

Recycling Recycling

Mark Wigley

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Mark Wigley is teaching at Princeton University, at which institution he has recently been awarded tenure. In 1988 he was one of the curators at the exhibition at the Museum of Modern Art entitled *Deconstructivist Architecture*. In addition to the publishing of a book by that title, he's been widely published in Architectural journals. You will know of his book *The Architecture of Deconstruction: Derrida's Haunt* which was published by MIT Press in 1993, and forthcoming by the end of this year, is his latest book which is titled *White Walls Designer Dresses: The Fashioning of Modern Architecture* from the same press. It is particularly nice to be able to welcome Mark because, as a teacher here, I am very aware of the extent to which work within the Department of Architecture has been both stimulated by and is indebted to Mark's thinking and writing. It is also personally very nice to have him back in Auckland. Please join me in welcoming Mark Wigley.

Mark Wigley

Thanks for the kind words. It is very nice to be here. Auckland remains aggressively beautiful, even in this lousy weather. It's good to see so many old friends after so many years. It has been particularly nice to spend some time with Mike Austin, my one and only teacher, to whom I owe everything. I've seen Mike in New York a few times, but it's about seven years since I've been back here. It's not as if I had the seven year itch but when this intriguing invitation came it was a great excuse. And it has been a fine conference. Mind you, I knew that it would be because the theme is such a special one. "Accessory" is subject that's very dear to my heart, or wherever that place is in there that is close to where the heart should be. So I thought, this would be easy because I'm always thinking about accessories, or at least ornament, the structural role of ornament. I thought tonight's talk would be a piece of cake. It wouldn't be difficult to choose what to talk about. Of course, it turned out to be a big problem. Which ornament? Which ornament here in New Zealand? Which ornament for our time? Which ornament for tonight? The perennial question. What to wear tonight?

Eventually, I decided just to do what I'm doing anyway, which is not that grand. I'm going to talk about accessory in the sense of prosthesis, which is to say, extension of the human body. And when I say human body we are, of course, already getting into deep trouble because there is no natural human body that simply gets extended. It is only the extensions, from clothes to artificial hands to cyberspace, that construct the sense that we are human. The accessory produces the thing it appears to "merely" accessorise. Or, to put it another way, you are what you wear. And nobody simply chooses what they wear.

This research into prosthetics is part of a project that I've been working on for a few years in an attempt to wean myself away from the question of the white wall. I am reexamining the legacy of the architectural discourse of the late 1950s and 1960s. The basic idea is that if we forget what happened in the discourse of the recent past then we don't stand a chance in dealing with contemporary issues. Much of what was said and done in the 50's and 60's has had to have been forgotten for people to make the kind of pronouncements that they do today, advertising themselves at the leading edge of some progressive tendency or another by clumsily suppressing the past. I'm interested in reexamining that past. Indeed, the suppression is itself an interesting symptom that needs to be analysed in detail. That's the project. The part of it that I have selected for tonight is about ecology, a "Made in New Zealand" subject if ever there was one. And here we are on the eve of France's resumption of the systematic detonation of Bikini atoll. But I am not going to save the planet in 55 minutes. I am not even going to talk about green architecture. Rather, I'll drift around between three words: ecology, prosthetics and architecture. For the faint of heart, there are number of well marked exits that could be used at this point. For the rest, here we go.

What is it to talk about ecology and architecture? What is there to say that hasn't already been said, and said well? What is there to say that is new? In fact, I've got nothing new to say about ecology. I just want to recycle some ideas, some ideas about recycling precisely. By recycling ideas about recycling, we can explore hidden aspects of the

relationship between ecological discourse and architectural discourse.

The exploration begins with John McHale, the author of two influential books on ecology at the end of the 1960s. McHale is a curious figure. When his *The Future of the Future* came out in 1969 and *The Ecological Context* a year later, he was swimming in a number of well backed think tanks, making presentations at high profiled conferences, lobbying at power cocktail parties, and smoothly operating within a clearly defined milieu of futurists. He was exerting a strange kind of influence on a very particular discourse about the future that was going on at that time. His agenda was clearly spelled out by the books. They advocated recycling, both in the familiar sense of "reuse" and in the sense of "no-use," knowing when not to use a resource, knowing when to say no. Effective recycling also involves removing things from circulation. Furthermore, the books argued for the need to increase energy input on a global scale and to improve the efficiency of the distribution of that energy. The two things go together. To more efficiently distribute resources is to more efficiently distribute energy, to make more energy available. This leads to a call for refashioning the food chain on a global scale. This redistribution of energy flows would require "Eco-Monitoring and Control Centres" aligned with new networks of strategic planning, global organisations in which some kind of elite infrastructure of technicians and administrators would transcend traditional political structures in the interests of efficiency and humanity - efficiency understood as humanity.

The argument was based on a particular understanding of prosthetics. The pivotal chapter of the book is entitled "Man Plus," as in man plus accessory, accessorised man. McHale is fascinated by the prosthetic attachment of artificial limbs (*fig 1*). Though these attachments are usually made in response to some kind of human defect (through birth, degenerate disease or amputation), they are capable of much further amplification, an amplification and diversification of the human organism that offers a general model of cultural production and restructuring. When the chapter presents a whole succession of prosthetic attachments, each is understood as a model for the enhancement of the human condition. The argument passes from artificial hands to the way in which machines can be controlled through body electricity. To accessorise and extend the body is not to simply attach prosthetic limbs to the outside of the body or to place bodies inside a prosthetic apparatus. It also means passing that apparatus right into the internal

nervous system and letting the nervous system control it, letting the machinery of the body interact with the machinery that is outside it, producing a new kind of super body. Accessorised man as superman. The limit between interior and exterior, organic and machine, gives way. The inevitable consequence is the "extension," as McHale puts it, of the control capacities of the human nervous system into electro-mechanical devices which in turn grow into a generalised cybernetic system. In fact, he says that it is precisely by generalising this cybernetic extension of the human nervous system into a model for all technology that technology will be transformed into an organic system. Ecologists will no longer simply talk about plant life, mineral deposits, atmospheric conditions, and so on. Everything that we think of as artificial would be addressed as the new nature, the artificial nature that needs to be analysed and reconfigured in ecological terms. The implication of McHale's argument is that the artificial body becomes the natural landscape, the space that people inhabit. The successive extensions of the body transform the space the body occupies. Indeed, it collapses the distinction between body and space. From an ecological point of view, the body is but an event or interruption in the continuous redistribution of energy. The new global space is that of the artificial body. The global ecological space whose energy flows require management is produced by hyperextended flows of nervous energy.

McHale theorises "extension" in all its forms, the word seemingly appearing in every second sentence. It is used, for example, to describe the use of hallucinogenic drugs as an extension of the body. It must not be forgotten how many articles were written in the sixties about the positive effect of the use of drugs on both the experience and production of architecture, as in an *Arts and Architecture* article on LSD. For McHale, such drugs have to be understood as an extension and transformation of the body's nervous system. Likewise, cryogenics, the freezing the body immediately after or before death, is understood as an extension of life, and therefore the body, that constructs some kind of after-life landscape. It is the last move in what McHale describes as the "vertical extension" of the body into inner and outer space - the extension down into the underwater depths and up into outer space. All of these extensions produce a "species extension," a fundamental transformation of the morphological and social conditioning of the human being. It's not simply that human beings will change in the future. The extension of the species is also an extension in time. McHale argues that these diverse technologies

enable both an extension into the future and an extension into the past.

The point of the "Man Plus" chapter is that the accelerated growth of the prosthetically extended body necessarily leads to networks of overlapping technological systems that will, in the end and probably quite quickly, envelope the entire globe as a single system. Images of prosthetic hands develop into images of the globalised media. The simple hand leads to a more sophisticated set of hands, then a set of hands that are detached from what they can manipulate at a distance, then a body mirrored by its prosthetic extension in human driven robots which gives way to communications systems, a primitive fax machine combined with television developed by Bell telephone, video phones based around a card reading system, and so on. Before long, we find images of radar systems and radio telescopes understood as enormous ears, which give way to spacecraft, remote extensions that fly around the globe doing our work for us. Or, more precisely, they are parts of our body that float above and around the planet, eyes and ears on the loose. The artificial body is globalised into a cybernetic network of electricity understood as a strange kind of mirror of the internal electricity of nervous system. The result is one body at the scale of the planet, one ecosystem.

If there is now one ecosystem in which the distinction between culture and nature cannot be simply made, it needs a new kind of management, if not a whole new class of managers and McHale's books lay out the preconditions of that management. The polemic is clear. The uneven distribution of resources has to be combated at every level and the villain is the nation state. In a single ecosystem, the nation is an anachronism, an institution that inherently interferes with the complex flows that sustain an equitable distribution of resources. At one point, McHale insists: "There are no local problems any more, the only problem is the global problem." The very idea of problem can only be understood at the global level. Conflicts are melted by easing the flows. Even war is washed away. It supposedly disappears with the emergence of a single global system because the system would have no competitors. Indeed, politics itself becomes obsolete. The construction of an ecologically balanced environment presupposes the destruction of political structures. The structure of human interaction changes with the ever changing structure of the body.

Now there are one or two problems with this position, most of which you can already guess and we could sing them along together but let me

quickly note some of them. Of course, McHale presents a globalising theory of the globe which effaces difference. I mean difference at the most obvious level - race, gender, class, and sexual orientation - but also difference in general, if we can say that. There is a very particular politics to McHale's attempted effacement of politics, a politics of denial if you like, a denial that includes the denial of its own political state. Exactly what is the new class of ecologically sensitive managers up to? Where did they come from? Who are they acting for? Indeed, what would constitute an act in an infinitely flexible economy of self-levelling flows? To put it crudely, will the equal distribution of resources between what used to be nations also be an equal distribution between genders, between sexual orientations? Will these differences be as redundant as the nation state in the age of artificial bodies? Does difference itself become obsolete or will differences be multiplied indefinitely? Does an infinitely responsive set of flows efface or emphasise difference?

A related problem is that McHale presents a boy's-own argument. These are all boys' toys after all. It's a kind of *Scientific American* view of the world, a fetishism of the glories of science. The guys in the white lab coats tweaking those prosthetic arms in McHale's illustrations are understood as quietly spoken but heroic leaders of the new world. Not by chance are McHale's books full of charts and diagrams, chapters ordered 1.1; 1.1.2 and so on. There is a glorification of global and millennial statistics, the bigger your statistics the more your credibility. Big is good. To be bigger than anyone else is to dominate. Despite the fact that it is not supposed to be about domination because we are all one happy family, right?

This leads to another related problem, the quasi-military and corporate rhetoric that is deployed. Most of the images, like the data cited, are taken from these domains, as is typical of so much discourse of the time. McHale was a promoter of particular technologies and particular attitudes to technology that were actively sponsored by military and corporate interests, interests precisely opposed to the equitable distribution of resources and the effacement of political barriers to the flow of people, resources and ideas. McHale republishes highly loaded documents and images as if they are innocent records of reliable analysis. His stance is often that of the accountant. For example, he calculates how many lumens of light energy arrive at the earth's surface at any one moment, divides it by the number of people on that surface and suggests

that by hanging the appropriate number of mirrors up there in space, the energy could be evenly distributed around the world. The starkness of the statistics is used to prop up the radical nature of the proposal, one that takes its inspiration from a number of NASA proposals that were in turn used for, and used to mask, certain military objectives. The depoliticization of the statistics becomes the basis for the depoliticization of the projects based on them, even, especially, of portraying those projects as the mechanism for getting rid of politics in general.

It would seem all too easy to criticise the two books as if we today understand what is politically and ethically correct or incorrect in the formulations of the sixties. But it is not so easy. McHale was aware (even if he succumbed to the dangers) of what he called the overprofessionalisation of the future and the militarisation of ostensibly objective knowledge. Indeed, his warnings against this formed a crucial part of his argument. He explicitly presented his argument as a displacement of resources away from the corporate and military world, a reuse or recycling of corporate and military thinking, a displacement from "weaponry" to "livingry." After all, we have to take into account that when he describes his idealised global economy, it is not just an ecological economy of material resources in the traditional sense. The hyperextended nervous system is also an ecology of ideas. From the beginning, his argument about prosthetics is a social argument. Language, for example, is described as the first prosthesis. It is not surprising that the central issue becomes the latest communication technologies. When he heads into all these technological extremes, McHale does not mean to leave the social world behind. On the contrary, he believes that he is describing the contemporary social condition. Physical technology is social technology. It is not that social life deploys various technologies to sustain itself or that social life can even be found within technological space. Rather, social life can only reside in prosthetic accessories. As McHale puts it: "Man is a social animal only through his extensions." Prosthetics are "psycho-physical extensions" of man, by which organised human thought now covers the globe as a fundamental part of the overall ecological system. McHale speaks about "conceptual extension" as often as he speaks about physical extension. Ideas, like bodies, can be prosthetically transformed and dispersed. Inside the ever larger, interconnected and entangled network that envelops the globe are layers of concepts that evolve and move like the weather. It is in this intricate play between organic processes, economies, technologies and concepts that the nuances of McHale's understanding of ecology lies.

Ok, so the obvious question is what on earth does this have to do with architecture? Well, there is an architectural dimension to this ecology of prosthetic accessories. When the scientist Haeckel coined the term "ecology" in 1873, he described its etymological sources in the Greek *oikos* - house or household economy - and *logos* - knowledge. Ecology is knowledge of the house, of the household economy. From the beginning, ecology is a thinking about a space, a domestic space. For McHale, the globe is a single space, one house with one family, a potentially happy family. This is a standard fantasy of the time. Think of the extraordinarily successful *Family of Man* photo exhibition at the Museum of Modern Art in 1955 where ordinary people from every race and country were portrayed as living out the same life cycle and sharing the same dreams under the same threat of nuclear devastation marked by the exhibition's final image, a large colour transparency of a nuclear explosion. If you look at McHale's rhetoric, this image is clear. He says at one point that "The home planet has become a minimal conceptual unit of occupancy for the whole human family," insisting that we all live in one big electronic house. Furthermore, "the feeling of at home has been mobilised round the planet." Even the sense of belonging to a place has been mobilised and then generalised. McHale presents an image of the domestic economy and literally describes his ecological agenda as "planetary housekeeping." The polemic about ecology, which was very influential at the time, was based on the idea that the world has become a kind of architecture. Indeed, it is an interior, the interior of a house, one that needs to be redesigned. The concluding chapter of *The Ecological Context*, which is entitled "Ecological Redesign," argues that "We need to design our way forward" and symptomatically ends with the claim that we need to establish "what are the ecological or housekeeping rules that govern human occupancy."

To talk about ecology in architecture is not to bring the thinking of ecology to architecture. Rather, ecology is, from the beginning, a certain kind of thinking about or from architecture. McHale constantly deploys an architectural rhetoric. In fact, *The Future of the Future* was first published as a special issue of the English journal *Architectural Design* that was edited by McHale in 1967 and entitled *2000+*. Other sections of the book appeared in the same year in an article called "World Dwelling" which was published in *Perspecta*, the journal of the Yale School of Architecture, and was republished in a special issue of *Design Quarterly* which McHale edited under the title *Towards The Future*. Likewise, *The*

Ecological Context is a reprint of *Document Number 6* of a series of reports, produced between 1963 and 1967 by "The World Resources Inventory" that was based at Southern Illinois University and directed by John McHale. The institution was founded at the International Union of Architects (UIA) Congress of 1961 when Buckminster Fuller made a speech that called for what he called a "Design Resources Decade." If you look at McHale's thinking throughout this time, it is essentially a reworking of the program that Buckminster Fuller outlined in the UIA speech. Architectural ambitions underpin it at every turn. In fact, the World Resources Inventory was basically the institution that promoted and published Fuller's ideas for a while. It is not by chance that the 2000+ issue of *Architectural Design* begins with a transcript of a speech by Buckminster Fuller. The series of documents of which it was originally part is largely made up of the writings of Buckminster Fuller and John McHale. It was McHale who wrote the first monograph on Fuller in 1962 (republishing part of Fuller's speech of the year before) and his writing is everywhere completely entangled with that of Fuller, who he describes as "Research Associate" (fig 2). If you read Fuller's writing at the same time, he has exactly the same attitude towards McHale. They never sign together or fully acknowledge the other, despite the fact that they seem to be saying the same thing and even using the same charts. It often becomes unclear who is writing what.

Fuller, for example, was also into prosthetics. In *Document Number 1* of the World Resources series, published in 1963, he describes organ transplants and the ever increasing sophistication of the body with its "various prosthetics attachments," such that it eventually be attached to the computer networks. Like McHale, he argues that we will soon plug ourselves into the net or, more precisely, plug it into us, absorbing and recirculating information intravenously. In *Document Number 2*, McHale publishes a graph entitled "The Velocity of the American Family's Acquisition of the Mechanical Extensions of its Apprehending Faculties and Physical Capabilities" (fig 3). It monitors the growth in the number of cars, radios, telephones, refrigerators and TV sets in American houses at any one time, each being understood as a prosthesis. By constructing a sense of the "velocity of acquisition" of prosthetics, human beings are portrayed as relentlessly accelerating towards their cybernetic, if not cyborgian, future. Fuller constructs the same image. In fact, he soon republishes the same diagram without reference to McHale. McHale's argument is both completely entangled with that of a well

known architect and yet strangely detached from it. Each haunts the other's texts without ever appearing as such. The special issue of *Architectural Design* that begins with a speech of Fuller's doesn't refer back to Fuller's work. In fact, there doesn't appear to be any architecture as such in either *The Future of the Future*, which is where the material ended up, or in *The Ecological Context*, even though both were published by George Brazillier, one of the most important architectural publishers of the day, who had published McHale's monograph on Fuller. The books appeared in an architectural context but did not have any architecture in them. Or, to be more precise, did not have any recognisable architecture in them. The architecture of the ecology is elusive.

But there is an architectural argument there. Like Fuller, McHale was concerned for the survival of architecture as a discipline. While he may not be discussing specific designs, he is speaking about the need to keep the discipline alive by extending it, prosthetic extension being, of course, the very condition of survival. What is presented is a prosthetically enhanced architectural discourse. When McHale describes the need to redesign the planet, since it is one big house that needs to be reorganised for its new multinational family, the discipline of architecture is being called on to transform itself. The moment that the discipline takes responsibility for the globe, it will have grown. And it can only do so by absorbing, reconnecting to and deploying new technologies, like those of statistics. New forms will emerge out of new forms of calculation, new models of structural harmony, models of flow, distribution and reuse, dynamic models that supersede those of gravity. Architecture must lift off. McHale offers an institutional argument, a polemic about the status of architecture rather than specific designs. The strategy is simply to give the world to architecture. The planet is transformed into one big architectural site by the new technologies of communication in which the world family needs to be rehoused. If the world is a house, it needs designers. If designers need commissions, what better commission could there be than the whole planet? The architectural implications may be unclear but the appeal to architects is very clear. The architectural world couldn't help being attracted to the idea of the world having an architecture. The already grandiose dreams of Fuller's contemporaries (like Le Corbusier, who likewise used the latest systems of communication as a model for architecture and saw the apparatus of modern life, from clothes to television sets to buildings, as prosthetic extensions, "artificial limbs," as he puts it) could be taken to a new level. The

generic fantasy of an international architecture could be extended to a new scale. As McHale puts it in the opening lines of his book on Fuller:

World architecture, in the unitary sense employed today, is a phenomenon of quite recent origin. Increased speed of communication in the 20th century has made it possible for the architect or engineer to operate in world terms ... This acceleration in communication, however, is but one facet of the vast technological revolution which has long been transforming not only our society but the physical environment within which that society functions. This transforming agency has been the direct application of science through industrial technology to human affairs ... In translating the context of architecture, from a local to a global scale, this agency of change has also enlarged the role and widened the responsibility of the architect.

McHale goes on to note that the first sketch that Fuller privately published, in *4D Timelock* of 1927, is of "a 'one world' town plan." It shows a globe covered with multi-deck "4D house" units that are airlifted into place by dirigibles and interconnected with small aeroplanes that circulate the planet. Not by chance is the sketch annotated with an accounting of the 2,000,000,000 "new homes" needed to house "the whole of the human family" within 80 years. The world is available, waiting for architecture. Time is of the essence. Fuller uses the label "4D" because he understands time as the "extension" of the physical. The architect of the prosthetically extended world has to operate in and with time. The rate of change in the new technologies that have transformed the world into a house that needs an architect need to be studied by architects if they want to become designers for the new age. Statistics become the very stuff of design.

This involves a complete re-thinking of the house. Specifically, it rethinks the relationship between material shelter and the technologies that have redefined the meaning of shelter. This rethinking, which supposedly precedes any thinking about architectural form, can be seen in McHale's books on ecology. A new attitude to architecture surreptitiously emerges out of the ecological philosophy. Indeed, a quite specific manifesto for the house lies within the discourse. At one point, McHale follows Fuller in describing the house as "a rentable fully serviced facility like the telephone," the telephone network being the ideal of the architectural condition. At another point, he refers to houses as "expendable and expandable." In another, he explicitly rejects the idea of home ownership. Furthermore, he describes the particular space that is produced and defined by projections

and drugs. At one moment, the house is a prosthetic device understood as a mobile skin and at another point the car is described as "a mobile extension of the house." Even the extension is extended. Elsewhere, he says "Car, boat, plane, motel, vacation cabin, trailer, restaurant, theatre, etc. are extended home roofs." The roof of the house rests on all these different types. What is left of the traditional house, the home sweet home that every child is encouraged to draw? All that is left is a "services pack," "a dwelling services unit which will operate with equal facility in the earth or on the moon." The pack can go anywhere, anytime. And just as the house is mobilised and heads out into the world, the world comes into the house through all the new technologies of communication. The house is simply, "the home base" in some kind of network. The end result is, as McHale puts it at yet another point, "The home hearth concept has become detached from the material paraphernalia of dwellings."

The Future of the Future illustrates this detachment with a sound-proof suit that isolates the body from the world of sound. Likewise, it presents a suit that is liquid conditioned so that regardless of where you are you just plug it into the right kind of conditioning. When the suits were first published in the *2000+* issue, they carried a commentary by Robin Middleton that reads "Architecture as we know it is likely to become redundant, space is a hostile and uninhabitable environment for man, he must carry his own environment with him if he is to survive ... The space suit...offers a vision of the future ... we may at least survive and enjoy living with no more than adequately designed clothes - no houses, no homes even ... Already clothing is available in Britain that offers amenities and comforts lacking in a great many of us." The prosthetically enhanced and mirrored body is again deployed. In the *2000+* issue, the "+" invokes both the future and the prosthetic accessory as in the plus of "Man Plus" that promises extension, life, health and harmony. The space suit becomes the model of the architecture of prosthetics. Indeed, it starts to take a more recognisable architectural shape when it is plugged into a space ship. The accompanying image shows modern man sitting in a capsule on a body-contoured chair wearing a slick suit connected to all the domestic plumbing hidden behind him. The truly modern interior is that of the space ship. The next step is obvious, the newly mobilised house settles into a suburban development on the moon. Then even the outside of the house is brought in and domesticated. An artificial nature is developed that reproduces a chocolate box environment on the inside of enormous doughnut shaped space stations.

Even the landscape has been mobilised and starts to drift through outer space. And so on and on. The architecture of prosthetics takes shape in a series of images.

Clearly this is not just the application of ecological arguments about technology to the specific technology of the house. Rather, it is the prosthetic extension of the house that produces the idea of a single ecosystem, a singular space that can be managed. A theory about the extension of the house makes a globalising theory possible. If you can imagine that the world is one house then you can imagine that a single theory is appropriate to it. One planet, one philosophy. The suppression of difference in the name of ecology required a very particular architectural argument. The radical extension of the house that supposedly transforms the status of the discipline of architecture has very particular political consequences. The image of the house that McHale constructs is far from innocent.

To reconsider this image, we have to go back earlier in McHale's career. While he published his first promotional article on Buckminster Fuller in a 1956 issue of *Architecture Design*, his particular take on architecture only became clear a year later when he did the cover for a special issue of the same journal called "Machine made America" (fig 4). He presented an artificial body made up of a collage of images, which as he says on the flyleaf, "reflects the world of infra-grilled steak, premixed cake, dream kitchens, dream cars, machine tools, power mixers, parkways, ticket tapes, sparkplugs and electronics." The image was followed by two pages of what he called "Marginalia" which linked popular culture to architectural culture. There are images of houses built from catalogues, loudspeaker designs by Architects, Buckminster Fuller Domes, car styling, push button automatic transmissions, office desks with pushbutton panels for lighting and temperature, waste and TV controls, dream houses by architects, mechanical beds, rotisserie sunbathers on a huge lazy susan, highway interchanges, and so on. Here we have the critical link between architecture, popular culture and prosthetics - the production of artificial bodies that is reinforced by the image McHale published of himself at the top of the article in which he appears alongside a robotic head described as his "sparehead" (fig 5).

McHale was an artist at the time and was obsessed with the artificial body, as can clearly be seen in numerous photograms and collages of the 1950s (fig 6). And this obsession cannot be separated from his commitment to popular culture. In fact, since 1954,

McHale was the convenor of the Independent Group Discussions at the Institute of Contemporary Art in London along with Lawrence Alloway, a role that he had taken over from Reyner Banham. He visited the United States in 1955 and returned to England a year later with his partner, the artist Magda Cordell. They brought back a huge trunk filled with American magazines, catalogues, Elvis Presley records, and odd bits and pieces of what we would call today "pop" culture. In fact, the term is unthinkable outside that very trunk. Richard Hamilton promptly cut advertisements out of those magazines and used them to construct his famous collage "Just What is it That Makes Today's Homes So Appealing?" that was a centrepiece of the 1956 *This is Tomorrow* Exhibition and has been canonised as the first significant work of Pop Art. The very expression "Pop Art" was first coined by Lawrence Alloway at the Independent Group meetings and first published in an article that symptomatically appeared in an architectural journal. Not by chance does McHale's article juxtapose the space-ship atmosphere of houses by Bruce Goff, Albert Frey and Joseph Waugh and Fuller with the latest in consumer technology and styling.

The bond became even more explicit in an article McHale published in the same year entitled "Technology in the Home." It begins by saying that "Technological changes in the home have accelerated in the post-war years, keeping pace in this with the home extensions - like the automobile, the Espresso café, the Wimpey bar, the movies - and even the pub." These internal and external extensions of the home have occurred without help of architects. The appeal to popular culture is an appeal to a newly emerging architecture for the prosthetically extended human body that the discipline of architecture cannot comprehend. McHale insists that "Where the penetration of the home by technology has occurred to the great degree, i.e. the kitchen, the architect's part has come down to providing a roof for a completely 'packaged' mechanical utility." The architect merely provides the package for the package. Unsurprisingly, Fuller is immediately identified as the one architect who has been able to extend the limits of the discipline, an extension that was launched by a series of house designs developed "outside of standard architectural practice." A crucial feature of these houses is the reorganisation of services. McHale catalogues the 4D single house of 1927 (later named "Dymaxion"), which consolidates all the services in the single mast and the 4D multi-deck apartment house of the same year, which likewise has all the services (elevators, air conditioning, waste disposal, lighting, energy outlets)

in the central mast from which the ten decks are suspended and into which various bath and kitchen units can be plugged. This mechanical core is seen to be taken to its limit in the 1946 Wichita house, with its prepackaged kitchen and bathroom units. Each project is defended with a kind of ecological argument about the minimal use of resources, the maximisation of efficiency, and so on. They are all demountable and highly mobile, if not recyclable. McHale points to the "Autonomous Living Package" of 1949, a services pack that can be packed up onto a 24 foot trailer, off loaded, reassembled in numerous combinations and gift-wrapped on site in one of Fuller's geodesic domes. Fuller's "far out" projects that refuse to make concessions to popular taste and styling are then contrasted with McHale's colleagues in the Independent Group, Peter and Alison Smithson, whose House of the Future for the *Daily Mail* Ideal Homes Exhibition of 1956 is seen to bridge the gap between science and popular culture. While its prefabricated plastic interior defined by a continuous moulded surface is reminiscent of the form and principles behind the bathroom/services units that Fuller developed between 1931 and 1937, the house is presented as an appliance, to be styled for the taste conscious market like any other piece of domestic equipment.

McHale's reference point is the 1956 Motorama Kitchen of Tomorrow developed by General Motors and Frigidaire. What impresses him is the seamless organisation of all the new technologies right through the living space whereby you cook your meals by putting in precoded computer cards into a reader which would then control the selection, combination and preparation of the ingredients. Likewise, the house is kept under surveillance by television, allowing the children and intruders to be monitored. The technologies of communication reconfigure and define the house: "Separation between cooking and eating was indicated by the Planning/Communication Centre, which provided serving space on the dining side, and on the other, a swivel TV, with remote control, to keep an eye on the playroom or the front door; a loudspeaker telephone, answerable anywhere in the kitchen, that records messages, as well as a device for sending and receiving written messages." McHale refers to it as a "conning unit" in the same way as Fuller described the study of the Dymaxion house, as a "conning" or control room containing radio, television, maps, globes, typewriter, mimeograph and calculators in revolving storage units. The technologies of communication redefine the shape and operations of the house and provide a model of its new role. The Smithson's House of the Future is, like the Dymaxion

house, an industrial product to be rented "on a service, repair, and new model replacement basis rather like a telephone company" as McHale's monograph on Fuller puts it. Likewise, Fuller argues that his 1940 Mechanical Wing house, a mobile extension of the suburban house that sits on a trailer and cleans itself automatically with a jet spray, must "employ as scientific an approach to cleansing and heating the human being as is employed in the design of present electronic communication apparatus." The bridge between science and popular culture is the communication technologies that act as the role model, redefining the houses they inhabit. Along with the radical mobility of the house comes new forms of intimate contact with the globe through wires and airwaves. Indeed, for McHale the "increased circulation of mass-communication devices have restored the importance of the home as a social centre - even the movie, through the drive-in, becomes a private home-extension." The architecture of prosthetics at once consolidates and disperses the house. This double movement is inseparable from the rise of popular culture. It is precisely by embracing the "styling" of consumer products that the Smithsons are able to grasp the technology transformation of the house. Science and Marketing are bound together

In 1959, McHale published the two parts of an article called "The Expendable Ikon" in successive issues of *Architectural Design*. Once again, it is significant that this argument about the role of images in mass culture is made in an architectural magazine. But while the essay begins by announcing that "Architects and designers are professionally concerned with communicating visually and, where not actively engaged, we are all participants in the process of mass-communications," the only explicit reference to architecture is the inclusion of cathedrals in the list of the old forms of stable imagery that have been displaced by the contemporary media. McHale argues that the relationship between fine art and mass culture has been transformed by the new "environment extensions," insisting that the rise of mass communication and consumption parallels the rise of technologies that have "pushed man's frontiers almost to the stars." The essay examines the economy of images in an age in which "the whole range of the sensory spectrum has been extended - man can see more, hear more, travel faster - experience more than ever before. His environment extensions, movie, TV, picture magazine, bring to his awareness an unprecedented scope of visual experience." The survey of potentially iconic images and their new forms of circulation begins with a sequence of images of robots, aliens and cyborgs that leads into a

sequence of images of special suits produced by the space program for surviving extremes of speed, heat and contamination. The new extensions of body are understood as new form of clothing. The “man/machine” mixture or “mechano-morph” that develops “mechanical adaptations of his processes which are become almost part of his body” extend life into hostile environments in an analogous way to the circulation of images themselves. The iconic value of particular images is replaced with the “alchemy of the moving image in the rectangle,” whether it be mammoth screens at mass rallies blowing up the image of a single figure, the mass of flickering monitors from which the TV director assembles a program from live feeds arriving from different places all over the continent, or a drive-in cinema. Old forms of security, like the image provided by a cathedral, a mask, or a ritual dance, is displaced by the flow of imagery in these new frames. The frames themselves become the only stable image.

McHale elaborated his position in a 1961 talk at the ICA entitled the “The Plastic Parthenon” that explored the way plastic replicas of architectural monuments have ended up having more cultural significance today than the monuments that they replicate. The talk, which would become well known when it was published in Dorfles’ 1966 volume on *Kitsch*, begins with a restatement of the “common cultural environment,” the “planetary culture” that is being produced by the technological extension of the human body through new forms of communication. A whole new sense of the environment, indeed a whole new environment, is supposedly being constructed in time and space: “Besides the enlargement of the *physical* world now available to our direct experience, these media virtually extend our physical environment, providing a constant stream of moving, fleeting images of the world for our daily appraisal. They provide psychical mobility for the greater mass of our citizens. Through these devices we can telescope time, move through history and span the world in a great variety of unprecedented ways.” In this new environment, a new economy, if not ecology, operates. Products become as expendable as images. Indeed, products are images. Even buildings succumb to the logic of obsolescence rather than scarcity. The “machine aesthetic” of the so called International Style is described as just that, an aesthetic, an “image of functional modernity rather than its actuality,” an image that could circulate the globe in an unprecedented way but will give way to other images.

McHale is picking up on the point that Banham made in his *Theory and Design and the First Machine Age* of the year before that modern architecture, which was itself explicitly based on the proposition that architecture should be a prosthetic technology, was in the end just an image of technology. In other words, that it was an image of prosthetics rather than a form of prosthetics. Banham’s mission was to produce a truly prosthetic architecture that would at the same time engage the new culture of images - hence his simultaneous commitment to the state of the art in technology and the state of the art in styling. Fuller was always the reference point. Not by chance does Banham’s book end its sustained critique of modern architecture by pointing to Fuller as the only ray of hope in architecture. In fact, McHale had invited Fuller to give a lecture at the ICA in June 1958 called “Man Plus.” Once again, it remains unclear whether the title is coming from McHale or Fuller, whether McHale was inviting Fuller because he was talking about prosthetics, or whether it was that Fuller entered into the discourse about prosthetics that was going on. After all, the Independent Group’s interest in the artificial body long preceded their encounter with Fuller. They had always been into robots. Alloway had one of the largest collections of material on robots. The undocumented exchange between Fuller, McHale and the rest of the Independent Group about prosthetics was an exchange between two kinds of science fiction, as can be seen by comparing one of Fuller’s domes constructed in 1969 and one of the many science fiction images used by the Group. Not by chance was there all this talk about outer space. The real science of Buckminster Fuller’s designs was exactly that of the so-called science fiction. Fuller and the Independent Group have to be understood as offering two rival forms of science fiction.

In the attempt to avoid the error of high modern architecture by getting beyond an image of prosthetics to the prosthetic technology itself, including especially the technologies of images themselves, the Independent Group and its offspring didn’t abandon the image as such. On the contrary, they were obsessed with the structure of images. McHale’s “Expendable Ikon,” for example, linked the idea of prosthetics to that of the image by drawing on Marshal McLuhan’s work. Of course McHale’s thinking about prosthetic extensions had been influenced by McLuhan, whose 1964 *Understanding Media* was symptomatically subtitled *The Extensions of Man*. It made explicit the implicit assertion of his earlier books that with the explosion of communication networks that endlessly circulate images throughout the globe, man had literally

extended his central nervous system: "Today, after more than a century of electric technology, we have extended our central nervous system itself into a global embrace." McHale cited this passage at the conclusion of the "Man Plus" section of the 2000+ issue of *Architectural Design* in 1967. In the same year, he reviewed McLuhan's book for *Progressive Architecture*, emphasising McLuhan's role in the early development of Pop Art.

So the question of images in popular culture cannot be detached from the questions of prosthesis and ecology. It was precisely when McHale offered the plastic pop simulation of the Parthenon, along with reconstructions of the Taj Mahal in Los Angeles and Medieval castles at Disneyland, as the paradigm of the new ecology of images that he was finishing his book on Fuller. The "cyclical mobility" of images through space and time is linked to the reconfiguration of architecture on scientific principles, principles that would later be understood as ecological. This intense discourse about what would all too easily today be called post-modernism (and has been forgotten to make much of the recent discourse about simulation and virtual reality seem new), is linked to a discourse about ecology. In the "Plastic Parthenon" and "The Expendable Ikon," the age of simulation is understood in terms of survival. McHale argues that the expendability of images is explicitly linked to the non-expendability of the body. The capacity to survive new environments and new time frames is directly linked to the capacity to use, re-use and discard images. Images are literally consumed as a form of nutrition. The prosthetic extension of the body that enables it to survive is precisely its ability to reconfigure the environment. The environment can be, indeed has to be, endlessly reconstituted. Everything gains an afterlife, many afterlives. This is even true of the supposedly irreproducible ikons of the past, as exemplified in the gothic cathedral which succumbs to its own reproduction in digital archives: "Most of Europe's main cathedrals, if destroyed, may now be reconstructed from the detailed photogramatic records." The Gothic cathedral, so often the paradigm of the inescapable presence of an auratic object, the immediate, unforgettable, irresistible, irreproducible and uncontrollable experience of authentic presence, simply gets recycled. Furthermore, the "Plastic Parthenon" points out that recycling allows the same materials to be transformed from one object to another, such that the materials move, as he puts it, through cultural space. Materials are, as it were, morphed through space and time. Culture is understood as a set of flows. The culture of architecture is but a rhythmic

ecology of images, even if they are not simply understood as visual images. Architecture becomes plastic, a morphing communication system that moves around the globe and in so doing defines a space, an artificial nature that is inhabited on an everyday basis.

While "human consciousness has expanded electronically," it does so precisely to oppose the "economics of scarcity." The expendable image circulating through popular culture becomes a model for an ecology of resources. McHale did not abandon the pop images of his early years for the later analytical and accountant-like discourse on the rigours of science and ecology. On the contrary, his introduction to the 2000+ issue suggests that "The imagery of technology may be as powerful an agency of change as the rational understanding of a scientific and technological basis." He goes on to speak of the need for "image makers" and is attracted to Fuller (whose speech is inserted between the introduction and the main body of the text), precisely because he is an "image maker." In a 1973 interview with Elvin Toffler, McHale literally describes himself and Fuller as artists producing images that take over the old role of fine art. Yet again, the claim is linked to a certain understanding of architecture. They talk about taking a room and transforming it with projections, plastics that have memory, drugs, and so on, into a Louis XIV interior. This very image of a space defined by redeploying certain image making technologies is understood as an artwork. When McHale writes about the future, he is trying to put into circulation a very tightly organised metaphoric set of images. Fuller is a role model because he is able to construct series of fantasies that have the sense of quantifiable reality, a believable science fiction, just as, "NASA knew that it was really producing an artistic extravaganza." All of McHale's charts and statistics have to be understood as works of art.

With Fuller, this is obvious. Every project is a polemical manifesto. Take the cloud structure of 1961, the same year as "The Plastic Parthenon" talk. It is a giant airship one kilometre in diameter that is supposed to float around the world and occasionally anchor itself to a mountain top. Four years later, there is the tetrahedral city with sides of 3.2 kilometres. These are really images of huge houses. Fuller even conceives of them from an ecological point of view. In 1964, he literally described the skyscrapers of Manhattan as "but crops in a farm that needed to be rotated, turned over, ploughed under, and the elements reused and replanted, recycled into a new crop." And five years later, he proposes to construct a one mile high dome over Manhattan to

house 300,000 families in a more efficient manner (fig 7). While Fuller and his associates were able to construct a number of domes, the dome is, above all, an image, an image of a single world, following the single world - single house polemic. It is not by chance that so many of Fuller's projects take the same shape as the planet.

This concern for the image of the world, the world as house, house as surrogate, becomes most explicit in the Geoscope project which was promoted by Fuller at the 1961 International Union of Architects (UIA) Congress where he argued that architectural schools around the world should spend ten years studying, as he puts it, "how to render the total resources of the world." Again, it is a planet rendering problem. Architectural schools are the places where you produce architects and architects are the people who produce images of houses. Images today are houses and you live in images, so schools of architecture have to produce a rendering, a single representation of the single world. Furthermore, to produce such a rendering, such an accounting of the world's resources, would already be to redesign the world, to change the architecture. To inhabit the world is to render it. To render is to inhabit. The particular rendering proposed was a two hundred foot diameter globe, the surface of which would inventory all the available resources. Since 1952, a sequence of schools of architecture had been involved in this project (Cornell, Minnesota, Princeton, Colorado, Nottingham) as Fuller moved from institution to institution (fig 8). A series of prototypes were developed with ever increasing sophistication in the representation. The idea was to build up a data display out of layers of information located within the flat surfaces that make up the globe. When Fuller promoted the idea to the executive committee of the UIA, calling for an international exhibition of each school's attempt in 1965, he predicted that:

Its interior and exterior surfaces could be symmetrically dotted with ten million small variable intensity light bulbs and the lights controllably connected up with an electronic computer ... At 200 ft. minimum distance away from the viewer, the light bulb's sizes and distance apart would become indistinguishable, as do the size and distances between the points in a fine half tone print. Patterns introduced into the bulb matrix at various light intensities, through the computer, would create an omnidirectional spherical picture analogous to that of a premium television tube - but a television tube whose picture could be seen all over its surface both from inside and outside.

The Geoscope is a glorified television tube whose picture can be seen all over its surface, from both inside and outside. It is a two hundred foot TV, not so much sitting in your living room, as being your living room. Indeed, everybody's house is inscribed on it. The scale was determined by the fact that at that particular size, each individual house on the world would be discernible on 35mm aerial surveillance images. The representation of the global house is only possible at the moment that it can account, and remember that this is an accounting job, for every single house. It is reliant upon the particular sophistication of surveillance photographs at the time, the ability to register a certain level of detail in the 35mm negative size. When every house is visible you can see the outside of the house, the world outside. The modern architect's dream to bring the outside in takes a quantum leap. The idea of this project was, as Fuller says, "to afford the viewer a swift and comprehensive awareness of man in the universe, to provide a World View." The world in a glance, then. Very satisfying. I suppose.

Remember, it is 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. A couple of years ago, a space "probe" got so far away from earth that it could turn around and produce the first family portrait of the solar system, looking back at all the planets. Who knows what the long term impact of that image will be. At one level, it is a real estate shot, defining the new site for architectural operations. Like its predecessor, it is seen as a beautiful image, one to be preserved with ecological management strategies. Diverse groups are united around the preservation of this image. 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.

Anyway, Fuller proposes a huge TV set which will represent the world, and in so doing, redefine architecture, if not become the architectural project. It is the world as a single space, an interior with a domestic economy to be regulated or controlled. In a sense, it reproduces, at the level of image, what was already in operation in the computer networks. The philosophy of networks was well established in the military at that time. In Fuller's hands, the diffuse architecture of the network is transformed into an aesthetic object, an artwork. Even the

drawings of the globe are artworks, as were the NASA photographs. Fuller wanted this enormous artwork to be suspended on wires over the East River in New York, directly opposite the United Nations headquarters (*fig 9*). One year after the Manhattan Dome, he is still focussing on Manhattan, proposing interventions because it is a political and cultural centre, a centre for the production and redistribution of images. Elevators would supposedly lift people right up (from ferries, bridges or tunnels) into the centre of the Geoscope where they could witness the presentation of stars, satellites, earthquakes, electromagnetic and astrophysical patterns, economic, demographic and sociological displays, world news and events, 24 hours a day.

McHale was the co-ordinator of this project as it went from school to school. A year before the 1965 Paris exhibition of all the different geoscope projects from around the world, which demonstrated that "the 'ecology' of universities is now global," McHale published the University of Colorado prototype that he had directed. It used Fuller's Dymaxion Air Ocean map projection (a map in which, by the way, New Zealand is the only country not cut by the triangular panels) folded onto a small icosahedron. Layers of information were located into, above and below the triangular plexiglass surfaces on mylar sheets (*fig 10*). The layering of these "data planes," along with hinged planes that provided sectional information where needed, produced a complex record of atmospheric, ground and subterranean conditions, one that was then filmed by McHale to demonstrate dynamic trends in human population since 4000 BC at 30 years per second. Fuller and McHale literally ended up working on technologies of a representation. They studied multi-projection devices, flat screen data displays, triangular faced television tubes, new kinds of photography, multi-slide machines, 8mm cinema units, video tape mechanisms for film, data storage, and so on. They were deploying the state of the art of image making, storing and distribution.

Ecology is a question of images in the end, images of architecture and the architecture of images. To raise the question of ecology again in architectural discourse is already to raise the question of the image. The first technological issue is the technologies of image, which include all the institutionalised technologies of discourse itself, of architectural discourse in particular. Lectures like this one, for example, are no more than the exchange of certain kinds of images. We need to think about the politics of such exchanges. More precisely, we have to think about the intersection between such institutionalised

technologies of imagery and institutions (like this School of Architecture here in Auckland) which are themselves technologies with specific agendas and mechanisms to realise those agendas.

More precisely still, we have to think about the images of domestic economy that these various technologies sustain and circulate. The politics of ecology is the politics of images, images of houses that need to be interrogated very closely. McHale and Fuller's happy family model cannot accommodate difference inasmuch as it effaces domestic violence. The production of a single house can only be understood as the eradication of all military and political conflict if violence is understood as something that only occurs between houses rather than within them. Indeed, politics is seen to be between houses and therefore there is no politics with the idealised future of the single house. But the very idea of the house is structured by a very particular politics, a very particular violence. If ecology is really knowledge of the house, it also has to be acknowledge of this structural violence. After all, the "natural" ecosystem is always so so brutal. Ecological design would be a rethinking of the house, or perhaps just a starting to think about the house in a different or multiple way rather than simply 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.

It is important to note that while certain inequities in the organisation of the house can be addressed, there can be no such thing as the politically correct house. The very idea of the house is premised on the certain violence - whether physical, emotional, conceptual or ideological. This violence takes the most obvious forms but also the least obvious, and in the end, perhaps the most lethal. It is not just a matter of finding a better image for the house. There is a need for different forms of exchange, which is to say, different forms of imagery as well images of difference that do not surreptitiously efface difference in the end. Ecology, after all, is only ever artificial. It's an institution, the institution of the house, and there are always designers involved. All of this is complicated by the fact that the household is our culture's paradigm of institution. If we think of institutions as houses, it becomes doubly difficult for us then to interrogate the discourse about houses sustained by particular institutions. Furthermore, the actual design of houses has an extremely complicated

relationship to this institutional deployment of the image of the house. I wouldn't want to underestimate the complexity of the relationship between what it is to design or even talk about a house and the sense in which we always live in certain kinds of images of houses whose consequences we cannot face to such an extent that it is the very way in which we don't face them that produces this sense of "at home." These complications have always organised, and perhaps surreptitiously disorganised, architectural discourse but I think it becomes increasingly difficult to neglect them as our houses, the everyday spaces we inhabit, are increasingly defined by images. It becomes ever more obvious that architecture is almost literally carved into the flow of images.

While taking account of this new architecture, it would be a mistake to recycle recycling today without understanding the extent to which the overt politics of ecology, which is to say the equitable management of resources, preserves particular regressive ideological formations. The essentially imperialistic and patronising structure that much ecological discourse preserves by definition never distributes resources equitably. Perhaps architectural discourse can help in monitoring this regressive tendency rather than simply reapplying ecological discourse to design as if architects are just waiting for inspiration or legitimation from above and beyond. Perhaps some of the enigmas of architecture that architects are aware of but rarely discuss could be used to rethink ecology.

Sarah Treadwell

I'd like to thank Mark very much for his riveting talk.

Member of Audience

Mark, I was just wondering what happens to those that don't want to move, to extend themselves...

Mark Wigley

Can you give an example? You cannot simply choose not to extend yourself if you are already, and always, nothing but an effect of extensions. Our identity is constructed by extensions. There is not simply a pre-existing identity that is extended by various technologies. The accessory is everything. In the beginning there was the accessory. It's not that the world changed overnight and cyberspace changes

the whole condition of identity. It's just a new set of prosthetic extensions to interact with all the older ones. And its not so new anyway. These technologies have been around for a while now.

Member of Audience

Why have we forgotten this recent history ... I mean why do you think we are not aware of this older discourse as we go through this cyberspace?

Mark Wigley

The cynical view, which is to say the realistic one, would be that architectural discourse is responsible for preserving a certain image of architecture, an image which might fall apart if we look at it too closely. Our job is to make sure that nobody looks at architecture too closely and the best way of doing that is by claiming to be looking at it while allowing certain things to slide on by. When faced with technological innovations, we make sure that the old image keeps going. We preserve the image of a secure house, for instance, which plays such a crucial role in the way our culture, let's say western culture, regulates itself. In the face of cyberspace, we have to make sure that the "new" architecture is actually the old architecture. We have every reason to forget. Precisely by pretending that cyberspace is new we can preserve particular images of architecture and neutralise certain historically specific forms of resistance to them. So much hype. Just how many books have been written on cyberspace and the dream of Internet in the last five minutes? What is that euphoric glaze that comes over so many people in architecture when faced with these possibilities? If you compare what is being said now about the brave new world with the same kinds of claims being made back in the sixties, it becomes clear that world is not so new and its promoters not so brave.

Member of Audience

Do you think that the legacy has been continuing through the schools?

Mark Wigley

Well, many of the protagonists, and their thinking, are still alive.

Member of Audience

The legacy hasn't really disappeared as far as I know.

Mark Wigley

I would argue that slightly differently. We are all children of that discourse. I could be quite specific, for example, about the ways in which I was influenced by that discourse through people who were very involved in it. But that knowledge, and the sense of what people like Reyner Banham, Archigram and Cedric Price were on about, is very different than the on-line discussion of electronic space today, which acts as if all that didn't happen. To put it another way, if architecture as a discipline can't handle television, how the hell is it going to handle computers? In fact, there was quite an elaborate discourse about television in the late 50's and early 60's which has been forgotten and I think there are particular reasons for that. The fundamentally conservative stance of the discipline is maintained by its sponsorship of ostensibly avant-gardist types that systematically neglect the history of the discipline in order to appear radical. Only through such manoeuvres can the discipline maintain itself as a gratuitous accessory to our culture while claiming responsibility for the entire built environment. But this responsibility is nominal. Architects control a negligible proportion of the environment and tend not to get paid. Nevertheless, we act as the guardians of some of the most central concepts that organise everyday cultural life.

Member of Audience

What in fact is the future of your own discourse because it seems to me that you're incredibly well placed institutionally. We were told that you were tenured. Are you part of this conspiracy?

Mark Wigley

You tell me. If I was, would I tell you? I don't think that if you're working in a place like that you are necessarily empowered all the way down the line. It is undoubtedly a risk but that doesn't mean that if you're at another institution, or even outside such institutions, that you are less susceptible, less implicated in the uneven distribution of resources. It's the dilemma that has to be faced, faced all the time, and addressed with certain forms of misbehaviour. If you say, "But if you had really misbehaved you'd be out," I'll squirm a little. But the margins are not so innocent you know. Some of the suspect assumptions and procedures are more entrenched in the margins than anywhere else. If you are willing to keep an eye on my operations, I'll keep an eye on yours.

Member of Audience

It's quite strange being turned into a thesis. I came to the School of Architecture when all of this happened, late 50s early 60s. We even had Fuller arrive and talk to us but what fascinates me is there was another thing going on that in fact won the battle of styles. By the time I had left the School of Architecture in Auckland in 65 or whenever it was, it was completely taken over by vernacular architecture. And that vernacular architecture moved through postmodernism and it was almost as though that discourse that you've been describing tonight was quiet and forced underground, in architecture anyway, until the rest of the world just forced it back upon us again by the continuous technological change that had taken place. But it was quite strange and quite conscious, this triumph of the vernacular, the way in which Archigram for instance, was regarded as something laughable, which perhaps it was. But it's as though some wave is going through, we're pushed so far into the future and then suddenly pulled back into the past again and are now coming out into the future, the millennial thing. It was just fascinating watching all those slides, you know, my childhood being presented to me.

Mark Wigley

We could all contribute our sense of what went on and what was happening, who was forcing who and who gave way. Indeed, it would be possible to imagine the flow of ideas in McHale's sense, thinking of it as continuous circulation, an ecology in which institutions act like organisms, defending themselves by absorbing certain ideas and rejecting them precisely when they run the risk of being realised and thereby upsetting the delicate balance. If the theory of ecology gave us something, it is probably the ability to think about the ecology of theory. If there is a point here, it is probably that. Thanks.