Resistance or Reaction? The Cultural Politics of Design

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Summary

This paper traces the roots of postmodernism in the social turmoil of the 1960s, and discovers in this history the genesis of two apparently opposing conceptions: a postmodernism of reaction — which serves the interests of a conservative power status quo, and a postmodernism of resistance which speaks to issues of emancipation, liberation and social change. The postmodernism of resistance has its origins in a profound questioning of social normativities which was the hallmark of the social philosophies in the 1960s. Beginning in 1968, these emancipatory tendencies were systematically suppressed in both academia and everyday life, as a conservative retrenchment achieved ascendency. These two factors have had a profound influence upon design theorizing since the 1960s, and current conceptions of postmodernism extant in the design professions tend to be shaped by forces of conservatism which are themselves influenced and directed by the economic structuring of late capitalism. This conservatism has been largely caused by a systematic programme of deskilling, coupled with the erosion of the traditional professional space of designers. Much of their traditional work has now been appropriated by other disciplines.

Here we look at how the earlier postmodernism of resistance still retains a capacity to inform design education and practice, and to lead the design professions once more back to play a central role in the liberatory potential of environmental change, speaking to issues of participatory democracy and creative citizenship.

Résumé

Cet article fait remonter les racines du postmodernisme à l'agitation sociale des années 1960; en retraçant ses origines, il découvre deux conceptions en apparence contradictoires: un postmodernisme-réaction, servant le maintien d'un status quo voulu par le pouvoir conservateur, et un postmodernisme-résistance concerné par l'émancipation, la libération et le changement social. Ce dernier trouve ses origines dans la profonde remise en question des normes sociales qui caractérisa les philosophies sociales des années 60. A partir de 1968, ces tendances émancipatrices furent systématiquement réprimées, dans les universités comme dans la société, parce que les conservateurs gagnèrent en pouvoir. Ces deux facteurs ont eu une influence profonde sur les théories du design élaborées après 1960 et les conceptions du postmodernisme trouvées couramment dans les professions concernées tendent à être influencées par des forces conservatrices, elles-mêmes influencées et contrôlées par la structure économique

imposée par le capitalisme tardif. Ce conservatisme résulte pour une bonne part d'un programme visant à réduire systématiquement les qualifications des responsables du projet, auquel s'ajoute une érosion de leur espace professionnel traditionnel.

L'article examine la manière dont le postmodernisme de type résistance peut encore influencer la formation et la pratique du design et amener à nouveau les professions concernées à jouer un rôle central au niveau des potentiels libérateurs inhérents au changement de l'environnement construit; ces potentiels permettraient une participation démocratique et créative de la part des utilisateurs.

1. Introduction

"I shall not meddle with the great art of Architecture, and still less with the great arts commonly called Sculpture and Painting, yet I cannot in my own mind quite sever them from those lesser so-called Decorative Arts...it is only in latter times, and under the most intricate conditions of life, that they have fallen apart from one another; and I hold that, when they are so parted, it is ill for the Arts altogether: the lesser ones become trivial, mechanical, unintelligent, incapable of resisting the changes pressed upon them by fashion or dishonesty; while the greater, however they may be practiced for a while by men of great minds and wonderworking hands, unhelped by the lesser, unhelped by each other, are sure to lose their dignity of popular arts, and become nothing but dull adjuncts to unmeaning pomp, or ingenious toys for a few rich and idle men." (Morris, 1979, 32)

History is not neutral. It is the site of a power struggle between competing social and cultural groups who wish to see their own version of historical events become the accepted everyday version, the better to validate their own position in the hierarchy of social relationships we call society. This essay is largely about the recent history of design theory, and places the events that have happened since the 1960's into a social, political, economic and ideological context. This for several reasons. First, it is a history that has never been told from quite this point of view - a point of view which critically apprehends the education of professional designers and the role they inadvertently play in practice to support asymmetrical relationships of power and resource distribution. But there is another reason for writing this history. I hope to clarify some of the misunderstandings and misconceptions which have recently developed within design theory itself. Postmodernism is either embraced or vilified by members of the design community, but few seem to be fully aware of its deeper ideological significance and emancipatory potential.

The meaning and social role of design have been contested since distinctions were first made between architecture and building, between art and craft, between design and manufacture. These distinctions express a struggle which continues down to the present to shape the thing we call "design" and express deeper social distinctions which operate on the basis of class, gender and ethnicity. The design disciplines have historically enjoyed the privilege of a social distinction which allowed them special status within the wider field of social relations mediated by the division of labour. They particularly enjoy the mythology that they contribute to the overall public good by virtue of their "purity" with respect to politics and ideology. This mythology is reinforced by recent theories of postmodernism which are prevalent in design practice, which express an essentially conservative ideology which seeks to sustain existing

social hierarchies. In architecture for instance, postmodern design theorists have developed structures of understanding which reinstate design practice as a depoliticized subcategory of fine art production, which takes as its sine qua non the building-as-beautiful-object, founded upon what are reputed to be universally accepted aesthetic norms. In so doing they have at the same time divorced form from its social, cultural and political roots, and have presented it as a value free commodity, the embodiment of the postmodern conception of the "free-floating-signifier" to be bartered and traded in an ever-escalating attempt to transform the use value of buildings into the exchange value of speculative, designed environment. In this process, notions of how the shaping of the built environment might reflect and reproduce asymmetrical arrangements of power which benefit these theorists themselves have been entirely elided from the theoretical discourse. These theories are paradoxically represented as value-free, while at the same time their ideological roots have been masked in logical mystifications which inhibit critical interrogation. They have played a crucial part in bringing about the abandonment of scientific rationality as a mediating factor of architectural design, and their ideology now stands as the dominant belief system to a whole new generation of design students. Yet postmodern theory has been applied in the design disciplines in a partial and selective manner calculated to prescribe the ways in which the professional designer might operate as a public intellectual. Its proponents in the design professions seek to preserve a sacrosanct domain of professional expertise, based upon normative theories of aesthetics, through which the designer might exercise control over what stands for quality in the built environment.

At the same time that this has been happening in architecture proper, a similar process has been occurring in the domain of Environmental Design. Environmental Design (as embodied in organizations such as the Environmental Design Research Association [EDRA], together with its Australasian and European affiliates [PAPER and IAPS] was originally conceived around the need to ground design in a rational methodology, and to eliminate the apparent arbitrariness of formalism. While not denying the legitimacy of formalism per se, Environmental Design has been viewed as a rationalist supplement to traditional conceptions of design, seeking the integration of Environment/Behaviour information systems into the everyday knowledge base of the design professions. This model has worked with reasonable efficiency until recently, when, with the advent of Postmodernism and Deconstructivism in design, a new form of radical expressionism appeared, undermining the veracity of all forms of rationalism save those dedicated to the ethic of efficiency, performativity and maximum short term economic return. In response to this tendency, many environmental designers have themselves repudiated the principles of Postmodernism seeing it as the affirmation of irrationality in the designed world (Harris and Lipman, 1989, 68).

In what follows, I will show how and why postmodernism has been conservatively taken up by designers, and will suggest an alternative model of the designer as public intellectual. This model will move beyond the selectivity and partiality of existing postmodern theories of design, and will take seriously many of the precepts of postmodern philosophy to re-insert the social and political into the theoretical discourse of design practice, design education and environmental design research.

2. What is Postmodernism?

Most recent critical authors (Debord, 1968; Bell, 1973; Mandel, 1975; Lyotard, 1984; Harvey, 1989) agree that the last twenty years have ushered in a set of unique

social, cultural, industrial and political circumstances commonly called "postmodern". This is variously understood to imply a radical departure from what is termed Modernism, which is itself taken to be an aspect of the Eighteenth Century Enlightenment Project - the application of instrumental rationality to the social world, ushered in by the industrial revolution, and transforming permanently the pre-industrial feudal society which had dominated life for the preceding two thousand years. According to Enlightenment philosophers, rationalism was to liberate humankind from the servitude of inherited privilege, and to ensure that resources were socially distributed according to individual ability (Ward, 1991). Postmodern critics maintain that any social emancipation has been at the cost of a decrease in the quality of life brought about by precisely that modernist rationality which promised freedom. The "progress" normally associated with Modernism and science is partial. Hayter (1982, 16-17) notes that a very large proportion of the world's population is significantly worse off now than before the Enlightenment with 16% of the population receiving 63% of the world's income, and the rest doomed to dependency. At the same time, within the industrial nations, the number of middle income earners is contracting, with a minority moving up the economic ladder and the vast majority moving down. (Parenti, 1988, 10-11; Harrington, 1984, 149) Furthermore, the situation is getting progressively worse, and this is true both nationally, as well as internationally. Modernism, with its scientific rationality has, according to writers like Lyotard, acted as a kind of cultural imperialism for which "progress" operates as a code word for oppression. One of the significant aspects of *Postmodernism*, then, is relationship to this process.

Modernism in design has a rather different meaning, usually being applied to a style of building which occurred during that period following the Russian revolution of 1917 and including as its primary influence the work in the 1920's and 1930's emanating from the Bauhaus (Blake, 1974). Postmodernism, in this more restricted sense is seen as a repudiation of many of the principles of this style, and the ideology which produced it (centralized socialist programs, factory housing production, an abandonment of ornament, etc). Wolfe, along with others notes that the high ideals of architectural Modernism, based originally upon the principle of universal worker housing have been an abysmal failure. He and other postmodern design theorists (Wolfe 1981; Jencks, 1984, 1987; Venturi, 1977), have suggested that Modernism, with its emphasis upon principles of universal emancipation, is dead. Jencks, particularly, has rather dramatically pin-pointed the death of Modernism, "at 3.32 p.m. on the 15th July 1972" when the Pruitt-Igoe housing complex in St. Louis, Missouri (a prize-winning design based upon Corbusian principles) was demolished as unlivable. In fact, the failure of Pruitt-Igoe has been recently shown to result not from design deficiencies arising from modernist principles, so much as from a dearth of capital financing, and a severe cutback of the maintenance programs of the St. Louis Housing Authority (Bristol, 1991, 163). For Jencks and Venturi, Postmodernism is a new formal style of architecture in which playfulness, and ornament have been reinstated. The style is characterized by a separation of form from content and by giving preference to the former over the latter. It is characteristic of such critics that they perceive the built environment as stripped of its social, political and economic reality, and see its social failure as a failure of form.

3. Design: a Science or an Art?

Since Vitruvius, opinions have varied about whether Architecture, and by extension design, may more accurately be viewed as a *science* or an *art* (Ettlinger, 1977, 98). This debate took on a sharper outline in the 19th century through its legitimation within academia (Wilton-Ely, 1977, 180) and since then the disciplinary ambivalence of design has become reified within the profession as well as in professional education. In the process, a false dualism has been established between science and art, which reflects a more fundamental distinction between pure subjectivity and objective reality which is one of the mainstays of Western cosmology. This distinction is relatively recent, even in Western culture, and dates from the Enlightenment. Prior to this time, art and science formed an undifferentiated whole. With the advent of capitalism, however, science developed as a separate category, and the two domains became oppositional. One of the major characteristics of the Modernist movement in design was its attempt to re-unite art and science.

Since Gropius first introduced the notion of team design and the contribution of social scientists as well as artists to the design enterprise, scientific methodology has played a central, if implicit, role in the rationalist design process. Since the early 1960's, faculties in Colleges of Environmental Design have included academics from a wide range of social sciences. The purpose of their inclusion was to rationalize the design of the built environment - to make it more responsive to human occupation and less influenced by an overarching need to be purely sculptural. Modernist designers believed that a rational design was a liberating design - that they could create a world free from oppression. Social conflict and human hardship were seen to be caused by the presence of irrationality in the organization of social affairs, and modernist designers believed that they had a significant role to play in this process of emancipation through a restructuring of the physical environment.. (We may note, in passing, the naive environmental determinism upon which such theories are grounded).

Against this, postmodern social critics maintain that the opposite has been the case, that modernism and scientific rationality have been used to oppress rather than liberate, that modernism has been used to silence and hence disempower subordinate cultural groups. They believe that rationality, when associated with such conceptual "meta-narratives" as Enlightenment, Universal Emancipation and Historical Materialism erases difference, standardizes experience, drains the world of colour and texture, reduces experience to undifferentiated dullness and precludes the richness and quality of life which is the freedom to which it claims allegiance and for which it offers promise (Lyotard, 1984). In other words, the freedom modernism promotes is a specific conception of freedom, constrained by cultural, social and ideological values and not (as its proponents would like to believe), evolving from some transcendental or absolute groundedness. Extending this argument, some feminists have gone on to see science itself as representative of gender-biased and paternalistic modes of consciousness (Jagger and Bordo, 1989). Postmodern designers, then, have repudiated the scientific paradigm of design and have, instead, reasserted the notion of design as an art distinguished by factors of appearance and style. They have based their theories on texts from other disciplines - initially from literary criticism - which question the legitimacy of science as a privileged form of knowledge, asserting its non superiority over other "language games", including those of "narrative" forms of knowledge such as folk tales, everyday explanations of reality etc..

The most articulate proponent of this theory is Lyotard, who has suggested that science operates upon identical principles of internal consensual validation (Lyotard, 1984, 26-7). Lyotard recognizes that the authority to canonize and legitimize particular areas and forms of knowledge is itself not evenly distributed. In what is considered valid knowledge, what is important is not so much what is validated, so much as by whom it is validated. What Williams calls a process of selective tradition mediates the process of legitimation. What this means is that the (selected) tradition of the dominant culture is passed off as the tradition, as the history. This tradition is then transmitted through the cultural infrastructure (schools, the family, the church, the media, and so on) down to the level of everyday life. In this way, the already-powerful have a greater capacity to bestow legitimacy upon particular forms of knowledge (Williams, 1982, 3-16). It is this relationship between knowledge and power which is one of the greater concerns of the postmodern theorizing, which is itself a site where the contestation of meaning validity takes place.

4. Two Postmodernisms

Within postmodernism there are different conceptions of what constitutes postmodernism. What is being questioned is not only the differing kinds of knowledge, but also to the legitimacy of those who hold and legitimate them. Thus, what is being undermined by postmodernism is not merely the external attributes of knowledge, but the social relations, role definitions and power/authority relationships which support them. Bourdieu (1977a, 1977b) has noted that different kinds of cultural experiences carry different value in society at large. He calls this phenomenon "cultural capital". Cultural capital operates like economic capital, in that different cultural experiences have different "exchange values" - a poor black woman's cultural experience is, in general, valued less highly in society today than an affluent white man's. Those with the most cultural capital (often those whose views align most closely with the owners and managers the media and the owners of the means of production) tend to promote theories of postmodernism which privilege the power status quo and reinforce their own positions within the social and cultural hierarchy (Mills, 1951, 104; Parenti, 1988,14; Chomsky 1989). For the sake of simplicity and clarity, we will use a useful distinction drawn by Foster between two opposed kinds of postmodernism - what he calls the "postmodernism of reaction" (essentially a position held by conservatives) and the "postmodernism of resistance" (Foster, 1983, xii).

Reactionary postmodernists tend to characterize postmodernism as an issue of style, rather than power. Those who promote a postmodernism of resistance (whom we will call critical postmodernists) on the other hand, see this as a device used to maintain the status quo power. These two strands evolved at different times. While, as we have seen, Jencks believes that postmodernism began in 1972, a careful analysis of social and cultural texts over the last thirty years seems to indicate that the postmodernism of resistance originated in the social flux of the 1960's (Harvey, 41; Berman, 1988; Bernstein, 1985, 25). The postmodernism of reaction, on the other hand, represents an appropriation and an aestheticization and depoliticization of these impulses which have been re-shaped by the rising tide of conservatism, welfare cut-backs, the recession and the free-market economy of the Reagan and Thatcher era of the 1980's. In what follows we will describe how postmodern theory has been appropriated by the Right to confirm and reinforce its ideological viewpoint, but in a way which does violence to the theory of postmodernism itself.

5. Postmodern Origins: The Social Construction of Normativity

Lyotard suggests that postmodernism was born in the 1960's as a reaction to the post-war revelations of the atrocities of the Nazi death camps and the horrors of the Stalinist gulags. The dilemma these posed could not be explained as a mere aberration in the onward march of human progress and freedom, but rather as the embodiment of rationalism in extremis. In this light, they cast doubt on rationalism itself (Lyotard, 1985, 45). In Architecture this doubt was given added poignancy in 1970 by Albert Speer's autobiography, Inside the Third Reich in which Speer, Hitler's chief architect, Minister of Armourment and Production (and hence responsible for the design of the labour camps) revealed how easily he and others had been "swooped up" by the evolving nationalist anti-semitism and how they had rationalized the internal contradictions of Nazism (Speer 1970, 33). Speer's story suggested that the behaviour of the Nuremberg war criminals might not be as aberrant as was commonly believed - that it might in fact be an inherent aspect of the social relations of everyday life.

Many of the early principles of postmodernism are to be found in writers of the 1960's who question dominant social values. The anthropologist Levi-Strauss questioned the superior legitimacy of science, and in contrast, authenticated the "primitive" cultures of anthropology (Levi-Strauss, 1969). Numerous psychiatrists (Laing, 1959; 1961; 1964; 1966; 1967; Cooper, 1971; Bateson et al., 1956 and Szatz, 1962) all questioned accepted definitions (and legitimations) of what constituted social and cultural normativity itself. This call was also taken up by educators (Neill, 1960; Goodman, 1960, 1964; Illich, 1971; Freire, 1972) and resulted in a proliferation of alternative pedagogies and the emergence of an alternative counter-culture value system which aimed to create a more just and equitable society. What was at stake was the very definition of what constitutes "normal" behaviour. Fromm referred to the normative social process of what he called "consensual validation" and maintained that whole societies might be so alienated as to be clinically insane (Fromm, 1955, 23). For Laing:

"The condition of alienation, of being asleep, of being unconscious, of being out of one's mind is the condition of the normal man. Society highly values its normal man. It educates children to lose themselves, and to become absurd, and thus to be normal. Normal men have killed perhaps 100,000,000 of their fellow normal men in the last fifty years." (Laing, 1967, 24)

The dilemma posed by these social theorists of the 1960's was how to define an alternative set of social values which were neither totalitarian (subject to the dictates of the majority) nor relative (disconnected from any moral imperative). In other words, they sought nothing less than to establish an ontologically secure moral basis for describing what it means to be human. They were equally as critical of orthodox Marxism as they were of capitalism, seeing "human nature" as a social construct determined not only from an economic base, as much as by relationships of power operant in the relations of everyday life. Within the fields of psychology and psychiatry, for instance, these critical theorists tried to define some basis upon which a therapist might legitimately say that he or she has a firmer grasp on reality than the "patient". (Laing eventually concluded that madness could only be determined as "the degree of conjunction or disjunction of the perspectives of two people one of whom is sane by mutual consent (Laing, Phillipson, and Lee, 1966). Within this philosophical house of mirrors, academic, medical and scientific legitimacy were all subject to intense moral scrutiny. Not even scientific research was immune from the exigencies

of power, as Stanley Milgram was to discover in his infamous obedience experiments at Yale in the 1960's. (Milgram, 1974, 3-5)

Milgram, then a young psychologist, induced ordinary American men to torture their colleagues with severe and life-threatening electric shocks as negative-reinforcement for apparently failing a word-association test. Milgram's test results (in which 65% of the experimental subjects administered shocks which would ordinarily have caused death) suggested that the quiescence of the Nazi torturers should be viewed not as a social aberration, so much as an inherent human tendency to social conformity. More compelling yet, was Milgram's own (conforming) behaviour, causing extreme distress in his subjects with his only excuse being the advancement of knowledge. If such behaviour was normal, then what moral legitimacy could a society of such normativities claim? It was against such questions that the social transformations of the 1960's occurred, and it was here that the first seeds of what was later to become known as postmodernism were sown.

6. Undermining Cultural Legitimacy — The 1960's

The 1960's differed from previous eras in that they saw the birth of a new youth culture. This was a self-conscious culture, aware of itself as a culture. The availability of oral contraception resulted in an awakening of sexuality that was only paralleled by a new awareness of the stuff of consciousness itself, Miniskirts, long hair and music were the cultural expression and Acid was the great sacrament. LSD had the effect of simultaneously undermining normative versions of reality and at the same time reinforcing modernist conceptions of equality, and in academia it evoked widely divergent attitudes and practices. Compare Milgram's moral position vis-à-vis his "subjects", for instance, with that of Leary and Alpert, flying down to Cuernavaca for week long "trips" on lysergic acid because they didn't believe it was morally defensible to subject their experimental patients to something they were not themselves prepared to try. Or Laing, comparing his patient's schizophrenic experiences with peak enlightenment episodes in "primitive" cultures (Laing, 1967). Orthodox disciplinary boundaries began to fragment as long-standing traditions of neutrality and objectivity were challenged. The 1960's revolt represented the threat of abandonment not just of Establishment style, but of all legitimacy.

The "new generation" to whom "the torch had been passed" in November 1960 with Kennedy's inauguration took seriously the social and political credos of equality and social transformation which the new President appeared to espouse. In politics, the 1960's were a point of remarkable transformation. In 1964, the British elected the socialist government of Harold Wilson (of Liverpool), and, in Berkeley the Free Speech Movement sparked the first campus revolt, which would point to the mythology of a value-free and neutral knowledge. In America, the repressive stranglehold of Macarthyism, which had held an icy grip on academic as well as government institutions (Schrecker, 1986) - began to loosen its hold. Marxist analyses, introduced by academic European refugees were taken up by the students and applied to myriad social issues. The Civil Rights movement was succeeding. Desegregation was moving ahead, and President Johnson had just declared "war on poverty". A new and radical hope was loose in the world. Change was imminent and it was everywhere. The young would transform the world. The old order was about to topple and to be replaced by...what?

In the light of the Soviet repressions in Hungary in 1957, and later in Prague in 1968, it was clear that orthodox Marxism did not offer a viable social and political alternative to capitalism, and this was underlined in May 1968 when the French Communist Party aligned itself with the Establishment to undermine the Movement of the French workers and students (Cohn-Bendit, 1968, 145-195; Aronowitz, 1981, 4). The critical analysis of Marxism and capitalism which developed in the 1960's, and from which developed the impetus of the New Left, was an essential component in the later emergence of postmodernism. The legitimation which each offered evaporated under the critical moral interrogation of the era, as fundamental relationships between knowledge and power were revealed. The use of reputedly ideologically-neutral knowledge forms to further the political ends of the dominant culture became one of the cornerstones of 1960's critical analysis, and would influence a whole generation of philosophers from Foucault (1980), to Lyotard and Derrida. The students at Nanterre clarified the issue quite simply:

"The transformation of academic psychology, a branch of philosophy, into an independent study with scientific pretensions, corresponds to the transformation of competitive capitalism into a state-controlled economy....From that point of view, the new social psychology has increasingly been used by the bourgeoisie to help rationalize society without jeopardizing either profits or stability. The evidence is all around us. Industrial sociology is chiefly concerned with fitting the man to the job; the converse need to fit the job to the man is neglected. Sociologists are paid by the employers and must therefore work for the aims of our economic system: maximum production for maximum profit." (Cohn-Bendit, 1968, 36)

7. Science and Modern Design — A Brief History

Design theories in the 1960's were directly shaped by the broader social and political movements and transformations of their time. In the early part of the decade, the scientific paradigm reigned supreme. Environmental Design Research began its life firmly wedded to a belief in social *science*, and this relationship influenced the dominant theories in architecture also. From its post World War II infancy in the field of Ergonomics, through Hopkinson's lighting studies at Sheffield, (Hopkinson, 1970, 1972), and the British studies of offices (Manning, 1965), housing (Barr, 1958; Ministry of Housing, 1961; Dick, 1962), and schools (Saint, 1987). This theoretical approach transcended a mere rational analysis of building types, and found its way into design theory and programming in the work of Alexander (1964), Moore (1965), Ward (1965), Alexander and Poyner (1966) and others.

A Post-war Europe in need of a massive rebuilding programme, and at the same time hampered by an acute scarcity of resources aligned itself to the efficiency and performativity that only a rational and scientific methodology could deliver. The new discipline of systems analysis also emerged to organize the more efficient classification, production and building layouts (Moseley, 1963; Whitehead & Elders, 1964; Levin, 1964). There were even attempts to unravel the mysteries of the creative process itself in a brief flowering of Design Methods (Jones & Thornley, 1963;

Designing better control systems for the machines of war, as, for instance, (in the U. K.) in the work of such behaviourists as Broadbent (1968, 1954) who worked for the Ministry of Defense on perceptual thresholds of submariner sonar operators.

Alexander, 1964; Gregory, 1966; Broadbent & Ward, 1969). What was so appealing to professionals about the scientific paradigm associated with Modernism, was that it relieved us of the existential decision of value. What was valuable was measurable. It fostered a certitude in the absolute veracity of science. Science would solve all problems, or so it seemed, and a large part of the infant discipline of Environmental/ Behaviour studies was carried along by this tide of instrumental rationality. Behavioural psychologists like Seaton at Berkeley, Stringer at Portsmouth, and Canter at Strathclyde held firmly to the belief in empiricism. Over a period of seven years, Lee (1963, 1968) conducted neighbourhood analyses, Studer (1969) constructed highly abstract diagrams of behaviourist conceptions of people/environment interactions and Ittlelson, Proshansky and Rivlin (1970) together with Lee (1976), developed the field of Environmental Psychology. If less harrowing than Milgram's laboratory experiments, they nevertheless drew their inspiration from the same theoretical and ideological heritage of logical positivism coupled with a commitment to environmental determinism and a belief in expert diagnostic and prescriptive systems. Among the few cautionary voices was that of Lipman (1968) who suggested that objective behavioural analysis of design settings was not always possible, and that participatory observation techniques carried their own dangers as well as opportunities.

The challenge to this ideology by Laing and other existentialists and social phenomenologists and the radical destabilizing which their theories inaugurated expressed the values and helped to shape emerging youth culture as a radical counterpoint to traditional mainstream academia. It was perhaps for this reason that academic institutions became a primary site of revolutionary social praxis in the 1960's, as students questioning basic values challenged the institutions in which these values were shaped and legitimated.

8. Design Resistance in the 1960's

Although public disquiet in the work of architects and planners had been growing since Jane Jacobs landmark work in 1961, it was not until the late 1960's that a radical theorizing began to evolve from the various confrontations in the public sphere. Significantly, designers had often played major roles in the politics of the student disturbances across the United States throughout the turbulent 1960's - usually focussing on environmental issues. As early as 1965, Martin Meyerson, then Dean of the College of Environmental Design at Berkeley, was nominated Acting Chancellor to solve the problems posed by the Free Speech Movement (Lipset & Wolin, 1965, 197). At Columbia, in April 1968, nineteen days after King's assassination, architects had been in the front line to prevent the replacement of housing in the black neighbourhood of Morningside Heights with a University gymnasium (Gitlin, 1987, 306; Friedman, 1968; Fact Finding Commission, 1968). Then, at Berkeley in September of the same year, it was architects who had devised a compromise plan to diffuse the confrontation of People's Park by forging an agreement for the City to lease the land from the University. Their plan was rejected by Governor Reagan and the Regents (McGill, 1982, 196). Environmental issues had also sparked community and student uprising elsewhere - in the Harvard student strike, and at Wuluwé-Saint Lambert in Belgium, both in 1969 (Hatch, 1969, 166, 202). These actual events were supported by radical professional groups that were formed towards the end of the 1960's uprising: The Architects Resistance (TAR), Radical Environmental Designers (REDS), both in the U.S.; Architecture Radicals, Students and Educators (ARSE) in the Britain; UP6 at the

Ecole des Beaux Arts in Paris, and the French group Utopie (Schuman 1981, 2-5). With the advance of the New Right, these groups eventually dispersed and their interests were redirected elsewhere.

The radical social theories of Laing and others as well as the political movements within the design disciplines began to exert an influence on theory by 1967, when the first critical assessments of behaviourism and logical positivism occurred at the Portsmouth Symposium on Design Methods in Architecture in October (Daley, 1969, 71-5). Calls were made to acknowledge the imperative of culture as a mediating variable in design (Rapoport, 1969a, 136-146) as well as a strong advocacy for user-participation in the design process (Ward, 1969, 166-178). The certitude of the scientific paradigm (particularly of that associated with Alexander) were soundly attacked. It was on these issues that the ideological battle lines began to be drawn in the design disciplines, as well as being writ large in society generally - on the principle of cultural self-determination as a meaningful social concept. There were those traditionalists who favoured the old professional and academic model of expertise ("All we need is better information gathering and processing") and against this there were those who saw design as a matter of power, and wished to change the traditional professional and academic role to one of advocacy and service. Here were the seeds of the two postmodernisms. In design education the boundaries between science and art began to dissolve, and the vacuum which was created was as exciting as it was unpredictable. From the arts, Cage and Duchamp were as important as Heisenberg was from science.

It was at this point that things changed. 1968 was a pivotal point of transformation not only in society at large, but also in design theorizing. Just as in America and Europe, the revolutionary impulse would falter under successive assassinations, establishment sell-outs and brutal repression, so also in design theorizing, the drive for a radical democratic theory of design would apparently wither. After 1968, what was left of the liberal Left would, in the professions, focus on separate, minority issues - migrant farm workers, women, gays, the physically and mentally impaired, solo parents, and the panoply of emerging separate "subject groups". While commendable, this strategy marked an acceptance of the restricted limits of social discourse. The agenda now was not to *transform* society fundamentally, but to reform the system *partially*. On the positive side, it also marked the important transition from the modernist metanarrative of universal emancipation and marked an important juncture in the history of postmodernism. For the first time, conceptions of freedom were freed from the limits of modernist ideology and were rendered susceptible to subordinate culture demands and definitions. Client-centered processes and projects proliferated.

EDRA was conceived during this time, in the Kresge auditorium on the MIT campus in June, from remnants of the Design Methods Group Conference, a few days after Senator Robert Kennedy was shot, and it took on the colour of its time. It was born to amelioration, to a loss of hope, to the emergence of a new conservatism, albeit tempered with ideals of social purpose and liberal humanism infused with an ideology of self determination. The politics of direct action, and faith in revolutionary praxis diminished, and those radical impulses which survived the tide of conservatism were channelled to "working within the system" in the development of theories of culture (Rapoport, 1969b) and user-participation (Sanoff, 1977, 1990).

Throughout the 1970's, the record is replete with example projects. In Europe, the SAR modular building system developed by Habraken which attempted to return control over the design process to the users was implemented in several projects

(Habraken, 1976). 1969 saw Ralph Erskine commissioned to work on the collaborative design of the Byker community in Newcastle, England (Hatch, 1984, 22, 186), and Kroll developed his student-collaborative medical complex at Woluwé-Saint Lambert in Brussels (Kroll, 1987, 36, foll.). In 1972, Rod Hackney, later to become the President of the RIBA, developed his self-help housing project in Macclesfield. Elsewhere in Europe, similar experiments in participation were in process. In Goteborg, Sweden, between 1973 and 1975 the FFNS-gruppen, worked with the community to develop a housing collective at Klostermuren (Hatch 1984, 134). Also in 1975, Walter Segal began his self-build housing project at Lewisham, outside London (Segal, 1980) and Alexander began his Mexicali self-build housing project in Mexico (Hatch, 1984). In 1977, together with Ishikawa and Silverstein, he published the landmark A Pattern Language which had been 10 years in the making and which was based upon the principle of user control over the process of environmental and building design. (Alexander et al, 1977). This work, for all of its social sensitivity, reduced the issue of power in design to a level consistent with middle-class values and expectations - guarantied to avoid structural social change and to operate within limits predefined by the power status quo with the co-operation of the professions. Ultimately, it gave rise to particularly middle class conceptions of the good life, of shared resources between small privileged groups, subsumed under the umbrella term co-housing (McCammant & Durrett, 1988) together with a plethora of "user guidelines" and post-occupancy evaluations. Only Turner would extend this principle of participation to its logical conclusion - to the issue of power and participatory democracy in the allocation of resources as well as in design collaboration - while in the process suggesting that "unreconstructed" professional designers would need to make major attitudinal adjustments before they would be able to aid the powerless (Turner, 1977, 23). He would suggest that much could be learned in the First World from these Third World squatter communities - a notion that would be confirmed much later by Leavitt and Saegert in their study of tenant cooperatives in the slums of Harlem (Leavitt & Saegert, 1990).

Social theories shape and are shaped by the political circumstances in which they evolve. The political repression of the late 1960's and 1970's carried enormous implications for design theory. The momentum for participatory democracy within the professions experienced a brief hiatus in the early 1970's, as the new ideas, supported by an almost universal public reaction to large scale post-war urban renewal programs were tried out.

Radical democratic theories of design diminished in the late 1970's in the face of the economic recession as the professions reverted to traditional social relations. The United States experienced a 12% decline in architects in employment from 1973 to 1976, (AIA, 1975, 1977). New York City had its own fiscal crisis in 1976, with a 10% unemployment (double that of 1971). There was a 33% drop in construction employment and a 14% decrease in the number of construction firms between 1974 and 1977, as the City cancelled its own building programs. Those firms which survived were more often the pre-eminent giants with corporate business connections (Blau, 1984, 115-25), the survivors moved with the power and with the money. As education and research budgets were pruned by monetarist administrations struggling to meet fiscal deficits in the wake of state budget cuts, the academic havens for radical theorizing were themselves subject to stringent budgetary limitations. In Britain, some Schools of Architecture were closed, and numerous younger staff were "let go". The

older generation of conservatives who had been silent throughout the 1960's found their voice in the "moral majority", and traditional "great books" and "great works" were reinstated as the datum of culture and education.

It was in this context that classical architectural formalists like Phillip Johnson, emerged to frame the arena of discourse in an expanding alignment with the interests of corporate capitalism. The *legitimated* field of enquiry shrank, and in the process issues of social normativity, which has been such powerful stimuli to theoretical research were now elided. While organizations like EDRA continued to include among its membership numerous diverse political voices, the Association as a whole adopted a policy of political pragmatism, accommodating to the reduced field of social and political discourse. Holding to traditional precepts of knowledge as neutral artefact, it stood for political neutrality through which it hoped to accommodate wide-ranging ideological viewpoints. This policy of accommodation and amelioration, however, may have prevented the development of an argumentation which would have challenged the Association's own stated policies. In the interests of ideological peace and academic survival, EDRA thus unwittingly assisted in the suppression of crucial social debate which might have helped to stem the rising tide of neo-conservatism. Alternatively, harbouring members with ideologies spanning the whole political spectrum, it may instead have destroyed itself. It would, incontestably, have needed to change.²

Since the early 1970's, much of the published work in Environmental Design showed an increasing emphasis upon the technology of analyses, in computer simulations, and highly structured empiricism, or, at best, in the conceptual environmental modification within the limits established by the political and social status quo. Funding agencies privileged academic and objective research programs which aligned with corporate and public policy over action-research projects, and the plethora of Community Design Offices in the Schools which had been federally-funded were closed down.³ Effectively, access of the poor and powerless to the services of design professionals was reduced, and the only game in town was the Establishment game which discouraged system-transforming innovation. In spite of all this, a large number of individual designers and researchers continued to work in socially responsible areas mostly with minority and disenfranchised groups (women, gays, people of colour, the physically impaired etc.) But the centre of professional discourse had shifted to the Right, and in the face of reduced availability of funding, these initiatives became increasingly marginalized. It was in this process that the underlying philosophies and agendas of postmodernism were appropriated by the conservative Right. Mainstream architects, driven by a shrinking economy as well as by a restricted field of social concern in design were reduced to prettying up the exterior of commercial buildings designed by economists. Environmental researchers, for their part embraced the existential and political safety of positivism (Buckman, 1991, 19-36) or restricted themselves

It may have been for reasons such as these that organizations such as EDRA have consistently found it difficult to recruit or interest minority groups and people of colour, since, in the last analysis, they are seen by minority groups as essentially serving the interests of the middle class and already-privileged and in preserving the hierarchy of existing social relations.

The oldest planning advocacy organization in the United States, founder at the Pratt Institute, in Brooklyn in 1963 would survive and in 1975 would spawn the Pratt Planning and Architectural Collaborative, designed to provide professional design services to squatter and low income housing groups in the blighted areas of New York City.

to analyses which did not challenge fundamental issues of resource allocation and distribution.

9. Design and Cultural Repression in the 1980's

During his eight years as President, Ronald Reagan increased the differential public spending between housing and the military budgets dramatically. The differential between the military budget and human resources budget was inverted (Phillips 1990, 87-8). In 1980, the federal government spent \$38 on the military for every \$100 it spent on capital investment in the civilian economy. There was an 82% decline in the federal funding for housing between 1980 and 1988 and there was a net loss of 1.2 million low income housing units from 1980 till 1989. By this latter time the annual rate of loss was in the region of 300,000 a year (Coates, 1990, 130). These losses had direct repercussions on the design professions. While public housing programs diminished, and the number of homeless proliferated, designers were forced to look elsewhere for a market for their professional services. Invariably, they found this in the plethora of cheap, commercial buildings stimulated by Reagan's tax cuts and the burgeoning climate of commercial investment in the new information revolution. One of the hallmarks of the post-industrial, postmodern society has been the de-industrialization of the built environment with a corresponding explosion in the need for commercial buildings to house the burgeoning information industry. As Harvey (1989, 331-2) points out, the buildings constructed to house the information and people to process the world's debt has, in New York alone, far outstripped the demand for factories:

"The biggest physical export from New York City is now waste paper. The city's economy in fact rests on the production of fictitious capital to lend to the real estate agents who cut deals for the highly-paid professionals who manufacture fictitious capital." (Harvey, 1989, 331-2)

It was to this arena of speculative commercial buildings that members of the design professions gravitated in the 1980's, turning their backs upon the burgeoning social problems created by the Reagan and Thatcher policies. During all of this time organizations like EDRA remained mute, lest they lose what modicum of leverage they imagined they had been able to sustain with the establishment. The AIA ran competitions to design "housing for the homeless" and thus lent its professional weight to the illusion that the problem of homelessness was a problem of design, rather than a political problem of resource allocation in a military economy driven with enormous asymmetries of power. Overall, the professional design organizations colluded with the political establishment, and stepped back from the radical democratic brink. They re-adopted the conservatism of the status quo power, and the postmodernism of reaction was born. The issue of power was elided from the discourse of design theory. In Environment/Behaviour Studies it would not reappear, until with increasing insistence, it surfaced at the 1986 EDRA Conference in New York, at Black Mountain in 1989 and ultimately, in 1993, at the EDRA Conference in Chicago, where the theme was "Power By Design".

10. The Deskilling and Commodification of Design

The conservative retrenchment in design also took place against a background of technological change and professional competition which completely circumscribed practice. Under present conditions of building production, design operates only indirectly upon the human condition. Being less critical to human survival than doctors or lawyers, designers have failed to achieve a solid constituency, and are consequently more vulnerable to periodic economic recession than these other professionals. The primary modern function of design is as a mechanism in the material world of capital production and accumulation, which is to say, property, the very corner-stone of capitalism. Being at the same time so close to the centre of capital production, and so vulnerable to the periodic swings in property values, the design disciplines have commodified their professional services around the conception of the building or environment as visual object. This tendency flows directly from the need to constitute a commodifiable product over which the design profession can be seen to exercise and retain some element of control. Under the competitive market conditions of late capitalism, the professional space of design services has been systematically eroded and this is particularly the case in architecture. Whereas in the early 1960's any graduate with a minimum of equipment could aspire to play a key role in the shaping of major buildings and environments, this is no longer the case. Now, major project roles in building design have been appropriated by others. Engineers, interior designers, project managers, facilities managers, landscape architects, economists and investment consultants have all claimed significant areas of professional design territory (Larson, 1983). While the amount of architectural commissions in the United States increased significantly between 1972 and 1982, this increase was more than offset by a correspondingly greater increase in the number of architectural students in training, by an increase in the size and complexity of building projects necessitating specialized control of specific areas of the building design process, by a consolidation of the building industry (specifically evidenced in the increasing amounts of work being undertaken by design/build contractors), and by increased competition from other professions (Gutman, 1988). Competition for professional design services has become extreme, and architects have, of necessity, been forced to define for themselves a "defensible professional space" to which they alone can claim exclusive right. Increasingly, this space has confined itself to the applied visual aesthetic of the building envelope.4

At the same time that this erosion of professional space has been happening, an increasing amount of the work undertaken by designers has been absorbed by much larger firms, thus reducing even further the breadth and scope of possible services for the aspiring graduate. The burgeoning technologization of design through CAD systems, coupled with the exponential increase in technical information has structured the profession to inhibit the survival of the small-scale creative entrepreneur. A second factor which has led the profession to adopt a conservative form of postmodernism has to do with changes in the role of building with respect to exchange value. Historically speaking, this is a recent phenomenon. The exponential increase in the speculative building programmes over the last twenty years represents a significant shift in the circumstances of building production. While banks, corporations, investment fi-

Gutman compares the role of architects with that of interior designers, whom, he maintains, suffer from a historic stigma associated with "interior decoration", he notes that the tendency for architects to confine themselves to the surface treatment of building constitutes a potential threat to the continued existence of the profession. (Gutman, 1988, 69). To professional architects, it may even have been the case that organizations such as EDRA posed a threat to their continued survival since they also sheltered members of the newly formed and competing disciplines, and thus accelerated the processes of deskilling and specialization.

nanciers and insurance companies often seek to convey, in their corporate headquarters, a feeling of permanence, solidity and reliability, exemplified in the form and material of their buildings - elsewhere, most other commercial building types have, to a greater or lesser extent, been caught in the web of speculative exchange. Lefebvre (1991)⁵, Smith (1990), Jameson (1983) and Harvey (1989), have all noted that one of the distinguishing features of the urban landscape in the era of late capitalism has been the replacement of the classical use value of buildings with an aggressive demand for increasing exchange value together with a dramatic increase in the global mobility of capital. This has caused a shift in our relationship to the built environment. It has happened at all levels of the built environment and has permeated the organization of all building types, from the speculative office building, through to that of the suburban house. Buildings are no longer designed primarily for occupancy, but rather to satisfy the twin desires for immediate social status through ostentatious self-advertising and to maximize the quickest economic return on the smallest investment. Harvey, particularly, documents the flow of capital into the 'secondary economic circuit' of the built environment during times of capital over-accumulation preceding economic collapse. He suggests that architecture has come to play a fundamental role in turning fictitious capital into real capital, operating as an important safety valve within the process of capital accumulation (Harvey, 1989, 74). The built environment is the first place to experience the benefits of over-accumulation, and at the same time it is the place where the financial institutions first seek to turn their fictitious capital back into real capital. In this context, design and construction time as a function of capital turnover time becomes critical, laying tight constraints on construction time as well as iconic formalism. What results is, in most instances, a "formula building":

"The present condition of architecture is one in which architects debate academic, abstract aesthetics while they are in fact in the thrall of the real-estate developers who are ruining our cities and turning working class people out of their homes....Philip Johnson's new skyscraper....is a developer building, with a few applied geegaws, thrust upon a neighbourhood that is not particularly in need of another skyscraper." (Crimp, 1987, 83-91)

It is under these conditions of increased competition, reduced professional space, under the dictates of vast forces of capital accumulation, coupled with economic recession in the 1970's that architects have, as Harris and Lipman so aptly put it, become the agents for yet another "effective aesthetic for corporate capitalism" (Harris and Lipman, 1989, 68). It is not too difficult to make the connection between the economic and professional constraints upon designers, and the theories of design which they have developed. Venturi's theoretical step (1977) of splitting off the iconic facade from the functional plan (the form from the content) was essential to professional survival in the early 1970's. Little wonder that this theory found such a receptive audience amongst design professionals, since it allowed for precisely that organization

Lefebvre also notes that orthodox Marxism has failed at a theoretical level largely because it has developed its theories around the organization of *time*. For Marx, the value of a worker's time is the intrinsic economic unit of exchange, and the inevitability of a proletarian revolution is determined by *periodic* economic crises (Lefebvre, 1976, 17). In the process, space, according to Lefebvre, has been seriously under-theorized, and provides the next major area for critical analysis. This is what makes current postmodern theories of design extremely important, because for the first time we are beginning to take seriously the relationship between the organization of space and power in the design of the physical environment.

of the design enterprise upon which economic survival depended, while at the same time providing legitimacy for a whole raft of specializations in a fragmented design process. Architects particularly, embraced the greater 'cultural capital' which an "artistic" architecture bestows, choosing to become skilled packaging designers and in the process relinquishing their traditional central role in the organization of building production. Now, the design of the inexpensive yet fashionable building envelope became an important component of a building production process directed towards the rapid augmentation of exchange value. Thus, the growth of formalism in practice and education is driven not so much by a desire to shape a less oppressive world as by the exigencies of profit, and it is interesting to note that the new aesthetic of postmodernism is not actually populist, but is simply an eclectic rehash of traditional precepts and dominant culture icons which allude, once again to transcendent values over which the professions might retain control.

The recent alignment of architecture with high art constitutes not a reversion to a higher form of truth, as its proponents insist, so much as an adaptation to changed social, political and economic circumstances of professional life. The exchange value of a high-fashion building is thus an important component in the formation of a professional identity. In this equation, the differentiation between architecture and building becomes important. 'Architecture', now conceived as a mechanism for corporate display, and as an economic and effective packaging of building consumption assumes an added importance in the marketplace. As a separate category from 'building' it offers precisely that opportunity to the professional designer to increase his or her cultural capital at a time when the exchange rate of such currency may be critical. The social division of labour which results from this shift is not new. William Morris, a hundred years earlier had warned that the distinction made between "intellectual" art and "decorative" art, corresponded to a parallel distinction between the privileged class and the class of manual workers (Morris 1979, 59-60).

This realignment of design with art and its (postmodern) repudiation of the rationalism of science represents one element of this process of social distinction. Their symbiosis had been one of the theoretical bases of modernism. Artists and scientists were equally valued at the Bauhaus, for instance, (Schnaidt, 1965). During the 1960's this correspondence increased dramatically, reaching its most explicit form in the early 1970's, which the burgeoning of the Ecology movement and interest in alternative energy environments precipitated by the 1973 oil crisis. But towards the end of the decade, this trend had slowed, and with the election of Ronald Reagan (massively backed by the oil companies) in 1980, theories of design were once again held completely in the sway of old formalist canons. In the process, architecture abandoned its pretence at science and resorted to its pretension as an art. Paper Architecture became a primary currency in a profession starved of actual concrete commissions. The drawing became architecture (Hatch 1984, 3). In the schools, design once again became a code term of distinction, used to differentiate the purported act of intuitive creation from the (less prestigious) act of rational analysis. Where there had been a rash of experimental pedagogical practices in the late 1960's (exemplified by the MIT students taking over their studio and turning it into living space), the traditional design studio now re-established its pre-eminence, with all of its structured emphasis on hierarchy, expert systems and authority, as the "mastery/mystery game" of studio interactions between tutors and students was once again reinforced (Argyris & Schon, 1974; Schon, 1985;

1987). Design, as art, was back! Only the icons had changed from modernist brutalism to eclectic postmodern kitsch.

11. Postmodern Design and Critical Resistance

In a sense it is ironic that postmodern designers should have founded their avant-guardism in a formalist aesthetic. In their (postmodern) flight from a delegitimated science - lacking, they would maintain, any hold upon a single truth - they have, instead, sought a refuge in art, which has itself been delegitimated in critical postmodern analysis. Art, no less than science has been shown to operate as a mechanism of social dominance (Gretton, 1988, 67; Taylor, 1978), and to be itself an insubstantial refuge in the search for a professional legitimation. The critical factor of postmodernism, whether in art or science, is not its capacity to bestow a new aesthetic, so much as to open up a space for meaning which can never be ultimately determined but which will always be in the process of social transformation. Postmodernism reveals the exigencies of power at work in this process, and inscribes them with a potential democratic ideal, or what Giroux has called a "radical provisional morality" (Giroux, 1988).

If we are to capture the liberatory possibilities of postmodernism, we must begin by asserting that any such proposal must, of its nature, be utopian. It is in the nature of postmodern discourse to be *critical* - to question the existing unequal social relations of public life, and to promote in their place an admittedly utopian alternative. Such a world is implicit in what we might refer to as an *critical* postmodern discourse. A critical postmodern discourse can be defined here as any analysis which addresses the social, cultural, political and economic disparities in the distribution of resources and power and which seeks at the same time to interrogate, with internal consistency, its own legitimacy. We define a critical postmodernism as one which acknowledges and exposes the relationships between knowledge and power and which takes seriously its own position as an agency for social and political change. How, then do we construct a proposal for a critical postmodern discourse about design?

The work of Habermas is informative here. Habermas believes, first of all, that postmodernism merely represents the further and most recent elaboration of the modernist project (Habermas, 1970; 1971; 1979; 1984). For Habermas, Modernism has not "failed" inasmuch as it has remained *incomplete*. The postmodernists, according to Habermas, blame Modernism for ills that are really the result of capitalism. He believes that it is important to draw a distinction between what he calls the "lifeworld" (i.e., the social and personal space of the individual as given meaning by the individual) and the "systems" of social organization which arise from capitalist production. Such a distinction allows him to develop a coherent theory of emancipation without falling into the dual traps of absolutism or relativism, in which he is able to criticize the one-sided (economic) development of the lifeworld, while at the same time defending the principle of rationalism (Benhabib, 1986, 254).

For Habermas, the principles which the postmodernists claim for themselves are, in reality, the foundation principles of modernity, and the emancipatory project of modernity can be best achieved through the realization of these principles on the basis of a fully communicative society. In his most synthetic work, he suggests that capitalism may be challenged only in the realm of language and communication where these can be reconstructed to allow ordinary men and women more say, influence and control

over the guidance of the system (Habermas, 1984). Within society as a whole, both science and art, falsely dichotomized, function as ideological supports of a social structure which requires the ordinary person to cede all system-steering rights to an elite. Domination occurs when technical processes and languages intervene to control the world of communicative action, replacing the motive of consensus formation, which he contends is the implicit intent of every speech act, with the motive of sheer control (Agger, 1988, 12). This control can only be broken not by abandoning Modernism, but by carrying through its rationalistic project into the sphere of communication using postmodernism's own insights, rationally applied (Benhabib, 1986, 254). The model which Habermas develops to achieve this end is what he calls an "ideal speech situation", comparable to we might call a level dialogical playing field. According to Benhabib, such a concept requires that we critically examine the context in which social discourse takes place, and take into account those asymmetries and distortions in the field of power relationships between participants so as to clarify the implicit silences of public life (Benhabib, 1986, 262).

Habermas suggests that power interests continually distort the freedom of communication, dialogue and consensus formation. Accordingly, public life is constituted of a fiction of *illusory* discourses - of consensuses arrived at through coercion. For Habermas, an "ideal speech situation" would be one in which each participant shared an equal freedom to communicate in an unconstrained dialogue. In such a situation, Modernism's emancipatory process becomes the systematic identification and removal of these asymmetries, disturbances, obstacles and distortions to the potential for full and free dialogue. These factors, of course obtain in every sphere of public life and discourse. What is therefore at stake is not so much an "ideal speech situation" but the struggle for a democratic politics in public life. What Habermas calls his *Theory of Communicative Action* allows us, using this model, to critically interrogate the impact of the system world upon the lifeworld, and the ways in which this impact reduces the potential for a participatory democratic dialogue.

There is one further aspect of Habermas' work which it will be important for us to explain. This concerns the issue of truth. Whereas Lyotard rejects the concept of truth as chimeric - seeing it as arising from consensual validation while purporting to absolutism, Habermas accepts the consensual basis of truth claims, but reframes it within the context of his notion of communicative action. Basically what this means is that the concept of truth, stripped of its connection with the absolute, is re-established as an operational construct determinable and recognizable to the extent that it evolves from a consensus functioning within the framework of an equality of individual speech acts. In this way, the focus is moved away from the inherent veracity of a particular claim onto the degree to which the individual participants share an equality of access to communication and to steering the meaning of the claim. In practical terms, such a position is consistent with the demands of a democratic cultural politics in which difference is not seen as oppositional (in the sense of true-untrue) but rather as complementary. There may be many equally valid versions of the truth as seen from different cultural/consensual positions. Such a theory accepts the legitimacy demands of postmodernism while at the same time allowing for the maintenance of the emancipatory project, since the latter can now be seen not as a historically determined absolute (having the same form and meaning for all cultures) but rather as a continually unfolding realization, mediated by legitimate differences of cultural perspective

fashioned through a constantly transforming and transformative process of consensual validation.

In traditional aesthetic theory, the *meaning* of an object of aesthetic judgement is seen to be inherent in the work itself (Kant, 1954, 50), and to usually be that which is ascribed by the individual (genius) author (Kant, 1954, 168) and to which the initiates and cognoscenti aspire. Postmodern aesthetic theory, on the other hand, problematizes this arrangement (Berleant, 1991; Jauss, 1982, 46-8). Some postmodern authors suggest that meaning is produced and reproduced entirely by the audience (Barthes, 1977, 148) while others believe that meaning is produced in what Derrida has called the intertextual space which exists between the author and the audience (Derrida, 1987, 21; Gadamer 1975). All agree, in contradistinction to Kant, however, that there is no one absolute meaning which might be attributable to the object of the aesthetic experience, and that beauty, far from being a transcendental phenomenon, is culture bound (Burgin 1988; Harrison, 1988, 77), and like all culturally determined phenomena, is a site of social and political struggle.

In design education this can have extraordinary implications. It means, for instance, that the authority of the design teacher/instructor is critically problematized, since s/he may no longer call upon a privileged access to unitary meaning. Meaning, in postmodern terms, derives from the relationships of power within the immediate field of knowledge. Under these circumstances, every student's perception is equally as valid as the instructor's, since there exists no one single truth to which either can claim access. This carries serious pedagogical implications. First of all, it suggests that the normative authority relationship which exists between instructor and students, together with the pedagogical practices which support it, should be abandoned. This may mean that the lecture form of educational communication becomes obsolete, and that more discursive forms of communication should be developed. Secondly, critical postmodern theory problematizes the role of the designer as an individual inspired genius (Kant, 1954, 168), and suggests that design as a social group process corresponds more closely to the way in which meaning and quality are created. This, in turn, suggests that group design projects may literally be a more meaningful way of designing than the more traditional individual form of studio instruction. By extension, such a process would require the abandonment of competition as the ideological subtext of the studio interaction. Students under these circumstances would be encouraged to share and cooperate rather than to compete with each other for the instructor's favour and for high grades.

In the context of such a new cooperative design pedagogy, the actual processes of design would obviously change. Design decisions, while being made collectively, would need to be guided by quite different aesthetic principles. Since, under postmodern conditions, all aesthetic experiences are equally valid, majority perceptions have no greater validity than individual perceptions (remembering Fromm!). This means that consensus decision processes becomes the preferred pedagogical practice. Such a practice must, of course, include all of the participants. However, the power/authority role of the instructor cannot so easily be circumvented, particularly in circumstances where institutional requirements demand that the instructor be the final arbiter of grades. The appropriate role for the instructor under such circumstances, is that of facilitator - ensuring that the power and authority within the group circulates freely and is equally accessible to all participants.

Within such processes, the decisions pertaining to design quality become *inverted*. No longer is quality determinable by virtue of the privilege granted by authority. Nor is it to be found in the oppression of the majority. Rather, quality becomes that which remains to be *discovered* within the space of democratic consensus, which is to say, the free accord of all the participants.

Unlikely as it might sound, such processes are not only viable, but offer to the participants a wide range of learnings over and beyond those which are available through traditional, authority-driven educational practices. One of their primary benefits is that they extend the educational experiences of the participants to include issues of power, and, in the process, lead to a profound sense of self-empowerment not only for the students but also for the instructors. Yet such empowerment is empty when it attaches only to studio solutions to studio determined problems. The development of a sense of self-empowerment is directly connected to the process of what Freire and Macedo have called "changing the world" (Freire and Macedo, 1987). It is important to the enterprise of democratic education that it be grounded in the real world of everyday life, and that it take as its aim the transformation of that world in the direction of greater equity and social justice. In this sense, it is vital that critical democratic studio design projects are real, and that the primary object of the design exercise be external to the studio itself. Real projects for real clients with real problems of powerlessness are the sine qua non of postmodern education.

Experiments in such critical democratic pedagogy over twenty years have convinced this author of its importance in the field of design education. However, it needs to be said that these benefits are not always universally recognized. Particularly, are they questioned by a profession which places all of its eggs in the visual aesthetic basket. In 1991, third and final year student's in a course using these techniques designed and constructed a school playground in a bilingual (Maori and English language) school. The work involved not only the children, but also the teachers, parents and the students in a collective design/build exercise. The students worked in the classroom, helping the children to design and model their own equipment and spatial organization. Following this they (the students) helped to organize a school fair to raise the money for materials. Then, together with the parents, teachers and children, they embarked upon the construction. The whole process took a total of ten weeks, and the students were entirely responsible for every element of the work, from organizing work schedules, materials and equipment to administering the budget. On the final day of construction, students and children together planted 200 native New Zealand trees. The finished construction was not just a "play structure", but a whole network of "structured play" which completely transformed the school. Teachers later reported that the children themselves also seemed to be transformed. Vandalism ceased (even from neighbourhood children who did not attend the school, but who used the playground after hours), and the social relationships between the children appeared to undergo a remarkable improvement. Follow-up interviews with parents, teachers, students and children indicated that the experience had been seminal for all. Almost 60% of students interviewed said that this had been the most important design course they had taken in four years at the school of architecture.

All of this would lead one to believe that this was a well received part of the course. Yet the opposite was the case. The visiting end-of-year examiners described the results as "not architecture", not significantly different from a (mere) building exercise, while one very senior faculty member considered that the project had not contained a

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"sufficiently intellectual component". Such comments point to the wide disparity in meanings which we ascribe to (aesthetically correct) "architecture" as opposed, for instance, to "building", and seem to this author to support an exclusory philosophy, the main aim of which is the creation of a hierarchy of social distinction, which operates in direct opposition to the principles of democratic self-empowerment promoted here and to which the course and pedagogy itself were committed (Aronowitz and Giroux, 1988, 8; Gretton, 1988, 67). Lipman and Parkes (1986) have provided a detailed analysis of how these mechanisms operate in conservative postmodern design theorizing to mask agendas of exclusion and class distinction. After many such experiences, this author is convinced that the design professions as they are currently constituted, and after twenty years of retrenchment, work not for democratic ideals as they claim, but on behalf of the interests of the already-powerful to prevent the evolution of more just and egalitarian social structures. Of course, the professional institutions themselves tend to currently deny this, and it will take a great deal of time and work to reintegrate the social and political agenda back into mainstream design discourse. In an attempt to do this, the principle of internal consistency is of particular importance.

A critical postmodernism of design recognizes the importance of internal consistency, the integrity of means and ends, and critically uncovers the mystification process which their conceptual separation masks. Applying the same principle to design research, the consensus of the participants (including the researched) may determine what stands for appropriate research. Under these circumstances, appropriate (action) research may no longer be that which satisfies academic or scientific imperatives alone. This might mean, for instance, that funding agencies may themselves be answerable to the community to account for the social relevance of the research which they fund, and minority groups may exert more power over the decision process than they currently do. Indeed, one may find that the allocation and distribution of research resources would itself be a legitimate field of enquiry within the domain of Environmental-Behaviour Research, determining precisely those relativities, say, between military and welfare budgets which are also shaped by asymmetries of power.

12. Conclusion

Much of what has been presented thus far has been based upon events and data specific to the United States, and the reader may feel that this represents an unbalanced basis upon which to project global futures. The undoubted heterogeneity of American society lends to this data a specificity which may not translate well into alternative cultural settings. Researchers in Scandinavia and Switzerland, for instance, may feel that lacking the extreme cultural diversity of the United States, issues of "voice", of cultural pluralism, and of radical democracy may have limited application in their own context. This view may seem to be supported by the assertion, given here, that postmodernism is rooted in delegitimation tendencies which developed after the Second World War. While we agree with Lyotard in this respect, there is no doubt that since the late 1970's the shape of these tendencies has been governed by other structural features which are quite new. It is important to note, for instance, that the postmodernism of reaction is driven not by local or even regional factors, but on a fundamental restructuring of capitalism itself, coupled with a dramatic revolution in the processes and results of production (Castells, 1989; Harvey, 1989). This transformation of the capitalist economy is world-wide and involves, amongst other things, an increased global mobility of capital, as well as a marked dissolution of the sovereignty of international boundaries. No country can remain immune from such circumstances, and the United States may, in the context of the present global recession, be considered an example of what other, relatively protected, states may expect in the future. The trend towards increased cultural heterogeneity coupled with increasing disparities in wealth, together with a reduction in the power of the unions and a corresponding absence of ameliorating state-interventionism can be expected to accelerate the forces which we have tried to describe. The recent events in what was Yugoslavia indicate the failure of pluralist policies which operate through centralized systems of administration and governance.

We are now in a position to summarize some of the characteristics which a critical postmodernism of design might exhibit. First, it will take up, once again, the issue of power, recognizing the relationship between power and knowledge. It will seek out those areas of social life which speak of oppression and exploitation. Having done this, it will develop practices which are open and democratic, and which display an internal consistency between means and ends. This means that if it purports to ascribe to itself connotations of liberation or emancipation, it will do so from the received meanings of the oppressed and exploited themselves, and will develop methodologies and languages that are transparent and comprehensible to the oppressed and exploited. In so doing, it will strive to create a space for the expression of the silenced, and will organize its dialogical structure such that these voices are given at least equal weight and importance. Such a strategy will invariably call into question existing modes of (objective) research which distances the researcher from the end user (and which almost invariably lead to the production of meanings which do not correspond to the expectations of the disempowered). A critical postmodern environmental research will therefore lay greater emphasis upon action research, which does not distinguish between that which is "pure" and that which is "applied". In short, such a critical postmodernism of design will create the conditions for an actual, rather than an illusory sharing of power and resources, and will take as its guiding principle the need to fundamentally change, rather than to merely describe the world.

With respect to design education it will do this intrinsically as well as extrinsically. One may imagine the difference which such a strategy might make to current pedagogical practices in design education, and from this one may intuit the very different conception of knowledge that such a change would imply. Knowledge would no longer be seen as an ideologically neutral artefact passed from the knower to the ignorant - what Freire has called the "banking system" of knowledge where teachers make "deposits" into empty student heads (Freire, 1972). It would be seen rather as something created through mutual dialogue in the context of equality rather than hierarchy, in co-operation rather than competition. A critical design education would seek to locate the silences engendered by present pedagogical practices and would take as its dominant aim the creation of dialogical space where the silenced might come to voice, and where issues of gender, ethnicity, colour, class and sexual inclination would themselves form a legitimate subject of enquiry. Such design education would honour cultural pluralism in fact as well as in theory, and would develop social relationships of learning which would respond to and honour difference, rather than conformity, diversity rather than uniformity, cultural expression rather than assimilation, open enquiry rather than lecturely transmission and, finally, the gradual elimination of hierarchical power structures. They would recognize that knowledge is created anew each time, as the meaning and democratic significance of the educational experience

reveals itself to the participants. What is at stake here is the issue of who has the right to circumscribe the meaning of "architecture", of "design". At the moment these definitions are set exclusively by the professions themselves in a way which makes professional services largely unavailable to the poor and the powerless. In critical postmodernism these definitions will become sites of fierce social contestation, the results of which cannot be forecast:

"Democracy inaugurates the experience of a society which cannot be apprehended or controlled, in which the people will be proclaimed sovereign, but in which its identity will never be definitely given, but will remain latent." (Lefort 1981, 173)

Until we are prepared to introduce such changes into our educational and professional practices, we cannot expect our graduates to take seriously issues of empowerment in their professional lives. Examples in New Zealand, in the context of a Maori renaissance and a commitment to biculturalism have indicated that such practices are both socially and politically viable, and that they are educationally meaningful (Ward, 1990, 1991; Ward and Wong, 1990). Others in the United States have already contributed significantly to the development of a critical pedagogy in design education. Dutton (1987; 1991a; 1991b), and Dutton and Grant (1991) have made a substantial contribution to our understanding of the way in which the design studio replicates dominant cultural values, Clarke (1988) has developed a coherent theory of the ways in which the organization of space is used as a mechanism of power, and the way in which economic determinants influence aesthetic normativities. Davis (1990), at a larger scale, has shown how post-war suburban development programs have shaped the political space of Los Angeles, while Thompson's critical analysis of the social and political use of space through the Enclosures Act in 18th Century England remains a benchmark of critical spatial/political analysis (Thompson, 1980). Also in historical vein, if in somewhat different terms, Goode (1992) has shown how the print media operates to shape cultural definitions of design; Franck and Ahrentzen (1990) have reframed our recent conception of the family as an economic and spatial unit; Leavitt and Saegert (1990) have described the struggle for self-empowerment of the poor and homeless in New York; Ghirardo and others (1991), have begun to sketch a critical social theory of design. All of these recent developments indicate the beginnings of a resurgence of radical design theorizing, but they remain the exception rather than the rule.

Most existing design studies and practices eschew the democratic potential that is available in the shaping of the built environment, preferencing, instead, the pragmatic path of what they think of as ideological neutrality. The design disciplines, because of their explicit concern for the social, for the cultural, have both the opportunity as well as the responsibility to take seriously these deeper levels of analysis in a way which helps to constitute a democratic public life by taking questions of equality, justice and cultural empowerment into account. Our position is not to reject postmodernism because there is a reactionary dimension to it, but to look at those elements of postmodernism that we think have emancipatory possibilities within a different kind of framework. We are not ready to give up on Modernism. There are aspects of Modernism like the language of public life (embodied, perhaps in the language of built form), the role of intellectuals and the role of political rationality that are essential to any political project that matters.

The tendency to abandon modernism and to substitute in its place a postmodernism stripped of any moral or social imperative is the ploy of the neo-conservatives. It is they who articulate a theory of postmodernism falsely dichotomous with the modernism it is supposed to replace. They do this, not for the purpose of a real emancipation from totalizing theories of universal liberation, as they claim, but to eradicate the democratic impulse from social life entirely. Their purpose is not grounded in a democratic idealism but in the economic and political realities of late capitalism. Postmodernism can no longer be used as a code word to mask the operation of reactionary ideologies either in education or the professions. Indeed, at its deepest level it is dedicated to precisely those qualities of empowerment which conservatives once again have most to fear. Finally, let it be said that in the design disciplines it will be necessary to reconstruct almost the entire social agenda which has been dismantled over thirty years of political and economic repression. It will not be easy. The students who now populate design classes were educated for fifteen years to believe in an educational system which promoted the tooth and claw competition of late capitalism. Their professional vision of social responsibility is invariably passive. In the United States they most often come from the ranks of the already-powerful and lack the sense of social hypocrisy which was the fate of their parent's generation. They are uncomfortable with notions of social transformation and radical change, and have not been exposed to critical thought in their public lives. But there is some hope that, through postmodernism, they may acquire these important skills. Postmodernism offers a chance to develop once again a critical democratic design theory through which we might problematize the given dominant ideology of late capitalism, and might, instead, develop strategies of resistance which speak once again to difference, equality and voice.

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