

3rd Building Beyond Borders Symposium

The Power of Reciprocity - Reflecting on the Potential of Regenerative Architecture and Educational Practices to Generate Positive Impact
6-7 February 2025, Hasselt, Belgium

BUILDING WITH NARRATIVES

TOWARDS A MEANINGFUL REUSE OF ARCHITECTURAL FRAGMENTS

Drs. J. Kempen

Hasselt University – Campus Diepenbeek
Building E, Agoralaan, 3590 Diepenbeek (Belgium)
joshua.kempen@uhasselt.be

Prof. Dr. B. Plevoets

Hasselt University – Campus Diepenbeek
Building E, Agoralaan, 3590 Diepenbeek (Belgium)
bie.plevoets@uhasselt.be

There is a widespread awareness that materials are *finite* and that there is an urgent need for alternative, more durable ways of building. This contribution explores the reuse of architectural fragments, including valuable materials, in new designs; i.e. to reconfigure. By doing this, it emphasizes not only ecological benefits, but also the transfer of meaning and intangible values. The objective of this study is to develop a novel conceptual framework that explores this potential for regenerative architecture for both practitioners and scholars. While the reuse of architectural fragments and materials has been extensively discussed from an ecological perspective, this contribution studies the potential of reconfiguration from a different perspective, i.e. the transfer of layers of meaning from one place or time segment to another. This is achieved by classifying the examples that are derived from an in-depth literature review into three categories based on the reconfiguration of their material. This study challenges the perception of existing building fragments regarded as ‘waste,’ and instead strives towards a valuable shaped environment and social impact. Ultimately, beyond these ecological and participatory aspects, it emphasises a regenerative character at a conceptual level, as an approach centred on meaning.

1 TO RECONFIGURE

The existing building stock can be considered a reservoir for ‘new’ materials, with its available fragments ready to be reconfigured in secondary contexts. To reconfigure is described by De Caigny, Ertas and Plevoets (2023) as the process of “rearranging building parts and reusing materials and architectural elements” (p. 8). This approach can be considered a valuable strategy for addressing the scarcity of materials, but at the same time it could serve as a cultural bridge between past and present, transmitting values and meaningful messages through reconfiguring (Gönül, 2023; Kalakoski &

Huuhka, 2017; Meier, 2016). The physical relocation of an architectural fragment can create dynamic connections between what is and what was, between tradition and modernity. By placing a fragment in a secondary context, narratives may continue from a bygone past, including a shift in meaning of the original fragment. This marks the potential of reevaluation, rediscovery, or even critical commentary on the histories the original fragments carries with it (Stone, 2023; Woods, 1990). Settis (2022) argues that the reconfiguration of architectural fragments in contemporary architecture generates meaning, but also evokes an intertextual or inter-objectual network between multiple temporalities. He, however, warns for the risks of fabricating memories since time can be manipulated and bent.

2 CLASSIFICATIONS

A comprehensive review of academic literature, professional journals, and architectural websites was undertaken to compile a longlist of projects incorporating reused fragments and materials. These projects were subsequently categorized based on the defining characteristics of their secondary elements. The discussion that follows explores three of these categories, each illustrated with examples that highlight the potential for meaningful reconfigurations.

2.1 RECONFIGURATION OF JOINERY AND INTERIOR ELEMENTS

Several current day practices have shown their pioneering role in reconfiguring joinery and interior elements, such as doors, window frames, floor tiles, or lighting fixtures - classified as the *stuff* and *space plan* layers by Brand's Shearing Layers (1995). Usually, these layers are subject to rapid change since their life span varies from a few years up to a few decades depending on the buildings function. In *The Eyes of the Skin* (2005), Pallasmaa argues that these materials, as the most multi-sensory layers of our built environment, should be valued for their tactile qualities which make them significant carriers of meaning. Through their haptic qualities, we can consider them as transfers of cultural, emotional and personal memories and stories. In Flores & Prats' Sala Beckett, the significance of the *as found* the architects stumbled upon is underlined, since "they reflected the building's cultural and social past" (2023, p. 46). They argue that through the reconfiguration of its fragments both the physical and social heritage of the building and its local community is restored. An exceptional example of this is the practice of Swiss architect Rudolf Olgiati, who collected and stored all sorts of joinery and interior elements "in order to keep them safe through difficult times" (Meier, 2016, p. 226). He created a lifelong storage of fragments to work with, designing from the earliest stages of the design process with the actual dimensions of the found objects in mind. In thick, white plastered walls, his modernism was made tactile and above all atmospheric by reconfiguring reclaimed objects who connect to nostalgia and memory. Olgiati's design method exemplifies a conscious approach towards reconfiguring; he did not mimic or made a pastiche out of his own nostalgia, but rather chose a singular design element, treating it as a sign. Although this has been criticized by Steinmann as an "Einmaligkeit" (1981, p. 7), appraising a one-off can become a well-considered design statement.

2.2 RECONFIGURATION OF STONE, BEAMS AND STRUCTURES

Stone, beams and structures – whether industrially produced or not – have proven to be valuable materials for reuse in times of scarcity and crises. Brand's (1995) *skin* and *structure* layers frequently serve as the first at hand materials for reconfiguration on destroyed sites, such as Alte Pinakothek by Hans Döllgast, or Annakirche by Rudolf Schwarz in the aftermath of the Second World War. For Schwarz, designing with reused fragments of the former Annakirche made it possible to address a sense of loss through reconfiguring (Grafe & Plevoets, 2022). This sense of loss is also addressed in well-known examples like Dimitris Pikionis' landscaping of the Acropolis which incorporates stones from demolished neoclassical buildings in Athens, and Weng Shu's activist architecture in China in which his studio reuses debris from demolished villages in their nearby regions. These projects demonstrate the potential for ordinary building materials to be reconfigured as a form of resistance against destruction, thereby contributing to the preservation of narratives and the conservation of valuable layers of society. In this context, there is a particular significance attributed to natural stone. Reconfiguring these stones could function as a strong identifier due to their direct geographical link with a specific place. Most recently, Mesura reconfigured endangered stone fragments for a retail interior in Barcelona. The now reclaimed blocks, originally sourced from the city's Montjuïc hill, were formerly used for the construction of *Modernista* heritage in Barcelona during the twentieth century. This reconfiguration exemplifies the potential for preserving and reusing endangered, non-listed fragments, as a tangible link between a local history and the present, and even the future.

2.3 RECONFIGURATION OF MURALS AND RELIEFS

Artistic stone elements like murals and reliefs have a long-standing tradition of reconfiguration, especially in façades. They are often integral part of the building, whether structural or not, but most often as layers of meaning. Following the Second World War, there was a notable surge in the integration of stone reliefs in architecture, serving as an important memorial layer of one of our youngest heritage. However, as the post-war reconstruction layers of our built environment are rapidly disappearing, this monumental art is too. Recent projects demonstrate new awareness regarding these artistically represented narratives, bringing with this its share of consequences. A seemingly modest 1950s mural by Jacques van Rhijn in The Hague was reconfigured into a sculpture after its original carrier – a post-war housing block – was replaced by new residential developments. Scottish artist Toby Paterson reconfigured the mural in a nearby park, titling it *Resetting*. In the new setting, the original voice of the mural has been disregarded; the mural has been given a stage in an almost fantastical appraisal, and breaking with the ensemble value of the original composition. Its original narrative is discontinued. A more integrated strategy was chosen by Caruso St John, who redeveloped the site of Antwerp's former Internationaal Zeemanshuis, a former home for seamen. A bas-relief by Leopold van Esbroeck, symbolising the importance of Antwerp's maritime tradition, was an integral part of the Zeemanshuis' façade. The Zeemanshuis was demolished, and in its new reconfiguration the bas-relief was preserved and incorporated in a new passage way as part of a mixed-use building block that was built on the cleared site. This projects a tactile layer of the identity and cultural memory of not only Antwerp's harbour district, but of the city in general.

3 CONCLUSION

The discussed cases in this study show how working with fragments can evoke a synergy of continuity of tangible and intangible values; they illustrate how reused fragments serve as carriers of memory, besides their ecological benefits. For example, Caruso St John's reconfiguration reflects community identity and historical narratives, imbuing the new design with a sense of local continuity. On the other hand, Olgiati's practice depicts how reconfiguration could foster regenerative or historical approaches and traditional methodological ways of designing; his approach of *Einmaligkeit* emphasises the unique character of the fragment in its new ensemble. Perhaps, this latter is the missing link in current day reconfiguration projects like the Europa building by Philippe Samyn, or the Kamikatz pub by Hiroshi Nakamura & NAP. The current contribution focussed on the classification of the examples based on their material reconfiguration. However, a multitude of classifications is possible, including those based on the fragment's origin, the fragment's new function, or the design strategy of the reconfiguration. By extending the pool of exemplary projects and classifications, e.g. through analytical or designerly exercises with students, a better understanding of the methodological use of reconfiguration in design exercises, and even the design process itself, could be developed.

4 REFERENCES

- De Caigny, S., Ertas, H., & Plevoets, B. (Eds.). (2023). *As Found: Experiments in Preservation*. Flanders Architecture Institute.
- Brand, S. (1995). *How Buildings Learn: What Happens After They're Built*. Penguin Books.
- Flores, R., & Prats, E. (2023). Second-Hand. In M. Puente (Ed.), *Flores & Prats: Drawing Without Erasing and Other Essays* (pp. 40-52). Walther Konig.
- Gönül, H. (2023). Contemporary Spolia: Afterlives of Ruins in Fragments. *studies in History & Theory of Architecture: Ozymandias 3.0: Afterlives of the Architectural Ruin*, 11, 157-174.
- Grafe, C., & Plevoets, B. (2022). The iconography of spolia: Meanings of material reuse in contemporary architecture. *Trace: Notes on adaptive reuse*, 4 - *On Iconology*, 21-31.
- Kalakoski, I., & Huuhka, S. (2017). Spolia Revisited and Extended: The Potential for Contemporary Architecture. *Journal of Material Culture*, 1-27. <https://doi.org/10.1177/1359183517742946>
- Meier, H. R. (2016). Spolia in Contemporary Architecture: Searching for Ornament and Place (B. Anderson, Trans.). In R. Brilliant and D. Kinney (Eds.), *Reuse Value: Spolia and Appropriation in Art and Architecture from Constantine to Sherrie Levine* (pp. 223-236). Ashgate.
- Pallasmaa, J. (2005). *The Eyes of the Skin: Architecture and the Senses*. Wiley-Academy.
- Settis, S. (2022). Short Circuits: When (Art) History Collapses (Malerba & Partners, Trans.). In S. Settis, & A. Anguissola (Eds.), *Recycling Beauty* (pp. 61-85). Fondazione Prada.
- Steinmann, M. (1981). Les paradis artificiel. Zur Frage des regionalistischen Bauens. *Archithese*, 11(3), 5-9.
- Stone, S. (2023). Reconfiguration: Fragments of Time and Place. In S. De Caigny, H. Ertas, & B. Plevoets (Eds.), *As Found: Experiments in Preservation* (pp. 61-64). Flanders Architecture Institute.
- Woods, M. (1990). Fragments of Memory. *Oz*, 4, 56-59. <https://doi.org/10.4148/2378-5853-1203>