Architecture as a Convivial Tool

Ardeth #15 contents

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Ivan Illich

Architecture as a Convivial Tool.
Reading BAST's Projects through Ivan Illich in Response to Fragility

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Abstract

Starting from Ivan Illich's concept of conviviality, which challenges the excess of consumption and the mass industrial production of goods and services of contemporary society, this paper analyses three projects of the French practice BAST. Particularly, through a triangulation with Illich's theories, the paper highlights their potential to produce use-values. The case studies – an apartment, a restaurant, and a community hall – are interventions on existing buildings characterised by a sensitive approach focused on care, repair, and reuse. By foregrounding specific design actions employed by BAST alongside Illich's theoretical framework, this study aims to identify generalisable and transferable strategies that can enable architectural practice to produce use-values and thus act as a convivial tool, addressing the fragilities of our contemporary world.

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Premise: Is it Time for a New Frugality?

"Use it up. Wear it out. Make it do. Or do without." This saying was the headline of an article in Time magazine on 15 October 1973 entitled "Time for a New Frugality." Half a century ago, the first great global energy crisis put the United States government on its toes and forced it to devise energy-saving prescriptions as banal as they were effective: lowering thermostats by a few degrees in winter and raising them in summer, reducing the speed of cars so that as few drops of fuel as possible ended up in the huge cylinders of American muscle engines. Fifty years and countless crises later (Tooze, 2022), in the United States as in the rest of the Western world, cars whiz by at high speeds on highly congested roads and entering a shop involves a thermal shock so intense as to be a health risk. Unless, of course, the prudent shopkeeper leaves the door open to mitigate the freezing or burning air coming from the air conditioning. In fact, the mechanisation of our domestic environments (Giedion, 1967) and the regenerative and extremely energy-intensive approach of much of contemporary building production (Banham, 1984) have accustomed us to an unprecedented level of comfort that is difficult to let go of (Shove, 2003). So, it seems that the time for a new frugality, at least an energetic one, has not yet come. Although already in the 1970s, when the mass environmental movement began to emerge, certain ideas began to challenge consumerism and the modernist paradigm of continuous progress (Borasi, Zardini, 2007; Calder, 2022). Among these was the first version of the essay "Energy and Equity," published in the French newspaper Le Monde in 1973 by the Austrian thinker Ivan Illich (1926-2002). In the same year, Illich also published one of his seminal and most famous books, "Tools for Conviviality" (Illich, 1973).

According to Illich, frugality is intended as a convivial austerity that can only be achieved by renouncing the superabundance and excess of consumption and the mass industrial production of goods and services.

A convivial toolbox

According to Illich, frugality is intended as a convivial austerity that can only be achieved by renouncing the superabundance and excess of consumption and the mass industrial production of goods and services (Illich, 1973). In these first writings, Illich theorised the concept of convivial tools, as opposed to industrial tools. According to him, the whole community can use convivial tools as easily and as much as individuals wish, and they are the only tools capable of creating use-value. In contrast, industrial tools can only be used by a specialised and professionalised elite and can only create exchange-value (Illich, 1973; Illich, 2008). According to Illich, the use of industrial tools and overconsumption of goods and services leads to the counterproductivity that characterises the perpetual state of crisis and the fragility of the contemporary world (Illich, 1974). Two decades later, in 1992, Illich addressed for the first time a distinctly architectural theme: that of dwelling (Illich, 1992). In the essay, he continues the line of thought developed in his seminal writings, attacking professionalism and technicism as outputs of industrial modes of production. He takes a stand against the architectural profession, promoting instead modes of inhabitation grounded in self-building and the inhabitants' experiential, personal knowledge of their dwellings. According to him, this knowledge enables both the care and maintenance of buildings, and, above all, the ability to "inhabit one's own traces, to let daily life write the webs and knots of one's biography in the landscape" (Illich, 1992: 55). In this context, Illich also explores the relationship between buildings and the natural environment, which he believes has been destroyed by the modern distinction between public and private spaces. According to him, we must return to a complex conceptualization of the threshold, understood as a hybrid space between the home and the community – one capable of fostering collective responsibility for the common good.

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Although Illich's unconventional and radical ideas have been scorned by both right and left schools of thought (Todd, La Cecla, 2002), and revisiting his work may at first feel unsettling, perhaps even provocative, his theories are undoubtedly illuminating and capable of producing a creative shock (Fromm, 1971). Above all, they are compelling when reconsidered and contextualised within the framework of contemporary architectural production and the current global condition of fragility. In this context, architecture is called to reconsider its operational models: a frugal and simple design is necessary to facilitate maintenance, care, and repair of the built environment, towards a cyclical perspective that valorises its physical characteristics and adaptability to future needs (Rahm,

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2023). However, in contemporary Western society, repair and care are often concealed and undervalued, something to be hidden from view (Strasser, 2000; Graziano, Trogal, 2019). As far as architecture is concerned, old buildings are generally perceived in one of two ways: either they are considered too beautiful to be adapted to current needs and thus preserved in their original state, effectively turning them into museum pieces (Choay, 1999; Heinich, 2009); or they are considered too unattractive to be worth the effort of repair, with demolition and rebuilding seen as the preferable option (Thompson, 2017). In both scenarios, the use-value of the built artifact is effectively lost, as it is only considered for its exchange or commercial value. According to Ivan Illich, the absence of use-value creation is a significant shortcoming of the contemporary commodity/market-intensive society (Illich, 1978). Liberation from the excesses of consumption, he argues, can only be achieved using convivial tools, which are the only means capable of fostering an abundance of use values (Illich, 1973). Some contemporary architectural practices address the paralysis of use-value production through a design philosophy oriented toward repairing and reusing the existing building stock, with cost-effective interventions that give these constructions a high use value regardless of their former architectural quality. Among these, the French architectural scene offers several noteworthy examples: from the duo Lacaton & Vassal – winners of the 2021 Pritzker Prize precisely for their ability to conceive sustainability starting from a careful inventory of the existing buildings – to younger practices such as BRUTHER or BAST. This paper reads the latter's architecture (BAST – Bureau Architectures Sans Titre) using Illich's writings as a theoretical framework, showing a set of generalizable strategies that may enable architectural practice to overcome the current state of crisis and fragility.

Three architectures sans titre: An apartment, a restaurant and a community centre

Based in Toulouse, in the French region of Occitanie, BAST has worked since 2013 on both private and public commissions, often small projects with few resources and minimal budgets (Davidson, 2023). When working on existing buildings – representing most

Fig. 1 - In the A11 project, a large folding window completely opens the apartment onto the courtyard (Photo by BAST).

of their portfolio – they structure their design process into three distinct phases (BAST, 2025). The first is the purging phase, which, as the name suggests, involves the removal of all superfluous elements that are unnecessary to the renewed functionality of the building. The second phase consists of conceiving a new structural framework tailored to the updated functions and needs of the users. This step often leads to the creation of devices capable of fundamentally changing the spatial dynamics of the existing environment. The third and final phase fosters a dialogue between the architecture and its context, bridging the relationship between the interior and the exterior. These phases are evident in the three case studies that will be presented, starting with the first, a small apartment in Toulouse.

The project name is A11, and it was completed by BAST in 2022. Three cellars opening onto an enclosed courtyard in the city centre have been converted into a compact studio apartment. The rectangular floor plan has service areas at the two short ends. The bathroom is hidden behind a wooden partition clad in anodised aluminium panels, the same material that forms the backdrop for the minimalist kitchen. The interior materiality remains deliberately austere, recalling the aesthetic of the former cellar spaces with exposed brickwork, concrete floors, and cork insulation panels integrated into a lightweight Douglas fir frame. The longer side facing the courtyard is characterised by a large, fully operable glazed façade, providing the primary source of natural light and ventilation (Fig. 1). The most defining feature of the apartment is a massive reinforced concrete structure that solves some structural challenges while organising the space. Indeed, the first design step involved the removal of the internal partitions separating the cellar rooms and parts of the external façade up to a height of 2.1 metres, resulting in the partial loss of the building's original load-bearing masonry. The new concrete structure - consisting of two concrete trilithons - re-establishes the load path, transferring forces from the overlying walls to the foundation. Both symbolically and physically, this structure provides a sense of shelter, also housing the sleeping area, a narrow-lofted space positioned atop the trilithons and accessed via a stepladder. The perpendicular trilithon

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supports the internal load-bearing wall and visually divides the interior into a dining and living area. In contrast, the longitudinal trilithon supports the external façade and redefines the apartment's threshold, becoming the lintel for the folding glazing that opens onto the courtyard (Fig. 2). When these windows are open, the interior merges seamlessly with the exterior, with the continuous concrete floor extending the domestic space into the courtyard. The reinforced concrete structure thus becomes the primary spatial and organisational element, mediating between the existing conditions and the new requirements. Being left uninsulated, the concrete structure is not only a figurative threshold between inside and outside but also a thermal bridge, for those concerned with thermal efficiency. In a contemporary architectural context increasingly obsessed with eliminating such direct, unmediated thermal connections between inside and outside (Rahm, 2023), this choice may seem strange – perhaps even a peculiar anomaly. Nevertheless, it reflects the simplicity of the intervention, also minimising costs. Indeed, for the architects, respect for the budget is the primary concern, and achieving a certain level of thermal comfort is always linked to

Fig. 2 - The interior of the A11 apartment is characterised by a frugal materiality and by the presence of a massive reinforced concrete structure that articulates the space (Photo by BAST).

Fig. 3 - The vestibule of the T15 project is divided from the dining room by the interposition of a glass partition and by the kitchen block (Photo by BAST).

It also refers to an immaterial understanding of comfort, primarily the result of cultural constructs and personal habits.

the resources available for the project (BAST, 2025). In its simplicity, this project challenges conventional notions of thermal comfort within contemporary architectural production, or rather, as historian Daniel Barber has theorised, the habit of thinking about a world “After it” (Barber, 2019). However, it is not just a matter of thermal comfort. Here, the broad concept of comfort does not only refer to the physical one, which is linked to an environment’s thermal, hygrometric, and illumination characteristics. It also refers to an immaterial understanding of comfort, primarily the result of cultural constructs and personal habits, each of which can influence how we perceive architectural objects, precluding their reuse and thus preventing the exploitation of their use value (Thompson, 2017). For some, BAST’s unfinished architecture may be disturbing, while for others, it may evoke a fascination for ruin and the permanence of history (Augé, 2004). In the case of the A11 project, some small and old cellars on the ground floor of a closed courtyard

Fig. 4 - The outdoor extension of the dining room of the project T15, with the open patio created by removing part of the roof of the original building (Photo by BAST).

become an architecturally interesting object, subverting the cultural constructs that shape our habits and perception of the surrounding space.
Also in Toulouse, BAST realised a project called T15, transforming a low garage building into a restaurant. At first glance, the intervention appears extremely simple but has important spatial implications. The single-storey garage occupies the entire L-shaped plot with no open-air spaces. The first stage of the design tackled the problem head-on by removing the last bay of the roof, along with some internal infill, to create a patio that could be used as an outdoor dining area for the restaurant. Since the garage is a single large volume, the designers decided not to intervene at a structural level, but to articulate the interior space with two simple moves. The first is placing, on the long side of the L-shaped building, a block containing the kitchen, made of a light timber structure filled with glass panels that can be opened using hydraulic pistons. The second is the insertion of two glass and

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Fig. 5 - The garden and the north façade of the E54 project in Montjoire, characterised by a shed roof over the original masonry wall (Photo by BAST).

The continuity of the concrete floor ensures a smooth transition between the different spaces. The in-between theme is often adopted by BAST and it allows them to rearticulate the threshold concept, creating with a minimal budget different levels of thermal comfort and privacy.

fully openable partitions, which, together with the removal of the roof section, make it possible to create four spaces with different climatic, functional, and comfort characteristics. The first glazed partition is placed behind the original garage door, which has been retained in the conversion project, and near the centre line of the new kitchen block, between the second and third structural bays. This creates a vestibule between the dining room and the public street, which also functions as a takeaway area thanks to the possibility of opening the glass panels of the timber kitchen volume (Fig. 3). Beyond this first partition is the dining room, separated from the patio by another glass partition between the fourth and fifth structural bays. The patio consists of two bays, but as only part of the roof has been removed, it allows for an open, weathered garden and a covered but open-air space intended as an extension of the dining room (Fig. 4). The continuity of the concrete floor ensures a smooth transition between the different spaces. The in-between theme is often adopted by BAST (Taillieu, 2023), and it allows them to rearticulate the threshold concept, creating with a minimal budget different levels of thermal comfort and privacy. Thus, the project becomes a hybrid (Yaneva, 2022) in which it is no longer possible to distinguish architecture from the context, natural or urban, surrounding it.

BAST's commitment is not limited to private commissions, where it could be argued that developing such a radical approach and experimenting with alternative solutions is easier. BAST is increasingly involved in public commissions, where the difficulty of experimenting with bricolage and the prototyping of building elements pushes them to experiment with other aspects of architectural design (BAST, 2025). As in the case of E54, a public project commissioned by the small municipality of Montjoire, about twenty kilometres north of Toulouse. Specifically, it is a so-called Maison des Associations, a multi-purpose space with recreational and cultural facilities for associa-

Fig. 6 - Inside, the E54 project's space is characterized by a cross-shaped reinforced concrete structure that accommodates a large community hall (Photo by BAST).

tions and the elderly community. The original building was a 19th-century farmhouse, which has undergone numerous extensions and renovations over the years, located west of the town hall on the village's main square. The old farmhouse, with its small and irregular spaces, was unsuitable for the new functions and activities involving the whole community and requiring the presence of many people. To solve this problem, the architects removed some internal partitions, both horizontal and vertical. Subsequently, inserting a simple cross-shaped reinforced concrete structure of two trilithons intersecting at right angles made it possible to create a large multi-purpose hall, the main feature of the new construction. The reinforced concrete structure is not only a structural solution to a spatial problem but can also articulate the relationship between interior and exterior spaces. Indeed, the new shed roof of the former barn, realised with a slender timber structure, is supported partly by this new structural element and partly by the original north masonry wall, reinforced at the top by a concrete curb. The north wall also acts as a threshold between the interior and exterior spaces, thanks to two central arched openings, treated as a large, mullioned window that can be opened through an external sliding anodised aluminium frame (Fig. 5). Once again, the glazed partitions open the interior as much as possible to the outside garden, transforming the hall into an intermediate space where architecture and nature merge. The large multi-purpose hall, characterised by the massive presence of the cross-shaped concrete structure, boldly proclaims BAST's design approach. The architects use reinforced concrete structures as a simple technology to activate spaces by restoring their use value (Fig. 6). Although reinforced concrete is not considered an ecological material per se (Material Cultures, 2024), it serves a sustainable and conceptually ecological function because it can restore the use value of otherwise abandoned buildings. Thus, it is not only about using ecological materials that have less impact on the environment, but a matter of approaching architectural design in a completely innovative way, tailored to the budget and the quantity of resources available. This approach focuses on "simple and real things and on the practical aspects of architecture" that BAST shares with other practices

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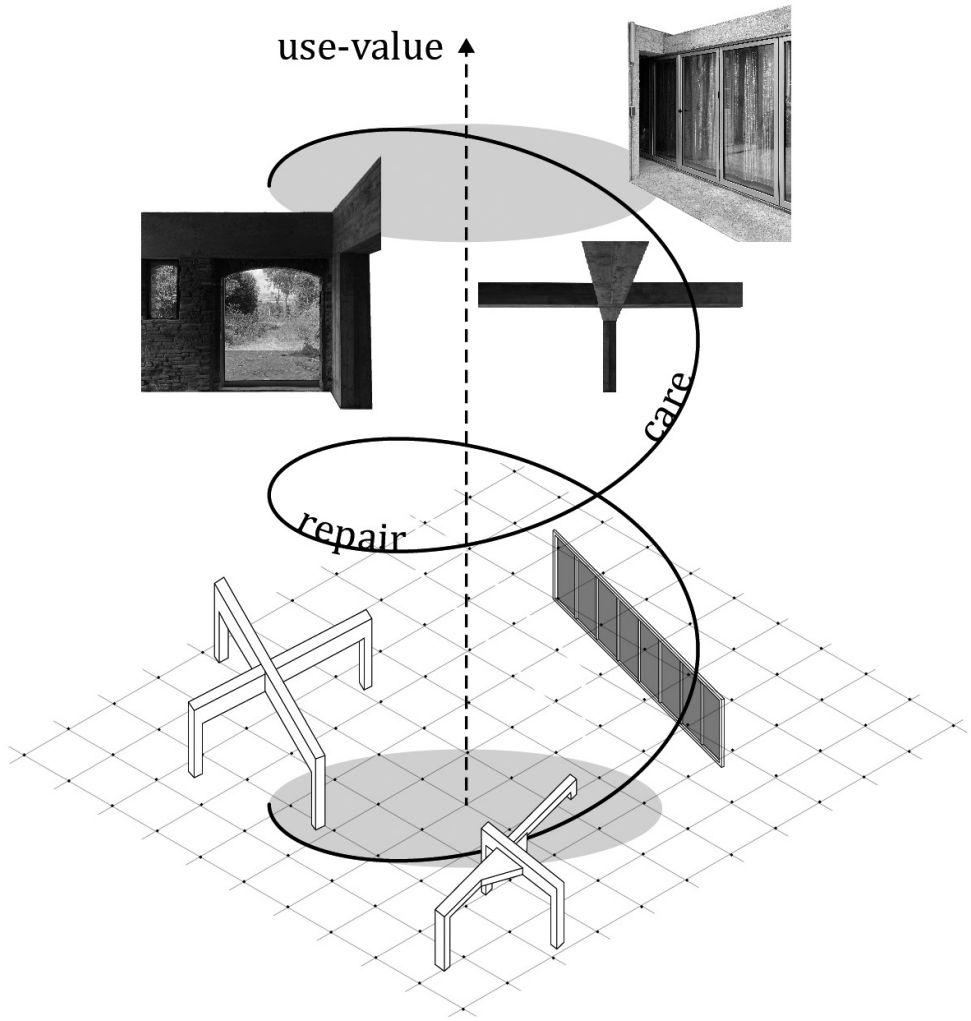

born in a period of crisis, scarcity of resources, and uncertainty (BAST, 2025).

Towards an architecture as convivial tool

The design philosophy of BAST, as highlighted in the three case studies, is based on a deep sense of responsibility toward the built environment and a significant technical expertise that permits them to focus on the constructive qualities of the existing building stock. Their architecture departs from the prevailing paradigm of production, consumption, and disposal and instead embraces principles of care, repair, and adaptation to contemporary needs (Fig. 7). It can be argued

Fig. 7- In BAST's architecture, actions of care and repair allow the use value of buildings to be fully exploited. Care and repair are therefore not conventionally represented as a cycle on a two-dimensional plane, but gain development in the third dimension, that of use-value (Drawing by the author).

BAST's architecture invites us to rethink comfort beyond its physical dimensions, including immaterial aspects shaped by cultural constructs and personal habits, through interventions that reveal their "constructive honesty" (as in the New Brutalism theorised by Banham, 1966).

that BAST's practice is essentially a convivial act, as it can generate a wealth of use-values, emphasizing the materiality and the physical and environmental characteristics of existing buildings. Thus, through simple and low-cost interventions, BAST puts into practice that convivial austerity capable of overcoming the crisis of use-values that Illich envisioned more than fifty years ago. BAST's approach also aligns with Illich's theories about the thresholds (Illich, 1992). They are redefined as shared, transitional spaces that strengthen the bond between individuals, their dwellings, and the surrounding environment. Indeed, in their projects large sliding or folding glass panels achieve a seamless continuity of indoor and outdoor spaces. Glass is used to create in-between spaces, exploring a different relationship with the context (Spirito, 2015) and, moreover, innovative concepts of thermal comfort. In fact, redefining architectural design as a convivial tool also entails a necessary redefinition of the traditional paradigm of comfort. BAST's architecture invites us to rethink comfort beyond its physical dimensions, including immaterial aspects shaped by cultural constructs and personal habits, through interventions that reveal their "constructive honesty" (as in the New Brutalism theorised by Banham, 1966), stripped of any unnecessary ornamentation. Beyond its aesthetic, this manifestation allows for a clearer understanding of space, technologies, and materials by the inhabitants. This self-evident nature of BAST's design approach directly responds to the need Illich pointed out in 1992: the necessity of knowing the space one inhabits and being able to leave one's own trace within it. So, although we are not speaking of self-built interventions, as Illich referred to, BAST's architecture can channel this professional and technical knowledge to effectively benefit the inhabitants. Finally, their design practice responds to the fragility of the contemporary world by generating substantial use value, transcending consumerism and conventional notions of comfort. Although Ivan Illich passed away in the early 2000s and his theory of Convivial Tools was formulated over fifty years ago, its relevance remains current. While we can only speculate about his views on BAST's architecture, their work embodies several of his core ideas. Their architectural language is inherently convivial, eschewing industrialised production favouring craftsmanship, reuse, and care for the existing built environment.

Conclusion: 3+1 Design strategies to deal with fragility

In a world marked by crises and diffused fragility, architecture can respond with a design approach based on simplicity, to guarantee acts of care, maintenance, reuse and repair. According to Elisabeth Spelman, repairing is not merely a technical act but a deeply human response to brokenness and fragility, more and more worn out by a culture of consumption (Spelman, 2002). Reclaiming repair and reuse of existing building stock, as BAST practice suggests, invites us to consider architecture as a convivial tool, as theorised by Illich, transforming fragility into a creative resource and redefining construction as a continuous and cyclical process rather than a sum of isolated acts.
However, which strategies and methods adopted by BAST can be generalized and transferred in other contexts, and adopted by other practices in order to deal with fragility? The design process of BAST essentially unfolds in three phases, which can serve as a basis for defining three corresponding strategies.
The first phase is that of purging. Removing superfluous elements and exposing the structuring elements of space primarily represent an analytical operation. This analysis makes it possible to understand the material and physical characteristics of the space and, consequently, its technical and morpho-typological potential. It is not an analysis aimed at asserting the historical, cultural, or social value of the artifact, but rather – moving beyond the postmodern idea which, according to Philippe Rahm, imbued objects with immaterial values defined socially and culturally (Rahm, 2023) – the first strategy calls for a thorough analysis of the physical, material, and environmental characteristics of the artifact. The second phase is the conception of a new set of spaces based on the results of the previous analysis and on a careful assessment of the new functional requirements. This "structural approach" is based on the management of environments through the strategic placement of technical elements as well as through the manipulation of the layout and morphology of the building (Banham, 1984). Heavy and punctual structures, such as concrete or steel, are used to redistribute loads in place of continu-

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The physical and material development of space, does not necessarily go hand in hand with the transformation of the social and cultural aspects that define how space is used and how it is perceived. The most evident and banal example of a usage-related issue is air conditioning.

ous partitions, thereby enlarging the space, or light structures, such as timber frame boxes, are employed to create new functional units within larger environments. So, the second strategy aims to reimagine the spaces through their structural elements, modifying their scale, spatial extent, and climatic characteristics to better meet contemporary needs. As seen in the case studies, a new structural conception can also lead to the third design phase: the connection between interior spaces and the external context. The use of glass or semi-transparent materials that allow light and heat through, such as polycarbonate, mounted on fully openable frames, the continuity of flooring between inside and outside, and the creation of covered yet cold spaces and green patios all enable not only the previously mentioned re-articulation of thresholds between communal and intimate spaces but also the creation of areas characterized by different climatic gradients and thus different conditions of thermal comfort. This third strategy is, therefore, increasingly crucial in a world marked by significant environmental fragilities, where the possibility of enjoying a wide range of thermal comfort without the aid of mechanical or energy-intensive systems represents a substantial advantage.

At the same time, this strategy reveals certain critical issues. These stem from the fact that technique, thus the physical and material development of space, does not necessarily go hand in hand with the transformation of the social and cultural aspects that define how space is used and how it is perceived. The most evident and banal example of a usage-related issue is air conditioning. An inhabitant may have access to any number of environments with different physical characteristics and thus different comfort gradients, but may still choose to use only one space, recreating the same range of comfort levels through a mechanical prosthesis – in other words, an air conditioner. Trivial as it may seem, this obstacle illustrates that even before considering the efficiency of a technical solution, one must address the issue of the "concept of service that it sustains" (Shove, 2003: 416). The other critical issue is more subtle and is rooted in the fact that the knowledge and perception of the built heritage is primarily based on social and cultural constructs (Heinich, 2009), regardless of its physical and material qualities. Even aspects such as maintenance and care are influenced by these same constructs and depend precisely on "the cultural category to which a building at any moment is assigned" (Thompson, 2017: 52). Despite the rising pressure of the climate and environmental crisis, it remains difficult – at least in the short term – to imagine a true disruption of this paradigm. This cultural barrier will lead to the loss of several occasions for reuse and creation of use-values that, as seen, depend mostly on the physical characteristics of the existing building stock. Since both issues are essentially cultural, a fourth strategy can be proposed. This strategy should focus on cultural aspects, both within and beyond the professional field, and aim to raise public awareness around the reuse, care, maintenance, and repair of the existing built stock as a response to the fragility of the contemporary world. Some steps in this direction have already been taken, such as the "House Europe!" initiative, which seeks to streamline European regulations to enable a renovation and transformation of the building stock that is easier and affordable, thereby avoiding demolition whenever possible. Many more steps will need to be taken, but the growing research on this topic (Graziano, Trogal, 2019) offers grounds for cautious optimism.

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The practice of BAST has been presented as an example of a contemporary international architectural culture that seems increasingly aware of the fragilities and the potential of a new way of practicing architecture in direct interaction with the existing building stock. At least as far as certain practices are concerned, such as Lacaton & Vassal or BRUTHER, as well as GAFPA in Belgium, harquitectes in Spain, or, moving beyond the European context, several young Japanese practices analysed in a recent exhibition at the Swiss Architecture Museum (Shinohara, Ruby, 2022). These practices advocate for an architecture that, according to Philippe Rahm, is more neutral in its meanings, more economical, and more directly responsive to the climatic realities of buildings and the city. Today, Illich theories and BAST's post-comfort, frugal, and convivial approach represent an innovative response and a holistic and sustainable vision of contemporary architecture that is emerging as a vital strategy for navigating the crises and fragilities of our time.

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