

Imaging Sustainability: The environment of the well tempered architecture

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Abstract

At the same time that images of both Sydney and Melbourne city's 2030 plans are being promoted under the banner of sustainability, the very technologies of ESD have transformed to the point where they can be concealed within conventional building systems. The ensuing formal suppression of these technologies questions the belief that ESD principles are the only fundamental design principles capable of providing authentic architectural form. This not only casts doubt on the legitimacy of the ensuing representational palette of sustainability design but, as Mark Wigley points out in the essay 'Recycling Recycling', the persistence of this claim can actually be seen as a continuation of a long history sustainability's overt use of imagery. Accordingly any critique of the current modes of this representational palette acts as a trace of its ideological underpinnings.

This being the case, the paper will categorize the significant aesthetic trajectories evident in sustainable discourse and link these to either humanist or technocratic traditions. Underlying this review will be an accompanying discussion of how the image was, and continues to be, used to legitimise design decisions. The paper will also consider how the original intent of sustainable architecture to offer solutions to the perceived the social and technical ills of modernism have inevitably come to share many of its ideological underpinnings.

The aim is not to condemn sustainable discourse but to point out that architecture, as a marginal and excessive design practice, must work with the image. By embracing architecture in all its social complexity it is hoped to offer the discipline of ESD an opportunity to critically re-examine, direct broaden the effect of its formal articulation.

Peter Davey, in the 1998 April issue of *The Architectural Review*, titled his editorial to the journal 'A Moral Issue'. Given the relative size of the disciplinary audience this presentation of sustainability as a moral issue would have had little impact, and therefore significance, if it weren't for Al Gore's uncanny repetition of this type of language in the 2006 documentary 'An

Inconvenient Truth'. Gore's use of 'morals' is noteworthy because by successfully making an environmental issue mainstream he simultaneously inscribed morality as an integral component of the intellectual framework. The consequence of this is profound given that morals are intended to not only be absolute, immutable and universal but also, importantly, obligatory. This mode of argument functions to exteriorize and apportion blame and typically any moral transgression is returned by a reminder of ones obligations and to the dire consequences of such an action. This is no better demonstrated than when Davey, in his editorial, accompanies an image of Durer's *Four Horsemen of the Apocalypse* with the caption "Durer's Four Horsemen will ride even more terrifyingly if we do not learn" (5). Clearly here the rhetorical deployment of morality institutes an argument that tacitly aims to avoid contestation so as to defend the promoted orthodoxy. In doing so it intellectually excuses its advocates from the responsibility of strategically and tactically engaging with the realities of existing social and political contexts.

Architecturally the moral framing of sustainability is both concerned with, and willing to exploit, the professional anxiety over formal legitimacy. The desire to control form-making aims to construct and promote a new set of sanctioned 'essential' forms. In Davey's case he employs morals to construct the binary opposition of the essential and superficial so as to promote those conditions by which one can make manifest the 'essential'. Thus when Davey writes: "The approach of the millennium gives us cause to reflect on the real values in architecture" and follows immediately by adding "The most important criterion for judging the quality of buildings is not style, but their impact on the biosphere" he is effectively attempting to constrain the formal and representational possibilities of architecture by narrowing the gamut of possible design processes (4). The implicit assertion is that when such architecture is produced it is without style and thus beyond ideology. By bring into the world 'essential' form it is, if not natural, at the least, neutral.

Mark C. Taylor in his book, *Disfiguring: Art Architecture Religion*, identifies this desire for universality and wholeness as modern and post-modernism concerns. Taylor argues that the formal differences may be brought about by the appropriation of different philosophical positions of Kant and the Hegel but this belies the fact that they arise from the same Christian moral tradition. To quote Taylor "[neither] calls into question the structures of order, reason, meaning, unity, wholeness, and totality" (197). The use of morality in sustainable discourse both continues the socially transformational agenda of modernist and post-modernist thinking as well as converting form into a sign of the essential. Form becomes a marker, where the "whole is a synthetic totality in which opposites are reconciled and differences united" (Taylor 197). Accordingly, the process and understanding of architectonic production functions as a figurative cipher.

Admittedly one could argue that these sentiments are generally held across the profession but it is clear that typically in sustainable discourse the bringing about of the 'essential' occurs through the application of sustainable principles and their associated technologies. Davey's editorial explicitly sets in train an argument that formal legitimacy can only be claimed when such form

privileges sustainable technologies and techniques. Thus when writing that “[technology] has made possible... [numerous] evils, [but] also offers great benefits”, one should not be misled by his initial qualification. The problem here is not in technology but in its inappropriate application (4-5). Oddly reminiscent of certain modernist ideological trajectories, this collapsing of philosophical absolutism with technological positivism also conceptually structures form as an expression of the application of quantitative technologies rather than qualitative social issues. Form only attains a social dimension when the quantitative is made present. Accordingly this presence not only has a performative dimension but also acts a sign of a working towards a greater social good.

Davey’s technological ‘essentialism’ is problematised by Shane Murray in issue 56 of *Transition*, when he writes “low energy design solutions can be delivered independently of any particular ‘imaging’ of a building or the arrangement of its formal elements” so that “technologies of sustainability do not appear to determine the arrangement of architectural form”). The integration of ESD technologies into conventional construction systems exposes any persistence in their overt formal expression as an aesthetic choice. The danger here is evident; when form effectively ‘stands in for’ a moral creed any explicit formal expression of sustainable technologies risks converting form from something that is performative to something that acts semiotically. In this light the explicit expression of these technologies, induced as they are by an ideological constraint, acts to limit architecture, which in turn can only lead to a highly mannered, stylized and pre-determined representational palette.

Davey’s faith in the primacy of technology is made more problematic by Pierre Francastel observation, in the book *Art and Technology in the 19th and 20th Centuries*, that the value of any technology is dependent on its capacity to be culturally received. The thesis here is that the forms of technology are not absolute and only become figurative and formal under the action of ‘plastic’ human thought. To quote; “Through images, man discovers both the universe and his need to organize it” (Francastel 25). This is further enforced when he writes of England’s economic expansion under the technology of the loom and coke oven. Francastel notes that this is an example where “we are dealing not with a purely technological or speculative progress but with a joint evolution of the social and technological activities” (33). The point here being that technology is not a simple instrumentation of an applied science but something that is both ‘designed’ and possesses social relevance.

This figurative process is made doubly significant given the contemporary demand for the identifiable and distinguishable design of technological outcomes. This much is clear given the popularity of the Toyota hybrid over Honda’s equivalent. Davey is at the least subconsciously aware of the import of the image given that opts for the figurative import of Durer’s image to that of an exemplar sustainable building. This reliance on the image is not surprising; Mark Wigley in the transcribed lecture ‘Recycling Recycling’, traces John McHale’s use of the propagandized image in the formative years of the ecological moment being in the middle of the twentieth century. Wigley in fact makes a convincing argument that McHale’s figurative intent

was anything but neutral. In commenting on the political and ideological consequences of McHale's images Wigley suggests that McHale was "re-circulating an old image, an ancient image, of the house that is itself constructed by, and responsible for, considerable violence. It's not that McHale simply ignores the politics of the house. On the contrary, he exercised and mobilised those politics, politics of effacement, entrapment, ritualistic brutality, closets and so on" (12).

In the same lecture Wigley touches on other cases where the environmental movement was more than willing to appropriate images to further their social and cultural standing. In speaking of the earth photos, the first of which were taken during the 1968 Apollo 8 mission, he notes that:

"precisely at this moment that images of the planet were playing a crucial role in the ecological movement. Think of the famous image taken from the spacecraft looking back at earth. Without that image, many of the arguments behind the movement, the global movement, may have floundered" (11).

These images fundamentally altered our perception of the world because, unlike previous representations of the globe within artistic and scientific practice, they provided the first real index or measure of the earth and framed it as a finite thing. These photos also came from an entirely new vantage point removed from the action of artistic interpretation and exceeding the anthropomorphic limitations of the experiential view of the earth as landscape. The Apollo images ensured that any notion of the earth as the endless and unlimited landscape now had to compete with this other new 'view'. As Wigley notes the ecological movement was quick to appropriate these photos because the technology of endless mass reproduction allowed them to exploit their profound beauty to figuratively remind us of its limitation. To quote Wigley again:

"It is symptomatic that no one sees the images as ugly. A quasi-theological view underpins the unquestionable sense of the beauty of the "natural order," the "harmony" of the cosmos. Ecology is a form of theology in the end" (11).

As the term 'Spaceship Earth' testifies, the effect of this appropriation objectified the planet but the affect on the trajectory of the environmental movement may have been very different if it were not for the demolition of the Pruitt -Igoe housing project and the 1973-4 oil crisis. These two events marked a moment of severe economic and social discontinuity and were significant because they provided an opportunity for the environmental movement to 'prove' its relevance. On one hand ecologically sensitive architecture positioned itself as a corrective measure against the formal homogeneity of Late Modernism. On the other hand the oil crisis, as a reinvigoration of McHale's concerns with equitable resource redistribution, offered a technological solution to the economic problems posed by the oil crisis. Murray, in the same 'Transition' essay, writes

these concerns continued to preoccupy the rhetoric of sustainable design advocates. He suggests that it became:

“[a] method of assuaging the despair brought about by the crisis of the modern project. This path conflates contemporary problems of architecture; problems of cultural relevance, commercial subservience and issues of representation, with the environmental crisis. It seeks to ameliorate architecture’s problems through a strategy which reconfirms the architect as coordinator of the more complex integration of technology and form to that of low energy demands” (10).

These competing social and economic objectives helps explain the figurative bifurcation of sustainable design into the organic and the technical and, in so doing permanently confused notions of the social good with sustainable technology. Thus the Apollo photos became co-opted into a conceptual framework that effectively shifted the environmental debate to the quantitative.

The ensuing quarter of a century has seen the subjugation of the qualitative into the quantitative. Obviously this is more evident in the technological strain of sustainable design, whose objectives were concerned with energy efficacy. Perhaps, a little too literally, this privileging of technology adopts Corbusier’s notion of the ‘machine for living’. This formal strain possesses no overt rhetoric focused on humanist principles; applied technology is paramount. The functioning of architecture as an ecological machine has one significant affect on architecture’s representational modes; the section assumes the same formal potency of the modernist plan. At its extreme, the privileging of these principles, technologies and techniques manifests themselves in an ascetic formal repertoire, where passive design strategies are the only legitimate basis on which to make form. Ideologically this technocratic Puritanism possesses a shared genealogy with the Calvinist ethic of capitalist production and the rejection of excessive expenditure. While, rhetorically, it might have attempted a non-representational form it was, nonetheless, a conscious design choice and so fails to escape representation.

The inability of this ascetic style to escape representation, together with its radically stripped formal expression, ensured that it would be a short-lived enterprise. After a relative hiatus this style of sustainable design re-emerged in the late 1980’s under the banner of Hi-Tech architecture. One is somewhat tempted to suggest that the Hi-tech avant-garde of the late 1960’s saw sustainability as the ideal vehicle to reinvigorate their overt technological imagery and apply it to quantitative ecological concerns. Importantly the formal contribution to the technological repertoire seems to have overcome concerns with excess; while these projects may achieve appropriate levels of performance they do so with a disproportionate level of excessive expenditure and technological innovation. As with the ascetic, these projects make the aesthetic decision to image and articulate technical proficiency. The importance of image of to Hi-Tech sustainable architecture is evidenced by its popularity with corporate clients, who no

doubt see this as a way to in which to image their civic mindedness.

If the motivation for the quantifiable is evident in the technological strain of sustainable design then it is less so in the organic. Underpinned by a strong humanist positioning against high modernism, the organic is seen to combat the abstraction and the perceived associated social disconnection of the work from that period. Modernist notions of spatial manipulation, composition and materiality are instead replaced by ideas of place, context and dwelling. Accepting Taylor's argument then the fidelity of the organic with post-modernism notions of heterogeneity, pluralism and regionalism, nonetheless are deployed to achieve the same ideological outcomes to those of modernism. With the organic the basic technological responses, involving the maximization of passive technologies are subsumed within an architectural language with an earthy, 'natural' material palette. In a counter to the modernist grid this material selection is often formed within regular curvilinear geometries. As such technology is subsumed into forms that act as a sign of a more humane architecture. Remembering that the term organic can be linked back to Frank Lloyd Wright, it is significant that Francastel goes so far as to note that Wright presented "himself as a divinity who occasionally visits... to bring them the gospel... What he is bringing... is material and moral salvation"(80). Francastel also reminds us that this organic architecture was achieved by replacing "geometric order with biological order" it is not unreasonable to suggest that Wright's evangelical mapping of the spiritual onto form has affected this style of sustainable design (83). The 'organic' was inculcated metaphorically and compositionally as an imagistic sampling of natural form and the fixation on these forms as an authentic and corrective can function only if one stabilizes and canonizes their formal expressions. Here there is no place here for semiotic ambiguity; the resultant formal palette sits as a sort of imagistic shorthand to become representationally quantifiable and predictable. If this, as other discussed modes of sustainable architecture possess figurative and symbolic functions then the desire for form to be a cipher of a particular ideologically can only result in an architecture that is as slavishly singular in intent as late modernism.

The continued privileging of quantifiable technologies as the fundamental logic guiding the generation of form opens the question of what we mean when we aim to deliver the ideal thermal environment. Leaving aside the fact that any measurement of sustainability is relative, there is no such thing as perfectly sustainable artifact, the social-economic reality associated with the production of ideal internal environment also happens to be the most favorable to maximizing human production. Accordingly the act of reconciliation between body and environment is either coincidentally or deliberately an ideal proposition for the capitalist economy. The danger being that the individual, as an objectified physiological body within space, effectively becomes both a metric and unit within the broader ethic of productivity. On one hand this reduces the performative requirements of architecture to quantifiable normative conditions, where the physiology of the individual acts as a standard universal measure by which to register the efficacy of that system.

Philosopher Georges Bataille writes: "What differentiates the medieval economy from the capitalist economy is that to a very large extent the former, static economy made nonproductive consumption of the excess wealth, while the latter accumulates and determines a dynamic growth of the production apparatus" (116). Heidegger's notion of the 'standing reserve' in his essay 'The Question Concerning Technology', also notes this conversion; what Bataille warns us of is the tendency to instrumentalize technology to the point that it both enframes nature and humankind as a resource for capitalist production. In light of this the pre-disposition to see the application of sustainable technology as the only legitimate mode of form making ironically reinforces, rather than rejects, modernism's ideological and figurative teleology. The support of performance against figurative excess or waste of the type Davey writes about is only to mask the highly figurative nature of such forms. If every new project confronts us with the relativity of any applied technology then what the architect must address the issue that *"...it is not necessity but its contrary, "luxury," that presents living matter and mankind with their fundamental problems"* (Bataille 12). The production of the image of sustainability will always confront the architect with the issue of justifiable expenditure and under these conditions the mounting of idealistic and homogeneous theoretical defenses are merely an attempt to legitimize the expenditure of society's surplus. This re-clothing of artifacts is culturally significant because, as Bataille warns us, this masking leads to an expressive and acquiescent method of political control. What Bataille forces us to consider then is both how and where we define our limits and the part we play in the production of meaning. For this reason alone is vital that the whole profession is aware of the use of images and the danger of how they construct repressive ideological formulations.

To conclude I would like to turn to the theorist, Tony Fry. His aim to shift sustainable discourse away from quantitative technologies is particularly noteworthy. For example, in the same issue of 'Transition' as the Murray essay, Fry suggests that:

"[S]ustainability is something to be learnt and that this learning will be transformative of almost all we know and do. This approach is totally at odds with the reduction of sustainability to a technique which can simply be added to existing practices in order to fix up their methods, products or presentations. In many cases it is not the nature of the thing which is the problem rather the nature of our being with the thing. From this perspective design shifts from the object to the relation" (30).

Fry's privileging of the institution is altogether another issue, but the objective of instigating action within an interrelated network that learns and informs is also to shift design away from the semiotic coded object. This also forces us to reconsider what it is we are dealing with when we talk about excess, waste and recycling. If the capitalist economy involves the reduction of the world to the consumptive realm of *things* then how are quantitative strategies based on conservation and preservation to deal with this circumstance? In the end it is useful to turn once again to Bataille when he asks us to question the grounds on which expenditure is

legitimized since the way in which this expenditure is legitimized is what truly defines the nature of a truly sustainable society.

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