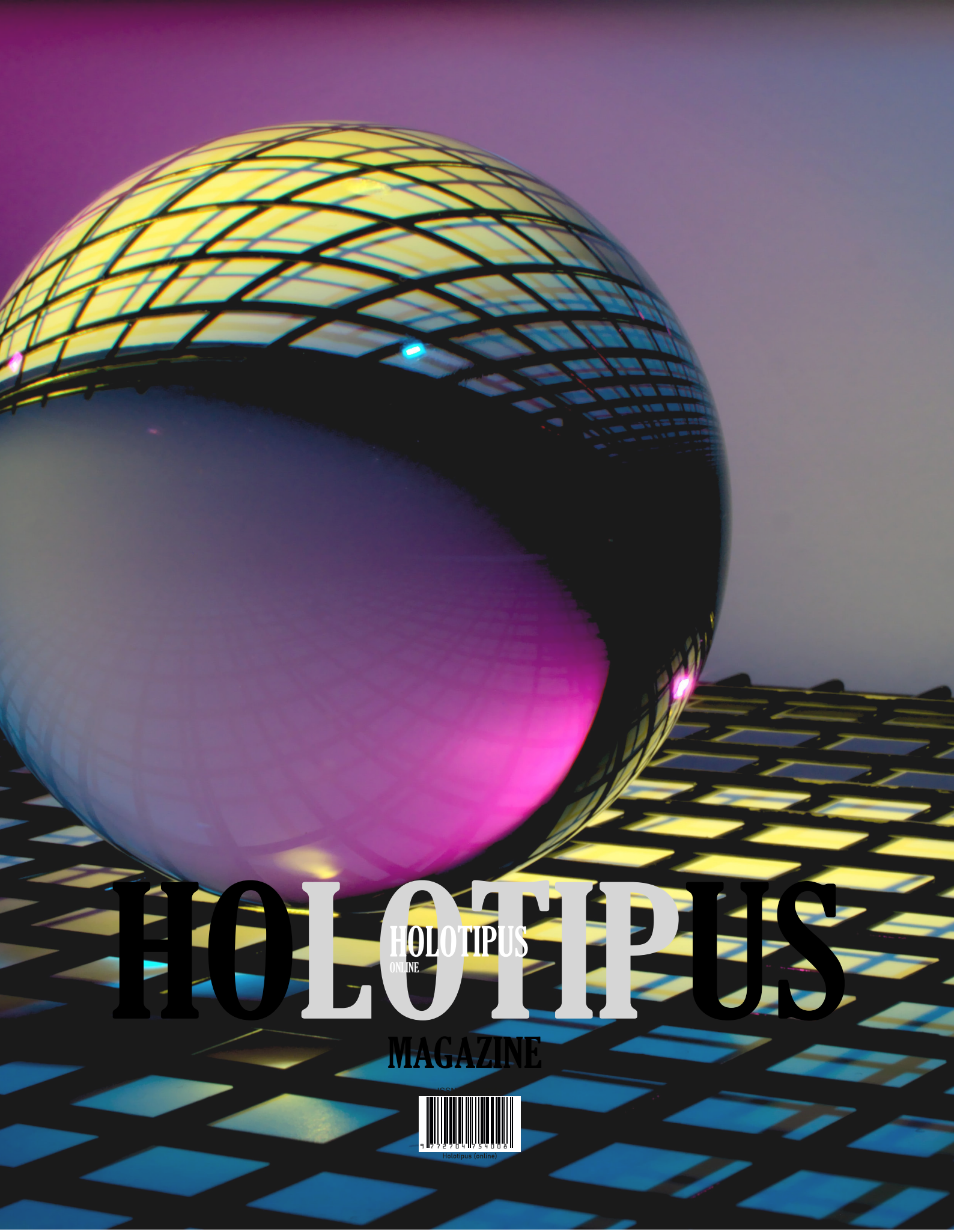

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No.	名前	name	カテゴリー Category	構造 Structure	使い方 Use
1	倉庫コート	warehouse court	○	○	●
2	エレクトリックパサージュ	electric passage	●	○	●
3	ハイウェイデパート	highway department store	●	○	●
4	シネブリッジ	cine-bridge	●	○	●
5	ジェットコースタービル	roller coaster building	●	●	●
6	ネオンビル	neon building	●	○	○
7	パチンコカテドラル	pachinko cathedral	○	●	○（発生的関連）*1
8	セックスビル	sex building	○	○	○（単一増殖）*2
9	カラオケホテル	karaoke hotel	○	○	○（単一増殖）
10	首都高パトロールビル	expressway patrol building	●	●	○
11	大使館ビル	embassies building	○	○	○（単一増殖）
12	パークonパーク	park on park	●	○	●
13	バス団地	bus housing	○	○	●
14	ゴルフタクシービル	golf taxi building	●	○	●
15	生コンアパート	nama-con apartment house	●	○	●
16	カータワー	car tower	●	○	○
17	馬アパート	horse apartment house	○	○	○（発生的関連）
18	物流コンプレックス	distribution complex	●	○	○
19	設備ビル	air-con building	○	○	○
20	広告マンション	billboard apartment house	●	○	●
21	神社ビル	shrine building	○	●	●
22	残土アパート	sand apartment house	○	○	●
23	配送スパイラル	delivery spiral	●	○	○
24	銭湯ツアービル	bath tour building	○	○	○（発生的関連）
25	タクシービル	taxi building	○	○	○
26	トラックタワー	truck tower	○	○	○
27	インターコート	interchange court	●	○	●
28	GSデュプレックス	double layer petrol station	○	○	●
29	スーパー・カー・スクール	super car school	○	○	●
30	下水コート	sewage courts	●	○	●
31	上水コート	supply water courts	●	○	●
32	墓道路	graveyard tunnel	●	○	●
33	アメ横空中寺	ameyoko flying temple	○	●	○（発生的関連）
34	商店崖	shopping wall/mall	●	○	●
35	レールミュージアム	rail museum	●	○	●
36	ツイン下水御苑	twin deluxe sewerage gardens	●	○	●
37	増殖スライダービル	proliferating water slides	○	○	○（単一増殖）
38	換気オベリスク	ventilator obelisk	●	○	○
39	駅のホーム	apartment station	●	○	●
40	ムカデ住宅	centipede housing	●	●	●
41	自動車ビレッジ	vehicular village	●	●	○
42	ダイビングタワー	diving tower	●	●	○
43	シャーシーマンション	chassis apartments	○	○	○（単一増殖）
44	TTT（レゴ・オフィス）	TTT (lego office)	○	○	○（単一増殖）
45	トンネル神社	tunnel shrine	●	●	●
46	マンション山寺	apartment mountain temple	○	●	●
47	吸血公園	vampire park	●	●	○（発生的関連）
48	クレーンだな	crane shelves	○	○	○（単一増殖）
49	ユーレイ・ル・ファクトリー	ghost rail factory	●	○	●
50	擁壁マンション	retaining wall apartments	●	○	●
51	ブリッジハウス	bridge home	●	○	●
52	宅地農場	residential farm	●	●	○
53	物流インターチェンジ	dispersal terminal	●	○	○
54	ロイヤルゴルフマンション	royal golf apartments	●	○	●
55	カーオフィス	car parking office	○	○	○
56	グリーンパーキング	green parking	●	●	○
57	オートデパート	auto department store	○	○	●
58	ファミレス3兄弟	family restaurant triplets	○	○	○（発生的関連）
59	青果タウン	vegetable town	●	○	○
60	松茸型レールビル	sprouting building	●	○	●
61	TRC（東京流通センター）	tokyo dispersal centre	○	○	○
62	冷凍団地ビル	coolroom estate	○	●	○
63	ペット建築1号	pet architecture 001	●	●	●
64	ダムマンション	dam housing	●	○	●
65	ジャンクションターミナル	airport junction	●	○	●
66	スポーツブリッジ	sports bridge	●	○	●
67	スポーツマン・ズー	sportsman zoo	○	●	○
68	ヘリ倉庫	heli-warehouse	○	○	●
69	洗車テラス	carwash terrace	○	○	○
70	射撃墓場	shooting graveyard	●	●	●

図2. オン／オフ表　fig.2: On/Off table　凡例　○=ON *1 generative relationship *2 monoproliferating　●=OFF

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Towards Non-Extractive Taxonomies in Architecture

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Abstract: Architecture, as a dissipative practice, strongly relies on extraction. This article investigates resistance to the extractive paradigm by studying the critical transformation of historical taxonomies in architecture. What are the forms and prerogatives of non-extractive taxonomies? This article first traces the evolution of architectural classificatory systems, to better understand the modalities of their contemporary renewal. An inventory of alternative taxonomies of built situations follows, emphasizing their critical departure from conventional practices. The article concludes by assessing the extent to which these alternatives contribute to framing non-extractive principles in architecture.

Keywords: classification in architecture, non-extractive taxonomies, externalities, abandonment, design.

Introduction

As the Anthropocene era is notably marked by climate change and scarcity of resources, cities become key driving forces of systemic, transformative actions on climate change (IPCC 2014, IPCC 2022). In this context, it is no surprise that Climate Action Plans urge us to initiate a transformational shift in how we act upon our built environment. In particular, the extractive paradigm, firmly embedded into architectural practices, is targeted. As a dissipative practice, architecture has a strong dependency on extraction «demanding a continual increase in the use of energy and of materials and dumping ever more wastes into the environment» (Bellamy Foster & Burkett 2021, 47). Extractivism in architecture speaks not only of the exploitation and accumulation of natural resources but also of mechanisms of expulsion and dispossession of living communities (Sassen 2016, 17). We hypothesize that this dispossession impacts our ability to know and our capacity to act by highjacking our ability to imagine alternative futures.

Figure 1.
Atelier Bow-Wow. *On/Off Table*. The seventy cases investigated in *Made in Tokyo* are given a specific hybrid nickname. Momoyo Kajima, Junzo Kuroda et Yoshiharu Tsukamoto, *Made in Tokyo*, (Tokyo: Kajima Institute Publishing, 2001), 16-17.

In a series of essays edited by Space Caviar (Space Caviar 2021) under the name *Non Extractive Architecture – On Designing without Depletion*, architects, geographers, economists, and philosophers explore preliminary definitions of a non-extractive architecture and ask whether an architectural model that does not depend on several orders of externalities is even possible. Non-extractive architecture is defined, in the introductory text by Joseph Grima, as «an approach to the design environment that takes complete responsibility for itself, and whose viability does not depend on the creation of externalities elsewhere -whether that elsewhere is removed in time or space (...) the end game of non-extractive architecture is to enlist the means available to the designer toward the production of an alternative "way of being" in the landscape that is not dependent on the accumulation of eco-systemic ruptures on a planetary scale» (Grima 2021, 15-16). Such a horizon critically considers the depletion of finite resources, questions the ideal of growth and techno-solutionism, rejects social and environmental exploitation and brings into crisis the starchitect's heroic personality.

This article is a contribution to this collective conversation aiming at realigning our profession with non-extractive values. It is interested in a specific act of resistance and repossession currently at stake in Architecture and countering the domination of the extractive paradigm. An act of re-worlding aiming at questioning and transforming historical taxonomies framing the discipline and the profession. In architecture, we inherited from the 18th and 19th centuries a whole classificatory apparatus whose structures continue to inform how we read and interpret the world we live in (From J. N.-L Durand to J.-D. Le Roy, from B. Fletcher to N. Pevsner). Properties-based and mainly attached to functional, formal, stylistic, or patrimonial criteria, these historical taxonomies struggle to address the complexity of our built environment, its ever-changing nature, and the evidence that time is embodied in the material world (Lynch 1976; Brand 1995). In particular, the contemporary city is punctuated by liminal structures such as informal constructions, unfinished infrastructures, hybrid buildings, and abandoned structures. We see in these urban phenomena, acting either beyond or in between categories, opportunities to rethink architectural taxonomies.

What are the forms and prerogatives of non-extractive taxonomies in architecture? This article proposes first to revisit the evolution of classificatory apparatuses in architecture to anchor the historical context of its development and better understand the modalities of its contemporary renewal. Secondly, an inventory of alternative taxonomies of built situations is made to highlight the critical distancing that these practices attempt to operate with conventional classificatory frameworks (formal, functional, stylistic). Finally, the article discusses to which extent those alternative taxonomies are participating in framing non-extractive design principles in architecture.

1. The Industrial Revolution and the birth of classification in architecture

Among the conventional modes of knowledge and intervention used in architecture, classifications have been present in the history of the discipline since the 19th century. At that time, the Industrial Revolution and its technical innovations shook the architectural landscape. First, in Europe and then in the rest of the world, a demand emerged for new forms and functions (factories, docks, stations, etc.). As classical forms were no longer sufficient to encapsulate all human activities, the industrial wave leads to an unprecedented diversification of construction forms and functions (Steadman, 1979). When Nikolaus Pevsner received the Gold Medal of the Royal Institute of British Architects in 1967, he evoked this rupture in these terms: «Until the 18th century, what did an architect build? Churches, palaces, country houses, houses, not much else. When you think of the 57 varieties of buildings that are now built by architects, you see what a profound change has taken place» (Pevsner 1967, 318). Nine years later, he organized this variety in *A History of Building Types* (Pevsner 1976).

In addition to this boom, linked to the Industrial Revolution, we can also underline the impact of the development of archaeology in the XIIX century. The organization of the latter, as a structured academic discipline, went hand in hand with collecting a large quantity of material brought back from expeditions. This original documentation contributed to the diversification of the architectural landscape by introducing new vernacular constructions, then unknown in Europe. Faced with this growing variety, classification, which "constitutes, as describable and orderable, a whole field of empirical" (Foucault 1966, 171), became relevant in architecture.

In his book *Les Mots et les Choses, une archéologie des sciences humaines*, Michel Foucault (1966) is interested in the different epistemic configurations that have crossed history. Two periods -in which different modes of being of things and distinct relationships to knowledge coexist- are described: the Renaissance and Modernity. The principles of resemblance by convenience feed knowledge in the classical period: by operations of similarity, the coherence of a world can be reached. No will of order is associated with language in this configuration; language is limited to a linearized designation. From the 17th century onwards, the principles of resemblance were considered insufficient and were substituted by those of representation. Between words and things, the links are pluralized to give way to a new game between signifier and signified. At the heart of these new modes of representation is the classification apparatus. Its development in natural science is inseparable from its emergence in architecture. Anthony Vidler (1995), in his book *L'espace des lumières: Architecture et philosophie de Ledoux à Fourier*, argues that the belief in architectural species coincided with and derived directly from parallel work in the natural sciences in the XIIX century. With a certain systematism, architectural treatises were to set up their own classifications: Jean-François Blondel (1771-1777), Le Roy (1758) but especially Jacques-Nicolas-Louis Durand (1799) were to try out comparative mechanisms of arrangement, and classification inspired by those implemented in the natural sciences.

In strong analogy with botanical taxonomies, the first architectural classifications were organized around formal characteristics (directly visible from the outside), soon accompanied by functional and stylistic criteria.

Behind the construction of classification mechanisms lies the desire to understand the architectural and urban production of the time and to shed light on the future. Categorization in architecture has always had a dual role, both as a framework of knowledge and intervention (Datson and Galison, 2017). Durand's classification, for instance, although based on mechanized combinatorial mechanisms, had the ambition to support the creation of new buildings. This active role of classification is also apprehended in the work of Pevsner. His book *A History of Building Types* (Pevsner 1976) is intended to show architects the new limits of their field of intervention. According to Steadman, this generative ambition is at the heart of early approaches to classification in architecture: «The practical purpose of classification in architecture, beyond historical description and scientific analysis, lies in the hope that out of an ordering of the variety of buildings of the past will come theoretical principles, which may be applied in designing new buildings, of new forms, to answer new programs and new circumstances» (Steadman 1979, 27).

2. The Anthropocene and the critical re-examination of classification in architecture

At the end of the 1970s, the cessation of certain activities (religious, military, industrial) made large structures -freed from their past functions- available. The industrial wasteland appeared as a new urban challenge to which large urban regeneration projects were to respond (Chaline 1999). In particular, the transition from the Fordist to the post-industrial model had precipitated the obsolescence of vast productive sectors. As a result, new "voids" with a significant land value appeared. These decades have therefore seen a second wave of expansion of the architectural landscape fueled by abandonment. Issue 42 of the Italian journal *Rassegna*, edited by Vittorio Gregotti, is entitled *The Abandoned Area*. It sets out, in its introduction, the general ambition of the publication: «This issue of Rassegna proposes a critical account of this interrelationship between words, causal processes, and physical events, as well as its reasons and expectations while taking into account the fact that this condition lies halfway between the concreteness of the terrain and the forms of thought that refer to it» (Gregotti 1990, 9). According to Gregotti, it is necessary to observe, know, and name the phenomenon of urban abandonment, an intention extended by the French professor of urban planning Marcel Smets, in this same issue, with an article entitled *A taxonomy of deindustrialization* (Smets 1990, 8-13). This article presents the reader with a taxonomy of abandoned European industrial sites organized around their past activity (mineral extraction, textile exploitation, etc.). In this typological classification, the functional entry prevails to categorize the structures. This disjunction between the functional classification and the reality of the structures (disappeared function) marks a first limit of the classification, unable to tackle the profusion of the built world. In a broader context, such an ambiguity in the signifier and signified relationship has also been addressed by Tschumi in his work on event, discontinuity, and heterogeneity (Tschumi 1996) and by Eisenman in his *Notes on Conceptual Architecture* (Eisenman 1970). In a short essay, Eisenman identifies two main limits in architectural taxonomies: their failure to consider the discourse between matter and process and their incapacity to distinguish between "conceptual-semantic" and "conceptual-syntactic" categories.

We argue that the contemporary condition tends to exacerbate these historical limits. Indeed, an increasing level of hybridization marks the Anthropocene: vibrant corpses interfere between categories and disrupt boundaries between the natural and the artificial (Nova 2021). Elsewhere, I have described how this observation explains the revival of the bestiary genre (Abenia 2022, 110-121). In architecture, too, a bestiary could be composed. To be able to identify and collect the specimens that populate it, however, requires a paradigmatic shift. It is a question of distancing ourselves from architecture read as a static object to apprehend architecture in its processual nature. In his book *Building lives: Constructing Rites and Passages*, art history professor Neil Harris (1999) invites us to renew the analogy bringing together the cycles of human life and those of constructions. Extending Steward Brand's research (1995), Neil Harris proposes to update the historical parallel between architecture and natural organisms around the notions of *event* and *moment of life*. Neil Harris's proposal thus aims to enrich the ways of studying a building by considering the different stages that punctuated its "life": its construction (birth), its demolition (death), but also all the celebratory phases, and the darker and more uncertain moments (abandonment) that accompanied its existence: «treating buildings as if they formed some kind of special species, a hybrid class whose character, identity, survival, interaction with humans, and, above all, whose (all) defined life stages merited systematic examination» (Harris 1999, 95).

Harris no longer considers the constructions as simple spatial objects, but he integrates their capacity to *perform events*. Other research extends Harris' position, calling for a shift beyond the linearization of the biographical journey of buildings. These works ascribe active, evolving, and dynamic characteristics to the built situations (Cairns and Jacobs 2014; Yaneva 2008, 8-28). The recognition of non-linearity in the study of the life cycle of a building speaks of the processual dimension attached to architecture. It allows the intermediate phases to gain visibility and thus be valued. It gives new visibility to fuzzy and uncertain stages between material extraction and disposal, construction, and demolition.

By contrast with the aesthetical fascination and romanticizing of decay, which tends to freeze the phenomenon into a necrotic image, our interest lies in the dynamic process inherent to abandoned structures. Abandoned structures seem to have slipped into classificatory limbo. As they are «*i*n a moment of freedom between two structures world-view or institutional arrangements» (Bjørn 2014, 7), they stand in a peculiar time-place from which they can support a reframing of architectural taxonomies towards non-extractive practices.

3. Beyond functional classification

The organization of constructions according to functional characteristics is a commonly observed mode of classification in architecture. The idea that a structure is closely related to its function was introduced into architectural theory by the French architect Germain Boffrand (Kruft 1994). Two main implications underlie this mode of classification. First, it implies the intertwining between a structural arrangement, a built form, and a function. Since the structural arrangement is relatively fixed over time, this mode of classification assumes that the function would also remain stable. This is contradicted by any phase of abandonment in which a break is observed between the built form and the original use. The second implication of this mode of classification is that of a monofunctional reading of the structure. Historically, large structures were power structures (Boucheron 2014) with a public vocation and one primary function. This is no longer the case today: observation of the contemporary city shows a coexistence of functions. My research on abandoned structures (Abenia 2019) has also shown that the abandonment of a structure can be only partial, that within the occupied parts can cohabit a multiplicity of uses, distinct from the initially intended function, and that these occupations can be informal and temporary. These situations testify to a juxtaposition of uses in space and time and make functional classification obsolete. In the words of sociologist of science Michael Guggenheim: «Different times become conflictive when a change of use leads to a different classification of a building regarding its use. Buildings are used by a multiplicity of users and thus have multiple times that cannot be controlled by any constituency» (Guggenheim 2009, 49).

In their work on the city of Tokyo, the architects of Atelier Bow-Wow have questioned the possibility of going beyond functional modes of classification. In 2001, Momoyo Kajima, Junzo Kuroda, and Yoshiharu Tsukamoto published the first version of their book, which has since been republished fourteen times, *Made in Tokyo* (2001). The Japanese architects set out to produce an alternative guide to Tokyo that would offer a tour of what the architects call "Da-me buildings". For the architects, these are anonymous, strange, yet challenging buildings. The guide is a tool that allows them to collect and compare specimens; it is «a kind of software after the fact»(Bow Wow 2001, 11). In this sense, the architects propose a classificatory tool. The Da-me-buildings do not respond to particular aesthetic or formal criteria; they do not belong to the classical circuits of architectural recognition. If these buildings are interesting, it is because they were not born from rational planning; they were not thought a priori and are the fruit of Tokyo's extraordinary conjuncture. They are «unthinkable production» (Bow Wow 2001, 8) and «unforeseen building types with unexpected combinations of function» (Bow Wow 2001, 19). According to the architects, the specimens collected present too many exceptions and too many asperities to fit into a given functional class: «If we try to collapse da-me architecture into a typology, we will lose the interesting mongrel nature of the differing elements» (Bow Wow 2001, 10). To overcome these pitfalls, two measures were taken by the architects and incorporated into the *Made in Tokyo* guide.

The first is accessible through the nicknames given to the seventy buildings collected [Fig. 1]. These nicknames familiarize the strangeness of the structures. In a sense, they downgrade to reclassify better (metaphorically and temporarily). To the narrowness of the single word conveying a single function, Bow-Wow responds with the juxtaposition and encounter of several associated terms. Linguistic mechanisms such as oxymorons, collages, and metaphors are engaged in this toponymic reclassification. The Atelier Bow-Wow attempts to encapsulate the hybrid nature of the cases studied by bringing together uses that are a priori impossible and conflicting: "03. High Way Department Store", "14. Golf Taxi Building", "35. Railroad Museum", "38. Fan Obelisk", "49. Ghost Railroad Plant", "67. Sports zoo", etc. The architects speak of the hybridization of categories: "The unexpected adjacency of function created by cross-categorical hybrids, the coexistence of unrelated functions in a single structure, the joint utilization of several different and adjacent buildings and structures, or the packaging of an unusual urban ecology in a single building" (Bow Wow 2001, 13). The nicknames thus allow the contradictions inherent in the situations under study to exist in the space of a name.

The second approach of the Atelier Bow-Wow to classify without smoothing the functional multiplicity is based on the construction of a disruptive tree structure [Fig. 2]. It aims to highlight the disruptive capacity of the inventoried buildings in relation to the conventional functional filters. The architects question the ability of the specimens to emancipate themselves from the expected reciprocity between container and content, software and hardware. They present a classification at three ordering levels: Category, Structure, and Use. The architects assign an "ON" or an "OFF" at each level and for a given structure. A structure is thus defined and classified according to this triple classification level. A first observation can be made: the classification proposed by Japanese architects does not concern the construction alone but the encounter between the structure and its uses. This classification system between structures leads architects to value cases presenting at least one "OFF" level in the tree structure. This level is that of multitude and otherness ("Category" level), infrastructural interdependency ("Structure" level), and porosity between uses ("Use" level). In other words, the architects value the expression of a conflicting coexistence (functional or structural) within the same structure and underline these structures' deviation from the monofunctional classification mode.

According to the architect Mark Wigley, a non-extractive practice of architecture starts by challenging «the illusion that a building is an object […] by exposing the fact that this illusion is propped up on countless interacting networks» (Mark Wigley 2021, 54). Going beyond functional classification, this first alternative, led by Atelier Bow-Wow, highlights precisely plural and contradictory networks of actors, and uses. It «offer(s) visibility into objects rather than onto objects (by) designing ways to expose the hidden insides of the building itself, its fabric and internal life […] the image of a static building hosting equally static images of idealized human life taken from consumer magazines gives way to rendering the multiplicity, complexity, and enigmas of lives» (Mark Wigley 2021, 54). A large part of the urban fabric is not designed by architects or the result of urban planning. Giving visibility and value to this often-invisible production supports non-extractive principles as it encourages us to closely observe our environment. It invites us to pay more attention and acknowledge minor, fragmentary, local, and informal interventions. As opposed to the modernist figure of the individual master, imposing a unique worldview through taxonomy, it calls for tools that would foster a multiplicity of assemblies.

4. Beyond formal classification

In the formal classification, the privileged approach is morphological. It implies a direct relationship between a building and its conformation. As the architect and teacher Grégoire Chelkoff reminds us: «the term of architecture rests primarily on the built object…defined essentially by its matter, its form, and (sometimes) its colors. The visuotactile dominant (plasticity of the object) is often posed as first» (Chelkoff 2004, 55). Formal architectural classification brings us back to the first botanical classifications, where only external and directly visible characteristics were considered. This mode of classification assumes that the structures present morphological coherence and formal stability in time. It favors simple and known conformations because unitary and monolithic conformations facilitate formal intelligibility. This formal intelligibility assumes that the structure is neither parasitized nor strongly altered and presents a clear and univocal separation between the interior and the exterior. Yet liminal structures (whether unfinished, abandoned, under construction, or in the process of demolition) exhibit formal ambiguity. Through abandonment, the unitary form gives way to fragments. Cyrille Simonnet argues, in his article entitled "From form to formlessness", that the ruin speaks to us of a conjunction between the indistinct and the heterogeneous. According to him, these structures deeply question constructive thought insofar as they mobilize «the entropic power of the formless» (Simonnet 1997, 97)

An attempt to move beyond formal classification can be seen in the work of French artist Eric Tabuchi. In 2015, the *Atlas of Form*s was released online. It is a digital work coupled with a search tool offering to view and manipulate 1500 photographs (and as many structures, sometimes abandoned), which are then arranged using mainly formal filters. Eric Tabuchi, a photographer, is not the author of the photographs presented in the Atlas. Instead, he collected all the photographs on the internet. Nothing is said about the photographs' geographical location, the year of the shooting, or the photographer's name.

Finally, the fact that the structure has since been demolished or transformed is of little importance; what matters here are the characteristics visually expressed by the archived structure at the time the photograph was taken.

The atlas is intended to be a plea for diversity, opening the framework of eligible structures to a broad spectrum covering, in no particular order, architecture, infrastructure, construction, abandonment, and ruin. The collection of photographs selected by the artist can then be filtered by a search engine added to the site. The latter allows the visitor to sort this collection of 1500 specimens according to eighteen criteria [Fig. 3] used to build a form taxonomy. Among the criteria are the elementary figures associated with a formal classification ("circle", "square", "triangle"). Three other entries refer to the formal result of a composition ("polygon", "geometric", "mycomorph"). To these first traditional entries are added seven other filters that specify the qualities associated with these forms ("monolithic", "high", "small", "light", "massive", "completed", "mimetic"). A fourteenth filter entitled "chaotic" introduces the resistance that some structures oppose to deterministic geometrical forms. Indeed, chaotic refers to what is in a state of unorganized and undifferentiated amalgam. As for the last four entries, their inclusion in this *Atlas of Forms* testifies to the inadequacy of simple geometric labels to account for the processual reality of the structures studied: "construction" (incompleteness), "decrepitude" (visual marks of abandonment), "ruin" (advanced state of ruin), "skeleton" (bare skeleton linked to incompleteness or ruin). We thus observe a broadening of the conventional entries used in formal classifications. This enlargement integrates temporal and dynamic considerations. With these last four entries, it is less a question of defining the abstraction of a form than of introducing vectors of alteration of a form. In this sense, "Abandonment", "Incompletion", as well as "Ruin" are presented as formal disruptors.

Going beyond formal classification, this second alternative engages time and change within its framework. It acknowledges that architecture operates in a continuous field of transformation and confronts the waste produced by the construction sector. In the words of Michael Thompson, it critically addresses «the creation and destruction of value» (Thompson 2017). With this dynamic perspective, where precise temporal arrangements prevail over stable and generic ones, comes a certain level of ambiguity. To tackle this tectonic ambiguity, architectural taxonomies should be able to grasp uncertain and altered material processes rather than finite objects. Joseph Grima, founder of Space Caviar, argues that a non-extractive shift in architecture would precisely require architects to commit, and be responsible «for the full lifespan of their built output, from the source of materials to their final destiny» (Grima 2021, 19). He defends the idea that we should urgently address the chasm that has separated architects and the material world over the last five hundred years. In doing so, flows of material would be made more visible, greater attention would be given to what already exists, abandoned structures would not automatically be considered as waste to be discarded, and ex-nihilo constructions and demolitions would become much more exceptional.

5. Beyond stylistic classification

A third mode of classification historically used in architecture is based on stylistic considerations. The notion of style covers a vast polysemy. We will consider in this article the traditional historical style understood as the aesthetic traits that characterize a production and associate it with a given school, nation, and period. The stylistic classification aims to date and evaluate a given architecture by isolating the constituent characters of a given context (temporal, cultural, geographical, anthropological, and technical). At the basis of this classification is the idea that stylistic taxonomies highlight a progressive and positive evolution of architecture, by juxtaposing, in a chronological way, the productions of specific nations. An evolutionary perspective that is reminiscent of family trees and their drifts in the field of biology in the 19th century. This mode of classification has several pitfalls. The traditional stylistic classification is based on remarkable examples that summarize the essence of a given period and synthesize its aesthetic characteristics. They thus serve as stylistic archetypes and overlap with buildings now recognized as heritage. However, this presupposition excludes a large majority of generic, ordinary, standardized, anonymous, or deteriorated buildings because these buildings do not meet the referential value aimed at by heritage architecture.

In 2007, an inventory of unfinished and abandoned Italian public structures was launched by Alterazioni Video, a group of artists from Milan. Their inventory takes the form of an online platform open to external contributions. Nearly 400 structures have been identified in Italy, more than a third in Sicily. Given this number, the density of the cases observed, and the common characteristics shared, the collective introduced the idea of Sicilian incompleteness ("Incompiuto Siciliano") to qualify the phenomenon. This label goes beyond a naming effort, as it argues for the recognition of a new architectural style: «The sum of these remnants of never achieved futures is so vast that it can be considered a true architectural and

visual style, representative of Italy and the time in which they were produced» (Alterazioni Video 2018, 486). Considering this statement, the collective seems to embrace the frameworks of stylistic classification, trying to enumerate the criteria to validate the inclusion of a new stylistic class: the unfinished. However, limiting Incompiuto Siciliano's proposal to an enlargement of the classificatory framework (by adding a new rubric) only partially covers Alterazioni Video's objectives. If a kind of validation of the classificatory frameworks is expressed in the form, a divergent and critical discourse emerges in the substance.

In the proposal of Alteration Video, there are parameters that one cannot elude: humor and irony. Indeed, the weight of the patrimonial heritage is omnipresent in Italy. The proposal made by Alterazioni Video to institute the unfinished Italian structures as bearers of an architectural style with historical value places them, de facto, next to Italian works recognized as milestones in the history of architecture. This sarcasm is even more evident when we observe the logo chosen by Alterazioni Video to illustrate their approach: on a black block, the façade of a Roman temple is drawn in white lines. It takes up, in a literal way, the codes of the UNESCO logo [Fig. 4] except for a few details: on the logo of the Incompiuto Siciliano, one of the four columns, the entablature, and the pediment are partially absent, signifying their abandonment, demolition, or incompletion. By opposing the heritage temple with a simulacrum of unfinished concrete structure, the collective makes explicit the critical dimension that emanates from their stylistic classification: «the importance of Incompiuto Siciliano lies in the satirical use of the traditionally hegemonic mechanisms of heritage, overturned: 'Incompiuto Siciliano Archaeological Park' is presented in such a conservative way that, paradoxically, it ends up being a provocative proposal» (Arboleda 2017, 60).

The work of the Alterazioni Video collective mobilizes a double discourse on classification. The use of conventional frameworks is privileged because it renews the attention on these otherwise invisible structures by employing institutional codes of valorization. However, their approach aims at something other than institutional and patrimonial recognition, as conventional classifications would have done. Indeed, the fact that the members of the collective self-proclaimed the birth of this new style short-circuits traditional institutional expertise. This disjunction between the tools of representation and the objectives pursued can be seen in the actions that the artists have been multiplying in situ for nearly a decade. These actions include festivals, performances, or workshops aimed at local institutions and inhabitants and not at national authorities in charge of heritage. The intentionalist or institutionalist considerations linked to classical classifications are overturned. Thus, the stylistic classification is less an end than a beginning to open a local debate on the future of these structures. This third strategy accompanies a non-extractive aim insofar as it aims to provoke a debate on the fabrication of value governed by hierarchical and historicist instances. It opens to plural and minor histories, challenges dominant decision-making systems, and investigates ways of reclaiming space and local identity.

6. Looking upstream and downstream

The three initiatives described above used abandoned buildings as extreme specimens capable of highlighting the limitations presented by conventional architectural classifications. Other initiatives invite architects to invest in the material world to have access to other critical moments of the architectural life cycle: the moments preceding a construction site (marked by the choice, extraction, and routing of materials) and those following a demolition/deconstruction site (conditioned by the treatment of construction materials and waste).

Material Atlas is a "living map of materials, language, landscapes, and practices"[1]. Initiated by the Ma-tt-er collective and the British Council, it provides a navigational tool for mapping and representing the materials that inform the world of design. The online platform presents a taxonomy organized around four categories of materials: "native materials" (indigenous to the land), "local materials" (citizens but not native to the land), "migrant materials" (travelers visiting other lands), and "cosmic materials" (omnipresent spirits in all lands). The choice of these categories supports the development of a kinship between designers and the non-human world. A connection that would no longer be based on instrumental ends but governed by principles of care and protection. This taxonomy also introduces a way of approaching the material world by integrating immaterial and cosmic dimensions. In this sense, the design of visual diagrams accompanying each category is revealing. Non-figurative and openly inspired by Australian aboriginal drawings, they manipulate simple forms (square, circle, spiral) not as symbols of formal coding but as the starting points of a material cosmology [Fig. 5].

Material Atlas invites us to follow a material's journey, past, present, and speculative future. The platform offers a tool for alternative storytelling and encourages the use of local terminologies. What could have been inventoried as "clay" appears, for instance, under the name of "IVHU", a term originating from Zimbabwe, and which could be roughly translated as "Ground considered as a subject of use or possession". Behind the choice of words to name construction materials lies a decolonial issue: "Material Atlas begins to decolonize language beyond the typological framework that exists in the current dominant universal understanding of materials, offering a more nuanced and mixed approach that is co-developed by diverse practitioners around the world"[2]. Classification is understood as a tool for collaboration and exchange that allows a re-reading of the material world, not as an assembly of static resources in time and space from which material can be extracted, but as individuals following a non-linear trajectory of displacements, migrations, stops, and bifurcations.

This last strategy demonstrates that the vast extractive system is never just material. As Saskia Sassen has shown, material extraction goes hand in hand with human extraction (Sassen 2016, 17). Mechanisms of material extraction are tied to expulsion and dispossession of living communities: dispossession of land, rituals, craft skills, languages, etc. In this last initiative, local terminologies are not translated to fit the Western knowledge systems, and cosmic dimensions are not presented as incidental. Material Atlas advocates for a shift in the definition of classification: from an arbitrary system of exclusive and conceptual classes to an experiential and narrative one. Considering how closely linked to slavery the history of architecture is, such a shift is of prime importance in drafting principles for a non-extractive architecture. As stated by Joseph Grima in his contribution, «a Non -Extractive architecture is an architecture based on care: for people, resources, materials, environments – as well as for civilization itself» (Grima 2021, 21).

Conclusion

Going beyond a mere antithesis of extraction, this article showed how forms and prerogatives of a non-extractive paradigm are necessarily plural, applying it to changing ideas of architectural taxonomies. The four initiatives introduced in this article address the normative frameworks that shape our worldview, encouraging deviations from the norm and pointing to ways to disrupt and reframe it. They give access to four design strategies for re-attuning conventional frameworks and supporting the conditions for a non-extractive architecture.

The first strategy, brought by the work of Tabuchi, is expansion. The taxonomic logic is kept, but new classes are added. Contrary to simple diversification, which would lead to the multiplication and refinement of classes in a fixed territory, enlargement conquers new territories. The architect's field of knowledge (and thus of intervention) widens, integrating new structures until now out-of-field. This expansion can support a non-extractivist perspective as it gives greater attention to what already exists before engaging in ex-nihilo constructions or demolitions.

The second strategy, identified in the work of Alterazioni Video, is re-semantization. At first glance, it is based on the acceptance of the pre-existing conventional taxonomy. However, this acceptance is only partial. This second strategy pushes the conventional classification to the limit by applying it scrupulously to situations usually excluded from the framework. The absurdity of this confrontation gives rise to a re-semantization of classification frameworks. This re-semantization is an act of creation integrating an essential part of subjectivity in its elaboration. This strategy accompanies a non-extractive aim insofar as it aims to provoke a debate on the fabrication of value governed by hierarchical and historicist instances. It opens to plural and minor histories.

The third strategy, evoked in the work of the Bow-Wow workshop, is that of subversion. Contrary to the preceding strategy, whose critical dimension remained implicit, this last positioning emits an affirmed opposition to the conventional classifications. This strategy produces a new classification, the antithesis of the one it denounces. The subversion of the framework leads to a reversal of the established conventional orders. However, one may wonder to what extent the criticisms formulated against the rigidities presented by the classification framework are not retained in the elaboration of its antithesis.

The last strategy is that of mythogenesis, employed in the Material Atlas. It aims to reopen narratives, to share other stories and myths where the relationships between humans and non-humans are recomposed. In the words of Anna Tsing, we see in this proposal a path toward «a reopening of the Anthropos through attention to non-Western and non-modern ways of knowing, inhabiting and making worlds. […] Other beings are animate persons, as alive and as social as humans. This approach is an exciting leap outside the usual scholarly categories» (Tsing 2019, 18).

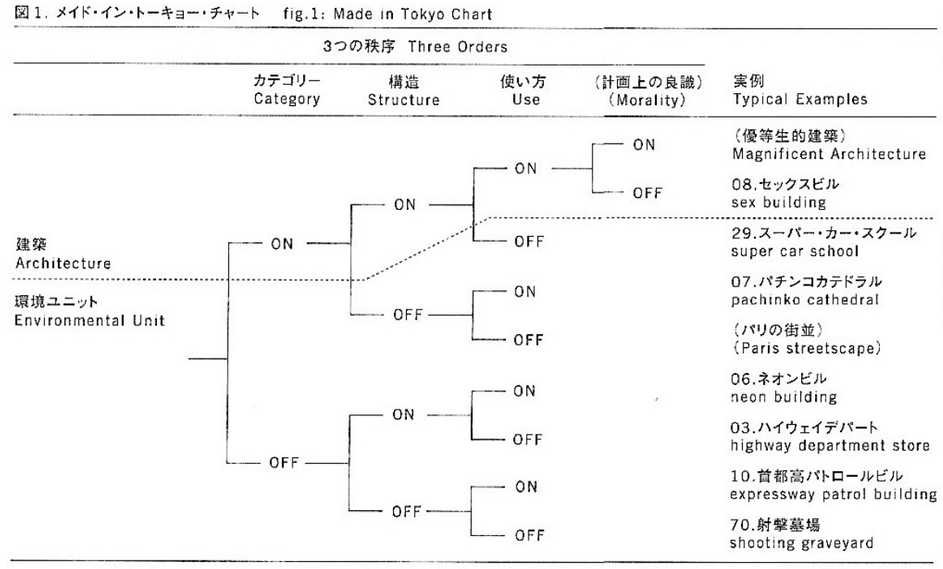

Figure 2.
Atelier Bow-Wow. *Three Orders Chart*. A disruptive Arborescence appearing in *Made in Tokyo*. Momoyo Kajima, Junzo Kuroda et Yoshiharu Tsukamoto, *Made in Tokyo*, (Tokyo: Kajima Institute Publishing, 2001), 15.

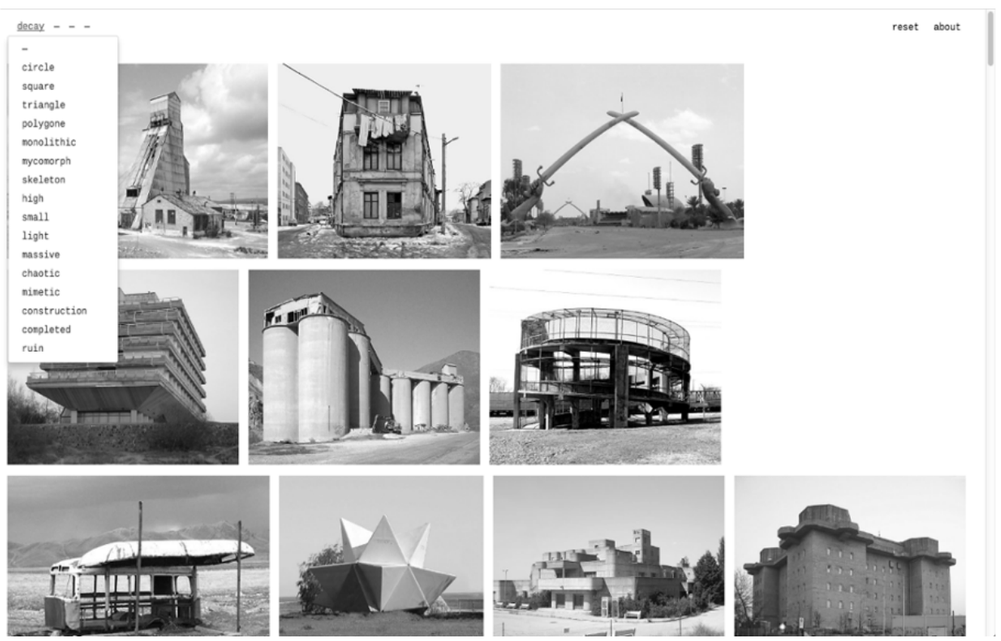

Figure 3.
Tabuchi, Eric. *Atlas of Forms*. Screen capture of the website showing, on the left column, the eighteen criteria of the classification. www.atlas-of-forms.net.

Figure 4.
Alterazioni Video. *Incompiuto Siciliano*. Map of the location of structures belonging to the Incompiuto style, based on a national survey of unfinished works (2008). Bottom right is the logo used by Alterazioni Video. http://www.alterazionivideo.com/new_sito_av/projects/incompiuto.php.

Figure 5.
Ma-tt-er and the British Council. *Material Atlas*. Screenshot of the website organizing the inventoried materials. Each material has its own diagrammatic representation. The four colors and forms correspond to the four main categories: native materials, local materials, migrant materials, and cosmic materials. https://materialatlas.world/maps.

[1, 2]Available at: https://materialatlas.world/explore (Date of access: February 1st, 2023).

Bibliography

Abenia, T. (2019) *Architecture potentielle de la Grande Structure Abandonnée (G.S.A) : Catégorisation et projection*. Ph.D. diss.,Université de Montréal and Université Toulouse Jean Jaurès 624 pp. https://doi.org/1866/23968;

Abenia, T. (2022) Let the monsters roam the classification. *L'Atelier Magazine EPFL*: 110-121;

Alterazioni Video, Fosbury Architecture (2018) *Incompiuto: La nascita di uno Stile / The birth of a style*. Humboldt Books, Milan, 331 pp.;

Aroboleda, P. (2017) *Reckoning with Incompiuto Siciliano: unfinished public works as modern ruins and all which it entails*. Ph.D. diss., Faculté d'Architecture et d'Urbanisme, Bauhaus-Universität Weimer, 150 pp. https://doi.org/10.25643/bauhaus-universitaet.3265;

Bellamy Foster, J. & Burkett, P. (2004) Ecological Economics and Classical Marxism: The 'Podolinsky Business' Reconsidered. *Organization & Environment* 17 No 1: 32-60. https://doi.org/10.1177/10860266032620

Bjørn, T. (2014) *Liminality and the Modern: Living Through the In-Between*. Londres and New York: Routledge, 262 pp.;

Blondel, J.-F. (1771-1777) *Cours d'Architecture* 12 volumes. Desaint,Paris;

Boucheron, P. (2014) *De l'éloquence architecturale. Milan, Mantoue, Urbino (1450-1520)*. Editions B2, Paris, 68 pp.;

Bow-Wow Atelier (2001) *Made in Tokyo*. Kajima Institute Publishing, Tokyo, 192 pp.;

Brand, S. (1995) *How Buildings Learn. What Happen After They're Built*. Penguin Books, London, 256 pp.;

Cairns, S., Jacobs, J. M. (2014) *Building Must Die: A Perverse View of Architecture*. MIT Press, Cambridge and London, 312 pp.;

Chaline, C. (1999) *Régénération urbaine*. PUF, Paris, 127 pp.;

Chelkoff, G. (2004) Percevoir et concevoir l'architecture: l'hypothèse des formants. *In*: Collectif (Eds.), *Ambiances en débats*. A la Croisée, Bernin: 55-69, https://hal.science/hal-04239135

Datson, L., Galison, P. (2017) *Objectivity*. Princeton University Press, Princeton, 504 pp.

Durand, J.-N.-L. (1799) *Recueil et parallèle des édifices de tout genre anciens et modernes remarquables par leur beauté, par leur grandeur, ou par leur singularité, et dessinés sur une même Echelle*. Imprimeur de Gillé fils, Paris, 52 pp.

Eisenman, P. (1970) Notes on Conceptual Architecture. Towards a Definition. *Design Quartely* No 78/79: 1-5.

Foucault, M. (1966) *Les mots et les choses, une archéologie des sciences humaines*. Gallimard, Paris, 400 pp.

Gregotti, V. (1990) *Rassegna* No 42 The Abandoned Area, C.I.P.I.A., Milano, 121 pp.

Grima, J. (2021) Introduction. Design without Depletion. On the Need for a New Paradigm in Architecture. *In*: Space Caviar (Eds), *Non Extractive Architecture. On Designing without Depletion*. V-A-C Press and Sternberg Press, Moscow and Berlin, 6-22.

Guggenheim, M. (2009) Building Memory: Architecture, networks and users., *Memory Studies*, 39-53. https://doi.org/10.1177/1750698008097394

Harris, N. (1999) *Building lives: Constructing Rites and Passages*. Yale University Press, New Haven, 198 pp.

Kruft, H.-W. (1994) *History of Architectural Theory: From Vitruvius to the Present*. Princeton Architectural Press, New York, 832 pp.

Le Roy, J.-D. (1758) *Ruines des Plus Beaux Monuments de la Grèce*. H.-L. Guerin & L.-F, Paris.

Lynch, K. (1976) *What time is this place?* MIT Press, Cambridge, 288 pp.

Nova, N. (2021) *A Bestiary of the Anthropocene*. Onomatopee projects, Eindhoven, 256 pp.

Pevsner, N. (1967) Nikolaus Pevsner, 1967 Gold Medallist. *The journal of the Royal Institute of British Architects* Vol 74.

Pevsner, N. (1976) *A History of Building Types*. Princeton University Press, New Jersey and Londres; 352 pp.

Sassen, S. (2016) *Expulsion. Brutalité et complexité dans l'économie globale*. Gallimard, Paris, 371 pp. https://doi.org/10.4000/chrhc.10239

Simonnet, C. (1997) De la forme à l'informe. À propos de quelques ruines. *In*: Simonnet, C. (Eds), L*es cahiers de la recherche architecturale: Imaginaire technique* No 40. Editions Parenthèses, Paris, 91-98.

Smets, M. (1990) A Taxonomy of Deindustrialization. *Rassegna* No 42: 8-13.

Space Caviar (2021) Non Extractive Architecture. On Designing without Depletion. V-A-C Press and Sternberg Press, Moscow and Berlin, 296 pp.

Steadman, P. (1979) *The Evolution of Designs: Biological analogie in architecture and the applied arts*. Routledge, London and New York, 320 pp.

Thompson, M. (2017) *Rubbish Theory. The Creation and Destruction of Value*. Pluto Press, London, 304 pp.

Tschumi, B. (1996) *Architecture and Disjunction*. MIT Press, Cambridge, 278 pp.

Tsing, A. (2019) How the Things We Study Respond to Each Other: Tools for Unpacking The Material. *In*: Penny, H., Christian, K.-H., Knut, G. N. (Eds), *Anthropos and the Material*. Durham, Duke University Press: 221-244.

Vidler, A. (1997) L'espace des Lumières : architecture et philosophie, de Ledoux à Fourier. Traduit de l'anglais par Catherine Fraixe. *In*: *Bibliothèque de l'école des chartes*. Picard, Paris, tome 155, livraison 1: 412-415.

Wigley, M. (2021) Returning the Gift. Running Architecture in Reverse. In: Space Caviar (Eds), *Non Extractive Architecture. On Designing without Depletion*. V-A-C Press and Sternberg Press, Moscow and Berlin, 40-57.

Yaneva, A. (2008) How Buildings 'surprise': the Renovation of the Alte Aula in Vienna. *Sciences Studies*, Vol 21 (No 1): 8-28.

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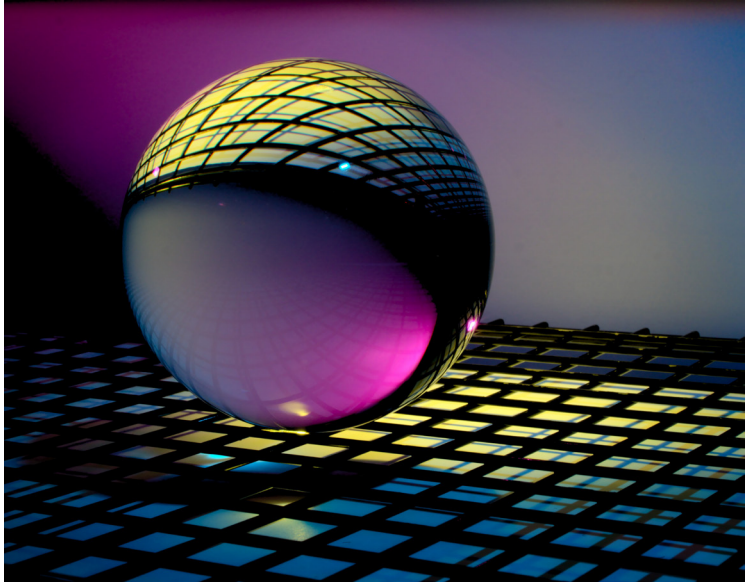

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