ARUPtocracy and the Myth of a Sustainable Future

Mark Jarzombek

Mark Jarzombek is a Professor of the History and Theory of Architecture at MIT and is also the Associate Dean of the School of Architecture and Planning. He has taught at MIT since 1995, and has worked on a range of historical topics from the Renaissance to the modern; his most recent book was entitled Global History of Architecture, co-authored with Vikram Prakash and Frances Ching.

In April 2010, Peter Head of ARUP came to MIT and gave a lecture in which he showed this equation:

\[
\begin{align*}
(CO_2 - 80\%) \\
+ \\
1.44 \text{ GHA/Capita} \\
\text{Ecological Footprint} \\
+ \\
\text{Human Development Index Increase}
\end{align*}
\]

\[= 2050: \text{The Ecological Age}\]

I am not sure I understand everything about this equation. But I do understand the equal sign, and it is at this point that I will aim my critique. The equal sign intends to prove that the equation not only 'will' work out, but that it has 'already been' worked out. ARUP has [so one can presume] placed the weight of its considerable reputation on this. The equal sign is an expression of the ideology of certainty. 1.44 GHA does not = 1.43 GHA. As to what is right and left of the equals sign, this can be translated into another equation that I think conforms better to the actual goals of ARUP. Technology + Control = Nature. In other words, what ARUP aims for is a combination of technology and control systems that work in accordance with the lives and needs of human society. It is a laudable ambition. But should we leave it at that?

I am not suggesting that ARUP engineers think that nature is something dialectically different from culture; they know that the nature they produce is just natural enough [for most people at least] that it cannot be mistaken for the artifice that it is. The result, of course, is that the natural has been evacuated of its naturalness. Everything, even nature, is not-nature. Architects, naturally, will continue to ornament their drawings with green grass and trees and with the romantic image of a happy and contented nature. But we all know that this is all so much smoke and mirrors, for our globe is basically an enormous vivarium. But unlike the vivarium of old where we humans see—and construct—the difference between nature and its artifice [unlike the animals in the vivarium who presumably are unaware of this difference], we are all now living in the vivarium and constructing its habitat at the same time. The controls and the dials are no longer outside the vivarium, but inside and part of our daily human existence. Every machine we operate, in fact, almost everything we purchase, changes the dial. And yet we want to live as if we were in the vivarium of old, with someone else taking care of things. We want to live like the fish, snakes and birds who can live an entire life without [ostensibly at least] realizing they are in an artificial landscape.

We should not be too shocked that the nature around us is an illusion constructed in tight alliance with the world of pipes, ducts and valves. But we should not just assume that this is a death of the natural world. ARUP's equation produces two natures. The first is nature as image and the second is Nature with a capital N. The equal sign gives us entree into this latter form of nature, a Nature that is rendered transparent and at the same time comprehensible in the abstractions of science. The equal sign is an indication that the new vivarium culture can actually work, that we can live in the enclosure of the globe and also manipulate...
The ARUPTOPIA

ARUPTocracy

Engineers

Happy upper class in gated "eco-cities"

Happy middle class taking trams to work
(and leading 'simple lives')

Happy poor with their "slum upgrades"

its inputs and outputs. ARUP’s equation is the governing principle of the new globe/vivarium.

The idea that Nature is not 'out there,' but that it is identical to science is, of course, an extension of Enlightenment techniques of observation, calculation and prediction. The Enlightenment rendered matter as 'dead' so that it could be enlivened by the equations that govern the world from their magisterial heights. But it is one thing to describe Nature through an equation and another to fiddle with the equation in our globe/vivarium so that it works out to our convenience. Heat has to be released and recaptured, CO₂ will have to be measured and contained, bought and sold. Methane will have to be curbed and natural resources managed. According to ARUP, by implication, we cannot trust politicians to do all of this. What we need is a special brand of trained technicians and managers who supposedly have nothing to do with politics. If Aristotle wanted us to be ruled by an aristocracy, ARUP wants us to be ruled by an ARUPTocracy, which would reign supreme in the Ecological Age.

In discussing ARUP in this way I am trying to separate ARUP's ideology of management pragmatism from its philosophical position. We are often so infatuated by the former that we do not see the latter. ARUP claims the supra-legitimacy of a disinterested science over the distrusted human institutions of governance and as such represents a form of disengagement for the more prosaic world of humans. It is modernism’s (and modernization’s) last great gasp.

But the equation promises what it cannot deliver. The equal sign is a fiction, an expression of a utopian projection of a unified nature. This means that ARUP’s approach to Sustainability is to architecture what intelligent design is to the discussion of evolution. It is an extension of the false hope that there is a god in the system or, in this case, that there is a big equation in the sky. It is not a real equation, of course, but a make-believe, a pseudo-science made by scientists who are then oddly surprised that no one believes what they have to say anymore. So why are we amazed that climate-change-deniars are so pervasive when our leading intellectuals play around with the equal sign?

The result is an architectural discourse about Sustainability—from a cultural and theoretical point of view—that is tottering on irrelevancy. The reason we want Nature [and the illusions of 'science'] to exist is so that there is a fixed point on which to leverage design and policy, but that Archimedean point—and the utopian project of modernity on which it is founded—does not exist and to hold on to the illusion is absurd. Just as religion is the opium of the masses, Sustainability is now the opium of architects and technocrats.

So let me be clear. We live in an unsustainable world and we will 'always' live in an unsustainable world. This means that we should build and theorize accordingly. The first theoretical act is to clear the air, get rid of the word Sustainability and learn to speak honestly about what it means to design in an unsustainable world.