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Crinson, Mark (2021) What is Modern Architecture? In: Lu, D. (ed.) Companion to Contemporary Architecture. London, UK: Routledge. ISBN 9781138940178. (In Press)

What is Modern Architecture?

Mark Crinson

In February 1928 the Swiss architect Le Corbusier published a protest against the

decision to award the commission for the Palace of the League of Nations to a group

of academic architects. **(FIG. 1)** While Le Corbusier felt his own design was entitled

to win, the academics' leader, Henri-Paul Nénot, declared that the barbarians had

been defeated (Le Corbusier 1928: 172-3). Le Corbusier's pamphlet, *Appel à l'Élite*

mondiale à l'occasion de la construction du Palais des nations à Genève, was signed

by James Joyce, Ford Madox Ford, André Gide, Marie Curie, Louis Blériot, Gabriele

d'Annunzio, Benedetto Croce, Paul Otlet, Marshal Hubert Lyautey, Igor Stravinsky,

Paul Valéry, and H. G. Wells.[1] These signatories included the established artistic

avant-garde and leading intellectuals, as well as reformers and innovators in medicine,

colonial administration, aviation, and information science. None were architects, and

few engaged with contemporary architecture in any substantial way,[2] yet their names

alone suggest a definition of modern architecture: they summon up the breaking of

natural and national barriers, the pursuit of new forms of cultural expression and the

dispelling of the inauthentic, even the imagining of new worlds of knowledge.[3] Le

Corbusier turned his failure into a rallying cry, a catalytic moment in which the

answer to the question "what is modern architecture?" was made to seem self-

evident.[4]

What and who modern architecture was associated with – "*la bataille 'pour le*

moderne' " Le Corbusier called it[5] – was as important to its definition in the 1920s,

then, as any formulas, theories, and descriptive inventories, and the international element in particular will be emphasized in what follows. The idea of a blockage on *les temps nouveaux* or the evocation of old conflicts between the Ancients and the Moderns,[6] of civilization or barbarism, were useful not just because they identified the enemy but because they marginalised other, dissonant ideas of the modern, and even of architecture itself. This forged consensus, a movement of movements, led directly to the formation of a new body, the Congrès International d'Architecture Moderne (CIAM),[7] and a continuing concern to defend a certain understanding of what modern architecture meant to this broader, no doubt vaguer, but no less significant understanding beyond architectural culture. And the emphasis in CIAM's name should therefore be as much on the "international" as on "architecture" or "modern."

The question "what is modern architecture?" had been asked many times before, of course: in Barcelona in 1878 as much as in London in 1857 or Karlsruhe in 1828.[8] What was different was the assertion that this was not a style merely conjured up for the age or a form of distinct cultural identity, but an intimate bond with the new forces and character of modernity itself. This is why its transcultural, transmedial, and transnational aspects were emphasized; and this, too, why the self-mythologisation of this "high" or even "classical" modern architecture was so significant and so alluring. "Modernism" as a term to describe this would come later; in the 1920s and 30s it was known as the *Internationale Neue Baukunst*, International Style, the Modern Movement, *Neues Bauen,* or *Nieuwe Bouwen* (McLeod 2014).[9] And there were two sides to this pugnacious self-certainty: one was the architecture's identification with ideas like the Baudelairean dialect of the contingent and the changeless; the other was its opposition to old political and cultural elites, whose attitudes were cast as inimical

to modern technologies. The first is seen in the associations made with some earlier and purer past (the vernacular, the pre-historical, the classical before classicism) degraded by history's use as tradition and precedent. The second is summed up in Le Corbusier's pamphlet, when he emphasized the incongruity of treating modern spaces (offices, committee rooms, assembly rooms) and modern technologies (the telegraph, telephone, radio, typewriters) as if they could be housed within arrangements devised for renaissance chateaus or baroque churches.[10]

The writing of contemporaneous histories and theories of modern architecture were essential in making the phenomenon coherent and recognisable. These are not accounts that pretend to any detachment, indeed they are written from within the movement and their purpose is usually to proselytise.[11] Adolf Behne, writing in 1923, asserted that architecture's return to purpose (*Zweck*) was bound in itself to be revolutionary. By following the lessons of unpretentious functional buildings and seeing buildings as tools (*Werkzeug*), modern architecture would inevitably arrive at qualities of airiness, concision and clarity (Behne 1928: 9-11). Answering the question "what is modern architecture?" in 1929, for what he saw as a distinctively backward British architectural culture, Bruno Taut explained that it was an attempt to find harmony between architectural form and new technologies, and in opposition to what he deemed "exaggerated Romanticism and sentimentality" (Taut 1928: 5). The architect must devote his materials and construction to the "fulfillment of purpose," which in itself would lead to elegance and beauty. As architecture is a product of social ideas, so house design should embrace the repetition necessary to the creation of collectivity. The modern architect is thus a "creator of an ethical and social character" whose buildings encourage "better behaviour in [people's] mutual dealings and relationships with each other" (Taut 1928: 9). This mixture of determinism

(technical and social) and form-making agency, and this concern with the lessons of the immanent expression of function (or *Zweck* or *Sachlichkeit*), would typify other definitions by modern architects and theorists. "Function" was as significant for its didactic compulsion (replacing didactic content, taboo to modernism) as for its ambiguity (Anderson 1986; Bletter 1996; Forty 2000). And the political implications of modern architecture – the "revolutionary" and the "collective" charge, the utopianism, the theology of new beginnings, the progressive and the future-minded – ramify and insinuate, never quite definitional because of their usefulness to many forms of politics (where the felicities of modernism might accompany atavist spectacle as much as corporate identity).

Certain concepts nevertheless become central to modern architecture's definition, their use a clear indication of what is being talked about (Forty 2000: 19). Abstraction, function, modern technology, space, and form, are all essential to the lexicon. The values attached to these – of honesty, transparency and morality – were already hackneyed by their bourgeois usage (this is, after all, a profession that is speaking) (Moretti 2013:173). Around the concepts certain axioms were repeated: "form follows function," "engineer's aesthetic," "truth to materials," "*l'esprit nouveau*," "ornament and crime." Modern architecture's claim to have a unique affinity with modernity was bolstered by arguments that linked it the various buzz-words of contemporary science and social science: associations were made with the "space-time" of Einstein's relativity, with the idea that modernity involved the bombardment of the senses and an emptied-out form of experience (described by Georg Simmel and Walter Benjamin), or that modern society was the highpoint of the economic rationalization of space and time (as Frederick Taylor had advocated in business management).

The exemplification of modern architecture through the reproduction of its appearance, is even more essential to its definition than the now-classic early histories.[12] The architectural treatise of the academic tradition is replaced by a hybrid genre, those manuals of formulas – training books in modernist recognition and emulation – that proliferate around modern architecture: Walter Gropius's *Internationale Architektur* (1925), Bruno Taut's *Bauen der neue Wohnbau* (1927), Ludwig Hilberseimer's *Internationale neue Baukunst* (1927), the three volumes of *Neues Bauen in der Welt* (1930) put together by El Lissitzky, Richard Neutra and Robert Ginsburger, Alberto Sartoris's *Gli elementi dell'architettura razionale* (1932), and Alfred Roth's *The New Architecture* (1940). Wrongly dismissed as picture books, their significance lies in their repetition of images and their very illusion of comprehensiveness. They effectively define modern architecture as a formal world, hermetic and consistent to itself, making evident the movement's claim to be universal in application and international in its spreading influence. It is because of its 687 illustrations and a geographic coverage of 29 countries across four continents, that the subtitle to Sartoris's 1935 edition – *Sintesi panoramica dell'architettura moderna* – achieves credibility. Sartoris, "The First Classicist of the Avant-Garde" (Bohigas 1979) creates a parallel universe in which modern architecture is everything, it reigns over all: black and white buildings dominate the middle ground of every photograph; roofs are everywhere flat; landscape and plants are tamely subsidiary; chairs, tables, operating theatres, restaurants, classrooms, factory floors and changing rooms all await their human users. The point here goes beyond the issue of Sartoris's photographic conventions. We might, like Sartoris, think of it as a "panorama", because there is nothing else in this scoping, world-making survey than the modern

and what can be glimpsed through the modern. A rule-making has become naturalized; its reiterations limit what can be allowed.

Contemporary with Sartoris there was that other panorama of modern architecture, "Modern Architecture: International Exhibition" at the Museum of Modern Art, New York (and the book published simultaneously, *The International Style*). Here, modern architecture claimed its place in the world because of its ubiquity – functional and implicitly anthropological – and this is what bestowed authority on the curators' more formalist interests. A global commonality of form was conjured up, with its own innate and serial logic, betraying mere variations as it was encountered across human societies. This architectural consensus had the compelling authority of a natural process, the dissemination of a genus. In this International Style every architectural thing testified to border-less transnational ideals free of specific historic or geographic constraints. Everything was thus defined as volume and space; everything was light-filled, reflective and smooth; everything was flat-roofed, white, cubic and asymmetrical. The place-less, history-less materials of steel, concrete and glass abounded. And this phenomenon was only reinforced as this limited set of qualities was repeated. Uniformity of style equalled the rationality that brooked no borders: "The contemporary style," wrote Hitchcock and Johnson, "which exists throughout the world, is unified and inclusive, not fragmentary and contradictory" (Hitchcock and Johnson 1932: 19). The photographs used in the exhibition, catalogue and book adhered rigidly to a conception of the modern building as a singular and separate entity, abstracted and independent of its setting whether urban or rural. Viewers were not to consider the specificity of a site, the qualities of a climate, or the effects of a terrain. The architecture of the International Style was not to be in dialogue with these matters because they were simply too specific, too conditional or

too local. Instead of dialogue there was a serial, monologic iteration. All such modern buildings exemplified the genus "International Style," all were symptoms or expressions of a universal aesthetics of contemporary form, of a world-view without apparent politics.

Its imagined world may be unified, but one of the things that modern architecture depends on is an implicitly adversarial relation, an estrangement, a radical otherness. Manifestos adjure readers in imperative terms, affirming ruptures with the "sentimental" approaches of a despised past and providing formulas or commandments by which the modern must be produced (Conrads 1971). There are gestures of erasure: Sartoris reproduces a photograph of a drawing of Nénot and his team's Palace of the League of Nations, then being built, and "deletes" it with a broad red diagonal as "false modern architecture" (Sartoris 1935: 11); Le Corbusier clears Paris's historic Marais and Les Halles districts to make way for his intended Plan Voisin (1925); and so on. What cannot be deleted is rejected or ignored: Adolf Loos attacks the "Potemkin city" of fake historicist facades around Vienna's Ringstrasse as much as the invented, "degenerative" ornament of Art Nouveau which had "no past and no future" (Loos 2002: 26-8; Loos 1987: 102); Mies van der Rohe's 1920s glass skyscrapers refuse any similarity with the dark, lowrise Berlin montaged around them; Gropius's Bauhaus building defies Dessau's desultory suburbs. What is being expunged or spurned is not something merely of the past but rival, alternative or actually-existing forms of modernity. Too much history may be the problem, or too little evident will to order; even, too much effort to make anew.

You are required to enter modern architecture's world, to learn its codes, recognize its formal language, and take on its phenomenological universe. There is a threshold for membership: we see this literally as a double set of checks in CIAM,

first to have the right buildings to pass into a national CIAM-affiliated body,[13] and then for that body to be accepted into CIAM itself. And we see this in Alfred Barr's direction to his visitors at MOMA's 1932 exhibition that "in order to appreciate [architects'] achievements [they] must make parallel adjustments to what seems new and strange"; like the modern architect visitors must "[think] in terms of volume – or space enclosed by planes or surfaces – as opposed to mass and solidity" (Barr 1932: 14-15). Equally there are the policing operations that architects or their close advocates carried out in terms of their own work. To ask "what is modern architecture?" when collating a monograph or exhibition meant editing out what could not conform: the pitch-roofed neoclassical villas that Mies was building well into the 1920s and that Philip Johnson was compelled to leave out of his 1947 exhibition and monograph on Mies, for example, as much as the early forays into developer's vernacular that James Stirling left out of his own *Oeuvre complète* (Johnson 1947; Crinson 2012:161-7).

And "what is modern architecture?" is a question asked with urgency again as architects question what has been produced under its name and as modernist novelty is absorbed by post-Second World War capitalism. Posed by the young architect members of Team Ten in the 1950s the question could seem like either a renewed fundamentalism or a species of apostasy. The tactic is to ask of the first generation of modernists whether they were really true to their word. Was their functionalism rhetorical? Were their uses of modern technology as open-minded, as progressive and experimental as claimed or were they superficial, even a substitute for modernization? And here the dread term "academicism" might be deployed again: Reyner Banham, for instance, accuses Le Corbusier of a cosmetic abstraction that disguises an underlying academicism (Banham 1960: 247-63); Archigram proclaim their desire

"TO BY-PASS THE DECAYING BAUHAUS IMAGE WHICH IS AN INSULT TO FUNCTIONALISM" (Archigram 1961). If the 1920s first generation or high modernists are being held to account, some condemned the intervening second generation as having diluted and softened anything that it inherited, while others reappraised them as part of an "other tradition" of modern architecture (Wilson 1995).

Since that time, and especially after the certainties of anti-modernism in the 1970s and 1980s, "what is modern architecture?" appears increasingly difficult to answer. On the one hand there has been a tendency to multiply defining concepts and to ever-complicate the phenomenon in search of more complete definitions; on the other hand definition is treated as inherently inadequate, if necessarily indispensable (Rowe 1994: 15-20). Some encompass the subject in a baggy way while treating modernist theory with skepticism or disdain, judging it internally inconsistent or more useful in understanding the historical confluence of ideas out of which modernism emerged than as definitive tenets of the new architecture (Colquhoun 2002: 9-12; Cohen 2012: 13-15). Some return to founding critiques of the modern and modernity as if modern architecture might be defined by how far it understood them (Heynen 1999). Others attempt to meld high modernist theory into an encompassing set of precepts while avoiding the slipperiness of "function" and "form": for Panayotis Tournikiotis these precepts would include a philosophy of history, a vision linking architecture and social change, and a reduction of architecture into "exemplary components" which then guide future architecture (Tournikiotis 1999:3-4); Sarah Williams Goldhagen offers the not-quite-similar framing "dimensions" of anti-tradition, a commitment to social progress, and a dynamic relation to new technology (Goldhagen 2000: 301-23). Others avoid descriptions of totality and treat one thematic aspect of modern architecture, such as its conceptual apparatus, its concern

with health and hygiene, or with transparency, its manifestos, its interest in materials, its intimate relation to visual media, or its relation to themes of gender and sexuality (Forty 2000; Overy 2007; Mertins 2011; Buckley 2014; Forty 2012; Colomina 1994; Zimmerman 2014; Colomina 1992; Friedman 2007; Williams 2013).

In a sense, whatever the nuances and revisions brought by historians to the question of modern architecture, they still accept the claim that only in this way is modernity to be responded to by architecture. This is modern, the architecture says, these are its forms, its protocols, its proper concerns, its horizon of understanding; deviations away from these are non-modern, insignificant and illegitimate in their claims on the modern, or simply invisible.[14] But that primary act of colonialism – taking over the modern as a land only fit for modern architecture – has received increasing attention from historians primarily concerned with non-Euro-American contexts and with colonial architecture. These accounts bear upon the question "what is modern architecture?" both by attempting to usurp the term "modern" (if usually neglecting "architecture"), and by creating a different geography of its evolution and alternative, non-western claims for its universalism (Wright 2002; Lu 2011). The modernity of new spaces and technologies identified by Le Corbusier, is now appraised not for its universal inevitability but for its ethnocentric and heterochronic specificity. In the three brief cases that follow the aim is different from these forms of decentering. Instead, each points to foundational problems in the answers commonly given to the question, problematizing the idea of modern architecture from within.

Architecture's world

CIAM's fourth congress in 1933 is a celebrated moment in modern architecture's history, as much for the utopian episode of international modernist architects and

planners working in harmony on board the SS Patris II, as for the crystallization of the Athens Charter and its protocols for modernist urbanism (Mumford 2000; van Es 2014). But there was at least one dissenting figure on board. Otto Neurath was a Vienna Circle philosopher, a museum director, and social reformer, and these interests came together in his development of a system of visual statistics known as the Vienna Method or isotype. It was on this that he was invited to lecture by the CIAM modernists (Faludi 1989; Voussoughian 2006; Chapel 1996; Faludi 1996).

The congress theme was intended to present a comparative international perspective on the "Functional City," seeking a unified approach that would reveal the contemporary city as an organism composed of four simple functions. Much was made of the need to find a shared language, most especially a uniform set of visual symbols, as well as an agreed coloring and scale (Giedion 1949: 37). Le Corbusier had already spoken on the need for better means to represent town plans according to "rules specific to our discipline… [using] means of honest expression" (Chapel 1996: 167). Neurath's lecture, on "Town Planning and Lot-Division in Terms of Optical Representation Following the Vienna Method," proposed a solution. His talk followed one on expansion plans for Amsterdam by Cornelius van Eesteren, who had developed a system of representation using some seventy-two largely abstract symbols to stand for elements in the city. His imagery, in fact his very conception of urban design, was derived from the avant-garde De Stijl group, and the formalist abstraction of their approach had seeped over into his cartographic language.

Neurath was already critical of contemporary architects' use of graphic symbols (Faludi 1996: 205), and his shipboard paper proposed isotype as the best means to represent statistics and functions pictorially in town plans. If the method was applied consistently, using a "visual dictionary, a visual grammar and a visual style,"

simplifying, condensing, and eliminating the unnecessary, then understanding of its signs would be reinforced, circumventing any need for explanatory legends (as used by van Eesteren) and creating a truly international comprehensibility, a "figurative Esperanto" bypassing problems of language and illiteracy.[15] Neurath's use of isotype to compare international cities is summed up in a later image. Showing 'Men Living in One Unit of Area', it demonstrated population densities by the numbers of men on square brick backgrounds, each of which was topped by distinctive images of specific cities. **(FIG. 2)** Learning was thus supported by stereotype – an image omnipresent in modernity and already associated with a meaning – so that the new highly simplified information on comparative densities was less stark, leaving space for the viewer to make the connections and comparisons, and to draw conclusions. (In one such stereotype the Eiffel Tower represents Paris, in stark contrast to how modernists like Siegfried Giedion, present at the congress, had acclaimed the tower's engineering achievements or its visual effects of penetrability.) The advantage of isotype, furthermore, was its ability to communicate with a wider public as well as other professionals, politicians and planners. Here Neurath was explicitly criticizing van Eesteren's system for its obscurity and complexity, as well as making a more general point against autonomous disciplinary languages developed to serve intra-disciplinary purposes, and in favor of placing the reader (whether another professional or a member of the public) as central to the consideration of visual language. Modern architecture's definitive functionalism and its concern for the modern collective, it was implied, would be as abstract as its formal language if it was limited to an internal conversation between architects.

The argument was too radical for CIAM, or simply unrecognizable as a contribution to architectural debate. It was certainly neither the imprimatur of

objective scientific method nor the simple means to communicate its aims that CIAM wanted from Neurath. Neurath was not just, by dint of his logical positivism, hostile to any system of thought and incapable of regarding science as anything but uncertain, he was effectively suggesting that the professional protocols of architects, including the hard-won modernist protocols of CIAM, be treated as subsidiary to the public understanding of architecture and planning. Neurath conceived communication as a discursive two-way process, while for CIAM modernists communication was the conveyance of an already achieved design concept. Isotype was a propositional method; it was a means to the end of public education and an actively democratic society, understood as a continuous process of making hypotheses and revisions. Most CIAM architects felt their end was achieved once their buildings were erected; they misunderstood Neurath's method as a way of giving their work objective technocratic credibility so that the public could be educated to see the rightness of modernist solutions and modernism's rationale, and so that the idea of its aesthetic inevitability could better penetrate into the various bodies of public instrumentation. As Neurath wrote four years later: "[isotype was] intended to bridge the gap between more or less purely conventional symbols for the orientation of specialists, and more or less self-explanatory symbols destined for general enlightenment" (Neurath 1937: 58). Collective consideration, not science or preconceived aesthetic formulas, would provide decisions. This divergence between Neurath's views and those of modernist architects meant that isotype never entered the workings of CIAM, though it certainly influenced the aesthetics of its visual communication as well as that of other modernists.[16]

Neurath's challenge was not just about appropriate visual languages of communication and their use as propaganda for modernism. Much more, it was about

whether modern architecture could really engage with its users in its design process rather than impose what its architects and its clients wanted to regard as a scientific and objective method. Definition is pre-empted by dialogue; the question 'what is modern architecture?' could never be a closed one for Neurath.

Compartmentalized world

Designed in the late 1950s, the Crown Law Offices was part of a refurbishment of Nairobi's government buildings at the tail end of colonial rule. **(FIG. 3)** Its architect Amyas Connell had been a member of Connell, Ward and Lucas, one of the first architectural practices in Britain to adopt continental modernism. His move to Kenya in 1941 was part of a wave of modern architects seeking work in the colonies just as colonial policy became more sympathetic to their work (Sharp 1983). The Crown Law Offices is in some ways a generic modernist office building: a slab block lifted above a plinth, with a concrete screen hung over its two long sides, and an external spiral staircase offering sculptural contrast. The catch here, however, is that it is very obviously an ornamented building, with motifs from Indian and Timurid sources on its screens, clearly breaching the modernist prohibition on ornament that Connell had respected in his British buildings. This breach or "crime" seems licensed outside European architecture culture and in the context of an "undeveloped" African colony (in a more famous instance, ornament was allowed by Adolf Loos in designing a house for the African-American dancer, Josephine Baker). And it is also clearly calculated to resonate symbolically with another feature of the screen, its sudden irregular spacing of windows at one end and the insertion of a large and unmistakably Venetian Gothic window. This is a clear invocation of another imperial architectural

tradition, that stemming from what John Ruskin called the "central building of the world," the Ducal Palace in Venice.

The point here is not to illustrate a mildly eccentric modernism, or to yet again 'explain' it as some form of proto-postmodernism on Connell's part (Sharp 1983: 323), but to indicate what it implies and exposes about modern architecture's relation to race and violence, issues usually excluded from the question 'what is modern architecture?'. If modernist abstraction was a definitional statement of its separation from previous architectural styles and their replacement by "honesty" or "truth to materials" or "functionalism," then the Crown Law Offices may be strategically associating this kind of semantics with, perhaps, the loyal Muslim population in east Kenya. It is important this symbolically ornamental work is done in the skin of the building while the universalist source of functional authority, the structure and overall spatial form of the building, is unaffected. Departing from its previous adherence in Nairobi to Graeco-Roman expressions of permanence and unilinear tradition,[17] the colonial state now allows high colonial architecture to create a scenography of affiliation and difference. In addition, Connell's building is at some level meant to make its British colonial users think of Ruskin's famous invocation of a hybrid mixture of racial elements, brought together under the paternalist authority of the British empire (much as they had been prefigured by Britain's typological precedent, the Venetian empire).

The dynamics of cultural form, and racial subordination are complex here, entangled and interdependent, but the issue of ornament is still superficial in its signaling of associations obscure or insignificant to many. The more fundamental issue is to do with political violence and the relation of modern architecture to the conditions of modernity as contemporaneously enacted in Kenya by colonial power.

A system of forced villagization and detention camps, to deter colonial revolt, was as much a part of colonial modernity as Connell's architecture. While in Nairobi, flamboyant, structurally and ornamentally expressive forms of modernism, like the Crown Law Offices, were aligning modernism with the benefits of new policies of welfare and development, just outside the city large numbers of Kenyans were effectively having their homes and land redefined by the state's coercive interventions. These equally modern forms of environment are put under the condition of 'emergency', and deemed to be more about policing, about land appropriation, and about native or vernacular housing – they are the modern's *nomos*, or hidden matrix, the variants of "bare life" they create are the absolute form of the biopolitical paradigm deployed to control colonial crisis (Agamben 1998: 166-80). Architecture's very existence as a "high" professional discipline, reinforced by modern architects, is thus an effective part of the strategic compartmentalization of the colonial world that helps it to function in times of crisis in its cultural legitimacy (Mbembe 2003).

Everyday world

For her work "Maison Tropicale," made for the Portuguese Pavilion at the 2007 Venice Biennale, the Mozambique-born artist Angela Ferreira reworked prototype prefabricated houses designed for tropical Africa by the French engineer-craftsman Jean Prouvé. In the 1930s Prouvé developed techniques of fabricating light metal structures influenced in part by aeronautical engineering, and complete buildings in folded sheet metal had followed. The African work came out of a new venture by the state-owned Aluminium Français company which invested in Prouvé's new postwar factory. The French colonial authorities wanted to develop their African territories

and to bypass the problems of importing building materials. Prouvé designed two prototypes for tropical houses, one for Niamey in Niger (1949) and two for Brazzaville in the Congo (1951) (Sulzer 2002: 12-16; Huppartz 2010; Guilloux 2008; *Jean Prouvé* 2009; Lemonier 2012). These houses had steel frames and aluminium panels and could be transported easily as air freight and assembled on site by unskilled labour. They were intended for the European parts of their cities: the Niger house for a colonial college administrator, the Brazzaville houses as an information centre for an aluminium manufacturer and a house for the manufacturer's regional director.

While there were some differences between the houses (in Brazzaville they were supported on stilts and set at rightangles with a linking bridge), they shared the same features. Each had a living space of 6x12m on a 10x14m platform with a roof projecting to the platform's dimensions, the whole resting largely on two forklike steel supports. The *cella*-like living space surrounded by a "portico" of thin supports for the pitched roof inevitably seems temple-like. The roof, separated with an air cushion from the ceiling, took hot air out of the interior via a flue along the ridge line. Natural airflow was further enhanced by louvers placed all along the upper parts, and by sliding screens serrated with grids of small porthole-like windows and circular ventilators. In one sense, the houses are merely footnotes in a history of prefabricated colonial buildings, but symbolically they stand for much more than this. As packages or bubbles of enlightenment universalism, they represent the extension of modernism's techno-utopian aspect into the realm of climate control but also its failure. These houses are not really "exemplary modernist artefact[s]" (Huppatz 2010: 33): the technology is a refinement and extension of nineteenth-century prefabricated metal structures and their factory production, rather than especially innovatory in its

own right. They speak the language of modern architecture more because of their lack of historical ornament, their geometries (even if their roofs are slightly pitched), and their unashamedly metallic components. If they seem to embody the aspiration that modern architecture was the instrument to modernize society everywhere then they are also invite less wide-eyed questions. Does that modernizing imply a lack of commitment to developing a skilled workforce? Would it really extend its benefits to Africans, and would it even (*pace* Neurath) be perceived as beneficial? Do these buildings mean that Europeans are to be sealed off from the conditions of the place at the same time as they seek to exploit it? And were they, and the rationalization they represent, merely justification for a proposed extension in the colonial exploitation of resources?

In Ferreira's artwork, components of the Maison Tropicale were remade in wood and formed into a corridor the visitor had to pass through (a human transit echoing the air transit of the boxed Maisons to and from Africa) (Allen 2015; Bock 2007). Photographs placed beyond the corridor showed sites of the Maisons Tropicale without their buildings. **(FIG. 4)** In part these images are scenes of colonial imposition and the scarred absences caused by postcolonial repatriation of these houses. In the Brazzaville photographs the remaining columns of the two Maisons are partly integrated into a building with a corrugated iron roof and partly freestanding with their steel cable reinforcements spilling out of their tops. In the Niamey photographs all that is left of the Maison is its concrete platform, a plinth that supports nothing, a "tomb to minimalism" (Bock 2007: 14). The question "what is modern architecture?" seems to hover around the images, and the initial answer their evident absences provide is less about a set of concepts, formulas and practices, than about the remains of the technological rhetoric that used ideas of universalism and

progress as cover for colonial exploitation, that has left ghostly presences and scars around the world, been transformed into a mythology of techno-utopia and, complementarily, been neglected and ignored for several decades.

Moreover, the photographs provoke a different, further, and just as disturbing set of reflections. The provocation is in their nondescript scenes of apparently serene everydayness. In Niamey, where the Maison was originally assembled in an open, grassed area (*Jean Prouvé* 2009: 97), the platform is shown occupied by goats and surrounded by the straw huts of Tuareg squatters. The concrete is slowly decaying and taking on the color of the surrounding red earth. A power mast is just outside the compound and concrete blocks line one wall. In Brazzaville ordinary modern materials are even more evident. Some of the remaining columns have been filled in, providing outhouses for a paint manufacturing company. Concrete block villas look over the site; there are corrugated iron roofs and frames; a man plays a guitar. Everywhere there is evidence of work: the recycling of bottles, plastic containers for paint stuffs, paints tested against walls and boards. The everyday nature of these scenes, played out on and around the concrete bases of the houses, is indisputably modern despite the fact that the houses themselves failed; there is nothing here that speaks in colonialism's terms of a "laboratory of modernity," or even a "heart of darkness" that the colonial project would pretend to dispel but actually maintain. The life that continues around these sites is modern yet unrecognizable to a European modernist. It is indubitably particular, evidently layered, and to some extent necessarily opaque – all alien terms to official translations of modernism to the colonial world. The question, then, is not so much "what is modernism?" as "what is demotic modernity?". Not so much "what is modern architecture?", as "does it matter?"

Walter Gropius explained the title of his book *Internationale Architektur* as to do with a solidarity of interests in progress:

> The will to the development of a unified view of the world, which characterizes our times, presupposes the longing to free spiritual values of their individual limitations and raise them to objective validity. Then the unity of the external forms, which generates culture, follows as a matter of course. In modern architecture, the objectification of the personal and the national is clearly recognizable. Impelled by worldwide trade and technology, a unification of modern architectural characteristics is progressing in all civilized lands, across the natural borders to which peoples and individuals remain bound.[18]

Despite the complications of both historical context and translation, it is clear Gropius understands modern architecture's emergence in terms of its place within overlapping and layered worlds, metaphoric and actual: a world-view, a unified form-world, an international comity of nations, and a smoothing of global difference. What is modern architecture – whether a Palace of the League of Nations-to-be, or Gropius's images of low-cost housing, factories, offices and other "functional" buildings – other than the positive coming-into-being, the architectural enframing, of all these forces and desires and impulsions? And we can trace elements of this nested and mutually constitutive world-making in the Maison Tropicale's aspiration to carry enlightenment everywhere, in the Crown Law Offices' forms of authority, and in CIAM's disciplinary sovereignty.

But discrepant worlds open up the self-constituting ones that modernism creates and helps to reproduce, breaking into its *mise en abyme*. The question "what is modern architecture?" becomes less about what threshold needs to be passed in order to name something modern architecture, as whether that threshold is in fact an ever-receding horizon, a lure towards the always future-oriented.

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[1] Le Corbusier, *Appel à l'Elite mondiale à l'occasion de la construction du Palais des nations à Genève*, 1928: copy in the Paul Otlet Archive, Mundaneum, Mons, PPP0008 CM8/D6.

[2] The exceptions here would be Lyautey (for his policies of extensive colonial urbanisation and promotion of an architecture identified with associationist politics in Morocco) and Otlet (who had helped his father's development of a seaside resort in Belgium, who was a supporter of Ernest Hébrard and Hendrik Christian Andersen's unbuilt scheme for a World Centre, and who would soon collaborate with Le Corbusier himself on a project for a Mundaneum). Wells and Valéry certainly had architectural interests but these were expressed in more literary ways.

[3] Several had a strong interest in the League of Nations or influence on its committees: Curie and Valéry were involved with the League of Nations Committee on Intellectual Cooperation; Wells, Otlet and Gide had been early campaigners for the League. Cannily, Le Corbusier also included figures who were more equivocal (Croce) or outrightly critical of League of Nations internationalism (d'Annunzio).

[4] That Le Corbusier's League of Nations design was imbued with many elements of classicism (its evocation of a court of honour, peristyle, scala regia, *'salle des pas perdus'*, and so on) was not to become a serious aspect of its analysis until much later: see Colin Rowe and Robert Slutzky, 'Transparency: Literal and Phenomenal', *Perspecta*, 8, 1963, pp. 45-54.

[5] Le Corbusier to Sigfried Giedion, 4 March 1927, Fondation Le Corbusier (FLC) 12-1-205.

[6] Typescript 'Un Ralliement – Le congres de la Sarraz', FLC B2-4-95.

[7] On the complexity of positions within CIAM, and conflicts early on regarding whether modernism should be identified with leftwing politics see Jacques Gubler, *Nationalisme et internationalisme dans*

l'architecture moderne de la Suisse, Lausanne: L'Age d'Homme, 1975, 152-3; Giorgi Ciucci, 'The Invention of the Modern Movement', *Oppositions*, 24, Spring 1984, pp. 69-91.

[8] Lluís Domènech i Montaner, 'En Busca d'una Arquitectura Nacional', *La Renaixença*, VIII:4, 28 February 1878, 149-60; George Gilbert Scott, *Remarks on Secular and Domestic Architecture, Present and* Future, London: John Murray, 1857; Heinrich Hübsch, *In welchem Style sollen wir bauen?,* Karlsruhe: Müller, 1828.

[9] For a similar argument for modernism more widely see Raymond Williams, 'When was Modernism?', in *Politics of Modernism* (London, Verso, 1989, 31-7.

[10] Le Corbusier, *Appel.*

[11] For accounts that give a more catholic sampling of contemporary architecture at this time see Myron Malkiel-Jirmounsky, *Les tendances de l'architecture contemporaine* (Paris: Delagrave, 1930), and Gustav Adolf Platz, *Die Baukunst der neuesten Zeit* (Berlin: Im Propylaen, 1927).

[12] These would include Henry-Russell Hitchcock's *Modern Architecture – Romanticism and Reintegration* (1929), Emil Kaufmann's *Von Ledoux bis Le Corbusier: Ursprung und Entwicklung der autonomen Architektur* (1933), Nikolaus Pevsner's *Pioneers of the Modern Movement from William Morris to Walter Gropius* (1936), and Sigfried Giedion's *Space, Time and Architecture: The Growth of a New Tradition* (1941). For analysis of these early histories see Panayotis Tournikiotis, *The Historiography of Modern Architecture* (Cambridge, Mass. and London: MIT Press, 1999, and Anthony Vidler, *Histories of the Immediate Present – Inventing Architectural Modernism*, Cambridge, Mass.: MIT Press, 2008.

[13] Members could be banned if found to be acting in ways, whether by intrigue or in their actual architecture, deemed contrary to CIAM's core beliefs.

[14] For a related argument about modernist literature see Williams, 'When was Modernism?', 33.

[15] The lecture was published in *Annales Techniques*, 44-46, 15 Oct-15 Nov 1933, 1036-1049.

[16] Andrew Shanken's argument, that isotype was used purely aesthetically and without the principles behind it, parallels this: Andrew M. Shanken, 'The Uncharted Kahn: The Visuality of Planning and Promotion in the 1930s and 1940s', *Art Bulletin*, 88:2, June 2006, pp. 317-318.

[17] The ubiquitous colonial architect Herbert Baker had several commissions in interwar Kenya. His Government House (1928) typifies the way Nairobi was seen by its colonial rulers as another place for the exercise of a permanent expression of rule through classicism. One of them extolled the country's "sublime scenery… [as] a setting for permanent architecture" and its sites as more magnificent even than those used by the Greeks and Romans: E. A. T. Dutton, *Lillibulero or the Golden Road* (Zanzibar: privately published, 1944), 230.

[18] Walter Gropius, *Internationale Architektur*, 2nd edition, 1927, pp. 6-7 as translated in Richard Pommer and Christian Otto, *Weissenhof 1927 and the Modern Movement in Architecture,* Chicago and London: University of Chicago Press, 1991, p. 161.