

Quality versus Economy, or How to Squeeze Junk into a Shape and Make it Look Good Wilfried Wang

The steady erosion of the material base of architectural design and construction has been principally caused by economic considerations. As a result, the very moral, intellectual and substantive foundations of architecture have been eroded. This demise parallels developments in other fields of human culture. The cumulative effect of this erosion is the "construction" of thin layers of fiction that consolidate states of false consciousness. Over centuries, architecture has both been coopted and allowed itself to become the servant of collective fictions. With climate change, the next layer of fiction to be superimposed on this cultural veneer is that of "nature".

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PALABRAS CLAVE Arquitectura, economía, material, cambio climático, formas

There is a moment in the career of most idealistic architects when they experience a sobering truth: the buildings that they had fallen in love with as images, in reality turn out to be anything as substantive, well-built and long lasting as they had either been led to believe by their teachers or that they had thought themselves. Mendelsohn's Einstein Tower, Le Corbusier's Villa Savoye, Gehry's Guggenheim Museum, Cook and Fournier's Kunsthaus or Eisenman's Ciudad da Cultura lack the conceptual and material integrity that naïve young architects project onto them.

However, these examples of modern architecture are not the sole cases in which there is a disappointing disparity between the building's constitution and representation, between the intellectual ambi-

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Fig. 01 Outside the Fondation Louis Vuitton, Paris 2006-2014, Architecture by Frank O. Gehry, photograph by the author, 2019. tion and the hard work of making the conceptual and substantive aspects of architectural design coherent. In fact, most buildings these days lack any kind of ambition as far as the relationship between the design concept and the physical realization is concerned. Today, most buildings are quantitative translations of clients' financial needs, somehow ending up as a bricolage of cheap materials tacked together by semi-skilled labourers and lasting for just a little longer than the warranty period. For some time now, most buildings are in fact inhabited waste sites of skilfully arranged semi-toxic materials, merely awaiting their *coup de grâce* before their constitutive parts are permanently heaped on the other detritus of modern civilization, in the landfill, whose evil contents are negligently allowed to coagulate into the only working example of the otherwise mythical neoliberal trickle-down effect.

Thanks to the dominance of capitalist logic, certainly in architecture, but not exclusive to it, economic criteria have been allowed to outweigh qualitative criteria. Gone are commodity (in the sustainable sense), firmness and delight. The eclipse of materiality as a qualitative criterion in architecture, or so far as it is still possible to speak about materials in connection with the construction industry, has been all but complete. The profession has presided over this eclipse of value systems over the past centuries with nonchalance.

Related to the disappearance of materials as the physical basis of architecture has been the elimination of the logic of detailing. The assembly of elements is now unrelated to the nature of what is being assembled. The Greek notion of the skilled assembly of objects, $T\dot{\epsilon}\chi V\eta$, has been superseded by an accretion of layers, each satisfying certain performative needs. The Greek syntax that spun a tectonic narrative from materials, constructive components to a fully embodied concept, complete with its compositional logic, has been irrelevant for centuries. Anything and everything is possible nowadays; any constructional matter can be brought together in combination with any other components to create any shape.

In fact, architecture's principal goal today is to squeeze junk into a shape and to make it look good as an *image*. The increased specialization in the forms of knowledge, the continued division of labour, the accelerated digitization of production processes and the resultant explosion in the range of products together with the spatial and temporal separation of assembly methods have, in the final analysis, merely reinforced the ancient practice of sausage making.

Sausages –or the Latin version *salsica* from *salsicus*, seasoned with salt– were the result of stuffing animal gut with the choppedup left-overs following the complete dismemberment of animals such as pigs, cows or sheep. The sausage as an end-product was the brilliant invention of Mesopotamian butchers sometime between 3100 to 800 B.C¹. Since then, every society has enjoyed the efficient consumption of even some of the less salubrious parts of animals; parts with which most people would neither ordinarily come into direct contact nor would they wish to witness these prior to their processing. *Parts Unknown*², or, to some, ignorance is bliss. Blissful ignorance forms the basis of trust that consumers place in the sausage as a product type, given that few consumers really know what it contains.

So, what is inside any other modern product? Can we trust the content description on the package? The review of the range of "pro-

duce" in grocery stores or supermarkets will serve as an analogy for the range of products available in the building industry. In supermarkets one can distinguish three categories of goods: firstly, "unprocessed"³ foods such as fruit, vegetables and eggs; secondly, semi-processed foods such as raw fish and meat; and thirdly, all other processed items from milk products to canned and frozen foods. The price range, particularly across the latter category, is wide, from a few cents for a candy bar to triple digits for luxurious alcoholic beverages. The price should be taken as a warning sign: caveat emptor. Buyer beware that a cheap product is highly likely to contain a range of synthetic compounds such as antioxidants, colourants, emulsifiers, enzymes, high-intensity sweeteners and modified starches (such as high fructose corn syrup), nature-identical artificial flavours, substance thickeners, stabilizers and preservatives. Thus, in a candy bar4, we find that it is a sweet version of the sausage, and recursively, natureidentical artificial flavours equally follow the sausage-like composition of chemical agents that simulate the molecular structure of natural aromas but are largely derived from products of the chemical industry. A cheap



Fig. 02 Inside the Fondation Louis Vuitton, photograph by the author, 2019. candy bar owes its existence to the combinatorial gifts of the agro-pharmacological, chemical and oil refining industries.

The symbiotic relation between these industries has been shown to be a powerful factor behind contemporary civilization's health epidemics such as cancer, obesity, diabetes and coronary diseases⁵. The small print on the back of a candy bar package tells the buyer something, but far from the whole story. Media reports point to the effects of fast-food diets⁶, however, the development of health statistics across the world does not show that these widespread warnings are being taken seriously, especially by those worst affected. Today, a large share of the regular diet of poor people consists of unhealthy products, sold under the guise of sausage-style alchemy with the in-built need for deferred "health" treatment.

The logic of sausage-style alchemy has pervaded every field of human endeavour, however, the principle of infilling representative skins with material of a lesser quality may have been developed by Phoenician masons as early as during the 10th century BC⁷. Two layers of finely dressed ashlar walls were constructed and filled with rubble and mud, an assembly that Ancient Greeks later called $\tilde{\epsilon}\mu\Pi\lambda\epsilon\kappa\tau$ OV (emplecton)⁸. The Phoenicians' wall system is one of the earliest instances in the division of labour in architectural representation: the more expensive external layer was reduced to a minimum thickness, enough to bear its own weight before the cavity was filled with cheap rubble. As long as this outer layer still followed the constructional logic of masonry, there continued to be a link between the chosen material and the constructional-compositional syntax: one saw how a wall was built, at least its outer skin.

So, while contemporary composite cladding materials follow the same Phoenician principle in the division of labour in architectural representation, today there no longer is any relation between what one sees, what it is beyond its surface and how that it is held in its position. Many architects consider this to be of an advantage, as this division of labour in architectural representation liberates them from strict constructional disciplines, hence there no longer are any limitations on the use of any surface materials and on any shapes.

Contemporary cladding materials are part of a constructional logic that inevitably serves the advancement of capitalist goals: the cladding materials and systems are for ever thinner and lighter so as to ease and accelerate the assembly on site. This strife will last as long as the capitalist value systems and goals remain preeminent and quality will be relegated by economy to an ornamental role.

While being light, the stiffening and insulating material between the visible skins has to meet certain performance criteria, for example, rigidity, thermal capacity or fire-resistance⁹. Typically, in-fill substances in cladding systems come from the chemical industry, for example, polyurethane, a substance that is chiefly processed from crude oil. As in the agro-pharmaceutical industry, without the involvement of the chemical industries, infill material would still originate from more direct, natural sources. Indeed, without the chemical and oil refining industries, many natural resources could not be substituted at such low costs with such convincing sensory effects.

In the teaching of modernist architecture (as opposed to modern architecture)¹⁰, the belief that the emergence of new materials and construction processes or systems would lead to new forms of expression persists to this day. It is a belief that is in itself a form of superficial wishful thinking, however, lacking the substantiation by new materials and construction processes. In his essay on "building" of 1928, Hannes Meyer cites thirty "new building materials for the new way of building houses". Only five of these thirty materials were in fact developed in the early 20th century"; the others are of an earlier origin. Significantly, four of the five new materials are amorphic and therefore not subject to any compositional logic. Meyer does not explain how the use of amorphic materials would lead to "pure construction" as "the basis and characteristic of the new world of forms"¹⁰. Modernist architecture has failed to substantiate a language out of contemporaneous constructional materials and there is equally no prospect for any other "new" materials or technologies such as nanoparticles or such like, would lay the grounds for a new architectural style.

Looking at the history of building construction, there have been compositional principles and periods that brought forth forms and spaces based on the use and assembly of materials subject to minimal processing: the Inuit igloo; the Caribbean hut; houses made of stones, logs or adobe; churches or even cathedrals made of stone or brick. The limited availability of resources, including energy, and the relative abundance of labour led to the cultivation of processing skills in preparation of raw materials for buildings. Working on simple materials such as stone and timber required knowledge and experience: real materials demand respect, and it was craftsmen who were stewards of such respectful treatment of matter.

With the principle of the emplecton taken to its contemporary extreme, in other words, with the separation of the representative skin from an inner substance, where neither have material specificity, traditional crafts have been replaced by business management with its priority on smooth, non-litigious contractual transactions. Today, architecture, like all the other modes of cultural expression, primarily satisfies the imagination, the fantasies and whims of clients, whose multiple sources for the external appearances of their commissioned objects originate from previous centuries, today conveniently and rapidly photo-shopped as "serving suggestions" and subsequently processed by computers into BIM-compatible contractual documents. This is how villas in suburbia, office buildings in central business districts, golf clubs and vacation centres, university campuses and entire airports become part of the expression of an assumed, but unsubstantiated and insubstantive reality. Scratch the surface of the cladding material that covers any one of these buildings, cut the sausage skin, and out pour those substances that you would rather not want to know about -Parts Unknown- but which support the clients' chosen, self-reflexive fictional reality. In the northern hemisphere, this auto-fictional reality patronizingly permits the intrusion of human versions of skin-supporting substances, in fact exploited illegals whose menially paid service enables this reality to exist.

The Phoenicians' invention of the rubble-filled doubleskin wall occurred before the definition of the ancient world's seven deadly sins. The psychological forces that to this day cause the separation of appearance from being, that bring about the dematerialization of construction, can be analysed according to four of the seven deadly sins: pride and vainglory as the instigators in collusion with greed and sloth. Pride and vainglory compels clients to want their buildings to look like

Fig. 03

"m&m, Kit Kat, Twix, Hershey's, Snickers, mr. Goodbar, Butterfinger, Payday, Milky Way, Oreo, Mamba, Airheads ...", photograph by the author, 2019.

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something more than the budget allows; greed and sloth lead clients and architects to choose both components of a lesser quality and short cuts in the proper processing and assembly of these components. The result is pimped up *Ersatz*.

Whereas in ancient Greek temples a longer lasting and more expensive material simulated a cheaper form of construction marble for wood, ever since then, with a few exceptions, cheaper materials with shorter life spans have been used to stand in for more valuable looking materials. With the age of crude oil permeating all areas of civilization, we have reached polystyrene with a lick of chemical paint as the lowest common materials to substitute and simulate all other materials. Properly sealed and deceptively painted, it blends perfectly on the inside and outside of buildings without anyone noticing that it is in fact not a hardwood profile or a masonry column. As in the world of cosmetics, plastic surgery, fashion and car design, today's construction industry has its creams and powders, its own type of botox and lipoinjection, its corsets and shoulder pads, its styling tools and "streamlined bodywork". The principle of the sausage, of cladding and infill, of the emplecton, this fundamental act of pretension has not stopped at the level of constructional materials or assembly details; it extends to all spaces and forms, to entire built simulacra. Thus, taken together, contemporary culture is one giant veneer hiding unspeakable junk. This expansive "house of veneered cards" only resists collapse thanks to individual and collective makebelieve. Each one of us follows a combination of cultivated desires and self-hypnotizing fictions.

Civilization has striven for autonomy in all fields of existence. The construction of a veneered reality independent of real materials and their demands has been part of this process of autonomization. It is an irreversible process. As climate change unleashes its full impact on this process of autonomization, we will increasingly see another ornamental layer applied to this general veneer: stylized images of cows meandering freely on grasslands giving their milk directly into the aluminum or polyethylene lined drinks cartons. Yes, we want to be told fictions that we can all believe in. This ornamental layer will not be confined to the packaging of products or to the images in advertising strategies; it will also extend beyond the green-washing of buildings. It will be yet another attempt at requiting our anxious desires with our self-hypnotizing fictions. "Nature", at least what we think it still is, will serve as the big reference. It will be the larger version of what the agro-pharmaceutical industry has been adding to the food products that many of us have been enjoying so much: nature-identical synthetic images to represented nature-identical synthetic aromas.

It will not be possible to recover a ground zero of material culture as every aspect of our lives has been invaded, pervaded and perverted by the practice of sausage making. The Phoenician emplecton, the principle of the division of culture into a decorative skin and a servile infill, cannot be deprogrammed from people's minds. "Architecture", or what remains of it, will continue to be the art of how to squeeze junk into a shape and make it look good. "Quality" will continue to execute the orders from the economy. **RA**

Notes

10. Modern architecture extends beyond the orthodox paradigms from the Bauhaus to the International Style.

11. Synthetic rubber, foam (aerated) or cellular concrete (same production principle, but listed twice by Meyer), synthetic resin, synthetic wood and viscose.

12. Hannes Meyer, "building", English transl. in *Hannes Meyer: Buildings, projects and writings*, Claude Schnaidt, Verlag Arthur Niggli, Teufen, 1965, 95-97.

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01. https://en.wikipedia.org/wiki/Sausage

02. In the spirit of cross-cultural enlightenment, Anthony Bourdain was a pioneer in demystifying mostly Anglo-Saxon-Western apprehensions and prejudices towards "unknown" food cultures of the greater rest of the globe.

03. Strictly speaking, one would have to include the spraying of pesticides, the waxing of citrus fruit or the radiation of vegetables as processes. However, for the sake of this essay, let us take the formal integrity of an object as the criterion for this simple classification.

04. Amongst of the origins of mouth-sized sweets were the so-called "pralines", invented according to Josef Loderbauer, by the cook of César de Choiseul, 1er duc de Choiseul, comte d'Hostel, comte du Plessi-Praslin, vicomte de Saint-Jean (1598-1675), Das Konditorbuch in Lernfeldern, Verlag Handwerk und Technik, Hamburg 2009. Amongst the earliest English candy bars were those by Joseph Fry and his son around 1847, and the chocolate bar by John Cadbury in 1849; fruits of colonialization and industrialization. One of the most popular chocolate bars – the Mars bar – contains 59.9% sugar.

05. https://www.commondreams.org/ views/2017/07/24/how-food-and-drugcompanies-ensure-we-get-sick-and-theymake-money and numerous other reports.

06. SCHLOSSER, Eric, *Fast Food Nation: The Dark Side of the All-American Meal*, Houghton Mifflin, New York, 2001.

07. SHARON, Ilan, "Phoenician and Greek Ashlar Construction Techniques at Tel Dor, Israel", *Bulletin of the American Schools of Oriental Research*, n. 267, 1987, 21–42. Sharon states that the ashlar and rubble wall construction was used as early as the 10th century BC.

08. Ancient Romans called these wall construction types opus caementicium and opus incertum.

09. While a required performative quality especially for large buildings, the cladding components at the Grenfell Tower in London lacked this with tragic consequences. Today, not only in Britain, there are still many high rises that are clad with dangerous systems. **RA 22**