I saw that there is no Nature,

That Nature doesn't exist,

That there are hills, valleys and plains,

That there are trees, flowers and grass,

That there are rivers and stones,

But that there is no whole to which all this belongs,

That a true and real ensemble

Is a disease of our own ideas.

— *Alberto Caeiro*

### One: How holding fixed values no longer works with global pratice

*Visitors.* Teachers in architecture schools take students out to observe everyday environments. Environments are read to extract meaning from them, which is expected to guide intervention sympathetic to what is already there. Inevitably, this act assumes we are visitors, coming in to acquaint ourselves with something unfamiliar. Even when we take students to an environment they already know, we do so to help them see it afresh. While the purpose is to penetrate and understand, the act itself implies detachment. We are divorced from the natural affinity that renders intervention self-evident and is the source of true vernacular.

This divorce comes with the professional condition. We expect to work in places we have never been before, and to judge work from places we have not visited. We belong to a network organization, which is itself part of a broader and thoroughly networked culture. The knowledge and skills we share are applied all over the world. With them go our preferences in lifestyle and taste. Those sensitive to the dilemma our condition brings turn to reading environment as a means to connect.

*Network institutions and local architectures.* As a network profession we serve network institutions as much as local forces. The relation between architecture and network institutions is far from straightforward.

In history, for instance, commerce and religion formed network organizations but did not necessarily bring their own architecture. Storehouses, hostels and roads were most easily produced by local builders for local money following local style. When commerce bore arms however, the network brought its own architecture, which was distinct from local vernacular and often influenced it. Warehouses and bastions of the crusaders are still standing in Acre and those of the seventeenth-century Dutch trading companies can still be found as far as Taiwan, South America and Ceylon.

While Islam's practice and teaching were uniform to all subjects, the architecture was not. Think only of the Indonesian, tin-roofed barn mosques, the mudbrick, castle-like structures in mid-Africa, the monumental gates of Samarkand's courtyard mosques or Sinan's domed spaces.

Within the larger Christian realm, the Roman Catholic Church was a networking institution if there ever were one. It had to be because, without territorial power of its own, it needed to maintain its hierarchic organization across a politically fragmented Western world. It imposed doctrine but not an architecture. The Gothic cathedral has little in common with the Italian basilica and, for that matter, Bernini's exuberance is not Bohemian baroque.

*Art and technology traveling.* When power and lifestyle combine, art and architecture travel with them. Roman political and military dominance brought extended roadway infrastructure and codified town building to far-flung cultures, demonstrating an entire way of life including its architectural and artistic taste. Tying into the empire's network, local elite often preferred Greco-Roman styles when building and decorating their houses.

Classicism, from Palladio on, spanned a politically and territorially diverse world. It was a true network architecture, producing similar appearances wherever applied in whatever materials available, including eighteenth-century Neoclassicism, then continuing into the nineteenth. Thanks to printing, architecture could now be known without actually visiting a site; it was passed on to the far corners of a Western European culture by a steady stream of pattern books. But it was part of a broader network culture maintained by

an international elite that shared an education in Latin and Greek and a view of history, and which wielded economic and political clout. Architects were part of this network, as were scholars and lawyers, but nobility, commerce and politics were at the center.

Amsterdam's seventeenth-century town hall, designed by Jacob van Campen in the classicist Baroque manner, is a case in point. Compared to his competitors, van Campen was not only more talented but also better educated and better traveled. Selected by a council formed by members of the city's most powerful trader families, his design fits in an international culture. The town hall was placed in the middle of an urban fabric with which it had little in common. The same town council that commissioned the building extended this centuries-old fabric, with three monumental concentric canals without altering its basic properties. Today, the town hall still stands as a masterpiece; the fabric still is a marvel of urban culture. One is a network product, the other is rooted in local typology.

*Professionalism takes off.* With Modernism we see professionalism acquire power. Not only engineers and architects, but also lawyers, administrators, medical doctors and educators came into positions of influence and dreamed of a world that could be remade by imposing their ideals. The International Style reflected the aspirations of that professional culture as much as did global accounting principles, medical practice, science and agricultural methods.

The neat distinction between the monumental building and everyday urban fabric was still possible in seventeenth-century Amsterdam but soon faded. Buildings spawned by network institutions came to serve everyday life: schools, hospitals, hotels, airports, railroad stations, office buildings and convention centers represented not only new functions (often supported by network organizations of their own), but also a more general professional culture.

Designers struggling to define new typologies for new functions applied what they invented globally. Their ambition to reinvent the world was not limited to the single building. Urban fabric too became a global product. Modernist mass housing, developed by a confident bureaucratic and technocratic class, proliferated independently of political or economic context. Communist and capitalist governments, in rich as well as poor countries, relied on the counsel of their experts who brought them the same solutions under the banner of progress, often sharing with them the ambition to shape a new world.

*Retreat.* The Postmodern generation took the network nature of the profession for granted, but the search for a collective signature was abandoned. A desire for self-expression and artistic autonomy replaced the quest for a shining new world. The rejection of the International Style, usually argued on artistic grounds, was also an admission that the world is simply too large and too diverse to be captured by a single convention.

The result for the profession, however, was an increased self-centeredness. Status, no longer measured by the norms of a broader culture, is now an internal affair. We want to be recognized by our peers: they are the network. The site of intervention is primarily context for a job that must earn such recognition.

One would expect that the transition from Palladian internationalism, restricted to a handful of building types executed in a codified style, to a practice dealing with all aspects of the built environment at any place of the globe, would have triggered a thorough and explicit examination of the knowledge, tools and methods needed for the new and so much more ambitious and complex task. It did not. The profession's self-centered attitude perhaps explains the remarkable fact that neither architectural theory nor architectural education so far has asked what the extended claim of operation means for the role of the profession, the tools it applies and the knowledge it needs. Both the Modernist ambition to shape a new world and Postmodernism's fixation with individual expression avoided issues of method and epistemology. Consequently, we still explain ourselves in terms of a threadbare Palladian professional image.

**Two: How in everyday practice architecture will have less and less to do with discreet buildings.**
*Systems, traveling and locally applied.* In contrast to design professionals, who are still wrestling with an exclusive ideology, manufacturers and suppliers are not compelled to condition their involvement as a matter of self image. Materials and utility systems already penetrate into the far corners of the world. In the barriadas, electric wiring, plastic plumbing, corrugated roofing, plywood, cement and steel reinforcement rods are commonly applied. Sophisticated manufacturing, which requires large investments in money and research, feeds informal environments everywhere.

**Environment has an autonomy of its own, meaning that it is too extensive, too complex and too much tied into human existence to be controlled by any one profession or power... Those who study vernacular and historic fabric so far have been operating at the margin, ...but their work can help us escape the professional cage and may well contribute to a general codification of environmental form.**

The affluent parts of the world now enter the next stage: more comprehensive subsystems are emerging. Steel and concrete skeletons are fleshed out to form internally flexible base buildings. They combine with interior fit-out systems, roof systems and facade systems to make a building. These new subsystems not only are technically defined but also perform a particular environmental service. Traditional utility systems like electricity and plumbing as well as security and control systems are broken down to be part of them.

In the building economy, the percentage of value added by system manufacturers has been increasing steadily in the last two decades. Value added by the local contractor is steadily decreasing. Architecture has already become the judicious composition of available hardware systems.

It is now recognized that self-stable subsystems, that is, systems minimally dependent on other systems, speed construction and boost variety and adaptability. "Open building" is now an emerging international network of researchers and systems designers seeking to improve conditions for self-stable systems. Interface must be simplified and codified, hierarchical relations must be better understood. Big as well as small projects will increasingly combine such progressively autonomous subsystems, purposefully designed for adaptation to local preferences of look and feel.

*Disappearance of the building.* Systems travel easily because they do not predetermine type or pattern. Yet, self-stable subsystems eventually will change architecture. Martin Pawley recently pointed out how in the City of London buildings retain their historic facades behind which a new fabric is built, a phenomenon that is heralding "the end of the single building as the basic unit of the urban environment, and the beginning of the rule of general purpose serviced floor space."[1]

Just as facades in historic environments are conserved while the buildings behind them change, in other parts of the world big buildings will receive new facades as well as new interior fit-outs while their base structure remains. Over time, thanks to the practice of independently applying subsystems, the building as an integral unit of function and identity will disappear. Parts of the building, like the London facades, may jointly form an infrastructure of urban scale. Other parts, like the fit-out system applied for a specific inhabitant, will be much smaller and more transient than the building's frame.

*The fine-grained large project.* One consequence of this new "open building" hardware is that it will no longer be necessary or advantageous for large projects to be repetitive and similar. The large project will become truly fine-grained, containing smaller, independent acts of inhabitation.

In a traditional neighborhood, a hundred houses may all be variations within a chosen theme, responding to inhabitants' preferences. Already, in upscale apartment building and in most office buildings, individual units of occupancy are similarly varied. The large building becomes a three-dimensional neighborhood, providing a new urban fabric.

This fine-grained approach to the large project will eventually be commonplace. Environmental intervention will no longer be measured by discreet buildings identified by their unified design. We will see large fields of base building to be filled in after completion as inhabitation demands, and cladded with a collage of different facades mediating between inside and outside, public and private. More and more functions that we now think of as requiring a special architecture will be accommodated within the continuum of the large project, their identity no longer expressed by an entire building but a partial facade, an entrance or only an inside public space. The multi-functional building, as it is now called, is merely a transition stage towards a true continuum of three-dimensional fabric, accommodating inhabitation that need not be predetermined.

*The design act dispersed.* The large, fine-grained intervention, produced by partial systemic acts, each with their distinct cycles of renewal and change, spells the end of the Palladian tradition. In everyday practice, architectural design will have less and less to do with discreet buildings.

The large project, so far, reveals the controlling hand of a single designer, and hence shows repetition. But architectural intervention will increasingly coincide with self-stable, systemic levels to serve ongoing inhabitation.

Already, for the majority of very talented designers who leave the world's schools to work in large firms, tasks are inevitably partial. But with the newly emerging systems, the partial act will acquire new autonomy, as design becomes less centrally dominated and more immersed in environmental fabric itself.

Eventually this more sophisticated reality will sink in, and schools may begin to address the needs of the new breed of designers to enable variety within user's preferred conventions. In short, the task of architects will be to help cultivate an environmental fabric.

## Three: How inhabitation takes care of its own
*The majority of the world.* Our network is our cage. We visit the same universities to study, the same hotels and conference halls to meet, the same office buildings to negotiate, the same architect's offices to work. The environments we observe and make pictures of are those designed by co-professionals.

I once remarked, at a seminar on typology among Asian architects in Korea, that the Seoul middle class seemed to have spawned a new residential type: applying traditional elements like the compound wall, the gate and the blue-tiled roof while accommodating the nuclear family with the car, the modern equipped kitchen and air conditioning. "Where could this be seen?" some asked. From a window in our high-rise conference site I pointed to what I had found at a pre-breakfast walk: a compact, low-rise fabric below. "Oh," was the response, "but that's not architecture!"

Precisely.

That present practice lays claim to every possible aspect and function of the environment as worthy of architectural attention does not mean we design all that is built. The amount of new environment untouched by the architectural network far exceeds what is designed by it. From the profession's perspective, it is called "informal" or "vernacular." And it is very prolific. Ranging from the *barriadas* in Latin America and other expanding economies in the world to well-to-do neighborhoods with expensive villas in those same countries, new typologies emerge in response to new circumstances and inhabitants' aspirations.

Do architects operate there? They do. But those who work for the rich feel embarrassed to admit following their preferences. And those working for the poor are ignored and their reports not read. Well informed on what aspires in the professional world, these colleagues, for reasons of their own, help cultivate new environmental species.

(And may well be a role model for coming generations.)

*Autonomous environment.* Environment has an autonomy of its own, meaning that it is too extensive, too complex and too much tied into human existence to be controlled by any one profession or power. This autonomy is manifest in historic fabric as well as in latter-day informal or vernacular environments.

Those who study vernacular and historic fabric so far have been operating at the margin, partly because many of them have turned away from a practice they find destructive, partly because the profession at large cannot see what their research has to do with the new and large projects it covets, partly because other fields, like geography, have engaged in these studies. But their work can help us escape the professional cage and may well contribute to a general codification of environmental form.

In the past, architects often have drawn inspiration from autonomous environment, observing it and transforming it by artistic selection and discipline. But the Modernist tradition rejected the historic and the vernacular as possible sources, and after Le Corbusier the industrial landscape no longer promised a better world.

**Human nature seeks variety within a framework of conventions. A truly global profession must be capable of respecting conventions other than their own and stimulating the variety they imply. This calls for cultivating environmental form, rather than producing or inventing.**

Indeed, the autonomy of the environment is not divorced from professional intervention. No one will claim we are in full control of what we are involved with ourselves. By now, professionally produced environments across the world — urban, suburban, industrial — are subject to such raw and calculated proliferation that they can no longer nourish us. Yet we are drawn into them more and more.

*Repetition.* Sameness and repetition can be observed in most of formal architecture regardless of place and circumstances. It is, after all, the result of implicit assumptions nurtured by the professions — architects, builders and developers — who, for good reasons, prefer proven ways to reduce risk.

Designing, as well, is drawn into this self-protective convergence. The architect's compulsive desire to do things differently from other architects seldom challenges the network's limited typology or its state-of-the-art procedures and technology. Doing so might well prove suicidal. Moreover, architecture, like all human institutions, tends to seek variety within the framework of its own conventions. Hence the architectural canon just underneath the Postmodern, pluralist skin remains surprisingly limited compared to the rich variety of actually present environmental species.

*Cultivation.* Indeed, human nature seeks variety within a framework of conventions. A truly global profession must be capable of respecting conventions other than their own and stimulating the variety they imply. This calls for cultivating environmental form, rather than producing or inventing.

If we must operate everywhere all the time, having undergone the same kind of education, reading the same magazines and visiting the same web sites, what of the knowledge and skills we share among our fellow professionals is generally applicable to nurture the peculiar?

The agriculturist and the botanist may offer useful models. Professionals in these fields seem to have figured out how to marry general knowledge with local cultivation. The former allows them to be effective with the latter. We must likewise be able to compare environmental form effectively and to determine a new species when we see one, to be able to decide what varieties may best perform in what circumstances, to be able to make them bloom.

This requires thorough knowledge of environmental form — its morphology, its mutations, its behavior. This knowledge must utilize general concepts of environmental structure, such as types, patterns, systems and territorial and morphological hierarchy.

*The local and the network.* The world we must study may already be very different from what we think. The distinction between formal and informal, for instance, is one drawn from our peculiar perspective. Reality is less clear cut, partly because society is becoming more informed, partly because ways of building are becoming more sophisticated.

We tend to assume, for instance, that geographic location equates with environmental type. That notion may be outdated. The same networked form may appear in different locales; consider the "California-style" suburbs that are preferred by well-to-do middle class in far corners of the world. Different network institutions may spawn their own architectures (businessmen living in California-style suburbs prefer Hilton-style opulence when they travel.)

Local environment must accommodate buildings that are nodes in worldwide networks, like hotels, banks, convention centers, airports, factories, schools and hospitals. Conglomerates of such nodes raise new questions of environmental coherence. The local is becoming more pluralistic and less homegrown.

On the other hand, network institutions may blend in with local fabric, like they have in the past. One of the most attractive international hotels in Amsterdam is located in a handful of interconnected seventeenth-century canal houses newly fitted out inside. To the chain's advantage, Amsterdam bylaws did not allow it to tear down the old buildings to build their standard type. A preference for local ambiance is often found among vacationers seeking sunshine at the Mediterranean, spawning instant vernacular environments of which Port Grimaux was noted with embarrassment in architectural circles but many others, less architecturally ambitious perhaps, remain unnoticed as is their purpose. Environmental coherence need not be pseudo-vernacular, but these examples show that architecture serving network society, including banks, hotels and sports facilities, will go with what is local if that is found advantageous.

*Network inhabitants.* Inhabitants of the local — and all inhabitation is local — function in networks, too. A single person may constitute a node in more than one active network (religion, hobby, work, relatives). This may not only reduce the time that person actually spends at home, but also divert her attention from local affairs when there (if she is reading books, surfing the web or telecommuting). Does such partial presence in body and mind make for a different environment? The situation was already very familiar to us before the Internet, but in past millennia, a few saints, scholars and warriors excepted, local time was devoted to local affairs.

Moreover, my neighbor and I may find no overlap comparing the networks into which we are locked. We may share neither religion, nor race, nor work, nor hobbies. If sociocultural coherence is low, what does that mean for the environment we share? Must our homes express such differences as true nodes in different networks?

Perhaps, on the contrary, formal coherence may be even more important because environmental preference is what brings us together. Just because we can easily relocate, sharing environmental coherence may be more important than ever. But then again, such coherence does not signify shared experience and need not be rooted in local formal tradition. Our common preference may be for an imported or recently (designer) invented environment.

## Notes

1. Alberto Caeiro, "On an incredibly clear day," in *The Keeper of Sheep*, (translation Richard Zenith).

2. Pawley writes:

"Our growing culture of internal change behind retained facades is doing more, for it is beginning to herald the end of the single building as the basic unit of the urban environment, and the beginning of the rule of general purpose serviced floor space.

"Take the nineteenth-century facades of the derelict banks in London's Old Broad Street, for example. That part of the City will still be present in a hundred years. But behind these same facades there will be no more wooden floors or high clerk's tables, nor even any party walls. Instead there will be glass partitions and levels of office floors with a central atrium, cruising over the old divisions between properties."

See Martin Pawley, "Polemic: The Age of the Serial Identity Building," in *World Architecture* 65 (April, 1998), 26.