

de-sign

architectural subtraction
in times of crisis

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De-Sign: Architectural Subtraction in Times of Crisis

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In the years following the outbreak of the 2008 global economic crisis, there has been a gradual, and predictable, paradigm shift in architectural manifestations: the typical phantasmagoria spread by the Bilbao effect and the Superdutch seems to have been replaced by a reversal to less bold and complex configurations, to traditional and more sustainable materials, to socially engaged design formulas, etc. Of course, this is just a general consideration, which does not imply that architectural production as a whole can be traced back to a kind of global new sobriety, yet in both the international debate and the more recent production, not only by smaller and younger practices, the spread of approaches along these lines is quite evident. In addition to this general tendency toward a return to formal simplification, one can also note some projects that take the logic of reduction to extremes until it coincides with the more specifically 'negative' aspect of subtraction.

The disorienting proliferation of breaches on walls as openings, demolitions of partitions of which the remnants and marks are deliberately left on the remaining ones, peeling surfaces, the unfinished, the raw and the bare are pursued as the (un)finish in the processes of transformation of the existing building material. But also in some brand-new projects of residential and tertiary complexes, the alternations between the solids and voids of the volumes seem to reproduce, through a Minecraft-style geometric-digital synthesis, the traces of a collision, a collapse, a destruction. On the other hand, the very real ruins or remnants of subtractions resulting from the abandonment or demolition of obsolescent buildings become the material with which to rethink saturated urban space through its opposite: the void, the absence, the wilderness.

So what could be the reasons for such a declination of subtraction in architecture that seems to have as its ultimate referent the image of ruin? In roughly the same years in which such aesthetic-design gimmicks were being

worked out, themes and key words such as error, obsolescence, failure, disaster, apocalypse, and death¹ began to appear insistently in the lexicon of the field literature, thus declining and extending the themes pertaining to the crisis and the effects, direct or indirect, that it produced in the disciplinary world. It seems that both theory and practice are somehow intent on analyzing and expressing the tensions provoked by a contemporaneity dominated by controversial events. After all, every crisis has its obvious repercussions precisely in the built territory and specifically through subtractive effects: from total and partial destructions as a consequence of wars or natural disasters, to abandonment and subsequent degradation as an effect of productive and demographic shrinkages.

The research thus moves on such a hypothesis: does subtraction seem to be an evidence of the outcomes of the contemporary condition dominated by various crises? Or, in other words, does the discipline, in turning their effects into design devices, seek to evade from its own crisis? Faced with the complexity and scope of the world's great problems and rather subjugated by the backlash of recessions, conflicts and various catastrophes, architecture has no choice but to manipulate what would seemingly constitute its threatening fate, ruin, into a design tool. This is certainly not new: as a material resource in practices of reuse or as an allegory of *memento mori* and an iconic representation of the sublime, the dilapidated building and subtractive practices are recurring elements in history. That is why the analyses produced here start from a reconnaissance of the origins and evolutions of certain contemporary architectural phenomena; at the same time, excursions into extra-disciplinary fields intend to illustrate the socio-political or more generically cultural contexts in which the occurrence of certain crises was decisive in shaping those evolutions.

The research does not pretend to be exhaustive, either as a historical text or as a general and all-encompassing survey of the topic of subtraction in architecture. Rather, the themes and projects discussed here are oriented toward the delineation of the subtraction design as a conceivable 'crisis project:' when ruin rises to the role of significant architectural *objet trouvé* in low-budget refurbishments; when the surreptitious reference to disaster in some contemporary complexes is an expression of a collective unease and culture about the perception of the 'end times;' when demolitions emphasize the superfluity of

¹ A few books by way of example: Hughes, F. (2014) *The Architecture of Error: Matter, Measure, and the Misadventures of Precision*, Cambridge MA; London: The MIT Press; Abramson, D. M. (2016) *Obsolescence: An Architectural History*, Chicago; London: University of Chicago Press; Murphy, D. (2012) *The Architecture of Failure*, London: Zero Books; Weizman, E. and I. (2014) *Before and After: Documenting the Architecture of Disaster*, Moscow: Strelka Press; Kafka, G., Lovell, S., Shipwright, F. - & beyond (eds 2018) *Archifutures Vol. 5: Apocalypse, a Field Guide to Surviving the Future of Architecture*, Barcelona: DPR; Cairns, S. and Jacobs, J. M. (2017) *Buildings Must Die: A Perverse View of Architecture*, Cambridge MA; London: The MIT Press; Kunze, D., Bertolini, D. and Brott, S. (eds 2013) *Architecture Post Mortem: The Diastolic Architecture of Decline, Dystopia, and Death*, Farnham: Ashgate.

some parts of the built environment, proposing the 'void' as the solely desirable design outcome.

This work, of course, feeds on the theoretical contributions that have variously, and more or less specifically, addressed the issue of subtraction in architecture over the years, seeking to offer an additional piece to that debate. The genesis and development of modern architecture as a progressive process of subtractive synthesis² - the high points of which lie between the spread of a 'minimalist tradition' enshrined in the well-known Miesian motto 'Less is more'³ and its efficiencyist and technicist declination of the Fullerian 'doing more and more with less and less until eventually you can do everything with nothing'⁴ - are covered here as a speculative basis for the evolutions of contemporary subtractive trajectories. The investigation of this aspect, however, was conducted with some caution. The emergence of several trends that proposed a strong formal simplification and a return to frugality was quite evident in the years following the outbreak of the Great Recession; after all, economic contraction usually dictates a reduction in complexity and waste. In this sense, subtraction could be understood as the most direct consequence imposed by the conjuncture on architecture. This is essentially true in quantitative terms: the failure of many offices and construction activities in the post-2008 period, but also the spread of ruins in shrinking cities or the partial or total annihilation of built land due to wars or natural disasters. Every crisis basically has its own quantitative spatial fallout.⁵

And what about the qualitative level? Is subtraction, in the sense of formal reduction and simplification, always an effect attributable to a crisis?⁶ There was a non-marginal representation of the minimalist current that had already been

² Or even as a series of negations, see: Soriano, F. (2004) *Sin_tesis*, Barcelona: Gustavo Gili.

³ The well-known phrase was not actually invented by the German architect. By his own admission, Mies would have heard it uttered by Peter Behrens. See: Vedi Mertins, D. (2014) *Mies*, London: Phaidon. However, the phrase would have a much earlier origin, specifically in the poem 'Andrea del Sarto' (also known as 'The Faultless Painter') by Robert Browning published in 1855 in the poetry collection *Men and Women*.

⁴ The phrase summarizes the concept of 'ephemeralization' coined by Richard Buckminster Fuller in 1938 and referring to the progressive optimization induced by advancing technological progress as an increase in efficiency in achieving the same or better result with less use of resources and means. Buckminster Fuller, R. (1938) *Nine Chains to the Moon*, Philadelphia: Lippincott.

⁵ Cf.: Wigley, M. (2008) *Space in Crisis*, in id., Jun, J. And Inaba, J. (eds) *Urban China Bootlegged for Volume by C-lab*, Rotterdam: Archis, pp. 2-7.

⁶ Every paradigm shift is usually a consequence of a turning point, a change, ultimately a crisis. However, the most diverse forms of simplification, reduction, subtraction can be traced in various eras, not always as expressions of a momentous shift. In more general terms, we could say that the negative, the opposite, the absence has often served to broaden disciplinary perspectives, through healthy reversals of customs and granitic certainties. See Corbellini, G. (2007) *Assenza*, in id., *Ex libris. Parole chiave dell'architettura contemporanea*, Milan: 22 Publishing, pp. 81-89, Eng. ed. (2018) *Exlibris: 16 Keywords of Contemporary Architecture*, Siracuse: LetteraVentidue, pp. 87-96.

operating in the years of so-called bling architecture⁷ - Peter Zumthor, SANAA, John Pawson, etc. - and whose continuity could also be safely traced in much of the work of younger offices of the 2010s. The risk to avoid was to associate too deterministically or too hastily all configurations characterized by rigor and essentiality directly with the crisis or as the very consequences of it. In any case, whether they are expressions of 'pure visibility,' a return to an 'architecture of good intentions,'⁸ or simple pragmatic choices driven by the need for cost containment, the various trends that have eclipsed the more spectacular ones in recent years have already been dealt with in other contexts, where subtraction would coincide more generically with varying degrees of architectural 'denuding,'⁹ that is, in those declinations ranging from 'nude' to 'naked,'¹⁰ between the severe elementarity of claddings and a return to the exposure of structural articulations. Rather, this research analyzes case studies that in a more direct way express a correlation with certain aspects of one or more crises: as an outcome of a paradigm shift (the focus on the informal and poor construction, the project of the 'void,' etc.) and/or as a means of representing an imaginary (the apocalyptic one). Thus subtraction is not understood as a simple, further form of reduction, but precisely as a reverse design and construction act, real or simulated, as a given or designed condition. The concept of subtraction would correspond to that of demolition or, more properly, destruction: in this sense, subtraction would be the most emblematic signifier of the crisis of architecture or the architecture of crisis.

Other issues regarding crisis/es and architecture that require a specification on how they are considered in this context: economics and emergency. Keller Easterling's various analyses of the economies of subtraction¹¹ further enrich the considerations by highlighting the logics that drive the processes of negative transformation of territories, while also pointing to areas

⁷ Savi, V. E. and Montaner, J. M. (1996) *Less is more: minimalismo en arquitectura y otras artes*, Barcelona: Actar. In the 1990s, in parallel with the spread of so-called deconstructivist architecture, a certain widespread passion for minimalism involved multiple cultural spheres. Probably as a reaction to the excesses of the previous decade, sectors such as fashion made wide use of the term. From the proper name of the artistic current of Dan Flavin, Donald Judd, Sol LeWitt, etc., the adjective 'minimalist' ended up also designating various and disparate aspects of popular culture and marketing.

⁸ Many years after their end sanctioned by Colin Rowe, 'good intentions' seem to resurface, in a less heroic, perhaps less rhetorical but no less emphatic way, in the various forms of the 'politically correct' project. Rowe, C. (1994) *The Architecture of Good Intentions: Towards a Possible Retrospect*, London: Academy Editions. Cf.: Lepik, A. (ed. 2010) *Small Scale, Big Change: New Architectures of Social Engagement*, New York: MoMA.

⁹ Mosco, V. P. (2012) *Nuda architettura*, Geneva; Milan: Skira.

¹⁰ See Hans Ibelings' afterword to Mosco's book: the Italian adjective 'nuda' would correspond to 'naked' while some design declensions would have more affinity with the adjective 'nude.' In *ivi*, pp. 310-311.

¹¹ Easterling, K. (2010) *Architecture to Take Away: The Subtraction of Buildings as a New Construction Economy*, in Ruby, I. and A. (eds) *Re-Inventing Construction*, Berlin: Ruby Press, pp. 265-274; id. (2012) 'The Geopolitics of Subtraction,' in *November*, 963, December; id. (2014) *Subtraction*, Critical Spatial Practice 4, Berlin: Sternberg Press.

where the profession is able to give its contribution. In more general terms, certain phases of capitalist development are raised here as a determining factor in several subtractive processes: from the simplification induced by the rationalization of resources, out of and within economic crises, to the negative forms of urban transformation linked to productive delocalization or by the dynamics of property speculation. In more specific terms, the effects that the same stages of capitalist development have on the formulation of low-cost project strategies or the so-called circular economy in the recycling and reuse of products from demolition activities are also considered here. Instead, emergency architecture is omitted here: although the various examples of compacting, simplifying, and optimizing units that are usually employed to respond to specific traumatic events are a good exercise in somewhat crisis-related reduction, their nature is necessarily linked to a 'state of exception.'¹² Whether and how much this exception affects or results in the normality of design practice is an interesting topic, but it would have involved the development of another type of research.

method and structure

In defining the characteristics of contemporary architectural subtraction, observation of relevant case studies brought out certain recurring features that defined three macro-themes. For each one it became necessary to provide a general framework, an evolutionary path of the conditions that nurtured them, and extra-disciplinary forays capable of illustrating the milieus in which the architectural phenomena and processes analyzed here manifested themselves. The tools used are mainly bibliographical, the treatment of case studies is based on the study, observation and critical interpretation of rhetoric and design outcomes.

The three macro-themes are not intended as a rigid cataloging of theories and projects but as an attempt at coherent organization of the discourse according to a salient feature that generically refers to a given crisis condition and

¹² According to the treatise made of it by the Roman philosopher Giorgio Agamben, which in turn derives from that of the German jurist and philosopher Carl Schmitt (*Ausnahmezustand*), the 'state of exception' defines a moment of suspension of the rule of law: while the emergency would imply the restoration of normality in a short time, the state of exception, on the other hand, would induce the elements of temporariness to become established practices. See: Agamben, G. (2003) *Stato di eccezione*, Turin: Bollati Boringhieri, Eng. ed. (2005) *State of Exception*, Chicago: University of Chicago Press. On the spatial transposition of the state of exception see: and the work of Borjabad, M. (2017) *Scenographies of Power: From the State of Exception to the Spaces of Exception*, <https://futurearchitecturelibrary.org/archifutures-articles/volum-5-apocalypse/scenographies-of-power/> (20.4.2022). Cf: Weizman, E. (2017) *Forensic Architecture: Violence at the Threshold of Detectability*, New York: Zone Books.

its, probable, corresponding subtractive architectural manifestation. Thus, economic crises and the spread of growing inequality, scarcity and indigence have a repercussion on the built environment where informal settlements seem to inspire the search for a new kind of raw essentiality through a sort of *aestheticization* (of poverty). Conflicts and disasters and their mediaticity spread a collective perception in which the most tangible image is precisely that of destruction; yet the indeterminate variables induced by collisions seem to offer inspiration for new formal and spatial configurations in a kind of *simulation* (of catastrophe). Urban crises produce landscapes of abandonment where the only ordering act requires a rethinking of urban development in terms of *clearing* (of failure).

The structure of the research is set on the track of the three macro-themes identified in the following three separate chapters:

I – ‘Poor is More:’ the contemporary renewed passion toward informal construction would be related in some way to the advent of recurring economic crises: poor construction seems to offer renewed disciplinary reflections and paradigms.

- ‘(In)Formal:’ since the focus on primitivism is not new and would have inaugurated that process of simplification and reduction in the developmental path of modern architecture, the chapter devotes an excursus from the eighteenth-nineteenth-century treatise on the primitive hut (Laugier, Semper, etc.), to the reflections of the Masters (Corbu, Mies), to the dissonant variability of the ready-made of spontaneous production (Jencks’ *ad hocism*) to the more recent research on the conditions of various informal settlements and associated projects (Urban Think Tank, Mazzanti, etc.).
- ‘De-Growth Vs Scar-City:’ scarcity and degrowth are analyzed here as determinants of certain practices and rhetorics that leverage the reduction of resources used and/or the optimization of formal configurations (Lacaton & Vassal, BIG) also in relation to increasingly pressing environmental issues.
- ‘New Realities, New Contextualisms:’ contemporary crises seem to have challenged postmodernist relativism; consequently, the chapter investigates recent debates on New Realism (Ferraris) and possible or tricky correspondences with some contemporary architectural manifestations that seem to recover the lessons of New Brutalism in clear opposition to postmodernist masquerades (HARquitectes, Fuhrmann Häckler, Aravena).
- ‘Vers Une Architecture de décadence:’ the debate on the return of ‘reality’ in relation to the crisis also brings to the surface some aspects that have been silenced in the disciplinary world: the constructed object, interfaced with ‘the real world,’ experiences an inexorable path to ruin. In the attempt to control all

phases of the fate of one's projects, the prefiguration of the building in its probable state of decay (Soane, Speer) opens up design not only to the fascination of the sublime but also to a real 'negative' design of subtraction, further corroborated by some artistic researches carried out on buildings or in the degraded parts of the built environment (Matta-Clark, Smithson).

- 'Surgical Excisions:' some contemporary practices seem to pick up as much the lessons of informal construction as they do with the dissonant qualities of ruin. The case studies analyzed here illustrate the concept of architectural subtraction as a 'negative' operation applied on existing buildings. The declinations of this tendency vary from the condition of 'as found' ruin (Lacaton & Vassal, Palais de Tokyo; De Vylder Vinck Taillieu, Caritas), subtractive operations that have a clear reference to the artistic operations of Matta-Clark (De Vylder Vinck Taillieu, Twiggy), elimination of interior partitions and finishes (Schemata Architects, Sayama Flat), breaches in walls as windows and doors (Brandlhuber+, Antivilla; Oliver, St. Miquel). The spread of these declinations in recent years seems to be the prerogative of many young and small offices and in low-budget refurbishment contexts.

II – 'Fake Subtractions for the End Times:' recurring crises, disasters and conflicts result in the destruction, in whole or in part, of the built environment. The coexistence and mediatization of traumatic events contribute to the definition of an apocalyptic imaginary in which architecture plays its iconic role.

- 'It's the Catastrophe, Stupid!:' the broader context in which the recent crises have developed is examined here in its political, economic and cultural implications. This introduction aims to establish the background against which apocalyptic cultural imaginaries have unfolded.
- 'Apocalypse... When?:' some tragic consequences of the spread of globalization, such as the rise of international terrorism or economic downturns, have reversed optimistic readings of the 'end of history' into more millennialist interpretations of the 'end times,' in which sometimes architecture or, more generically, the built environment have functioned as tangible images of the contemporary apocalypse (the attacks on the Twin Towers) and crisis (the foreclosure landscape in the bursting of the financial bubble).
- 'Hellmagery:' with the aim of illustrating the scope of disaster imagery in contemporary culture and the role that architecture plays in that imagery, a number of issues related to the dissemination and reception of cultural products that leverage collective fears and unease as engines of reproduction of late-capitalist accumulation (Jameson, Baudrillard, Fisher) are analyzed.
- 'Shock and the City:' further contributions illustrate a kind of inherent catastrophic potentiality in architecture and the city, from the more general

'global society of risk' (Beck), to the 'panic city' (Virilio) to the dual 'violence' imposed by the construction of a new building in the environment to that which each building suffers from external agents (Tschumi).

- 'Trudging Through the Ruins and the Relics:' the succession of recurring crises, wars and disasters and the media coverage of these events have spread the image of ruin as an icon of the contemporary further spread through the multiplication of images from digital platforms or extreme tourism to contaminated or abandoned places.

- 'A Simulacrum of Architectural Corpse:' significantly, the simulacrum of ruin reappears in conjunction with the turning point of the crisis of the modern as a postmodern version of the folly (SITE, Best stores), after the first major postwar crisis (1973 energy crisis) and a few years later the hallucinatory subtractions in the critical readings of radical architecture groups (Archizoom No-Stop City, Superstudio Supersuperficie). Subsequently, the deformations of so-called deconstructivist architecture aspired to metaphorically represent the fragmentation of the postmodern era through cracks, seemingly unstable volumes, and simulated collapses. Today, projects that seek to establish a renewed relationship with ruin use a different code. Immersed in the image industry, thanks in part to the production of imagery disseminated by the rendering industry, it seems that some contemporary big offices exploit the collective unconscious's fascination with destruction and apocalypse by means of the simplified simulacrum of a ruin, synthesized into a three-dimensional translation of digital aesthetics. Buildings that look like huge monoliths from which pieces have been taken update the iconicity of the ruin to the aesthetics of a Minecraft-style digital virtual world (Ole Scheeren, MahaNakhon; MVRDV Valley) thus depowering the overly dramatic reference with real catastrophes (MVRDV, The Cloud).

III – 'The Work of Architecture in the Age of Mechanical Destructiveness:' demolition is an engine for cleaning up the land of obsolete patterns and gaining space for innovation. However, evolutionary processes do not always imply the need for new construction or even result in large portions of abandonment. The 'void' project therefore becomes the most plausible and viable option.

- 'The Creative Destruction:' the chapter initially traces the issue of subtraction as destruction and its cultural and historical significance. An activity that has always mirrored that of construction, demolition takes on an accelerated character with the advent of modernity and as a consequence of the 'creative destruction' of capitalist development (Marx, Schumpeter). The dimensional and epochal scope of the Haussmannian transformation of Paris triggered the modernist passion for *tabula rasa*, yet often disconnected from real political and economic contingencies to the extent that it easily fell into the realm of utopia (Le Corbusier, Plan Voisin).

- ‘The Ideological Removal: From Iconoclasm to Architectural Scapegoat:’ subtraction as destruction is also investigated in its historical and ideological manifestations. Calvinist iconoclasm would have represented the prodromes of the rigor of essentialism as an expression of capitalist efficiency (masterfully illustrated later by Hilberseimer’s Hochhausstadt). Subsequently modern architecture has suffered a general wave of blame toward its failures. Some of its manifestations have been elevated to scapegoats such that their demolition (typically, the Pruitt-Igoe’s one) has often become not only a tangible image of the failure of modernism in toto (by Charles Jencks) but even liberating and spectacular events.
- ‘Dismantling for Disassembly for Recycling:’ demolition activities, partial or total, continue today to clear the land according to the needs of renewal or purely speculative activities. Under the pressure of environmental issues and with a view to containing waste, the building considered as an assemblage of ‘fundamental elements’ (Koolhaas) thus becomes a mine for the extraction of materials for the recycling industry. A number of contemporary studies show how reuse and recycling succeed in producing a language that repurposes the concept of architecture as a palimpsest (Rotor, Zinneke).
- ‘Let’s Shrink!:’ the issue of shrinking cities reintroduced the theme of selective destruction as a ‘cure’ and as an engine for eventual further development. Projects that aimed to reorganize a city that was suffering from depopulation (Ungers, The City in the City), as an ordering act of urban chaos for further development in the future (OMA, Mission Grand Axe) or as a necessary counterbalance to urban density (OMA, Melun-Sénart) showed once again how ambitious plans for development and destruction are destined to remain in the realm of utopia when not aligned with market needs and dynamics.
- ‘Tabula Silva:’ recent projects that propose a recycling of industrial ruins (Latz+Partner, Landschaftspark) or the remnants of demolition activities for which no further development is planned (Station C23, Landscape Corridor) have proven to be less ambitious and more cast in the realities of shrinking or failing territories. Such interventions show a model of rethinking the city in which the ‘third landscape’ and the wilderness become active and affordable tools of urban regeneration.

The final part of the research sets out some considerations regarding the work done, drawing some provisional conclusions. The reasons that guided its genesis, the goals set, the hypotheses discarded, and the results obtained are here outlined. Above all, the attempt is to delineate some perspectives, hypotheses of further developments that emerged from the investigations conducted, indicating the resources that the materials collected, analyzed, interpreted may offer for further areas of research. But also the missing parts, of a work that did not aspire to compose a kind of ‘encyclopedia of architectural subtraction,’ are further

sources of possibilities for exploration. After all, the selection work also produced much 'discarded material:' what was subtracted in this context might offer inputs for future trajectories of inquiry and project.

poor is more

'imagine an entire building being cut, not just as an analytical/artistic tool, as gordon matta-clark did, but as one of the many form-generating tools. the process of building is always additive. imagine a reductive process instead.'

omer arbel

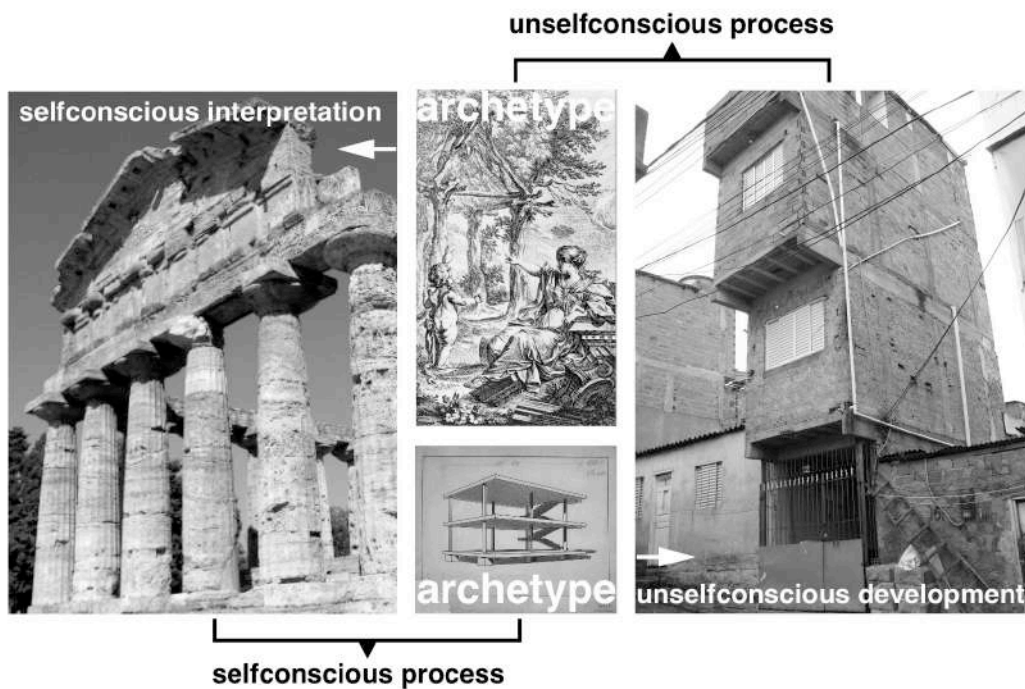
(in)formal

Three years after the outbreak of the financial crisis and the beginning of the Great Recession, an issue of Lotus magazine was dedicated to informal settlements, with the eloquent title 'Favelas, Learn from.'¹ The reference to the famous essay by Venturi, Scott Brown and Izenour² is not accidental and emphasizes a similar approach, that is to recognize in popular and spontaneous building production, generated from below and devoid of any ambition - where it does not imitate or awkwardly include the elements considered as clues to bourgeois status (balustrades, decorations, etc.) - essentially the meaning for a new disciplinary direction or, rather, the solicitation for the 'return of the repressed' denied by a certain technological or elitist dogmatism. While Venturi and Scott Brown dealt with the configuration of commercial buildings to criticize the modern removal of the more directly communicative aspect of the building - embodied in the superstructure of the envelope and the decorative apparatus - , the interest in the artefacts that define the various slums, bidonvilles, *favelas*, etc., seems instead to focus on the raw essentiality of frugal construction, also noting the richness of typological and morphological variations resulting from adaptations guided by pure necessity and limited material and spatial possibilities. However, this is not a new interest, rather the increase and spread of informal settlements, driven by the rise of marginal populations with very low income and by migratory flows, are today even more posed as a form of increasingly pervasive³ urbanity that not only is impossible to ignore but it also offers a field of disciplinary investigation and experimentation.

Cyclically, part of the architectural debate and its theoretical production has focused on the phenomena of spontaneous and primitive constructions in order to trace a kind of ancestral order. Significantly, this has sometimes occurred at a moment of crisis when developments in mainstream languages have passed their zenith by going through the phase of their inevitable overcoming. Usually this also coincided with a turning point at which a cross-cutting crisis condition persisted involving more or less all assets of the dominant systems. The recourse, therefore, to the primitivism and purity of the 'good savage' offered and still offers today an opportunity for the radical rethinking of society and its manifestations, starting from a primordial human condition - idealized or romanticized - considered devoid of induced corruption from the superstructures of advanced cultures. It is a narrative which, at least in the treatment of the most distinguished theorist on the subject Jean-Jacques Rousseau,⁴ does not necessarily imply a moralistic reading of the primitive condition, but rather the definition of its 'neutral' nature, neither good nor bad. And to this presumed idealized neutrality of primordial man, understood as a quality since it is not susceptible to conventional judgment parameters, its products, including construction, are consequently also traced.

The famous essay by Abbot Marc-Antoine Laugier, *Essai sur l'architecture*, enriched the long and consolidated tradition of architectural treatises by inserting the principles of the fervent cultural *milieu* set by the Enlightenment (even though he was a Jesuit). At the moment in which the spatial and decorative phantasmagoria of the Baroque and Rococo was declining, as an indicator of an Ancien Régime in inexorable collapse, the exhortation for an architecture deprived of superfluous and ornamental overlapping and composed only by its most essential structural elements assumed the characteristics of an absolute concept of architectural beauty as conforming to its 'natural' principles and, as such, 'truthful.' Appealing to a sort of universal reason for building, Laugier elaborates through the archetype the perfect synthesis with which to trace the origin of the discipline, embodied in the primitive hut:⁵

The little rustic cabin [...] is the model upon which all the magnificences of architecture have been imagined, it is in coming near in the execution of the simplicity of this first model, that we avoid all essential defects, that we lay hold on true perfection.⁶



Notes on the synthesis of form of the archetypes and their relations and evolutions.

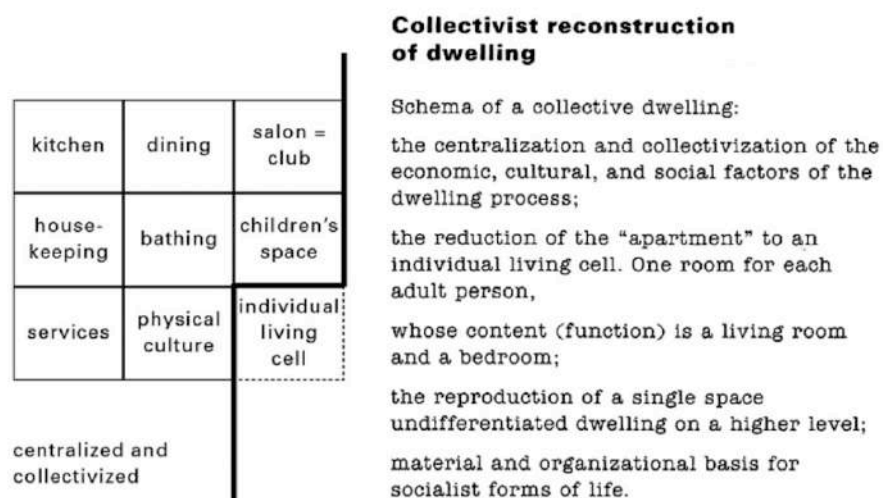
While on the one hand Laugier's essay contributed to the affirmation of neoclassicism - the natural development of that archetype is the Greek temple which can be easily deduced from the well-known allegorical Charles-Dominique-Joseph Eisen's representation for the frontispiece to the second edition - on the

other hand that objectified and secularized synthesis of the architectural form also contributed to the purification process and autonomy with a clear modern approach.⁷ This process of synthesis is conceptually a process of subtracting everything that could be defined as extraneous to constructive and therefore architectural issues: the basis of rationalism or disciplinary autonomy but also, in some way, of functionalism.⁸ Although the essay appealed to 'reason,' it was a transfigured and mythologized retroactive form of the primitive condition, free from a rigorous scientific or anthropological approach, exploited in order to establish the absolute superiority of classicism:⁹ subordinating other archetypes, such as the cave or the tent, to the prototype of the Greek temple, Laugier certainly does not make a historical but an ideological operation, probably also functional to the internationalization of a language that colonialism has imposed on indigenous people - sometimes real savages - who certainly could not identify themselves with those principles. In addition to not being a real celebration of primitive simplicity and its validity in constructive terms, Laugier's demagogic use of the archetype rather emphasizes the hegemonic character of the Western perspective, even when it frees itself from classicism.¹⁰

While a century later Gottfried Semper disputes the bare essentiality of the structure of Laugier's primitive hut by introducing the cladding,¹¹ the reference to primitive identity is used by Adolf Loos at the beginning of the twentieth century with a radical overturning of meaning: in his famous essay *Ornament und Verbrechen* the Austrian architect, in his vehement attack on decoration, justifies the *horror vacui* in the Papuans only by virtue of their being anthropologically at an archaic stage, while in the modern civilized man the same sentiment would betray his perverse and criminal nature.¹² Although Loos' rhetoric is imbued with a certain racist moralism and elitism, cultural and class differences, in quantitative and qualitative terms, are still detectable today in the phenomena that are treated in this chapter and which present some paradoxical aspects. On the one hand, the proliferative production, therefore fundamentally additive, of the so-called informal architecture, where the building materials are raw for reasons of economic and material limitation only; on the other hand, architectural projects on existing buildings where subtractive interventions and low-cost transformation strategies are implemented, with informal, poor and degraded architecture as their aesthetic reference. However, this is the umpteenth disciplinary incursion into a marginal condition extraneous to the dominant convention as a source of critical and design elaboration. If in the 1960s the commercial building showed the relevance of the architectural mask in the society of the spectacle, in the economic boom and in capitalist consumerism, today its inverse, that is the slum or the dilapidated building, rather reflects the crisis of those economic and productive models.

The hut understood as a formal archetype takes on the symbolic characteristics of the ascetic dimension, becoming a stereotype of primary needs in its utilitarian meaning. While architects and treatise writers - from antiquity to

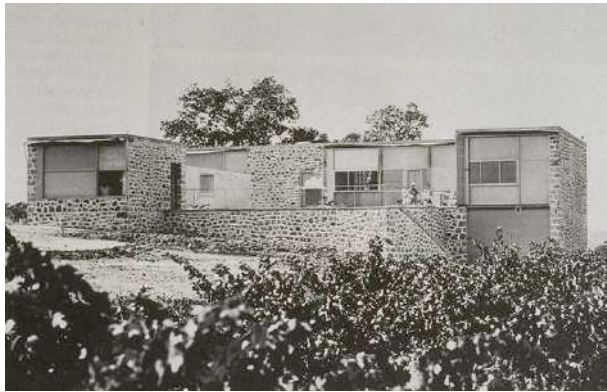
the dawn of modernity - celebrated the innocent authenticity and austerity of something that actually existed only in ideal reconstructions retraced backward in an arbitrary way, Modernism re-proposed its principles of essentiality, not as a romantic and ideal look at the past but as a founding value for the dwelling of the present and the future. In that progressive modern process of architectural 'purification' it was not only the ornamental tinsels that underwent a gradual synthesis up to their own subtraction but also everything that could generically be defined as superfluity in everyday life. This also resulted in the rationalization of the domestic space in which the minimum corresponded to the strictly necessary.



Karel Teige, The Minimum Dwelling diagram, 1932, reduction as efficiency in domestic life.

The a priori decision to establish the needs of the inhabitants and the exact measures of the space within which to fulfill them may seem aberrant, however the *Existenzminimum* or the *Minimum Dwelling*¹³ were attempts to define the organization and division of the living space coherently with the dynamics imposed by the evolution of industrial society.¹⁴ And even in the era of the 'machine for living in' there was no lack of references to the sobriety of the 'savage' and spontaneous architecture as *archè* of modern housing: again, it was not a question of making primitivism a fetish, rather it was an attempt to demonstrate how the constructive practice conducted through functional principles was actually a foundation in the spirit of *homo construcens* from its very beginnings. For Mies van der Rohe the Indians' hut made of leaves is a lesson of perfect functionality that he claims for modern architecture,¹⁵ but beyond exoticism or temporal idealization, this interest towards the local construction practices of the so-called vernacular architecture, as a trace of an archaic essentiality, will increasingly assert itself within the disciplinary debate:

the archetype at that point takes on ideological characteristics akin to the rhetoric of tradition. The exhibition on Italian rural architecture, edited by Giuseppe Pagano and Guarniero Daniel and set up at the VI Triennale di Milano in 1936, exhibited a large photographic corpus of the many variables of spontaneous building as an impulse for a 'site specific' production of the farmhouse in reclamation works promoted by the fascist government,¹⁶ an approach towards the value of popular and traditional construction that will find its best results in the post-war period when the Italian disciplinary debate will be freed from the regime monumentalism and will produce a renewed interpretation of the settlement, typological and morphological features of vernacular constructions¹⁷ within a general revision of modernist orthodoxy.



Le Corbusier, Villa de Madame Hélène, 1929.



Le Corbusier, Cabanon, 1951.

Identified mainly with the purism and abstraction embodied in the elaboration of the iconic white villas,¹⁸ Le Corbusier's complex theoretical and architectural production also feeds on references often derived from the features of informal and popular realities. While villa Fallet, one of his very first commissions, revisits the model of the Swiss chalet, still through the decorative influences of the Jugendstil, subsequently his formation will be structured through the study of antiquity from which he will draw not only the direct knowledge of the ancient monuments but above all the fascination towards the naked rawness of what remained of them, that is the ruins.¹⁹ The study on the residues of the past therefore seems to influence the Swiss master's production, obviously not as a recovery of historical styles, but rather as a reflection on the nature of the building itself,²⁰ already contained in his essay-manifesto *Vers une architecture*: 'The business of architecture is to establish emotional relationships by means of raw materials. Architecture goes beyond utilitarian needs.'²¹ Starting from the thirties, Corbu developed a greater and progressive passion for the properties of rough and nude materials, for the authenticity of anonymous and poor constructions, perhaps due to an exhaustion of that abstraction, that placed

his modern archetype par excellence – the Maison Dom-ino (1914) - under the candid envelope of the purist membrane,²² and perhaps also in the wake of the 1929 crisis and the relapses on the quality and quantity of the commissions. The recurring use of stone left exposed in the various villas of the period - Ville de Madame Hélène (1929), Maison Errazzuriz (1930), Maison a La Celle-Saint-Cloud (1934), Ville le Sextant (1935) - seems to be influenced by his renewed sensitivity towards ancient ruins.

Instead of reworking, in a modern synthesis, the stylistic features of a local tradition, Corbu seems rather interested in the result of an aging process that makes the structures ruins:²³ the rural houses of Provence have bare stone walls only thanks to the effects caused by the washout process of the plaster. From here on, Corbu seems to recover the need to highlight the distinction between structure and masonry infill - already visible in Villa Schwob (1916) - by looking at Semper's lesson rather than Laugier's, a paradigm shift that will have its most evident manifestation in the Maison Jaoul - designed in the 1930s but built only after the war, between 1954 and 1956 - where the overhangs of the vaults and concrete slabs on the short sides exacerbate the non-load-bearing role of the walls. At the same time, in a perennial oscillation between the primitive character²⁴ and innovative construction technologies, Corbu begins to take an interest towards the plasticity and materiality of concrete, which he will further develop after the war, an artificial material but able to take on the appearance of an unpolished rock and which allows him to free architecture from Euclidean rigidity. The possibility of shaping the space outside of any traditional construction system and its further evolutions, is for Corbu an opportunity to transcend the hut and go so far as to define spaces that seem more excavated than built, where references seem to lose all pretense of rationality (Ronchamp)²⁵ or evoke the ancestral spirit of the cave (Firminy) or the archaic rock carvings (the *Modulor* imprinted on the walls of the Unité). But the most intense moment of the connection between primitive frugality and Corbu's modern design spirit occurs in the design of his own version of 'primitive hut,' the Cabanon, conceived as a gift for his wife Yvonne but also as an intimate retreat. Apparently it is a simple prefabricated shed covered with raw pine wood with an extremely humble appearance, while the interior - set up with oak panels, some of which are painted - shows how frugality lies not only in the quality of the materials and their crudeness but in the ability to minimize the living space to its minimum degree of necessity. In the space of just over 13 square meters - 3.66 x 3.66 meters and a height of 2.26 meters - Corbu implements the synthesis of his idea of Minimum Dwelling defined through the proportions of his Modulor, thus combining his admiration for the simplicity of the fishermen's huts²⁶ and the efficiency of a rationally determined instrument. Based on the simple and primary needs of a 'naked man on vacation,' the Cabanon is a single environment completed with spaces and furniture with interchangeable and integrated uses, therefore this

place take on the qualities of frugal synthesis of a hut or a monastic cell as well as the functional ones of the train or ship cabin.



Brutalism in ruins (Lyons Israel Ellis Gray, Parkhouse School) and a ruined informal settlement, two versions of the same archetype.

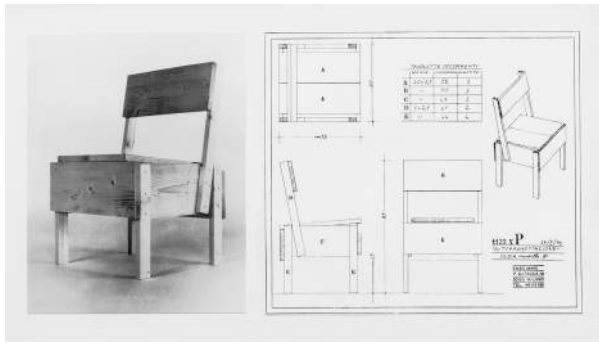
The theoretical development history of the Modern Movement seems to have evolved by tracing the purest essence of the discipline in those forms of primitive construction. However, especially in its official version, namely the International Style, Modernism ended up coinciding with the representation of the power of bureaucracy, large companies and the myth of the machine, even when groups like Team X tried to overcome some of the distortions produced by modernist orthodoxy. Le Corbusier's lesson continued in some representatives of the new generations of post-war architects in the deliberate use of construction materials left exposed in order to convey the honest and clear legibility of the buildings constituent parts,²⁷ a solution that could also be accepted for its predictable affordability.

The so-called 'New Brutalism' assumed a double semantic code: the constructive honesty of *béton brut* could be associated with the uneducated and naïve expressiveness of *art brut* celebrated by Dubuffet, a much more effective connection when dropped into the ramshackle constructive realities of *favelas* or slums. Alongside this clear intentionality and awareness of raw architecture, new ways of interpreting the spirit of constructive and settlement spontaneism are emerging in a more political perspective and which shifts attention from the immanence of the building to its mobility. In the context of the criticism about the everyday made by the French situationists and coherently with practices of *détournement*, Constant Nieuwenhuys began the elaboration of his radical project New Babylon, defined as a 'nomadic field on a planetary scale,' in Alba, Piedmont, in a Sinti camp hosted by the painter Pinot Gallizio. Its further developments - the various phases and versions of the project will last until 1974 - see the definition of maquettes and representations in which the reticular infrastructural system feeds on continuous changes and developments, and

sometimes its images have a clear reference to informal settlements and their irregular differentiation of materials and spatial configurations. In the wake of countercultural pressures, the gaze towards primitivism and spontaneism is renewed, as areas of criticism and rethinking of society, consequently also in the disciplinary field the theme of the hut and of all those construction practices not referable to conventional design reappear. The exhibition edited by Bernard Rudofsky, set up at the Museum of Modern Art in New York in 1964, underlines this aspect with a programmatic title: *Architecture Without Architects*, a thematic excursus of examples from the most disparate parts of the world with a clear polemical intent:

Part of our troubles results from the tendency to ascribe to architects [...] exceptional insight into problems of living when, in truth most of them are concerned with problems of business and prestige. Besides, the art of living is neither taught nor encouraged in this country. We look at it as a form of debauch, little aware that its tenets are frugality, cleanliness, and a general respect for creation.²⁸

Rudofsky's exhibition, and the associated book, therefore intends to offer an overview of the rich variety of primitive, spontaneous and vernacular architectures that are collected under a generic but clear condition - not to be the outcome of an architect's mind - in an attempt to highlight both the contradictions of the processes induced by modernity²⁹ and the validity of constructions mediated only by the specific needs of its builders / users and the environmental contexts in which they are inserted. It is no coincidence that the book emerged in a decade of strong critical tensions, transversal in many fields of knowledge and in society in general, and two years before the publication of two seminal treatises that have led to revisions of modern architectural paradigms - *Complexity and Contradiction* by Bob Venturi³⁰ and Aldo Rossi's *L'architettura della città*.³¹ Neo-avant-garde and conservative positions shared intense frictions during the 1960s, in which the instrumental idea of the hut was still traceable, respectively: transfigured into a hyper-technological delirium that looks at the spaceship³² rather than the cabin, or as an archetype of a recurring figurative code in the field of history and tradition. A thought on technological and production development is articulated around it, leading to hypotheses and interpretations in which architecture itself undergoes a subtractive process: in Cedric Price's design proposals, where architecture is reduced to become a flexible infrastructure, ephemeral, interchangeable at the service of the processes it has to accommodate³³ or in the dystopian prefigurations of radical architectural groups such as Archizoom or Superstudio, where technological developments at the service of maximum capitalist efficiency make architecture superfluous to the point of making it disappear in generic plans or gigantic, potentially infinite parallelepipeds.³⁴ Although somewhat prophetic,³⁵ those depictions seemed only the extreme points of a disciplinary crisis that will eventually coincide with a general crisis, the energy crisis in 1973 and stagflation, at that point the return to frugality was welcomed for predictable practical reasons or because it was coherent with the spread of ecological and environmental awareness.³⁶



The *bricoleur* designer and his aestheticization: Enzo Mari, Autoprogettazione, 1974 (the cost varies depending on the material used) and Campana Bros, Favela chair, 2010 (€ 4.900).

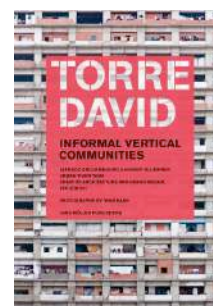
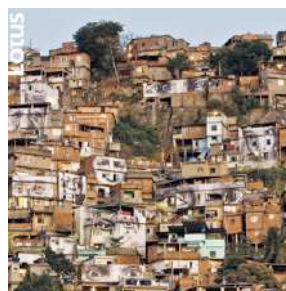
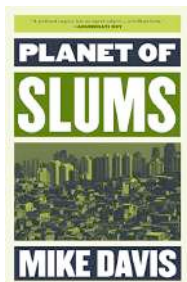
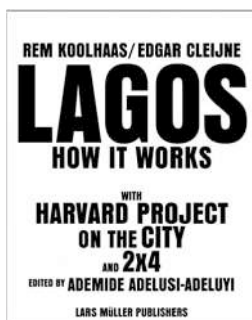
The crisis of a model based on infinite growth is an opportunity to definitively destabilize the ideological structure of modern architecture, also through an inversion of meaning of the rhetoric that the modernist masters have sometimes used for their own legitimacy: the primitive spirit once used in an instrumental way as the basis of the rationalist and functionalist synthesis is now used as their negation. The renewed attention towards constructive manifestations of the so-called ‘Third World’ or aspects of popular and vernacular culture are an opportunity to promote different and alternative ways in the design and use of spaces and everyday objects in an anti-dogmatic and anti-hierarchical sense. Frugality thus becomes a political choice that intends to promote a subtraction from the laws of consumerism and capitalist power structures, also through the recovery of the value of craftsmanship and self-construction.³⁷ The issue also takes up the reflections around the figure of the *bricoleur*, analyzed by Lévi-Strauss in his *La pensée sauvage*, in which a distinction is proposed between the creative needs of a wild mind, and his practical ability to use and combine the most disparate objects to produce something new, and the predetermined order by the ‘scientific mind’ of the engineer, able to rationalize the ad hoc use of the available resources.³⁸ A few years later Derrida will question this rigid distinction, pointing out that the engineer himself is actually a myth produced by the *bricoleur*.³⁹ Referring to the structure of languages, the issue takes on an ironic meaning in the disciplinary field, where ‘savage thought’ is no longer referable to an idealization, distant in time and space, but in the perspective of the *bricoleur* it is also concretized in the most direct reality of contemporary daily life. It is an innate propensity towards improvisation, reuse and manipulation of objects in the most disparate ways but also more suited to one’s individual needs according to the most immediate availability: a clothespin used as a paperweight, a wire hanger recycled as a TV antenna, a book as a doorstop, the assembly of decontextualized but useful components for the construction of a new object, etc.⁴⁰ Charles Jencks analysed the phenomenon by assigning it the term ‘ad hocism’,⁴¹ attributing to it not only the qualities of utility and formal synthesis but also sensual, symbolic, irreverent, rough, clumsy, comic,

kitsch, vulgar features. The recovery of the Dadaist ready-made outside the artistic context is evident, but it is simply a new way of defining a truly primordial trait - a tree or a leaf does not develop themselves as materials for huts, they are eventually objects that the *bricoleur* recombines to build his own shelter or for his furnishings - and that in the times of the consumer society and the hyper-production of objects is further enriched. But in the operation that frees the object from the use for which it was intended, adhocism is essentially a further attack on functionalist determinism and, more generally, on modernism, a basic concept for the postmodernist narrative in architecture.⁴² Therefore, a further connection with the linguistic and philosophical field occurs when the architectural language can no longer have function, structural honesty, and the myth of the machine as its only referents: in the society of the spectacle, Venturian discourse seems to be the more appropriate and effective. The reference to the qualities of the popular or the vernacular take on, in the postmodern field, the appearance of parody, simulation, *cliché*, in an assembly or, better, in a *bricolage* of fragments and quotations. The recovery of 'history' and the vernacular, popular or traditional rhetoric, even when transfigured into gaudy *pastiches*, seem to fulfill a consoling function after years of reduction and abstraction of architectural signs. This compensation seems to be fulfilled by the facade or the envelope, often freed from any reference or formal continuity to the building structure. While postmodernist historicism petered out within a quarter century - at least in the 'learned debate,' while it continued and continues to operate in commercial building - , the structure-envelope schism manifests itself in an even more experimental and daring way in the spectacular evolutions of so-called deconstructivist and blob architectures - elaborated thanks to the possibilities offered by sophisticated digital design technologies and supported by financial systems and global tourism networks - which further emphasize a sidereal distance from any idea of frugality, vernacular or primitivism.⁴³

The interest in spontaneous buildings and settlements is part of the disciplinary debate through investigations on the contemporary city in the era of globalization and the hypertrophic and heteroclitic developments of the metropolises that are sometimes accompanied by conurbations beyond any type of planning or control. In his continuous research on the developments of the contemporary city outside of old Europe, Koolhaas begins to take an interest in megalopolises that offer sudden, unprecedented and paradoxical development dynamics, of which Lagos,⁴⁴ the fifteenth Nigerian city in the world for number of inhabitants,⁴⁵ seems to offer interpretative ideas on the fate of the city to come.⁴⁶ The study of the African megalopolis was supposed to compose one of several hundred-page monster books,⁴⁷ however the project was likely halted due to the controversial nature of a territory,⁴⁸ partly occupied by the extensive Makoko slum,⁴⁹ which did not lend itself to abstract definitions of its urban metabolism without incurring accusations of cynicism. A few years later the important UN-Habitat monitoring *The Challenge of Slum*⁵⁰ was drawn up, which managed to

return an overall image of the characteristics and dimensions of the phenomenon of informal settlements, analyzing the various causes of its origins and proliferation, its structures and type-morphological variations, but also its capillarity and diffusion through case studies that indicate its presence even in areas not belonging to the so-called 'developing countries.'⁵¹ The estimates counted a total population in the informal settlements of almost one billion inhabitants already in 2001 (about 32 per cent of the total world urban population),⁵² in the following years the phenomenon has developed further, so as to constitute a situation with apocalyptic characteristics, especially for the conditions of pure survival to which its inhabitants are subjected and the precariousness, not only constructive, of the settlements.⁵³ In providing a further descriptive and illustrative contribution of the dramatic dimensional escalation of slums in recent decades, Mike Davis⁵⁴ interprets this as the urban waste product of capitalist processes in the era of globalization (widening of social inequalities in already fragile economies, impoverishment of agricultural activities, gentrification processes and lack of housing welfare policies, etc.), however the author identifies in their proliferation and diffusion also the possible formation of a critical mass capable of compromising the very system that generated them.⁵⁵ The growing attention towards informal settlements, especially the more characterized ones such as the *favelas*, become a sphere of analysis and project precisely by virtue of their unstable and critical condition. From the study of building and settlement conformations, different scales of programs can be defined starting from what are, in spite of everything, potential. The most typical institutional responses usually result in 'rehabilitation' operations, which involve the destruction of settlements and the violent uprooting of the consolidated social dynamics of local communities, their displacement, in serial building agglomerations in peripheral areas often lacking in services and urbanization works.⁵⁶ A season of analysis and projects⁵⁷ begins aimed at identifying on which deficiencies and problems the architectural discipline can intervene without radically distorting the settlement and social structure - in the awareness of the criticalities that the demolition interventions would produce - starting from the sense of community found in these places, the possibilities offered by interstitial spaces as occasions for the organization of collective places and public services, and recognizing the quality of some type-morphological characteristics.⁵⁸ From the structures with a strong formal connotation by Giancarlo Mazzanti (Bosque de la Esperanza, Bogotá); to the organization of processes and programs involving the DIY construction of URBZ and Aravena (Mumbai Contra-Ct; Elemental); to the definition of public transport infrastructure networks by Urban Think Tank (Caracas Metro Cable), or in their study on the social and material dynamics in the development of the 'vertical slum' Torre David in Caracas;⁵⁹ etc., the architectural and urban projects that take shape in fragile and poor contexts show a disciplinary trend that has further intensified especially after the outbreak of the 2008 economic crisis, when in addition to occurring a severe contraction for constructive activities - previously blown out by speculative

activities - there was a general disaffection towards the more gaudy expressions of the so-called stararchitecture, as a brazen expression of the financial system power that caused the crisis. It is a reaction that is easily observable from the theoretical and practical production that has seen a return to more simplified, reduced, 'naked' forms,⁶⁰ to a rediscovery of the frugal characteristics of vernacular architecture and of artisanal and traditional construction techniques, especially in emerging countries⁶¹ (Anna Heringer, Eriksson Furunes, Made in Earth, etc.), often carried out in association with support programs for disadvantaged communities promoted by non-governmental organizations and classified in the category of virtuous projects from a social and environmental point of view.⁶² Furthermore, the use of constructive solutions based on a reduction of bold formal complexities and a sort of 'architecture of hypo-consumption'⁶³ - fundamental in an energy-intensive sector such as construction, in an era of environmental crisis and global warming - ultimately shows the disciplinary attempt to remove the feelings of guilt accumulated in years of gratuitous spectacle and nihilisms. This is a sense of repression, in some way also symbolic or effective, in some subtractive processes recognizable both in the sobriety of the formal and spatial configurations and in the manipulation of the existing stuff 'in negative' - operative actions that reflect the artistic performances of Gordon Matta-Clark's 'Anarchitecture,' but also the raw and dissonant essentiality of informal settlements. Today it is the humble shack of the contemporary poor man, and no longer the ideal Adam's house in Paradise, that indicates the direction towards a subtractive synthesis which is not only a matter of form, but it is also the image of a world increasingly plagued by problems of scarcity and inequality:⁶⁴ 'La société pauvre exige légalité et déploie, poussée par la nécessité, une ingéniosité technique exceptionnelle. *C'est la société du monde pauvre qui est en train d'inventer l'architecture de survie.*'⁶⁵



de-growth vs scar-city

The photos taken with the use of a drone by Johnny Miller⁶⁶ eloquently present the translation, on the urbanized territory, of the extremely differentiated distribution of wealth and which in certain geographical areas shows all its exacerbated distinction. The various zenith images of some areas in South Africa, Brazil, Argentina, Tanzania, etc., exhibit an almost common layout: on the one hand, the dense, disordered, miserable horizontal distribution of the informal settlements; on the other, the rarefied, orderly and rich succession of villas and leisure facilities immersed in lush parks. What most impresses about these images is the proximity of these areas and their sharp, abrupt interruption defined by elements such as walls and vegetal margins that separate the rich part - usually developed on the gated communities model - from the poor one. Although they refer to cases of urbanization that clearly reflect the controversial dynamics of development of certain countries, these images lend themselves to being rather paradigmatic of a global condition relating to the issue of inequalities:

Global inequalities seem to be about as great today as they were at the peak of Western imperialism in the early 20th century. Indeed, the share of income presently captured by the poorest half of the world's people is about half what it was in 1820, before the great divergence between the Western countries and their colonies. In other words, there is still a long way to go to undo the global economic inequalities inherited from the very unequal organization of world production between the mid-19th and mid-20th centuries.⁶⁷



Johnny Miller, Unequal Scenes.

Defined as disparity in the levels of well-being deriving from the different availability of income, goods or access to services such as education and health, inequality therefore arises as an excessive lack - or, one could say, subtraction - of resources to a social class versus an easy, or even high, accessibility for the other class. Central notion of political economy, the concept of scarcity takes on a particular social and class connotation that can be associated with the increase of the population and the awareness of a finite world, and therefore of its limited resources. Aspects of quantitative imbalance between an increase in demand for goods and their limited availability are treated in a 'scientific' way at the end of the 18th century by the English cleric, scholar and economist Thomas Robert Malthus in his famous *An Essay on the Principle of Population*,⁶⁸ a central essay on the theory that will take his name. The economist hypothesized a future condition of famine and economic crisis mainly due to a demographic increase to which a sufficient quantity of primary goods would not be able to correspond.⁶⁹ While apparently unlimited lands, such as those of the English colonies, offered the possibility of greater development, less fertile and more dimensionally contained areas were subject to consequent cycles of shortages and pandemics which could only be remedied through birth control.⁷⁰ In the following years, other economists widely refuted its foundations: from Ralph Waldo Emerson, who underlined how the technological development offered by progress was able to optimize production and the quantity of resources, while Karl Marx attributed precisely to the progression of capitalist processes the rise of a multitude of unemployed, as the overflow produced by the surplus value was invested in the improvement of production technologies that would have caused the formation of the 'reserve army of labour' and therefore a 'relative overpopulation.'

Although from Malthus' theories would have derived others with aberrant ideological connotations - such as social Darwinism⁷¹ or eugenics⁷² - subsequently the awareness of an excessive exploitation of natural resources, the increasingly vast portion of urbanized territory occupied by productive activities and the consequent issue of environmental pollution, have reopened the debate on the problem of scarcity especially after the years of strong post-war economic expansion. Founded by scientists, humanists and entrepreneurs in April 1968 in the homonymous city, the Club of Rome tried to determine the conditions of the planet's resources and to simulate what would be the future scenarios of a world based on a system of continuous growth and exploitation. With the support of MIT researchers and the construction of a five-variable model - population growth, food production, industrialization, pollution and consumption of non-renewable resources - based on system dynamics, the text *The Limits to Growth*⁷³ showed how by maintaining the standards of development, and their consequences, with the growth of the population, the limits would be reached within the following century, with consequent famines and irreversible disasters. The goal was to find a plausible solution that considered the possibility of varying the standards trying to contain the possible consequent inequalities and the

outbreak of the energy crisis of 1973 seemed to offer tangible support to those forecasts, yet many economists rejected those prospects, considering them too catastrophic and accusing the study of failing to consider, once again, the ameliorative impact of progress. However, since the issues raised are real problems linked to development, the study has been continuously updated in the following years, moreover the recurring environmental crises and disasters have given rise to a series of further contributions to that debate including: the Bruntland report on sustainable development (1987); the 'ecological footprint' indicator, i.e. the relationship between the human consumption of natural resources and the Earth's ability to regenerate them (1996); the concept of 'planetary boundaries,' which identifies nine critical areas and their limits within which human activities do not cause irreversible damage (2009); etc.

The environmental issue, and the consequent impacts on human life, becomes a crucial issue in the public debate, above all because it is capable of generating a collective pseudoconsciousness with respect to other kinds of more circumscribed claims - class, gender, ethnicity⁷⁴ - and therefore more easily exploited by the market. Acting directly on the individualistic dimension of the consumer, capitalist production systems can easily overturn the controversial role of hyperproduction and waste of resources simply by using marketing formulas that are now widespread that act precisely on the sense of personal responsibility by means of 'eco-sustainability' labels and various 'greenwashing' formulas. In this sense, architecture offers paradigmatic and somewhat paradoxical examples, being it an integral, albeit minimal, part of one of the most impactful industries. Since the mid-seventies, building technologies have been developed aimed at optimizing the energy performance of buildings and promoting the use of natural materials such as wood, starting from the awareness of the environmental impact that the construction industry has on environmental issues.⁷⁵ Subsequently, parameters such as the carbon footprint⁷⁶ or gray energy⁷⁷ and various certifications such as LEED⁷⁸ have tried to dilute more and more the impact of construction activities, however not enough to contain the many and unsustainable speculative developments, often interrupted only by the outbreak of related economic bubbles.⁷⁹

The theme of 'sustainability,' whatever this extremely abused term means, is recurring in architecture just like in any other industry, moreover, as mentioned above, it becomes a useful marketing tool above all because it is capable of concealing how much production and current consumption is the problem and not the solution. In this perspective of pure commercial rhetoric, Bjarke Ingels tries to dilute the blame towards the waste produced by an architecture devoted to formal and material excesses and the appeals to frugality, by proposing his 'Hedonistic Sustainability,'⁸⁰ in which sustainability must not imply the acceptance of a lower standard of living but indeed, a highly performative architectural design, in terms of energy consumption, can effectively combine the reduction of building impact on the environment with a

comfortable life and with the profitable side of the investment. As an introductory speech to his second editorial bestseller, *Hot to Cold: An Odyssey of Architectural Adaption*,⁸¹ Ingels seems to recall a banal aspect - every 'good' architecture should also be articulated according to the environmental potential in which it is inserted - while updating Koolhaasian rhetoric of the surfer architect on the wave of the market, aligning it with the prevailing greenwashing.⁸² His clear positioning towards a specific sector of society, the richest one, seems to minimise the issue of sustainability by solving it through the built object performances and its ability to integrate large portions of vegetation, ignoring any other issues on the impact of large-scale luxury real estates in terms of social exclusion (gentrification). After all, it is the natural condition of the architect to flirt with those who are able to finance his/her projects, while the disciplinary impact on the world seems more linked to his mediaticity - which in itself is an economic engine - than to a massive fallout on the totality of the built environment. If it is true what Koolhaas already remarked in 2001, namely that the architect's work represents 2% of the total construction works carried out,⁸³ it could therefore be said that the scarcity referred to architecture also concerns its restricted field of action. However, crises are also moments of discernment that oblige the discipline to re-elaborate its mandate, also through a revision of some granite certainties, especially those that imply a further additive contribution in a context that is often saturated and dominated by the volatility and fragility of financial activities related to the construction sector:

There will always be physical objects and spaces that need some architect-like character to engage with it, but this zone of operation will become increasingly narrow. To continue to define our work within this part of the spectrum will just lead us to become further marginalised, irrelevant and ineffective.⁸⁴

In the aftermath of the outbreak of the financial crisis and the long effects of the Great Recession and their translation into the territory built in interrupted construction sites and business failures - together with the negative effects of the processes of deindustrialisation and/or relocation of productive sectors that determine landscapes of abandonment - the architectural discipline must necessarily confront two quantitative opposites: an excess of buildings and a scarcity of economic and material resources. If on the one hand we are witnessing a myriad of failures or downsizing of many small and medium-sized architectural firms, on the other hand many professionals propose design strategies that elaborate the concept of circular economy and decline the theme of sustainability - beyond pure improvement of energy efficiency technologies⁸⁵ - with recycling and therefore with an approach aimed at optimizing the available resources with a low-cost perspective. Since 'The most sustainable building is the one you don't build,'⁸⁶ the existing building becomes the very material for the project, in which the design contribution is eventually manifested in the qualitative but also quantitative degree of transformation, i.e. between addition and subtraction,

where by subtraction we can also mean the radical but well-considered renunciation of the physical transformative act.⁸⁷ Price knew it well enough to make it one of his sarcastic observations on the discipline,⁸⁸ however since Leon Battista Alberti decreed its status as a liberal art, architecture can be considered freed from the constraint of the 'materiality' of his work: 'Alberti [...] argued that the designer is a thinker rather than a worker, producing drawings rather than objects. The institutional magic of the drawing is precisely that it is almost nothing, the lightest of traces on the lightest of material.'⁸⁹

Anne Lacaton and Jean-Philippe Vassal seem to perfectly embody the idea of reduction in architecture as a containment of waste, often combining recycling as a process and low-cost as a strategy.⁹⁰ their famous project for the Place Léon Aucoc in Bordeaux has subtracted any hypothesis of physical transformation of a square considered flawless in its existing state, proposing a maintenance program that would preserve the main environmental qualities that any modification would have compromised. The approach of the French duo is only apparently provocative or extreme - especially considering that at the time of the project (1996) the discipline was experiencing a season of strong formal experimentation dominated by the 'Bigness' - but perfectly consistent with an architecture that seems to be the design translation of Okham's paradox 'Frustra fit per plura quod potest fieri per pauciora',⁹¹ where not doing or minimizing the building product turns out to the simplest and cheapest answer but also the most effective in welcoming a level of indeterminacy that opens the architecture to several degrees of possibility in the adaptation to variable programs: 'With their excellent capacity/cost of construction ratio, building system with frameworks and cladding are valuable because they do not determine any particular programme and can become whatever one puts inside them.'⁹² Lacaton & Vassal's production is clearly identified with the low-cost discourse⁹³ through a level of rhetoric⁹⁴ that corresponds to an image of frugality extraneous to any vernacular aesthetic mediation but indeed extremely brutalist in the recurring use of low-cost prefab concrete and steel elements, wood boards, corrugated metal and polycarbonates sheets, etc., in which any hypothesis of finish is subtracted. Their approach, recognized in 2021 with the Pritzker Prize,⁹⁵ becomes paradigmatic of an era in which recurring crises - the aftermath of the 2008 crisis, the perennial environmental and social crises, the most recent ones caused by the COVID-19 pandemic and Russo-Ukrainian war⁹⁶ - seem to reiterate the need for a frugality which, at least in its appearance, corresponds to the idea of degrowth, widespread above all through the informative work of the economist-philosopher Serge Latouche.⁹⁷

The appeal to a conscious quantitative and qualitative reduction of production and consumption apparently becomes the most plausible choice⁹⁸ in the face of the recurring emergence of the problems already illustrated by the Club of Rome reports fifty years ago, however more than providing a plausible alternative on a global level, forms attributable to the principles of degrowth take

place mostly in microeconomic areas - solidarity economy, co-housing, sharing economy, etc. - or as limited cultural and social manifestations - with phenomena such as downshifting.⁹⁹ The term also predictably enters the disciplinary discourse, where it sometimes takes on the characteristics of an umbrella term that includes various tendencies and strategies, often interdependent, such as recycling, the neo-vernacular, the prefab, the self-construction, etc.,¹⁰⁰ or as a debate which attempts to propose an architecture more coherent with the political aspect of degrowth¹⁰¹ or disconnected from the mere economicist aspect.¹⁰² However, more than tokens of resistance or alternatives capable of triggering broader virtuous processes, these approaches are driven by issues of necessity and permissible or imposed possibilities by the conjuncture:

Today we are obliged to resolve many situations with basic, provisional and even precarious concepts. Provisional is often almost synonymous with precarious, as if being provisional was an exemption from all accepted requirements. [...] The mass consumption of poor-quality, low-cost objects that abound in global commerce is changing our demands. *Provisional* should only mean the opposite of *definitive*, not of *correct*.¹⁰³



Lacaton & Vassal, Place Léon Aucoc, 1996: before and after design.

The idea that architecture is able to establish itself autonomously outside the dominant production mechanisms or even to indicate new paradigms capable of overturning a condition considered problematic for the survival of the discipline itself¹⁰⁴ is cyclically reaffirmed. The various forms of ‘asceticism,’ recycling, low-cost, even if apparently released from consumerist logic seem to inevitably fall into a fundamental contradiction, that is to reproduce, by aestheticizing them, the dynamics that at least in intentions are blamed:

Within the history of capitalism, ‘less is more’ defines the advantages of reducing the costs of production. Capitalists have always tried to obtain *more* with *less*. [...] And in an economic crisis, what capital’s austerity measures demand is that people do more with less [...]. In this context, the principle of ‘less is more’ runs the risk of becoming a cynical celebration of the ethos of austerity and budget cuts to social programmes.¹⁰⁵

new realities, new contextualisms

The theme of the architect as a 'political agent' is certainly not new and the desire to remove the profession from conditions that are limited to the fatalistic acceptance/celebration of the status quo - through disciplinary alternatives capable of re-establishing a centrality of design outside the dominant mechanisms - is cyclically part of the debate. However, this is a misunderstanding, or sometimes a naive illusion, which should be understood in its precise characteristics and limits. It is difficult for the architect to decide the 'vision of the world' that the project proposes, if and when this happens it is only when the architect identifies himself with the hegemonic class of a given moment.¹⁰⁶ The perception of a demiurge role possessed by the architect is also the result of the statute of the project and its being a projection of the designer's point of view in a future time. A time lag that sometimes entails a frustration of the premises elaborated in the design phase, when the implementation and operation of the building show a distance that therefore ends up coinciding also with that of the 'real' - after all, 'architecture is too slow to solve problems.'¹⁰⁷ It could be said that any project, once the threshold of feasibility has been exceeded, automatically enters the dimension of the tangible, thus exhausting the architectural discourse, and its value, making it consequentially coincide with the built object, however it is a materiality that is the translation of a preliminary expectation elaborated by its creator as his personal, therefore partial, interpretation of the real world.¹⁰⁸

The disciplinary relationship with the world 'out there' is always of an epistemological nature, even when deliberately aimed at defining the architectural discourse as extraneous to utopian idealisms. The path of radical rupture operated by the avant-gardes, which ended up producing a 'dispossession,' a synthesis, a subtraction, an extreme abstraction - a limit point in which the modern could not go any further, because reduced to the metalanguage that spoke of its impossible texts¹⁰⁹ - provoked finally a crisis and the emergence of new languages that referred to a type of reality that had been excluded by modernist dogmatism. In the original intentions of the main, but reluctant, proponent of a so-called postmodernist architecture Bob Venturi, there was an attempt to re-establish within the architectural debate more direct forms of communication traced in the landscape of everyday life of the popular and banal commercial strips, and a formal recovery of the languages of history.¹¹⁰ Although this seems to conflict with the anti-realism typical of postmodern theories - deriving from the well-known Nietzschean assumption that there are no facts but only interpretations¹¹¹ - the world of reality evoked both by Venturi and by his followers was to be understood more as its transfiguration, a metaphor, a deformation of those realities rendered through such a level of ambiguity that it ended up coinciding with what Ferraris defined as involuntary ideological support to populism: even if initially animated by noble emancipatory

intentions, postmodernism has run out in that realized and overturned utopia of media spectacularization.¹¹² After all, the first postmodern architects used history as a cliché, distinguishing themselves between those who artificially cloned the languages of the past and those who played with a patchwork of its fragments, reality thus ended up coinciding with its Disney simulacrum. The result was then the addition of a fake or caricatured mask, which could at times alternatively hide the lower quality of construction¹¹³ or sneakily celebrate a reactionary ideological discourse.¹¹⁴



Facade test for Huawei's European themes campus in Dongguan, 2019: the architectural schism between cladding and structure as a metaphor between interpretation and reality?

However, the disconnection between the envelope with the interior was something that apparently had its own intrinsic logic, at least according to one of the *topoi* of the Koolhaasian theory about the delirious homeland of capitalism, Manhattan.¹¹⁵ The schism, not only vertical, was therefore as valid for a decorated shed as it was for an office tower in the era of rampant globalization, in which 'reality' was made up of 'liquid modernity' and financial flows, something that

could be represented by means of formal artifices in which references to history and context, in a condition dominated by the collapse of the Berlin Wall and the 'end of history,' no longer made sense.¹¹⁶ The reality underlying such a process of extreme formal experimentation - made up of simulated collapses, shapeless blobs, apparently impossible cantilevered spaces - originated in that specific model of capitalist accumulation in which the spectacle offered by those metaphorical envelopes was functional to the reproduction of financial, real estate and mass tourism speculations, while the very evolutions of the so-called stararchitecture were allowed by technological development and by the flows of globalized societies, in a sort of 'cyclical feedback' between cultural and economic systems typical of late capitalism.¹¹⁷ No wonder then if a form of reaction to that kind of extreme formulas coincided with a sort of 'stripping,' removal and subtraction of those 'masks,' a symptom not only symbolic that demanded a *rappel à l'ordre* after the obvious connection between formal architectural excesses and the financial system that supported them and that had caused a crisis and recession of global proportions.

As already reiterated, the discipline operates in a condition of subordination from the economic structures on which the feasibility of projects depends: if there is a need for low-cost planning, it is because the economic situation - in general, in a condition of crisis - or the specific condition - in particular, in the limitations of the available budget - induce paradigm changes. This basically indicates the pragmatic adaptation 'to the downside' in terms of complexity and formal experimentation of much architecture of the post-crisis years, a return to notions such as 'vernacular' or even 'generic' which in contexts such as the Dutch - strong experimentation field at least since the nineties - take on the characteristics of a swerve: from the Superdutch¹¹⁸ era to that of the Superhumble.¹¹⁹ However, the 'generic,' in the Dutch context, would have its specific origin in Calvinist moderation:¹²⁰ Koolhaas analyzes its potential as a more authentic expression of the 'real' in his famous essay *The Generic City*¹²¹ and in many other forays into those parts of urban metabolism which counterbalance the spectacular bling architecture.¹²² The idea of a vagueness bordering on the banal seems to be in some way indebted to the architectural synthesis that Oswald Mathias Ungers had begun to undertake as early as the seventies after his move to the United States, and the German architect's project for his *Haus ohne Eigenschaften* (house without quality) made in the same year as Koolhaas's essay on the generic city is a significant coincidence, even if its rigid compositional rules, the symmetrical repetition and the rationalist rigor, made up of an extreme synthesis and reduction, differ markedly from the most of OMA's production. Instead, that kind of 'exalted rationalism' seems to have raised a generation of German architects engaged in a series of rigidly homogeneous solutions in their simplified geometries,¹²³ a non-random and rather revealing connection with Ludwig Hilberseimer's Groszstadt, where the

idea of the city consisted of the most extreme reduction of city form to the logic of urban management. [...] The diagrammatic minimalism through which Hilberseimer represented his plans is much more than a simple technique of drawing. Such graphic minimalism amounts to a highly evocative rendering of the very ethos of urbanization – its composition of systems and flows rather than places and forms. Hilberseimer's drawings suggest a complete acceptance of the main value of urbanization – that of management – yet they express this without any formal commentary.¹²⁴

The extreme geometric synthesis of the functional city at maximum capitalist efficiency hypothesized in the 1920s by the German architect¹²⁵ - developed on the indications of Georg Simmel's 'philosophy of money'¹²⁶ - finds its application today in a new phase of real estate developments that no longer seem to need the stararchitectonic phantasmagoria. This paradigm inversion would be further traceable in those built objects that fifty years ago inspired that show inaugurated by Venturian theories and which today, at the time of the transformation of consumption through digital platforms, is able to employ a radically different meaning:

Venturi's categorization of 'boxes' into ducks and decorated sheds appears old-fashioned in our over-wired society where context and address is defined by GPS and webspace. More disturbingly, it makes an unnecessary connection between the container and the contained.¹²⁷

A vagueness characterizes the buildings of the new forms of consumption: after the ducks have been removed, un-decorated sheds remain, home to the data centers and the large, hermetic - and sometimes subjected to militarized control – warehouses and sorting centers for logistics,¹²⁸ something very similar to what was prefigured in the dystopian representations of the Italian radicals Superstudio or Archizoom.¹²⁹

Thus the 'new reality' to look at takes on the characteristics of the most brutally aseptic evolution of a further phase of capitalist development in which there seems to be no longer any need for spectacular mediation. An indeterminateness that seems to characterize much of the architectural production of some more recent contemporary offices, such as the duo OFFICE Kersten Geers David Van Severen, in which residential and tertiary buildings are defined by external perimeters where hermetic and bare diaphragms often stand out similar to sheds industrial (Villa Buggenhout, 2010; Computer shop in Tielt, 2010; Weekend House in Merchtem, 2012).

In 2008, the Ghent architects edited the Belgian pavilion with an installation consisting of a diaphragm of scaffoldings covered with aluminum panels that define an external perimeter that surrounds the facade of the existing building. The interior, unadorned and occupied only by a few chairs and a myriad of confetti on the ground, evokes the title of the installation, 'After the Party,' in some way an allegorical but prophetic image of the disciplinary condition in the year that established the start of the Great Recession: after the party, only its

residues remain on the ground, in the rigor of a bare space enclosed in a hermetic envelope.



Kersten Geers David Van Severen, Villa Buggenhout, 2010; After the Party, 2008.

In particular, the context of Flanders seems to be the privileged field of an architectural language whose generic nature however differs from the globalized one narrated by Koolhaas: sometimes vernacular characters are recognized but in extremely simplified and bare forms, the recurring use of brick, in some cases interrupted by the concrete stringcourses, shows a layout similar to a clean and elegant version of the favelas buildings. Its sober configuration seems to embody the 'new realism' in an architectural sense, above all because it coincides with the moderate residential normality of the 'nebular city' typical of these areas:

More than anywhere else in Europe, this nebular city is the consequence of individual desires, middle-class presentability and small-scale capital. The foundations of this nebular city with its finely-meshed infrastructure and its unemphatic topography have totally particularised the urban aspect of Flanders.¹³⁰

Its generic specificity therefore represents a sort of radical everyday life, called *normcore* (normal + hardcore),¹³¹ to which the qualities of a form of resistance against the rules of the commercialization of icons are attributed, by means of a simple, socially accessible and only apparently trivial language.¹³² Although the term has actually already been swallowed up by the commercial world, especially in the fashion sector,¹³³ its application in the disciplinary field seems to imply something more strategically incisive in redetermining or recalibrating the dependence of architecture on the fluctuations imposed by the market, precisely because of its 'minor' dimension.¹³⁴ Jill Stoner made a manifesto of it, through the usual operation of similarity between the structures of languages and literature with those strictly spatial and architectural, adopting the treatment of 'minor literature' proposed by Deleuze and Guattari:

they locate 'minor' and 'minority' as conditions that exist at the bottoms of powers structures, yet hold an extraordinary potential for power. Emerging from within a major language, minor literature is that language intentionally impoverished, fractional, stripped of decoration and even of grammar.¹³⁵

In this sense, minor architecture does not seem to be an exercise in style aimed at elaborating a form of affected and dimensionally and qualitatively reduced reaction of the architectural form, rather this type of production is based on choices that are often guided by budget limitations, where the 'unfinished' is often an unavoidable choice. Exposed concrete frames and clay brick infills often characterize a lot of informal construction - Brazilian *favelas*, the so-called 'turbo-urbanism',¹³⁶ certain abandoned and unused abusive constructions - indicating the interruption of a construction process that would otherwise feed on finishes, decorations, improbable additions, while in the 'cultured' production the stripped construction becomes the characterizing expressive figure, defining many contemporary projects that recover the neo-brutalist lesson in extremely simplified and less emphatic terms.

Outside the Flemish context, in Spain the unfinished represents both the most eloquent image of a crisis that there has had its heaviest repercussions in the construction sector, as well as the field in which to operate and reflect on its destiny:

There are not many places on the planet where such an incredible amount of structures were built in a short period of time [...]. Their appearance in the Spanish landscape has generated a collection of unfinished buildings, which exemplify the madness of recent years [...]. Nobody knows how long these structures will remain in this unfinished state. Some of these contemporary ruins will be adapted to new uses, yet others will remain for many years frozen as useless objects in the landscape.¹³⁷

The project by HARquitectes Casa 712 in Gualba (2012) seems to derive both from that suggestive image of the crisis and from the lesson of adaptation of vernacular architecture¹³⁸ the formula for redefining a program through a succession of subtractions guided by budget limitations:¹³⁹ in a triangular lot, in which the perimeter of the house occupies the maximum possible extension, the designers had to subtract the upper floor, the garage, the second bathroom from the initial requests, also forcing a rethinking in terms of finishes and materials. The result has an austere simplicity, in which the salient feature is the use of the external infill bricks arranged with the visible holes, a solution which, although functional - as aeration of the gap between infill and load-bearing wall - evokes the oddity of a 'wrong' layout, almost a tribute to the naive quality of informal constructions.¹⁴⁰ The brick conceptually as the basic unit of construction and corresponding to a type of humble building thus becomes the expressive figure of an architecture without masks, whose raw materiality seems to coincide with that overcoming of the postmodern in an era in which very real facts such as effects of the crises seem to clear the field of pure interpretations.

The Alder House (2018) by Fuhrmann Häckler Architekten in Zurich, a sculptural volume defined by exploiting the local building regulations and the context peculiarities, presents the intermediate walls in masonry in which the mortar has not been purposely removed, 'to lend the wall a textile expression and to make the craftsmanship visible. This is a comment on the striving for perfection and the dematerialization of surfaces in contemporary aesthetics.'¹⁴¹ Here, as in Alejandro Aravena's house for a sculptor in Santiago de Chile, the use of materials and brut finishes allude to the ramshackle construction quality of the self-constructions and jerry-builders, but these are operations carried out with the intent of creating a peculiar effect, which is essentially the aestheticization of a condition of poverty produced for bourgeois and cultured contexts, something that ends up establishing an analogy with the products of fashion luxury brands that reproduce clochard-like clothes and shoes. These are therefore 'interpretations' that the architects propose by transfiguring the image of poor buildings, thus operating a sort of mystification, a kind of ambiguity not so different from that of Venturian ducks. Tracing in these manifestations the architectural correspondent of the 'new realism' therefore risks slipping into a forcing and abusive incursion¹⁴² into a foreign disciplinary field in order to find some form of legitimacy or 'consolation.'¹⁴³



The rhetoric of bricks: HArquitectes, Casa 712, 2012; Fuhrmann Häckler, Alder House, 2018.

Nonetheless, the idea of a possible connection between New Realism and the most recent trends in architecture has predictably triggered debates in the Italian academic world,¹⁴⁴ not only because the authorship of its theoretical manifesto belongs to the Turin philosopher Maurizio Ferraris,¹⁴⁵ but also because

the Italy would have a sort of 'realism' tradition in the architectural field: from post-war neo-realism, as a recovery of a popular identity freed from the classicism of the Fascist period, to the seventies with the neo-rationalism of the *Tendenza*.¹⁴⁶ However, the attribution of coincidence realism = rationalism appears somewhat problematic, as it implies that the definition of 'reality' depends on an epistemological datum, that is, as a product of thought, while reality ignores it - beings and entities exist before thought and even in the absence of it.

Given its complex nature - made up of rules, procedures but also frictions and conflicts - architecture falls into the category that Ferraris defines as 'artefacts',¹⁴⁷ a conjunction between natural objects and social objects: it exists as a document but it is also a generator of testimonies,¹⁴⁸ is therefore also a sort of hypertext in which the multiplicity of experiences - that determine its elaboration, realization, exercise, transformation and even its end - is inscribed. It is therefore difficult to objectify it as a purely ontological entity, since its existence is always mediated by epistemological associations and relationships. It then seems that architecture can be objectified only when deprived of its dimension as a social object, that is, when it is abandoned and enters an inexorable process that transforms it into ruin (when it can eventually be socially objectified *a posteriori*, as an image of residue or waste).

vers une architecture de décadence

Trying to hypothesize which reality to consider when this is dominated by one or more crises, a substantial part concerns the material repercussions in terms of waste that our production model is able to generate. Although waste is a substantial consequence in every transformative process in the history of human societies,¹⁴⁹ the evolutions of modernization have further increased their size and impact so as to generate paradoxical situations and regions afflicted by contamination, where man-made waste can sometimes become a threat to man's very survival. The size and concentration of waste often constitute the most visible feature of entire areas, so much so that they are alternatively defined as junkspace,¹⁵⁰ drosscapes¹⁵¹ or brownfields - see for example the vast American Rust Belt - thus redefining the very notion of landscape, a place now irremediably altered in the Anthropocene era. But in addition to the residues of unscheduled obsolescence, the territories are often populated with the leftovers of failed projects, adding to the degradation of industrial ruins the grotesque ghosts of absent planning or the result of perverse political and economical logics. The

abandoned structural frames of interrupted developments¹⁵² often stand out in naturalistic contexts in an arbitrary way - from this contrast comes the populist and often overused *ecomostro*¹⁵³ term - and a certain heretical interpretation would see them as the clumsy modern transposition of the ruin of a Greek temple. But moreover to the perverse fascination that such structures can arouse, the 'unfinished' also lends itself to being an architectural potential in the making,¹⁵⁴ therefore the waste is to be considered as a new land on which to operate.¹⁵⁵ After all, beyond the stereotyped canons of 'beauty,' even the ancient ruins are in themselves waste, often resulting from previous recycling operations of other waste. From this awareness, the ruin, rather than being just an abstract object to be venerated, is a testimony of the true nature of the constructive and therefore architectural process.



Le Corbusier, Tower of Shadows, 1952; Vittorio Chiaia, Massimo Napolitano, Punta Perotti, the *ecomostro* par excellence, 1995.

The ruins of antiquity speak of a distant past to which the qualities of an idealized world far away in time are attributed, so much so that even the most banal and functional buildings (minor artefacts, infrastructures, etc.) acquire the status of monuments. The various processes of subtraction imposed by the effects of time lead to extreme results on the original morphology so as to reduce the architectures to abstract masses in which it is sometimes difficult to reconstruct even their general features. This does not imply a decrease in the value of the find but rather its fetishization: even the smallest residue becomes the most authentic testimony of the past civilizations. While on the one hand the erosion has contributed to producing some distorting effects - the erroneous attribution of absolute whiteness in Greek and Roman sculptures and architectures - on the other hand it has allowed the knowledge of the most 'authentic' construction practices as they were no longer hidden behind vestments finishing and, as it has already explained above, this has somehow contributed to a further progressive conceptual subtraction in the evolutionary path of modern architecture. However, the ruin is also and above all a *memento mori* for architecture, the

warning that recalibrates the disciplinary ambition to eternity or at least the certainty of its *firmitas*. This has contributed on the one hand to the rise of an awareness of protection, conservation and museification of archaeological finds or in general of all ancient constructive manifestations worthy of being counted among the most distinguished works of humanity, on the other the technological development has allowed the elaboration of a series of protocols, technologies and ideologies on conservation and maintenance up to a sort of 'therapeutic obstinacy.' The need for preservation determines a kind of disciplinary approach with apparently paradoxical connotations for a profession conventionally associated with its formal additive contribution – 'Preservation is architecture's formless substitution'¹⁵⁶ - however the restoration project and maintenance practices are tools that provide the discipline with means, or hope, to control not only space but, in some way, time as well.

If time cannot be stopped, at least its effects can be sublimated, not only with the crystallization of the vestiges but also through their imitation or simulation. Almost parallel to the developments of modern archeology and Grands Tours, a craze for follies that reproduced portions of ancient ruins, fake destroyed medieval towers or semi-ruined castles spread in the European noble residences. Although considered a minor and tacky expression of architectural production, a sort of ruinporn¹⁵⁷ *ante litteram*, the elaboration of a fake-ruin project forced the architect to question the precarious foundations of the dilapidated buildings but also those of the Vitruvian triade and the Albertian *concinnitas*. It was essentially a form of simulated subtraction that also lent itself as an exercise in the structural stability of a configuration that went beyond the canons of symmetry and formal completeness in order to imitate the destructive effects of nature.¹⁵⁸ In the process of emulation, a form of control could therefore also be included in those phases that traditionally were outside the auspices of the project, namely the building ruination. A mixture of romanticism but also a considerable dose of realism must have inspired John Soane in foreshadowing his project for the Bank of England¹⁵⁹ even in its decaying phases. Between 1788 and 1833 the English architect continually modified and expanded the original portion of the credit institution he had in charge to extend it to an entire block, by means of additions, superfetations, extensions that defined a sort of complex patchwork of buildings with different shapes, interspersed with courtyards and patios. Mindful of the fascination triggered by his stay in Rome and the meeting with Giambattista Piranesi, Soane implemented the program increases through a sort of spatial condensation that took up the repertoire of forms and typologies of the antique Roman city and, as such, it was also necessary to foresee their probable decay: his friend, the painter Joseph Michael Gandy, depicted the bank in ruins in 1830, in an apocalyptic rendering configuration, while the reality was much more severe and less romantic as the entire structure was demolished in 1913 for the construction of the new bank headquarters.



Joseph Michael Gandy, A Bird's-eye View of the Bank of England, 1830.

The ruins therefore also lent themselves as an empirical field of possible representation of the destiny of one's works: the grandeur of the ancient Rome monuments lay not only in their dimensional, formal and constructive power but also in their effective resistance, a capacity that had inspired through the centuries not only architects but also the rulers on duty in their aspirations for omnipotence and eternity. In an attempt to re-propose the formal qualities of the architecture of ancient Greece and Rome - magnified and exasperated in a sort of 'exalted classicism' - Albert Speer conceives his Third Reich projects as the monuments that will become the solemn vestiges for the civilizations of the future, according to the principles of his *Ruinenwerttheorie* (theory of ruin value). Noting the difference between the squalor of a contemporary ruin - a dynamite-destroyed building showing rusted iron bars - and the solemn monumentality of the ancient finds, Speer proposed a construction methodology for the new buildings of Nazi Germany in accordance with their future condition of sublime magnificence:

I had a romantic drawing prepared. It showed what the reviewing stand on the Zeppelin Field would look like after generations of neglect, overgrown with ivy, its columns fallen, the walls crumbling here and there, but the outline still clearly recognizable. In Hitler's entourage this drawing was regarded as blasphemous. [...] But he himself accepted my ideas as logical and illuminating. He gave orders that in the future the important building of his Reich were to be erected in keeping with the principle of this 'law of ruins.'¹⁶⁰

Soane and Speer, in prefiguring the hypothetical state of decay of their projects, transcended from the romantic pictorial representations in which the ruin had the function of transmitting the sense of the sublime and a warning of transience; rather the ruin was understood by them as an indicator of

permanence, further underlined by the use of a classical language which at least semantically could give the illusion of a guarantee of eternity.¹⁶¹ However Soane, unlike Speer, is not interested in producing a self-referential Platonic object, rather the labyrinthine agglomeration of the Bank of England seems to reproduce the delirium of a Piranesian Campo Marzio on a smaller scale. In the drafting of his *Scenographia Campi Martii* and *Ichnographia Campi Martii antiquae urbis*, Piranesi reinvents the structure of the city of Rome focusing on one part of it, in which he condenses a phantasmagoric collection of ancient buildings starting from literary sources, memories, remembrances and traces of its ruins. The result is a collage, a *capriccio* built by analogies, a sort of process of invention but firmly consistent with the principles of development of a city increased by additions and subtractions, but also by recycling and parasitism. Piranesi could be defined as a villainous architect, who highlights the hypocrisy hidden in the rigor of the language of 'finished forms,'¹⁶² yet the stratifications (horizontal, vertical, volumetric) recall the eternal nature of urban and architectural metabolism that feeds on its continuous modifications of residues and ruins.¹⁶³



Albert Speer's Maerzfeld after destruction by dynamite demonstrates its intended effectiveness as a ruin as foreshadowed by its author.

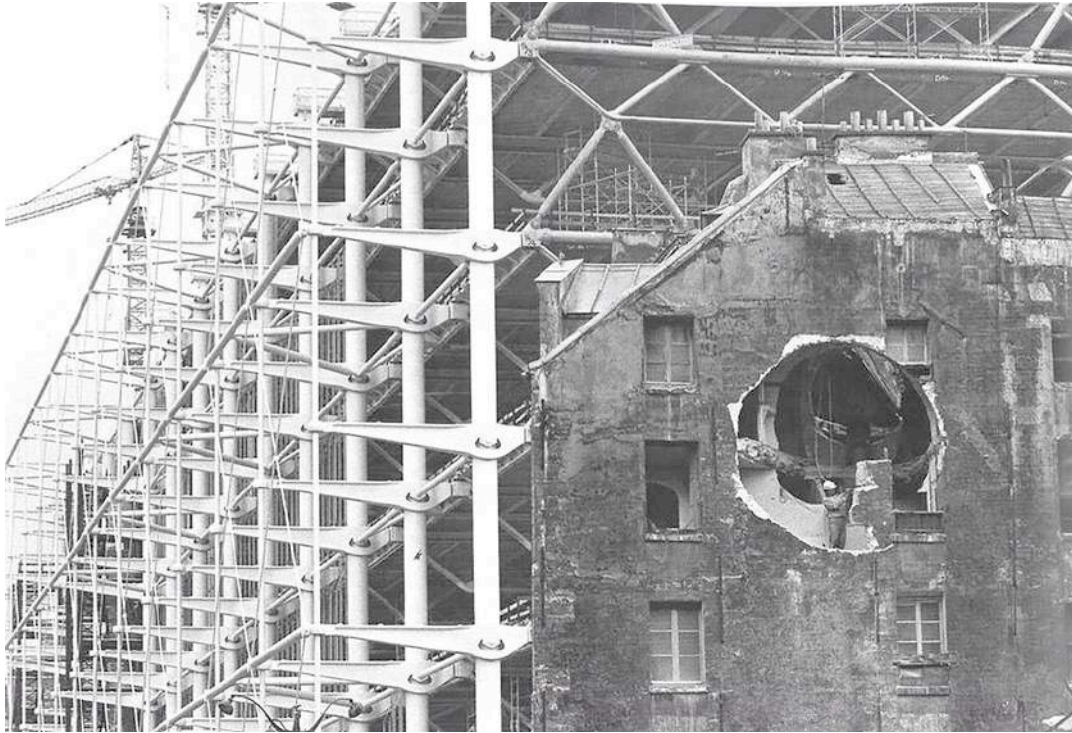
Instead, the restorer's work has often been characterized by a sort of ordering subtraction with which to 'correct' the variations induced by superfetations, or by making reconstructions ranging from simple recomposition by anastylosis to the definition of philological additions or arbitrary reconstructions, triggering questions on the authenticity of the result or the legitimacy of such operations. Against the falsification exerted by attempts to

counteract the effects of time on monuments,¹⁶⁴ John Ruskin proposed the value of ruin as an intrinsic quality of every construction, in which the processes of decay 'freed' architecture from its usefulness and purpose to transfigure it into a 'uncorrupted' object, pure manifestation of human work brought back into the laws of nature. Obviously Ruskin's controversy was not that of a fervent iconoclast who hoped for the decay of the monuments, if anything, his was as much an exhortation to a correct maintenance of the opus in its authenticity as an invitation to accept decay as a natural process that invests all things. While Simmel returned to this aspect, further remarking the ruin as nature's redemption on human artifacts,¹⁶⁵ the modernization processes began to produce an accumulation of waste in which the territory was about to be overwhelmed. At that point the ruin in the landscape was no longer just the fragment of an ancient construction but also the various objects at the service of industrial civilization that often stood out in the landscape with their abstract monumentality not mediated by any aesthetic tinsel but rather often characterized by a condition of decay and dirt. The chaos induced by the conflicting coexistence between natural and artificial systems inspired Robert Smithson the development of the concept of entropy,¹⁶⁶ especially in those parts of the territory where the 'ruins in reverse'¹⁶⁷ spread like the debris of civilization. As part of the art scene of the early seventies which looked to the artificial environment as a field of experimentation, a more markedly critical disposition characterized the work of Gordon Matta-Clark in his activity of deconstruction and subtractive manipulation of buildings:

By undoing a building there are many aspects of the social conditions against which I am gesturing. First, to open a state of enclosure which had been preconditioned not only by physical necessity but by the industry that profligates suburban and urban boxes as a context for insuring a passive, isolated consumer – a virtually captive audience.¹⁶⁸

Born to a family of artists,¹⁶⁹ after studying architecture at Cornell University, in the early seventies he formed a group of artists under the label 'Anarchitecture,' a name deriving from the conjunction of 'anarchy + architecture' which he himself coined¹⁷⁰ and which caused some ambiguities on the artistic operations of a group more oriented to artistic debates not necessarily related to the modification of the built space,¹⁷¹ however the term ended up coinciding more with Matta-Clark's work, above all because he was mainly involved in practices of deconstruction of existing buildings. The New York artist investigated the various forms of accumulations that define the built space and which can only be revealed by subtraction:

What is invisibly at play, behind a wall of floor, once exposed, becomes an active participant in a spatial drawing of the building's inner life. [...] Aspects of stratification probably interest me more than the unexpected views which are generated by the removals – not the surface, but the thin edge, the severed surface that reveals the autobiographical process of its making.¹⁷²



Gordon Matta-Clark, *Conical Intersect*, 1975.

These reflections on stratifications stemmed from his observations of the deteriorated and demolished buildings that characterized some degraded areas in New York between the 1960s and 1970s; some photographic reports of him showed the remains exposed by the destruction, e.g. his series of photographs *Walls* (1972), where the adjacent buildings to the demolished ones revealed signs and imprinted traces of disappeared perpendicular walls, pieces of wallpaper or tile residues, etc. His exploratory interventions, with camera or film camera, captured also the unfathomable features of the city's stratifications - the video *Substrait* (1976) recorded in the New York underground - or those produced by communicative social phenomena in public space - the photos of New York tags and graffiti (1973). His best known works concern interventions on abandoned buildings, where Matta-Clark was able to directly experiment with the investigations about the stratifications that made up the buildings, also making holes that offered new perceptual points of view and unprecedented perspectives (Bronx floors, 1972-1973): 'One could look down through the hole through the room below and on out through the window in that room in the street. Or, in inverse [...] Floor became window and windows served different floors.'¹⁷³

Matta-Clark's subtractive operations seem to materialize the transformation into 'pure form' that Ruskin assigned to architecture once it entered the status of ruin, anticipating that condition and making it extreme by means of radical acts aimed at undermining architectural spatial relations, the certainties of the finished form, the superficial cosmetics. For the 1975 Paris

Biennale, Matta-Clark used two 17th-century buildings - before their demolition to make way for the Center Pompidou - as material for his Conical Intersect, a spiral conical cut that created a 'parallel' dimension constituting an unprecedented Piranesian spatial cavity, an attempt to escape from the constraints of Euclidean space but also from the logics of reification which constantly reproduced the oppressions in built space. The tendency to develop artistic operations involving the residues, the rejects, the material consequences of capitalistic processes¹⁷⁴ increased at a time when the various contradictions of that system, and of the related ideological and cultural apparatuses, ended up collimating in a state of generalized crisis and in the architectural field, that crisis could only be expressed by using metaphorically, and not only, the fragments and residues, of a modern architecture that had by now exhausted its scope.¹⁷⁵ But it is perhaps the very nature of architecture, as a 'socially determined object' or 'generator of evidences,' that is made up of fragments, residues, accumulations, aspects that somehow contradict the disciplinary fixations on the myths of integrity and *concinnitas*, when instead its products, interfaced with the complexity of the real world, undergo continuous processes of modification induced both by negotiations and by conflicts that the project generates, up to the effects of a natural decay that involves all things.¹⁷⁶ Some contemporary projects try to include - then to control within design process - the principle of an architecture understood as a palimpsest and in which the subtraction turns out to be the most signifying design act. In some cases these are projects elaborated in 'as found'¹⁷⁷ objects, in which previous subtractions - interrupted 'negative' construction works - are included as part of the process, in others the subtractions are implemented *a posteriori*, to expand spaces, to generate new views or to exhibit the stratifications that make up the building genesis or the structures hidden by the finishes. Sometimes the subtractive act manifests itself by means of sudden ruptures, holes that seem the result of a collapse or a violent impact, delaminations that look like the results of a washout, etc., showing a certain debt towards the Matta-Clark's operations, the cheap inventiveness and the rough quality of poor and informal constructions, the dissonant geometries of the ruins a 'reflection on the decay and destruction of buildings not as a death sentence for architecture, but as a path to a new way for it to be in the world.'¹⁷⁸

surgical excisions

While in the last edition of the Venice Biennale architecture exhibition the curators of the German pavilion presented a very subtraction of any physical exhibition - except for the presence of the QR codes that revealed its virtual

nature¹⁷⁹ - the curatorship of this new edition of the art biennial proposes the theme of subtraction in a more (de)constructive way. Instead of using the pavilion as the container for her aesthetic thoughts, the artist Maria Eichhorn uses the container as the object of her reflection, or rather its concrete history. Her *Relocating a Structure* project should initially have involved the total dismantling of the building and its reconstruction in Germany, marking her intervention by means of the very absence of the pavilion. During the analysis of the building the existence of traces of the previous construction had emerged and that the artist highlighted with the appropriate subtraction of part of the plaster and the partial removal of the floor and digging up to the foundations. In bringing out the pre-existing part and reconstructing the dimensional and formal characteristics of the vanished pavilion, the artistic-archaeological operation highlights the predictable ideological constructive implications of the Nazi version:

Not only were the transitions between the original architecture and the extension and reconstruction work revealed, but also the shift in dimensions. While the proportions of the Bavarian Pavilion were oriented to a human scale, the 1938 additions to the side rooms, the main room, and especially the facade dwarf visitors, producing an intimidating effect.¹⁸⁰

In her surgical deconstruction, the artist highlights an architectural quantitative-qualitative paradox: she reconstructs, by subtraction, what the additions had in fact removed from view through a uniforming white mask of 'exalted classicism.' The subtraction therefore lends itself to restoring a sort of 'structural honesty' in its various multiple dimensions, by removing the censorship of the finish, the building reveals its rich material and structural qualities. The exploratory processes that are conducted on the existing building, in order of its re-functionalization or restoration, always involve a sort of archaeological work:

From the phase of internment to that of the ruin, from the deterioration impressed by succeeding different strategies of use to the beginning of the construction process, the archeologist's procedure of looking backwards into time reveals provisional sequences that must be checked in the light of the alternation of cycles of neglect and reappropriation.¹⁸¹

Whether it is the recovery of an ancient ruin or a recent building, subtraction is a necessary act as it allows to discover the alternation of stratifications, construction flaws and subsequent improvements, the presence of previous decorative apparatus or other relevant finds; the removals also give fundamental indications on the transformative possibilities of the construction and that the coatings often hide under layers of ambiguity. When not used for the purposes of archaeological unveiling of the finds, subtractive processes are therefore part of almost all construction site activities in the context of re-functionalization. It is a de-constructive activity that implies a subsequent phase, purely constructive, therefore additive (modifications of the finishes, new volumes or redefinition of the geometries, re-cladding, etc.). If this type of

‘negative’ constructive manipulation is so necessary and revealing, it can therefore become both the interruption of a process that opens up to other future possibilities as well as its ultimate aesthetical goal. But this easily lends itself to a broader consideration of the role of construction activities in light of the issues of scarcity of resources and a desirable containment of wastefulness.



Maria Eichhorn, Relocating a Structure, 2022.

In their well-established and well-known ability to carry out low-cost projects - with cheap materials and flexible spaces to better accommodate variable uses - Lacaton & Vassal decline the concept of building recycling by re-proposing the ‘good sense,’ already submitted with the Place Leon Aucoc project, doing almost nothing in their redevelopment for the Parisian Palais de Tokyo museum. Built in 1937 for the Universal Exhibition of Art and Technology in Paris, in later years the building became home to various museum institutions until it was abandoned to an uncertain fate. When in 1999 the Ministry of Culture decided to use it as a venue for contemporary art exhibitions and events, Lacaton

& Vassal noted as a quality to be preserved not only the enormous internal spaces,¹⁸² but also the character of 'artificial ruin' produced by the various (de)construction works that had removed some parts of the coatings and modified some spaces that remained there as evidence of an interrupted constructive-destructive process.



Lacaton & Vassal, Palais de Tokyo, 2001-2012.

The intervention proposed by the French architects was not to make further subtractions but rather, their contribution included the safety of some environments through little additions¹⁸³ - after all it is also the duality of the construction process: if each addition necessarily involves some subtraction this must necessarily be true even for the opposite - only the strictly necessary allowed by the tightness of a budget that has turned out to be more a resource than a limit.¹⁸⁴ The resemblance to a ruin or an informal space, often associated with a 'squat for art,' is its most distinctive feature, - thanks also to the contrast it creates with the white fascist classicism of the exterior - even if it is only the consequence of a choice that was guided more by necessity than by a 'fetishization' of decay:

In our project, we never adopted an esthetic position on the unfinished or the run-down. On the contrary, we repaired and then added just what was lacking to put the venue, which was already very surprising in itself, back in service. We felt that the existing parts, as they appeared, were part of the whole and that there was no reason to conceal them. [...] In architecture, the esthetic is important but it's a consequence of the working process. It's an outcome. And if there exists an esthetic in the Palais de Tokyo, it's certainly not that of the walls left in their natural state. It's rather the esthetic that arises from the totality of the design work and now from its use.¹⁸⁵

The project took place in two phases - the first in 2001, involving 8000 square meters, the second in 2012 on an area of 14000 square meters - expanding the exhibition space also in terms of greater flexibility, a feature that therefore allowed the most wide possibilities for contemporary artistic expression:

The most powerful neutrality we could offer artists are walls that don't exist; in other words, walls that are perpetually evolving. That architecture introduces excesses that make it possible to have a discussion or negotiation and an explanation that exist nowhere else.¹⁸⁶

The informality of this space lies more in its ability to interrupt the fixed structure of traditional exhibition spaces, often set on a rigid separation between the work of art and the spectator. The fluidity granted to artistic expressions is also understood as greater adaptability in the use of the environments by visitors, a type of free interaction that for the French duo is a contemporary declination of Cedric Price's Fun Palace: 'est la référence et l'enjeu sur lesquels nous nous appuyons. Un contenant ouvert et intelligent, qui fabrique la liberté d'usage, la flexibilité, le renouvellement des projets sans conformisme.'¹⁸⁷

The decadent aspect of the Palais' interiors - even though it is only an *objet trouvé*, an 'as found' condition - has clearly also determined its success, an image that seems in itself a work of Arte Povera. Its resonance finds its reasons in an era in which the passion for contemporary ruins has become a sort of fashion that rages above all in digital platforms, becoming the aesthetic code in contexts such as bars, cafes, restaurants, etc. , but also luxury shops. Definitely less 'radical' than the Palais de Tokyo, OMA's intervention for the Fondaco dei Tedeschi in Venice highlights the layers of interventions that have changed its original structure over the centuries and that have transformed a sixteenth-century building - which is the reconstruction of a previous building that was destroyed - in a 'historical palimpsest of modern substance.'¹⁸⁸ The project, developed in its initial phases almost simultaneously with the drafting of *Cronocaos*, underlines the contradictory conservationist prescriptions that limit the transformations of the existing heritage: the juridical status of monument forbade any hypothesis of change, however the original Renaissance building had undergone a series of alterations, subtractions, and stratifications in the following centuries such as to make the theme of 'inviolable authenticity' a bogus burden.



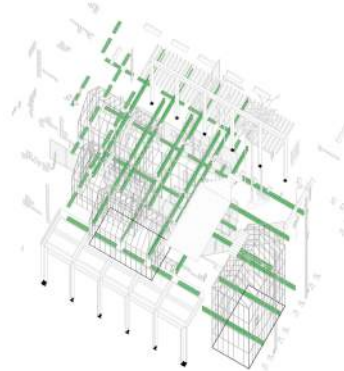
OMA, Fondaco dei Tedeschi, 2009.

The OMA's project negotiated a series of substantial additions and modifications of some parts, thus managing to transform the listed building into a luxurious urban shopping center, paying homage to its intrinsic quality where 'Each intervention is conceived as an excavation through the existing mass, liberating new perspectives and unveiling the real substance of the building to its visitors, as an accumulation of authenticities.'¹⁸⁹ The requirements envisaged that in the shopping center the space of the atrium became a public square - the most 'authentically sixteenth-century' side - while the perimeter spaces could be articulated with the multiplicity of material and structural elements (concrete beams and pillars, reticular beams, etc.) of modern interventions, together with the 'technology of the fantastic' that would have emphasized them: the succession of escalators in the vicinity of bare walls with a brutalist appearance and in which a delirious Piranesian space comes to life; the transparent elevators in which to contemplate the actual temporal-material scanning of the building.¹⁹⁰ The space of 'archaeological subtraction' does not involve the entire building and the raw parts alternate with finishes in brass, woods and velvets, in a collision of contrasts and paradoxes between ruin/new, prosaic/luxurious, which further underlines the Rossi's concept on *locus*,

according to which buildings architecturally meaningful are able to accommodate in time the most diverse functional changes, taking advantage of the successive layers and making this ability the device which ensures their permanence [that is] a positively amoral character of architecture.¹⁹¹

Partial removals are therefore able to reveal questions about the disciplinary nature also because they offer themselves as a field for further processes, whether additive or subtractive, thus making architecture as an ‘open work,’ that is when ‘every reception of a work of art is both an interpretation and a performance of it, because in every reception the work takes on a fresh perspective for itself.’¹⁹² This characteristic of openness, transposed into the architectural field, inspired the project by Architecten De Vylder Vinck Taillieu - also due to the very nature of the place - for the Sint-Jozef building on the campus of the Caritas psychiatric clinic in Melle, East Flanders. The building, begun in 1908, is part of a complex of separate structures surrounded by a park, some over the years have been demolished and replaced by more modern structures, others completely abandoned, making the campus lose its unified character. The same fate should have led to the demolition of the Sint-Jozef when the new director entrusted the drafting of a masterplan to the BAVO research group in 2014: after a first draft, the group decided not to tear down the building and to propose an open programming, without establishing rigid functions, through a competition. The winning proposal by De Vylder Vinck Taillieu,¹⁹³ also confronted with budget limitations, involved the open participation of the clinic staff and patients, offering the possibility of experiencing the building in a freer way and not tied to specific programs. In the *objet trouvé*, already partially demolished, the architects make further subtractions in order to ‘free up’ the building more, emphasizing the open and flexible character of the structure making it coincide with its possible therapeutic quality:

A proposal was made to keep the building as it was, halfway demolition. The roof was already gone. All mineral materials were removed. The ground floor became gravel, to let the rain out. The old floors were perforated to do the same. The windows on the ground floor were lowered to the ground. The floor between the basement and ground floor was removed. The building has been fully opened, now. [...] An invitation to think differently. About therapy. About clinics. About care.¹⁹⁴



Architecten De Vylder Vinck Taillieu, Caritas, 2016: image of the interior and isometric drawing with the few additive interventions highlighted.

Also in this case the additive interventions are minimal and to be understood more as repairs than renovations - green-painted steel consolidation beams, parapets, the loggia at the entrance - and as light and reversible elements - the 'glass rooms,' i.e. the greenhouses. The fragile provisional nature led to subsequent changes - both for the problem of further deterioration of the wooden floors and for issues related to patient safety - which would have frustrated the expectations of a 'conventional' project, while in this case the variations in course and in the future are perfectly consistent with the type of open design proposed: 'The building's physical structure was left intact, avoiding irreversible interventions to leave open the possibility of reconstruction one day.'¹⁹⁵

The elaboration of a project whose quality lies both in the opening to the flexibility of its modifications, and in being able to elaborate it in a continuous process of negotiation between the needs of the client and users and the restrictions of the funds available for its transformation, represents the consolidated ability of the Flemish office to work easily with what would apparently represent a limit to disciplinary creativity:

Scarcity as a momentum in economy. A momentum of our time. Imagination and making here come closer than ever before. They have to. They should. To consider bravoure as ambition is not only possible. It is necessary. Because in times of scarcity, imagination is in danger. While imagination is precisely the chance to find opportunities in scarcity. BRAVOURE through SCARCITY is BEAUTY.¹⁹⁶

The *Bravoure* manifesto, proposed for the 15th architecture exhibition at the Venice Biennale, is an exhibition of the skills of Flemish inventiveness in proposing an architecture with its intrinsic qualities precisely because, as already described above, it is antinomic to the spectacularity, to the free and environmentally and economically unsustainable refinement. What most distinguishes the exhibition is the arrangement of the materials: the projects are also illustrated by means of full-scale maquettes which are in reality details, fragments, pieces of furniture and systems, pillars and canopies, all then summarized by the Filip Dujardin's photorealistic *capricci*. This aspect characterizes part of Flemish production, especially that of De Vylder Vinck Taillieu, and which manifests a tendency capable of undermining the misleading attribution of 'ordinary' or 'generic' that has often been attributed to the architectural production of Flanders. The theme of the fragment recurs in their production, often as part of pre-existing building objects or as gaps left by appropriate subtractive actions:

How little does one need to make a cover? Consider how little it takes. That's what it means to confront the problem in the way we so much like to do. Verzameld Werk: turning the doors around and cutting through the wall ought to suffice. Nothing else. House S in Leeuw-SP: excavating and removing floors should be enough to translate the desire for space into a desire for air, rather than into floor area. Cast-iron columns which, truncated, become part of a flat lattice girder that spans a space without support.¹⁹⁷



Artistic operations as design tools I: Gordon Matta-Clark, *Bronx Walls*, 1973 (left); Architecten De Vylder Vinck Taillieu, *Verzameld Werk*, 2000 (right).



Artistic operations as design tools II: Gordon Matta-Clark, *Splitting*, 1974 (left); DVVT, *Kouter II*, 2013 (center and right).

In their operations of removal, fragmentation and re-combining it is easy to come across some reminiscence of Matta-Clark's artistic operations, which in the architectural design discourse become tools capable of producing dissonant and paradoxical effects, as often happens when the subtractions reveal the logics of the architectural palimpsests.¹⁹⁸ Thus, to give light to the rooms of an old house in the countryside, their project *Kouter II* (2013) opens a cut in the longitudinal wall into which a V-shaped glass window can enter, while further natural internal lighting is allowed by seemingly random holes in the slab, recalling both *Splitting* (1974) and *Bronx Walls* (1973). This series of removals by the American artist seem to have clearly inspired, among many others, the *Verzameld Werk* project (2000) and the more recent *Twiggy* (2012), a clothing store in Ghent in a listed building. Prescriptions and constraints have in any case made it possible to modify the building with solutions that are always the result of de-constructive actions: the staircase on the back that looks like the diagonal extrusion of a fragment of the facade, the removal of wallpaper and the peeling walls such as 'decoration,' the subtraction of a slab, to expand the interiors, in which the trace and the elements leaning against the wall remain evident. The architects don't just denude existing architecture as a purely archaeological work, they manipulate its elements by reconfiguring its layout:

A shop in an old mansion. A shop over all the stories. From the basement until the top floor. Removing a floor enough to let everything together be a retail store.

Returning the back façade enough to unite all the floors by a simple staircase.
Removing all the unnecessary decoration. To celebrate the beautiful traces of the past.
That's it: just enough to make the difference.¹⁹⁹



Artistic operations as design tools III: Gordon Matta Clark, Bronx Walls, 1972-1973 (left); Architecten De Vylder Vinck Taillieu, Twigg, 2012 (right).

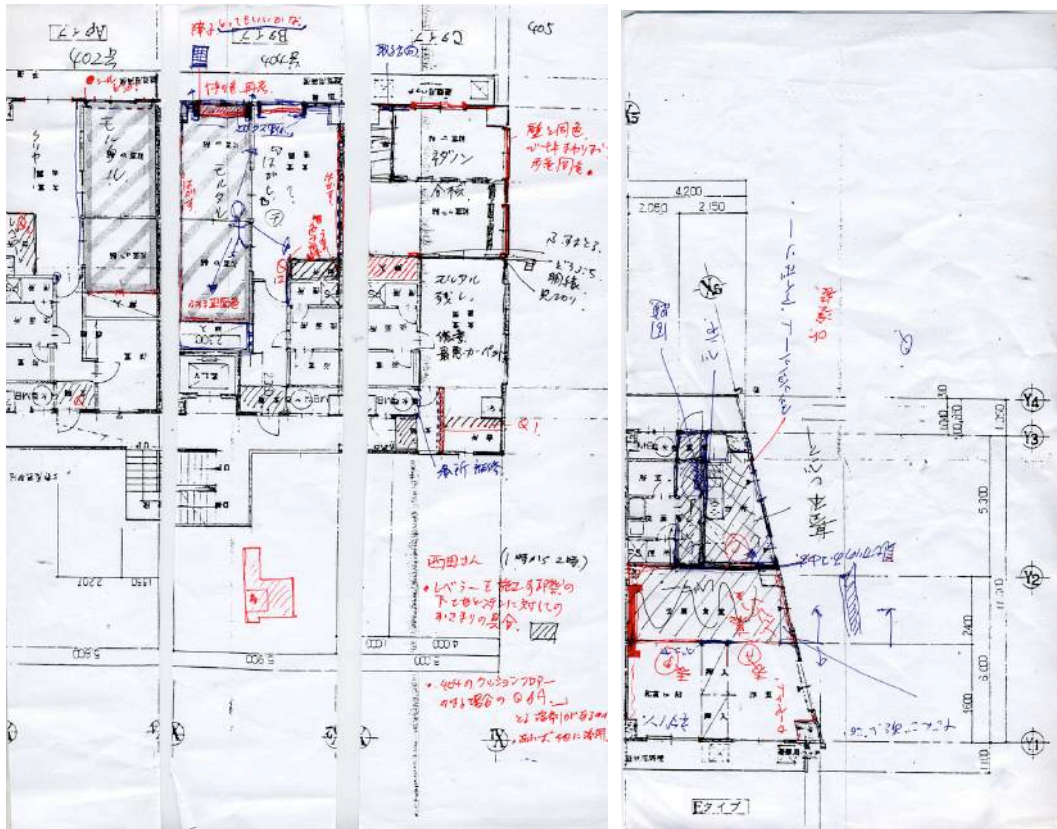
Subtractive operations are often widespread in the domestic environment, considered necessary especially in those living contexts created according to *existenzminimum* criteria in which the internal organization has been serially and rigidly compartmentalized according to a functionalist order of domestic life. The rigidity of this housing model was already contested starting after the World War II and especially in the 1960s, with radical proposals ranging from the flexibility of the domestic space to its total questioning. Lofts began to be widespread in the artistic and countercultural fields due to their cheapness, space in abundance and greater freedom in use and transformation, often obtained from former warehouses or industrial laboratories and whose material and aesthetic peculiarities were further appreciated as elements of informality. Their popularity then ended up becoming a luxury product, thus subtracting its original squat character for penniless artists, often accompanied by operations of pure gentrification. But the 'freed' space continues to be desired in the most disparate ways as it corresponds more to the social variables that make the definition of 'typical user' meaningless. The domestic space thus becomes the privileged place

in which to operate a form of liberation from spatial and therefore political constraints:

Estrangement is not conventionally nomadic; rather, it takes place largely in situ, as existing buildings and constructions respond to desires for escape, for blurred boundaries, and for collective expression. The stripping away of excess may be literal, as minor architectures employ subtractive mechanisms that dismantle the overwrought, manufactured, 'meaningful' objects of culture through political force.²⁰⁰

In their design activity, the Japanese Schemata Architects have often faced the limitations imposed by scarce budgets for spaces to be reconfigured, sometimes this negotiation has produced choices in which 'doing almost nothing' has turned out to be the best strategy, that is to redefine the disciplinary and planning parameters in which the additive and formal contributions are close to zero. This approach implies a greater attention on the qualities of the 'as found' object in order to highlight its potentialities that a too invasive and transformative project could compromise, however it is also an open type of design and therefore capable of always accommodating further transformations, whether additive or subtractive. In having to configure the space in which their studio is based, the Japanese architects initially sought a cheap solution capable of uniforming the interiors for the art gallery with which they shared the rooms. The initial choice was simply to paint everything in white, probably with the idea of 'neutralizing' the surrounding space and highlighting the works on display, while the owner of the gallery rejected that idea by emphasizing the material quality of the rough OSB panels.

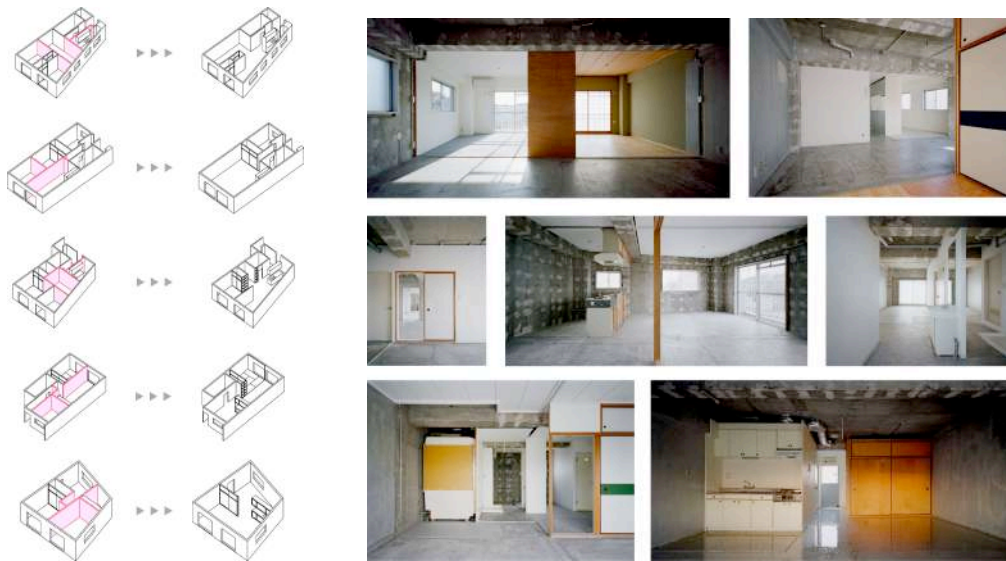
This apparently insignificant change of perspective forced the architects to develop a different way of approaching the design process: 'The budget limitation forced us to concentrate on choosing the minimum necessities rather than designing. As a result, this "featurless" space – or one could say a space ready to undertake any features – emerged.'²⁰¹ One of their best known projects and usually counted among the examples of contemporary architectural subtraction, is the intervention in a condominium in Sayama (2008), in the far northwest of Tokyo. The building was built in the 1970s, in a period of economic and demographic expansion, in which the apartments were set up according to the housing strategy called 'nLDK' - where *n* indicates the number of bedrooms and LDK are living room, dining room and kitchen - with which to provide the maximum number of individual rooms within the housing units, at the lowest possible cost and space. Also in this case the design choices were guided both by a very limited budget availability and by a client who triggered a different perspective: when he saw their studio he exclaimed 'You architects are not fair! You design such a cool space for yourself at a low cost – but, when it comes to designing for others, it suddenly becomes fancy and expensive. I want you to design this way.'²⁰²



Schemata Architects, sketches of the subtractive options in the transformation process in Sayama Flat apartments.

Given the peripheral, and therefore unattractive, location, the budget was so tight that it barely covered the demolition costs. Combining this with the client's input, the architects began to assume a design by inversion: operating a series of subtractive operations to be performed in each individual apartment, improvising the layout without having previously designed it. Some finishes were spared, as well as some kitchen furniture, the result was a new internal spatiality, different for each apartment, in which a sort of reverse craftsmanship was celebrated, in a quantitative and not a qualitative meaning. This type of intervention, by giving more space through subtractive interventions and by dismantling the rigidity of 'nLDK' model, also underlines the quality of the subtractive act itself, in revealing the features of the raw materials and in opening the possibilities to the most diverse configurations guided by a DIY approach.

'Designing by subtraction' eventually became one of our standard methods. There are two aspects in the concept of 'subtraction,' one signifies the act of reduction or cutting down elements to the minimum in traditional Japanese arts [...] the term 'the culture of subtraction' is often used to describe the minimalistic Japanese culture, which is sometimes related to the Modernist expression. [...] Another aspect of 'subtraction,' such as the cases of Sayama Flat, is different [...]. It is a method of removing some of the components to create a 'void' which serves as a medium to recompose the relationship of the existing components.²⁰³



Schemata Architects, Sayama Flat, 2008: Isometric drawings highlighting the interior partitions removed in the various housing types and images of the results.

The questioning of some consolidated models of domestic space is also practiced through the ability to derive, between the legislative interstices, the areas for operational possibilities,²⁰⁴ above all as regards the project on existing structures. Brandhuber+, when not committed to creating new structures, transform sometimes banal building objects into new opportunities for design experimentation through appropriate reductive actions: ‘Legalising buildings, reducing the structure, and opening up façades – these are measures with which empty buildings in risk of demolition can be made usable again.’²⁰⁵



Brandhuber+, Guardia di Finanza, 2017.

A 1970s office of the Italian financial police (Guardia di Finanza) was paradoxically abandoned as it exceeded the maximum height limit. A few years later Brandlhuber+ recycled it to turn it into a villa (2017), also given the environmental qualities in which the building is inserted, repairing some problems due to a soft ground and making a series of internal subtractions - non-load-bearing walls - and external finishes bringing out the material qualities of both the concrete frame and the tuff infill. Together with Casa Storta - a small house tilted after a land subsidence in which the architects hypothesize an internal intervention made of a horizontal slab - Brandlhuber+ propose a trajectory to rethink very pragmatically about possible uses of that unfinished or illegal building material that is widespread in Sicily and elsewhere.

The former GDR Ernst Lück lingerie factory in the outskirts of Berlin was an abandoned building of 500 square meters that was not particularly attractive not only for its rather banal appearance but also for a series of economic and legislative constraints: in addition to the excessive demolition costs, the local regulation established that in case of tearing down it would be possible to rebuild only 20% of the living space, therefore 100 square meters. The decision to recycle the building, as a residence and professional studio (2015), however, required a series of interventions that took place through subtractive changes: the gable roof, which contained asbestos, was replaced by a flat roof, all internal non load-bearing walls have been eliminated while a central structural core that supports the new roof contains the services, such as the kitchen and bathrooms. This also made possible to reconfigure the windows on the upper floor, on both short sides, so as to allow a panoramic view of the lake below and the forest behind the house, and which clearly denote the image of the building: four large holes in the wall, whose contours have not been regulated by finishing interventions but left purposely uneven, thus underlining the expressive side of the subtractive gesture performed as a collective work by a group of friends.

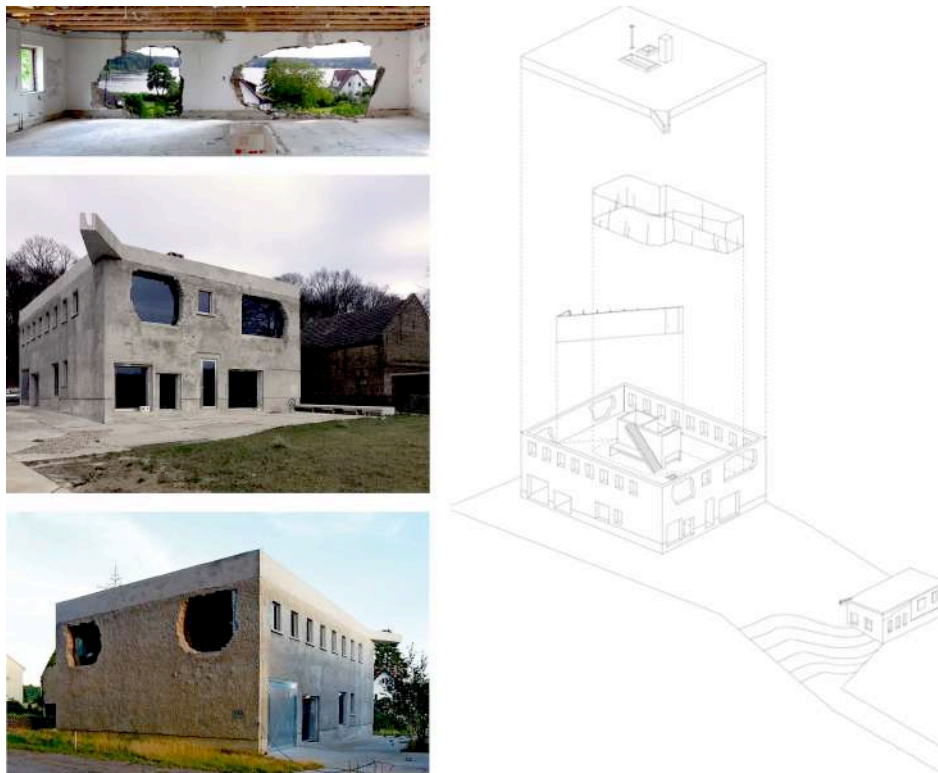


Michel Piccoli in *Themroc* (1973) is the inspiration for the architectural performances of the openings in Antivilla, 2015.

In order to highlight the aspect of that liberating destruction, the project was presented with images from the anarchist film by Claude Faraldo *Themroc* (1973), in which the protagonist transforms, as an extreme act of rebellion, his

house into a cave by demolishing the contour of a window and opening a huge hole in the wall. The informal character of the project, emphasized by the name Antivilla - whose prefix seems to recall the use made of it by Price (anti-architect, anti-architecture) - is extremely conferred by the enormous free space that, according to the seasons, is compartmentalized through the use of curtains in smaller climatic zones, respecting however the German prescriptions in terms of energy efficiency in an alternative way. In this way, the architects were able to avoid using insulation on the external perimeter walls and to cover them only with grey lime sludge, giving the previously plastered brick walls an artificially brutalist aspect.²⁰⁶ Given its general configuration, almost the expressionist version of a post-industrial ruin in which bureaucratic construction rules are subverted, Antivilla seems to offer new design paradigms, once again as a minor architecture apparently capable of undermining the controversies in the construction sector:

Gaping holes were hacked through the walls [...], proving that it is possible to have a lakeview home without it having to be a new-build villa and even without thermal insulation. [...] In the past, such solutions may have sparked accusations of improper building [...]. However, with growing socio-political criticism of the Bilbao effect and environmental pollution by the construction industry, the work of Brandlhuber+ and their collaborators reached an entirely new status. Their buildings are recognised both as resistance and progress in the face of a rogue real estate industry.²⁰⁷



Brandlhuber+, Antivilla, 2015: interior view of the site with breaches; exterior views; exploded view.

However, if there is a possible subversive character,²⁰⁸ this has been tempered by the success of its image, immediately swallowed up by the advertising industry as a background for some commercials. After all, the fascination with the scraps of modernity or with architectures that seem such is now so widespread that it is in itself a new production of icons. However, it is a type of cheap iconicity, in which the relevant aspect of ruin is sometimes given by subtractive design modifications carried out through ‘traumatic’ gestures on existing buildings. Although this kind of practices are suitable in contexts of industrial architectures, where often the buildings are of poor formal and material quality and sufficiently ‘generic’ to be easily redefined by subtractive operations, they can also be found in more historical and vernacular environments, in this case the manipulative-subtractive aspect manages to undermine the sacredness and the cloying side of the picturesque.



Carles Oliver, St. Miquel 19, 2016.

Carles Oliver's projects offer variations of vernacular architecture with a minimal and frugal essentiality, with the aim of proposing housing models with very low cost and low environmental impact. In his St. Miquel redevelopment project, in Palma de Majorca (2016), the architect worked with an extremely low budget, also trying to produce a housing model that was able to respond to economic needs for the inhabitants in an increasingly gentrified context and invaded by the tourist presence. Of the initial available amount of € 18,000 € 12,000 was used for the improvement of energy efficiency - roof insulation and biomass stove - while the remaining money available was used for the internal renovation, where the various subtractions of the passages stand out, made here

as fractures in the walls that highlight the stratifications of the historic building. The project was carried out according to three programmatic points:

1. NOT TO DO, as the best way to do.
2. DOMESTIC ARCHEOLOGY, to learn how economy of means has built our cities for centuries.
3. BACK TO ARCH, as a way to open spaces without adding any kind of new material. To open a door is not the same than to build a door.²⁰⁹

Much contemporary so-called 'minor' architecture seems to include today and more and more frequently, in the transformative processes of existing spaces, both the aesthetics of the ruin and the relevant signs of demolition as significant elements of the architectural discourse. Windows obtained from large breaches in the wall, demolished walls of which traces and residues are left on the other remaining walls, peeling and degraded walls as a 'decorative apparatus' of the facade, garden follies which are residues of industrial ruins, slabs partially demolished as if they had suffered a sudden collapse, etc.

The enhancement of the subtractive effects produced by degradation or by previous interrupted demolitions or even as intentional design executions seem paradoxical jokes, especially if we consider that conventionally the work on the existing building is defined as 'refurbishment,' or 'work such as painting, repairing, and cleaning that is done to make a building look new again.'²¹⁰ Beyond a certain perverse passion for ruin that these projects exhibit, the work of subtraction thus conducted also arises as a critical reflection on some constructive and therefore disciplinary issues, questioning the contemporary hyper-stratification as the only solution to energy efficiency, a certain cold and aseptic minimalism of much of today's corporate architecture, the idea that the building as an entity to be kept intact and inviolable.

It is therefore uncertain whether these kinds of design approaches are more a symptom of the crisis - inside and outside the discipline - an eloquent representation of it or some plausible response to it, however, the work on existing construction carried out between finding the enhancement of a degraded building product or obtaining it through destructive works sometimes seems more like a smug game than a choice 'forced' by budget constraints. Side considerations cannot be avoided: with respect to the issue of scarcity, subtraction often takes place in contexts of economic and material abundance; the residues of subtraction produce additional waste that is not always recyclable, although this happens in any building context involving physical transformations; degradation and breaches return a distorted image of misery and disaster that risks being interpreted as blatant cynicism with respect to those forced to live in a slum or under bombs. However, moral or self-righteous interpretations about architecture are a sterile exercise induced by a basic misunderstanding of its communicative-representative scope: the discipline is

not capable of resolving the world's contradictions, it only has the skill to make them much more apparent.



1 Workment, Eert Mangwon Cafe, 2020; 2 Suppose Design Office, Hotel Sou, 2020; 3 BLAF Architekten, TMSN House, 2018; 4 Kilo / Honc, Byt, 2021; 5 Helga Blocksdorf Architektur, Rieckshof, 2021; 6 GAFPA, House Gentbrugge, 2015; 7 Giancarlo Gareiss, Textil und Modecenter, 2020.

¹ Lotus, 143, August 2010, 'Favelas, Learning from.'

² Venturi, R., D. Scott Brown, S. Izenour (1972) *Learning From Las Vegas: The Forgotten Symbolism of Architectural Form*, Cambridge MA: The MIT Press.

³ Despite the decline in the number of populations living in what are generically defined as 'slums' - recorded between 2000 and 2014, from 28 percent to 23 percent - , there was a further increase thereafter and the proportion has risen until 23.5 percent. The estimates calculate that populations living in informal settlements have grown to over one billion, of which around 80 percent are spread across three regions: Eastern and South-Eastern Asia (370 million), sub-Saharan Africa (238 million) and Central and Southern Asia (227 million). The United Nations estimates that the number of these populations could grow to 3 billion by 2030. United Nations (2017) *Progress towards the Sustainable Development Goals*, New York, <https://unstats.un.org/sdgs/report/2017> (2.5.2020).

⁴ The Swiss philosopher has dealt with the theme in various works, including the essays *Discours sur les sciences et les arts* (1750), *Discours sur l'origine et les fondements de l'inégalité parmi les hommes* (1755), *Du contrat social: ou principes du droit politique* (1762) and the pedagogical novel *Émile ou de l'éducation* (1762).

⁵ The first of a long series to deal with the theme is obviously Vitruvius in *Book II* of his *De architectura*.

⁶ Laugier, M. A. (1755) *Essai sur l'architecture*, Eng. ed. *An Essay on Architecture*, London: T. Osborne and Shipton, pp. 11-12.

⁷ Francesco Milizia was even more radical, thanks to the Carlo Lodoli's rationalist lessons, in his *Principj di architettura civile* (1781). See also his vigorous attack on the Baroque in the pages of his *Dizionario delle belle arti del disegno* (1797).

⁸ This aspect is particularly akin to the utilitarian discourse. Laugier's description on the origin of the primitive hut, rendered in the form of a short novel in the first pages of his book, tells about a man driven by the sole need to build a shelter, there is no trace of communication and social life, no encampments or villages. The construction, therefore the architecture, seems to coincide only with individual needs. If, on the one hand, Laugier's theory seems to adhere to the idea that Rousseau attributed to the 'good savage' - that is, an individual abstracted from any type of society, even primitive, because in any case it is a harbinger of 'corruption' - on the other hand seems to have inspired the narrative that Adam Smith would later use in his *Wealth of Nations* (1776) as a description of the origin of the exchange: 'In both of these un-innocent fables, primitives

are anything but primitive: their strictly capitalistic behaviour implies a very precise agenda for contemporary societies.’ *What’s Wrong with the Primitive Hut?*, San Rocco call for paper, <https://www.sanrocco.info/callforpaper/what-s-wrong-with-the-primitive-hut> (4.5.2021). See also the distinction that Alexander makes between distinct unself-conscious and self-conscious cultures. In the case of the ‘conscious’ builder, that is, the architect: ‘The form-maker’s assertion of his individuality is an important feature of selfconsciousness. Think of the willful forms of our own limelight-bound architects. The individual, since his livelihood depend on the reputation he achieves, is anxious to distinguish himself from his fellow architects [...] And the selfconscious architect’s individualism is not entirely willful either. It is a natural consequence of a man’s decision to devote his life exclusively to the one activity called “architecture”.’ The act of building is therefore presented as an individual necessity even when it is produced within an advanced society, no longer as a refuge for oneself but as a manifestation of personal prestige. Alexander, C. (1964) *Notes on the Synthesis of Form*, Cambridge, MA: Harvard University Press, pp. 57-58.

⁹ ‘The early theorists of architecture [...] made rather cursory reference to the connection between the origins of architecture and its principles. For Laugier origins had unique authority.’ Rikwert, J. (1981) *On Adam’s House in Paradise: The Idea of the Primitive Hut in Architectural History*, Cambridge MA, London: The MIT Press, p. 44.

¹⁰ ‘La forma clásica ejercía además una totalizadora e intentaba recuperar una dimensión universal al convertirse en el lenguaje común a todos los estilos y épocas. Hoy se puede decir que ha desaparecido, no sólo una estructura lingüística absoluta y comprensible, sino la conciencia de la posibilidad de su existencia. Las formas geométricas o las esayadas por la vanguardias artísticas no fueron sino sustitutos a esta primitiva estructura desaparecida.’ Soriano, F. (2004) *Sin_tesis*, Barcelona: Gustavo Gili, p. 50.

¹¹ Semper, G. (1851), *Die vier Elemente der Baukunst: ein Beitrag zur vergleichenden Baukunde*, Braunschweig: Vieweg.

¹² ‘The Papuan tattoos his skin, his boat, his paddles, in short everything he can lay hands on. He is not a criminal. The modern man who tattoos himself is either a criminal or a degenerate. There are prisons in which eighty per cent of the inmates show tattoos. The tattooed who are not in prison are latent criminals or degenerate aristocrats. If someone who is tattooed dies at liberty, it means he has died a few years before committing a murder.’ Loos, A. (1908) *Ornament und Verbrechen*, Eng. ed. *Ornament and Crime* in Conrads, U. (ed. 1975) *Programs and Manifestos on 20th-Century Architecture*, Cambridge MA; London: The MIT Press, p. 19. See also his short text ‘Architektur,’ in which Loos addresses his controversy to his colleagues: ‘how is it that an architect, whether good or bad, can defile the lake? Farmers do not this [...]. They do things differently.’ In id., Eng ed. (2017) *Architecture*, Rome: Divisare Books, p. 5.

¹³ Teige, K. (1932) *Neimesí byt*, Eng. ed. (2002) *The Minimum Dwelling*, Cambridge MA; London: The MIT Press.

¹⁴ See Aureli, P.V. and Tattara, M. (2018) ‘Soft Cell: The Minimum Dwelling’ in *Architectural Review*, 1453, July/August and id. (2019) *Loveless: The Minimum Dwelling and its Discontents*, Milan; London: Black Square.

¹⁵ ‘Das ist die Blatthütte eines Indianers. Haben Sie schon etwas Vollkommeneres gesehen an Zweckerfüllung und Materialbehandlung? Ist das nicht eine Potenzierung des Urwaldschattens? [...] Da es keine Bauten gibt, die so restlos den Bedürfnissen des heutigen Menschen entsprechen, kann ich Ihnen nur aus einem verwandten Gebiet einen Bau Zeigen, der neuzeitlich empfunden und die Bedingungen erfüllt, die ich auch für unsere Wohnhausbauten ersehne und erstrebe.’ Mies van der Rohe, L. (1923) ‘Gelöste Aufgaben. Eine Forderung an unser Bauwesen’ in *Die Baumwelt*, XIV, 52, December 1923, p. 719.

¹⁶ ‘E l’analisi di questo grande serbatoio di energie edilizie, che è sempre sussistito come un sottofondo astilistico, può riserbarci la gioia di scoprire motivi di onestà, di chiarezza,

di logica, di salute edilizia là dove una volta si vedeva solo arcadia e folklore.’ Pagano, G. and Daniel, G. (1936) *Architettura rurale italiana*, Milan: Ulrico Hoepli Editore, p.15.

¹⁷ Although the adjectives ‘primitive,’ ‘vernacular’ and ‘popular’ are used here as equivalent terms, they are actually variants of the informal manifestations with specific declensions: ‘primitive’ refers to technologically less advanced cultures than those of the industrialized societies and communities; ‘vernacular’ all minor building production that has local characteristics; ‘popular’ concerns a type of constructive production belonging to the lower social strata. However, these are distinctions that can sometimes appear forced or limiting (for example in the case of the Brazilian favelas it is a type of popular building production that takes on the characteristics of the vernacular). Guidoni, E. (1975) *Architettura primitiva*, Milan: Electa, p.14.

¹⁸ Bentos, T. (1987), *The Villas Of Le Corbusier and Pierre Jeanneret, 1920-1930*, New Haven; London: Yale Univeristy Press.

¹⁹ Roma, C. (2020) *Le Corbusier e le suggestioni delle rovine*, Macerata: Quodlibet.

²⁰ ‘Sull’acropoli, il biancore dei templi assorbe i colori del paesaggio si copre del rosso tramonto: richiamando questa visione poetica, il ricordo della pietra bianca accarezzerà i volumi delle *Maison* degli anni ’20. Al contrario, le immagini del Foro Imperiale romano in frantumi e le superfici compromesse dei ruderi di Tivoli, che rivelano le tecniche costruttive, manifestano una diversa essenza dell’architettura.’ Ivi, p. 128.

²¹ Le Corbusier (1923) *Vers une architecture*, Paris: Cres, Eng. ed. *Le Corbusier, Towards a New Architecture: Guiding Principles*, in Conrads, cit., p. 61.

²² The white surfaces of the 1920s appeared as a removal of any further residual decoration or volumetric variation which, in the free facade, no longer had any reason to exist. At that point the white façade was placed like a canvas left untouched while the search for the concrete materiality of the building indicated, rather, the need for its own subtraction.

²³ Roma, cit., p. 130.

²⁴ ‘I am attracted to the natural order of things [...] in my flight from city living I end up in places where society is in the process of organization. I seek out the primitive men, not for their barbarity, but for their wisdom.’ In Curtis, W. J. R. (1986) *Le Corbusier: Ideas and Forms*, Oxford: Phaidon, p. 116.

²⁵ Corbu, in describing the significance of the coverage of the *Notre Dame du Haut* chapel, wrote in 1965: ‘A crab shell picked up on Long Island near New York, in 1946, lay on the drafting table. It became the roof of the chapel.’ In Von Moos, S. (2009) *Le Corbusier: Elements of a Synthesis*, Rotterdam: O10 Publishers, p. 275.

²⁶ In 1928, when observing the fishermen’s huts in the Bassin d’Arachon pine forest, he wrote: ‘This precariousness places them in the archetypal position of the house builder: they make a cottage, a shelter, nothing more, quite simply and honestly. [...] Everything is in proportion: reflecting the footstep, the shoulder and head. Economy is at its highest. Intensity is at its highest. One fine day, I suddenly understood them and I cried out: “But these houses are palaces.”’ Le Corbusier (1928) *Une maison, un palais: a la recherche d’une unité architecturale*, Paris: Crès et Cie, Eng. translation in Benton, T. (2018) *Le Corbusier: From the Primitive Hut to the Cabanon*, <http://www.ayp.fapyd.unr.edu.ar/index.php/ayp/article/download/111/82/> (7.8.2020).

²⁷ ‘The definition of a New Brutalist building [...] must be modified so as to exclude formality as a basic quality if it is to cover future developments and should more properly read: 1, Memorability as an Image; 2, Clear exhibition of Structure; and 3, Valuation of Materials ‘as Found.’ Banham, R. (1955) ‘The New Brutalism,’ in *Architectural Review*, 118, December, p. 361.

²⁸ Rudofsky, B. (1964) *Architecture Without Architects: An Introduction to Non-Pedigreed Architecture*, New York: The Museum of Modern Art, p. 6. The Czech architect

will later develop the topic in another volume, which also includes the constructions made by animals: id. (1977) *The Prodigious Builders: Notes Toward a Natural History of Architecture with Special Regard to those Species that are Traditionally Neglected or Downright Ignored*, New York; London: Harcourt Brace Janovich.

²⁹ ‘There is a good deal of irony in the fact that to stave off physical and mental deterioration the urban dweller periodically escapes his splendidly appointed lair to seek bliss in what he thinks are primitive surroundings: a cabin, a tent [...]. Despite his mania for mechanical comfort, his chances for finding relaxation hinge on its very absence.’ Id., *Architecture Without Architects*, cit., p. 9. This aspect is particularly significant in the case of the *Cabanon*: despite his status as an absolute master of modern architecture, Corbu will nourish many idiosyncrasies towards some developments of modernity, seeking refuge in the very small, frugal and extra-urban dimension of his personal hut, near of which he will die of a heart attack during a swim in 1965. The hut in the modern age becomes a place of subtraction from the world, understood as the ‘world of human beings,’ it therefore acquires the role of ascetic refuge or even as a hiding place. See Jakob, M. (2020) *La capanna di Unabomber, o della violenza*, Syracuse: LetteraVentidue, and Caffo, L. (2020) *Quattro capanne, o della semplicità*, Milan: Nottetempo.

³⁰ Venturi, R. (1966) *Complexity and Contradiction in Architecture*, New York: The Museum of Modern Art.

³¹ Rossi, A. (1966) *L'architettura della città*, Venice: Marsilio.

³² See, for example, David Greene's *Living Pods*, 1966.

³³ Presenting himself with a certain degree of irony but also with a clear position established with the recurring use of the oppositional prefix *anti-* (anti-architect, anti-architecture), Price ‘si rivolge a un'idea di architettura come mezzo e non come fine. [...] Il suo è un nichilismo felice, curioso delle possibilità liberate dal passaggio dalla progettazione di oggetti alla organizzazione di processi o, più precisamente, alla ideazione di oggetti integrati ai processi.’ Corbellini, G. (2016) *Price-less. Cinque sottrazioni*, in Perriccioli, M. (ed.) *Pensiero tecnico e cultura del progetto. Riflessioni sulla ricerca tecnologica in architettura*, Milan: Franco Angeli, pp. 145, 150.

³⁴ Superstudio's *Monumento Continuo* ‘is an operation of progressive destruction and reduction of the architectural object in which all of the Avant Garde is concentrated.’ Felicori, B. (2020) *When Superstudio drew Inspiration from Land Art*, domusweb.it/en/from-the-archive/2020/01/24/when-superstudio-drew-inspiration-from-land-art.html (5.8.2020). See also Mastrigli, G. (2015) *Superstudio, la vita segreta del Monumento Continuo*, Macerata: Quodlibet.

³⁵ In the progressive processes of digitization of labour in intangible networks or in the vast Amazon warehouses, real *No-Stop Cities*.

³⁶ Two books that had a certain impact on the ecological issue and on the limits of the planet's resources, one year before the outbreak of the energy crisis: Meadows, D. H., Meadows, T. L., Randers, J. and Behrens, W. W. (1972) *The Limits to Growth*, New York: Universe Books, and Dubos, R. and Ward, B. (1972) *Only One Earth: The Care and Maintenance of a Small Planet*, New York: W. W. Norton & Co.

³⁷ In the Italian countercultural context of libertarian Marxism and in the wake of the aesthetic experiences of Arte Povera, the short story of the Global Tools collective stands out above all as ‘a form of resistance, even a return to archaic technologies and practices. The radical act was to set up of mechanized city in an anti-urban appeal to agrarian roots.’ Colomina, B. (2018) *Learning from Global Tools*, in Borgonuovo, V. and Franceschini, S. (eds) *Global Tools 1973-1975: When Education Coincides with Life*, Rome: Nero, p. 6. In the field of self-construction see Mari, E. (1974) *Proposta per un'autoprogettazione*, Milan: Centro Duchamp/Galleria Milano, later reprinted by Corraini in 2002 with the title *Autoprogettazione?*

³⁸ Lévi-Strauss, C. (1962) *La pensée sauvage*, Paris: Plon. Cfr. the distinction between self-conscious and unself-conscious identity proposed in architectural terms by Alexander, see note n. 8.

³⁹ Derrida, J. (1967) *L'écriture et la différence*, Paris: Éditions du Seuil. See specifically the chapter *La structure, le signe et le jeu* (pp. 409-428) initially developed as a lecture of the same title presented at Johns Hopkins University in Baltimore in 1966.

⁴⁰ Derrida's speech on the condition of the engineer as a product of the bricoleur is in some way represented by the Castiglioni bros' projects: examples are the *Toio* lamp, which assembles the headlight of a car as a light source, and profiles and transformers of industrial production, or the *Mezzadro* stool that is a reused tractor seat.

⁴¹ 'Ad hoc means "for this" specific need or purpose. A need is common to all living things; only men have higher purposes. [...] A purpose immediately fulfilled is the ideal of adhocism; it cuts through the usual delays caused by specialization, bureaucracy and hierarchical organization.' Jencks, C (1972) *The Spirit of Adhocism*, in id. and Silver, N. (2013) *Adhocism: The Case for Improvisation*, Cambridge MA; London: The MIT Press, p. 15. Cfr. Brandes, U. and Erlhoff, M. (2006) *Non Intentional Design*, Cologne: Daab.

⁴² Jencks is the first to use the adjective 'postmodern' associated with architecture - four years before it was used in the field of philosophy by Lyotard - in an article and then used it in his most famous book and in a list of other subsequent texts. Jencks, C. (1975) 'The Rise of Post-Modern Architecture' in *Architectural Association Quarterly*, 4, pp. 3.14; id. (1977) *The Language of Post-Modern Architecture*, New York: Rizzoli.

⁴³ In reality, Frank Gehry, the absolute representative of this architectural season, in the early years of his career experimented with the use of cheap materials such as corrugated sheets, plywood, mesh fences, etc. The well known Gehry's residence in Santa Monica stands out for the dissonant superfetation that the Canadian architect applied in 1977 to the colonial-style villa he owned, with a low-cost *bricoleur* operation that presents itself as an exasperated version of precarious and lopsided self-constructions of the slums. With different formal outcomes but equally inspired by spontaneous architecture is the Norton House in Venice Beach (1983). Even in Koolhaas' early works, informal elements can be traced: for example, the corrugated sheet metal, the off-axis pillars and the Gigan safety net left specifically to surround part of the roof in Villa Dall'Ava.

⁴⁴ 'I made an inventory of cities that would be very important in the future. China's Pearl River Delta was one [...]. And Lagos was another. Also, by the end of the 90s, the endless idolatry of the market economy had become irritating to me. I was interested in the big city as a poor city [...] This forced me to confront something I didn't know anything about: Africa [...]. It was the image of a continent in perpetual crisis - with health gloom, economic gloom, food gloom, political gloom.' Koolhaas, R. and van der Haak, B., *A discussion on Koolhaas's Research with the Harvard Project on the City on Lagos*, Nigeria, Rotterdam, 5 July 2002, <http://www.oma.eu/lectures/lagos-infrastructure-and-improvisation/> (3.1.2020).

⁴⁵ <https://worldpopulationreview.com/world-cities>. In 2022, the population of Lagos, the largest city on the African continent, was over 15 million (19.2.2022).

⁴⁶ 'The African city forces the reconceptualization of the city itself. [...] It is to examine the city elsewhere, in the developing world. It is to reconsider the modern city and to suggest a paradigm for its future.' Harvard Project on the City (2000) *Lagos*, in Koolhaas, R., id., Boeri, S., Kwinter, S., Tazi, N. and Obrist, H. U. (eds) *Mutations*, Barcelona: Actar, p. 653.

⁴⁷ The 800-page book, titled *Lagos: How it Works*, was originally supposed to be published by Taschen, then by Lars Müller in 2008.

⁴⁸ See Cano Ciborio, V. (2021) 'Lagos' Delirium is Not That of New York: Rem Koolhaas and the Role of the Author-architect in Conflictive Territories,' in *Revista de Arquitectura*, 23, pp. 262-266.

⁴⁹ Also known by the misleading nickname of ‘African Venice,’ the informal settlement is inhabited by an estimated population of about 86,000 people in extremely precarious conditions from a sanitary, economic, social and environmental point of view. Partly built on the coast and partly made up of shacks on stilts in the middle of the water, in addition to experiencing a situation common to all informal settlements - i.e. their removal / destruction by local authorities for mainly speculative reasons - the Makoko residents exploit the proximity of water as a partial source of livelihood - the shanty town originates from a fisherm village that colonized the area since the 18th century - which at the same time poses a threat due to extreme weather conditions and floods. The settlement had particular relevance in the disciplinary field thanks to the Makoko Floating School designed by the Nigerian architect Kunlé Adeyemi, awarded with the Leone d’Oro at the XV International Architecture Exhibition of the Venice Biennale (2016), edited by Alejandro Aravena. Made with local wood, the A-frame structure was equipped with empty plastic barrels, assembled as a platform that allowed the structure to float, thus showing a contextual relevance that combined the frugality of the floating hut with recycled waste elements. Sponsored by the United Nations Development Programme, in providing useful support to the local community, the project had an international resonance as a sustainable and politically correct project, however instead of responding to the precarious condition of the area it further emphasized its seriousness when a storm destroyed it, in the same year in which the project was awarded and the full-scale copy floated in the placid waters of the Biennale. See Gaestel, A. (2018) *Things Fall Apart*, <https://magazin.atavist.com/things-fall-apart-makoko-floating-school> (20.1.2022).

⁵⁰ UN-Habitat (2003) *The Challenge of Slums: Global Report on Human Settlements 2003*, London; Sterling VA: Earthscan, consultabile a <https://unhabitat.org/the-challenge-of-slums-global-report-on-human-settlements-2003> (3.4.2020).

⁵¹ Besides the Nigeria, Kenya, Zambia, Brazil, Colombia, etc. slums, case studies are shown in Los Angeles, Barcelona, Sydney, Naples. Although the greatest concentrations of informal settlements occur close to the large urban agglomerations of South America, South-East Asia, Africa, the report shows how easily the phenomenon is actually observable even in the countries of the so-called ‘advanced economies,’ where some cultural and historical peculiarities, in specific geographical areas, have established a rooting of molecular and widespread illegal building practices that do not configure enclaves separated from the regulated city, but easily hybridize with it. For the Italian case see: Zanfi, F. (2008) *Città latenti. Un progetto per l’Italia abusiva*, Milan: Bruno Mondadori.

⁵² UN-Habitat, *cit.*, p. VI.

⁵³ See Williamson, T. (2015) *A New Threat to Favelas: Gentrification*, <https://www.architectural-review/essays/a-new-threat-to-favelas-gentrification> (3.4.2020).

⁵⁴ Davis, M. (2006) *Planet of Slums*, London: Verso.

⁵⁵ One could say a critical mass whose outcomes are not so obvious: ‘Marx himself distinguishes the so-called social slum (*Lumpenproletariat*) as not only not revolutionary, but as ever ready material for a reactionary movememnt, the bribed tool of the counter-revolution.’ Marchionati, R. (ed. 1998) *Karl Marx: Critical Responses*, London; New York: Routledge, p.136.

⁵⁶ It is a rather typical process of the modern era: Haussman’s Paris can be considered as one of the greatest gentrification interventions in history. The demolition of the disordered and dense agglomerations is also a theme that fascinates, from the point of view of functional order and hygiene, the modernist rhetoric of the tabula rasa and the ‘towers in the park’ of the Lecorbusierian Plain Voisin. Forty years later Jane Jacobs’ fervent critique on American cities showed that actually the density and variety of urban settlements were much healthier from the point of view of social relations, as they were based on a spontaneous and rooted sedimentation favored by proximity.

⁵⁷ Angéllil, M., Hehl, R. and Something Fantastic (eds 2011) *Building Brazil! The Proactive Urban Renewal of Informal Settlements*, Berlin: Ruby Press, and id. (eds 2014) *Minha Casa – Nossa Cidade!*, Berlin: Ruby Press.

⁵⁸ In 2009 the Secretaria Municipal de Habitação (SEHAB) of São Paulo asked six groups of Brazilian and non-Brazilian architects for some housing improvement projects for the inhabitants of the informal settlements. For the Porto Seguro area Christian Kerez proposed six different units arranged randomly in a type of pattern that recalled the settlement structure of the favelas, as well as using the typical materials of these places, namely concrete frames and masonry infill: 'The mazy quality of the urban settlement will create different kinds of streets and squares where people can meet and children can play. [...] The favela is a very lively, vernacular part of Brazilian architecture; this project pays respect to the inhabitants of the favela who are mostly proud to live in their community, as most people are proud of their own roots to which they can relate.' Kerez, C. (2012) 'The Infinite Variety of Urban Spaces,' in *Abitare*, 524, July-August 2012, p. 39.

⁵⁹ Brillembourg, A. and Klumpner, H. (eds 2012) *Torre David: Informal Vertical Communities*, Zurich: Lars Müller Publishers.

⁶⁰ 'Ultimamente da più parti assistiamo al ritorno di un'architettura nuda, spogliata, asciugata, semplificata non solo nelle forme, ma anche negli apparati concettuali [...]. L'odierna riscoperta della nudità va quindi considerata innanzitutto come una reazione nei confronti dell'architettura degli involucri, un fenomeno che non a caso matura in un momento storico in cui il capitalismo arrebbante della prima globalizzazione [...] sembra implodere in una crisi profonda.' Mosco, V. P. (2012) *Nuda architettura*, Geneva; Milan: Skira, p. 13.

⁶¹ This is a phenomenon that can also be found in publishing: echoes of Rudofsky in: May, J. and Reid, A. (2010) *Buildings Without Architects: A Global Guide to Everyday Architecture*, Brighton: Ivy Press, and more recently: Watson, J. (2019) *Lo-TEK: Design by Radical Indigenism*, Cologne: Taschen.

⁶² The Museum of Modern Art in New York has a deep-rooted tradition in organizing architectural exhibitions that sanction the birth, or institutionally define their status, of trends in architecture which then become dominant, thus also generating the related mannerisms: from 'Modern Architecture' of 1932 and the International Style; 'The Architecture of the École des Beaux-Arts' of 1975 and the postmodernist historicism; 1988 'Deconstructivist Architecture' and deconstructivism; 'Small Scale, Big Change: New Architectures of Social Engagement' of 2010 which brought together various projects of the 'politically correct' architecture. Another important international showcase of these approaches was certainly the edition of the Venice Biennale edited by Alejandro Aravena 'Reporting from the Front' in 2016 but also the following ones, 'Freespace,' edited by Yvonne Farrell and Shelley McNamara in 2018 and 'How Will We Live Together?' edited by Hasmin Sarkis in 2021.

⁶³ Abbate, C., Spina, M. and Zevi, A. (2010) *Una guida all'architettura frugale*, Rome: Iacobelli Editore, p. 5.

⁶⁴ 'Sembra che l'architettura del nostro tempo, scevra dai vincoli dettati da asserzioni apodittiche del movimento moderno, e lontana dai richiami intellettuali, ironici e forzati al passato del postmodernismo anni ottanta, abbia trovato una libertà espressiva vicina ai modi, in cui alcune architetture spontanee si concretizzano nella contingenza del quotidiano.' Clemente, M. (2005) *Estetica delle periferie urbane. Analisi semantica dei linguaggi dell'architettura spontanea*, Rome: Officina Edizioni, p. 13.

⁶⁵ Friedman, Y. (2002) *L'architecture de survie, une philosophie de la pauvreté*, Paris: Éditions de léclat, p. 15.

⁶⁶ unequalscenes.com/projects (20.1.2021).

⁶⁷ Chancel, L., Piketty, T., Saez, E., Zucman, G. (eds 2021) *World Inequality Report 2022*, World Inequality Lab, p. 13, consultabile in wir2022.wid.world/www-site/uploads/2022/01/Summary_WorldInequalityReport2022_English.pdf (3.4.2022).

⁶⁸ Malthus, T. (1798) *Essay on the Principle of Population*, London: J. Johnson. Actually the first edition is printed anonymously, only in subsequent extended versions will his name appear on the cover.

⁶⁹ Malthus compares the two different orders of magnitude of his theory: while the population has a geometric progression, the growth of goods is only arithmetic, it follows that production will be increasingly insufficient to feed a greater number of individuals.

⁷⁰ The spread of poverty was essentially to be attributed simply to the very existence of the poor: in order to counteract their proliferation, the English economist, who was also an Anglican pastor, proposed the spread of moral limitations such as the postponement of marital age or chastity and the dwindle of assistance tools for the paupers.

⁷¹ It is a justification of inequalities that resorts to an alleged correspondence of class divisions to those of natural selection, reducing Darwin's theories to arbitrary trivializations and instrumental to a rhetoric that underlies racist and classist ideologies.

⁷² Practices of 'improvement' of the human species in the selection of the 'desirable elements' of the population have been adopted since ancient Greece, however only at the end of the nineteenth century did eugenics establish itself as a pseudoscientific discipline - deriving from selective processes applied in the botanical or faunal field - which was based on the promotion of policies oriented towards the reproductive incentive of individuals considered better from a physical and intellectual point of view, and to the detriment of others considered to be carriers of undesirable traits. Political-administrative eugenic formulas (prohibition of mixed marriages, forced sterilizations, etc.) spread at the beginning of the twentieth century in Great Britain, USA, Canada and some European countries, where they will then be applied in an even more exacerbated way by the Nazi regime in Germany.

⁷³ Meadows, Randers, Behrens, *cit.* The Club has constantly worked on these issues and this year has published a new report fifty years after the first edition: *The Limits to Growth Model: Still Prescient 50 Years Later*, consultabile a <https://www.clubofrome.org/publications/> (20.4.2022).

⁷⁴ Different identities are actually connected and superimposed in contexts of discrimination, see the topic of intersectionality introduced by Kimberlé Crenshaw at the end of the 1980s.

⁷⁵ For projects based on ecology and energy saving after 1973 crisis, see: Borasi, G. and Zardini, M. (2007) *Sorry Out of Gas: Architecture's Response to the 1973 Oil Crisis*, Montreal; Mantova: CCA / Corraini.

⁷⁶ It is the estimate of the greenhouse gas emissions caused by the production of a product, expressed in tons of carbon dioxide equivalent.

⁷⁷ It is the quantity of energy required for the production, transport and disposal of a product or material, expressed in MJ/kg (megajoule of energy required to obtain one kilogram of product) and tCO₂ (tons of carbon dioxide released by the production of one kilogram of product).

⁷⁸ The Leadership in Energy and Environmental Design, developed in the USA by the US Green Building Council since 1994, provides building sustainability assessment standards according to classification areas that include: site sustainability, efficient water management, energy and atmosphere, materials and resources, quality of indoor environments, design innovation and regional priorities.

⁷⁹ The Spanish speculative bubble is rather emblematic especially for the quantity of building products made between the nineties and the early 2000s and many of which were unfinished or demolished without ever having been used. On Spanish speculative

hyperproduction see Concheiro, I. (2011) *Interrupted Spain*, pp. 12-25, in Mateo, J. I. (ed.) *After Crisis: Contemporary Architectural Conditions*, Zurich: Lars Müller Publishers. See also the documentary on Spanish bubble *Bricks* (2017) by Quentin Ravelli. Obviously the outbreak of the 2008 crisis did not stop world speculative activities and one of the most paradoxical cases of recent years is that of Burj Al Babas Villa in Turkey, a newly built village consisting of 732 identical mini castles, which began in 2014 and discontinued in 2017 due to the bankruptcy of the sponsoring company in the context of high inflation and the Turkish economic crisis. The village is still abandoned, without urbanization works and with the buildings finished only in the external finishes, isolated in the middle of wooded hills. The only residual attraction of this place is its absurd ghost village dimension, where the serial repetition of abandoned Disney castles makes it seem like a sort of dystopian nightmare.

⁸⁰ https://www.ted.com/talks/bjarke_ingels_hedonistic_sustainability (20.4.2022).

⁸¹ The book is basically a catalog about the performativity of the office's projects according to the environmental contexts in which they are inserted. Each architectural object is introduced by the typical diagrammatic-comic narrative style, in which the initial program prescriptions generate neutral volumes that are subsequently deformed according to specific conditions (direction of the wind, sun, presence of green areas, etc.). Ingels proposes a 'third way' to better illustrate this aspect, between the rigidity of the modernist monolith and the contextual specificities of vernacular architecture, in which it seems that the form factor is able to guarantee the maximum energy and environmental efficiency of architecture: 'So instead of "Architecture without Architects," what we are interested with is "Engineering without Engines" – that it is possible to make buildings that are less dependent on machinery.' BIG (2015) *Hot to Cold: An Odyssey of Architectural Adaption*, Cologne: Taschen, p. 9. See also id. (2021) *Formgiving: An Architectural Future History*, Cologne: Taschen.

⁸² The ambiguity in Ingels' use of the term 'sustainability' takes on particular intensity especially after his meeting with the far-right president of Brazil Jair Bolsonaro - a climate change denier and responsible for further destruction of the Amazon rainforest - to discuss future projects in the South American country. See Hadley, A. (2020) *Bjarke Ingels and the Art of Greenwashing*, <https://failedarchitecture.com/bjarke-ingels-and-the-art-of-greenwashing/> (20.4.2022).

⁸³ Chaslin, F. (2001) *Deux conversations avec Rem Koolhaas, et cetera*, Paris: Sens & Tonca, p. 53.

⁸⁴ Young, L. – Unknown Fields (2013) *The Educator of Excess*, in Hyde, R. (ed.) *Future Practice: Conversations from the Edge of Architecture*, London; New York: Routledge, p. 228.

⁸⁵ Barth, B. (2018) *Is LEED Tough Enough for the Climate-Change Era?*, <https://www.bloomberg.com/news/articles/2018-06-05/reconsidering-leed-buildings-in-the-era-of-climate-change> (20.4.2022).

⁸⁶ 'Architects always address a spatial need with a building [...]. But we don't believe building is always the answer. Before you start building, you first have to determine whether not-building is an option.' RE-ST, *The Most Sustainable Building is the one You Don't Build*, <https://www.re-st.be/en/article/het-duurzaamste-gebouw-is-het-gebouw-dat-je-niet-bouwt>. See also: id., *Profits of Not-Building*, <https://www.re-st.be/en/research/de-winst-van-het-niet-bouwen> (20.4.2022).

⁸⁷ 'The most radical challenge that scarcity presents to architecture is that the most appropriate solution to a spatial problem under conditions of scarcity is almost certainly not the addition of something new.' Till, J. and Schneider, T. (2012) 'Invisible Agency,' in *Architectural Design*, 218, July/August, 'Scarcity,' p. 39.

⁸⁸ In an anecdote told by the English architect, referring to a couple of clients who could not agree on the common needs of the project, the only possible solution was not a

building at all: 'The man hoping to transform his life with a new house might be better off getting a divorce,' in Corbellini, *cit.*, p. 144.

⁸⁹ Wigley, M. (2006) 'Towards a History of Quantity,' in *Volume, 2*, 'Doing (Almost) Nothing,' pp. 28-29.

⁹⁰ 'Lowering the construction cost must not [...] constitute an isolated act, since the aim is not to cut down on quality [...]. Rather, the objective of economy must necessarily be combined with the intentions of the project and the creation of something else besides. It is within this logic of mental superimposition that we defend a vision of the project by way of saving money, as a critical reflection.' Lacaton, A. and Vassal, J. P. (2011) 'Structural Freedom, a Precondition for the Miracle,' in *2G, 60*, 'Lacaton & Vassal: Obra Reciente / Recent Work,' p. 172.

⁹¹ 'It is vain to do with more what can be done with fewer' is a phrase, very Proto-Miesian, usually attributed to William of Ockham, a Franciscan theologian of the fourteenth century, actually it is a sentence belonging to a seventeenth-century commentary by the Irish Franciscan John Punch. The paradox is also known as 'Okham's razor,' (Novacula Occami) a methodological principle formulated by the homonymous friar and which refers to a philosophical tradition that sees in the simplification and reduction of postulates and hypotheses the most effective resolution of a problem. The razor essentially represents a subtractive metaphor with which the most complex hypotheses are eliminated. The Franciscan condition, traditionally devoted to frugality, and the practice of tonsure make this interpretation even more suggestive. On the subtractive principle as a logical cognitive process see: Klotz, L. (2021) *Subtract: The Untapped Science of Less*, New York: Flatiron Books.

⁹² Lacaton, Vassal, *cit.*, p. 170.

⁹³ See: Rocca, A. (2010) *Architettura Low Cost/Low Tech. Invenzioni e strategie di un'avanguardia a bassa risoluzione*, Rome: Sassi.

⁹⁴ See the doctoral thesis: Morassi, C. (2015) *The Economy of Rhetoric: Architectural Low-cost Seductions*, Venice: IUAV-Villard.

⁹⁵ 'Through their design [...] Lacaton and Vassal reexamine sustainability in their reverence for pre-existing structures, conceiving projects by first taking inventory of what already exists. By prioritizing the enrichment of human life through a lens of generosity and freedom of use, they are able to benefit the individual socially, ecologically and economically, aiding the evolution of a city.'
<https://www.pritzkerprize.com/laureates/anne-lacaton-and-jean-philippe-vassal> (20.4.2022).

⁹⁶ The pandemic, associated with the effects of the climate crisis and Brexit, has caused the phenomenon called 'Everything Shortage' or the interruption of many sectors of logistics and a shortage of materials of all kinds, from cereals to microchips. Goodman, P. S. and Bradsher, K., *The World Is Still of Everything: Get Used to It*, <https://www.nytimes.com/2021/08/30/business/supply-chain-shortages.amp.html/> (20.5 .2022). The Russo-Ukrainian war has further aggravated the problem also as regards the price of building materials: *Materials Prices Facing Renewed Upward Pressure Following Russia's Invasion of Ukraine*, <https://www.designbuild-network.com/comment/materials-prices-pressure-russia/> (20.5.2022).

⁹⁷ Latouche often uses adjectives such as 'serene' or 'happy' to describe his idea of degrowth, thus trying to dissolve the prejudice towards this type of concept in the general public. Latouche, S. (2007) *Petit traité de la décroissance sereine*, Paris: Mille et une Nuits. See also: Jackson, T. (2009) *Prosperity Without Growth*, London; New York: Routledge.

⁹⁸ The market economy is usually attributed with the ability to produce an ever greater advancement of technologies and therefore greater efficiency, also in terms of repercussions on a reduced impact on the environment and on improving the general

conditions of populations. However, technological advances are also able to generate the so-called 'Jevons paradox,' according to which the increase in production efficiency can lead to a greater consumption of products, sometimes thus frustrating the saving of resources used for its production (see also the concept of 'planned obsolescence,' that is the planning of the decay of the functionality of a product already in the design phase).

⁹⁹ Voluntary reduction of hours dedicated to work and consequent conscious decrease in economic income. Obviously this is a type of choice made by freelancers or workers who can afford a type of 'simplicity' far above the standards of poor workers.

¹⁰⁰ Morabito, G. and Bianchi, R. (2010) *La decrescita prosperosa dell'edificio. Architecture from High Tech to Low Cost*, Rome: Gangemi.

¹⁰¹ *Enough: The Architecture of Degrowth*, Oslo Architecture Triennale (26 September – 24 November 2019), <https://oslotriennale.no/en/aboutoat2019> (20.4.2022).

¹⁰² Harper, P. and Mordak, S. (2019) 'On the Money: The Merits of Degrowth,' in *The Architectural Review*, 1464, September, 'Money,' pp. 30-36.

¹⁰³ Quintáns Eiras, C. (2017) *Unfinished*, in Carnicero, I., id., Martínez, A. (eds) *Unfinished: Ideas, Images, and Projects*, Catalogue of the Spanish Pavilion at the 15th Venice Architecture Biennale, Barcelona: Actar, p. 239.

¹⁰⁴ Gregotti, V. (2008) *Contro la fine dell'architettura*, Turin: Einaudi.

¹⁰⁵ Aureli, P. V. (2013) *Less is Enough*, Moscow: Strelka Press, p. 9. The author specifically refers to: Boeri, S. (2012) *Fare di più con meno. Idee per riprogettare l'Italia*, Milan: Il Saggiatore. Cfr. 'Die Architek*innen lieferten unter dem Deckmantel des Realismus der vorherrschenden neoliberalen Austeritätspolitik nicht nur Argumente, sondern auch eine eigene Ästhetik frei Haus.' Ngo, A. L., Kempe, A., Koch, M. (2020) 'Neuer Realismus in der französischen Architektur,' in *Arch+*, 240, p. 2. See also Fromont, F., 'Vom Glanz und Elend des französischen Neo-Rationalismus,' in *ivi*, pp. 28-37, and Ekici, D. (2013) *Architectural Asceticism and Austerity*, in Kunze, D., Bertolini, D. and Brott, S. (eds) *Architecture Post Mortem: The Diastolic Architecture of Decline, Dystopia, and Death*, Farnham: Ashgate, pp. 205-218.

¹⁰⁶ Biraghi, M. (2021) *Questa è architettura. Il progetto come filosofia della prassi*, Turin: Einaudi, pp. 178-179. Cfr. 'As well as being shaped by bureaucratically codified state regulations, architecture is also fundamentally conditioned by the broader political-economic context in which it is commissioned, designed and understood. Therefore, architecture is rarely immune to the social, historical, economic and political contexts of the society in which it is designed and implemented.' Yaneva, A. (2017) *Five Ways to Make Architecture Political: An Introduction to the Politics of Design Practice*, London; New York: Bloomsbury, p. 28.

¹⁰⁷ Price, C. (2003) *Re:CP*, ed. by Obrist, H. U., Basel: Birkhäuser, p. 57.

¹⁰⁸ According to a very popular sentence, architecture 'resterà [...] la fede segreta dell'epoca. Sostanza di cose sperate.' Persico, E. (1945) *Profezia dell'architettura*, Milan: Muggiani, p. 56.

¹⁰⁹ Eco, U. (2012) *Di un realismo negativo*, in De Caro, M. and Ferraris, M. (eds) *Bentornata realtà. Il nuovo realismo in discussione*, Turin: Einaudi, p. 95.

¹¹⁰ Gregory, P. (2016) *Realismo, antirealismo, postmodernismo: letture interpretative*, in id. (ed.) *Nuovo realismo/postmodernismo, dibattito aperto fra architettura e filosofia*, Rome: Officina Edizioni, p. 13.

¹¹¹ 'In opposition to Positivism, which halts at phenomena and says "There are only facts and nothing more," I would say: No, facts are precisely what is lacking; all that exists consists of interpretations. We cannot establish any fact "in itself": it may even be nonsense to desire to do such a thing. "Everything is subjective," you say; but that in itself is interpretation.' Nietzsche, F. (1974) *Werke*, Band VIII/1, *Nachgelassene Fragmen-*

te. *Herbst 1885 bis Herbst 1887*, Berlin-New York: Walter de Gruyter, Eng. ed. (1910) *The Will to Power*, Oscar Levy, London, p. 481.

¹¹² Ferraris, M. (2012) *Manifesto del nuovo realismo*, Rome-Bari: Laterza, pp. 6-7.

¹¹³ See Jencks' observation regarding the decoration of postmodern buildings, according to which, paradoxically, they had a functionalist purpose: to hide construction flaws. Jencks, C. (1977), *The Language of Postmodern-Architecture*, (4th edition, 1984), London: Academy Editions, p. 7.

¹¹⁴ On the issue of historicist populism-postmodernism and its conservative political connotations, see Ferrari, F. (2012) *La seduzione populista. Dalla città per tutti alla città normalizzata*, Macerata: Quodlibet.

¹¹⁵ It is 'the Vertical Schism, which creates the freedom to stack such disparate activities directly on top of each other without any concern for their symbolic compatibility.' Koolhaas, R. (1978) *Delirious New York*, (2nd edition, 1994) New York: The Monacelli Press, p. 173.

¹¹⁶ 'Globalization has propelled a set of spatial typologies primarily determined by the capacity to conduct flow. Architects have tried to engage with this new borderless space, the "space of flows," by dissolving the envelope as an obstacle to flow and spatial continuity and presenting an image of the world as a chaotically flowing magma.' Zaera Polo, A. (2008) 'The Politics of the Envelope: A political Critique of Materialism,' in *Volume*, 17, November, 'Content Management,' p. 78.

¹¹⁷ In the postmodern era 'the interrelationship of culture and the economic here is not a one-way street but a continuous reciprocal interaction and feedback.' Jameson, F. (1984) *Postmodernism, Or, The Cultural Logic of Late Capitalism*, (7th edition, 1997), Durham: Duke University Press, p. 10.

¹¹⁸ Lootsma, B. (2000) *Superdutch: New Architecture in the Netherlands*, London: Thames & Hudson.

¹¹⁹ 'In the Netherlands the pendulum often swings rather far out and after the radical and extraordinary architecture of Superdutch, there is now an architecture that is sometimes ordinary in the extreme. [...] Nevertheless, compared with the bravura of the 1990s, an architecture that is so modest, realistic and pragmatic has a greater chance of success in times of economic adversity.' Ibelings, H. (2010) 'The End of an Era,' in *A10*, 33, May/June, pp. 60-62.

¹²⁰ See Cattapan, F. (2014) 'The Protestant Ethic and the Spirit of Minimalism,' in *San Rocco*, 9, Spring, 'Monks and Monkeys,' pp. 110-118.

¹²¹ Koolhaas, R. (1995) *The Generic City*, in OMA, id., *Mau, cit.*, pp. 1238-1267.

¹²² After advocating a sort of 'conservation' of the workers village, made of humble and banal constructions behind the Sheik Zayed Road, Koolhaas proposed projects that clearly differ from the hypertrophic phantasmagoria of the emirate, for example the monolithic, and with the ambitious name, Duabi Renaissance (2006): 'So far, the 21st century trend in city building leads to a mad and meaningless overdose of themes, extremes, egos and extravagance. [...] The design of the building wastes no energy on useless invention.' (oma.com/projects/dubai-renaissance, 20.1.2022). OMA's first building in Dubai was built only in 2017: the Concrete exhibition space at Alserkal Avenue, a former warehouse of 1250 square meters that the project partially recycled, organizing fluid and free spaces internally, while covering the external walls with polycarbonate panels on one facade and another by spraying dark concrete with fragments of glass and mirror, giving it the appearance of bare and rough volumes, almost reminiscent of some primitive earthen constructions (oma.com/project/concrete-at - alserkal-avenue, 20.1.2022).

¹²³ Englert, K. (2019) 'German Birdcages: Misguided German Rigour,' in *Domus*, 1034, April, 'Room for Diversity,' pp. 406-413.

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- ¹²⁴ Aureli, P. V. (2011) *The Possibility of an Absolute Architecture*, Cambridge MA; London: The MIT Press, p. 35.
- ¹²⁵ Hilberseimer, L. (1927) *Großstadtarchitektur*, Stuttgart: Julius Hoffman Verlag.
- ¹²⁶ Simmel, G. (1900) *Philosophie des Geldes*, Leipzig: Verlag von bunker & Humblot.
- ¹²⁷ Geers, K. (2012) 'Words Without Thoughts Never to Heaven Go,' in *2G*, 63, 'OFFICE Kersten Geers David Van Severen,' p. 166. See also id., Pancevac, J. and Piovene, G. (2015) *Architecture Without Content*, London: Bedford Press.
- ¹²⁸ For an examination of the logistic places and their political-spatial characteristics, see *Footprint*, 23, Autumn / Winter 2018, 'The Architecture of Logistics.'
- ¹²⁹ CAPTCHA (2022) *The Superarchitecture of Amazon*, <https://failedarchitecture.com/the-superarchitecture-of-amazon/> (3.6.2022).
- ¹³⁰ Somers, D. (2012) 'Commonplace and Classicism,' in *Architectural Review Flanders*, 10, 'Radical Commonplaces,' p. 179.
- ¹³¹ *Arch+*, 220, Summer 2015, 'Normcore: Die Radikalität des Normalen in Flandern.'
- ¹³² 'In der Architektur lässt sich eine bewusste Abkehr von den sich ständig überbietenden Derniers Cris einer kommerzialisierten ikonischen Architektur feststellen. Diese Tendenz wendet sich gegen eine Marktlogik, die Architektur zu einem vermarktbareren Designobjekt degradiert. Mit einer strategischen Normalität will sie so wenig Angriffsfläche wie möglich für die Mechanismen der Vermarktung und Verwertung bieten. Statt auf exaltierte formale Differenzierung zu setzen, wird dabei auf möglichst generische Grundformen zurückgegriffen, die im Sinne einer gemeinsamen, allgemein verständlichen Sprache sozial aufgeladen werden.' Kuhnert, N. and Ngo, A. L. 'Normcore: Die Radikalität des Normalen in Flandern,' in *ivi*, p. 2.
- ¹³³ Benson, R. (2014) *Normcore: How a Spoof Marketing Term Grew Into a Fashion Phenomenon*, <https://www.theguardian.com/fashion/2014/dec/17/normcore-spoof-marketing-term-fashion-phenomenon> (21.4.2021).
- ¹³⁴ 'A *minor* architecture is political because it is mobilized from below, from *sustrata* that may not even register in the sanctioned operations of the profession.' Stoner, J. (2012) *Toward a Minor Architecture*, Cambridge MA; London: The MIT Press, p. 4.
- ¹³⁵ *ivi*, p. 3. The text Stoner refers to is Deleuze, G. and Guattari, F. (1975) *Kafka. Pour une littérature mineure*, Paris: Les Éditions de Minuit, in which the concept of minority is first treated and then further developed in id. (1980) *Mille plateaux*, Paris: Les Éditions de Minuit.
- ¹³⁶ The term indicates the sudden, abusive and casual spread of buildings after the war in Kosovo. See Vockler, K. (2008) *Prishtina is Everywhere - Turbo Urbanism: The Aftermath of a Crisis*, Amsterdam: Archis.
- ¹³⁷ Carnicero, I. (2017) *Architecture Non Finito*, in *Unfinished*, cit., p.7.
- ¹³⁸ 'Over the time we have discovered that the great value of vernacular architecture resides in its onesty, its minimal, efficient organization that produces the right conditions for its designated use.' HARquitectes (2015) 'The Nature of Buildings,' in *El Croquis*, 181, 'Four Strategies: MGM, Barozzi Veiga, HARquitectes, Selgascano,' p. 161.
- ¹³⁹ <https://urbannext.net/harquitectes/house-712> (21.4.2021).
- ¹⁴⁰ A similar use of brick has already been used by Miralles Tagliabue for a house in la Clota, Barcelona (1999).
- ¹⁴¹ <https://www.afgh.ch/index640/html> (15.2.2022).
- ¹⁴² This issue already occurred with postmodernism, see Lyotard's controversy against the use and abuse of the term also in the architectural field, since 'postmodern signifies not the end of modernism,' in van Reijen, W. And Veerman, D. (1988) 'An Interview With

Jean-Francois Lyotard,' in *Theory, Culture, & Society*, 5, 2-3, June, p. 277. 'While in literary criticism poststructuralist analyses have pointed out internal inconsistencies and irrationalities in oppressive discourse [...], in architecture these critical possibilities are largely precluded once again by the difficulties of the linguistic analogy.' McLeod, M. (1989) 'Architecture and Politics in the Reagan Era: From Postmodernism to Deconstructivism,' in *Assemblage*, 8, February, p. 51.

¹⁴³ 'Difficilmente, agli interrogativi pressanti che pone il reale, la riflessione teoretica riesce a fornire risposte adeguate [...] le contingenze – e conseguentemente le urgenze – del mondo potrebbero venire affrontate e risolte facendo ricorso alla filosofia, sia pure soltanto per riceverne qualche "consolazione." Di fronte ai problemi attuali le uniche soluzioni ritenute plausibili sono quelle che è in grado di offrire l'azione. O almeno, così pare.' Biraghi, *cit.*, p. 153.

¹⁴⁴ For the various contributions, made of proceedings conferences, exhibitions and publications dedicated to the theme '(new) realism and architecture,' see: Malcovati, S. Visconti, F., Caja, M., Capozzi, R. and Fusco, G. (eds 2013) *Architettura e Realismo. Riflessioni sulla costruzione architettonica della realtà*, Sant'Arcangelo di Romagna: Maggioli, and Gregory, *cit.*

¹⁴⁵ Ferraris, *cit.*

¹⁴⁶ 'Leur quête néo-réaliste (Quaroni, Ridolfi), les conduit à interroger l'histoire et à chercher dans une tradition nationale et populaire un mode d'expression conforme aux aspirations collectives et démocratiques du peuple italien. [...] La "Tendance" se propose en second lieu de reconstruire la "discipline" architecturale. Au fonctionnalisme de l'architecture moderne, elle oppose un rationalisme "éclairé" dans le quel la forme implique l'architecture comme instrument de connaissance.' Huet, B. (1977) 'Formalisme-Réalisme,' in *L'Architecture d'aujourd'hui*, 190, p. 36.

¹⁴⁷ Ferraris, M. (2009) *Documentalità. Perché è necessario lasciar tracce*, Rome-Bari: Laterza, p. 36.

¹⁴⁸ Olmo, C. (2013) *Note per un'introduzione al tema*, in AA.VV., *Architettura e Realismo. Riflessioni sulla costruzione architettonica della realtà*, in Malcovati, Visconti, Caja, Capozzi, Fusco, *cit.*, pp. 99-106.

¹⁴⁹ See: Lynch, K. and Southworth, M. (ed.) (1991) *Wasting Away*, San Francisco: Sierra Club Books.

¹⁵⁰ Koolhaas, R. (2001) *Junkspace*, in Chung, C. J., Inaba, J., id. and Leong, S. T. (eds) *Project on the City 2: Harvard Design School Guide to Shopping*, Cologne: Taschen, pp. 408-422.

¹⁵¹ Berger, A. (2007) *Drosscape: Wasting Land in Urban America*, New York: Princeton Architectural Press.

¹⁵² For a contemporary Grand Tour see: Alterazioni Video / Fosbury Architecture (2018) *Incompiuto: The Birth of a Style*, Milan: Humboldt.

¹⁵³ A derogatory term - deriving from the conjunction of the prefix eco- with *mostro* (monster) - used to indicate concrete building objects, completed or not, which would visually disfigure the landscape in which they are inserted.

¹⁵⁴ Licata, G. (2014) *Maifinito*, Macerata: Quodlibet.

¹⁵⁵ Marini, S. (2010) *Nuove terre. Architetture e paesaggi dello scarto*, Macerata: Quodlibet. See also: Giancotti, A. (2018) *Incompiute, o dei ruderi della contemporaneità*, Macerata: Quodlibet.

¹⁵⁶ Koolhaas, R. and Otero-Pailos, J. (2014) *Preservation is Overtaking Us*, New York: GSAPP Books, p. 79. See also the *Cronocaos* exhibition (2010), edited by Koolhaas / OMA / AMO at the 12th Venice Architecture Biennale: 'the area of the world declared immutable through various regimes of preservation is growing exponentially. A huge

section of our world (about 12 percent) is now off-limits, submitted to regimes we don't know, have not thought through, cannot influence. At its moment of surreptitious apotheosis, preservation does not quite know what to do with its new empire.' Koolhaas, R. (2011) 'Cronocaos,' in *Log*, 21, Winter, p. 119.

¹⁵⁷ Or a sort of spectacularization in the contemporary sublime, see Lyons, S. (ed. 2018) *Ruin Porn and the Obsession with Decay*, Cham: Springer.

¹⁵⁸ Modern and contemporary developments of this approach are covered in the next chapter.

¹⁵⁹ Piva, C. (2007) *John Soane. La problematica della frammentazione*, Florence: Aión.

¹⁶⁰ Speer, A. (1970) *Inside the Third Reich*, London: Weidenfeld & Nicolson, p. 97.

¹⁶¹ 'The fact is that the essentials of architecture [...] are to be found expressed, consciously or unconsciously, throughout the architectures of the world. And while we must incorporate these essentials in our idea of what is classical we must also accept the fact that classical architecture is only recognizable as such when it contains some allusion, however slight, however vestigial, to the antique "orders"'. Summerson, J. (1963) *The Classical Language of Architecture*, Cambridge MA; London: The MIT Press, p. 8.

¹⁶² Tafuri, M. (1976) *Ceci n'est pas une ville*, in id., Rossi, A. (2019) *La città analoga*, Milan: Lotus Booklet, p. 33.

¹⁶³ 'In Piranesi's Campo Marzio [...] Roman antiquity is not only a recollection imbued with nostalgic ideologies and revolutionary expectations, but also a myth to be contested, all forms of classical derivation are treated as mere fragments, as deformed symbols, as hallucinating organisms of an "order" in a state of decay.' In id. (1973) *Progetto e utopia*, Rome-Bari: Laterza, Eng. ed. (1976) *Architecture and Utopia: Design and Capitalist Development*, Cambridge MA; London: The MIT Press, p. 14.

¹⁶⁴ 'The thing is a Lie from beginning to end. You may make a model of a building as you may of a corpse, and your model may have the shell of the old walls within it as your cast might have the skeleton, with what advantage I neither see nor care: but the old building is destroyed, and that more totally and mercilessly than if it had sunk into a heap of dust, or melted into a mass of clay.' Ruskin, J. (1849) *Seven Lamps of Architecture*, London: Smith, Elder & Co., p. 244.

¹⁶⁵ Simmel, G. (1911) *Die Ruine*, in id. (1919) *Philosophische Kultur. Gesammelte Essays*, Leipzig: Alfred Kröner, pp. 125-133.

¹⁶⁶ 'Instead of causing us to remember the past like the old monuments, the new monuments seem to cause us to forget the future. Instead of being made of natural materials, such as marble, granite, or other kinds of rock, the new monuments are made of artificial materials, plastic, chrome, and electric light. They are not built for the ages, but rather against the ages.' Smithson, R. (1966) 'Entropy and the New Monuments,' in *Artforum*, 10, June, p. 26.

¹⁶⁷ 'That zero panorama seemed to contain ruins in reverse, that is - all the new construction that would eventually be built. This is the opposite of the "romantic ruin" because the buildings don't fall into ruin after they are built but rather rise into ruin before they are built [...] the suburbs exist without a rational past and without the "big events" of history. [...] A Utopia minus a bottom.' Smithson, R. (1967) 'The Monuments of Passaic: Has Passaic Replaced Rome as Eternal City?,' in *Artforum*, December, p. 50.

¹⁶⁸ Matta-Clark, G. (ca. 1970) 'Typewritten Statement,' in *Lotus*, 133, February 2008, 'Viral Architecture,' p. 5. Cfr. Richard, F. (2020) *Spacism. Gordon Matta-Clark e le politiche dello spazio condiviso*, Rome: Postmedia Books.

¹⁶⁹ His father was the Chilean Roberto Sebastián Antonio Matta Echaurren, a famous surrealist artist.

¹⁷⁰ Actually, the term has already appeared in: Jean Dubuffet portfolio of ten prints entitled 'L'Anarchitecte' (1959); Manfred Schiedhelm's 1969 DIY mutable urbanism as 'Anarchitecture: idées pour une ville d'aujourd'hui' (1969); Robin Evan's 1970 article 'Towards Anarchitecture'; Hugh Braun's essay 'The slide Towards Anarchitecture' (1972). See: Wigley, M. (2018) *Cutting Matta-Clark: The Anarchitecture Investigation*, Zurich: Lars Müller Publishers, p. 19.

¹⁷¹ The group - Lorie [Laurie] Anderson, Gordon Matta Clark, Tina Girouard, Gene Highstein, Suzanne Harris, Burnie Kirschenbaum, Richard Landry (Dickie) and Richard Nonas - after a first exhibition at 112 Greene Street in New York published a collective photographic essay: 'The show was comprised of a collection of photographic notes evolving from a year of group discussion around mental, personal non structural or architectural notions of space and place.' 'Anarchitecture,' in *Flash Art*, 46-47, June 1974, p. 71.

¹⁷² *Interview with Gordon Matta-Clark* (1977) in *Gordon Matta-Clark*, exhibition catalogue, Antwerp: Internationaal Cultureel Centrum, reproduced in *Lotus*, 133, cit., p. 11.

¹⁷³ Wigley, *cit.*, p. 113.

¹⁷⁴ See the birth of Arte Povera in Italy in the second half of the sixties, 'the aesthetics of the ordinary.' Celant, G. (ed. 1969) *Arte Povera: Conceptual, Actual or Impossible Art?*, Worthing: Littlehampton Book Services Ltd. See also the *Modernism As Ruins* exhibition (Generali Foundation in Vienna, June 19 – September 20, 2009), which analyzed that passage in the artistic manifestations of the early 1970, 'a time in which the shimmer of pop and minimal art began to crumble and the post-industrial era made visible the limits of growth.' <https://www.e-flux.com/announcements/37991/modernism-as-a-ruin/> (20.2.2022).

¹⁷⁵ 'Tafari, M. (1974) 'L'Architecture dans le Boudoir: The Language of Criticism and the Criticism of Language', in *Oppositions*, 3, pp 37-62.

¹⁷⁶ Cairns, S. and Jacobs, J. M. (2017) *Buildings Must Die: A Perverse View of Architecture*, Cambridge MA; London: The MIT Press.

¹⁷⁷ Term with which the aesthetic research of the Independent Group was oriented. In architectural terms, its declination was expressed as follows: 'we meant by "as found" not only adjacent buildings but all those marks that constitute remembrancers in a place and that are to be read through finding out how the existing built fabric of the place had come to be as it was.' Smithson, A. and P. (1990) *The 'As Found' and the 'Found'*, in Robbins, D. (ed.) *The Independent Group: Postwar Britain and the Aesthetics of Plenty*, Cambridge MA; London: The MIT Press, p. 201.

¹⁷⁸ Cairns, Jacobs, *cit.*, p. 2.

¹⁷⁹ *2038 – The New Serenity*, German Pavilion at the 17th International Architecture Exhibition - La Biennale di Venezia, <https://2038.xyz/> (12.5.2022).

¹⁸⁰ *Relocating a Structure*, La Biennale di Venezia 59th International Art Exhibition Deutscher Pavillon 2022, <https://www.deutscher-pavillon.org/en/exhibition/> (12.5.2022).

¹⁸¹ Gritti, A. (2016) *Archaeology*, in Marini, S. and Corbellini, G. (eds) *Recycled Theory: Dizionario illustrato / Illustrated Dictionary*, Macerata: Quodlibet, p. 59.

¹⁸² 'So we reasoned as though we were dealing with an open site, that is, a street or a shopping arcade, where it's all about circulation. In an indoor market, as in any public space, the walls aren't important. What prevails are the opportunities to make movement easier.' Vassal, J. P. (2012) 'Comme un paysage sans limite / Like an Endless Landscape: Interviews Anne Lacaton & Jean-Philippe Vassal,' in *Palais*, 15, p. 100.

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- ¹⁸³ The architects describe this as a 'light postproduction.' See: Herrero Delicado, G. and Marcos, M. J. (2012) 'Exhibition After Demolition,' in *Domus*, 959, June, p. 48.
- ¹⁸⁴ 'The budget even turned out to be a piece of luck for the project. By optimizing the lack of money, we were motivated to free up new surfaces.' Ivi, p. 104.
- ¹⁸⁵ Lacaton, A., Vassal, J. P., in *ivi*, pp. 103, 104.
- ¹⁸⁶ Vassal, in *ivi*, p. 102.
- ¹⁸⁷ <https://www.lacatonvassal.com/index.php?idp=20> (18.3.2022).
- ¹⁸⁸ OMA, *Il Fondaco dei Tedeschi*, <https://www.oma.com/projects/il-fondaco-dei-tedeschi> (3.12.2021).
- ¹⁸⁹ *Ibid.*
- ¹⁹⁰ See Koolhaas, R., AMO, Harvard GSD and Boom, I. (2014) *Escalator*, in *id.* (eds) *Elements of Architecture*, 14th International Architecture Exhibition, la Biennale di Venezia, Venice: Marsilio, cfr. Jovanovic Weiss, Leong, S. T. (2001) *Escalator*, in Chung, Inaba; Koolhaas, Leong, *cit.*, pp. 337-365. Another connection between architectural subtraction and moving elements is that in OMA's project for the Très Grand Bibliothèque in Paris: in that case the large and dense parallelepiped of the archive should have been interrupted by the large cavities of the reading rooms and collective spaces, the sudden difference between dense space and the 'emptiness' would have been scenographically visible thanks to the glazed elevators placed at regular distances. See: OMA, Koolhaas, R. (1995) *Strategy of the Void*, and *Last Apples*, in *id.*, Mau, B., *S,M,L,XL*, Rotterdam; New York: O10 Publishing / The Monacelli Press, pp. 602-685.
- ¹⁹¹ Corbellini, G. (2012) 'Il bosone di Rossi / Rossi's Boson,' in *Paesaggio Urbano*, 4, April, p. 6.
- ¹⁹² Eco, U. (1962) *Opera aperta. Forma e indeterminazione nelle poetiche contemporanee*, Milan: Bompiani, Eng. ed. (1989) *The Open Work*, Cambridge MA: Harvard University Press, d. p. 4.
- ¹⁹³ The project, finalist for the EU Mies Award in 2019, was also exhibited in at the 'Freespace' Biennale edition in 2018. Architecten De Vylder Vinck Taillieu and BAVO (eds 2018) *Unless Ever People*, Antwerp: VAI. 'In the Caritas project, we always started from the premise that everything is architecture. In mental healthcare everything is part of the therapeutic setting, from the location (the asylum tucked away from the city) to the building typology (the pavilions scattered across the green) via the different elements of architecture (walls, doors, balconies, etc.), the materials used (brick walls can tumble upon you) and the interior design (from washable chairs to the different shades of white on the wall).' Boie, G., *Everybody Architect: A Note on the Authorship of the Square*, in *ivi*, p. 338.
- ¹⁹⁴ Architecten De Vylder Vinck Taillieu (2017) 'Caritas,' in *A+U*, 561, VI, p. 81.
- ¹⁹⁵ Boie, G. (2019) 'The Social Mind,' in *Domus*, 1036, June, 'Instant Heritage,' p. 656.
- ¹⁹⁶ Architecten De Vylder Vinck Taillieu, Doorzon Interieurarchitecten and Dujardin, F. (2016) *13th Demonstration – Ambition – Manifesto*, in *id.* (eds) *Bravoure Scarcity Beauty*, 15th International Architecture Exhibition Venice, Antwerp: Flanders Architecture Institute, p. 131.
- ¹⁹⁷ De Vylder, J. (2012) 'Dear Jan De Vylder, Dear Inge Vinck, Dear Jo Taillieu,' in *Domus*, 954, January, p. IV. Joseph Grima, director of *Domus* at the time, asked the Flemish architects to design the cover of the magazine in which part of their recent production would be presented. The replica, which is partly reproduced here, sets out the reasons for proposing an entirely white cover, including the name of the magazine.
- ¹⁹⁸ With an adhocist spirit, they have 'a layer of humor, with a cultivated wink embedded in the sites for those who take the time to see it. Their buildings become paintings that

often conceal a *trompe l'œil* [...]. They love to play tricks while at the same time hiding their hand in the construction.' Campens, A. (2013) 'Vernacular variations,' in *Domus*, 966, February, p. 64.

¹⁹⁹ Architecten De Vylder Vinck Taillieu (2019) *Architecture/Desire*, Tokyo: Toto, p. 325.

²⁰⁰ Stoner, *cit.*, p. 4.

²⁰¹ Nagasaka, J. (2017) *Jo Nagasaka/Schemata Architects: Objects and Spaces*, Amsterdam: Frame, p. 9.

²⁰² Ivi, p. 14.

²⁰³ Ivi, p. 17.

²⁰⁴ See *Arch+*, 35, May 2016, 'Legislating Architecture,' features Erica Overmeer on Brandlhuber+. See also Brandlhuber, A., Roth, C. and Steger, A. (2016) *Legislating Architecture Schweiz*, Zurich: Patrick Frey, and the movies *Legislating Architecture* and *The Property Drama*, produced by Arno Brandlhuber with the German director Christopher Roth.

²⁰⁵ Brandlhuber+ (2021) 'Opening: Rethinking the Old,' in *2G*, 81, 'Brandlhuber+', p. 48.

²⁰⁶ 'Raw concrete is obviously one of Brandlhuber's favourite materials, whether already present in the buildings he converts, as a material for new constructions [...]. As in the work of Beuys and his followers [...] the material always has a social, cultural and psychological meaning and feeling.' Lootsma, B. (2018) 'A discursive Architectural Practice,' in *El Croquis*, 194, 'Brandlhuber+ 1996 2018: A Discursive Architectural Practice,' p. 15.

²⁰⁷ Stahl, A. (2021) 'A Collaborative Practice,' in *2G*, *cit.*, pp. 6-7.

²⁰⁸ For the practices of informal use of existing spaces as an antagonistic political practice see: Boer, R., Otero Verzier, M. and Truijten, K. (eds 2019) *Architecture of Appropriation: On Squatting as Spatial Practice*, Rotterdam: Het Nieuwe Instituut.

²⁰⁹ <https://divisare.com/projects/365390-carles-oliver-jose-hevia-st-miquel-19>. See also: Hevia, J. (2018) *St. Miquel 19 Carles Oliver*, Rome: Divisare Books.

²¹⁰ <https://dictionary.cambridge.org/it/dizionario/inglese/refurbishment> (12.5.2022).

fake subtractions for
the end times

'what has appened is [...] the greatest possible work of art in the entire cosmos. [...] there are people who are so concentrated on one performance, and then 5000 people are chased into the afterlife, in one moment.'

karlheinz stockhausen

The abrupt, tragic and spectacular interruption of the alleged 'strike of the events'¹ that characterized the nineties - the 'end of history' advocated by the bard of liberal rhetoric Francis Fukuyama² - sees as an absolute protagonist an architectural object or, better, his annihilation, implosion, ultimately, the subtraction of architecture. Destruction and its own spectacle, that is its very aestheticization, are the elements that come into play in this context in order to describe a specific product/architectural phenomenon that in recent years has made its appearance and whose historical, cultural premises and ideologies are investigated here to give it a plausible interpretation.

it's the catastrophe, stupid!

If the terrorist attacks of 9/11 had somehow the value of a sinister omen was due not only to the event itself, but also and above all to the significance that that destruction had in hitting the specific and globally recognizable symbol of the capitalist power and US hegemony. However, such a schematic reduction of the extemporaneous watershed event, however effective and effectively resolving the issues concerning international balances and the aforementioned hegemony, tends to consider the cause-effect relationships only in a sterile Manichean perspective. If at the end of the first twenty years of the new century we can draw conclusions from a period that is not exactly pacified, we owe it to the processes of transformation in the models of economic and political development at a global level that have far more remote origins and a wider scope.

The earlier model on which the stability of the West was based, called 'The Glorious Thirty,' is considered to be as the golden age of humanity's recent history, but was it really so? It must be recognized that the period between 1945 and 1973 saw the unprecedented development and growth of Western societies, however it was a period in which the international assets, dominated by the two great blocs of liberal democracies and socialist regimes, stood on a rather precarious balance based on the mutual paranoia of an atomic apocalypse. Furthermore, both blocks saw dissent towards their respective dysfunctions increase: on the one hand the class issues and gender inequalities, and a transversal idiosyncrasy towards some rigidity of the Keynesian system had led to criticism and radical protest movements in social democracies; on the other hand, in the socialist regimes, in addition to the problems related to the weakness of the planned economies, there were old nationalistic resentments and an understandable aversion to dictatorship and authoritarianism. The so-called 'collapse of ideologies' following the implosion of the socialist bloc and the

symbolic event of the fall of the Berlin wall is part of the liberal rhetoric that evidently considers ideology par excellence only the communism and the whole economic-political apparatus, more or less consistent or akin to its principles. Moreover, the free market promoters have always opposed their alleged 'realism'³ to the idealism of economic planning and that type of narrative has worked quite well as the only ecumenical system capable of giving prosperity and development, as long as it was limited to subtle blandishments of his rhetoric or ignoring, for example, the consequences beyond what was once the iron curtain (the war in the former Yugoslavia, the serious problems of reconversion of the former socialist economies and the urban crises in the former industrial cities, the financial bubbles of the 'Four Asian Tigers,' etc.). The aversion to the concept of welfare state, now considered to be bankruptcy and counterproductive, led to the rise of private devolution and to the revision of the legislative restrictions that limited financial speculation. Globalization and the advent of new digital technologies have further fostered those processes while they have produced international competitiveness on the one hand, causing the relocation of many industrial sectors, and on the other a progressive obsolescence of some productive sectors and professional figures, thus creating vast de-industrialized areas and related employment and social crises.

The bursting of the dot-com bubble in 2001 and then the great financial crisis of 2008,⁴ produced not only a long and devastating recession but also highlighted the impossibility or the inability of political representatives to offer effective solutions to those problems. Hence the emergence of populist-style opposition movements that find acceptance in a generalized resentment of the effects of globalization. Trivialized and distorted rhetorics of contemporary complexity aim to foment dangerous racist and chauvinist sentiments through conspiracy theories in which there would be organized plans of 'invasion of the foreigner' - which in the European case would be constituted by waves of migration from those countries that have undergone, since the postwar period, the conversion of colonialism into ephemeral states perpetually at war with each other. On another front, after failed attempts at modernization, including cultural, in the Arab countries there has been a growing reaction that has led to a revival of religious sentiment that soon degenerated into an extremist radicalization opposed to the West, above all thanks to US military interventions (first and second Gulf War). Al Qaida and Daesh, or ISIS, are the labels under which a new model of terrorist conflict began: widespread, unexpected and infiltrated, which used the banality of the Western every day life as a strategic 'mask with double deception.'⁵ The numerous attacks in the heart of old Europe⁶ have spread the sense of paranoia and suspicion, especially towards the Muslim communities, and in general have caused a general crisis of the founding values of the open society and an escalation of security and discriminatory policies.

In the background, an increasingly alarming environmental condition: diffuse pollution, intensification of extreme atmospheric events, desertification,

etc. All of them contribute to describing the contemporary reality, and the future, in a disturbing apocalyptic way.

apocalypse ... when?

The concept of apocalypse - from ἀποκάλυψις, apokálypsis, a Greek word meaning 'revelation' - , understood as an interpretation and description of humanity's ultimate destiny, has remote origins at least as long as there is historical memory and is, in its most archaic forms, ascribable to the elaboration and ritualization of the mortuary event, while the literary genre in the strict sense has its beginnings in the late-Arab age (II century BC - I AD). Apocalyptic texts are then found in some passages of the Old Testament even though it is among the apocrypha that one can find the greatest contributions to the genus. Also in the New Testament there are texts referable to this type of literature (of which the most famous is the Apocalypse of John) and what is defined as 'Synoptic Apocalypse' has particular importance above all in reference to Jesus' discourse on destruction of the Temple.⁷ All the texts are united by the spasmodic expectation of a radical and sudden change of the social and historical order, here entrusted to the implacable divine will in which the end of time is realized in the definitive separation of the saint from the damned. The theme is then taken up again outside its eschatological value even in the profane sphere of the arts, literature, philosophy, etc., as well as having a concrete role in certain interpretations on the end of a specific historical cycle in favour of a better considered one - this is the case, for example, of the Marxist apocalyptic. In general, the apocalyptic dimension has to be traced back to the existential anxiety of the individual facing the irreversibility of existence or the indomitable forces of nature, and which Ernesto De Martino defines as a 'permanent anthropological risk.'⁸ In the Western world the individual emotions triggered by catastrophic events have had collective exegesis through specific cultural and historical connotations: in classical Greece through mythology, where Greek tragedy expressed the tension between an intelligible world and its unknown side subjected to the game of divinities ; in the Middle Ages, and in the first predominantly theological Christian modernity, with its long tradition of apocalyptic literature or through Scholastic commentaries on the nature of evil, focusing on a moral reading based on the concept of salvation; finally in modernity, to the convergence between industrial capitalism, scientific hegemony and the Nietzschean 'death of God,' the answer takes on more existential tones, referring to the role of social groups in relation to the problems caused precisely by technological progress, capitalist processes and world wars.⁹

The increase in catastrophic concatenated factors with the extreme effects of the modern and contemporary age has now made it clear that today the most probable end of the world is attributable to human activities. However, this consideration requires a clarification: since this perception is a product of the human mind, it cannot be anything other than a projection of man *on the world*, hence all the apocalyptic narratives end up being nothing more than the fear of *the end of the man in the world*, because, even after a hypothetical disappearance of the humankind, the world would continue to exist very well¹⁰ if not even better, including other forms of living species.¹¹ Ultimately, what today is defined as ‘Anthropocene’¹² would be nothing more than an anthropic process that leads inexorably towards an announced disaster, since the well-known consequences that this process has had on the world are perceived either as irreversible, and therefore inevitably fatal, or simply lacking effective solutions, or because the implementation of corrective measures would imply a renunciation of many of the comforts allowed by progress and therefore considered by many unacceptable. Moreover, although some aspects of catastrophic contemporaneity are given as universal assumptions (global warming and pollution, terrorism and conflicts, crises and recessions), the perception of their imminence, causes and probabilities is paradoxically distorted with what we can today define as ‘information overload.’¹³ While forty years ago Jean-François Lyotard hailed the ‘end of the metanarratives’ of the postmodern era as a healthy liberation, today we are dealing with his dystopian heterogenesis: if ‘there are no facts but only interpretations’ then there cannot be an absolute acceptable truth. The decisive step towards the so-called post-truth¹⁴ seems to have originated precisely from the event par excellence of the new century: during the news broadcasts and in the periods following the September 11 attacks, the scrolling news became constant, merging information synthesis, immediacy of reception and fusion of anxious topics with greater impact (war on terrorism, stock market collapses and employment, hurricanes, etc.). The constant flow of information, mostly with alarming tones, has thus replaced the empirical approach of the news, anticipating the Facebook and Twitter feeds, made by fluid message boards, often without references or checks.¹⁵ In addition to a simple hermeneutic subjectivism inherent in each of us, the difficulty in giving a plausible and comprehensible interpretation to complex phenomena of a general character of contemporaneity, together with a progressive loss of credibility of what should be the official information organs, has led to the production of simplistic and even toxic narratives, hoaxes and fake news, conspiracy theories and a general condition of widespread paranoia, aspects that fall perfectly into the postmodern cultural logics of late capitalism.¹⁶

hellimagery

Although there is still a widespread doubt that the term ‘postmodernism’ exhausts the description of the contemporary condition¹⁷ sufficiently, it still manages to fit perfectly with regard to the production of a multiplicity of ‘ends,’ typical of apocalyptic interpretations of reality, and that Fredric Jameson defines ‘inverted millenarism.’¹⁸ Regarding the various theories on the end, the ‘happy globalization’ proposed by Fukuyama appears as the most fabulous, consolatory and artificially optimistic: in fact, the vision of a world pacified under the aegis of absolute tolerance guaranteed by liberalism, places the pluralism in a totally idealistic perspective, abstracted from the implications caused by the functioning of capitalist processes and by the bewilderment of individuals in the face of the liquidity of global space. The reality, so often slyly escaped from the standard bearers of postmodernism, shows the other aspect of deterritorialization: the disintegration of consolidated social patterns, the precarization and the fragmentation of the existence dimensions, the estrangement. The impossibility of recognizing oneself in an image-world, which paradoxically should contain all the local particularities and individual multiplicity democratically, causes forms of friction and resistance that succeed, sometimes dangerously, even to seriously undermine the secularization typical of modernity.¹⁹



Three nonfictional architectural disasters: Ronan Point collapse, 1968; Twin Towers attacks, 2001; Grenfell Tower fire, 2017.

The reaction to the displacement of the neutral but chaotic space of globalization brings out new processes of identification in conservative rhetoric that transform religious identities into a sense of belonging with militant tones and which refer to universalism, once mediated or prevented by the spatial distances, but that today can find proselytism in the pervasive universe of digital networks. Thus re-emerge the ardour of iconoclasm in the galaxy of the flow of

images, in this superimposition of symbolic and conflicting orders of the most disparate, materialized in the most exacerbated and spectacular terrorist act ever. Spectacle, because this is what it is about, recognizing that the media effect is an integral part of the physical act of destruction: in addition to recognizing in the Twin Towers a specific representative value of the power to be destroyed, the terrorists were fully aware of the amplifying power, and in turn iconic, of the infinite reproduction and media repetition of the images of the attacks. It is as if in this event modernity, or late modernity, fell back on itself: by striking that specific symbol and exploiting the typical capitalist accumulation means of late capitalism, they undermined the very founding values of the liberal or liberalist society, whatever it means.²⁰

It was not only the delirium of iconoclastic terrorists that gave this destruction and its media reproduction a destabilizing value that transcends the tragic fact itself: that spectacle provided another kind of attraction for a wider audience. Jean Baudrillard noted a devious and transversal idiosyncrasy towards that brazen display of strength constituted by the symbols of financial power embodied by architecture, since

All that has been said and written is evidence of a gigantic abreaction to the event itself, and the fascination it exerts. The moral condemnation and the holy alliance against terrorism are on the same scale as the prodigious jubilation at seeing this global superpower destroyed – better, at seeing it, in a sense, destroying itself, committing suicide in a blaze of glory.²¹

The atavistic phantom that relates the rise of a power and the desire to destroy it is sublimated and averted from the construction of the artificial imaginary offered by the flourishing industry of catastrophic cinematography. When Baudrillard reminds us that the attraction exercised by violence, like pornography, leads to an imminent danger of the approaching of the real act,²² it also suggests to us that impulses and voyeurism are mechanisms that are always perfectly exploitable by the late-capitalist logics. The entertainment industry thus feeds on the media diffusion, never mediated by a rational or discursive filter, of an uninterrupted flow of images, already mentioned above, which certainly starts with the 9/11 attacks and which establishes a further obscene approach to the tragic events, in which a multitude of individuals participate ready to take their personal shots of the disaster and share them in the multiplier space of the digital networks.

The question that Jameson asks himself is whether the cultural value of the catastrophe imagination produced by the entertainment industry can no longer be ascribed to the categorical forms of imagination of the future but rather to manifestations, sometimes superficial, cynical or satirical, of a reflection on our moment in time,²³ it sounds more relevant than ever. Mark Fisher offers a further reflection: while the narrative and the dystopian imaginary of the past used the representation of the disaster as a pretext to hope for the birth of new models of life and society, today some films of the apocalyptic genre seem to

propose instead an extrapolation or exacerbation of [our world] than an alternative to it:

In *Children of Men*, public space is abandoned, given over to uncollected garbage and stalking animals [...]. Neoliberals, the capitalist realists par excellence, have celebrated the destruction of public space but, contrary to their official hopes, there is no withering away of the state in *Children of Men*, only a stripping back of the state to its core military and police functions [...]. The catastrophe [...] is never waiting down the road, nor has it already happened. Rather, it is being lived through.²⁴

While on the one hand the seventh art has the inherent ability to be the medium par excellence in effectively transmitting, through its own technical and mechanical artifices and the process of identification that it induces, a complete sense to an apocalyptic narrative - regardless of the quality of the filmic product -, the very construction of the contemporary apocalyptic imaginary has been further distorted by the popularity and actuality of the subject. If for the term 'apocalyptic' there is, as already mentioned above, a specific cultural meaning, the 'imaginary' has, as a function and content of the individual and/or collective imagination, an elusive nature with variable contours, influenced by the historical and cultural alternation of the images it feeds on. Thus also the apocalyptic, as an inflated and traceable category in almost all the products of the cultural industry, sometimes becomes a vague, all-encompassing and sometimes questionable metaphor or something that has lost any link with its original meaning.²⁵ In its pop reception, the apocalyptic is often in fact associated with the catastrophic, or used alternatively to indicate substantially the same thing, or still fed by its causes and its effects: crises and disasters. Regardless of what the deeper meanings of an apocalyptic narration or the precise meaning of a catastrophic metaphor are, what distinguishes or manages to evoke the end of the world in an univocal and icastic way is precisely the destruction, by deliberate violent acts, disasters natural or due to the decay, of the built landscape.

shock and the city

Despite the mistrust of postmodernist relativism, contemporary reality has always required organic descriptions of one or more dominant and characterizing aspects. Old interpretations of industrial society, such as mass or post-industrial society, like the consumer society, have not lost meaning, they are only no longer able to exhaust or fully understand one or more aspects of the *Zeitgeist*. In 1986, in the year of the Chernobyl disaster, Ulrich Beck elaborated the concept of a 'global risk society,'²⁶ noting the increased and more widespread perception of the effects of the most disparate disasters that spread at surprising space-time

speeds, thus involving the entire planet. Subsequently, Zigmunt Bauman further contributed to describing the condition of the individual and of humanity, starting from the criticism of the effects of post-modernity or, better, of 'liquid modernity,' considering the state of constant uncertainty and fear²⁷ caused not only by terrorism but also in the loss of identity, in the economic and social security decay, etc. However, it is the spatial context that provides the most effective description of the disaster: already engaged in the analysis of the relationship between technological development and the consequent incidents (integrating incident), Paul Virilio, in analyzing cities like New York after 9/11, Baghdad after Saddam, and Jerusalem with its 'security wall,' states that the metropolises are the 'panic cities,'²⁸ which have gradually become a place of devastation and where the incident can occur at any time. The catastrophe is therefore already between us and not necessarily exhausted within an episodic event,²⁹ but perennial or imminent, for example in those marginal and extreme urban conditions, in the slums or in the vast landscapes of the abandonment and degradation of shrinking cities, or even in the urban settings built next to polluted and polluting sites, in seismic or alluvial zones perpetually at risk.

If the destruction of the built landscape is the most representative image of the catastrophe it is because the construction has the potential of disaster in it. From the outset, the construction activity has been a perennial bet against the force of gravity and with a land surface that is only apparently stable, and every evolution, every structural boldness has been achieved by means of empirical data obtained also through devastating collapses:³⁰ from the legendary destruction of the tower of Babylon to the collapsed domes of Hagia Sophia, up to the disaster of the Ambiance Plaza, the partial collapse of Ronan Point or even the tragedy of the Grenfell Tower,³¹ the history of architecture is also made by its 'integral accident,' but also from a certain degree of *Unheimlichkeit* and from an intrinsic violence. Those are themes that are certainly not new but that in a contemporary context dominated by real, symbolic or imaginary fears³² assume new perspectives and new fields of research.³³

At the beginning of the eighties, Bernard Tschumi identified two types of violence in architecture, indicating with 'violence' the interaction between individuals and the built environment:

if bodies violate the purity of architectural spaces one might rightly wonder about the reverse – their violence inflicted by narrow corridors on large crowds, the symbolic or physical violence of building on users. [...] Architecture and events constantly transgress each other's rules, whether explicitly or implicitly [then] two types of partial violence should be distinguished [...]. The first is formal violence, which deals with the conflicts between objects [...]. Distorsions, ruptures, compressions, fragmentations, and disjunctions are inherent the manipulation of form. This is also the disruption inflicted by any new construction on its surroundings, for it not only destroys what it replaces but also violates the territory it occupies. [...] The second type of partial violence is not a metaphor. Programmatic violence encompasses those uses, actions, events, and programs that, by accident or by design, are specifically evil

and destructive. Among them are killing, internment, and torture, which become slaughterhouses, concentration camps, or torture chambers.³⁴

In the age of liquid fear or global perennial risk, the contemporary spatial translation of the violence described by Tschumi takes on complementary connotations. While programmatic violence manifests itself as such through its manifest spatial translation, there is a much more ambiguous type of violence, triggered by the widespread perception of the catastrophe in the era of globalized terror, and sold instead as a defensive tool against terrorism. In addition to the technical requirements introduced in the 1970s in the American context,³⁵ which analyse the spatial dynamics of criminal behaviour and develop devices to discourage or oppose it, the paranoia caused by terrorist tactics in recent decades has favoured the transformation of public space into a widespread panopticon. If on the one hand the perception of security and the operations put in place to guarantee it are an integral part of the concept of welfare, surreptitiously this aspect has degenerated into an aberrant form of policing. In this sense, the fear felt of a potential catastrophe deriving from criminal or terrorist acts extends to a broader spectrum that includes the more general and reactionary concept of inhibiting behaviours deemed as ‘deviant.’



Villa Savoye: the ‘real violence’ of decay (ca. 1950s) and the ‘fake violence’ of digital manipulation (Xavier Delory, 2014).

In addition to the proliferation of technological devices - video surveillance, facial recognition, tracking of movements, etc. - there is a planning field of programmatic violence, extremely subtle and extensive, defined ‘hostile design’ whose founding principle, based on the vague and sterile notion of urban decorum, takes the form of design devices that are harmless at first sight and for this reason even more effective in preventing, for example, the improper and

informal use of benches, stairways, flower beds, porches, etc.³⁶ In essence, what is concretely determined in the urban space thus organized is a disturbing subtraction of free use and the very concept of public space in the era that, according to the paean of liberalism and globalization, should have been instead the most eloquent image of the open society.

trudging through the ruins and the relics

Sudden and unpredictable events - such as earthquakes and tsunamis - expected - such as wars or hurricanes - or chronic critical conditions - such as shrinking cities - being the crises and catastrophes events that also affect the built landscape, they are material for analysis and architectural project. It has already been mentioned, the constructive activity was born and has evolved by relating, also through disastrous outcomes, with the forces of nature and in some contexts, such as the Japanese, developing a specificity relating to natural disasters in the use of techniques and special materials. In general, the post-disaster design context sees a disciplinary approach that, depending on the context, fluctuates between reconstructions according to the logic of the fake copy (like the controversial reconstruction of the historic center of Dresden) or exploiting the opportunity offered by the tabula rasa to implement experimentation areas (as in the reconstruction of Berlin) or again towards the by now consolidated category of the politically correct design, ie the so-called 'emergency architecture.'³⁷ From Shigeru Ban's paper architecture and his NGO VAN, to the Sean Godsell's *FutureShack* shelter, there are countless virtuous examples that combine emergency needs with the formulation of specific languages deriving also from what is established by the conjuncture (easy transportability, existenzminimum, economy, recycling, etc.), however, even here we can find the same dynamics that the discipline in the contemporary era suffers, or is accused of. On the one hand the increasingly sidereal distance of the architectural profession from decision-making roles and planning and which inevitably suffers from deregulation, private devolution and pure speculative interest,³⁸ on the other, initiatives sold as laudable and meaningful from the social point of view,³⁹ absorbed into the entertainment and the star system logics. Another problem is the tendency of some architects to exhaust complex questions with excessively or exclusively formal proposals that would require another type of approach, which does not include, for example, a new architecture as the best possible solution, as in the case of the proposed design outcomes as a solution within the vast campaigns of foreclosures in the United States, after the bursting of the 2007 housing bubble.⁴⁰

During the most intense years of the crisis, two types of urban landscapes have become rather familiar, seemingly at the antipodes but which lend themselves perfectly to being described as perfect post-apocalyptic scenarios, and which show the two sides of the same coin, or the most extreme urban effects of the late capitalist production machine. The conversion of western economies towards the post-industrial condition has consequently determined the mutation of those territories that had developed their urban apparatus on the basis of their own industries. Processes such as failures or obsolescence of certain productive sectors that have caused their closure, radical transformation or delocalisation, and the consequent demographic contraction, have had as a more evident effect - as in any self-respecting disaster - the degradation of the spatial assets of the landscape built in so-called shrinking cities.⁴¹ Here, the degraded building material is no longer only made up of those wrecks and ruins nowadays commonly called 'industrial archeology,' but also those of abandoned residential buildings which - in the dispersed territories of American sprawl dominated by the myth of private ownership concretized in the single-family house - forms large portions of urban territory in progressive decomposition. The other side of the coin about the transition to the post-industrial dimension of the neoliberal era has generated a new form of urbanization of capital,⁴² putting the speculative activities related to the building sector and the various forms of financial instruments in close relation. The world economy on the brink of collapse and the long recession with its serious consequences were triggered by the financial sector connected to the real estate sector and this highlights not only their scope and risk but also the paradoxical precariousness of the most recent urban developments. After having increased the landscape of abandonment in American sprawl, the outbreak of the crisis has also led to the transformation of entire brand new neighborhoods into real ghost towns - in the old Europe the Spanish case is paradigmatic in this sense,⁴³ but also in economies considered stable or growing like the Chinese one. The irrational euphoria of recent decades has involved various parts of the planet, especially those in which economic and demographic expansion were considered to be almost infinite entities. Building on a territory that is in fact finite, the precariousness on which the contemporary economy is based in terms of social and economic integration - unlike what is advocated by trickle-down apologists, the accumulation of surplus value does not automatically translate into an increase of aggregate demand - inevitably leads to overproduction. At that point the reckless failed real estate operations have two destinies: dynamite or abandonment, it depends on whether the simple costs of managing and maintaining an empty property exceed any demolition and disposal costs, or when the prospect of planned destruction allows create a new *tabula rasa* able to offer the favorable terrain for further future speculative activity. Similar aberrant dynamics in the production of the built area have rightly led to a strong general criticism of the determinant causes and, even if some instruments have been introduced to control the riskier stock exchange activities, in no way the dominant economic model was challenged by the states

and by the ideology that supports it: the Thatcherian slogan 'there is no alternative' has become a common political practice.

One of the methods by which capitalism succeeds in reabsorbing or digesting its dysfunctions is certainly constituted by the processes of aestheticisation and the consequent seduction effects induced by cultural systems and by the related reproduction devices. In the last part of his famous essay *Das Kunstwerk im Zeitalter seiner technischen Reproduzierbarkeit*,⁴⁴ Walter Benjamin analyzes the relationship between art and politics through key concepts such as aestheticization of politics and politicization of art: although referring to dictatorships of his contemporary era - that is historical fascism and Nazism - the conjunction between the apparently merely propagandistic function of newsreels and the spectacularization of the existence seems always valid. The maximum moment of expression of the mass would coincide with the aestheticizing reproduction of aspects of reality and in this sense this assumes a political value precisely thanks to the process of estrangement of the mass induced by aestheticization; passive contemplation of the spectacle thus replaces the critical sense thus exhausting any urge to insurrection. The origin of this process is identified by Benjamin in the *passages* and world exhibitions, where the relations of domination and class struggle are transfigured by spectacle and consumption, reducing therefore the proletariat to spectator and consumer. These concepts were then extended and expanded by other authors in later epochs, where they did not lose their validity but were further strengthened - by Guy Debord with his 'society of the spectacle,' to Baudrillard who applied it as an example, as seen above, to the relationship between apocalyptic cinema and violent impulse.



The subtractive effects in a modern ruin: Detroit #ruinporn

Referring to the urban territory in the era of the widespread catastrophe, the aestheticization of reality is further conveyed by photographic images diffused on social networks and digital platforms⁴⁵ specialized in spreading images such as Instagram or Pinterest, in which collections of abandoned places pics, architectural and industrial ruins, and ghost towns are categorized through specific hashtags of which ruinporn is the most famous and inflated (but there are just as many evocative names: #abandoned_junkies, #naturetakesover, #abandoned_seekers, etc.). The -porn suffix is not random or just irreverent, rather it precisely defines what the approach is: like pornography - where for the consumer the sexual act is sublimated by the visual experience - the spread of photographs of decadent places transforms contemporary discomfort, the perception of a world in perennial balance on the edge of the precipice, a passion for the tragedy and the sublime, into images that transcend any critical connotation, exhausted only in superficial and passive fruition. The reality is thus softened or purified by the most controversial aspects and what triggers is yet another spectacle to be sold in the circuits of the cultural industry and global tourism. While the widespread proliferation of decaying urban material has led to the re-emergence of debates around the cultural and historical role of ruin related to the wrecks of modernity and the contemporaneity,⁴⁶ the other aspect concerns the vulgarization of the topic in approaches with an unconventional tone⁴⁷ and the spread of a niche tourism market towards the devastated destination. In addition to the trips to Chernobyl and Prypjat, there is also Tianducheng, the fake Chinese Paris but real ghost town, Hashima, the Japanese artificial island with the miners' village abandoned since 1974, the deserted but new Mehra Mer district,⁴⁸ and obviously Detroit, the capital of all shrinking cities that in 2015 became the first American city to be nominated Unesco City of Design, 'thanks to its ambitious proposal to become a global leader in 'inclusive design.'⁴⁹ The visit to such places therefore provides the direct experience and the thrill of living in a sort of post-apocalyptic condition, as if it were a dystopian Disneyland,⁵⁰ proposing in the direct and real experience the catastrophic imagery spread by the media. The discrepancies produced by the capitalist system can thus be translated into pure entertainment, becoming in turn not only an instrument of capitalist reproduction but also elements of distraction that Benjamin identified with the key concept of spectatoriality. For Fisher, this aspect also switches into a passive and regressive acceptance of reality:

Capitalism is what is left when beliefs have collapsed and the level of ritual or symbolic elaboration, and all that is left is the consumer-spectator, trudging through the ruins and the relics. [...] The 'realism' here is analogous to the deflationary perspective of a depressive who believes that any positive state, any hope, is a dangerous illusion.⁵¹

On this fascination and aestheticization of the extreme conditions of the 'real,' not only of the disastrous contexts, but in general of the sudden and even violent turbocapitalistic transformations, Rem Koolhaas has built his critical fortune, also through different rhetorical registers: from a nihilistic *jouissance* for the

generic city to a more dramatically apocalyptic tones for the *junkspace*, the spectacularization of capitalist catastrophes is a '*rendez-vous* with the sublime'⁵² that contemporary architecture certainly cannot miss.

a simulacrum of architectural corpse

From the much-cited demolition of the Pruitt-Igoe complex in Saint Louis, to the attack on the NY Twin Towers, the apocalyptic meaning of neoliberal capitalism - broadly but also more specifically in producing space crises - is iconically represented by spectacular destruction or subtraction in architecture. Minoru Yamasaki has gone down in history, in spite of himself, as the architect of the buildings whose destruction defines the parentheses within which to grasp *the cultural logic of late capitalism* - respectively the alleged deaths of modern and postmodernist⁵³ architecture - that is, further destructions that have provided symbolic imaginaries for the evolutionary stages of the new model of capitalist accumulation. On 11 September 1973 the Palacio de la Moneda is bombed in Santiago de Chile and this marks not only the beginning of a bloody dictatorship but also the first experimental field for the economic theories of Milton Friedman and the Chicago School Boys, the militant front economic liberalism,⁵⁴ while November 9, 1989 is conventionally referred to as the beginning of true globalization, represented iconically by the Berlin Wall destruction.

Each era preserves its destructions heritage that have assumed, beyond the tragedy suffered by the victims and the territories, specific symbolic values and, fatal events apart, destruction has always been also the engine of renewal. However the destructive events that have defined the development phases of the so-called neoliberalism, seem to be symbolically, strategically and ideologically related to it. The Canadian essayist Naomi Klein called it the capitalism of disasters, not only for its natural propensity to profit even after catastrophic events (also because each subsequent intervention sets in motion an economic process, regardless of the reference model) but also because the production of disasters and the resulting shock effect would be effective determinant tools for its reproduction and its domination.⁵⁵

The characteristic of capitalism to produce crises with cyclical recurrences is evident, whether one is generically critical or specifically orthodox Marxist, which in fact they are also crises of values and models of development.⁵⁶ As for architecture - inasmuch as its professional practice is supported by the economic system, whatever it may be - it is therefore not surprising that the first great post-

war crisis - the 1973 oil crisis - took place the following year after the demolition of the Pruitt Igoe, *the day modern architecture died*. In the previous decade, the relapses of social unrest and the strong *milieu* of the counterculture had challenged the essential dogmas of modernism and the dysfunctions of capitalist structures; however, the contrast between the dominant economic model and the criticism of the representatives of a profession that from that model depended created many tensions and frictions within the discipline. The groups of the so-called Radical Architecture expressed those tensions in forms of paroxysmal representation of reality, where to celebrate a cathartic 'death of architecture' by subtracting any superstructure and reducing it, for example, to a pure and potentially infinite geometric entity – Superstudio's Monumento Continuo⁵⁷ - , or to a generic and endless rigorous Miesian infrastructure – Archizoom's No-Stop City.⁵⁸ The critical distance from the 'Piano del Capitale' was translated for the two leading groups of Italian radicals into two forms of symbolic subtraction: the abstinence from large commissions - perhaps due to imposed conditions or to snobbishness, while they could rely on the design product industry that produced objects for a cultured and wealthy bourgeoisie - and a polemic removal of every sign and language for the definition of a zero degree architecture. Such critical assumptions could coincide with what was advocated in the same years by Manfredo Tafuri, however the Roman critic soon dismissed the Radicals movement as 'the academy of utopia.'



Superstudio, Monumento Continuo, 1969.

In those years, Tafuri's goal was to reveal the rhetorical mystifications used by the so-called 'operational criticism' - i.e. the cultural legitimization of the bourgeois reformist mandate configured in consolatory fairy tales aimed at building a heroic story of the Modern Movement - and to bring out the contradictions of the architectural ideology and the role of the utopia that, in the very moment of overcoming the threshold of feasibility and therefore emptied of its idealistic superstructures, thus became a mechanism operating according to the 'Piano del Capitale.' A similar critical awareness about reality, elaborated outside the distorting lenses of ideology, could only be carried out through a

triumph of the absolute disenchantment not devoid - unlike the more enthusiastic and Nietzschean *Umwertung aller Werte* - of a heavy blanket of tragedy. The astute disguises of the 'academy of utopia' or the same apparent removals of the contradictions operated by the architectural ideology left only the silence, a dramatic aut-aut revealed by 'discovering [...] the "drama" of architecture today: that is, to see architecture obliged to return to *pure architecture*, to form without utopia; in the best cases, to sublime uselessness.'⁵⁹ Precisely in detecting the destiny of an architecture defeated by the same ideological superstructures dictated by the mechanisms of capitalist reproduction, Tafuri saw, in the course of an alleged rearguard, the recovery of the proper meaning of architecture, subtracting the postural and ideological apparatuses of modernist and functionalist verbs. The attempt to get out of that impasse, that antinomy that left no way out, could only be led through the bitter declaration of defeat:

the most heartfelt condition today is that of wishing to salvage values pertinent to architecture, the only means is to employ 'war surplus' materials, that is, to employ what has been discarded on the battlefield after the defeat of the Modern movement. [...] Today, he who is willing to make architecture speak is forced to rely on materials empty of any and all meaning [...] to reduce to degree zero all architectonic ideology, all dreams of social function and any utopian residues.⁶⁰

Architecture - thus overcome by its own contradictions, by historical alternations, by a necessary exit towards 'reality' - saw the redefinition of the meaning of its form translated into the multiple connotations of linguistic games; to the Venturian mixture of quotations, metaphors and dissonant languages, Tafuri opposed a sort of antithesis, an abstention from the delusional contaminations of reality, that is, by means of the Russian archetypes. Tafuri certainly did not use Rossi's work as an illusory formula to re-establish the discipline, nor as an easy comforting compensation for the awareness of a disciplinary destiny increasingly absorbed in the logic of an even more exasperated capitalism, he essentially had to deny the flirtations of design with its more vulgar manifestations. In validating the silent signs of Russian archetypes, Tafuri attributed to them the ascetic rigor of mourning, however another contradiction was taking place: those same signs were in fact becoming part of the iconographic repertoire of a very functional radical eclecticism, effectively representative of an architecture immersed in the market economy and entertainment systems.

The experience of the SITE group (Sculpture in the Environment), given its geographical and cultural origins, is a compendium on how architecture can flirt with the ideology of capital even in an irreverent and paradoxical way. Numbered among the American representatives of the Radicals universe,⁶¹ the group founded at the beginning of the seventies by the artist James Wines became famous above all thanks to the collaboration with one of the various symbols of capitalist consumerism: the chain of catalogue products stores BEST. Determined to transform simple exhibition halls into works of art and aware of

the attractive value that an iconic formal configuration has in producing advertising returns for the sale of consumer goods, the SITE group created a series of showrooms, between 1972 and 1984, whose images, according to a recent research, will end up being the most reproduced in the architecture books of the twentieth century.⁶² In general, all the buildings designed for BEST seemed to be a declination of Venturian theories on the decorated shed, combined with the artistic experiences developed in those years by artists such as Gordon Matta-Clark, with his architectural cuts and subtractive ready-mades, and Robert Smithson, an exponent of land art and of an artistic translations of concepts such as entropy, chaos, ruin. The shed series called Indeterminate Façade played on the expressive ambiguity of the architectural container: the simulation of ruined buildings, collapses and subtracted portions of the façade were mistaken for a sort of criticism of the consumption system and the architectural profession that supports it and by which it depends on, but it can be defined as a further phase or one of the highest moments of aestheticization in the architectural field already investigated by Benjamin. It is easy to doubt that there was some serious polemical intent and even if it had been so, the process of reification of that criticism took place almost immediately: as a commercial attractor and vehicle of corporate communication it was a success. The fake walls made by collapsed bricks, the corner of the building that opens in a simulation of fracture to reveal the entrance to the building, portions of the façade removed, all can be traced back to a simple *divertissement* that makes the typical postmodern ambiguity between meaning and signifier its distinctive feature, despite Wines reiterating its extraneousness to postmodernism (from which Venturi also distanced himself or, at least, considering himself just as its reluctant pioneer). The only moment when the signification relationship was unitary and coherent occurred when the company went bankrupt and the buildings suffered a real demolition.



SITE, Indeterminate Façade, 1974.

The 1970s were years of crisis and strong social tensions: the capitalist system seemed to be collapsing under the thrusts of stagflation and the oil crisis, industrial production and consumerism had already proposed tragic endings for our planet and in the cinema industry flourished, as a cultural expression of that popular feeling about the perception of the end, the catastrophic genre. Whether it is the eternal return in history or a simple *déjà-vu*, passions for apocalyptic visions, aestheticization of the disaster and pop cult for the ruins are, as already explained above, aspects of today's culture and as such find representative space also into contemporary architecture. In ancient times the ruin could have been an area of further signification either as a re-use material or as an element on which to graft hybridization processes into a sort of architectural palimpsest. The engravings by Giambattista Piranesi of eighteenth-century Rome anticipate the romantic concept of ruin as a cultural entity in its own right, further enriched by the philosophical treatments of Immanuel Kant and Edmund Burke on the concept of sublime - understood as an overwhelming experience that defies reason and can be triggered by tragedy and fear - and later expanded by the contributions of John Ruskin, where ruin becomes the moment of maximum sublimation in the life cycle of an architecture, and Georg Simmel, who identifies the tension between the will of the spirit and strength of nature. With the advent of the twentieth century and the iconoclastic contribution of the historical avant-gardes and the modernist drive towards perennial innovation determined by progress, it will take the crisis of the 1970s to question the very idea of infinite development and bring back the concept of architectural degradation, as a natural evolution of its process, within the disciplinary debate. When he visited one of the greatest symbols of modern architecture, Le Corbusier's Villa Savoye in Poissy, a young Bernard Tschumi remarked that:

It was decayed and almost collapsing [...]. When you saw it a few years later after it had been cleaned up and repaired, it looked so fake that you thought perhaps the dimension of architecture that was so compelling had to do with its materiality. The aspect of the building that most interested you was the way it engaged with unexpected misuse. Its decay transgressed its anticipated form.⁶³

The ascertainment of the disjunction between the form of the building and the elements that intervene to modify it, as the use and the event, inevitably lead to a redefinition of the architectural space, of its language, of its meaning and therefore the impossibility of providing a univocal interpretation is inscribed in what already happened in the philosophical sphere in the context of 'deconstruction.' However, despite sporadic collaborations with Tschumi and Peter Eisenman, Jacques Derrida will distance himself, even in a rather controversial way, from what he considered an association at least arbitrary, more referable to a kind of de-construction than to something metaphorically akin to his thought:

if all architecture is finished, if therefore it carries within itself the traces of its future destruction, the already past future, future perfect, of its ruin [...] what would again

bring the architecture of ‘the period’ [...] back to the ruin, to the experience of ‘its own’ ruin? In the past, great architectural inventions constituted their essential destructability, even their fragility, as a resistance to destruction or as a monumentalization of the ruin itself [...]. Is a new image of the ruin to come already sketching itself in the design of architecture of our present, of our future [...] so that it already drawn and calculate itself, so that it already leaves its future trace in your projects?⁶⁴

In order to demolish the functionalist axiom but also the ‘truth’ of the architectural articulation based on orthogonality, complanarity and symmetry, we can trace the common salient features even in the extreme differentiation of the languages adopted by the representatives of the abusive architectural deconstructivism. Fractures, decompositions and deformations of the Euclidean space, until reaching extreme spatial configurations that simulate the instant before a collapse or mime an unstable equilibrium, the buildings of Eisenman, Coop Himmelb(l)au, Zaha Hadid, Daniel Libeskind or Frank Gehry end up representing a moment of the emotional relationship between building and observer, a momentary and distorted interpretation destined to fix itself forever and appear as arbitrary compositions.⁶⁵

The ability to transmit the most evocative depiction of entropy, precariousness and transience produced by the processes of globalization through extremely innovative and unsettling formal shapes and configurations became itself the engine of reproduction of logics late capitalist and mass tourism, of which the so-called ‘Bilbao effect’ was the eponym.



Eisenman's Ciudad da Cultura de Galicia incomplete and empty.

With the outbreak of the global 2008 crisis and the consequent recession, the system that held a season of bold experiments linked to reckless financial formulas began to crack and what was once defined as ‘the death of architecture,’

understood as a crisis of its values, has turned into a professional extermination tout court of minor and local studies, while the so-called 'starchitect' was imputed the complicity with a system that had caused the disaster. In the following years there was certainly a downsizing, not only formal but also more generically rhetorical, of the discipline: Venetian biennials sponsored by Rolex but filled with pavilions dedicated to refugee camps and squats, boschi verticali as a panacea to global warming, and low cost aesthetics also in luxury hotels. Above all, the degree of representativeness that clients and companies expect from contemporary architecture is not lacking.

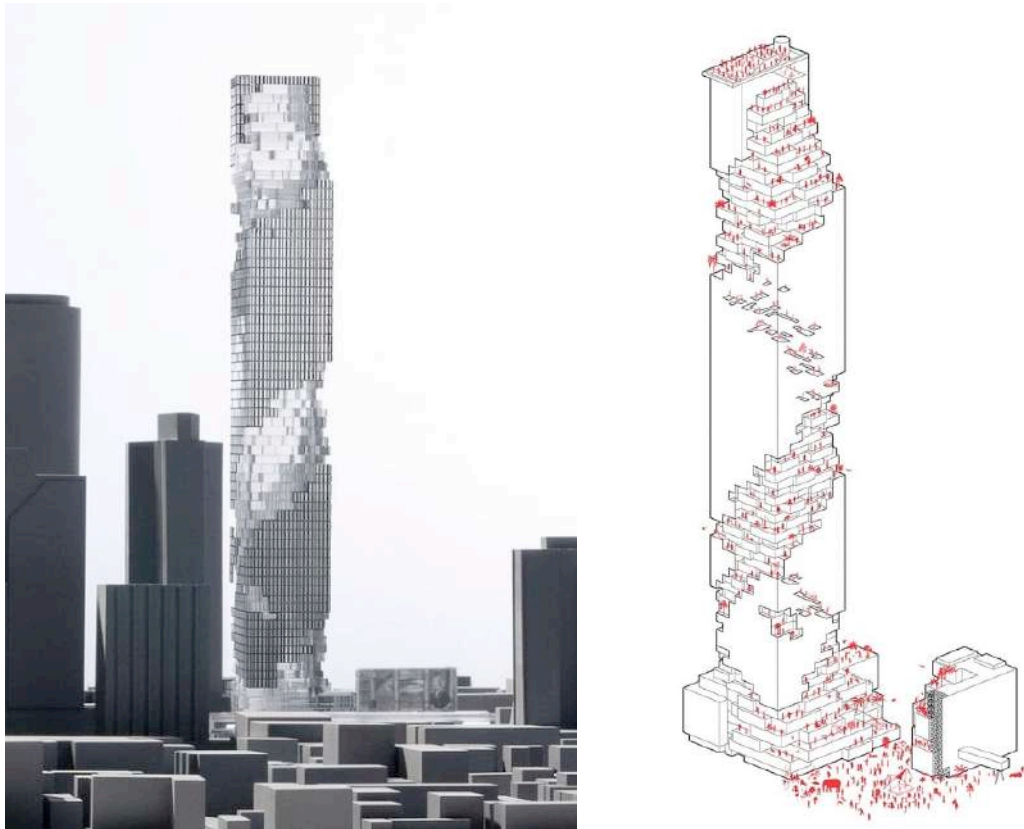
In recent years there has been a certain tendency to re-propose a sort of aesthetic of ruin, much more subtle than the SITE and Wine's parodies, more sober with respect to the fractures and collisions of 'deconstructivism' but equally ambiguous and which seems to respond to those structures of contemporary feeling that suffer from the widespread perception of catastrophes and further imminent crises. No MoMA curator that identifies some philosophical correspondence, let alone any of these buildings is proposed in the form of ruin in terms of design or communication strategy, however in the following examples we can recognize common traits: typologically, skyscrapers or building complexes; formally, parallelepipeds in which irregularly and seemingly arbitrarily pieces seem to be missing. In all of them the scanning between positive and negative, between full and empty volume, appears as a compositional exercise on subtraction.

The MahaNakhon skyscraper by Büro Ole Scheeren and HLS, in the Bang Rak district in Bangkok (started in 2012 and inaugurated in 2018), is a residential-tertiary mixed-use tower that has a continuous external glass surface interrupted by a series of variable depth indentations and distributed in a spiral path that surrounds the building up to its top. These recesses allow interfacing the curtain wall and housing terraces of variable dimensions and configurations showing some heresy towards his master, Koolhaas: in subtracting portions of both the façade and the generic plan, the vertical schism seems to partially break. The general appearance makes the object appear as a sort of gigantic Jenga⁶⁶ game or a digital 3D made of pixels, however the most eloquent reference image is precisely that of a damaged skyscraper, which has suffered subtraction due to collapses or an unfinished building due to developer failure:

As a result of Asia's 1997 financial crisis and general political instability in this part of the world, Bangkok is saddled with dozens of unfinished high-rise projects. [...] MahaNakhon Tower – with its veneer of double-height skyboxes, terraces and balconies – seems to mock current circumstances with a reflective façade whose smooth surfaces are interrupted by recessed blocks that suggest an imaginary whip stroke aimed at the building.⁶⁷

None of these aspects have been mentioned in the official presentation of the building, yet any connection with 9/11 and its iconic charge, however tragic, does

not seem so random. Given its powerful image further increased by its height (with its 317 meters high and up to 2018 the tallest building in Thailand), the building is already affected by various imitations.



Büro Ole Scheeren, MahaNakhon Tower, 2018: photo of the model and isometry highlighting the 'subtracted areas.'

The design for The Taipei Performing Arts Center Competition (2008) entry by NL Architects obtained the Honorable Mention. The complex brief included a structure that accommodated three theaters, of which the largest with 1,500 seats and the other two with 800. The idea of integrating a covered public square in the building for outdoor activities but protected from sun and weather, has prompted the designers to obtain it by subtracting volumes in the central and lower part of what appears to be a gigantic 110x80x64 meters porous parallelepiped. The space or, better, the central cavity of the building, onto which the various volumes containing the activities and services overlook, returns a digitized version of Piranesian space, while the building as a whole looks like a huge ruined volume.

After having voted in favour of overcoming the building restrictions regarding the maximum height allowed but only in six exceptional cases, the city

of Paris in 2009 launched an international competition for the construction of six tower buildings. For the Porte de la Chapelle area Dominique Perrault Architects proposes a residential-tertiary mixed-use tower whose profile is interrupted by irregular scans derived from subtracting volumes for housing terraces. Compared to Ole Scheeren's skyscraper, a further particularly significant element is introduced here when it comes to ruins, or the vegetal element: an architecture that is no longer habitable, becomes vegetalized sculpture, it is, therefore, perhaps the first depository of that mythic-poietic character that the intact building hardly possesses today. This characteristic is due to the emergence of immaterial forces, of indescribable suggestions, or, as Simmel claimed in his essay on ruins, because the ruin of a building shows that in its destruction other forces have grown forms, those of nature, for which a man's work is ultimately perceived as a natural product.⁶⁸



NL Architects, Taipei Performing Center, 2009; Dominique Perrault, Tower, 2009.

In the various investigations conducted by Winy Maas (MVRDV) and by the think tank 'The Why Factory' on issues inherent to the complexity of the contemporary era and the possible fields of operation for his office, the theme of shock linked to the perception of a catastrophe seems to have inspired some recent projects by the Dutch studio:

In a world where future forecasting seems futile, where predictions are unreliable, many urban planning decision seem to be governed not by vision, but by fear: gear of disaster, fear of change, fear of the unknown [...] with the fantasies in this book, we can gain perspective on our current fears.⁶⁹

The Cloud (2011) design for two commercial-residential twin towers in Seoul caused quite a stir and indignation: the idea of joining the two separate twin towers at about half their height from a ‘cloud of pixels’ - to house services various including gyms, restaurants, swimming pools, etc. - defines an overall image that reminds too well the attack on the twin towers in New York. Following the avalanche of accusations and insults on the web, the studio replied with public excuses, justifying that choice as if it had been dictated by a parametric automatism;⁷⁰ to accuse the Dutch study of calculated cynicism - given the media coverage of the affair - seems to be inappropriate, yet other projects seem driven by a sort of unconscious perversion for disaster. The renderings depicting a bird's eye view of the complex for seven residential towers and gathered around a square in central Abu Dhabi are reminiscent of an urban center excavated by bombing, while street-level depictions illustrate, in the usual rhetoric of advertising rendering, a fabulous scenario. The *Valley* design for the Zuidas area in Amsterdam is even more eloquent in presenting itself as a sort of false ruin: a slab with services and three residential towers above is ideally excavated and the surfaces treated in different ways: the parts of the building facing outwards they are flat and have a mirrored facade, the internal parts with the usual degrading proliferation of pixels which constitute the terraces covered with vegetation. Precisely this difference in treatment between surfaces creates the illusion of a building residue that has been colonized by vegetation.



MVRDV: The Cloud, 2011; Valley, 2015; Pixel, 2017.

The recent proliferation of buildings that are composed by agglomerates of cells, cubes, modules is probably the heir of that late-modernist approach that proposed a more variegated and less alienating use of prefabricated building elements: with the Moshe Safdie's Habitat 67 stacking housing modules and the free connection of housing units to the supporting structure in Kisho Kurosawa's Nakagin Capsule Tower, industrialized building was freed from the repetitive and

serial image of Plattenbau rigidity. Without resuming the constructive logic and the ideological principles of modernism but only the more general formal layout of the jagged and irregular profile, an office like BIG, for example, has regularly used this type of formula in recent years - mainly for residential projects and in order to offer a kind of 'democratization of the individual terrace' - adapting it deterministically in various configurations according to the environmental context of which the salient features are parameterized. Given the success of a certain kind of communication associated with the project, through comics-like diagrams and eye-catching photorealistic renderings, this design approach now boasts a myriad of epigones, so much so that we could speak of the pixel, or the Jenga game or a sort of 'Legoland academy.' It is no coincidence that the famous Danish bricks were often used as material for conceptual maquettes so much that MVRDV used Lego for its skyscraper scaled models for the 'Porous City: Lego Towers'⁷¹ exhibition in which the rigidity of the monolithic rationalist skyscraper is interrupted by appropriate subtractions, intrusions or extrusions. Its variant with subtractions seems today the image most akin to a kind of aesthetics of ruin, as it simulates what happens in a damaged building, namely the partial and irregular removal of its volume. It is thus a further simulacrum of the ruin that expresses itself through a principle of abstraction that is its own, for it is not a folly, the Romantic-era garden pavilion imitating a building in ruins, nor is it an artistic operation of simulating façade collapses, nor is it a reflection on the instability of language and meaning.



MVRDV and T?F, Porous City, 2012.

The simulation of subtraction, understood here not as a real removal of parts of an existing building but as a conceptual-design method that works 'in negative,' like the action of a sculptor, and on the clear full-empty contrast of the building volume, is not a new process and even less necessarily linked to the aesthetics of ruin - see for example OMA's projects for the Très Grande Bibliothèque or for the Y2K house. Actually, each subtractive process has by its very nature a destructive origin: the sculptor 'destroys' the material from which he derives his work and every architecture has the potential of destruction, being born and developed also for subtractive operations - the raw materials from which derive the building materials or the *tabula rasa* necessary for its construction from scratch. Moreover, the sharp visual contrast deriving from the sudden alternation between full volume and adjacent cavity is in turn a declination of the catastrophe: one use of the word catastrophe is given in some perceptual phenomena, in this case, due to the effect of different psychological mechanisms linked for example to the inversion of figure/background, to the apparent interruption of continuity.⁷² Architectural subtraction, when it is not a voluntary act - be it physical or conceptual - is a violent act that determines, necessarily new meanings also of a social nature, as the architecture violated, damaged or destroyed, as already reiterated, constitutes a trauma for the society both in a material and symbolic sense⁷³ but, also specifically, cultural for the discipline directly involved. The violence that affects architecture and the resulting trauma is also the instrument with which the discipline succeeds

to perform a sort of disciplinary auto-analysis, critical to its ability to transform itself in relation to changing contexts. Indeed, the traumatic process affects architecture not only when it is triggered by a planned or accidental external event, but also when it is intrinsic to the relational nature of architecture itself, and can be introduced (or designed) in a process of critical (self)definition.⁷⁴

However, the need to produce a sufficiently eloquent signification of violence and trauma is something equally inherent in the discipline and such tensions often degenerate into exasperated expressive forms. In his attempt to combine the iconoclastic but also cathartic force of war⁷⁵ and recognizing in it the parallel with architecture, Lebbeus Woods proposes in Sarajevo destroyed by bombing a different approach to that of reconstruction or the removal of its consequences on buildings but rather, in an attempt to give historical evidence to the traces of conflict, it underlines its presence with hypertrophic architectural 'scars' and grafts. For those who had experienced the drama of conflict directly those traces on the buildings were only a testimony of death and Woods' magnificent drawings, yet another fervor of an architect excited by the sublime.⁷⁶

Therefore, if architecture is violence (Tschumi) and war (Woods) then it is also terrorism. Even without mentioning that Mohamed Atta - the terrorist in charge of the suicide commando in the 9/11 attacks - had a degree in architecture and that the collapse of the twin towers does not seem to have been foreseen - thus assuming the character of a 'suicide' that further amplified the act⁷⁷ - the

not-so-casual allusion to that event in the MVRDV towers in Seoul refers to another type of terrorism that supports these architectural manifestations, even more subtle: it is the perverse one of commercial logic that measures everything on the parameter of economic performance, where every formal configuration adapts to become a brand dominated by the laws of the market.⁷⁸ The very reason is better explained by Slavoj Žižek:

Today, more and more, the cultural-economic apparatus itself, in order to reproduce itself in competitive market conditions, has not only to tolerate but directly to provoke stronger and stronger shocking effects and products. [...] Here again, as in the domain of sexuality, perversion is no longer subversive: such shocking excesses are part of the system itself; the system feeds on them in order to reproduce itself. Perhaps this is one possible definition of post-modern as opposed to modernist art: in postmodernism, the transgressive excess loses its shock value and is fully integrated into the established artistic market.⁷⁹

Given its fundamental difference from the world of art and cinema but at the same time as integral part of the cultural and therefore communicative and therefore economic systems, the shocking effects related to the disaster - in the case of the MVRDV's towers, The Disaster par excellence - are borrowed through the register of the allusive metaphor. Furthermore, the recursive use of the pixel as a basic module of some contemporary architectural objects, often obsessively remembered by the designers themselves, refers not only to a clever wink to the contemporary digital culture or to the very nature of the medium with which the project is produced today, but also to the artificiality of his image, which in this way takes on the real appearance of an unreal eBoy⁸⁰ design, as if a sort of low resolution gaussian blur were being applied to the true image of the tragedy.

To further contribute to dilute the *Unheimlichkeit* caused by an overly explicit reference to a real catastrophe represented by a ruined building, architectural marketing par excellence intervenes: the digital narration of photorealistic renderings. Realized in order to return the most real image of the reality of a project, through artifices on the qualities of a building that does not yet exist, they actually return the perfect snapshot of the late capitalist utopia: dazzling sunny skies, overshiny surfaces, perennially lush vegetation and a humanity that is always young, healthy and happy. A seeming ruin, or the simulacrum of it, as a symbolic element characterizing the perception of the collective unconscious on the end of time immersed in a *Truman Show* scenario... what is the meaning attributable to such apparent paradox? In addition to the persuasive function of a purely commercial nature, the profession which should be optimistic by nature, can only produce consolatory fables about itself and therefore as a projection of the world. The discipline must invert the meaning of that imaginary that would represent architecture as tangible proof of the disaster - be it as a victim or as a engine of financial speculation or as an impacting product on the environment -, in a narrative that uses the apocalyptic only through a synthetic or abstract idea of ruin, to immerse it in a scenario that

lies beyond a hypothetical apocalypse, intent on demonstrating its own survival since the ruins, as symbolic material and not as mere rubble, are a hermeneutically sensitive deposit, capable to produce a new beginning.⁸¹

By attributing to itself and in this way an autopoietic power, similar and specular to that of capitalism, and as a symbolic function of the 'return of the repressed official ideology,'⁸² architecture thus renews its natural dimension as an aesthetic factor, today in perfect accordance with that 'capitalist realism' illustrated by Fisher. So if the sentence - attributed alternatively to Jameson or Žižek - that it is easier to imagine an end to the world than an end to capitalism is true, then it must necessarily be valid also for architecture.



MVRDV, Valley, 2015, rendering.

¹ Cfr. Baudrillard, J. (1992) *L'illusion de la fin ou la grève des événements*, Paris: Éditions Galilée e id. (2002) *L'esprit du terrorisme*, Paris: Éditions Galilée. However, the author recalls that the term originates from a boutade of the Argentine poet Macedonio Fernández from 1989.

² Fukuyama, F. (1991) *The End of History and the Last Man*, New York: The Free Press. Taking up the concept expressed by Hegel and Marx on the end of history, the evolution of human societies would have been exhausted by the attainment of a universally satisfying and peaceful condition. Unlike Marx, for Fukuyama this desirable condition coincides with the global spread of liberal capitalism.

³ The alleged monopoly of the concept of realism, understood as an adherence to a supposed 'reality,' has been part of the neoliberal rhetoric since the time of its most controversial representative, Margaret Thatcher, who expressed with her infamous slogan 'There is no alternative!' more than pragmatism, the intrinsically authoritarian tendency of the new capitalist accumulation system, ultimately a real dystopia. See: Fisher, M. (2009) *Capitalist Realism: Is There No Alternatives ?*, London: Zero Books. It is interesting to note how on one hand postmodern plurality denies the existence of an absolute 'reality,' while liberalism, of which the postmodern is the 'cultural logic,' identifies in the free market the only given reality, a sort of entity apparently supraideological supreme. In fact, neoliberal rhetoric has always stressed the 'naturalness' of free trade, using it not only as a means of economic legitimacy but also as a means of measuring the very concept of freedom, thus extending itself into a political and anthropological dimension. These aspects were already investigated at the end of the seventies by Foucault, in the famous courses at the Collège de France, through the concepts of governmentality and biopolitics, subsequently taken up and analyzed by a wide literature. In recent years, especially close to the recent crisis, see Dardot, P. and Laval, C. (2009) *La nouvelle raion du monde. Essais sur la société néolibérale*, Paris: La Découverte.

⁴ On the relationship between the 2008 crisis and architecture see: Croce, G. (2022) *Surfing Crisis. Teorie e progetti per tempi difficili*, Melfi: Libria. Texts dealing with the relationship between capitalism and architecture: Kaminer, T. (2011) *Architecture, Crisis and Resuscitation: The Reproduction of Post-Fordism in Late-Twentieth-Century Architecture*, London: Routledge; Jeinić, A. and Wagner A. (eds 2013) *Is There (Anti-)Neoliberal Architecture?*, Berlin: Jovis; Deamer, P. (ed. 2014) *Architecture and Capitalism: 1845 to Present*, London: Routledge; Spencer, D. (2016) *The Architecture of*

Neoliberalism: How Contemporary Architecture Became an Instrument of Control and Compliance, London: Bloomsbury.

⁵ Baudrillard, *cit.*

⁶ On the modern and postmodern transformation of war into terrorism, as a strategy that transfers the object of the attack from the enemies to their environment, see: Sloterdijk, P. (2002) *Luftbeben: An den Quellen des Terrors*, Berlin: Suhrkamp.

⁷ In Mark 13: '1 As Jesus was leaving the temple, one of his disciples said to him, "look, Teacher! What massive stones! What magnificent buildings!" 2 "Do you see all these buildings?" replied Jesus. "Not one stone here will be left on another; every one will be thrown down.'" biblehub.com/mark-1.htm, biblehub.com/mark-1.htm (10.8.2020).

⁸ De Martino, E. (1977) *La fine del mondo. Contributo all'analisi delle apocalissi culturali*, ed. C. Gallini (2002) Turin: Einaudi, pp. 219.

⁹ These interpretative contexts can still be traced, transfigured, in our contemporaneity: the mythological is material of the cultural industry made up of digital filmography and the relative merchandise; the theological has merged into political ideologies and religious fanaticisms; the existential through self help and consumerism. Thacker, E. (2011) *In the Dust of This Planet*, London: Zero Books, p. 3.

¹⁰ Of all the probable theories about the end of the world, the most certain seems to be the one that will see the sun transform into a red giant that will also explode and engulf our planet. Estimated time: a few billion years. In the meantime other theories hypothesize possible collisions with celestial bodies that traveling in the universe could intercept our planet on their trajectory. Other catastrophes could originate from imposing volcanic eruptions, however many theories about the end of the world see human action as the main cause. After all it is in the apocalyptic traditions to identify the catastrophic event as a purifying act of the misdeeds of the human race, today more than moralizing warnings we are dealing with real forecasts based on events already in progress. For a repertoire on the various options, more or less plausible, on the end of the world see: Jha, A. (2011) *The Doomsday Handbook: 50 Ways to End the World*, London: Quercus Editions.

¹¹ Consider, for example, the case of Prypj'jat, the Ukrainian town built in 1970 to house the workers and builders of the nearby Chernobyl nuclear power plant and evacuated, after the nuclear disaster, on 26 April 1986. Defined as a ghost city it actually became a sort of paradise for wild animals that sometimes found refuge in abandoned buildings.

¹² Appeared for the first time in 1973 in the second volume of the Great Soviet Encyclopedia, it was later adopted by the Nobel Prize in chemistry Paul Crutzen. The term indicates the current geological epoch and in general the effects and the impact that the human activities of the last centuries have had on the territorial, structural and climatic modifications of the planet.

¹³ Despite the almost majority concordance of the scientific community in identifying human activities (production of greenhouse gases, deforestation, intensive breeding, etc.) as the most probable cause of global warming, yet another and outlandish conspiracy theory spread on the net indicates it as an invented story from obscure financial interests or that it is simply attributable to natural climatic cycles.

¹⁴ A term coined at the beginning of the nineties by journalist Steve Tesich, it is today particularly widespread in the era of social media and indicates the personal-emotional distortion in the reception of some news, mainly of a political nature, even when faced with a demonstrated objective truth. In 2016, the Oxford English Dictionary elected her the following year. For an examination of post-truth as the heterogenesis of postmodernism, see: Ferraris, M. (2017) *Prima dissertazione. Dal postmoderno alla postverità*, in id. *Postverità e altri enigmi*, Bologna: Il Mulino, pp. 19-65.

¹⁵ Bridle, J. (2018) *New Dark Age: Technology and the End of the Future*, London: Verso Books.

¹⁶ 'Conspiracy [...] is the poor person's cognitive mapping in the postmodern age; it is the

degraded figure of the total logic of late capital, a desperate attempt to represent the latter's system, whose failure is marked by its slippage into sheer theme and content.' Jameson, F. (1988) *Cognitive Mapping*, in C. Nelson and Grossberg, L. (eds) *Marxism and the Interpretation of Culture*, University of Illinois Press, rainer-rilling.de/gsvilla07-Dataein/JamesonF86a_CognitiveMapping.pdf (11.2.2019). Think about the phenomenon of 'clickbait' consisting in websites that report news, often false, with captivating and sensationalist titles and whose revenue vector comes from online advertisements that guarantee higher income depending on the large number of interactions.

¹⁷ The so-called 'new realism' mainly raises the objection to the indiscriminate principle of antirealism and the typical subjectivism of postmodernism, but without denying the essential validity of criticism and hermeneutics in the light of the awareness of the existence of real objective facts (for example scientific discoveries). De Caro, M. and Ferraris, M. (eds 2012) *Bentornata realtà. Il nuovo realismo in discussione*, Turin: Einaudi.

¹⁸ 'The last few years have been marked by an inverted millenarism in which premonitions of the future, catastrophic or redemptive, have been replaced by senses of the end of this or that (the end of the ideology, art, or social class; the "crisis" of Leninism, social democracy, or the welfare state, etc., etc.); taken together, all of these perhaps constitute what is increasingly called postmodernism.' Jameson, F. (1991) *Postmodernism, or, The Cultural Logic of Late Capitalism*, Durham: Duke University Press, p. 1.

¹⁹ The world traversed by the icy wind of estrangement that appears in the Baudelairian metropolis where the city seems reduced to a universal non-place that the inhabitants cover almost like veterans of a war not yet happened is actually repopulated with a variegated variety of faiths that lead an often difficult coexistence. The neutral public space of liberal democracies is actually completely contaminated by highly disoriented individuals in search of identifications that are often regressive and potentially violent. Vercellone, F. (2017) *Il futuro dell'immagine*, Bologna: Il Mulino, pp. 90, 100.

²⁰ 'We knew (I knew!) we had never been modern, but now we are even less so: fragile, frail, threatened; that is, back to normal, back to the anxious and careful stage in which the "others" used to live before being "liberated" from their "absurd beliefs" by our courageous and ambitious modernization. Suddenly, we seem to cling with a new intensity to our idols, to our fetishes, to our "factishes" [...]. We look at our institutions [...] with a somewhat renewed sympathy. Less cynicism, suddenly, less irony. A worshipping of images, a craving for carefully crafted mediators, what the Byzantine called "economy," what used to simply be called civilization.' Latour, B. (2001) *What is Iconoclasm? Or is there a World Beyond the Image Wars?*, in Weibel, P. and id. (eds) *Iconoclasm: Beyond the Image-Wars in Science, Religion and Art*, Karlsruhe; Cambridge MA; London: ZKM / The MIT Press, p. 38.

²¹ Baudrillard, *cit.*, Eng. ed. (2002) *The Spirit of Terrorism*, London: Verso Books, pp. 4-5.

²² Ivi, p. 7. Cfr. Berardi, F. 'Bifo' (2017) *Futurability: The Age of Impotence and the Horizon of Possibility*, London: Verso Books.

²³ Jameson, *Postmodernism...*, *cit.*, p. 382.

²⁴ Fisher, *cit.*, p. 2. The movie *Children of Men* (directed by Alfonso Cuarón, 2006), based on the novel of the same name by the writer P. D. James, tells of a near future in which humanity is in the throes of widespread sterility, terrorist attacks, militarization of the territory and persecution and the imprisonment of migrants in detention centers.

²⁵ Marega, S. (ed. 2018) *Visioni dell'apocalisse. L'immaginario cinematografico della fine del mondo*, Milan: Mimesis, p. 10-11, 18-20.

²⁶ Beck, U. (1986) *Risikogesellschaft. Auf dem Weg in eine andere Moderne*, Frankfurt am Mein: Suhrkamp.

²⁷ Bauman, Z. (2006) *Liquid Fear*, Cambridge: Polity Press.

²⁸ Virilio, P. (2004) *Ville Panique. Ailleurs commence ici*, Paris: Éditions Galilée.

²⁹ ‘The point is deconstruct this particular apocalyptic narrative. What if the apocalypse has already happened? In the sense that it has already happened for the majority of people in the world. The fact that the super-rich or many others have not experienced this kind of apocalyptic situation doesn’t mean that it has not already taken place in Somalia, in Bangladesh or at the border between Mexico and the US. [...] for example, [...] the results of the 2010 earthquake in Haiti were not a natural catastrophe, but resulted from bad planning and bad infrastructure and affected mainly people from specific class origin – the underdogs.’ Horvat, S. (2018) ‘No Future = No Architecture. Using Architecture Theory to Think About Our Common Future,’ in *Archifutures*, ed. & beyond, 5, ‘Apocalypse,’ pp. 30-31.

³⁰ A good popular text, rather widespread, on examples of disastrous and sensational collapses: Levy, M. and Salvadori, M. (1994) *Why Buildings Fall Down: How Structures Fail*, New York: WW Norton.

³¹ Actually the Grenfell Tower - one of several Council tower residences built during the seventies in London - did not collapse but a disastrous fire broke out in the early hours of June 14, 2017, triggered by the short circuit of a refrigerator in one of the apartments. The fire quickly spread to the upper floors in a terrifying way thanks to the highly flammable thermal coating that had been applied to the external surface during the restoration work in 2016. The number of victims was enormous - including two young Italian architects, Gloria Trevisan and Marco Gottardi, both 27 years old - also due to the lack of security systems and serious negligence by the firefighters.

³² The reference to the Lacanian triad is to be understood as the relationship between the production of the imaginary of the catastrophe and its signifiers, in this case, architectural.

³³ ‘Despite the constructive aspect of the process, keeping the projective energy of architecture oriented towards completeness and coherence, there is an equally destructive side that needs to be acknowledged and analyzed. Rather than elaborate solely the passive view of architecture as a target of violent operations, it is crucial to remember that the discipline is constantly feeds the environment with physical objects and images that trigger violent actions.’ Kenzari, B. (ed. 2011) *Architecture and Violence*, Barcelona: Actar, p. 15.

³⁴ Tschumi, B. (1981) ‘Architecture and Violence,’ in *Artforum*, Vol XX, 1, September, reproduced in id. (2012) *Architecture Concepts. Red is Not a Color*, New York: Rizzoli, pp. 75-78.

³⁵ In 1971 the American criminologist Charles Ray Jeffrey elaborated the CPTED (Crime Prevention Through Environmental Design) analyzed the way in which the criminal behavior was favored by determined physical and environmental conditions. Robinson, M. B. (1996) *The Theoretical Development of ‘CPTED:’ 25 Years of Resposnes to C. Ray Jeffrey*, in Laufer, W., and Adler., F. (eds) *Advances in Criminological Theory* Vol. 8, New Brunswick: Transaction Publishers, pp. 427-462. Subsequently, in 1973, the architect Oscar Newman, taking up some notions from Jane Jacobs' famous essay *The Death and Life of Great American Cities*, enriched the prescriptions introduced by Jeffrey with notions of an operational and formal type, through the concept of *defensible space*. Newman, O. (1973) *Defensible Space: Crime Prevention Through Urban Design*, New York: Macmillan Publisher. See also: Ragonese, M. (2019) *Paupopolis*, Melfi: Libria.

³⁶ An illustrated description of security devices and prescriptions in public space and in planning: Deutinger, T. (2018) *Handbook of Tyranny*, Zurich: Lars Müller Publishers, pp. 16-104. On conflictive spaces: Weizman, E. (2017) *Forensic Architecture: Violence at the Threshold of Detectability*, Cambridge, MA; London: The MIT Press.

³⁷ Following the principle of continuity, the society destabilized by a catastrophe aspires

to buy back what it had and to project into the future only the trends that were already ripe in its original model. The natural disaster or the war could start a serious strategic-cultural debate. We must ask ourselves about the degree of transformability of the context in which the event took place. The strategy is at least twofold: the ephemeral, the provisional, the piece of furniture or the infrastructure, the networks, the object. Morgia, F. (2007) *Catastrofe: istruzioni per l'uso*, Rome: Meltemi.

³⁸ 'Do architects play a role in post-disaster reconstruction? "It's marginal, at best," wrote David Sanderson, an expert on emergency practice, in *The Guardian* in the aftermath of the Haiti Earthquake. Sadly following the 2011 Great East Japan Earthquake, the Japanese government appears to agree. Its official plan for recovery doesn't even mention architects. In a country that is world famous for its architectural invention, political leaders view the profession as redundant.' Sumner, Y. (2013) 'Japan After the Storm,' in *Architectural Review*, 1397, July.

³⁹ Consider two paradigmatic cases: the project 'Make it Right,' and the foundation of the same name founded and supported by Hollywood star Brad Pitt which consisted in the construction of homes for displaced people from Hurricane Katrina that struck New Orleans in 2007, and 'Elemental,' the association founded by architect Alejandro Aravena and its low-cost social housing system. 'In simple terms, we might say that in the case of Make it Right, the promoter is a film star who aspires to be an architect and in the case of Elemental he is an architect who aspires to be a star [...] as is inevitable in an age of spectacles, what starts off with good intentions ends up delegitimizing the initiatives. [...] For his project, Pitt hired architects unfamiliar with social architecture, planners accustomed to designer pieces. [...] This equates Pritt's project more to the reality show [...] than to a working proposal for the future of the population. [...] Aravena's proposal [...] unveil[s] the media-servitude of contemporary architecture, the cult of the image and the obsession with defining its value and effectiveness through a conceptualization of the project. They altogether forget to test the actual circumstances of the future occupants. [...] a project in which the beneficiary is not the resident, but the architect himself who exploited a manifesto of social awareness as a personal spring-board toward a much desired [...] popularity.' Massad, F. and Guerrero Yeste, A. (2012) *Social Building in the Age of Show Business*, in Faiferri, M. and Bartocci, S. (eds) *Housing the Emergency the Emergency of Housing: New Forms of Living for Cities of Third Millenium*, Barcelona: List, p. 88.

⁴⁰ Organized by Barry Bergdoll and Reinhold Martin at the MoMA in New York, the *Foreclosed: Rehousing the American Dream* exhibition (February 15th - August 13th 2012) brought together the design results of a team of five architectural firms supported by five professionals from other disciplines (economics, sociology, etc.). Given the emergency situation and probably also given the need to produce something suitable for a museum exhibition, the projects lacked hypotheses that included temporal hypotheses or alternative solutions that were not simply the production of another, yet another type of architecture. Borasi, G. (2012) 'Sognare un altro tipo di architettura,' in *Abitare*, 520, March, p. 47.

⁴¹ There is now a vast literature on the subject, however the research conducted and directed, a few years ago, by Philip Oswalt, who has analyzed the various declinations of the shrinking city, not only American but also the consequent one, is still essential. Vedi Oswalt, P. (ed. 2005) *Shrinking Cities, Volume 1: International Research*, Stuttgart: Hatje Cantz and id. (2006) *Shrinking Cities, Volume 2: Interventions*, Stuttgart: Hatje Cantz. Something more recent, which also concerns the urban regeneration processes adopted in the shrinking cities contexts of the US Rust Belt: Coppola, A. (2012) *Apocalypse Town. Cronache dalla fine della civiltà urbana*, Rome-Bari: Laterza.

⁴² A phrase that David Harvey uses to describe urban and cultural transformations in relation to the dynamics of capitalist accumulation in its various historical phases. Harvey, D. (1989) *The Urban Experience*, Baltimore: Johns Hopkins University Press.

⁴³ In 2013, five years after the outbreak of the crisis, the Spanish ministerial figures

estimated around 800,000 unsold homes for which was proposed the demolition. Concheiro, I. (2011) *Interrupted Spain*, in Mateo, J. L. (ed.) *After Crisis: Contemporary Architectural Conditions*, Zurich: Lars Müller; Quirk, V., 'Why Spain's Crisis Is the End of An Era,' <http://www.archdaily.com/268058/why-spain-crisis-is-the-end-of-an-era/> (11.8.2020).

⁴⁴ Benjamin, W. (1955) *Das Kunstwerk im Zeitalter seiner technischen Reproduzierbarkeit*, Frankfurt am Main: Suhrkamp Verlag.

⁴⁵ Digital communities like Abandoned World or photographers of degradation like Dmeek who gathers, in a sort of archive of images, the abandoned detached houses of Detroit (Slum.Beautiful.com, 11.8.2020).

⁴⁶ 'Ruin Lust, an exhibition at Tate Britain [...], offers a guide to the mournful, thrilling, comic and perverse uses of ruins in art from the seventeenth century to the present day. [...] The exhibition begins in the midst of the craze for ruins that overtook artist, writers and architects in the eighteenth century.' tate.org.uk/whats-on/tatebritain/exhibition/ruin-lust (15.8.2020).

⁴⁷ Biamonti, A. (2016) *Archiflop: storie di progetti finiti male. Guida semiseria ai più clamorosi casi di errore, fallimento e sfiga in architettura*, Milan: 24 Ore Cultura.

⁴⁸ Messynessy, 'Tehran's Desert Ghost Towers Look Like a Zombie Movie Waiting to Happen,' messynessy.com/2019/06/13/therans-desert-ghost-towers-look-like-a-zombie-movie-waiting-to-happen/ (accessed 15.8.2019).

⁴⁹ Loiseau, B. (2018) 'Detroit, 10 Years On,' in *Icon*, 186, December, p. 79.

⁵⁰ A type of attractiveness that inspired Dismaland, the artistic installation organized by the famous artist Banksy at the Tropicana, an abandoned beach in the English town of Weston-super-Mare. Between August 21 and September 27, 2015, 58 artists produced a gigantic installation that consisted of a dystopian and depressing version of Disneyland. Cinderella's fake castles of in ruins, disfigured mermaids and other distorted references of the cartoon world, 3D reproductions of atomic fungi and tanks in which miniature reproductions of migrant boats float, rather than stimulate a critical sense towards the disasters of our contemporary age they seem rather to stimulate a further fascination and feed a cynical humor (dismaland.co.uk, 15.8.2020).

⁵¹ Fisher, *cit.*, pp. 4-5.

⁵² Koolhaas, R. (1995) *Globalization*, in id., OMA and Mau, B., *S,M,L,XL*, New York; Rotterdam: The Monacelli Press/010 Publishers, p. 368.

⁵³ For the first death, the introductory words of Charles Jencks to his most famous essay sound like a merciless liberating song: 'Happily, we can date the death of Modern Architecture to a precise moment in time. [...] Modern Architecture died in St Louis, Missouri on July 15, 1972 at 3.32 pm (or thereabouts) when the infamous Pruitt-Igoe scheme, or rather several of its slab blocks, were given the final *coup de grace* by dynamite. [...] Without doubt, the ruins should be kept, the remains should have a preservation order slapped on them, so that keep a live memory of this failure in planning and architecture. Like the folly or artificial ruin [...] we should learn to value and protect our former disasters.' Jencks, C. (1977) *The Language of Postmodern Architecture*, London: Academy Editions (1991 ed.), p. 23. For the second death: Docx, E., 'Postmodernism is Dead,' prospectmagazine.co.uk/features/postmodernism-is-dead-va-exhibition-age-of-authenticism (6.7.2020); Kirby, A. (2006) 'The Death of Postmodernism and Beyond.' In *Philosophy Now*, 58, November-December, available on philosophynow.org/issues/58/The_Death_of_Postmodernism_And_Beyond (6.7.2020).

⁵⁴ For a closer look, also on the relationship of the birth of the new capitalist accumulation system and new forms of cultural expression: Harvey, D. (1990) *The Condition of Postmodernity*, Oxford: Basil Blackwell Publishing; id. (2005) *A Brief History of Neoliberalism*, Oxford, Oxford University Press.

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- ⁵⁵ Klein, N. (2007) *The Shock Doctrine: The Rise of Disaster Capitalism*, New York: Metropolitan Books.
- ⁵⁶ Ponzi, M. (ed. 2017) *Karl Marx e la crisi*, Macerata: Quodlibet.
- ⁵⁷ With their neutral presence and their absolute a-functionality, the histograms of architecture - in all their variations up to the *Monumento Continuo* - reveal that the desert represents the most generic condition of modernity: the space of its crisis. Mastrigli, G. (ed. 2016) *Superstudio. Opere 1966-1978*, Macerata: Quodlibet, p. LVI.
- ⁵⁸ The Factory and the Supermarket actually become the true models of the future city: optimal, potentially infinite, urban structures, where functions spontaneously place themselves on a free plane, made homogeneous by a system of microclimatization and optimal information. Archizoom Associati (1972) 'Distruzione e riappropriazione della città' in *In. Argomenti e immagini di design*, 5, May-June, p. 23. The images of the *No-Stop City* and a similar description compared with the photographs of Amazon's huge stores make a certain effect.
- ⁵⁹ Tafuri, M. (1973) *Progetto e utopia*, Rome-Bari: Laterza, Eng. ed. (1976) *Architecture and Utopia: Design and Capitalist Development*, Cambridge MA; London: The MIT Press, p. ix.
- ⁶⁰ Id. (1974) 'L'Architecture dans le Boudoir: The Language of Criticism and the Criticism of Language,' in *Oppositions*, 3, p. 38.
- ⁶¹ Pettena, G. (1996) *Radicals. Architettura e design 1960/1975*, Venice: La Biennale di Venezia/Il Ventilabro.
- ⁶² Douglass-Jaimes, D., 'When Art, Architecture and Commerce Collided: The BEST Products Showrooms by SITE,' archdaily.com/778003/the-intersection-of-art-and-architecture-the-best-products-showrooms-by-site-sculpture-in-the-environment (10.11.2020).
- ⁶³ Tschumi, *cit.*, p. 45.
- ⁶⁴ From the letter of Jacques Derrida to Peter Eisenman, sent on the occasion of his non-participation in the conference 'Postmodernism and Beyond: Architecture as the Critical Art of Contemporary Culture,' University of California, Irvine, 26-28 October 1989 and published on 'An Exchange Between Jacques Derrida and Peter Eisenman', in *Assemblage*, 12, 1990, p. 11.
- ⁶⁵ Ciorra, P. (1997) *Estetica della demolizione. Demolizione dell'estetica*, in Terranova, A. (ed.) *Il progetto della sottrazione*, Rome: Palombi, p. 104.
- ⁶⁶ Betsky, A., 'Jenga Architecture Proposes the Unstable, the Tentative, and That Which Tends to Dissolution,' dezeen.com/2018/08/06/opinion-aaron-betsky-jenga-towers-pixelated-buildings-architecture/?li_source=LI&li_medium=bottom_block_1 (11.11.2020).
- ⁶⁷ Den Hartog, H. (2017) '(Un)finished,' in *Mark*, 71, December 2017-January 2018, p. 24.
- ⁶⁸ Dorlfes, G. (1984) *Architettura ambigue. Dal neobarocco al Postmoderno*, Bari: Dedalo, p. 150.
- ⁶⁹ Maas, W. (2012) *Shock Design*, in id., The Why Factory (eds) *City Shock: Planning the Unexpected*, Rotterdam: NAI010 Publishers, pp. 7, 16.
- ⁷⁰ controversies.msa.ac.uk/blogs/cloudseoul/bibliography/ (11.12.2020).
- ⁷¹ mvrdiv.nl/projects/179/porous-city-lego-towers (11.12.2020).
- ⁷² Cecchini, A. 'Bibo' (2012) *Per una buona catastrofe*, in Faiferri, Bartocci, *cit.*, p. 302.
- ⁷³ 'Violence against architecture is, among other things, a form of communication that enlists architecture as its medium. In this sense, violence does not simply damage or destroy its targets, but also endows those targets with new social meanings.' Herscher, A.

(2007) 'Warchitecture / Post- Warchitecture,' in *Volume*, 11, September/October, 'Cities Unbuilt,' p. 69.

⁷⁴ Stoppani, T. (2016) *Architecture and Trauma*, in Ataria, Y., Gurevitz, D., Pedaya, H. and Neria, Y. (eds) *Interdisciplinary Handbook of Trauma and Culture*, Berlin: Springer, p. 148.

⁷⁵ 'Architecture and war are not incompatible. Architecture is war. War is architecture. I am at war with my time, with history, with all authority that resides in fixed and frighted forms. I am one of millions who do not fit in, who have no home, no family, no doctrine, no firm placet o call my own, no know beginning or end, no "sacred and primordial site.'" Woods, L., 'War and Architecture: The Sarajevo Window,' lebbeuswoods.wordpress.com/2011/12/02/war-and-architecture-the-sarajevo-window/ (10.1.2021).

⁷⁶ 'In going over what I wrote about this work at the time – in 1993 – I find it inadequate in its explanation of what inspired the designs, drawings, and models and what I hoped to achieve by making them. No wonder, I say in hindsight, that they were accused of "aestheticizing violence," and merely being exploitative of a tragic human condition. I failed to put the work in the broader human context that it needed to be understood as proposals for architecture serving rational and needed purposes. I hope to correct – to the extent I can here – this failure. Because of my work concerned the Sarajevo crisis long ago, people have often asked what I was working on for Baghdad, of Kabul, or Tripoli, or a growing list of cities that have shared its fate. My answer is always the same: *nothing*. While each is different, the destruction they have suffered is so similar to that suffered by Sarajevo that the principles I established there apply as well to the more recent catastrophes. My "war and architecture" work was not aimed at proposing the reconstruction of particular buildings – that should be the work of local architects – but at deriving guiding priciples.' Id., google.com/amp/s/lebbeuswoods.wordpress.com/2011/12/15/war-and-architecture-three-principles/amp/ (10.1.2021).

⁷⁷ 'The Symbolic collapse of a whole system came about by unpredictable complicity, as though the towers, by collapsing on their own, by committing suicide, had joined in to round off the event. In a sense, the entire system, by its internal fragility, lent the initial action a helping hand.' Baudrillard, *The Spirit of Terrorism*, cit., p. 8.

⁷⁸ Vercellone, *cit.*, p. 70.

⁷⁹ Žižek, S. (2000) *Coke As Object Petit A*, in id. *The Fragile Absolute: Or, Why is the Christian Legacy Worth Fighting For?*, London: Verso, p. 25.

⁸⁰ Group of artists specialized in pixel art, established in 1998. hello.eboy.com/eboy/ (11.8.2021).

⁸¹ Vercellone, *cit.*, p. 18.

⁸² 'This is why Jameson is fully justified to talk about the "political unconscious": there is a coded message in an architectural formal play, and the message delivered by a building often function as "the return of the repressed" of the official ideology. Recall Wittgenstein's inisght: what we cannot directly talk about can be shown by the form of our activity. What the official ideology cannot openly talk about may be revealed in the mute signs of a building.' Žižek, S. (2010) *The Architectural Parallax*, in id. *Living in the End Times*, London: Verso, p. 255.

the work of
architecture in the
age of mechanical
destructiveness

'where there is nothing,
everything is possible.
where there is architecture,
nothing (else) is possible.'

rem koolhaas

the creative destruction

Destruction has always been inextricably linked with construction, it is the death of the old that allows the new to be born, the cure of an urban ailment that is reset, it is also the way in which the progression of the city and architecture manifests itself, sometimes encompassing the scraps of past architectural lives, sometimes cleaning the field by rewriting not only the urban text through the *tabula rasa* but also 'outdated' models of the discipline itself. Although built architecture is always an outcome of collective work, as much in the design stage as in the execution phase where the division of labor prevails, the nominal attribution or total identification of a building to the architect is a modern tradition rooted in Alberti's splitting of architecture from a mechanical art to a liberal art; in fact, it is not coincidental that during the Renaissance the proportions of the building in relation to the human body were spread and effectively illustrated: an allegory of the process of subjectification experienced by the architect. Thus, one might consider the disciplinary relation to destruction, within the process of subjectification, on two conflicting planes: on the one hand, destruction as a threat to the ambitions to eternity, or at least to a prolonged permanence, of the creator embodied in his project, the emergence of the Freudian death drive that limits the affirmation of vital individual processes; on the other, is the necessity of 'the killing of the father' as the full emancipation of one's own creative force. However, the existence or destruction of an architecture lies within the complex mechanisms of reality that its creator is obviously unable to control in its entirety, which sometimes leads to the frustration of those premises: the negative side of subjectification leads to the identification of a failed model with its most tangible object, consequently by metonymy with its very designer. The infamous reputation suffered by Minoru Yamasaki because of his most controversial project, namely the Pruitt-Igoe - amplified by Charles Jencks' instrumental and demagogic use of it and later by the filming of its demolition in Godfrey Reggio's movie *Koyaanisqatsi* - led him to remove the project from his monograph since 'I am perfectly willing to admit that of the buildings we have been involved with over the years, I hate this one the most.'¹ Significantly, the cover of his monograph bore the project that gave him the most prestige at the time, the Twin Towers in New York City, which were completed almost simultaneously during the first demolition work on the Pruitt-Igoe complex. While Yamasaki was unable to witness the tragic destruction of the World Trade Center - he died in 1986 - the choice not to include the Pruitt-Igoe project was a choice compelled by self-preservation of ego and personal reputation, but in some ways a form of symbolic removal similar to the defensive mechanisms of memory with respect to tragic events.

In his essay *Das Unbehagen in der Kultur (Civilization and Its Discontents)*, Freud seems to offer an interpretation of the mechanisms of memory using Rome as an example: if it were the result of the accumulation of its

memories today we would find its oldest testimonies side by side, while its real substance is the outcome of continuous demolitions, replacements, accumulations:

The question may be raised why we chose precisely the past of a *city* to compare with the past of the mind. The assumption that everything past is preserved holds good even in mental life only on condition that the organ of the mind has remained intact and that its tissues have not been damaged by trauma or inflammation. But destructive influences which can be compared to causes of illness like these are never lacking in the history of a city, even if it has had a less chequered past than Rome, and even if, like London, it has hardly ever suffered from the visitations of an enemy. Demolitions and replacement of buildings occur in the course of the most peaceful development of a city. A city is thus *a priori* unsuited for a comparison of this sort with a mental organism.²

But in reality is it really so? The comparison Freud raises, and then denies, between memory structures and properly urban ones may seem a stretch that does not hold up in terms of direct correspondence, yet can we say that replacements and demolitions in an urban fabric outside of war or natural disaster events are always 'peaceful' evolutions of the city? While this is may be true in punctual replacements, in the major planned destructive transformations of the modern city the radical modification of sedimented social structures rooted in the historic cores of urban centers can be said to be less than peaceful. In addition, planned demolition is nonetheless the manifestation of a crisis, the questioning of a previous settlement pattern that manifests itself through the social frictions that demand its change, the empty space that subtraction leaves highlights the crisis that provoked it: these are the holes of memory around which to build urban space reset by the fragments of pre-existence. And this can only be enthusiastically embraced by the architect, destruction offering the ideal blank sheet of paper on which to rewrite his own worldview: from Haussmann to Le Corbusier to all their various epigones, 'tabula rasa is the mode of subtraction most compatible with architectural desire.'³ Modernity thus coincides with its destructive character, that is, in its sharp opposition to what preceded it, in its denial of any dialogical relationship with the old world

The destructive character knows only one watchword: make room, only one activity: clearing away. His need for fresh air and open space is stronger than any hatred [...] it cheers because everything cleared away means to the destroyer a complete reduction, indeed eradication, of his own condition. But what contributes most of all this Apollonian image of the destroyer is the realization of how immensely the world is simplified when tested for its worthiness of destruction.⁴

But what is the real driving force behind this destructive spirit? Almost at the same time as the advent of Napoleon III, Marx and Engels published their *Manifest der Kommunistischen Partei (The Communist Manifesto)* in which euphoria over scientific and technical progress is accompanied by recognition of the bourgeoisie in having simplified the social composition inherited from the Middle Ages.⁵ It also gave the propulsive start to capitalist development and thus

with it the driving force of modernization, but its very survival lies in the incessant need to continually renew both the instruments of production and the consequent class relations. While the aristocracy based its fortune on the exploitation of agricultural production and, marginally, by that of artisans, the bourgeoisie based its livelihood on the continuous change of products and the incessant transformation of the techniques of their production. The revolutionary scope in the historical sense of the bourgeoisie would reside precisely in its incessant necessity to continuous innovation, in which both its 'chaotic' dimension - deregulation as the foundation of the market - and its ephemeral nature - the continuous overcoming of previous production models - dominate its innate dynamic and ultimately fundamentally destructive character. It therefore also has the paradoxical character of self-destructing what it itself produces: 'With the upheaval of the market economy, we begin to recognize the monuments of the bourgeoisie as ruins even before they have crumbled.'⁶

In *Manifesto*, the characteristic of capitalism to create systematic crises indicates that they are not determined by exogenous factors but are inherent conditions of the destructive character as a condition for its own self-preservation.⁷ From these premises, Schumpeter develops his interpretation on 'creative destruction' (*schöpferische Zerstörung*) as an ameliorative driving force of the whole system: through capitalist stages of development that by cycles of obsolescence force, amidst failures and various economic crises, the replacement of old production standards and the emergence of new business models capable of driving innovation:

Capitalism, then, is by nature a form or method of economic change and not only never is but never can be stationary. [...] The fundamental impulse that sets and keeps the capitalist engine in motion comes from the new consumers' goods, the new methods of production or transportation, the new markets, the new forms of industrial organization that capitalist enterprise creates.⁸

For Schumpeter, growth is determined by innovations and dynamic competition; it is the new combinations of factors of production that underlie cyclical development. For Schumpeter, in essence, an entrepreneur is such if he is able to destroy routine.

Consequently, the destructive character of the modern project is in essence the field of action generated by the innovation induced by capitalist development: from this condition modernism⁹ cannot disregard even in its declinations derived from that model, in non-capitalist or spurious capitalist contexts. If the historical revolutionary reach of the bourgeoisie in France can be icastically embodied in the destruction of the Bastille, its destructive character finds its apogee in the grand and ambitious plan combining the tools of disruptive capitalist innovation with the subtractive transformations of the city of Paris, which would begin only a few years after the writing of the *Manifesto*. The radical transformation of French capital were the consequence of the paroxysmal effects

due to industrialization, mass migrations from the countryside to the city and the resulting accumulation of new buildings, factories, housing and rail infrastructure, a chaotic, congested and unhealthy condition - buildings had invaded all open areas, some even crept into the courtyard of the Louvre.¹⁰ After Napoleon III took office, Baron Georges Haussmann was commissioned as Prefect of the Seine from 1853 to 1870 with the main purpose of solving the problem of urban congestion also in terms of sanitation, especially after the two cholera epidemics that had hit Paris in the first half of the century. Picking up on some of the ideas traced by earlier plans on the creation of axial structures - such as the Plan des Artistes de la Révolution of 1793 - Haussmann's intervention was most notable for the great work of subtracting the intricate and chaotic fabric of the medieval city, a place not only of precarious sanitary conditions but also of revolts where it was easy to install barricades. This aspect has often been cited as one of the main reasons for the plan, and indeed the improvement of traffic in the grand boulevards lent itself to be functional in the suppression of possible riots, however Haussmann's intentions were more that of an administrator¹¹ whose intent was to order a chaotic and problematic urban fabric and shape the modern city, but it was also the effective classist transformation of the city center into the great capital of the bourgeoisie and consumerism, in fact 'his purpose was to give unity to and to transform into an operative whole the "huge consumer market, the immense workshop" of the Parisian agglomerate.'¹²

As much as the renovated city offered the wide spaces of an orderly city, parks and public spaces usable by everyone, the uprooting and displacement of communities of poorer inhabitants to suburban areas where rents were lower, set in place a pattern that will be repeated in almost all radical transformative-subtractive interventions in urban centers: the classist definition of the new arrangements set on land rents and building speculation, this will therefore also determine the uniformity of architectural language and the standardization of urban furnishings.¹³ The large costs accumulated in the rearrangements and internal political games in the French parliament caused Haussmann to be relieved of office, but despite the criticism and instrumental blame his plan for Paris was a model of modern urban renewal that would give way to various epigones and imitators, especially as an ordering instrument of the city that combined hygienicist needs, space for building speculation, and the use of the *tabula rasa* as the sphere of expression of the free creative desire of urban planners and architects. But since creative destruction is fundamentally characteristic of capitalist cycles, its eventual translation into the built territory is always dependent on it, and this has also determined the very evolutions that have occurred within the development of modern architecture. The birth of the capitalist building par excellence, the skyscraper, has a genesis perfectly consistent with this principle:

The first tall office buildings constructed in Chicago owed their appearance not to the *tabula rasa* produced by the fire, but to a rise in property prices that began to

accelerate as the country emerged from the recession of 1873. [...] Beginning in the early 1880s, whole swathes of post fire buildings were demolished and replaced with higher ones in an act of economic destruction and reconstruction that was almost equal in its force to the great fire.¹⁴

However, the glorification of progress and ideological confidence in the potential of industrial society, including in terms of efficiency to destruction, also generated the idea that processes of city transformation could be defined simply at the drawing board. The elaboration of the *Ville Contemporaine*, an abstract, noncontextual plan of an ideal city for three million inhabitants, is the instrument with which Le Corbusier would later decide to make an even more radical contribution to the subtractive project Haussman had already initiated seven years earlier in the transformation of central Paris. The Plan Voisin, whose research was financed by the car manufacturer of the same name, envisioned the demolition of 240 hectares in the center of Paris, a *tabula rasa* on which to articulate a main east-west axis for the construction of residential buildings - immeuble villas - and a tertiary district with cruciform skyscrapers, while only a few major monuments would be spared from this enormous destruction (Louvre, Place Vendome, etc.). Obviously, the plan will be destined to remain in the realm of utopian dreams, despite Corbu's attempt to combine his project as the ultimate expression of the logics of industrial production and capitalist development. However, many developments of the modern city will be set on that model, not as an integrated plan with such radical subtraction - except in the redefinitions of cities razed by wartime destruction - but within semi- or fully planned economies where the Schumpeterian destructive character was partly if not entirely suppressed.

In the 1970s Koolhaas recognized precisely in the delirious capital of capitalism New York, significantly despised by Corbu,¹⁵ the genuine destructive character of a market that would shortly thereafter be increasingly globalized and able to offer infinite *tabula rasa* as the opportunities offered by the incessant cycle of crisis and renewal, rather than tools of the planning of an ideal city. The tool of demolition ceases to be the avant-garde need for the cleared space as a dramatic and salvific resetting of the built, rather in the real world of financial markets it falls under the necessities / possibilities established by the remuneration of capital mobilization:

Almost all of Singapore is less than 30 years old; the city represents the ideological production of the past three decades in its pure form, uncontaminated by surviving contextual remnants. [...] It is conceived as the apotheosis of the *tabula rasa*: the razed plane as the basis for a genuinely new beginning.¹⁶

So if the possibility of the *tabula rasa* exists today it is financially determined, not only as a place for new speculation but as the very business of destruction. And specifically consistent with the principles of its operation, capitalism in order to reproduce itself always needs the self-destructive input and that the built landscape is better able to represent than any of its other products.

the ideological removal: from iconoclasm to architectural scapegoat

Given the enormous deployment of forces and consequent waste of materials, any planned demolition of consistent proportions is charged with a communicative bearing intended to make it a necessary operation, predominantly for practical reasons - the replacement of obsolete and degraded facilities with innovation. It often happens that in order to sustain the validity of the destruction one must also further degrade the value of the building object to be demolished by attributing to it a meaning that goes beyond just the material denotation of 'construction' but the more general one of a social object that would have failed in its performance qualities. Being performative in its communicative power, for better or for worse, architecture sometimes manages to transfigure itself from monument to scapegoat, when it rises to the role of specific signifier that transcends its mere material value to become the symbol of an entire system to be torn down.

The practice of destroying a signifier probably goes back as far as the dawn of civilization, or at least as long as man has been able to clothe a precise symbolic meaning as much in the object to be produced as in the one to be destroyed. Traditionally iconoclasm is traced back to the religious prescriptions contained in the sacred texts of the three Abrahamic religions, in which a transcendence that goes beyond the limits of the human being is attributed to God, in this sense any of his representations would therefore have made the sacred coincide with the profane (the corrupt) of the performer, therefore the signifier (the fetish) with God himself. However, the sacred representations in the context of Christianity began to spread both for the purpose of a more direct communication with the illiterate, and for a process of conversion of many pagans and the transmigration of their artistic codes into the first forms of Christian sacred art. In order to contrast forms of idolatry of sacred images, the first radical manifestations of iconoclasm, carried out in the Byzantine Empire around the eighth century AD, led to the destruction of sacred representations, real subtractions applied in religious architecture that made the purity of their geometries stand out. After the abolition of iconoclasm in the 9th century, the advent of the Protestant Reformation in the 16th century will cause iconoclasm and its subtractive-destructive action to reappear, this time in northern Europe and parts of France, as a reaction to the moral decadence of the Roman Church and the papacy. This reference to religious coherence therefore had to be manifested also through a consistency to the original precepts: referring to the prescriptions of the Pentateuch, the veneration of images was considered on the same level as paganism and superstition, therefore in many churches sacred images, vestments and relics were destroyed. This campaign of vehement iconoclams, in addition to causing serious damages or even the destruction of entire churches, involved the subtraction of every figurative decorative element

inside the religious buildings - see for example the seventeenth-century realist paintings by Pieter Jansz Saenredam of some Dutch churches. Iconoclastic fervor and religious rigor are manifestations of that Protestantism which was not only one of the factors that gave rise to the modern age but also that precondition, especially in its Calvinist variant, necessary for the birth of capitalism according to the well-known Max Weber's interpretation.¹⁷ The savings produced by the moderation of Calvinism would also be understood as the incessant reinvestment of what was earned, the pursuit of profit as an aim and the subordination of everything that did not have economic purposes. The mediation operated by Catholicism through the exercise of the faith that redeemed the sinner, with Lutheranism was terminated by making the believer assume personal responsibility for his own actions whose grace was determined,¹⁸ according to Calvin, by the wealth he was able to accumulate as result of his own work. Iconoclasm must therefore also be understood as a process of synthesis that has its own intrinsically economic reason, thus establishing aesthetic codes that made rigor and simplicity the driving force of savings. The Calvinist type of morality differs markedly from that professed by the pauperistic monastic orders - after all, poverty for the Calvinist was the test of the sinner excluded from God's grace - and is represented by a type of asceticism that 'becomes a form of life in which sacrifice and hard work are seen as the necessary foundation for future revenue and consumption – or, in times of economic recession, as the sole means to repay a debt.'¹⁹



Pieter Janszoon Saenredam, Interior of the Sint-Odulphskerk in Assendelft, 1649.

Although Weber's theses have been partly disputed by those who have observed that 'pre-capitalist' conditions already existed in the Italian merchant bourgeoisie, therefore within Catholicism itself, Protestant ethics would have introduced a morality structure of sobriety functional to capitalist accumulation that will later have, as an effect of the 'heterogenesis of ends,' its secularization in the age of Enlightenment, where at that point the replacement of God with money became almost automatic.²⁰ With the advent of the Enlightenment and the development of economics as an autonomous science, the principle of sobriety shifted from religious morality to that of the utilitarian principle, in which the action of the individual, in order for him to freely exercise his actions without conflicting with those of others, must be mediated by the action of the devices of secularized power. In a cultural *milieu* increasingly dominated by exhortations toward the original values of architecture as ethics of building and the rational simplification of its spatial elaborations - as much in the protofunctionalist lectures of Carlo Lodoli ²¹ and Francesco Milizia, as much as in Marc-Antoine Laugier's search for disciplinary primitive origins - the *Panopticon* elaborated by Jeremy Bentham shows how the elaboration of a constructive model purified of all decorum or representational ambition, but designed according to criteria of functional correspondence to the attainment of a set purpose, is the most effective means to the achievement of profit. The principle behind control in Bentham's device was not driven by moral concerns but by obtaining a specific result at the lowest possible cost,²² so much so that the same *Panopticon* would later be applied by its inventor to one of his factories, where prisoners would be employed. Capitalist ethics thus coincides with the form and space of its maximum profit as iconographic reduction, as iconoclasm of the superfluous.

That kind of discourse will then come to its most extreme consequences as the advance of modernity uses the rhetoric of order, hygiene and healthiness, identifying the minor and historical city as the place of misery and vice, to support the demolition campaigns of many historic centers to replace them with the most functional and fundamentally more efficient city from an economic point of view. Although the representation of absolute essentiality would seem to coincide with the rigor of capitalist city functioning - Hilberseimer's Hochhausstadt, 1924- the nexus of ascetic severity, destruction, and iconoclasm is not only about capitalist development, nor has it always manifested itself through material rigor. Rather we could say that modernity and its cultural manifestations have expressed themselves in forms of symbolic or material destruction towards the consolidated and stale structures of traditions. In the arts, the accelerated engine of industrial innovation has produced, through its formalized ideology that is modernism, forms of iconoclasm towards the structures of bourgeois art, which were destroyed in the sacrificial rites of the decomposition and destruction of traditional artistic codes. The same innovation by substitution that took place in the alternation of the different methods of abstraction of the modernist avant-gardes was a progressive attempt to

constantly clean up/purify the field of representation, until it disappears completely. It is therefore clear that in that subtractive sacrificial exaltation, once the absolute apex of total negation was reached - that is, its absence - the arts necessarily had to recover a rearguard discourse and restore a communication that had already been made incomprehensible or even silent. However, in the recovery of traditional figurative forms, in the return to the symbolic and metaphorical and in the attribution of the value of the image of any kind, the modernist scheme of a new path of successions and substitutions could not be re-proposed, in the postmodern dimension in the end everything could easily hybridize in a pacified condition, in which the tensions between opposing factions finally found themselves in that field of coexistence that Arthur Danto defined as the 'end of art.'²³

But if the path of art ended up finding a condition of equilibrium precisely from the exhaustion of its iconoclastic reach, the same cannot be said of the 'most political of the arts,'²⁴ that is, architecture, which is much more 'compromised' with the transformations of the economic systems of reference and therefore much more capable of becoming their easy scapegoat. The evolutions of capitalist processes certainly cannot be exhausted in the functionalist dimension and in the rigor of maximum saving, on the contrary, forms of excess defined by overproduction are typical and cyclical and, as Marx recalls, the recurring cause of capitalist crises. The paradigm shift can also be traced to that 'commodity fetishism' that has eclipsed the rigor of Protestantism and therefore replaced the observance of religious precepts with the veneration of the object of consumption. Indeed Weber

well in advance of many of his contemporaries, [...] was among the first to perceive how 20th-century capitalism later wriggled free of any ethical grounding and led to a sort of unconscious servitude to mechanized industry. Consumerism, as the consequence of mass production, actually stands as the complete reversal of Protestant attitudes and could be understood as the most effective outcome of this process of the separation of ethics and the economy.²⁵

The level of identification of society with consumer goods had therefore led to overcoming the simple use and exchange value of the object to transcend that of symbolic value, in a system of social and cultural hierarchy of signs.²⁶ In a context increasingly dominated by cultural systems, the rigor and abstraction of modernism became increasingly the object of blame, both from within the disciplinary sector that demanded a return to the semantic variety of historical and popular languages, as from sociological criticism and politics, which underlined how the living spaces built on the precepts of the CIAM had produced more than places of order and hygiene, areas of decay and alienation.²⁷ Moreover, modernism's celebration of industrial production - expressed through significant key concepts such as 'machine for living' - resulted in a kind of ethics of structural honesty that actually implied a positivist moralism through which to exhaust any disciplinary issues.²⁸ Although many of the criticisms of the modern city

development model had legitimate foundations, some of them ended up identifying the evils of contemporaneity with the single building or with certain urban schemes, thus attributing them to the intrinsic characteristics of those projects. Although any discourse on architectural design has always necessarily fed on a certain level of rhetoric in order to blandish its potential users - the people first, the consumer later - with the advent of the 'society of the spectacle,' architecture seems to have begun not only to include the most popular signs of cultural systems and consumerism, it also became the object of media interest and also the subject of public debate.²⁹ And precisely because the postmodern narrative is loaded with populist features, its chief cantor used that kind of register to declare nothing less than 'the death of modern architecture' by means of images of the demolition of the architectural scapegoat par excellence that is the Pruitt-Igoe:

Modern Architecture died in St Louis, Missouri on July 15, 1972 at 3:32 pm (or thereabouts) when the infamous Pruitt-Igoe scheme, or rather several of its slab blocks, were given the final *coup de grace* by dynamite. [...] Boom, boom, boom. Without any doubt, the ruins should be kept, the remains should have a preservation order slapped on them, so that keep a live memory of this failure in planning and architecture. Like the folly or artificial ruin [...] we should learn to value and protect our former disasters.³⁰



The first demolitions of Pruitt-Igoe complex, 1972.

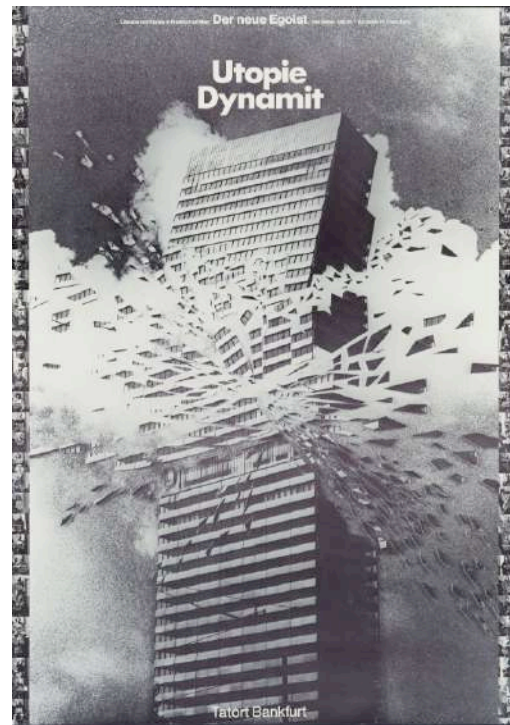
Jencks' vehement and polemical attack does not appear immediately after the destruction of the complex, it is drafted instead in the second half of the seventies, at a time when the crisis of the modern had already been consumed by two decades of revisions, criticisms, attacks inside and outside the architectural debate. The use of such a controversial example - as presumed proof of the failure

not of that specific model but of the more general movement of which it would be a perfect expression - takes on the characteristics of a superficial journalistic controversy that very prosaically needed to splash 'the monster' across the front page. However, the problems produced by the processes of modernization ended up coinciding with its constructive manifestations and thus with blame against that profession that had been responsible for creating spaces where those problems had occurred. It was a type of automatism that was difficult to undermine; the identification of a problem with a specific object was more effective and allowed the complex and invisible bureaucratic machine to escape responsibility for its inefficiency. In this way, the destruction of a controversial building would not only eliminate the problem itself, but also allow the discipline to avoid defamatory accusations:

Attaching itself to the demolition of Pruitt-Igoe may well have been the way a profession undergoing unprecedented internal rivalry and introspection could keep in check potentially fatal forces. [...] In scapegoating Pruitt-Igoe, a type of architectural creativity deemed to pose the risk of putting the entire architectural system in jeopardy was marked as being negative value and killed off. And through this sacrifice professional architectural order and authority was restored.³¹

But what exactly were the faults of this project or possibly of its designer, who has gone down in history more for the destruction of his buildings than for those still standing? In 2011, Chad Freidrichs' film-documentary, *The Pruitt-Igoe Myth*,³² attempted to reestablish a different story than the one that would attribute the only exclusive blame to the modern city model that this complex embodied - after all, it could be said that similar settlement and housing patterns could be observed anywhere else in the world, without being the subject of such severe demolition or blame. Rather, the problems with this housing development should be sought in the social conditions of its inhabitants, the historical context in which it was built, and the consequences of failed maintenance programs. The complex designed by Helmut, Yamasaki & Leinweber in the early 1950s was located within a general urban renewal program and in accordance with the requirements of the Housing Act of 1949, which encouraged suburban living. The project consisted of 33 buildings of eleven stories each on a 57-acre tabula rasa in the DeSoto-Carr neighborhood on the north side of St Louis and was built between 1954 and 1957 to house a community of about 10,000 residents. Its decline began almost immediately as industrial activities were gradually leaving the area with consequent impact on occupancy rates; the plan called for the settlement to be occupied by whites and blacks, but in the meantime the pressure of white housing demand eased and the complex was inhabited only by blacks, who certainly had more problems with private housing access due to segregationist policies (redlining); maintenance would have been supported by rents but the abandonment of the complex by many inhabitants, lack of sufficient income and the delinquency of many tenants generated a vicious circle; many spaces ended up being squatted and vandalized, as well as places of drug dealing and petty crime, making this place a real ghetto. In addition, some construction

cost-cutting imposed by federal housing regulations forced Yamasaki to revise his initial proposals: while images of the project showed some 'human' dimension to the settlement, with innovative solutions such as skip-floor lifts and corridors as internal streets that were supposed to foster sociability among residents, later, the designers had to double the density per unit, eliminate row houses and the green river, and reduce individual housing.³³



Examples of anti-modernist controversies: Gunter Rambow, Bauträger poster from the 'Muß das so bleiben?' series, 1971; Utopie Dynamit poster, 1976.

Jencks' rhetoric was neither sectional nor isolated; it represented only one of several attacks, many of them rather superficial, intended at the time to throw the whole of modern architecture into the cauldron of infamy, polemics that were further corroborated by pamphlets that were shallow and populist in tone and therefore widely circulated.³⁴ This kind of attitude, rather than stimulating or contributing to a debate on the directions to be taken in order not to repeat the mistakes of the past, lent itself rather to being functional to a growing reactionary spirit, which was also very useful in questioning the very concept of the welfare state.³⁵ Prince Charles has engaged in a populist crusade against modern and contemporary architecture since the 1980s,³⁶ and that has met with the enthusiasm of architects such as the eclectic Jencks or the neo-traditionalist Léon Krier. Appealing to the 'values' and traditional materials of architecture and counting on his power, including media power, the Prince of Wales in his anti-

modern controversy managed to intervene in the definition or excerpting of certain projects,³⁷ using a communicative apparatus built on a sophisticated and conscious rhetorical mode in which the identification of a target was taken as a paradigmatic case, constructed through a simplified image so as to achieve the widest reception, with which to carry out an attack on an entire era and a precise way of conceiving architecture.³⁸

Anti-modernist populism has often manifested itself through appeals to history and tradition with a clear reactionary order approach and promoted by questionable figures on the political scene even in recent years: from the delirious kitsch-neoclassical Skopje 2014 project promoted by the Macedonian nationalist party VMRO-DPMNE,³⁹ to the executive order decreed in late 2020 by Donald Trump, in which new federal government buildings were to be built in the neoclassical style and that those built in the modernist style would have to be torn down or radically transformed.⁴⁰ This aspect underscores how much in populist rhetoric architecture is always exploited by degrading it to a figure, a two-dimensional object that would represent or frustrate the demands of 'the people,' whose trivialization is further multiplied by media systems. In the cultural field of postmodernism this characteristic has been taken up, adopted and in turn exploited by architects, not to say that their production is populist per se, rather its reasons arise and are reproduced according to the laws of media mediation. In fact, it is no coincidence that the architecture produced in late capitalism has often been defined as iconic, its creators as starchitects, and its spectacular manifestations reproduced as images for international tourism destinations in the age of globalization and the finance that supports it. It goes without saying, then, that as an icon, architecture also becomes an object of iconoclasm: the terrorists of the September 11 attacks recognized the architectural object as a symbol of U.S. economic, therefore political, power, but they were also aware of the scope of that destructive gesture, and of its communicative value, precisely because of the multiplicative effect of media reproduction.

Architectural destruction as a show, linked to demagogic discourse, has its own tradition that runs parallel with the advent of postmodernism. If, with the Pruitt-Igoe demolition, all modern architecture was not dead, one could at least kill the epigones of that housing model, which was opposed as much by those who lived there as by those who despised their presence as disfiguring elements in the urban landscape. That 'purifying rite' had to be made spectacular, however: the spectacle of architecture, for better or worse. The dynamics that occurred in Pruitt-Igoe can be taken, with due proportion and differences, as a prime example of the failure of a housing model linked to a management structure that was often found to be extremely deficient. In addition, these settlements made extensive use of concrete - in extremely repetitive patterns, especially in those made at very low cost that employed standardized and prefabricated technologies - often without finishing, further amplifying the sense of estrangement and alienation caused by the giant size of these intensive agglomerations and their

grayness, elements that on a perceptual and psychological level could increase the discomfort caused by adverse social conditions, sometimes experienced on the margins of the city.



Top: demolitions of modernist housing developments.

Below, left: the destruction by parts of Robin Hood Gardens; right: fragment of the 'street in the air' at the Venice Biennale, 2018.

Concrete, once considered almost indestructible, began to show signs of its inexorable decay, associated with various vandalisms that corroborated the broken windows theory, and the maintenance deficiencies incumbent on public institutions, increasingly subject to funding cuts, often led to the resolution of these complex problems through demolition, as it was considered the most convenient option from all points of view. Laden with the stigma accumulated over the years, in which material degradation was associated with, or rather was the perfect representation of, social degradation, the many examples of social housing of the 1960s and 1970s imploded, between the 1980s until the present, by dynamite blows offering the spectacle to a public awaiting the sublime-catastrophic real, the ‘execution’ of the architectural scapegoat. While grimly celebrating the defeat of a social model associated with spatial configurations sometimes worthy of better consideration, witnessing the sudden collapse of a concrete giant, with all the portent of meaning it embodied, was combined not only with the illusory resolution of broader problems and certainly not exhaustible only in the building object on the scaffold, this kind of spectacle effectively tickled the unconscious:

Freud speculated that the death drive counters Eros – the innate tendency towards procreation. Can we see demolition as a manifestation of the death drive? In some sense, culture depends on resisting the death drive, needing, as it does, stuff and ideas to accumulate over time. Would it be better to understand demolition as a synthesis between the two drives? Demolition, distinct from its cousin vandalism, is judicious destruction sensitive to the importance of creation. As kind of tempered aggression, demolition could be seen as a *petite mort*, a small death prefiguring one’s own death. Indeed, is there a bigger climax than a stiff 100m-tall tower suddenly collapsing as onlookers all exhale? Thousands of tonnes of embodied energy vaporised in seconds. Is there better erotic metaphor than the ground literally shaking beneath your feet?⁴¹

In that often hasty liquidation of entire housing estates, even buildings of substantial value and very short life span were lost - James Stirling’s Southgate Estate was demolished only 15 years after its construction in 1990 due to similar problems as the Pruitt-Igoe, of which it would constitute the ‘English variant’⁴² - which also demonstrates an incredible double standard in the general consideration about the preservation of existing architectural heritage.⁴³ The recent demolition campaign of Robin Hood Gardens is yet another demonstration of this havoc, and despite several attempts to have the complex included in the list of historic buildings to be preserved - at the initiative of Building Design Magazine, the Twentieth Century Society, and with the support of architects such as Richard Rogers and Zaha Hadid - have been in vain, and in 2017 the demolition of the western block was underway, of which only a fragment of the facade remains, purchased by the Victoria and Albert Museum as a relic and exhibited at the Venice Biennial in 2018.⁴⁴ However, this demolition seems to show a paradigm shift in that well-established ritual horror show of modernist building destructions: here the absence of dynamite and the deconstruction of the building by pieces seems a more discreet attempt to celebrate its failure, also resenting the symbolic and cultural load of this architecture or the impact even

environmental that simple implosion by explosion would entail:

The world has changed: in 2018 we passed the Peak Controlled Explosion. [...] Perhaps we will see more discreet dismantling, moving and reassembling buildings [...]. If we had an active attitude towards demolition, maybe we could avoid the shame and anguish of living with the remains.⁴⁵

dismantling for disassembly for recycling

The 2014 edition of the Venice Architecture Biennale curated by Rem Koolhaas, *Fundamentals*, displayed at the central pavilion the most controversial exhibit of that event, *Elements of Architecture*, or 15 specimens of architecture - floor, ceiling, roof, door, wall, stair, toilet, window, façade, balcony, corridor, fireplace, ramp, escalator, elevator - and their respective histories, types, evolutions, and varied applications within projects and in diverse building configurations.

Architecture is a strange mixture of obstinate persistence and constant flux. Just as science has recently shown that all of us carry 'inner' Neanderthal genes, each element, too, carries long strands of junk DNA that dates from time immemorial... Some elements have barely changed in the last 3000-5000. Others were (re)invented last week [...]. The fact that elements change independently, according to different cycles and economies, and for different reasons, turn each architectural project into a complex collage of the archaic and the current, of the standard and the unique, of mechanical smoothness and bricolage – a complexity revealed in its full extent only by looking at its constituent parts under a microscope.⁴⁶

Always very adept at unhinging established disciplinary certainties, Koolhaas proposes, very polemically, an exhibition 'about architecture and not architects,' also trying to challenge the superficial narrative that accuses the processes of modernization as the blatant manifestations of a global flattening, where the various national pavilions instead render the wide variability in the declination of reference models. The contents of the exhibition show a certain nostalgia for a 'heroic' era experienced by the discipline, while attempting to demolish the various forms of stigmatization that in recent decades, as seen above, have repeated the superficial cliché of modern design as an overall 'failure.' Also expressing a degree of annoyance and pessimism toward the contemporary condition, to start again from the fundamentals of architecture means for Koolhaas therefore also to analyze its fundamental elements. This approach was predictably not exempt from criticism, perhaps even astutely sought, by many colleagues who accused Koolhaas of hypocrisy or incoherence in proposing a supposed 'biennial without architects' even though he was its absolute creator.⁴⁷

Peter Eisenman in particular sharply challenges the reduction of architecture to an assemblage of disparate elements, claiming its status as a language:

if architecture is to be considered a language, 'elements' don't matter. [...] So for me what's missing [from the show], purposely missing, is the grammatic. [...] We have performance, we have film, we have video; we have everything but architecture.⁴⁸

Eisenman's polemic, consistently anchored in his principle of disciplinary autonomy, reclaims the importance of an authorial grammar, where rather the elements are integrated into a specific solipsistic lemma constructed by, indeed, deconstructing the discourse of modernist formal completeness. Instead, Koolhaas shows how elements have been decisive in the construction of architectural space, regardless of the specific languages - the fireplace for Wright, the elevator for skyscrapers, etc. - thus denying the principle of a perfectly self-determined discipline. In emphasizing his 'elementary particles' rather than their composing into a coherent and self-referential discourse, subtracting and bringing them into the encyclopedic list, the catalogue, Koolhaas seems to reiterate the negation of architecture as autopoiesis to highlight instead the complexity of the variables that contribute to its evolution.

Architecture is a holistic cultural technique, aiming towards the engineering of an enclosure. Yet architecture, which traditionally targets containment and even hermeticism [...] can be opened up by an alternative approach to architecture. This approach, which amounts to a type of reverse engineering, selectively puts into focus not the 'whole' of architecture, but its component parts: the elements of architecture. They are interrelated with other specific elements, but via reverse engineering are considered in isolation rather than as components of the 'whole,' which, at least since modernity, has become a critical and unattainable value.⁴⁹



Rem Koolhaas, Elements of Architecture, 2014; Rotor, catalogue of second-hand windows for Zinneke.

However, this kind of 'alternative' seems rather to be much more akin to the ways and customs rooted in a pre-modern architecture, in which its elements were usually recombining outside of any supposed coherence of *concinntas*, both the

cities and its components are the result often of hybridizations, corrections, palimpsests in which elements are re-deployed sometimes dissonantly or totally inconsistently. The practice of reuse was basically the tool by which in antiquity the remains of earlier buildings were employed in a very pragmatic way, composing configurations in which the collage operation was evidenced by the different texture of the materials or the nature of the element itself. In fact, it is not uncommon to see in historic city centers interesting constructive patchworks or in the same ancient ruins fragments of earlier constructions that also serve different functions - column pieces arranged horizontally along building curtains, funerary stems as piers, etc. The idea of a grammar of architecture seems somewhat problematic when considered in these terms, where it is more the palimpsest than the autonomous text that connotes many architectures and cities;⁵⁰ moreover, the work of rewriting existing construction has often produced hybridizations in which recombined elements or new ones altogether have resulted in consistent transformations to the myth of the integrity of architectural space. Therefore, it could be said that if architecture is a language it sometimes expresses itself by polysemies, a type of inherent complexity that has been largely repurposed in ambiguous and fictitious ways by postmodernist *pastiches*.⁵¹

The issue of 'elements' now lends itself to being the counterpart of the 'natural' reuse that determined the construction of the historic city: very prosaically, it is a useful and convenient contrast to waste in the face of building subtraction, whether partial (modernizations) or total (demolition). The large production of waste from demolition activities⁵² has forced governments and institutions to proceed by prescriptions and directives,⁵³ especially in years of economic and environmental crisis, with the aim of increasingly encouraging the recovery of and recycling of construction materials. The procedure over the years had remained pretty much the same: client contracted with the architect, the architect contracted with the general contractor who hired a demolition company that in turn delivered the waste to the hauling company that delivered the waste to the landfill. The problem involved not only the construction material but also the portions of buildings such as finishes or individual elements that could have been salvaged but in the absence of an effective network of activities to keep and store the materials the only solution, and the most cost-effective one, was to turn the entire demolished building into garbage. After all, this was a cultural legacy that at least from the Industrial Revolution onward considered innovation only through the destruction and replacement of new materials, technologies and models. Today, the change in attitude toward the production of construction waste has thus also changed the approach toward the demolition of those modernist housing estates, no longer through spectacular implosion and the dumping of their debris in landfills but a different environmental sensitivity that is sometimes combined with respect for the historical significance of certain places undergoing radical transformation.

In Ivry-sur-Seine, the 'banlieu rouge,' also known as the 'cité Gagarin,' inaugurated in 1961 and made up of 370 apartments, was at the time considered the pride of the PCF (the French Communist Party), as it embodied the ideals of the working-class city. Deindustrialization, conversion of the local economy much more related to tourism, and lack of maintenance have led to the slow degradation of the building which will be, unlike the fate suffered by many similar buildings in France, not demolished with dynamite but 'de-constructed' by means of selective dismantling: the program calls for the rubble to go to make up aggregates for the manufacture of roads of which 2500 cubic meters will be reused for the infrastructure of the new city that will rise in its place. Items such as cast-iron radiators, doors, fire extinguishers, and mailboxes will be dismantled stored and sent to specialized recycling firms as Backacia.⁵⁴

Recycling rhetoric in recent years has become one of the various declinations of greenwashing and is often accompanied by its greater cousin 'eco-sustainability' in spreading a narrative that often attempts to dilute the impact that demolition and construction activities have on the environment anyway. In more specific terms, there is a tendency to overlook the fact that even without causing the dust clouds and total waste of materials due to dynamite demolition, deconstruction activities also involve environmental pollution and waste generation, albeit in significantly reduced quantities. In addition, in the components eventually to be recycled, there is often contamination by residues of toxic materials (asbestos, polyurethane foams, etc.), creating additional difficulties in their processing, storage, and reuse, while many materials are not fully recyclable (clay debris, aerated concrete, glass bricks, insulation made of mineral wool, plasterboards, sealant, Heraklith board, mixed materials, ecc.). While the recycling of metals, thanks to their chemical properties, guarantees a product with performances very similar to those of first use, for other materials, such as glass and most plastics, the original conditions cannot be restored in recycling processes, thus limiting their material and energy-saving potential (downcycling).⁵⁵ Much more interesting, however, is how the reuse of decommissioning remnants are reworked in architectural design, as 'fundamental elements' that characterize the design language itself, which is often endowed with a degree of indeterminacy:

What makes it so difficult to describe building conversions is that it is not enough simply to present the final result. A building conversion involves a complex interaction between old and new, before and after, and all points in between, including a strategy, until it eventually reaches the end stage.⁵⁶

The aspect of indeterminacy is necessarily linked to the nature of the objet trouvé, where the salvaged elements that go to make up parts of the new construction, or of an interior, are different from time to time as the stock of building objects to be reused are often not homogeneous sets in terms of finishes and characteristics, and this emphasizes the informal and experimental aspect of the approach in reuse. On this creative dimension of recycling works the Rotor group, a Belgian

collective that since 2005 has been investigating at a theoretical-critical and design level the topic of reuse also by questioning the too superficial and rhetorical readings about it⁵⁷ - since 2016 joined by the spin-off RotorDC,⁵⁸ a cooperative that deals with the recovery, valorization and resale on the platform of secondhand materials and elements: 'The flow of materials and the way we act with materials are unusual but interesting ways to explore the way the world works through the backdoor. We discover unexpected things.'⁵⁹ The office's work, corroborated by studies and analysis on recycling issues,⁶⁰ also highlights the real resistance that often exists in the construction industry due to the legacy of mistrust that salvaged material carries. However, this broad understanding of the issue has enabled Rotor to translate reuse into declinations ranging from low-cost design that retrieves Robert Smithson's lessons about 'ruins in reverse,' or the emphasis on recombination of reclaimed elements through a ready-made assemblage. In the Gent's Docks area, Rotor transformed the 160-meter-long former decommissioned gravel and sand depot into an open-air exhibition space, in which the industrial remnant is emphasized in its 'poor' and industrial ruined condition, with highlights of its textural peculiarities made of small subtraction operations and white paint that emphasize the joints and textures of decaying concrete colored by metal oxides accumulated over the years.⁶¹



Rotor, Grindbakken, 2012; Zinneke, 2020.

The Zinneke social-arts center project in Brussels was conducted in collaboration with Ouest Architecture, MATRIciel and involving metalworkers who regularly attend training programs organized by the center. In addition to preserving as much of the original portion of the existing structure as possible, the redoing of a portion of the interior façade required the use of secondhand windows and doors: the inability to predict which window frames would be available at the end of the design phase forced Rotors to project a system that

could cope with the unexpected -‘We standardised the uncertainty’⁶² - thus creating the scanning of a collage that seems to update the often dissonant variety of historic buildings:

We think it's useful to rediscover techniques, approaches and old ways of doing things in order to deal with contemporary questions. We are experiencing a reconciliation with the field of architecture, which we used to sometimes criticise or reject.⁶³

But the destructive subtractions of the built environment are unfortunately also those of natural disasters, where the need to rebuild also passes through the reuse of the remnants of destruction, where recycling also takes on the connotations of a ‘rebirth’ that significantly incorporates the traces of that drama. In 2008 China is hit by one of its most violent earthquakes in recent years in Wenchuan county, Sichuan province: the razed houses compose mountains of debris that Jiakun Architects in part recycle as aggregate, along with fragments of ears of corn as reinforcing fibers mixed with concrete, a hope for rebirth thus not only material. But China is also the site of continual subtractions in the built environment, often carried out through outright forced demolitions of minor and vernacular architecture to make room for ongoing real estate developments. ‘Everywhere you go, you find ruins of buildings that have been demolished,’⁶⁴ observes Wang Shu, the Pritzker Prize winner who heads Amateur Architecture Studio, noting how the result of those developments produces continuous remnants of ruins on the land, almost as if they were the outcome of a kind of artificial earthquake. The attempt to preserve the material memory of those buildings prompted the architects to recycle much of the debris of demolished houses to cover the exterior walls of the Ningbo History Museum: tiles, stones, bricks become the melancholy catalog of the remnants of a vanished identity.



Jiakun Architects, Rebirth Brick, 2008.



Wang Shu, Ningbo, 2008.

let's shrink!

The activity of architecture is a contribution to the transformation of space which, at least in the intentions of its creators, capable of bringing quality to the environment and which is traditionally understood as exclusively additive (in both quantitative and qualitative terms), although any addition necessarily also involves its opposite, namely, subtraction, of previous structures or simply of vacant territory. The space within which the agility of architecture exerts its influence is very small compared to the amount of built mass occupying the land, yet its cultural dimension forces it to fit in critically, especially in relation to the development of cities: the more they grow by progressive additions, in the interweaving and overlapping layers of the urban fabric, the more the architect is fatally stimulated by the need to put order back into the lost hierarchies of constructive chaos, through the exercise of subtraction of objects he does not appreciate, claiming his own presumed capacity for objective judgment, as if his selective action were a tacit delegation entrusted to him by the community, as if were an ethical justifier of History.⁶⁵ But what happens when the territory with which he is confronted exhibits the characteristics of a development deficit such that the built material is the surplus of a systemic condition of crisis in which decomposition dominates? Is it possible in such a case to orient the ordering act in which subtraction is the end and not the means? Urban crisis conditions can strike in a punctual and circumscribed manner in certain areas, and when this has occurred the response has often been 'remediation' by demolition, usually succeeded by the replacement of a new model capable of manifesting its ameliorative contribution or a vacuum awaiting future development. While this is part of an established urban metabolism, where subtractions and additions make up the natural succession of stages in its evolution, cities can also undergo a reverse development, that is, they may be plunged into a condition of crisis such that a paradigm shift is needed to reverse the traditional additive design approach.

Industrialized societies have produced a sudden unprecedented transformation and development of urban centers, often creating some from scratch as prosthetic entities of productive realities. In the accelerated rotational cycles of capitalist evolutions, driven by the 'creative destruction' of continuous innovation, there have been phases of obsolescence of industrial sectors. The absence of innovation contributions for the purpose of competitiveness on a global scale, have resulted in total divestment, with the consequent fallout on the relevant territories and the occurrence of urban, economic and social crises due to unemployment, destruction of satellite activities and the production of the landscape of abandonment, whereby 'obsolescence can be seen as a concept that brings order to the built environment, making sense of it by giving a name and logic to the seemingly irrational process of capitalist disinvestment and reinvestment.'⁶⁶ If the modern and contemporary dynamics are the main causes

of the sudden development and contraction of certain cities, creating both intensive agglomerations such as megacities and once-developed centers that have now fallen into disrepair, it should not be forgotten that urban settlements have not always developed on progressive and stable rates of growth, and that the factors of their eventual decline is also caused by crises of another kind, such as conflicts and wars, where planned contractions of one expanding territory over another can also occur - see the case of the progressive and violent reduction of Palestinian land.⁶⁷ Conflicts bring about radical changes in territories, their destructive outcome producing different levels of *tabula rasa* in which planning has sometimes been able to freely experiment with new city models. But wars also redefine the political-economic arrangements and thus consequently also the quality of reconstructions, sometimes defined by such paradoxical situations in which the desirable design of the territory seems to require an approach in which the void becomes a strategic design tool.

At a time when Berlin was divided in two - or rather, the western part was a city enclosed by a wall as a 'fortress' of capitalism within a socialist country - Oswald Mathias Ungers, together with a group of collaborators including Koolhaas and Hans Kollhoff, developed the concept of 'the city within the city' as a plan for future urban development for Berlin during a summer academy in 1977. The occasion was given by the debate about the 'International Building Exhibition' to be held in the city in 1980, a kind of Interbau to be built in a specific area of West Berlin on the model started as early as 1957 with Hansaviertel. During the discussions, the idea of a different approach emerged than a demonstration based on the proposal of exemplary new architecture; rather, Ungers focused on the idea of repairing an urban condition that was the outcome of piecemeal development in which empty lots were scattered throughout the city, as a legacy of a war that had nearly wiped out the entire urban fabric and subsequent developments conducted inconsistently. Moreover, at that time the city was becoming depopulated, and this aspect rather than a penalty should have been the strength of the project. It was drafted according to eleven theses, the first of which (*Berlin's population drop*) set out data of the inexorable population decline, which was estimated to be greater than 10 percent over the next decade. Because of these premises, thesis 2 (*Criticism of current design theories*) strongly criticized the classical approach of planning as repair, on the grounds that in a depopulated condition the intensive input of void filling would not make sense. Thesis 3 (*The problem of the population drop*) broadened the look by illustrating the problem of depopulation in other large centers other urban centers as well, taking New York City as an example, where the deletion of some areas could have even accommodated thousands of urban farms. The fourth thesis (*The differentiated urban structure*) considered how population reduction was actually an opportunity as it allowed for an assessment of which areas offered potential for development over others. Thesis 5 (*The Idea of the city in the city*) is the founding concept of the project: the strategic areas thus defined as islands

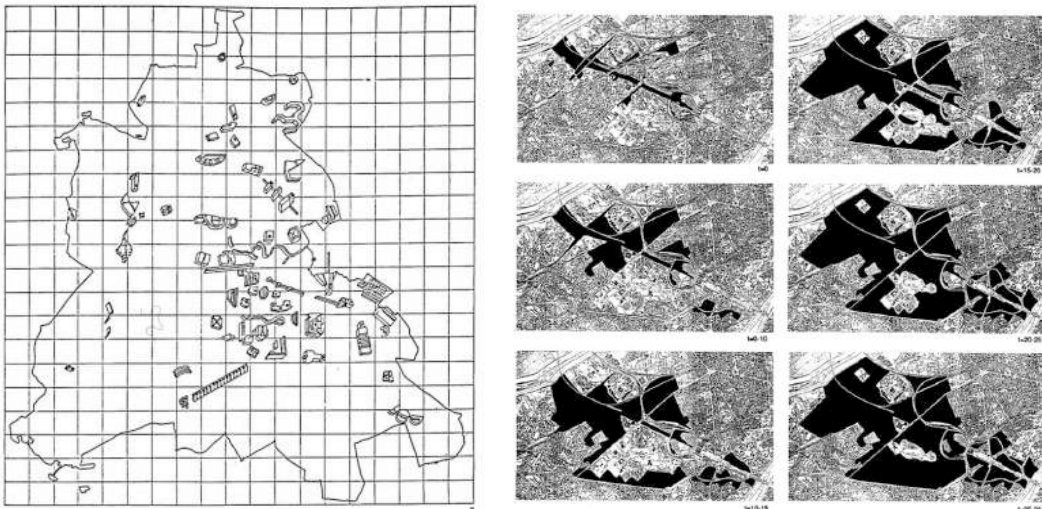
with their precise structural and historical peculiarities where thesis 6 (*Establishments of the area of the city-islands*) proposed, as a filler for the fragmented areas, comparison and analogy with specific urban areas that could serve as guiding principles, both within the city of Berlin itself - the radial axes of Karlsruhe as an example for the configuration of the lower part of Friedrichstadt - but also examples inferred from other cities or unrealized projects - such as Central park in New York or Leonidov's concept for the linear city Magnitogorsk. Thesis 7 (*The green archipelago*) that is, the areas between those possibly to be developed 'ought to be allowed to be gradually retransformed into natural zones and pastures, without any rebuilding.'⁶⁸ However, Ungers did not reveal whether these green areas were to be realized as an outcome of planned destruction, he only proposed its final stage, basically West Berlin as 'an ideal city that integrated the experience of the American city with its extensive highway networks and endless suburban spaces with the ideal forms of the European city with its dense public spaces.'⁶⁹

Of course, the project will never come to fruition, and predictions of an increasingly emptied city will be largely belied by the course of history when Berlin becomes the capital of reunified Germany and the destruction of the wall enclosing the west as the defeat of the Soviet bloc and the start of full globalization. In that historical process, other cities, on the other hand, suffered rapid decline and depopulation, namely the various centers in the former GDR that depended on industrial sectors that were no longer able to sustain themselves in a global market environment after the sudden change in the political-economic system. Although Ungers' project can be ascribed in the context of planning idealism, however different to the established approaches of the time, the needs to address the deep-rooted problems in some areas plagued by depopulation and urban decline definitely forced paradigm shifts in IBA programs as well.⁷⁰ But it is above all the idea that one can 'plan for emptiness' that seems to be the most attractive side of Ungers' project, even as a counterbalance to urban congestion. Koolhaas, part of the discussion group in the archipelago city project and simultaneously probing the New York City area, will later take up as much the notions of the project for Berlin as those of the sudden emptiness that Central Park establishes in the congested mesh of Manhattan. The question of emptiness involves not only areas afflicted by depopulation crisis but also those that are growing: if anything, the crisis is at that point more in urban terms, where the chaotic proliferation of layers has supplanted any planning assumptions. For the Melun-Sénart urban competition (1987) OMA takes up the concept of archipelagos this time defined by areas of 'emptiness' around which the city continues to expand. In assessing the qualities of the natural landscape, OMA opts for a program that does not limit the expansion of the city but defines project areas within which green 'protected zones' or intended to accommodate variable programs that do not involve the proliferation of the built environment:

The built is now fundamentally suspect. The unbuilt is green, ecological, popular. If

the built – le plein – is now out of control – subject to permanent political, financial turmoil – the same is not yet true of the unbuilt; nothingness may be the last subject of plausible certainties.⁷¹

The fascination with the *tabula rasa*, or at least of its potential as a basis for new developments, returns in the city of Paris, not as a redefinition of the center and major urban axes of the nineteenth-century bourgeois city, nor even as a radical and sudden modernist rewriting of the territory, but as a progressive process of deconstruction of easily and hopefully 'expendable' buildings. In the design for the competition regarding the extension of the already densely built-up La Défense area, the project questions which buildings deserve an 'eternal life,' as 'They were not conceived with claim of permanence; they are a kind of provisional – short-term – architecture.'⁷² The project thus hypothesizes the gradual elimination of buildings in the area that are more than 25 years old (preserving only those of notable architectural or historical quality) a sort of death sentence or planned obsolescence that would gradually, over 25 years, render the area completely empty to which it would later bestow the much cherished New York Hippodamean grid as a plan for a new 'heroic' development of Paris.



OMU, Cities Within the City, 1977; OMA, Mission Grand Axe, 1991

As much as the projects of Ungers and Koolhaas have been elaborated more as critical reading tools on city development, they have often been used as probable application examples for conditions of severe urban crisis such as that experienced by the capital of all shrinking cities, Detroit. The idea of an 'archipelago city' has often been proposed to reorganize an area that has literally dissolved in nearly seventy years of crisis, and the option of controlled demolitions have often been used by various city administrators as a panacea, yet

even demolition has a cost that a city in default can hardly easily pay, after all 'attempts to shape the process of shrinkage have been inadequate and have often failed because the conventional means and tools of city planning and urban development, if they are at all available, are not able to tackle the problem.'⁷³

This is not to say that demolitions cannot be a design tool; on the contrary, subtraction is often offered as the only desirable tool to alleviate urban problems that the city's own development has created; however, the issue always remains tied to the economic factor, and therefore more than environmental or urban sustainability, it is the economic one that eventually drives the executability of demolition. Or that of tragedy. With the intention of bringing the theme of subtraction back into the context of planning in areas plagued by urban developments that are often inconsistent and problematic, five architectural firms (Baukuh, Gosplan, OBR, Sp10, Una2) decided to propose in 2011 a GE-1% critical-design manifesto⁷⁴ for the city of Genoa. It was more a program of intent than a real project or feasibility study, which considered the problem of the demographic crisis afflicting the Ligurian city: since the 1960s, a time of demographic and building boom, Genoa has now lost almost a third of its population and a consequent 10 percent of empty houses, in an area that - by its very nature, squeezed between the sea and the mountains - is hyperdensified and paradoxically lacking in parks. In order to make the hypothesis acceptable to the Genoese population even before constituting a project plan, the team proposed that citizens send to the digital platform that had been created specifically, photos of buildings considered to be torn down. The proposal was intended to anchor itself in a kind of citizens' initiative in order to make itself subsequently operational, thus trying to solicit the claim to the city and free space, which in such an asphyxiated condition as that of an area that had also grown by additions of building speculation, was quite plausible.

The territory on which the Ligurian city is located has undergone a series of urban and infrastructural changes over the years that have led to extremely critical situations, especially in those areas occupied by urbanization works and buildings that have been constructed over river beds. Indeed, there has been no shortage of problems due to the lack of attention paid to hydrogeological issues near floods and that a selective demolition operation could sanate. Although not directly related to the hydrogeological theme, the collapse of the Morandi bridge has nevertheless highlighted the controversies of a sudden past development and the subsequent inability to control and evaluate its products: built in the sixties, with innovative methods at the time, the bridge connected the city with the motorway network grafting on the territory in an invasive way between and above the existing houses, becoming the infrastructural landmark that monumentally symbolized the 'heroic' advent of the sudden modernization in Italy during the economic boom. The tragic collapse of a part of the bridge in 2018, due both to structural solutions and to problems of erosion of the concrete and the lack of adequate conservation interventions, led overwhelmingly to the theme of

demolition in the Genoese territory with the spectacular controlled destruction of the entire structure and part of the underlying buildings in 2019.



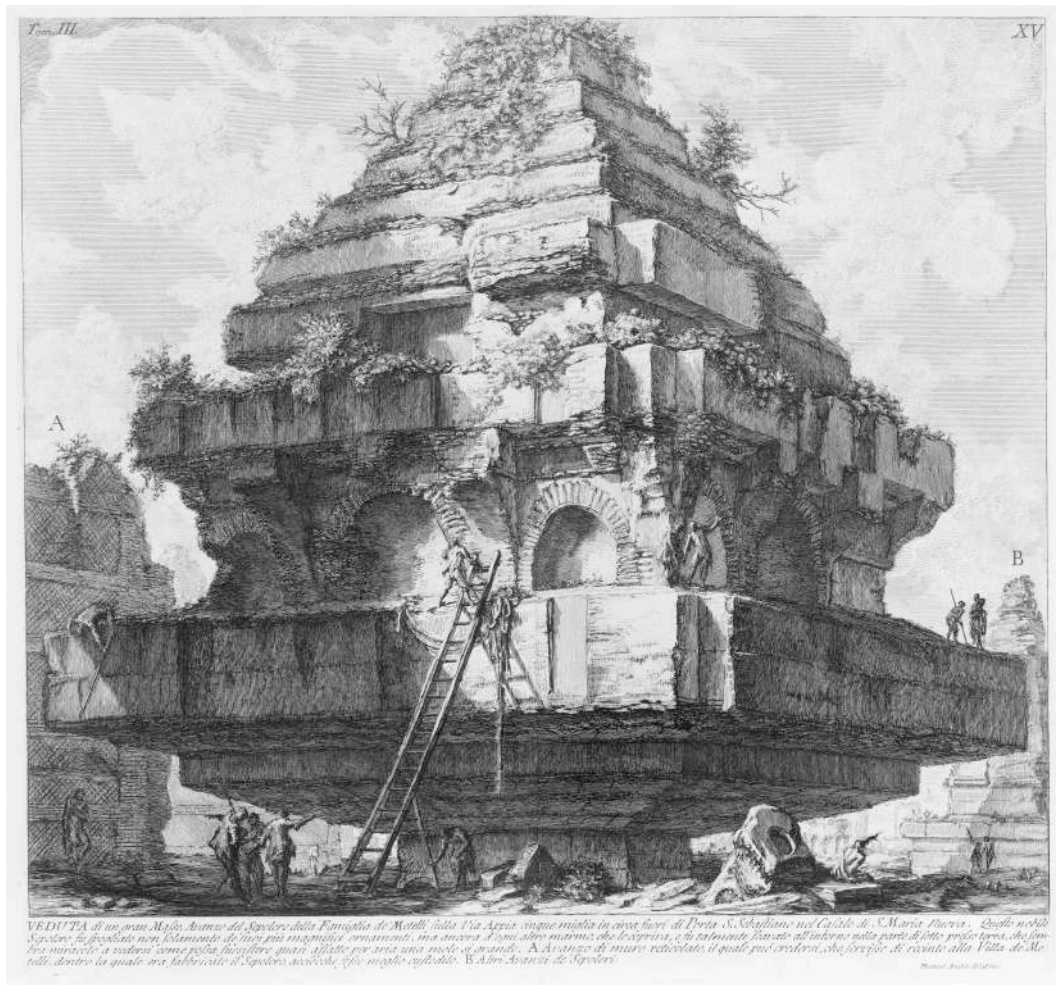
The demolition of Morandi bridge, Genoa, 2019.

tabula silva

The Soviet city of Pripyat, built in 1970 to house the workers and builders of the Černobyl nuclear power plant and their respective families, is one of the most notorious ghost towns since the infamous nuclear disaster forced the total displacement of even a several-kilometer area of relevance. Set on a typical modernist city model, it was home to 50,000 inhabitants before the disaster, yet today it cannot be said to be uninhabited: the re-naturalization processes that over nearly four decades have affected the entire ruined urban area is also the site of incursions by a variety of animals-as well as sporadic visits by enthusiasts of 'extreme' forms of tourism. The slow and inexorable decline of the city was thus accompanied by a proliferation of plant and animal species that ultimately resulted in the typical parable about the ruin:

nothing else than the merely natural forces begin to become master over the work of a

man: the balance between nature and spirit, which the building manifested, shifts in favor of nature. This shift becomes a cosmic tragedy which, so we feel, makes every ruin an object infused with our nostalgia; for now the decay appears as nature's revenge for the spirit's having violated it by making a form of its own image.⁷⁵



G. B. Piranesi, *Veduta di un gran Masso, Avanzo del Sepolcro della Famiglia de' Metelli sulla Via Appia*, 1750-56.

However, can human ingenuity take back its creative/creator space by channeling the coexistence of nature and ruin? Seemingly conflicting, what we call 'renaturalization processes' imply that the presence of humans, or at least their constructive manifestations, have been subjugated by forces that the construction itself has sought to dominate or otherwise destroy or conceal artificial intervention. The varied manifestations of 'wildness' result in a kind of anarchic mutation of the conditions established by anthropogenic control, not least that of architecture. Forms of plant parasitism undermine the interstitial spaces of worn asphalt, in the cracks of walls, as an infestation of mosses, fungi or ivy, while bacterial forms, wood-eating termites, spiders, cockroaches and mice sneaking

into domestic spaces or the various colonies of birds nesting near or on the roofs, remind us that as inhabitants of our homes we often experience unknowing forms of coexistence. However, if unwelcome presences, both plant and especially animal, pose a real threat to our comfort and to the very integrity of construction, the proliferation of wild forms of naturalness in the city seem to be a consoling palliative today, in a condition increasingly dominated by global warming and environmental crisis. Wilderness also presents itself as an opportunity for landscape and city design in absolutely low-cost terms. However, it seems an apparent antinomy: if the forms of wild proliferation imply the absence of man, how can the latter transform them into design tools? Despite the deleterious effects of the so-called anthropocene, wildness is always able to establish a 'natural order of things,' it easily lends itself to 'repairing' those conditions of degradation that the various forms of divestment, obsolescence, and crisis have produced on the territory and that often no plausible form of reconversion - made up as much of new developments as of resolute destructive projects - is able to resolve precisely because it is not supported by an economic engine to finance its implementation. Thus, if there is an actual plane of subtraction this is the passive, slow but inexorable one that nature imposes on all things, not least construction, therefore, all that remains is to go along with its course and perhaps design it.

Design responses to these changes start from the awareness that is impossible to handle everything. This requires a paradigm shift resulting in the definition of new tools [...]. The culture capable of relating to nature, which used to be skilled in inhabiting it, caring for it, using it and restraining it, is largely lost; it must be therefore reconstructed, updated and redefined.⁷⁶

Corroborated in recent years by the work of the 'planetary gardener' Gilles Clément,⁷⁷ projects integrating the ruins or *terrain vagues* of crisis seem like the contemporary updating of eighteenth-century whimsy, yet the decadent scraps of antiquity established a sense of the sublime, the allegory of the *memento mori*, today very prosaically the use of so-called industrial archaeology or the remnants of failed development, transformed into urban parks, are quite simply the most practical way the discipline has to recycle the scraps of the destructive character of development.

Examples such as the *Landschaftspark*, designed in 1991 by Latz + Partner, has been one of the most recognized areas of redevelopment of a disused former industrial coal and steel production hub in which both the objects of the industrial past and the tracks of its settlement are part of a park also built on the memory of the site's significance in the area's development history. But in addition to the recycling or reuse of brownfields transformed into parks, other forms of intervention manipulate the remnants of vanished activities or residences. Part of the territory of post-unification Germany has become a laboratory for the transformation of areas plagued by depopulation and obsolete industrial activities. In addition to large rusting cisterns, decaying pylons, skeletons of warehouses, and everything else that usually makes up so-called

industrial archaeology, the service infrastructure of more crowded pasts now offers additional materials for the project of subtraction.

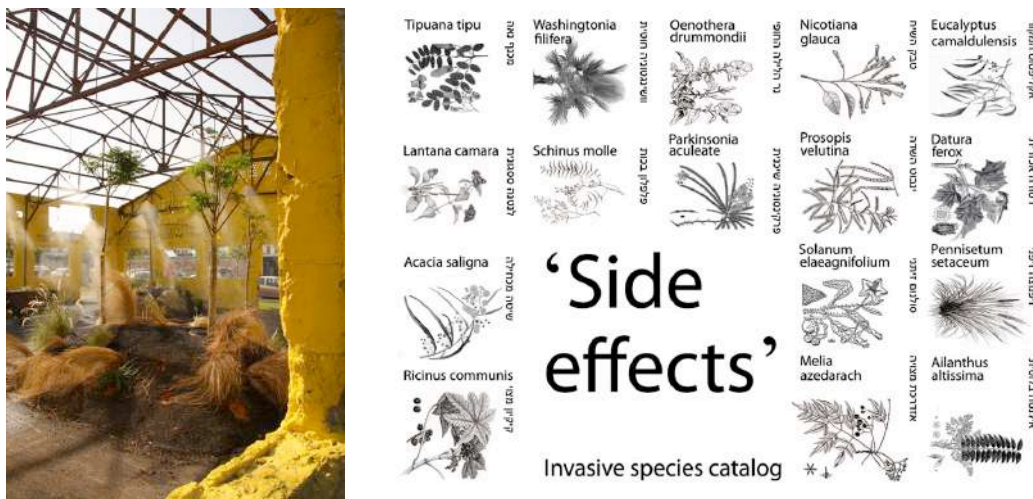


GLT, Bonames Airfield Park, 2002-04.

In Bonames, a Frankfurt suburb, an abandoned U.S. Army helicopter airfield has been opened to the public as a recreational and outdoor activity space. The project by GLT (Michael Triebswetter Landschaftsarchitekt) transforms the area with a series of subtractions, ranging from the removal of nearly 50 percent of the former airfield's surface area, made of concrete slabs and asphalt, and the recombination of the resulting rubble. The residues were fractionated and recomposed into different grain sizes, creating various areas for the formation of disparate plant and animal habitats. The portions of the hard surface, recombined as rubble, thus allow the proliferation of spontaneous plant organisms, mimicking, and intensifying, the process of destruction that plant elements are capable of bringing to construction. Creeping into the crevices, growing in cracks, deforming and compromising the stability of buildings, the plant kingdom is the silent and inexorable actor of ruin, and the project seems to go along with this disturbing and engulfing character.

One of the first indications of a process of degradation, plants, or in their derogatory meaning, weeds, are the abusive and disrespectful identities of the anthropic domain; their eventual integration within a design discourse, devoted by convention to the control of space, appear at least paradoxical and therefore harboring valuable potential. The proliferation of spontaneous greenery could be configured as one of the multiple dimensions of the galaxy of the indeterminate, the place where the project as an open work comes alive with unexpected relationships and configurations. In feeding off each other, ruin and wilderness appear as the perfect materials for the declination of the urban garden in the age

of crisis. Situated in a middle ground between industrial and residential areas, an abandoned warehouse in Bat Yam (Israel) used as a landfill is an ideal opportunity for the creation of a proliferative space for pest organisms. Amir Lotan's project reclaims the building through appropriate subtractive actions: from the removal of fixtures and the asbestos roof, which leaves the steel frames exposed, to the demolition of the interior partitions, the pieces and remnants of which are recombined to reshape the site. While the perimeter walls on the outside are left to their bare brutalist quality, on the inside the surfaces have been painted a bright yellow, as if to emphasize the 'threat' of the invasive species colonizing the interior space. The floor is presented as an artificial landscape where a selection of ruderal plants are watered by special vaporizers. The result is an undefined space that oscillates between natural and artificial, an ideal meeting place for humans and nonhumans alike.



Amir Lotan, Side Effects, 2010: interior space detail and catalog of invasive species.

In other contexts, the space that defines the void, rather than being part of an aprioristically defined project in the urban fabric, is actually the space left over from a shrinking condition in which nearly 3,000 buildings have been razed due to the abandonment and dilapidated condition of many buildings. In the Dessau Landscape Corridor project by Station C23, the remnants of pre-existences and the result of subtractions become elements of the urban landscape design: foundations of demolished houses, concrete pylons, remnants of curbs, become the furniture of an urban park made mostly of wild vegetation. Here we get a very good glimpse of Smithson's lesson, yet dominating interventions such as these are precisely the only possible sphere of operation established by the conjuncture: 'It is an interesting moment to consider a stabilizing spatio-financial protocol that might in turn be applied to situations where poverty rather than markets are the reasons for deletions.'⁷⁸



StationC23, Dessau Landscape Corridor, 2010.

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- ¹ Gyure, D. A. (2019) 'Reputations: Minoru Yamasaki 1912-1986,' in *The Architectural*
- ² Freud, S. (1920) *Das Unbehagen in der Kultur*, Eng. ed. *Civilization and Its Discontents*, New York: W. W. Norton & Company, p. 71.
- ³ Easterling, K. (2003) 'Subtraction,' *Perspecta*, 34, p. 81.
- ⁴ Benjamin, W. (1931) 'Der destructive Charakter,' in *Frankfurter Zeitung*, Eng. ed. *The Destructive Character*, in id. (1978) *Reflections: Essays, Aphorisms, Autobiographical Writings*, Harcourt Brace Jovanovich, pp. 301-303.
- ⁵ 'Our epoch, the epoch of the bourgeoisie, possesses, however, this distinct feature: it has simplified class antagonisms. Society as a whole is more and more splitting up into two great hostile camps, into two great classes directly facing each other – Bourgeoisie and Proletariat.' Marx, K. and Engels, F. (1848) *Manifest der Kommunistischen Partei*, London, Eng. ed. *Manifesto of the Communist Party*, in id. (1975) *Collected Works*, London: Lawrence & Wishart, Vol. VI, p. 482.
- ⁶ Benjamin, W. (1938) *Paris, Hauptstadt des XIX Jahrhunderts*, Frankfurt am Main: Suhrkamp, Eng. ed. (1969) *Paris: Capital of the Nineteenth Century*, *Perspecta*, 12, p. 172.
- ⁷ 'The conditions of bourgeois society are too narrow to comprise the wealth created by them. And how does the bourgeoisie get over these crises? On the one hand by enforced destruction of a mass of productive forces; on the other, by the conquest of new markets, and by the more thorough exploitation of the old ones. That is to say, by paving the way for more extensive and more destructive crises, and by diminishing the means whereby crises are prevented.' Marx, Engels, *cit.*, p. 486.
- ⁸ Schumpeter, J. A. (1942) *Kapitalismus, Sozialismus und Demokratie*, Bern: A. Francke, Eng. ed. *Capitalism, Socialism & Democracy*, (2003 ed.) New York: Routledge, pp. 82-83.
- ⁹ 'Industry, overwhelming us like a flood which rolls on towards its destined end, has furnished us with new tools adapted to this new epoch, animated by the new spirit. Economic law unavoidably governs our acts and our thoughts.' Le Corbusier (1923) *Vers une architecture*, Paris: Les editions G. Crés et C., Eng. ed. *Towards a New Architecture*, New York: Dover Publications, p. 227.
- ¹⁰ Choay, F. (1969) *The Modern City: Planning in the 19th Century*, New York: George Braziller, p. 19.

¹¹ Ibid.

¹² Ivi, p. 17. See also Benjamin, *Paris...*, cit.

¹³ “The creation of [...] various companies designed for real estate speculation generated closer collaboration between bankers, architects, and entrepreneurs, who henceforth acted as collaborators, employees, stockholders, and even property managers. Architects were essential to the speculative affairs of real estate companies, which they helped to develop by providing their technical and scientific skills in matters of construction, subdivision, and urban planning. These general contractors surrounded themselves with a network of entrepreneurs who, in an effort to reduce costs and increase profits, were asked to repeat the same construction models by using the same architectural language and materials. [...] Cost optimization sometimes led to the identical reproduction of the same houses, as in the rues de Bernoulli and Andrieux in the Europe neighborhood of Paris.’ Jamet, E., ‘Architecture and Real Estate Speculation During the Second Half of the Nineteenth Century,’ <https://ehne.fr/en/encyclopedia/themes/arts-in-europe/space-city-and-territory/architecture-and-real-estate-speculation-during-second-half-nineteenth-century> (2.4.2022).

¹⁴ Merwood-Salisbury, J. (2014) *The First Chicago School and the Ideology of the Skyscraper*, in Deamer, P. (ed.) *Architecture and Capitalism*, New York; Oxon: Routledge, p. 30.

¹⁵ Corbu defined New York as “utterly devoid of harmony” and “a storm, a tornado, a cataclysm,” according to Mardges Bacon, a professor at Northeastern University. When he arrived in Manhattan for the first time, in 1935, he held a press conference at which he described even the Empire State Building as too small and claimed the city’s leaders were too timid to hire him. He later described the height of Manhattan’s towers as “nothing more than the manifestation of an inferiority complex.” Bernstein, F. A., *Le Corbusier and New York City: A Love-Hate Relationship*, <https://www.architecturalrecord.com/articles/2904-le-corbusier-and-new-york-city-a-love-hate-relationship> (2.4.2022).

¹⁶ Koolhaas, R., (1995) *Singapore Songlines: Portrait of a Potemkin Metropolis... or Thirty Years of Tabula Rasa*, in OMA, id. and Mau (eds) *S,M,L,XL*, New York; Rotterdam: The Monacelli Press / O10 Publishers, pp. 1011, 1031.

¹⁷ Weber, M. (1904, 1905) ‘Die protestantische Ethik und der Geist des Kapitalismus’, *Archiv für Sozialwissenschaften und Sozialpolitik*.

¹⁸ “The rationalization of the world, the elimination of magic as a means to salvation, the Catholics had not carried nearly so far as the Puritans (and before them the Jews) had done. [...] The God of Calvinism demanded of his believers not single good works, but a life of good works combined into a unified system. There was no place for the very human Catholic cycle of sin, repentance, atonement, release, followed by renewed sin. Nor was there any balance of merit for a life as a whole which could be adjusted by temporal punishments or the Churches’ means of grace.’ Id, Eng. ed. (2005) *The protestant Ethic and the Spirit of Capitalism*, London: Routledge, p. 71.

¹⁹ Aureli, P. V. (2013) *Less is Enough: On Architecture and Asceticism*, Moscow: Strelka Press, p. 33.

²⁰ ‘Capitalism itself developed parasitically on Christianity in the West - not in Calvinism alone, but also, as must be shown, in the remaining orthodox Christian movements - in such a way that, in the end, its history is essentially the history of its parasites, of capitalism.’ Benjamin, W. (1921) ‘Kapitalismus als Religion,’ in (1955) *Gesammelte Schriften*, Fragment 74, volume VI, Berlin: Suhrkamp, pp. 100-103, Eng. ed. (2005) *Capitalism as Religion*, in Mendieta, E. (ed.) *The Frankfurt School on Religion: Key Writings by the Major Thinkers*, London: Routledge, p. 260.

²¹ Lodoli's ideas were handed down only through the writings of his students or other treatise writers, in which there are recurrent appeals to the definition of an architecture

that would match its form to those of needs (in open controversy with the baroque trappings and deformations). 'Niuna cosa, egli [Lodoli] insiste, metter si dee in rappresentazione, che non sia veramente in funzione; e con proprio vocabolo si ha da chiamare abuso tutto quello, che tanto o quanto si allontana da un tale principio che è il fondamento vero, la pietra angolare, su cui ha da posar l'arte architettonica.' Algarotti, F. (1756) *Saggio sopra l'architettura*, Pisa, (2005) Milan: Il Polifilo, p. 491. See also: Memmo, A. (1786) *Elementi di architettura Lodoliana, ossia l'arte di fabbricare con solidità scientifica e con eleganza non capricciosa*, Roma.

²² 'Economy [...] should be the ruling object. But in economy every thing depends upon the *hands* and upon the *terms*. In what hands then? – Upon what terms? There are two grand points to be adjusted: and that before any thing is said about regulations. – Why? – Because as far as economy is concerned, upon these points depends, as we shall see, the demand for regulations. Adopt the contract-plan, regulations in this view are a nuisance: be there ever so few of them, there will be too many. Reject it, be there ever so many of them, they will be too few.' Bentham, J. (1791) *Panopticon*, London: T. Payne, p. 19.

²³ For Danto, the 'end of art' is to be placed already in the 1960s, from the eclipse of abstract expressionism and the birth of Pop Art, where the traditional notions of production and evaluation of the figurative arts have been progressively dissolved into the 'everything goes' dimension. Danto, A. C. (2015) *After the End of Art: Contemporary Art and the Pale of History*, New York: Princeton University Press.

²⁴ 'As Architecture is the most political of all the arts, the Architecture Biennale must recognise it.' The definition is by Paolo Baratta, president of the Venice Biennale, given at the presentation of the edition edited by Alejandro Aravena, *Reporting from the Front* (2016), <https://www.labiennale.org/en/architecture/2016/introduction-paolo-baratta> (3.2.2022).

²⁵ Cattapan, F. (2014) 'The protestant Ethic and the Spirit of Minimalism,' in San Rocco, 9, Spring, 'Monks and Monkeys,' p. 118.

²⁶ Baudrillard, J. (1972) *Pour une critique de l'économie politique du signe*, Paris: Gallimard.

²⁷ 'Le Corbusier's dream city has had an immense impact on our cities. It was hailed deliriously by architects, and has gradually been embodied in scores of projects, ranging from low-income public housing to office building project. [...] No matter how vulgarized or clumsy the design, how dreary and useless the open space, how dull the close up view.' Jacobs, J. (1962) *The Death and Life of Great American Cities*, Vintage Books, p. 23.

²⁸ Watkin, D. (1977) *Morality and Architecture: The Development of a Theme in Architectural History and Theory from the Gothic Revival to the Modern Movement*, Oxford: Clarendon Press.

²⁹ Ferrari, F. (2012) *La seduzione populista. Dalla città per tutti alla città normalizzata*, Macerata: Quodlibet, p. 9.

³⁰ Jencks, C. (1977) *The Language of Postmodern Architecture*, London: Academy Editions, ed. 1997, p. 23.

³¹ Cairns, S. and Jacobs, J. M. (2017) *Buildings Must Die*, Cambridge MA; London: The MIT Press, pp. 208-209.

³² <http://www.pruitt-igoe.com/> (2.1.2022).

³³ See: Gyure, *cit.*, pp. 44-47.

³⁴ See, for example: Wolfe, T. (1981) *From Bauhaus to Our House*, New York: Farrar, Straus & Giroux.

³⁵ Ferrari, *cit.*, pp. 107-108.

³⁶ HRH The Prince of Wales (2014) *A Vision of Britain: A Personal View of Architecture*, London: Doubleday, and id., 'Facing up to the future: Prince Charles on 21st century architecture,' <https://www.architectural-review.com/essays/facing-up-to-the-future-prince-charles-on-21st-century-architecture> (20.1.2022).

³⁷ The Prince of Wales intervened decisively in the definition of some projects. His debut came in 1984, when on the occasion of the RIBA's 150th anniversary he declared his clear opposition to the winning proposal for the expansion of the National Gallery, described as 'a monstrous carbuncle.' He then distinguished himself in the redevelopment of Paternoster Square (1988), near St. Paul's Cathedral, where Arup's winning design was bitterly contested. Then in Richard Rogers' Chelsea Barracks project (2009), against which the prince directly intervened with the Qatari royal family, the project's financiers, forcing a significant downsizing.

³⁸ Ferrari, cit., p. 127.

³⁹ The project, which according some estimates seems to have reached 500 million euros, was supposed to give a classical and historicist look to the Macedonian capital, with the construction of 20 new buildings and 40 monuments. The result is a ridiculous and clumsy historicist fairground monumentalism, where some Brutalist buildings, designed by Kenzo Tange as a post-earthquake reconstruction in 1963, have been covered with columns and false decorations. <http://skopje2014.prizma.birn.eu.com/en> (22.3.2022).

⁴⁰ 'Keep It Classical, Says Trump Order On Federal Architecture' <https://www.npr.org/2020/12/21/948926995/keep-it-classical-says-trump-order-on-federal-architecture?t=1656113233771> (2.4.2022).

⁴¹ Blake, E. (2019) 'Bringing Down the House,' in *The Architectural Review*, cit., p. 50. On the pornographic logic connected to the sublime see: Baudrillard, J. (2002) *L'esprit du terrorisme*, Paris: Éditions Galilée.

⁴² Pearman, H. (2010) 'What Went Wrong at Runcorn?' https://www.architectmagazine.com/design/urbanism-planning/what-went-wrong-at-runcorn_o (2.4.2022).

⁴³ 'Bad taste or bad ideology? The intolerance of our generation has been breathtaking; if the same criteria that eliminated Berlin's Palast der Republik had been applied to the past, for instance the Romans, we would have no history left. There is now a worldwide consensus, in all cultures and all political systems, that postwar architecture was wrong, that is deserves to die and disappear because it is "ugly," and because it is declared responsible for many of our current ills. Our intolerance for the architecture of the "Black Hole" – ostensibly caused by its failure to create livable cities – is in fact fueled by a deep envy towards the former belief in social experimentation.' OMA / Koolhaas, R. (2010) 'Cronocaos,' <https://cdn.sanity.io/files/5azy6oei/production/27a57c22474166b447b389f2c2660ba99182f711.pdf> (2.4.2022).

⁴⁴ Turner, C. (2018) 'A Small Segment of a Masterpiece,' <https://www.vam.ac.uk/blog/museum-life/a-small-segment-of-a-masterpiece-2> (2.4.2022).

⁴⁵ Blake, cit., p. 51.

⁴⁶ Koolhaas, R. (2014) *Elements of Architecture*, in id. (ed.) *Fundamentals*, 14th International Architecture Exhibition, La Biennale di Venezia, Venice: Marsilio: p. 193.

⁴⁷ 'He is the archistar and now he is the curator star. He's killed all the archistars, and now he is going [to be the] single curator star.' 'Rem Koolhaas is stating "the end" of his career, says Peter Eisenman,' <https://www.dezeen.com/2014/06/09/rem-koolhaas-at-the-end-of-career-says-peter-eisenman/> (2.4.2022).

⁴⁸ Ibid.

⁴⁹ Trüby, S. (2018) *Elements of Architecture: An Introduction*, in Koolhaas, R. (ed.)

Elements of Architecture, Cologne: Taschen, p. LVI.

⁵⁰ ‘Tali consuetudini, che non si interrompevano nemmeno con il trasformarsi degli edifici in rovine, erano talmente diffuse nell’antichità da diventare parte non secondaria di quel processo di repliche e intrecci che ha generato la più ricca cultura urbana mai prodotta dal genere umano.’ Ferlenga, A. (2011) *Ricicli e correzioni*, in Ciorra, P. and Marini, S. (eds) *Re-Cycle. Strategie per l’architettura, la città e il pianeta*, Milan: Electa, p. 90.

⁵¹ After all, this was consistent with what was expressed in postmodern theory : ‘The narrative function is losing its functors [...] It is being dispersed in clouds of narrative language elements [...] we do not necessarily establish stable language combinations, and the properties of the ones we do establish are not necessarily communicable.’ Lyotard, J. F. (1979) *La condition postmoderne. Rapport sur le savoir*, Paris: Les éditions de minuit, Eng. ed. (1984) *The Postmodern Condition: A Report on Knowledge*, Manchester: Manchester University Press, p. XXIV.

⁵² Estimates from the EPA (United States Environmental Protection Agency) report that in 2018 alone 600 million tons were produced by construction and demolition activities, while about 76% was recovered or recycled, <https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/construction-and-demolition-debris-material> (2.4.2022).

⁵³ EU waste management law (2008/98/EC), which stipulated that C&D material recovery was to reach 70 percent by 2020, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32008L0098> (2.4.2022).

⁵⁴ <https://www.backacia.com/> (2.4.2022).

⁵⁵ Zeumer, M. and Hartwig, J. (2010) ‘Potenziale und Schwierigkeiten beim Recycling im Bauwesen,’ in *Detail*, 12, January, ‘Architektur + Recycling,’ p. 1348.

⁵⁶ Petzet, M. and Heilmeyer, F. (2012) *The Language of Conversion – The Conversion of Language*, in id. (eds.) *Reduce Reuse Recycle: Architecture as Resource*, German Pavilion at the 13th International Architecture Exhibition, La Biennale di Venezia, Hatje Cantz, Berlin: p. 203.

⁵⁷ Rotor and Ciuffi, V. (2011) ‘The Complexity of Waste,’ in *Abitare*, 517, November, pp. 124-133.

⁵⁸ <https://rotordc.com/> (2.4.2022).

⁵⁹ Peluso, S. (2021) ‘Interview With Rotor, the Studio That Has Been Building With Recycled Materials For Years,’ <https://www.domusweb.it/en/architecture/2021/06/23/interview-with-rotor-the-belgian-studio-that-builds-with-recycled-materials.html> (2.4.2022).

⁶⁰ The *Opalis* project is a collection and archiving of the various companies that deal with recycled materials, <https://rotordb.org/en/projects/opalis> (2.4.2022). See also: Ghyoot, M., Devlieger, L., Billiet, L., Warnier, A. and Rotor (2018) *Déconstruction et réemploi: Comment faire circuler les éléments de construction*, Lausanne: PPUR Presses Polytechniques.

⁶¹ <https://rotordb.org/en/projects/grindbakken> (2.4.2022).

⁶² Geerts, G., in Peluso, *cit.*

⁶³ Boniver, T. in *ivi*.

⁶⁴ <https://www.dezeen.com/2016/08/18/video-interview-wang-shu-amateur-architecture-studio-ningbo-history-museum-movie/> (2.4.2022).

⁶⁵ Dezzi Bardeschi, M. (2016) *Stratificazione, fabbrica e ragione. L’(eterna avventura del progetto*, in Gregory, P. (ed.) *Nuovo realismo/postmodernismo. Dibattito aperto fra architettura e filosofia*, Rome: Officina Edizioni, p. 175.

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- ⁶⁶ Abramson, D. M. (2016) *Obsolescence: An Architectural History*, Chicago; London: University of Chicago Press, p. 7.
- ⁶⁷ See: Lambert, L. (2015) *La politique du bulldozer. La ruine palestinienne comme projet israélien*, Paris: Éditions B2, and *Counterforensic in Palestine* in Wieszman, E. (ed. 2018) *Foresnic Architecture: Violence at the Threshold of Detectability*, New York: Zone Books, pp. 131-214.
- ⁶⁸ Ungers, O. M., Koolhaas, R., Riemann, Kollhoff, H. and Ovaska, A. (1978) 'Cities Within the City: Proposals by the Sommer Akademie for Berlin,' in *Lotus International*, 19, p. 90.
- ⁶⁹ Cepl, J. (2006) *Oswald Mathis Ungers's Urban Arcipelago for Shrinking Berlin*, in Oswald, P. (ed.) *Shrinking Cities, Volume 2: Interventions*, Stuttgart: Hatje Cantz, p. 194.
- ⁷⁰ 'From 2002 to 2010, IBA Stadtumbau (Urban Renewal) in Saxony-Anhalt sought answers to the population decline in Eastern Germany. Saxony-Anhalt's small and medium-sized cities in particular wanted to set a new course in urban development in response to the demographic decline. IBA Stadtumbau was the first IBA to span an entire federal state.' IBA Stadt-um-bau, 'Less is Future,' <https://www.internationale-bauausstellungen.de/en/history/2002-2010-iba-stadtumbau-less-is-future/> (2.4.2022).
- ⁷¹ OMA, *Surrender*, in id., Koolhaas, Mau, *cit.*, p. 974.
- ⁷² *Ibid.*, p. 1099.
- ⁷³ Oswald, P. (2005) *Introduction*, in id. (ed.) *Shrinking Cities, Volume 1: International Research*, Stuttgart: Hatje Cantz, p. 15.
- ⁷⁴ Ciuffi, V. (2011) 'GE-1%,' <https://www.abitare.it/it/archivio/2011/02/05/ge-1/> (2.2.2021). See also: Baukuh (2016) *Demolire Genova*, in Marini, S. and Corballini, G. (eds.) *Recycled Theory: Dizionario illustrato / Illustrated Dictionary*, Macerata: Quodlibet, pp. 143-146.
- ⁷⁵ Simmel, G. (1911) *Die Ruine*, in id. *Philosophische Kultur. Gesammelte Essays*, Leipzig: Alfred Kröner, Eng. ed. (1958) 'The Ruin,' in 'Two Essays,' *The Hudson Review*, 11 (3), 379.
- ⁷⁶ Marini, S. (2020) 'Wildness,' in *Vesper*, 3, Fall / Winter, p. 16.
- ⁷⁷ Clément, G. (2004) *Manifeste du Tiers Paysage*, Paris: Sujet / Objet.
- ⁷⁸ Easterling, K. (2010) *Architecture to take Away: The Subtraction of Buildings as a New Construction Economy*, in Ruby, I. and A. (eds) *Re-Inventing Construction*, Berlin: Ruby Press, p. 267.

This research establishes somewhat of a continuity relation with an earlier work published recently: there I had investigated the issue of the economic crisis of 2008 and the connections with the disciplinary world.¹ If in the first parts of that book I had dealt with issues pertaining to the spread of the financialization of the built environment, the crisis of the modern, and evolutions/involutions of the stararchitectures in the context of globalization, the last part attempted to outline a kind of hypothetical ‘crisis project.’ The construction of a glossary that collected quotations from theoretical or design texts provided me with a mapping of the most disparate strategies adopted in contexts more or less controversial and rather akin to the issues raised by the research. Of all the strategies and theories collected, subtraction appeared to me the most stimulating as a seemingly heretical – but widely practiced - approach for a discipline traditionally contemplated for its additive contribution.

The first difficulties emerged in trying to demarcate a precise field of inquiry that would establish continuity with previous research work. In the following years it became quite clear how much the epochal event I had studied would define and transform many aspects of contemporaneity, not least, of course, the world of architecture. The crisis also, conceptually, represents a turning point that imposes paradigm shifts: subtraction, as the inverse of a development that appeared schizophrenic especially with regard to speculative activities, seemed to me to be a valid expression of it.

It became quite clear to me that some trends were emerging that proposed a clear-cut formal simplification and a return to frugality, perforce the economic contraction imposed reasoning around the reduction of complexity and ‘waste.’

¹ Croce, G. (2022) *Surfing Crisis. Teorie e progetti per tempi difficili*, Melfi: Libria.

In this sense, subtraction could be understood as a direct consequence of a necessity imposed by the crisis.

Although the process of simplification and reduction that developed within the vicissitude of the modern has been treated in my research, my ideal concept of subtraction tended not toward a 'zero degree' of construction but toward its 'negative.' This was because it allowed me to more coherently associate crisis, broadly speaking and outside and inside architecture, with what I felt most represented it. Every crisis after all operates subtractively on construction: the degradation of neglect, the partial or total destruction caused by war or natural disaster, etc. The idea that the effects of a crisis on the building became design devices seemed to me to be quite apt with the premise of the research.

Lacaton & Vassal's Palais de Tokyo – probably the most representative work at the beginning of the new millennium - embodied perhaps the project that best suited my idea of architectural subtraction. It became quite clear then that what I was looking for were projects that somehow used the same kind of approach that had ruin as its ultimate referent. The success of that project actually brought back into vogue a certain aesthetic of the raw, ruined, 'as found' object: not only art galleries, but also restaurants and bars began to equip themselves with poor-chic environments given also the ease and cheapness of the transformation. However, these were interventions that worked mainly on an internal, often domestic, dimension. There were certainly other examples of contemporary architecture in which the condition of ruin lay on the outside, but this risked reversing the assumption: projects recycling a ruin, such as Naumann Architektur/FNP Architekten's S(ch)austall (2004), show a clearly additive contribution. However, if there was a 'minimalist tradition,' understood as a recurrent need for simplification and formal rigor to a hypothetical 'zero degree,' there must also have been a form of design elaboration that tended toward the 'negative.' The incipit to the design for OMA's Shinjyuku Vertical Campus makes this clearer:

Most buildings are generated through 'Addition.' All the necessary parts are assembled, adjusted, accumulated in more or less pleasing compositions. Shinjyuku Vertical Campus is generated by 'Subtraction;' like Michelangelo's 'Slaves.'²

It was therefore a different field of investigation: not of the actual subtraction of parts of an existing building but that 'fictitious' one of a design process. I began to notice that some more recent projects of the various 'baby Rems' used the same principle, often declined according to the trend of 'pixel architecture,' in which the apparently random succession between solids and voids seemed to suggest the idea of the unfinished or the outcome of damage. Such types of projects featured rather common concepts, in which the result of subtraction was presented as a space carved out of a monolithic volume as the site for terraces,

² <https://www.oma.com/projects/idea-vertical-campus> (6.5.2022).

stepped openings, etc. Rather, the possible connection with *the crisis* lies on the communicative code that these objects convey as an overall image in the urban fabric, also in relation to their typology: a symbol of *hybris* in ancient legends, the tower in the contemporary era becomes the privileged architectural object in disaster movies, a role further corroborated by well-known and real catastrophes. None of the studies involved in this investigation would obviously declare such a cynical connection, however, the controversy, and subsequent media coverage of MVRDV's *The Cloud* design would instead suggest a concealed intentionality. In



Additive process in an existing ruin: Naumann Architektur/FNP Architekten, S(ch)austall, 2004; one of Michelangelo's Prisoners as a metaphor for OMA's Shinjuku Vertical Campus, 2004.

addition to the ability of such architectural objects to tickle, and essentially monetize, the contemporary passion for the sublime, the ruin - both that resulting from a slow process of deterioration and that resulting from natural and other disasters - as an outcome of entropic effects, offers varying degrees of morphological variations to architectural form that are potentially infinite.³ I think in essence this is the fundamental aspect that binds the different approaches of contemporary architectural subtraction analyzed here. In this regard, it is necessary to make some further clarification on the three identified subtractive strategies that shaped the structure of the research. As already specified in the introduction, the three chapters analyze various declinations of architectural subtraction as an expression of crisis/es; however, the respective

³ 'Yet although [the] imports from the "hard" sciences occur essentially on the metaphorical-narrative level [...] their role in activating creative thinking remains nevertheless unique. They give access to approaches both paradoxical [...] and grounded in a basis of shared truth [...]. Of these paradoxes, the notion of entropy is a particularly efficient agent of discourse.' Corbellini, G. (2016) *Entropia/Entropy*, in Marini, S. and id. (eds) *Recycled Theory: Dizionario illustrato/Illustrated Dictionary*, Macerata: Quodlibet, P. 215.

salient features that ordered the material of the chapters are not intended as a rigid cataloging of the case studies. Some projects in one chapter might well find their way into the others: for example, the breaches in the facade of Antivilla, recalling those caused by grenades, thus pandering to a certain imagery. At the same time, the rhetoric used by Brandlhuber+ to describe that perforating action appeals more to a kind of 'liberating act.' Although the project does not slavishly trace or imitate poor housing, the operations of transforming a former factory into a dwelling return, as an overall outcome, a luxury fake ruin.

The selected case studies proposed a range of possible declinations of the subtractive project at various scales of design, typology, and strategy. They therefore offer a concise repertoire of practices that in turn could compose a kind of glossary: removals, breaches, punctures, delaminations, cracks, cuts, etc., actions that present different ways of manipulating the existing built space. Being at the antipodes of construction, de-construction is capable of producing paradoxical and estranging effects: a piece of building cut away as if it were the slice of a cake (De Vylder Vinck Taillieu, Kouter II); a vanished attic and the remains of doors and fixed furnishings to testify its absence (De Vylder Vinck Taillieu, Twiggy); two large and dramatic breaches in the wall as privileged vantage points from which to enjoy a romantic landscape (Brandlhuber+, Antivilla). 'Real' subtractive practices take place through an expressive enhancement of nonconservative intervention; they reorganize geometries, hierarchies, and syntax by means of simple but nontrivial actions. They also redefine the design process through their degree of indeterminacy: in the undefined and free space for the interactions of its users (De Vylder Vinck Taillieu, Caritas); in the liberation of domestic space from all typological constraints (Schemata Architects, Sayama Flat). Not surprisingly, it is rare for such interventions to make use of photorealistic renderings; on the contrary, projects are often illustrated by means of isometrics, naive drawings, sketches, or even the action unmediated by representations and performed directly *in situ*, as if the building itself were a 1:1 scale maquette. In direct manipulative action, a kind of 'reverse craftsmanship' occurs as much as a rupture of the traditional, modern separation between design process and (de)constructive activity.

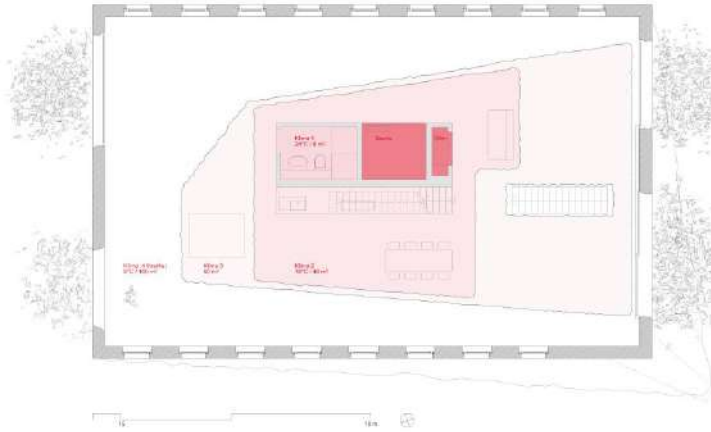
The projects analyzed in the second chapter also manage to offer some potential insights into the field of 'real' subtractions. Beyond what has been analyzed in this research in terms of meaning and reference to catastrophe, their formal and spatial configurations, in presenting 'negative' variations in monolithic volumes, could translate into an interesting field of application with regard to possible transformative-subtractive hypotheses of part of the modern building heritage. Some trajectories along these lines have already been proposed in German urban shrinkage contexts, in blocks constructed between the 1950s and 1970s using prefabricated building techniques (Schneider-Wessling/Herz, Bayer Head Office; Stefan Forster Architekten, Stadtvillen). Subtractive interventions capable of disrupting the traditional repetitiveness, monotony, and

rigidity of social housing blocks in many suburbs would make it possible to put forward an alternative to their total demolition as a solution to the problems of depopulation, obsolescence, and consequent degradation. Where possible, especially in large intensive complexes, subtractive operations could reduce building mass by redefining volume in more performance terms with regard to solar exposure, winds, etc. However, as was partly illustrated in Chapter III, assumptions that are not aligned with economic feasibility analyses are bound to remain in a purely illustrative realm. A useful, further field of inquiry in this regard could develop a kind of ‘profitability of subtraction.’



Recycling modern buildings by subtraction: Schneider-Wessling / Herz, Bayer Head Office, 1998; Stefan Forster Architekten, Stadtvillen, 2000-04.

One of the common aspects of many of the projects discussed in the first chapter is the raw nakedness of the building as an aesthetic element to be brought out - as in the case of Sayama Flat by Schemata Architects - or to be artificially made - as in the case of the cement mortar wall cladding of Antivilla by Brandlhuber+. This characterization necessarily forced designers to devise solutions that would allow a comfortable condition during the winter months. In De Vylder Vinck Taillieu's Rot Ellen Berg project, in order to preserve the material quality of the existing building, they insert a kind of 'house within a house' consisting of a structure with transparent, lightweight and flexible vertical elements. More or less on the same principle, the open space of Antivilla's inhabited floor is compartmentalized during the winter months by curtains that enclose a smaller heated space. Although adopted in particular contexts, such solutions propose interesting alternatives to the prevailing models of thermal retrofitting.



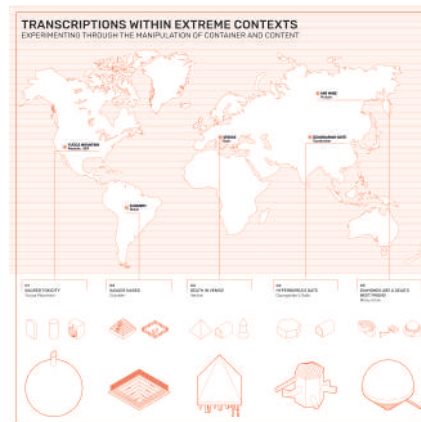
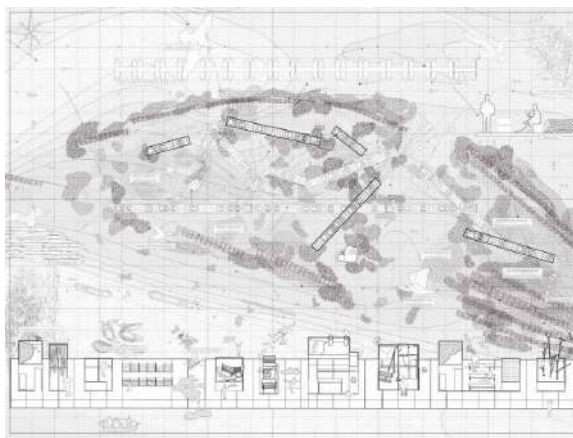
Internal compartments: De Vylder Vinck Taillieu, Rot Ellen Berg, 201; Brandlhuber+, Antivilla, 2014.

If subtraction presents useful dissonances and paradoxes that can unhinge some ingrained disciplinary certainties, its association with the wilderness theme seems to further corroborate its heretical scope. So-called renaturalization processes of abandoned areas, brownfields transformed into parks, and green coverings of polluted sites are healthy recovery interventions, however, often implemented with a land design that limits and circumscribes the green elements. Much more tempting, however, is the hypothesis that subtractive interventions encourage a proliferation of the wilderness and its many floral and faunal facets: by insinuating itself into the territory as an antigen to urban substance, the wilderness offers areas of potential friction and conflict. Some projects even emphasize and foster this threatening attitude of the wild realm in restoring a ‘natural order’ within the man-made space by mimicking its destructive gesture (GTL, Airfield Bonames). The wilderness theme was further investigated outside of this research through participation in the ‘Isolario’ project of the PRIN Sylva research unit of the IUAV University of Venice. The design reflection proposed in that context concerned the possible rethinking of a minor island in the lagoon as an area of coexistence between biological and artifact: by intensifying existing uses related to fish farming and tourism, the project envisions floating platforms to serve activities where indeterminate aspects lend themselves to accommodate the unpredictable side effects of coexisting with elements of flora and fauna that thrive in symbiotic/conflictual relationship with this floating settlement.⁴

Another field of inquiry conducted in parallel with the research was the elaboration of a theoretical-design work that extremes the issue of crises in apocalyptic terms. Elaborated together with Mariacristina D’Oria (PhD candidate), the project Time-capsule Transcripts is a reflection on the need for

⁴ Corbellini, G., Croce, G., D’Oria, M. and Rodani, V. (2022) *Fisherman’s foes. Cozze, alghe, turisti...*, in Marini, S. and Moschetti, V. (eds) *Isolario Venezia Sylva*, Milan: Mimesis, pp. 380-387.

the preservation and transmission, in a hypothetical distant future after a catastrophe of global proportions, of a condensed repertoire of ‘end times architecture.’ The design of a kind of architectural time capsule is actually a speculative operation that explores issues such as archival production, the disciplinary role in regard to catastrophes, the relationship between container and content, the genealogy of architectural structures that can be likened to the concept of time capsule itself, and the symbolic and communicative aspect. The project was presented at the CA2RE Conference at TU Delft Faculty of Architecture & the Built Environment on March 29, 2022, and will use the feedback gathered there as resources for further developments.⁵



Corbellini, Croce, D’Oria, Rodani, Fisherman’s foes, 2022; Croce, D’Oria, Time-capsule Transcripts, 2022.

Finally, there are probably more aspects missing than fully developed in this research, but this could be considered rather coherent in the context of an investigation on subtraction. Instead, some extra-disciplinary excursus might seem redundant, yet I believe that some properly architectural issues required a more ‘outside’ look to understand the meaning I have ascribed to them (particularly the historical-political context in which some manifestations of contemporary apocalyptic culture dealt with in the Chapter II). Elsewhere, the time and space of research prevented me from investigating other areas that I had initially set out to explore (e.g., some applied research on the economics of subtraction): any gaps and especially what I learned along the way can hopefully be inputs for better future projects.

⁵ Croce, G. and D’Oria, M. (2022) *Time-capsule Transcripts: An Experimental Taxonomy of Forms as a Vehicle for a Design Operation*, <https://delft.ca2re.eu/submissions/croce-time-capsule-transcripts> (20.5.2022).

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