very badly taken care of so it was kind of a relaxing hobby in the beginning to rake leaves and I've grown up in a little countryside village nearby Tampere, so from there came this attitude towards neighbors, to say "Hi" and greet them and kind of those both ways have been, or things I think has

been the basics or groundings of my personality that I wanted to bring countryside to Tampere city. Little by little I have taken more and more responsibility of the caretaking of the block, the surroundings, sanding during the winter, repairing roof, whatever I come across, so yeah and now I'm here after 19 years. And I have now succeeded to produce this urban wasteland in downtown area in Finland which doesn't exist elsewhere, and just yesterday I got the official contract with the town officials, so there is something fresh and new in whole Finland perspective, like how civil activism can act well in a town when its based just in a free will and its not governed or controlled from higher officials, so it's been a very nice and surprising progress, this whole 19 years.

And I haven't had a plan, there hasn't been any 5 years plan or program, it just happened in an organic way, and now I have become an artistic caretaker.

D: Yeah. It must have been very challenging, I imagine, with coming here and having to take on responsibilities of maintenance, and I guess it was you had to probably learn a lot of things on the fly and just improvise.

M: Yeah, and I have also have friends who have taught me how to do it, and learning by doing has been mostly the thing.

D: It's also exciting to hear that you were here when this was still student housing, and now that main

hospital building isn't in use, except for the occasional music video you might film there...

M: And storage. It's one very important part of this whole concept of this place that I have to do it with a very low budget and by recycled material, so it needs then a lot of storage space. For example when the nearby big theatre ends the theater play they throw away the whole setup, so then it's very good to have a lot of space and storage room to install six vans full of stuff, so that's also nowadays it works as a storage for recycled material.

D: One thing I was wondering about was that a lot of this stuff you find is recycled, for example I think this bed... [gestures to hospital bed in the room] Did you say it was a dentist's chair?

M: It's been a hospital bed.

D: so you must have found it in the hospital and brought it in?

M: Yeah and it was a doctor student who was making a film about time machine, and he wanted to make a good reputation for the electric shock treatment with the movie. So, in the story the main character wakes in a hospital in the next scene, so then [unclear] brought me the hospital bed and I made it or tuned it, decorated it to be time-travelling chair. So, we are now in a time machine and this is totally made out of recycled material. A Do-it-yourself kind of animation studio. Only the dishwashing table has been originally here. Also the art that I produce or make possible to people to do here, and the care-

taking is based mostly through recycling.

D: It's very interesting that it's a time machine in the script of this movie that this student was making, but it is also a time machine in that all of these things have their own history.

M: Yeah, exactly.

D: That's a very cool connection.

M: it's my own personal time travel, or retrospective of different junk and projects during the past nineteen years. On the floor are sketchbook pages [points to floor where pages are painted onto the ground]. There is my first photography work at the first year, and my costume designs for a monster or a black sheep, which I have then made to be costumes and then I have made performances in those and then there's lot of pieces of my graduation work. It's turned into the time machine's main unit, which also works as an animation [unclear] box or my balcony bed. I also recycle my own art. [chuckles]

D: It's very cool because I feel you could have found a typical bed to put in here but is there a desire —

M: There's nothing interesting in that. [laughs]

D: Yeah. It's nice to inhabit your process, and to never forget where you came from. This can transition into your thoughts on waste in general. Is there such a thing as waste? Or has it just not reached

the right people?

M: I think dirt is just material in the wrong place. [laughs] I think it's the lowest of the low of the materials you can think of, dirt. It's always been intriguing to see what's been thrown away in big trash containers. They tell a story of what's been left behind. It gives a lot of joy when I have found something and have been storing it for five, six, seven years and then I get the idea "hey I have that piece of metal there, it could work here and it could look nice". [Laughs] I think it's one thing which has got into me when I've been living in the country. You have to manage to do it yourself, or create your own play.

D: It's more sustainable of course, this opportunistic use of what's available. There's this question of preservation, and maybe this site is a good example of, like, you have preserved it by maintaining it and keeping it in shape, and at the same time you've changed it, and do you feel like you're a preservationist or do you feel you're doing something else here?

M: Well, preservation, the usual meaning of that is to make a protected house very nice and in its official shape. But my goal always has been to keep this place and maintenance running and to be somehow together in one piece without falling or getting burned. So, to do at least the minimum effort to keep it safe and clean and running. Is that answered? Sorry, what was the question? It was kind of long.

D: Yeah, sorry. But I think you answered it, the question of if you feel like you're preserving things here, that preservation has a different implication.

M: Of course, that is self-protection. I want to protect my home, and my workplace or studio. So, that makes me very connected, attached. Of course it's always for people to protect their homes. I want to have it safe and sound. In a way I never have imagined or dreamed that I could save the big hospital building from demolition. I think I should be some Salvador Dali level artist, or Sibelius to be able to do that, because when it comes to the actual moment when they—this is the most valuable block area of town—so when it comes to the real renovating and building it's so big money that I can only pilot this version of how, or my way to produce community and open town space. So I think this is the most important work which I do. I just keep the lowest level of maintenance, and then I grant myself the right to make art to the walls [laughs].

D: You touched on the fight you had with the city for a very long time, on how they're constantly trying to develop the site. Do you have an idea of what the future of the site is, will it be... I guess what do you think will happen, and what do you want to happen?

M: Well, the long ongoing process since the hospital ended in 1985 has been "let it be dark bush and rot itself, maybe the buildings would demolish themselves" but mm-mm [shakes his head]. It

hasn't been working, and it hasn't been very good way to deal things or to take care of citizen's property. So this work, the community garden, actually has become so good so it might preserve the buildings now. Last autumn, the new plans included the big hospital, that it would be saved, so perhaps. [laughs] And there was an idea that this block would be turned into elämyskortteli, "elämys" is an experience of... what is it in English. The block would be citizen's open garden combining the home yard and the official park where would be happenings and cultural growing, city gardening, and these kind of stuff which is now very trendy, and every town plans they have included this society aspect and how to develop it it's always been very problematic. So, accidentally it has become preserving this block. But I didn't mean to! [laughs] It just happened to fall into my lap.

D: You play the cards you have, as they say.

M: When I have taken more and more responsibility and get to know the neighbors, I have piece by piece got more workspace and now it's the whole—this is the former laundry house of the hospital where we are now [gestures to building where we are sitting]—I have almost a whole house in use. So then I feel that I really can't be here if the surroundings are dirty or in bad shape, so it's a natural idea that if I am allowed to be somewhere then I should work for it. Also having this enormous and awesome workplace would be very selfish to keep it to myself, so I've tried to organize it to be open and in as much community use as possible, so that's also

been a good way to do things right.

D: That's very noble as well. I was curious, was it easy to adapt? Was it easy to change the rooms from being this old laundry building to then being this new studio space.

M: Well, no. it's been always developing organically. Like that space there which works now as my office, or the wardrobe in the beginning it was just this shelf which was made to be an animation stage, but then when Tiitus came here to work, he needed to have a sound studio to make sound mixing and be a little bit separated from the band who's playing now here where we sit. So then it turned to be this kind of a separated office. So it's always been a two-way interface or progressive organic—there comes some problem which has to be solved, like water goes to basement and there starts to get mold, so then I just dig a water-run outside and direct the water away from the buildings, so then comes this artistic maintenance work called Stone River which is made out of cobbled stones.

I wouldn't say it hasn't been hard, it's been fun [laughs] I've always tried to make the work, whatever it is, fun to myself.

D: This sort of work also... maybe you're forcing the buildings to work for you, and at the same time they're kind of forcing you to do your thing as well and it's this sort of co-acting or finding a balance.

M: Also, the buildings, and the neighbors, and the

music school students, their parents, their teachers, I think it's very important when producing community to take into consideration as many different people, then it works better. Like I make a light sculpture, ion cannon on the roof and I make it blink, there's just a little light but it blinks, but if some neighbor complains about it then I make it not blink. So just being always in close contact and have this two way interface with surroundings.

D: That leads to this question of events and community. How do you develop these happenings? Are they things you've had in mind for a while? Do you talk to the people here?

M: Sometimes but mostly those generate from surroundings, or people who want to organize block festival or garden festival, or they want to organize a light happening, it's always better that there's a group who are motivated and want to realize something than just making it out of nowhere, which actually doesn't have any necessity or interest. One of the most important works has been this awesome ice-slope. It started from the need to do something with the snow. There came so much snow that I didn't know where to put it and I have only this thing you push with man power, the little...

D: Yeah what is it... kola. I don't know the translation for that actually but...

M: So it's like a big snow shovel you need to push in front of you. It was getting very exhausting, and I really had the need to make some fun out of it,

because then it would become work. [laughs] All work and no fun, so then I got the idea I have to try to make this ice slope, and would it be fun? So then it turned into a big success, and people from different parts of Finland have come just for the ice slope to Tampere.

When one thing leads to another by a natural force it's always a better way to generate happenings.

D: Did you have any that were just a total failure? You tried it once and never again?

M: Yeah, for example we've had this open flea market for everyone on Sundays. Now when we have had it there has been over 100 people visiting the place. Of course, they are not buying all of them, but now they want to go through the block and see what's inside it and enjoy the arts and stuff, but I think it was 9 years ago when I tried with my friend once or two times there was nobody. So the time wasn't right for that. It was still too not well-known or not colorful enough. But never that kind of "No, no, never again" thing. Perhaps some parties ten years ago they got out of hand and we were too wild with my Mouhijärvi friends from my childhood. [laughs] There is also one reason why people move to live in the country rather than in the town, because you have neighbors [laughs], and somebody has to go to work. If you make a lot of noise... I have corrected from that a lot [chuckles].

D: You mentioned that you wanted to take into account everybody, or as many people as possible.

That must be difficult. Sometimes you'll find contradictions.

M: Of course, there's always somebody who wants to complain, but then it's their stuff, like one two neighbors, and then the happening or the rock concert which is on the back yard happens between 6 and 7 then the person who wants to complain, it works for him or her also they have the possibility to come out and make some cry publicly. Most important thing is to be kind to everybody and take consideration.

D: My final question is what do you feel that this place would need the most? Is just renovations? Would it be new buildings, new spaces for storage perhaps? Or materials?

M: a horse!

D: a horse?

M: [laughs] a horse! Oh and a garden tractor.

Every piece of art, every function like the slackline, or open art studio there, they always take time and work to keep them running and maintaining that there's always clean brushes, paint, canvases to offer. Now when this comes more and more popular it takes more time and more work, and maintaining. So I think more personnel would be nice, I have to start thinking about getting organized and have a work group. There would be work for one person to just take care of green areas, the roads, and those

things. One person would have enough work to do the office stuff and information and marketing and giving interviews. All this presentive work.

D: Have you thought a lot about that? What would you need for that?

M: Well we put up an association called Koko Kylän Piha, but in the first place the idea was to keep it as simple as possible, to have as little administration or bureaucracy and... kokous.

D: Yeah. Meetings, I guess.

M: Meetings. The core idea is to produce possibility to anybody to do their own stuff.

D: It's very democratic. It's the ideal for a lot of these things, you want the people who are here to organize themselves rather than needing someone at the top that they meet with and organize with. Have you tried getting people to come in and spontaneously do things? Is that successful?

M: Yes. Just that started then two years ago. First spring, when I started this community project. Open Garden or our garden. Not everybody has a summer cottage or even a balcony. So the idea was to open the whole yard and leave the tools to gardening and some dirt, or turn the greenhouse to an art studio and bring their paints and canvases and brushes, so it's open 24/7 and have these different kind of... toiminto.

D: Like functions?

M: Yeah. Everybody's use, all the time. That's been very good project and worked nicely. People bring stuff and new tools they don't need and other resources. They contact and want to bring presents rather than stealing or breaking stuff. They know it's like the basic trust. They know and take responsibility and I try to organize those materials and presents to everybody's use.

Perhaps one thing it would need is one little organized group who would get official payment for the work. It always motivates someone if they get some money [laugh].

Now it has continued, I have this new contract done. It's also an element of motivation, that I'm not bullied anymore by some little officials of Tampere. I'm more like a coworker with them. Co-operating.

D: That dynamic must be much more comfortable, it's horizontal you're on the same level and it's not these people barking at you from the top.

M: Yeah, but rather than money some resources would be nice to have so I don't have to buy myself gloves or working shoes. But it could also work organized by exchanging services, like I have with INFRA, the green areas caretaking department. I take care of this block and they give me gasoline and some stuff. They borrow rakes when I have talkoot and so on. One or two personnel taking care of organizing this actually would be quite nice. There is

always only 24 hours in a day, and you can't make noise after 10 o'clock in downtown.

D: Okay. That was all I had prepared and this has been very helpful, thank you very much.

[end of recording]