

# Stepping Back to Make Progress

Jeannette Kuo

**SLEEP IN AN  
ICE CUBE  
ON HOT NIGHTS!**



**New low-priced Fedders  
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Comfort as culture and habit started with ads like Fedder's "Sleep in an ice cube on hot nights", from 1951

Progress, for much of the past century, has been associated with technology and its promises as a panacea for the control of our environments. Technological progress through mechanization and digitization have allowed us not only unprecedented means and speeds of production, it has enabled us to temper previously inhospitable environments at financially affordable rates. These advancements were by and large necessary, bringing significant improvements to our way of life on many fronts, not least of which was the increase in human comfort. On social ends, it has also brought about monumental improvements, introducing leisure and relaxation as a condition of everyday life no longer just for the upper class or royalty. However, typical of the perfectionist ambitions of the technological revolutions, the taming of the environment became so totalizing that it brought along unintended consequences, the most significant of which may be the radical shift in our habits and the expectations we've developed towards the role of a building.

Comfort in buildings, since the introduction and widespread adoption of mechanical systems, has been associated with the control of our environments to ensure the „perfect“ interior climate. Buildings became a

means for us to escape and insulate ourselves against the hostilities of the exterior context. Whatever happens outside, we would be endlessly blessed with a constant and ideal comfort of 22°C. In the USA and in Asia, this ideal temperature sinks even lower. This control of the interiors was further heightened in the early 2000s as subsequent calls for sustainability became equivalent with the regulation of energy-consumption, not by removing the machines but by piling on automated technologies, and thereby adding to the mechanization with yet more mechanization. In the distrust of human nature, we have relinquished control of our environments to machines, so much so that we cannot even manually open a window for a breath of fresh air, lest we forget to close it. The faith in machines to address energy-loss in buildings has however led to cumbersome systems that not only continue to consume energy but that prove difficult to run and maintain, and in the end enslave the buildings to the very energy systems from which we seek to escape.

Financially, it is equally difficult to justify. The up-front and operational costs take on significant percentages of the construction costs, and increasingly so. But an even greater side-effect of such approaches has been the encouragement of a certain lethargy. They have on

one hand absolved the buildings' inhabitants from participation in the responsible management of the conditions and on the other hand in an intolerance for any deviation from the idealized comfort. Mechanization has made us all spoiled brats.

At the same time, the well-intentioned certification systems that hold designers accountable for the sustainability of a project became more and more a straitjacket to a bureaucratic checklist of objectives that leave little room for creativity. In Switzerland, the ever-thickening build-up of façade sections since the 1990s, coupled with the ubiquitous use of automated exterior metal shutters and the prohibition of manually-operated windows, has led not only to an increasingly hermetic interiorization of built spaces but also to a prescribed aesthetic that seems almost unavoidable for buildings seeking a certain standard of ecological certification. While a system of accountability is by all means necessary to ensure certain goals and objectives are upheld, the insistence on progress as linear and one-directional may prevent us from seeing the bigger picture.

While the establishment of standards has at the base of it the right intentions, we do need to question the consequences they may have brought about, including the possibility that these standards may have hindered progress. Sustainability standards were largely introduced in the late 1990s – LEED in the US and Minergie in Switzerland were both established in 1998. This was a time when such guidelines were used to set the high bar for emblematic and pioneering projects. They were a way to shine the spotlight on innovative projects as an example for future practice. Yet as these standards have become adopted into everyday practice we should re-evaluate not only their goals but also the motivations of those who seek the certification. In Switzerland, Minergie has become the normative expected by most public clients. Most school buildings, public administration, and even housing have been built according to Minergie

standards to such a degree that it is rare these days to come upon a project that does not in some way reference it. They have become, so to speak, standard practice.

You might wonder why this would ever be a hindrance to progress since we have indeed collectively raised the bar. However, the equation is not so simple. Design is always a weighing of priorities and with a public client who might have more modest means this weighing of priorities carries with it more existential bearing. By becoming standard practice, these construction standards are no longer an aspiration of working to find the best possible solution that may push the boundaries of current practice but rather a checklist of items required to absolve any further responsibility on the matter.

At the same time, the certainty by which such standards define particular performance criteria and the widespread acceptance of the particular solutions ends up producing a culture of automatism. It seems that by achieving the certification and checking off the requirements, we've done our share in regards to the ecological question. It's no longer about elevating the field but about achieving the norm. As with most regulatory measures, the market always tips in favor of the lowest common denominator – the solution that is simultaneously the most cost effective and most pragmatic – resulting in an industry standard that may be less than innovative.

The most visible consequences are in what I would call the contemporary Swiss façade – not the exceptions that are lauded on the international stage like projects of Olgiati, Kerez, or Herzog de Meuron, but rather the facades that enshroud the other 90% of buildings built since the late 1990s. This Swiss façade is more often than not a compact façade (exterior insulation and stucco finish), roughly 40cm in depth, with punched openings that are then dutifully regulated by motorized louvered metal sun-shading.

Another consequence is the widespread use of mechanization, from heating and cooling systems to the operation of windows, as mentioned earlier. These types of blanket responses have incited quite some backlash from design architects who don't want to be defined by the norms. So rather than promoting sustainability as an integral and inalienable part of design culture, these standards have instead produced a schism between design and sustainability goals.

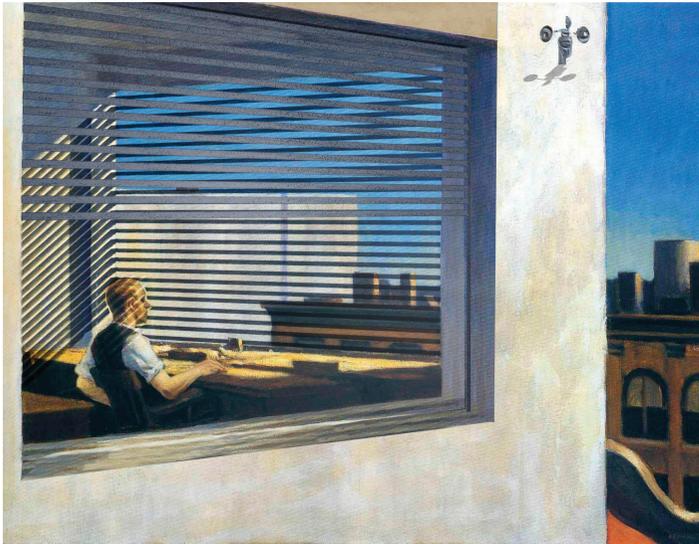
If questioned objectively, most if not all architects in Switzerland would agree that responding to ecological issues in the building industry is critical – even urgent—today. However very few would probably be excited by the idea of working with the standards. Fewer still have managed to push through these regulatory measures to achieve true innovations on the end of sustainability. And yet given the extremely high level of design culture (Baukultur) and given the prolific construction in the country during the last decade, the relative lack of experimentation for matters of sustainability gives pause for thought.

Let's go back for a moment to the issue of weighing priorities in the design process. True innovation and experimentation often entail a certain cost (either financial or performative) which, if not offset somewhere else, may prove unfeasible to a budget-strapped client. The hardline approach that most regulatory oversight takes (zero-tolerance for deviation) means that the evaluation becomes a very black and white checklist with all deviation treated equally. While in theory it's true that the point system of standards like Minergie allows some degree of flexibility, in practice the risk-aversion of most clients who are laymen leads invariably to a general distrust of everything not proven or recommended by the norm. However design is fundamentally the negotiation of relative conditions. Standards are often written as average ideals, not for the idiosyncrasies of projects whose overlapping complexities often produce contra-

dictions that cannot be resolved without some form of compromise. But if a slight deviation on a set of criteria achieves much greater innovation elsewhere should conformity to the standard still be enforced? And this is just considering the quantitatively measurable criteria. What about the qualitative criteria that cannot be accurately measured but that we know contribute not only to the overall well-being of users but also to a greater quality of life? I'm speaking of course of architectural qualities such as spatial atmosphere or tectonic expression. Where does our reliance on quantifiable data begin to weaken design?

If public clients with high-exposure projects are to set the example for the future, how can they promote ambitions beyond the mere satisfaction of the norm? In a context like Switzerland where the base standards are already quite high and the impulse for conformity already strong, perhaps it is possible, despite the cultural aversion to risk, to promote more experimentation by rethinking our means for evaluating accountability. Can we break free from the bureaucratic checklist mentality to find a system that rewards innovation and promotes progress? Can we restore trust in the individual or at least rebuild a culture of the active user, tuned-in and responsive to their built space?

Jeannette Kuo is co-founding partner of Zurich-based Karamuk Kuo Architects and Assistant Professor-in-Practice of Architecture at Harvard Graduate School of Design. Her research and work focus on the intersection of structures, space, and culture and include two publications on the workspace: *A-Typical Plan* (2013) and *Space of Production* (2015). Recently completed projects include the Weiden Secondary School in Rapperswil-Jona and the International Sports Sciences Institute in Lausanne.



Jeannette Kuo, "Armored Office in a Small City" or, Edward Hopper's Office in A Small City Meets Regulations, 2019