THEORY AND DESIGN IN THE AGE OF POP

by

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Theory and Design in the Age of Pop   Summary

The aim of this thesis is to discover the principle determining factors behind British Design in the 1960's in order to describe and analyse the background and effects of the crisis in Design theory that occurred at this time. This crisis, which meant a questioning of the tenets of Functionalism — the name with which the architectural and design theorists of the 1920's had identified themselves — constitutes, in both theoretical and practical terms, a major development in Twentieth Century Design History and by implication for any Design historical study. The period thus serves as a model for an examination of some major factors pertinent to many Design historiographical problems.

The philosophical and stylistic implications of Functionalism, its discrepancies and variations, are noted briefly. A description of their continuation into the 1950's and 1960's is given in which the gap between abstract ideas and stylistic considerations is seen to widen.

The critical reaction to Functionalism, manifested in several spheres, is noted and analysed. This reaction stems from an involvement with popular culture as a serious matter for academic discussion and a desire to restructure the value system within which judgements about buildings, objects and other social phenomena are made. This is followed by a survey of the more general sociological changes that occur in the period and the way in which design is modified accordingly, basing itself upon an alternative set of criteria to that of the Design Establishment, and aligning itself with many of the categories established by the above-mentioned critics.

THEORY AND DESIGN IN THE AGE OF POP

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SECTION 1. CHAPTER 1. INTRODUCTION

This thesis focuses upon a search for an approach to Design History. In order to achieve this in a practical manner an historical period has been selected to serve as a model which will bring to the surface most of the major problems encountered in any Design historical study. Among the most predominant of these are questions like;

1. What is the definition of design and to what material must one turn in order to make an historical survey of design in a given period?

2. To which tangential disciplines must one ally one's study in order to create a structure for what is ultimately an inter-disciplinary study?

3. What is the nature and function of Design History? Has it merely professional or more general implications as a subject?

These questions are inevitably interdependent. To begin to answer the first and most crucial question, 'What is design'? one must first recognise the verbal and substantive ambiguity inherent in the word which points in two divergent directions. On the one hand it implies the designer end if the design situation with associations with the creative act, industrial production, and technology generally,- all of which contain their own psychological, social, cultural and technical implications, (these can all be put into an historical context); on the other the more anonymous artefact, concept, or system end of the design scale. This latter complex presents the analyst/historian with a direct relationship between design and society as a whole, whereas the former definition necessitates the mediation of the structure of industry in every consideration of it. The latter therefore implies more direct social meaning.*This links up with the last question in that a historical study of artefacts has more general social and cultural meaning than a study of the history of production processes which is of more professional interest for the designer.

If design history is to be meaningful it must stress social and cultural implications at every opportunity and thus become a branch of cultural history or the history of ideas in such a way as to extend the relevance of such studies outside the design profession and the narrow bounds of formalist art history. The question of 'meaning' is therefore a crucial one and provides a central theme of this study.

To ally design history to the history of ideas implies reference to design theory. The relationship between design theory and practice is therefore highly relevant and will provide another thematic base for this thesis.

The period selected for this study is British theory and design in the post war period, predominantly the 50's and 60's, chosen because so many of the major themes are highlighted. The importance of design theory and the history of design theory is raised by the questioning of the paradigmatic

twentieth century theory of Functionalism, bringing into focus, as its major critical factor, the notion of meaning in design. This is demonstrated by both the theory and practice in the period.

The question of what material to use as sources and which methodological discipline to employ is also a crucial one in this period as the crisis in design theory means that one has to look outside the design mainstream for an alternative approach to both design theory and practice. Whereas the crisis is articulated by familiar voices, there is no alternative presented in terms of an autonomous design language. Thus a number of design models are presented ranging from cybernetic theory, set theory, game theory, information theory, through anthropology, linguistic theory and the social sciences to formalist art theory and other aesthetic theories. Design is allied, in this period of philosophical confusion, to a complete cross-section of disciplines from the extremes of the arts and sciences. In terms of theory, therefore, there is no rule as to where one can place design. This is a very complex stage in its definitional evolution, and one must examine each possibility in turn.

The design practice of the period is to be found in the periodicals which sold design to the consumer public. The notion of a design elite or Establishment is irrelevant as they, as will be shown, are slow to realise the philosophical confusion. To discover where alternative design is heading the popular press provides the most useful source and the design journalism in it, aimed at the man in the street, is more useful than many other documents because it was the public who asserted their values at this point with the help of the salesman. By the very nature of the inadequacy of Functionalism, which was expressed on a popular as well as on an intellectual front,

"There are times when one longs to buy something plumb ugly and utterly unfunctional" [1] (without, inevitably, the same historical and theoretical awareness) and the economic change of increasing affluence in the period, the design alternative was expressed in terms of 'human values' which were demonstrated unconsciously by consumer choice and consciously by a few designers and a few theorists, mostly from the anthropological and sociological end of the stratum.

This conscious/unconscious dichotomy is a characteristic of design analysis and history as a designer can either be aware of current design or other theories and attempt to infuse deliberate qualities or features into his design or he can be carried along by public enthusiasm, fashion or sales possibilities. The degree of consciousness from the designer's end seems to follow an ever downward graph through from architecture, to interior design to ephemera design and fashion. The vast majority of theoretical material in this work stems from the architectural field and is used for design by implication only. In the 1960's, however, this traditional position is modified slightly by the emergence of an alternative design profession, - a group of young people who emerged from Art Schools which were becoming gradually more and more aware of current ideas, and thoughts were filtering through from different departments (eg the painters influence on the designers at the R.C.A. in the early 60's). They were not historically conscious but nonetheless aware of the need for change

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The relationship between horizontal and vertical analyses of design - in semiotic terminology, between synchronic and diachronic analyses* must be resolved in a design historical study. Stylistic analyses, whether iconographical or semiotic, tend to ignore the historical perspective and stress simultaneous phenomena referring to the past only as a way of illuminating the present. (Barthes demonstrates this in his reference to the Gothic Cathedral in his description of the Citroen car. [3]) Ultimately history engulfs semiotic analysis as it shows it to be a methodological reaction against an over-rigid rationalism. It is an historical result of the problem of dealing with theory in a pluralist society. Tomas Maldonado claims,

"We need a structure for pluralism." [4]

Semiotics will be shown to be a product of a particular historical context and to function best as a tool for analysis for that same context.

The structure for the historical study that follows is therefore to combine historical analysis with a horizontal study of those objects which manifest semantic richness, whether consciously or unconsciously, to show how these significant factors co-exist. This will serve both as an example of them at work and to illuminate an historical period of design which brings into discussion those factors which are relevant, to a greater or lesser degree, to any historical analysis of mass-produced objects.

The subject of the historical study chosen to illuminate these themes is post-war design with particular reference to the debate which took place mostly in England about the relevance or otherwise of the design theory of Functionalism and its practical application. The debate arose through the revival of functionalistic theory which occurred as a reaction to the architectural and design anarchy which was demonstrated by the immediate post-war reaction to austerity, (the Festival of Britain set this strongly in motion). The fact that the only appeal to theory was demonstrated by a turning back to an out-moded philosophical idea helped the crisis on its way and provided the thesis upon which the anti-thesis was achieved is a subject for this study.

The first section provides a brief summary of the original variations in functionalist theory and the ambiguities inherent in its different interpretations. This is followed by a survey of the practical and theoretical revival of these ideas in the late 50's and early 60's in England and their counterparts in other parts of the globe. The different aspects of the theoretical crisis follows this section, in which the philosophical bases for such a reaction are outlined. The second half of the thesis concerns itself with the practical reactions to functionalism and the design that resulted, from a dissatisfaction with the ethical and aesthetic implications of the theory. This survey is accompanied by a historical study of how the different ideas were developed and transferred into the practical design area. An attempt is made to find an appropriate methodology for an analysis of this design which functions outside the

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subject for this study.

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deterministic structure set up by the early theorists.

NOTES TO CHAPTER 1

Page 3   *   The expression 'more direct social meaning' is used in the sense that individual behavioural patterns can be perceived by observation of the relationship between an object and its user, whereas in a consideration of the role of industrial structures in society, one is more concerned with economic patterns in society. The meanings that are relevant to this study are psychological, sociological and anthropological.

Page 5   *   This statement is based on the assumption that the same logical structure that determines the theory and design of a period also influences the historical approach made to it.

Page 5   **   The function here referred to is that of design and of history.

Page 6   *   These terms taken from Saussure are used by many semioticians, most of whom tend to be concerned with analysing the synchronic or a historical meaning of an object or social phenomenon. Semiotics, deriving from linguistic analysis, is one of the many disciplines applied to thoughts about design in this period.

CHAPTER 2. THE FUNCTIONALIST HERITAGE

The main reason for the search for meaning in design in Britain in the 1960's is a historical one. It stems from a dissatisfaction with the prevalent theory and practice which owed their existence to ideas formulated by designers and architects of the Modern Movement - ideas which had set hard by the end of the 1920's and been handed down through the following decades, undergoing inevitably increasing perversions in the process.

These ideas were identified with the complex theory known as 'Functionalism'. The one factor which characterises the many differing interpretations of Functionalism and indicates the reasons why it became mythologised by many of its critics into what amounted to a fascist ideology, is its quality of determinism,* ie that there is a necessary and inevitable connection between form and content (function), whether this is formulated as,

     a)   an analogy with the process of nature which evolves, organically, beautiful forms perfectly suited their function or identity, or

     b)   an analogy with the engineers principle that if a form performs its function perfectly then it is a perfect form aesthetically.

Louis Sullivan's much repeated and little understood dictum 'form follows function' contains this deterministic implication, and served as a slogan for the different interpretations of the theory. At one extreme end of the theory were the 'pure' Functionalists who attempted to bypass aesthetics completely and evolve an architectural theory which depended only upon functional determinants. These were defined however as elements which preceded production - economics, materials, etc. - rather than as features which connected the finished article/building with its user requirements. Thus human aspects were seen as secondary to production techniques. This extreme wing of Functionalism was represented by Hannes Meyer who was director of the Bauhaus from 1928-1930. He stated in 1928

> "All things in this world are a product of the formula: (function times economy.)
>
> all these things are, therefore, not works of art:
> all art is composition and, hence, is unsuited to achieve goals.
> all life is function and is therefore unartistic." [1]

Many architects of the period took a more liberal attitude vis a vis the aesthetic content of building. Tatlin in Russia and Marcel Breuer at the Bauhaus denied the existence of style in objects and buildings, putting forward instead an idealistic concept of ultimate form, but concerned themselves, nonetheless, very strongly with the principle of construction seen as an abstract aesthetic concept and not as material features of an object. Breuer states in 1928,

> " Metal furniture is part of a modern room. It is styleless for it is expected not to express any particular styling beyond its purpose and the construction necessary thereto." [2]

This obvious fallacy, ie that objects like Breuer's tubular steel chair were 'styleless' was one of the first points to be picked up by the critics of Functionalism.

In the words and practice of Walter Gropius and Le Corbusier Functionalism moved even nearer to becoming an aesthetic theory of form. Function was defined as the internal dictates of the object in terms of geometrical structure rather than any practical requirements. Thus Gropius made statements like this one,

> "Function is the organic shaping of things, dictated by the presence of their own law without romantic playfulness." [3]

causing the definition of Functionalism to be associated simply with formal simplicity, and absence of decoration - a classical aesthetic.*

The theory behind design and architecture became, therefore, a circular, self-defeating proposition which rested on the tautological idea that 'an object is dictated by what it is' with little outside reference to sociological or psychological factors. Le Corbusier perpetuated the same idea writing in a confused manner about the distinction between the engineer's and the artist's aesthetic. Ultimately Vers Une Architecture was influential because of the spirit it pinpointed and the enthusiasm it engendered rather than for any reasoned argument it might contain, and, together with the buildings produced by Le Corbusier during the same period, was responsible for much of the lack of clarity inherited from the theories of the Modern Movement.

Among the multiple implications therefore of the various versions of what can loosely be called the theory of Functionalism are these,

a. a philosophical base of determinism.

b. a belief in the power of logic and reason, above that of intuition and emotion.

c. a concept of universal design

d. a worship of the industrial model in terms of mass production and standardisation.

e. a moral abhorence of decoration, and a belief in the Platonic theory of form.

f. the Zeitgeist theory - or the idea that there is a proper natural style - for each period.

g. the emergence of the 'machine aesthetic' or the 'functional style'.

The last factor derives more from the practice than the theory. It formed nonetheless the base for the criticism of Functionalism which attacked the theory on the grounds of the immoral implications of a design and architecture that supposedly failed to consider the human being except as an abstract factor in the concept of 'the modern age' which was ruled by the dictates of technology.

This was an emotional reaction to what was ultimately an emotional theory founded on a belief in a magical transformation of function, however it was defined, into form, and in poetic evocations of the role of the engineer, of technology, and of the new age in general. Peter Collins states in his book,

> 'the architect thinks of forms intuitively and then tries to justify them rationally." [4]

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This is true of the architects of the Modern Movement and presents the difficulty of applying a rational criticism to their theories. The universal ahistorical implications of the theory also provides a point for criticism inasmuch as the necessity for a historically conscious theory of architecture/design became obvious when the austere, white, simple style of Modernist architecture ceased to contain any cultural relevance.

The theory of Functionalism is highly complex, depending upon the varied interpretations of its original assumption - that perfect form can be discovered by analysis of the internal formal and technological dictates of the object and its production. What is of relevance for the present study is the obvious disparity between the two extremes - between the theoretical notion of ultimate form which denies the concept of style, and the obviously highly styled buildings and objects produced at the time under the aesthetic influence of Cubism. This presented a problematic situation for those who inherited the Functionalist theory and style.

NOTES TO CHAPTER 2

Page 9   *   The word 'determinism' is used to mean both historical inevitability and a belief in
               the possibility of function exclusively determining or dictating the nature of form.

Page 10   *   This was implied by many other protagonists of the Modern Movement, amongst
               them the Dutch group 'De Stijl' who were concerned with 'ultimate form'.
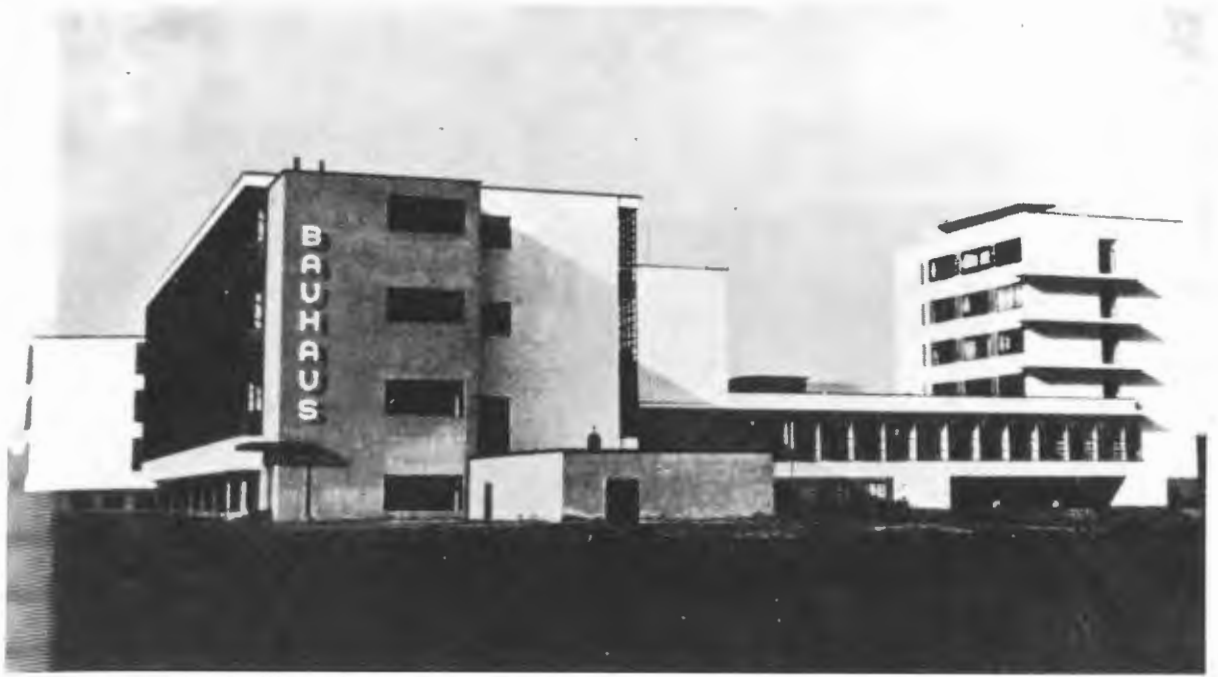
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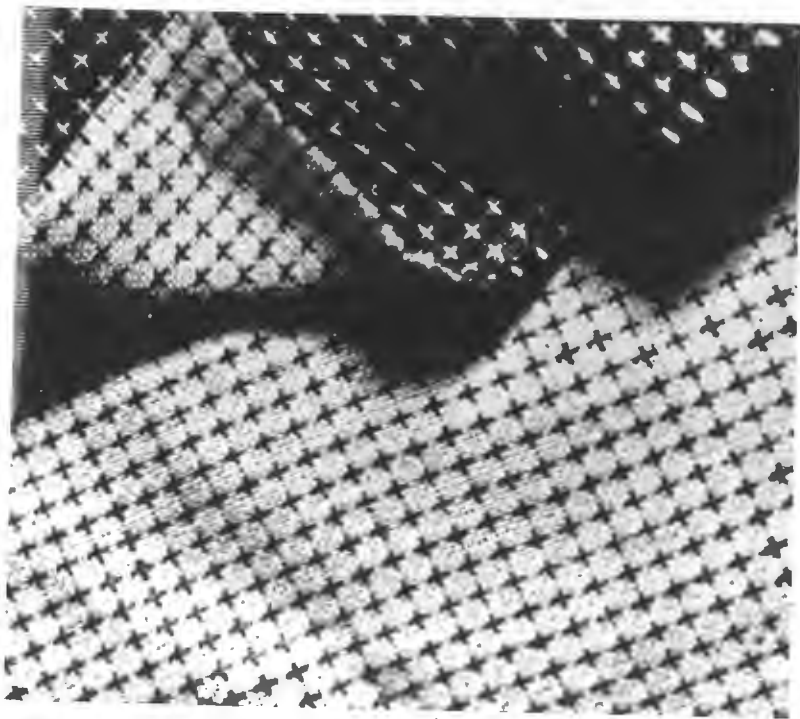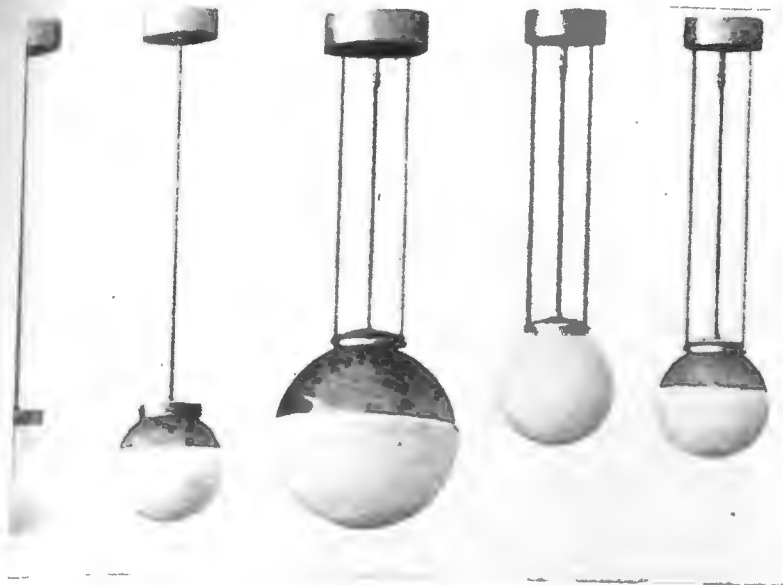
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SECTION 2   BRITISH FUNCTIONALISM IN THE 50's AND 60's

CHAPTER 3   INTRODUCTION

The different ways in which Functionalism was interpreted by designers and design theorists in the decades following the war varied according to which aspects of the original theory they focused upon or to which particular line of inheritance they identified with. The interpretations varied between the Corbusian formalistic version of Functionalism on the one hand to the economic / production orientated version of Hannes Meyer and others at the other end of the functionalist spectrum

Of the two extremes the former was most prevalent as Le Corbusier had become the hero figure for all English architectural educational establishments and with him all the ambiguous human-istic/mechanistic implications of his buildings and his writings. Statements like his 'the house is a machine for living in' typified this ambiguity as it was seen as both a mechanistic analogy and a sign of a symbolic union with technology which increased human participation with the contemporary environment. Whatever the academic debate about his intentions resolved, the real influence of le Corbusier was that of his clean, white classical buildings which inspired the two generations after him to create buildings which looked like those of their'master' regardless of their theoretical base.

The formalism that resulted was Functionalist inasmuch as it was determined by its own internal laws and not by any external, expressive factors. The aesthetic derived from that of the Cubists who were concerned with the internal implications of abstract, conceptual form in which perception was reduced to a minimum. Thus an architectural aesthetic developed which had no external referent and excluded to a large extent, the idea of perceptual experience on the part of the human participant.

The aesthetic so developed was determined by its geometrical component parts and therefore fulfilled the dictum of 'form follows function' if function was defined as the internal determinants of the structure. There was therefore a non-referential form / function deterministic unity which formed the aesthetic base for many buildings and objects created under this influence. To apply an external theory of meaning to design and architecture based upon such principles is possible but far removed from the intentions of the designer or architect. The results of such an activity are minimal because of the introverted non-referential nature of the abstract aesthetic employed.

As I shall show in the next section, British post war design which falls into this category maintained that same stimulus that went into the Modern.Movement in a modified form: the notion of the craft aesthetic. The craft activity is based upon the principle that the finished product is a total result of the creative process that determined it. One slip of the hand modifies the final appearance of the product in such a way that there is a completely logical connection between the two things. The emphasis is very strongly upon the 'making' of the object with a strong moral sense

of 'good' making being both a quality of the process and the finished product. The notion of 'good design' stems from this ambiguous idea, with little modification allowed for the substitution of the craft process by that of mechanical production. Thus the relationship between production, internal formal qualities of the object, and its finished appearance moved through The Modern Movement into post war British design and is emphasised by the continued involvement with the craft ethic and aesthetic. The elimination of the external referent and the lack of the importance of external perception of the finished object and its effect upon human behaviour is a direct result of the attitude described above.

Because of its continued involvement with the craft ethic and aesthetic, however, the human factor, in production terms, was still important in design and the British were hesitant to move into the totally impersonal, mass production orientated design of other countries, notably, Germany and the U.S.A. who had had more first hand experience of the Modern Movement. The way in which the human 'value' element was retained was by the continued use of natural and textured materials - wood and textured fabrics etc., used in modernist frames. It took Britain a long time also to eliminate surface decoration in their domestic design of the 50's and early 60's, the function of which was to retain human 'meaning'[*] in design. The stylistic influence of Modernism was very strong, however, and took a firm hold on British Design by the middle of the 1960's.

The symbolic content of objects which come under the category of the 'Functionalist style' is present as it echoes the physical associations of an age dominated by technology - geometric, austere, impersonal, etc., but the practical and theoretical dichotomy in approaching neo-functionalist design with such an attitude is so great that problems arise. It is not only that this kind of technological symbolism is semantically very poor (cf, fashion based on the inspiration of technology which appeals to fantasy rather than to fact) but the whole pseudo-rationalist framework which supports and surrounds such design makes it difficult for such an analysis to take place because of the 'logical' structure which it imposes upon it.[**] The fundamentally introverted tautological nature of the aesthetic, which is supported on formally deterministic grounds and held up by 'rational' justification both limits the existence of symbolism which depends upon the existence of irrational elements and the possibility of approaching the design with an analytical methodology which refuses to accept rationality as its starting point. The function of semantic analysis with relation to objects which manifest the 'functionalist style' is therefore minimal. The fact that the notion of 'style' is included in this category, means, however, that symbolism must be present in however small a degree. The result of semantic analysis of such objects serves, however, only to highlight their semantic inadequacy.

The other extreme of the functionalist spectrum, those architects and designers who denied the existence even of the notion of style, was picked up in Britain in the 1960's by a number of design theorists who were not concerned at all with design as a finished object. This meant that, by interpreting 'design' verbally rather than substantively, they were avoiding completely the possibility of a design theory basing its premise upon the existence of finished objects functioning in a social context and creating expressing, and reflecting 'meaning' by so doing. The deterministic quality of functionalist design is evident in this theory between the production process and the product. The form of the product is not defined other than as a reflection of the logical methodological approach that is employed in the approach to the design problem and the production process. The fact that this theory relies so heavily upon the written word allows it to escape the fallacy presented by Ulm in which their logical methodology resulted, nevertheless, in the development of a particular aesthetic style. The one case in England in which the rational method was put to the test was with Bruce Archer's Hospital bed project which provided a central study for the Design Research Unit at the Royal College of Art during the 1960's.

The procedural approach to the design problem was formulated and written and filed into a logical structure so that the entire process could be recorded and serve as a model for future projects. In his 'aims of investigation' Archer set out the following intended points

"1. A report describing how equipment schedules and specifications are prepared, how the selection of equipment is made, where equipment deficiencies are, and where future research and development effort would best be directed.

2. The classification and preliminary evaluation of types of equipment as part of the procedure for the selection of equipment for a new hospital.

3. Some new equipment designs offered as better solutions to some of the more pressing needs." [1]

from which one can see how they were skirting round the problem of design itself, how they were determinedly creating the logical framework within which design must function if it is to totally allied to the rationality of the production process. In creating this structural framework for design two factors were being ignored - the inevitable appearance and inescapable style of the finished hospital bed, and the psychological responses of all the people involved in either the production process or in interaction with the finished product. In appearance the hospital bed was based upon the reductivist aesthetic associated with Functionalism, a minimal aesthetic intended to affect the observer as little as possible. Bruce Archer explains this fact adding a functionalist justification to it,

"The colour is light stone to give a neutral background for the patient's colour, etc., and to assist cleaning and hygiene." [2]

No mention is made of the psychological boredom forced on the patient by the use of such a neutral colour.

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Within the area of rationalist design methodology one theory was developed to increase rather than decrease object / user involvement - this was the theory of ergonomics.

Again the theory was developed on a rationalistic basis, maintaining that there is a measurable relationship between for example, an abstract man and a particular chair. This implied that there are therefore perfect physical proportions and measurements for a chair which will then fulfill all its necessary requirements. The irrational relationships, symbolic, psychological, metaphysical etc; between man and objects were totally ignored.In an article entitled The Sitting Position - A Question of Method, published first in Arena, June 1967 and later in Jencks' and Baird's Meaning in Architecture, Joseph Rykwert presented the anti-ergonomics argument in which he showed how sitting is more complex than a mere physical activity. He states,

> "It is quite clear, however, from the briefest study of the positions described as comfortable that the situation is relatively independent of the measurements and materials which they (the ergonomists) use to attain comfort." [3]

and

> "The functional solution of problems will not lead to an ideal situation where the arbitrary aesthetic choices will be relegated to a marginal exercise." [4]

The rationalist framework of ergonomics is therefore its limitation and its neglect of style and aesthetics. This is , however, the theory in which Functionalism is at least restored to its original nineteenth-century meaning - ie, as a fulfilment of user requirements rather than an introverted theory relating product to production process, or to formal components of the object itself.

The fundamental determinism of Functionalism is carried through into its second phase in the post war period and the expressive, symbolic function of objects in the environment is at a minimum. Externally referential theories of meaning provide, therefore, little insight into the objects as Functionalist theory determines not only the nature of the objects in question and abstract ideas about their mode of production but also the ideological abstract context within which they function and according to whose rules alone they can be analysed and achieve 'meaning'.

NOTES TO CHAPTER 3

Page 16 *   This is in opposition to the feeling of impersonality and lack of human content often associated with large expanses of undecorated surfaces.

Page 16 **   Semantic analysis depends upon intuitive cross references, ie. putting objects into a lateral context. Its use of metaphor and symbolism opposes, in intention at least, the Modernist idea of a mathematical relation between form and function.

CHAPTER 4   FUNCTIONALISM AS DESIGN - THE FUNCTIONALIST STYLE

British interpretations of the theory and practice of the European Modern Movement of the 1920's and 30's evolved through the 1930's, with the arrival of Gropius in England in 1934 and the adoption of his architectural theories by Wells Coates, Jack Pritchard, Jack Howe and others, with an eclipse during the forties and early fifties and a resurgence in the late fifties and early sixties. The interpretations were tempered, however, by parallel manifestations of 'British' design characteristics - eg., an emphasis on craft and an ethics/aesthetics confusion which derived from Ruskinian notions of 'good and honest' design (a notion which moved in fact through Morris to Gropius), a stress on formal rather than conceptual theory (cf Roger Fry and his art criticism) and a tendency to water down ideas until they are easily grasped in terms of tradition. Norman Potter, in 1969, describes the 'contemporary' style which emerged from the Festival of Britain of 1951,

> " ... an enfeebled and misunderstood derivation from this earlier (ie. that of Gropius in Germany) work, almost wholly removed from the force of its guiding spirit." [1]

Britain tended to break down Modernist theories, interpret that part of them that it could grasp emotionally and combine this, in the 50's, with either the craft oriented work of Scandinavia, the sculptural formalism of Italian design or the expressive lines of American Streamlining (provided this was not so extreme so as to offend good taste).

The Design Establishment played a strong part in propogating the ideals which designers should strive to attain. In 1915 The Designers and Industries Association introduced the first Britain/Europe compromise by combining theories deriving from the craft aesthetic with principles of industrial production inspired by the Deutscher Werkbund Exhibition of 1914. The first Design slogan was introduced to the British Public - Fitness for Purpose - and its glossed over ambiguities of both ethical and aesthetic connotations led the way for many others over the years. The use of ambiguous terminology and undefined criteria for 'good' design characterises the contribution of the Design Establishment in Britain. In 1946, at the time of the Britain can Make It exhibition organised by the two-year-old Design Council, Sir Stafford Cripps wrote in the foreward to the exhibition catalogue,

> "Good design can provide us in our homes and working places with pleasant articles which combine good construction and fitness for their purpose with convenience in use and attractiveness in shape and colour." [2]

The craft ideal is combined with a token reference to the theory of Functionalism and formal ideas. No real theory of design is put forward. This is echoed in 1951 by Gordon Russell (one of the dominant figures of the British design Establishment in this century and 1st head of the Council of Industrial Design in 1944, who retained throughout his long career his role of 'artist-craftsman), - who wrote in the Festival of Britain catalogue,

> "I would say that a well designed industrial product would be made to serve a particular and useful purpose." [3]   (look at Cold criteria 1972)*

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He completely begs the question of what he means by 'well designed', and goes on to refer to 'good and suitable materials' (the craft ideal) and reference to a 'tradition' in design. The notion of tradition is frequently referred to and is synonymous with the craft ideal. John Gloag (a member of the D.I.A. in 1924,) wrote his first edition of The English Tradition in Design in 1947 (the second edition was published in 1959) and in it stated;

> "today designers like Milner Gray, Misha Black and Ernest Race have all accepted, studied and mastered industrial techniques. In common with craftsmen of the Middle Ages, they have familiarity with materials ..." [4]

A continuum is believed to exist between craft and industrial production in terms of Truth to materials (in fact a characteristic feature of the Modern Movement that Gropius took from Morris). Britain's early contribution to the Modern Movement - the Arts and Crafts Movement - however, remained their 'modus operandi' even after the Europeans had refined the early notions into a new position and theory, in machine terms.

The Designers that Gloag listed were founder members of both the Society of Industrial Artists, created in 1930, and the Design Research Unit (the first professional design body to operate a consultancy service) created in 1943. Their artistic affiliations were demonstrated by their bringing in, in 1932-3 Paul Nash, Allan Walton and Graham Sutherland to work with them, thus giving them an 'aesthetico-moral support.Their aim was to bring about a link between artist, designer and industry and they were strongly backed by Russell and the CoID in their attempts to achieve this. James de Holden Stone writes in 1951,

> "Government appreciation and support has steadily grown, and the effect of Gordon Russell's energetic backing is seen in the Society's close and friendly working with the CoID." [5]

Other evidence of the notion of tradition in British Design is presented by Herbert Read (the first leader of the D.R.U.). His book Art and Industry published first in 1934, and later in 1942, 1952 and 1956, provided the first attempt by anyone in the British Art Establishment to convey the intentions of the Modern Movement. His fundamental emotional dissatisfaction with Functionalism, is, however, demonstrated in his preface to the 1952 edition in which he refers to 'a justifiable dissatisfaction with the bleakness of a pioneering functionalism.' His aim is, however, like Gropius and le Corbusier, to establish a universal theory of design whose formal values are in line with a real 'machine aesthetic' ie; that of the early engineers. His theory is a formalist one and he is preoccupied with high standards of form, colour etc., which he sees, in design, to be evident in abstract art (he refers to that of Mondrian, Nicholson, Pevsner and Gabo.) He sees the roots for such design in education and he is the first British exponent of what is called in the 1960's 'basic design', - a concept inherited from the Bauhaus*. Read, however, believes in the autonomy of form seeing no necessary

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* See W. Huff - Basic Design in Arch. Design May 1966

connection between form and practical function. He is much more of a traditionalist than either Gropius or Le Corbusier as he sees the machine aesthetic deriving not from a specifically twentieth century sensibility, but from an age-old organic view of nature. He stresses the role of intuition as well as rationality in the design process. In 1961, Read gave a speech to the S.I.A. entitled Design and Tradition in which he put forward Morris and Wright as part of an 'organic tradition' again stressing threrfore the British craft ideal which moved into the Modern Movement and providing an example of British conservatism in being unable to move beyond that point, he describes as organic,

" ... a design that links the products of the machine with the products of nature." [6]

Like Gropius and Corbusier he was searching for a universal theory of form which corresponds to the standards of 'good taste' but unlike the Europeans he failed to move outside the craft ideal in doing so. Thus his interpretation of Gropius and the Modern Movement which he supported, provided it didn't move into the area of mechanical functionalism, was tempered by the tradition contained in British design which preceded the machine. The autocratic notion of universal good taste that the Modern Movement perpetuated is implied by Read, but he lacks any rigorous theory to accompany it.

The influence of his book was largely that of the illustrations which were of household goods, mechanical goods and decorative items which tended towards the European notion of 'simple' design. It was in this way that the Modern Movement influenced British design in the 50's and 60's. The emphasis on the formal implications of the movement, and the ethical/aesthetic confusions were perpetuated in British Design.

The last Establishment Body to exert influence was the Royal College of Art, which, under Robin Darwin in 1948 realigned itself with the principles of the CoID. Misha Black became head of the Industrial Design department and David Pye - later to write about 'workmanship' - head of Furniture Design. In 1949 the first edition of the CoID's Design magazine was issued. By 1950 the British Design Establishment was in full control and in 1952 Paul Reilly wrote,

"Modern Design has moved from its severely functional phase to something more friendly and relaxed." [7]

Thus in the first half of the 1950's British design was a long way from the Modern Movement although the slogan 'fitness for purpose' was still used and supposed to derive from the theory of Functionalism. In purist terms the designs of those years were anything but functional and the 'contemporary' style which manifested love of surface decoration, spindly forms, brash colour juxtapositions etc.

demonstrated no necessary link between form and function. Instead they were the logical conclusion of a link between art and design, not in a theoretical way but simply in terms of formal inspiration. Furniture resembled the spiky sculptures of the period and the notion of function became irrelevant.

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The need to move away from this stylistic cul-de-sac was felt by the CoID and the need at the same time to evolve something resembling a design theory led to a series of articles in Design, the mouthpiece of the Council, in 1956 (the year of the opening of the Design Centre, in the Haymarket) by Beresford -Evans *, entitled Good Form. The characteristics of British Design that have been outlined were implied in this title -

1.   An ethical / aesthetics confusion concerned with the word 'good' applied to design.

2.   An emphasis on the formal aspect of design to the exclusion of a concern with production, utility, society, etc.

The articles pinpoint a move towards goods at a more technical end of the scale from those decorative and luxury goods that characterise the Festival style.

The goods that Evans analyses are domestic appliances of the type that Germany was becoming renowned for producing in the early 50's onwards. The Rat fur Formgebung, the equivalent of the Council, was formed in 1951 and inherited more directly the theories of the Bauhaus etc. They used the expression 'gute form' on several occasions, and it is likely that Evans picked up the expression from here and used it with the same formal implications that the Germans bestowed on their mechanical objects - ie., geometric simplicity, neutral colour etc. The objects that Evans described - the Aga stove, the toaster, the letter plate, the petrol lighter, the carpet sweeper, the piano, the gas boiler and the solid fuel boiler, all conform roughly to a basic cube in shape, a rectangle from the front and employed neutral colour. It seems therefore that his discussion functions within the aesthetic context set up by the Germans at this time. (More will be said about the influence of German design at a later stage).

Evans' analysis is far from scientific. He uses as criteria,

1.   Physical practicality of appliances, eg., the door handles on the Aga cooker are difficult to grip, and,

2.   Aesthetic pleasure or satisfaction.

The second criterion is not clearly defined but is based upon 'comfortable' perception which depends on clarity, simplicity, and lack of visual ambiguity on the part of the product. Thus the excessive swing on the radius on the top corners of the toaster is to be condemned because the corners are not 'confident'. No mention is made, except by the manufacturer, of the fact that this product is influenced by American streamline car styling, hence the presence of the chrome. Evans implies that there is only one 'right' visual solution for each product. Colour is subordinated to form and is only used to enhance it. When form is simple, therefore, colour is neutral - most of the objects he describes are buff coloured. The vocabulary he employs perpetuates the ethics / aesthetics confusion,

* a member of the D.R.U.

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eg; 'forthright', 'ingenuous', 'frank', 'ruthless', thus transmitting human moral qualities on to the objects, implying therefore that they speak a language. The vocabulary is, however, ambiguous, and Evans does no more than look a little harder at objects than his predecessors, and re-establish the functional style that the Bauhaus initiated, using the formal criticism of classicism. With the solid fuel boiler he is nearer to Functionalism as he shows how the formal shape is dictated by the position of the functional components of the object. No mention is made of the fact, however, that this conveniently provides a neat slightly slanting cube with a rectangular facade. Evans assumes also that every prospective buyer is as form conscious as he is.

In Design May/August 1960, Bruce Archer wrote two articles under the title What is good Design? He superceded Evans' sculptural view of form in design and lay greater stress on the non-aesthetic features of design ie; use, safety, durability, appropriateness, and the economics of production. Appearance was discussed only in relation to market appeal, not to any absolute theory of form. He distinguished between different levels of design:

High Style which conforms to the taste of the Modern Movement inasmuch as it is described as 'free from ostentation' and 'doesn't offend' form follows function etc. This is not the only kind of design, however, in Archer's eyes there is also 'original design'. Archer claims ultimately that it is up to each individual to judge design. He is rejecting, therefore, an elitist conception of design which Evans was advocating.

Between 1956 and 1960, therefore British Functionalism developed from a style to a more complex set of determinants. The impulse behind the developing ideas was that of an increasing rationalism and objectivity. This was transferred into every part of the design field, and owed its direct stimulus to developments in Germany.

British Functionalism in the 1950's and 60's cannot be separated from parallel developments in Scandinavia, Italy, America and Germany. The 'contemporary' style owed much to Scandinavian wood and fabric textures and Italian sculptural form combined with the attitude of exuberance that resulted from a period of austerity experienced during the war under the reign of 'utility'. Formal simplification was the rule in all these countries and the tendency affected English design in the second half of the 50's.

I.B.M. in the U.S.A., Olivetti in Italy and Braun in Germany all arrived at a concept of 'corporate image' at a similar time in the early 50's. Britain experienced their designs through the periodicals Industrial Design, Stile Industria and Domus, and Form. (American, Italian and German respectively). These countries were direct descendants of the Modern Movement, whereas Britain still viewed it through the mediation of Arts and Crafts. (Italy's association with Art Nouveau however caused it to move away fromFunctionalism and towards curvaceous form*). Germany inherited the

* The neo-Liberty Movement

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Bauhaus directly and in 1951, when Max Braun died and left his company to his sons Artur and Erwin, it was to Bauhaus principles that they turned,to principles which had been revived after the defeat of the Nazis. It was from this year onwards that the impact of German design began to be strongly felt in England. Features on such design appeared in Design in 1952 and 1953, alongside articles about Scandinavian principles of craft and industry working side by side, illustrations of kidney shaped tables and articles on decorated coronation souvenirs. Fritz Eichler was appointed as Director of Braun design in 1954 and he initiated the methodoligcal market analysis that was to characterise them. The first new designs were of radio and T.V. sets; (exhibited in a showroom designed by the Ulm school at the Radio and T.V. Fair at Dusseldorf in 1955). Eichler describes why they chose these objects:

> "Nous commencames par les radios car il n'y avait aucun modele de reference. Elles avaient perdu leur caractere fonctionnel et etaient devenues de veritables meubles utilises a des fins representatives et leur qualite de reproduction sonore etait d'une mediocrite egale a leur forme." [8]

Here was an opportunity for total innovation - both technical and formal. These two qualities work together in all Braun products and show their debt to Functionalism. Their work together earned the label 'instrument look' as the aesthetic stimulus seemed to stem from the appearance of control systems with dials. Psychologically this implied mechanical efficiency and the logic of impersonal automated activity deriving from engineering design. The notion of precision was enhanced by the meticulous detailing on the products. R. Moss, in Industrial Design, 1962, describes the formal features of the hand kitchen mixer;

> "reading from the bottom upwards, there is a strict procession of parallels formed by the lower edge of the motor housing, the seam in the middle of the housing, the upper edge of the housing, and the lower and upper of the handle. Then reading from left to right, there is a set of parallels which crosses the others at right-angles..." [9]

The straight line and the right angle become the sine qua non of Braun industrial design and echo the rationalist ethic behind all their activity and production. Ultimately, however, they are, like the Bauhaus before them, doing little more than creating a style which corresponds to the technological imagination of the age. Their kitchen Machine - a food mixer of 1957 - sums up the symbolic analogy that they are drawing between domestic gadgets and machine engineering. They achieve this symbolism formally rather than functionally. R. Moss says that 'design is also a matter of eye and idea' and that theirs was a 'visual formalism' founded upon 'a creation of harmony in design by the fewest and simplest means'. If they achieve a style, then it is the so-called functionalist style which depends on simplification and universality.

The initial connection between Braun and the Hochschule fur Gestaltung at Ulm which opened in 1955 was their employment of two Ulm pupils - Hans Gugelot and Otl Ai chler. Ideologically, in terms of a fundamental rationalism and objectivity, Braun and Ulm shared the same design principles.

Their model was that of science, not art. This fact was to determine the evolution of mainstream design for the next decade.

Max Bill was the first head of the school which was originally conceived in terms of broad Bauhaus principles. This meant that there was a foundation course which dealt with 'fundamentals', and then specialization into various design areas for three years. The dispute within the institution which disrupted it considerably was this resemblance or otherwise to the Bauhaus. Max Bill conceived it in Bauhaus terms, whereas Tomas Maldonado, who succeeded Bill as rector, in 1956, maintained,

> "The target we have set ourselves is not to contribute to the creation of some undefined and indefineable new culture in keeping with what the Bauhaus had in mind, when that institution in 1919 spoke of a 'new building of the future' and 'a crystal - clear symbol for a coming new faith . Nowadays when we talk of a cultural conception, we try to be guided by the cultural and social problems which we must try to solve at the present time.' "

He was rejecting the subjective idealism presented by the Bauhaus and substituting for it a realistic study of culture which involved objective analysis and a thorough knowledge of such disciplines as sociology, psychology, social anthropology etc. Whereas the Bauhaus employed artists, Maldonado wanted to keep to scientific principles. In many ways, however, the rhetoric of Maldonado resembled that of Gropius. He says that they were;

> "at the peak of the scientific rivalry between the great powers, and at the dawn of the new revolution in methods of industrial production." [10]

He warns of the danger of 'confusing imaginary science with real science', encouraged the study of geometry as a base for study of form. The emphasis in the school was on communication studies and the relationship between objects and their environment in terms of language study. The fundamental notion of 'form follows function' was crucial but no longer in the simplistic way that it had been considered before. The emphasis on objectivity led to extensions in the definition of the notion of function to include the total spectrum of the inter-relationships between object, user and environment, not simply in terms of utility, but also of semantic and psychological links. Function in terms of construction, the 'truth to materials' notion was extended into a mathematical analysis of structure, stresses and perception of form. Maldonado is against what he calls the 'modernist formalism of the final teaspoon', but perpetuates the concept of 'logical form', based now more upon the rational framework within which the object is produced rather than on formal characteristics of the object itself. The objects produced at Ulm, however, demonstrated a rational aesthetic through their logical relationship with their mode of production. In appearance they resembled Bauhaus objects with their geometrical exactitude and neutral colour, with an emphasis on white. This was part of the new rhetoric that Maldonado wanted expressed by the world of artefacts. He states in 1957 that the best sign system is one that is reduced to a few basic units and rules of combination. This is Platonic aesthetics expressed

within a new discipline - that of semiotics. Clarity, unambiguity, simplicity, reduction are still the guiding principles. Banham calls it the 'compact style', saying that it lies somewhere;

"between functionalism and artistic expressionism." [11]

The influence of the developments in Germany on Britain was substantial and led the way to the functional style of the late 50's and 60's that invaded the pages of Design and other design and architectural periodicals. In Design 1954 a German camera is put beside a British one and seen to be superior in design in terms of its clearer lines and more distinct form. The move towards Functionalism in England is predominantly a formal concern, stemming as it does from photographs of objects rather than written theoretical documents. Also it satisfied the CoID's desire to rationalise design and feel confident again in the application of the old slogans - fitness for purpose etc. The same rigour is, however, not applied. The visual austerity of German products resulting from rational thought is not acceptable to the British public as, lacking an abstract theory of design, they are concerned only with the appearance of products and found the severity of the German design too extreme, and lacking in their organic tradition. Thus their Functionalism is often a visual compromise.

Design in Britain in the 50's was largely produced by a small clique of young designers, most of whom had studied at the R.C.A. at the beginning of the decade. Among them were Robin Day who designed furniture for Hille, John and Sylvia Reid, Ernest Race and Robert Heritage who also designed furniture, David Mellor and Robert Welch who designed metalware, and Lucienne Day and Shirley Craven who designed fabrics. Other recurrent names in the 50's were Ronald Grierson (fabrics), Humphrey Spender (fabrics), Susie Cooper and the Marquis of Queensbury (ceramics), R.D. Carter and Hulme Chadwick. Towards the end of the decade, when emphasis moved from domestic to more technical goods, Kenneth Grange emerged.

The festival style dominated the first years of the decade and Ernest Race designed his Antelope and Springbok chairs for 1951, epitomising the light metal rod designs of the day. In 1954 (the year in which the German camera was admired in Design) Robin Day's chair for Hille was shown in the same periodical. It had tapered splayed legs as did Heritage's sideboard of 1955 which also had a patterned front. John and Sylvia Reid's wardrobe of the same year conformed to the same aesthetic, and David Mellor's silver cutlery set (of the same year) entitled 'pride' had tapered handles with bulbous ends. Designs were, on the whole, relatively simple, but shaped inasmuch as the curve and oblique angles were favoured over straight lines and right-angles.

Design 1955 (the year of the opening of Ulm and the Dusseldorf fair) showed a very simple Max Bill chair and a Wagenfeld lamp. Architectural Design ran an article on Ulm. In 1956 Beresford-Evans' article crystallised the debate which had begun in the previous year about 'appearance design' and brought to attention German-type objects in his article, ignoring completely the fabrics, complex wall

and standard lights, and bulbous furniture on spindly legs of the last few years. Also in this year was the beginnings of a concern with engineering products in Design which was to develop considerably in the next decade. Bruce Archer refers to the school at Ulm. By 1957 British designs are themselves looking more solid and geometrically based. This is the year of the first design Awards - the Council's opportunity to publicly demonstrate what they considered to be 'good Design'. The line-up was interesting as it included the Day's, the Reid's, David Mellor and, an acknowledgement to the past, Wedgwood.

Robin Day's 'Form' unit seating, made by Hille, in 1957, undoubtedly owed much to photographs of German design. It consisted of modular units with straight, parallel legs, with a square table fitting into the right-angle between two adjacent sets of units. The texture of the covering fabric and the wood texture on the table area demonstrated the English horror vacui in terms of surfaces. By 1958 the year of the publication of the 1st Ulm periodical German-style photography had crept into Design * - rectangular objects were looked at straight on, so as to emphasise the 'instrument' geometrical look. Goods that had been looked at from a multi-plane angle were now shown with one plane visible at a time. This increased the illusion of simplicity in technically complex objects. This was to remain the photographic norm for mechanical and consumer goods for the next fifteen years. British goods became more and more solid looking in the years following 1958 and an increasing number of German goods appeared in the design periodicals. In 1958 the Braun 'kitchen machine' appeared, only a few months after its appearance on the market, a Braun radio appears in the same year in Design, as does a remark on German superiority in the design field.

In 1959 in Design the Braun Mixer is compared to the Kenwood Chef by Grange, and inevitably comes off better. This is the time when English kitchen equipment and technical goods ape their German equivalents but lack the theoretical substance to allow them to be anything but formal studies. Ergonomic research has become evident in British design (see Jones in Design June 1954) but it lacked the discipline that the Germans devoted to their systematic studies. Hence British designs of this period are largely an unresolved compromise between function in terms of efficiency, practicality, use of materials and styling. Writing in Industrial Design in 1960 about national design characteristics a writer claims that in England,

> "There is no positive expression ... decisions are left to chance ... human rightness is the only determining factor ... it is ethical rather than sensuous design." [12]

An example is given of a kettle with a flat lid with what can only be an arbitrarily determined curved handle, as it bears no resemblance to the curve of the hand and jars aesthetically with the rest of the kettle.

Goods like ceramics, plastics etc. are;

> "Plain, nutritious, highminded and off-white" [13]

* Work of new Art Director Ken Garland

It is interesting that back in 1954, the look was evident in illustrations of fuse boxes and light switches where minimal design is obvious. No mention was made of this at the time as design was considered to be something more positive than simply meeting functional requirements Functionalism had to come to England via stylistic considerations.

In 1960 Grange received an award for his Kodak 'Brownie' design which owed much to German inspiration, but again lacked the same formal rigour. It was, however, according to the judges, 'easy to load and hold,' and 'produces very competent photographs for the price'. (see Design December 1959). The geometrical shape of the office furniture designed by Brian Henderson which received an award in the same year received comments characteristic of those given to the 'best design of the period',

"...reasonably prices, robust yet elegant." [14]

The combination of 'robust' and 'elegant' at the same time is a typically English criticism. England didn't take kindly to the artificial look of new materials that Germany and America advocated in their neo-functionalist designs. This transgressed the 'truth to materials' craft ethic and hence many designs were produced with 'German' shape but made out of wood with attention to grain etc. Ronald Carter's 'Brompton' chair of 1963 falls into this category. The theories of Ulm were little known among designers of the period and there was little sympathy with what Grange calls its 'highly puritanical statement'. He explained also that the use of neutral, ie 'natural' colour derives as much from Scandinavia as anywhere else. Thus Britain, while absorbing the visual desire for simplification and rationalisation from the continent, hung on to its tradition of craft ideals.

Paul Reilly succeeded Russell as head of the CoID in 1960. He was less of a traditionalist than his predecessor. In discussions as to whether or not the Design Centre should display 'good' traditional designs, Reilly came out against, maintaining that they had a commitment to the present and to the future.

German design became increasingly evident during the first half of the 1960's influencing magazine layout, hence the visual conception of neat logical design in which each object stood in isolation in its own space. This notion of the emphatic 'objectness' of the object, together with its implications of good taste and permanence raised the sociological status of the object. Together with the increased affluence and strongly developed materialism of the period, design was instilled with an unprecedented significance, maintaining and in fact sustaining the ideology of the status quo. Fiona McCarthy in All Things Bright and Beautiful talks about 'the reverential feeling for the nicely-designed object', implying that it came to play an almost quasi-religious role in everyday life. The new style photography emphasised the feel of offering perfect objects for worship, objects whose value was universal.

The American periodical Industrial Design showed some Ulm dinnerware in 1961 and described

it as 'New Bauhaus'. An Ulm student, Hans Roericht, designed some very simple straight-sided white stacking china for Rosenthal in 1961, and very similar items appears in Design 1963, bearing Russell's name and in Design 1967, designed by Robert Welch. Germany was now providing prototypes which were being imitated in England. Ulm clip-together flat cutlery of the same year resembled flatware designed by Mellor and Welch in that and subsequent years. Braun and Ulm products continued to be shown in the next few years in Design, and to a lesser extent Architectural Review and Architectural Design (Maldonado expressed many of his educational ideas in the latter.) 1964-5 were the years of high neo-functionalism in England * [1]. Mainstream designers moved into the area of more technical goods. R.D. Carter designed a gas fitting and Mellor a gas measuring machine, others like Robert Welch reverted to a craft notion of design which was being resurrected, or simply brought more clearly to the surface at this time. In 1966 a writer in Design proclaimed;

"Carnaby Street has failed to recognise the underlying discipline of function." [15]

Ephemerality and fashion had by now, presented a significant threat to the timeless neutral, autocratic aesthetic of Functionalism. Carlo Argan remarks in Ulm 1967;

"Industrial design has moved into a critical state in the very moment when it started to define its own possibilities of formal characteristics: that is in the moment when industrial design ceased to be a kind of micro-architecture." [16]

The Council of Industrial Design moved, in 1967 to include capital goods in their awards as fashion had ousted their criteria in the area of consumer goods. Paul Reilly gave his speech entitled The Challenge of Pop [17] in the same year.

In 1968 * [2] the Royal Academy housed an exhibition of the Bauhaus and the Camden Arts Centre a De Stijl exhibition. The formalist interpretation of the Modern Movement which, amounted to little more than a reductivist aesthetic, had shown itself to be inadequate in socio/psychological terms. What was needed was a re-examination of the Bauhaus itself, rather than a passive adoption of its formalism reflected through preconceptions and second hand interpretations.

This impasse had been reached by the inflexibility of the 'absolute object' in a highly competitive economy, and the way out of this, for the British design mainstream was to subordinate the object to its overall context, while retaining a 'functional' attitude towards it. A writer in Design stated, in 1969

"The functional design of an object is not just a matter of its own lay-out but also of the way it relates to everything around it." [18]

This subordination of the object to general systems was a result of studies that had been carried out into design methodologies, during the 1950's and 60's. The ideology of design as a logical process, deriving from Functionalism, was still the motivating force, but a need was felt to analyse the actual mode of production of design, thus creating the logical framework before the finished product is visualised, thus moving the emphasis from concrete product to abstract process.

* [1]   Zeev Aram reproduced the Breuer tubular steel chair in 1965 c f:OMK and Plush Kicker

* [2]   The Ulm school was closed by German authorities in 1968.

NOTES TO CHAPTER 4

Page 20   *   The COID criteria for good design in 1972 were, in the following order:

performance, safety, construction, ergonomics, aesthetics and cost.

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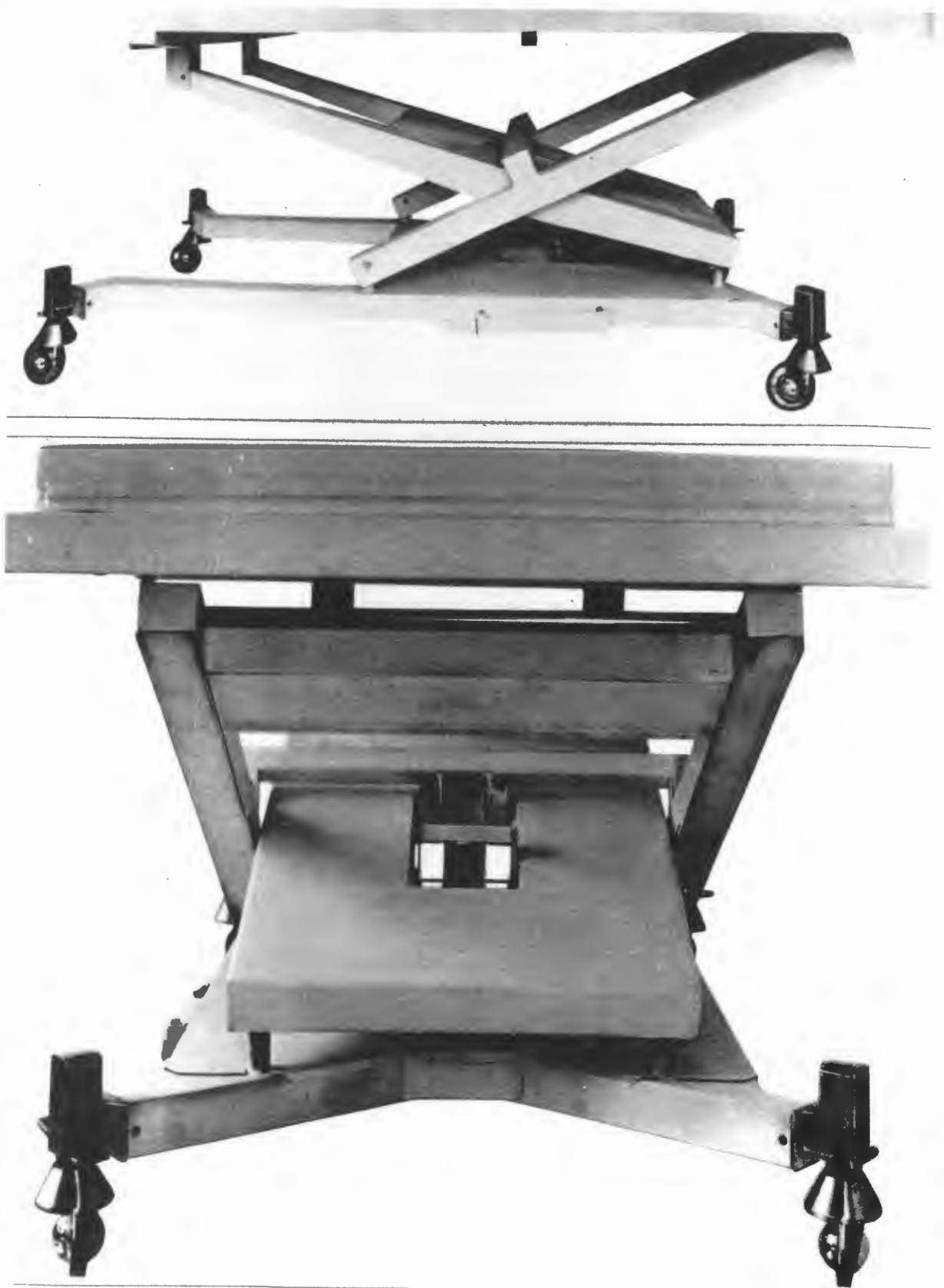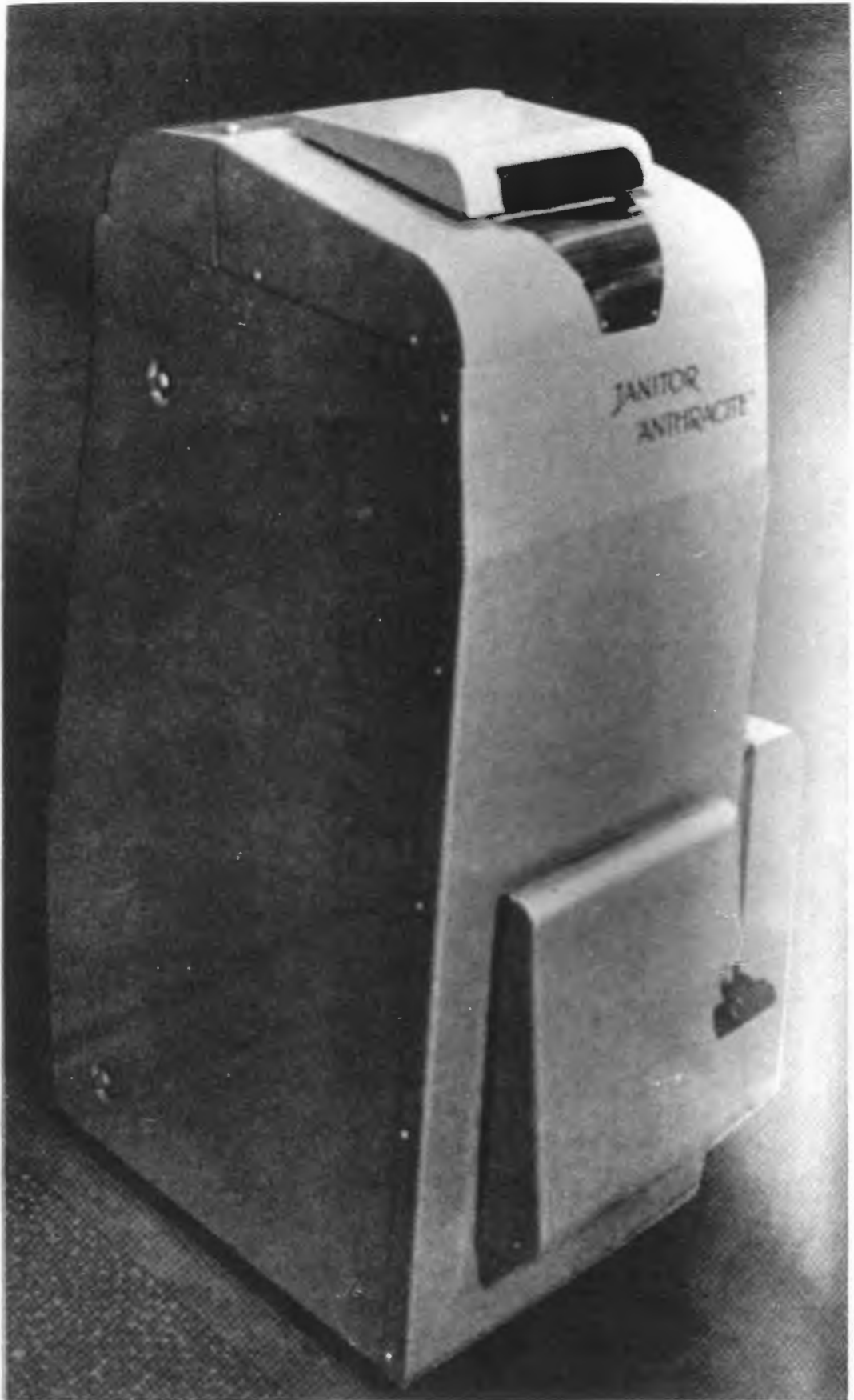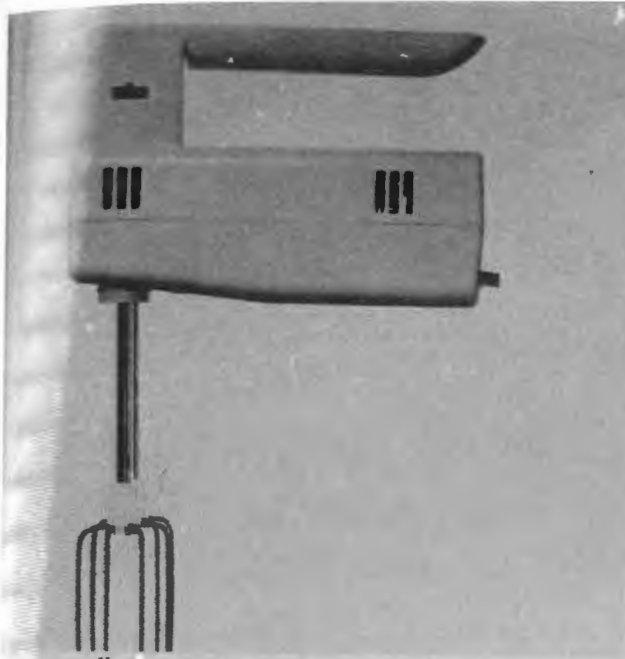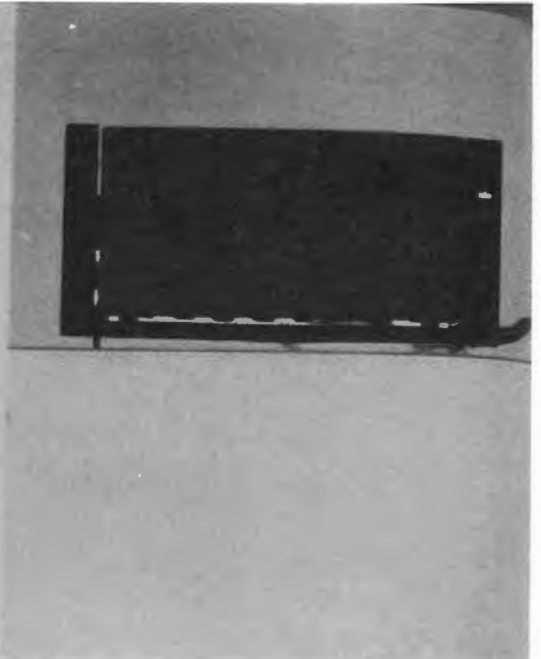
11. Hand-type kitchen mixer (1960).
12. Studio-1 radio-phonograph
(1957), designed by Hans Gugelot.
13. Toaster (1961). 14. Space heater
(1959).

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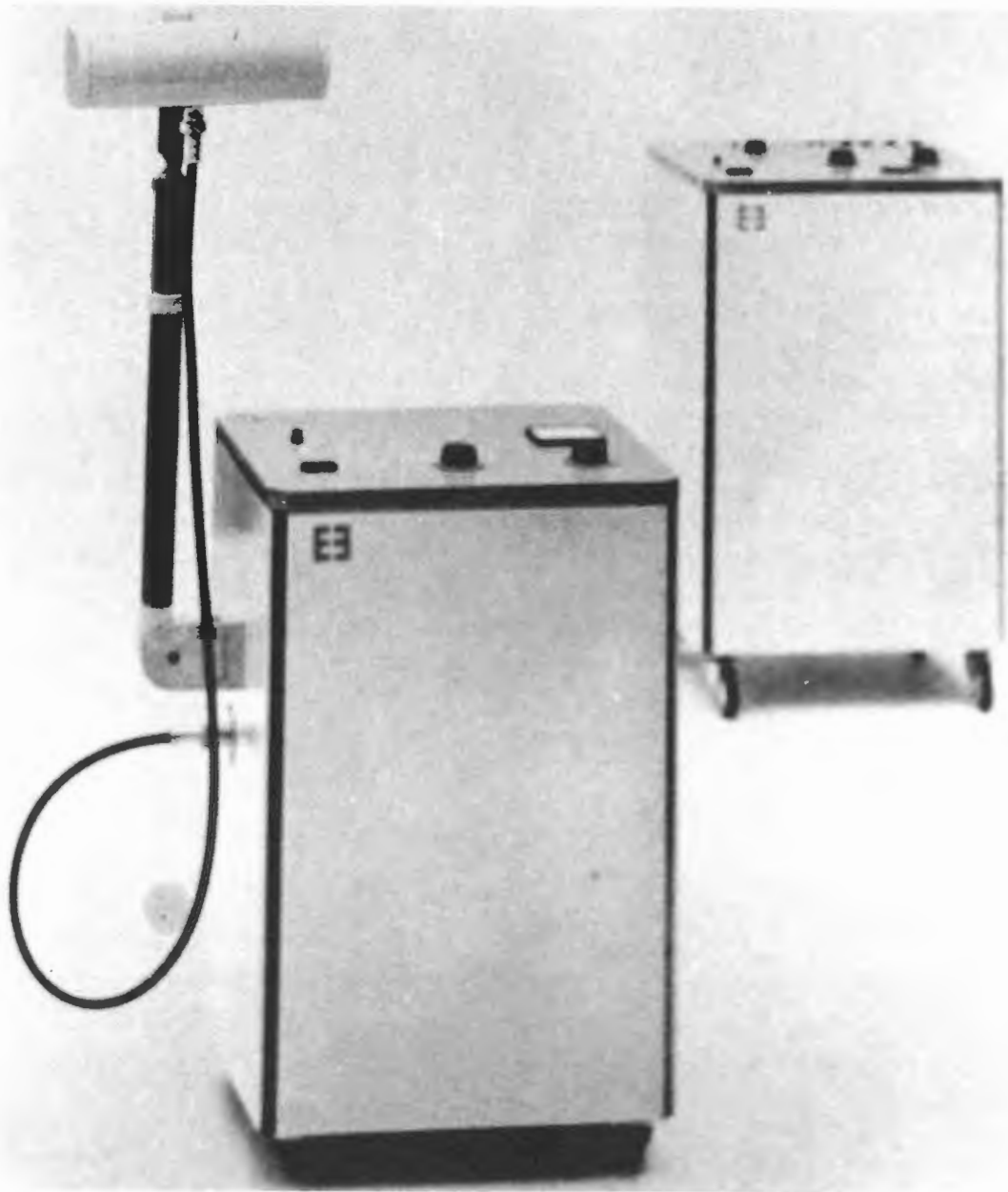
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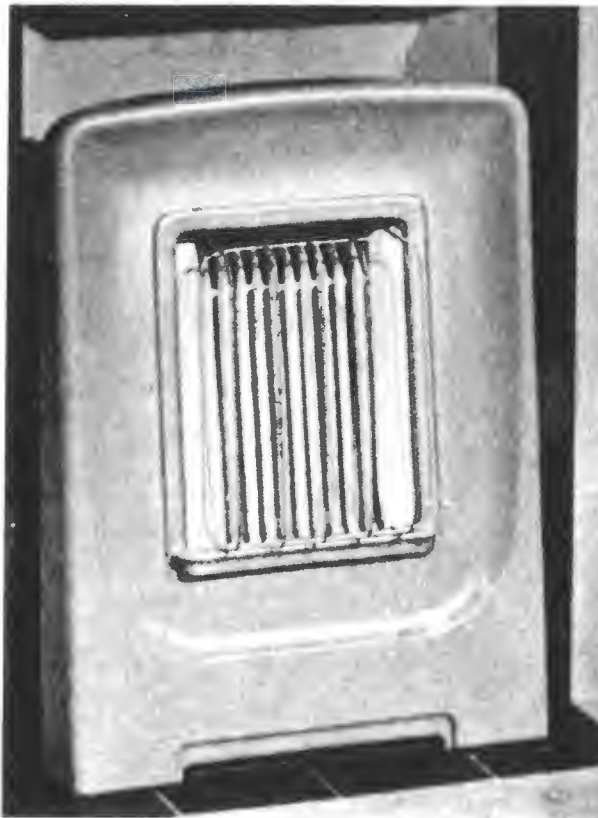
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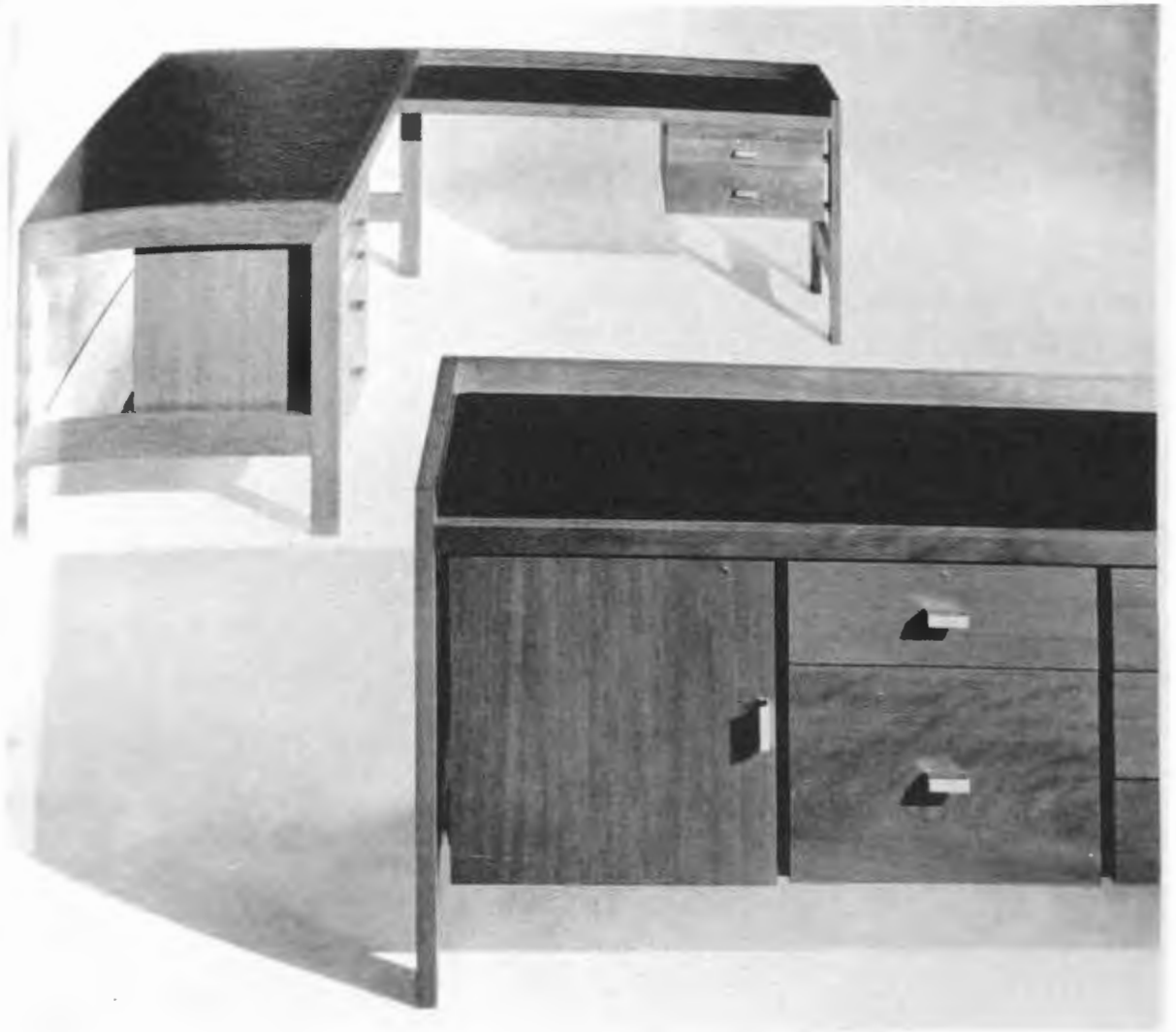
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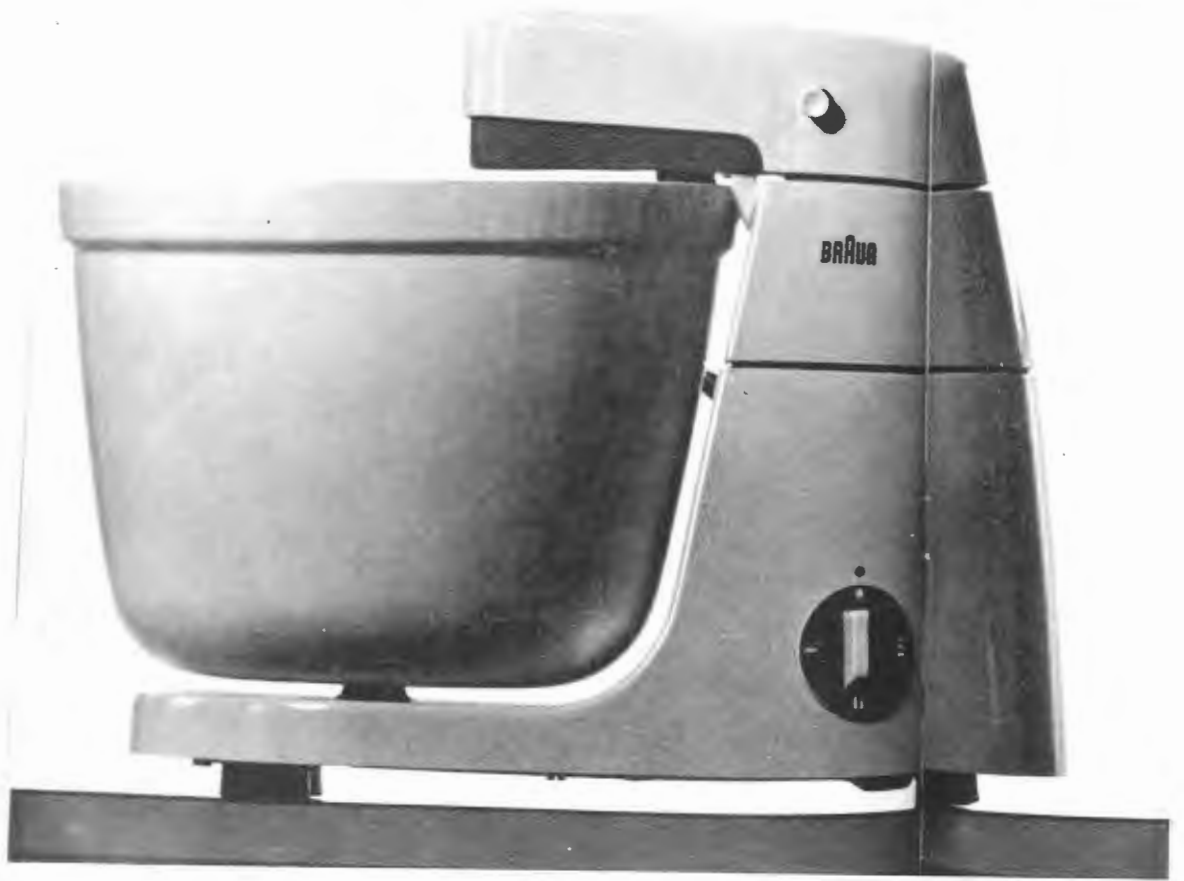
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Flat-topped kettle *by A. W. Ryan (Ryan Co.) Kettle top doubles as hotplate, with side vents for steam. Its form is a straightforward statement of usefulness, while handle seems arbitrary.*

Stainless steel *saucepan by Mischa Black, Ronald Armstrong (Judge). The clearly-conceived expression of volume and closure is transmitted logically to the handle. The lid knob, though tastefully formed, looks functionally dubious by contrast.*

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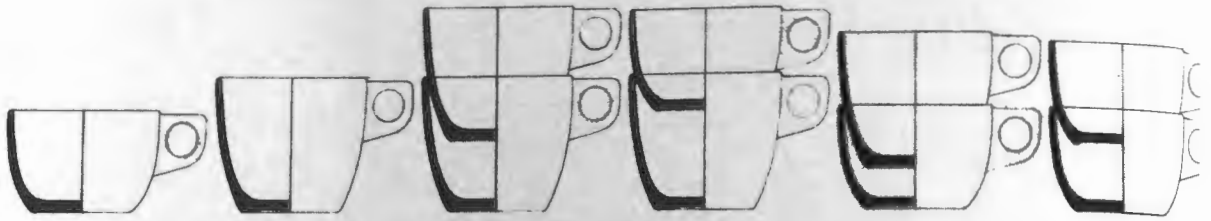
Two sizes of cup were needed – 8 and 5 oz – fitting the same size saucer. In plan, both sizes of cup occupy the same space, and the shape of both allows for various nesting permutations (the design brief did not call for stacking cups). One handle is common to the two sizes of cup, and the aperture allows the index finger to pass through to the first joint, thus making the cups easy to hold.

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CHAPTER 5   FUNCTIONALISM AS THEORY – DESIGN METHODOLOGIES

In order to avoid the emphatically formalistic interpretation of Modernism, a number of designers from the engineering side of the profession moved the emphasis from product to process, thus setting up a new body of thought which ran parallel to that of British formal Functionalism in the late 50's and 60's in England. The dualism was made possible by the ambiguity inherent in the definition of the word 'design' which describes both a mental abstract process and the formal qualities of the product resulting from the mental activity. Emphasis on the latter was simply replaced by theories about the nature of the former which maintained, however, the underlying assumptions of Functionalism, ie. that there is a logical relationship between the economic production of an object and its final condition, whether this be its appearance or its contextual role or function. It was implied that, once the logic of production has been defined as clearly as possible, this would mean that it filtered through, by what amounted to an act of faith, to the object and to its context, thereby rationalising the environment. The same 'magical' idea contained in 'form follows function' is thus expressed.

The urge to rationalise was a product of several forces during the period. Logical positivism influenced philosophical thinking in England in the period between the wars and onwards, and an increasing influence of theories concerned with structuring and defining behavioural patterns in terms of systems was felt from the U.S.A. in the years following the war. The theory of cybernetics (N Weiner, 1945 ['the study of the control mechanisms of living organisms']) moved into increasing computerisation, resulting in a greater emphasis upon objectivity in the area of technology, moving finally into the public's imagination. Parallel with scientific and technological innovation developed a popular image of it which revolved around images of increased mechanisation and automation based on rigid logic and scientific exactitude. The designers saw that an alliance with this would free them from formalism while extending the theories of the Modern Movement. Archer stated in 1973;

> "Form follows function becomes problem – solving methodology rather than a call for the symbolic expression of function." [19]

Cybernetics provided not only the abstract intellectual setting for design method theories but also one of the models for them. One of the characteristics of the various methods was their dependence upon other methical models. J.C. Jones lists them as:

> "1.   Computer programming
> 2.   Psychotherapy
> 3.   Behavioural Science
> 4.   Electrical circuit theory
> 5.   Communications theory" [20]

Of these the first was the most popular and was based on the analogy drawn between systems theory and the fact that every product is a set of components, put together in a sequence, therefore constituting a system which can therefore, it was maintained, follow the same laws as a computer

how the difference was not one of essence but of manner only. The Modern Design Methodoligist simply becomes conscious of the stages of the process and therefore avoids too many errors. The notion of conscious/unconscious methods is central to Alexander's thesis of 1962, as I shall show presently. In one way this can be seen as a parallel to American action painting in which it is the process, not the product that is important, — it is the transmission of energy that is important, and the object appears in a way similar to alchemic chance. The designers found it necessary to set out their process in a quasi-scientific manner, however, and to aspire to the status of 'scientist' in order to give their profession credibility.

In 1959, Jones wrote his Systematic Design Method in Design. This consisted of a written report (a very important component in most of these theories) about the design of a set of cutlery. This was procedural rather than scientific, and long-winded. It was based on assessment of 'user behaviour'. The aims were first articulated, then experiments with different pieces of cutlery and different foods were undertaken, the results listed and compared, conclusions drawn and then tested. The systematic appearance of the programme looked convincing on a first glance but it quickly becomes obvious that it is imaginative rather empirical, that an infinite number of foods and utensil shape could have been used, and that the final decision rests as much on aesthetic (defining the word in its widest sense meaning pleasure to all the senses) satisfaction as any other criteria. One can only say that inasmuch as lists and charts appear there is a stronger attempt to show on what bases decisions, however intuitive they were, were made. Alexander tries to avoid the problem of not including experimentation with every possible solution by approaching the problem negatively, ie. by saying that it is only when one sees a 'bad fit' that a systematic approach can be used. He still relies on the aesthetic/ethical confusion with his terminology, however, and is no nearer producing an empirical method whose results are measurable in anything other than a relative sense.

In 1962 the first conference on Design Methods was held at Imperial College. It was convened by Jones and Thornley who asked a number of people involved to contribute papers in different areas of the subject. The history and raison d'etre of the subject was explained and the fundamental processes of the design Method were defined by Page as analysis, synthesis, evaluation [23]. This three stage process was at the base of all the methods that emerged however much they were adapted and added to. Jones developed his own method, showing how he was concerned to both systematise that part of the design process that was rational, even to automate it, and increase the creative possibilities of that part of the process that still depended upon intuition. He mentions and develops an American method called 'brainstorming' which meant a group of designers sitting together, throwing up random ideas and working on them together on the principle 'two heads are better than one'. His method depended on keeping one's mind free for inspiration at all times while at the same time using a notation method.

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The notation system is more complex than that of 1959, and includes use of cross reference, graphs, and other charts to describe, in another language, or metalanguage, the relevant problems, kept for as long as possible separate from the solutions. Jones states later that design method is not a question of 'problem-solving' (cf Guildford 1958) but of 'problem-finding'.

In the second conference of Design Methods in 1965, Jones contributed a paper entitled Design Methods Reviewed in which he showed how some methods inclined to the purely systematic, others to a compromise between system and intuition. Every facet of the problem had received systematic treatment, from decision theory to analyses of the creative act with reference to 'synectics' etc. He distinguishes between different types of design, components, products, systems and environments, and in 1967, he wrote an article in Design making a plea towards design as system not only in process but in product as well in terms of the general environment. This was a logical conclusion for design methodologists to reject the static object and concern themselves with a more abstract notion of the logic or structure beneath surface appearance.

Jones' work of 1970 entitled simply Design Methods repeats and extends his earlier ideas. He no longer claims the suitability of any specific method but maintains rather that there is a relevant method for each problem. His ideas have become more open-ended but the basic concept of 'analysis, synthesis and evaluation' remains the same. He decides finally that design is a hybrid activity, blending together art, science and mathematics and devotes most of the book to showing how different methods can match different design problems.

Archer begins to realize the necessity for accurate measuring in the design process in his articles on stress analysis which appeared in Design from 1955 onwards. Again the logic relates production to user requirements and therefore conforms to the tenets of Functionalism. He rejects the role of beauty in this relationship maintaining that

"Beauty and structural efficiency do not necessarily go hand in hand." [24]
and yet form is connected to 'reliable calculation based on scientific principles.'

In the articles What is Good Design? of 1960 it has already been shown how aesthetics were seen as only part of the criteria of design which include 'functional performance and manufacture.' Archer makes a distinction between design at the points of manufacture, sale and use which he retains in his later writings showing how there are no 'Platonic truths' in design judgments. 1960 was an important year for Archer as he was appointed at Ulm for a short period in that year (Maldonado was also concerned to systematise the design process although from the perception rather than the production end of the scale). Also in 1960 The Research Unit under Archer was set up at the R.C.A. and the effect of Ulm was felt strongly in the project which was begun in the next year, following a series of articles in Design, on the design of non-surgical hospital equipment. This was focused on the design of a hospital bed which was a model case study for a methodological approach to design.

The whole project was extensively documented. (See Design March 1965). This was the first of many projects undertaken by the department, including designs for an automotive passenger seat (1965-6), a window design (1966-8), a wheelchair design (1968-70).

Archer's first complete writings on the subject appeared in Design 1963/4 and was published as a booklet in 1965 under the heading Systematic Method for Designers. In this treatise Archer discusses a logic, which is separate from the numerical logic of physical science, which is used in ethics and law and which can be used in aesthetics. No real definition is given to the nature of this logic except that it allows the presence of intuition and judgment. Archer's methodological process conforms to the pattern of analysis, synthesis, and communication that has already been observed in other methods (padded out in his case with programming, data collection, and development). Emphasis is laid on the role of creativity which is neglected rather in some programmes. Archer calls Designing a 'creative sandwich' in which it is only the bread that can be systematised. The model used is again that of cybernetics and Archer uses diagrams to organise procedures and information (special use is made of the arrow diagram). The process is simply one of ordering information to a 'rank ordered list', followed by the 'creative leap' which rests in intuition (perception theory from Ulm is mentioned at this point), followed by the 'donkey' work of development, concluded by communication. Archer's system is no more than a procedural common sense breakdown of a linear process of the lead up to and conclusion of a creative act which as yet defies any systematic analysis. The process is a simplification of a complex situation with as little regard as possible paid to external constraints - social and psychological expectations, the effect, of any one object on its context and vice versa. The linear, reductive logic of the Modern Movement is still very evident and the notion of cybernetics used only as a metaphor, not a real model. Mathematics is flirted with but not used as a metalanguage in a real way. The process/product is only intuitively and not logically grasped.

Archer's thesis of 1964-8, entitled Structure of Design Processes, carries his basic ideas further by formulating them in terms of algebraic symbols and developing them in terms of mathematical formulae graphs and flow charts etc. The underlying intention is to create a formula which is then applicable to any 'problem solving' situation. Archer makes reference to the majority of work done in the field, and states that the main techniques used by methodologists are those of,

"systems analysis, morphological analysis, precedent analysis and empiricism." [25]

He admits, however, that there are still major problems to the notion of systematisation, ie; aesthetics and incomplete information. It seems that unless these can be resolved, every systematic metalanguage is ultimately not a complete solution.

Among the many strong American influences on British thinking in this area were Asimov's Introduction to Design (1962) Starr's Product Design and Decision Theory (1963) and Christopher Alexander's Notes on the Synthesis of Form (1964). The latter's theory stemmed directly from the

magical notion of 'form follows function' inasmuch as he maintained that there was an abstract connection between the shape of a design problem properly evaluated and the final form of the object produced. This metaphysical view led him to a concern with the mathematics of set theory as a metaphor of the fundamental idea of shape coming from arrangement of a group of components, seen together in a particular way. Like nearly all the design methodologists, therefore, Alexander built up a highly logical and systematic framework, borrowing from other disciplines to do so and committing the fallacy that every other facet of the discipline was therefore applicable, around a process which depended for its very existence upon the intangible, irreducible notion of 'creativity' while also per- petuating the Functionalist fallacy that there is a necessary, logical connection between form and function, whether the latter is defined in the manufacture, sales or user stage. It was only at Ulm that logic was being applied outside the immediate production/object/use sequence, into a more horizontal consideration of peripheral factors. The urge to simplify was however the same in terms of object form. The product was ultimately,

"A heirarchic assemblage of components." [26]

In 1970 J.P. Bonta pointed out that there was a complete polarity and a choice between only 'geometrical clarity or complex ambiguity'. There was no method that could provide a compromise.

Another aspect of the effect of method studies was an increase in other professional studies relating the designer to industry and defining his newly found role there. Again the stimulus derived from the U.S.A. where the profession of 'industrial designer' had originally emerged. Design ran articles on Design Management, Design Teams and House Styles (later known as corporate identities) in 1956, and a series of books on the subjects emerged on both sides of the Atlantic in subsequent years. These included D. Goslett Professional Practice for Designers (1961), D. Scott, The Business of Product Design (1965), Michael Farr, Design Management (1967)[Farr was connected with Design magazine and Archer], A Parkin, Design Co-ordination and Corporate Image (1967) and M. Middleton, Group Practice in Design, (1967). These issues became burning debates in the 1960's and took discussion about design completely away from the 'appearance design' end of the scale.

Functionalism in England in the 1950's and 60's developed both formal and theoretical aspects therefore, which functioned in opposition to each other but which both perpetuated the same ideology of reductivism, whether visual or intellectual, of the preference of logic over intuition, of theory over non-theory. The Modernist notion of 'keeping up with technology' was interpreted as literally as possi- ble, although inevitably, because design is not a science, the interpretation was ultimately symbolic. It was the lack of recognition of this fact, the fallacious simplification of complexity, and insufficient recognition of the psychologico/symbolic needs of the sonsumer and other tangential problems that led to the crisis of Functionalism that occurred in the early 1960's.

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SECTION 3   THE CRISIS OF FUNCTIONALISM

CHAPTER 6   TOWARDS A CRITIQUE OF FUNCTIONALISM

The criticisms of Functionalism existing on several different levels depending upon which point they wished to invalidate most strongly. The main problem for the critics lay in a definition of the term and in interpreting the real intentions of the so-calledFunctionalists.

One can examine the critics of Functionalism by dividing them into three categories. In the first category are those writers who sense the existence of fallacies and paradoxes in the way Modernist theories have been understood, realise also that they fail to provide an adequate design theory for the present cultural situation, but can see no immediate alternative; the second category encompasses those critics and artists who see the same limitations and a possibility of renewal through an involvement with concepts from popular culture; and in the third category are a group of theorists who develop semantic analysis to show both the inadequacies of the Modern Movement and an alternative set of criteria which avoids making the same mistakes.

Among the earliest critical statements about the Modern Movement appears in an article by the American Paul Zucker entitled The Paradox of Architectural theories at the Beginning of the 'Modern Movement', 1951, in which he refers to the confusion that existed between abstract problems of function (production rather than consumer orientated) and aesthetics - a concern with formal problems of space and volume. Zucker states that these considerations were not seen as distinct from each other, and neither involved the participation of the user. He states,

> "The awakening functionalism did not consider as pertinent the emotional reactions of man what Woelfflin called 'humanization'." [1]

Zucker lists theorists who, at the beginning of the century, were concerned with 'architecture as symbol', but claims that the architects themselves were only concerned with new materials and new techniques.

Also in 1951, Louis Mumford decried the lack of a concern with expression in Modern Movement architecture, but he did not see the impossibility of this gap being filled within the functionalist code. He maintains,

> "...in all systems of architecture, both function and expression have a place." [2]

Mumford refers to Matthew Nowicki's statement about Wright's organic theory of architecture — 'form follows form' [3] — thus changing the deterministic relationship, and allowing for 'the expression of a subjective human preference'.

This inclusion of expression within functionalism is echoed by another American, Rudolf Arnheim, in 1964, in an article entitled From Function to Expression. He demonstrates the arbitrary subjectivity that is involved even in a design problem which appears to be dictated by purely

functional requirements,

> "pure function does not eliminate the need for stylistic choice... a neglect of the vital connection between function and expression is traditional." [4]

There is little attempt, however, to give any explanation why this is so, other than this statement,

> "Granted that in an age of disturbed taste, it may be more sensible to try to reduce the decisions of the architect or designer to objectively determinable requirements than to mislead him by unsuitable aesthetic standards." [5]

What these critics are doing is not so much to reject the Modern Movement as to redefine its definition of function to include psychological and symbolic factors, without questioning the fundamental deterministic ethic.

CHAPTER 7   THE POP CRITICS

1.   Introduction

In England the criticism of Functionalism was the result of an awareness of an outdated aesthetic felt simultaneously by a group of intellectuals, who called themselves The Independent Group — among them critics, artists, architects and a photographer. They identified the old aesthetic and ethic with the theories of the Modern Movement associated with the notion of Functionalism. They set out therefore to both analyse the shortcomings of the theory and examine their contemporary cultural environment in order to establish a new attitude towards and a new set of criteria for design and architecture.

Sir Nikolaus, in an article entitled Architecture in Our Time (1966), in which he demonstrated his acknowledgement of writings which cast doubt upon such straight-forward, rational theories of the evolution of the Modern Movement as he himself had put forward in his Pioneers of Modern Design, claimed that,

> "Reyner Banham — my pupil I am glad to say and puzzled to say — was the first to cast doubt on it." [6]

This is true in England as Banham constituted the point of focus from which English suspicions of Functionalism emanated. He presented an analysis of the Modern Movement which showed how far away he stood from it both in time and attitude. He was a member of the Independent Group, which set itself up at the I.C.A. in Dover Street in the early 50's to discuss various topics associated with developments in technology and mass culture. They laid strong emphasis on contemporary American culture as there the lack of restrictions that tradition had imposed on Europe had resulted in rapid technological and therefore mass cultural developments. Emphasis was put upon the symbolism of styling — thus they were involved in a positive way with what the American writers noticed to be present in the Modern Movement theories. Eg. Mies van der Rohe had said,

> "We reject all aesthetic speculation, all doctrine, all formalism." [7]

The move from a theory based upon such abstract concepts as construction, function and rationalism, to one based upon stylistic analysis in terms of symbolic content was made possible by Banham's repeated declaration that Functionalism had never been more than a style, (whatever the protagonists had intended) — an aesthetic and symbolic credo, and, more than that, as an aesthetic it was 'poverty stricken' symbolically. This latter conviction was shared by Stephen Spender, who took up the cause of 'post-modern' * design as a spectator rather than practitioner, who claimed that,

> "Functionalism is inadequate as an aesthetic creed." [8]

The criticisms of Functionalism that focused upon its lack of symbolic content were in fact saying two things and tending to confuse them into one critical statement. What they were in fact pointing out were,

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*   This term is used by N Pevsner in articles in the Listener in Dec. 1966 and Jan. 1967

1. That functionalist theory was in fact fallacious as it was not the objective rational methodology that it had been maintained to be, and

2. that as the symbolic theory it really was, it lacked sufficient expressive quality to provide contemporary man with either adequate or relevant psychological and aesthetic material in his everyday environment.

The two criticisms need to be differentiated as the first is historical — a comment on the fallacies inherent in both the theories of the functionalists, and its inheritors and interpreters, whereas the second is a reflection of the inadequacy of design theory and practice in contemporary society, on the fact that limited Modernist theories had lasted for so long without being questioned earlier, and on the desire for a renovated design theory and/or aesthetic.

Banham's first words on the subject appeared in Architectural Review — a magazine which was attempting to establish a contemporary design philosophy — in April 1955, three years after the I.G. had first been convened. It was at the time of their second round of talks which centred around the theme of popular culture. In the article (Banham says that he tends to be deliberately provocative and extreme in magazine articles and more tempered in his longer publications)he wanted to establish the fact that the implications derived from the functionalist ethic — that simple, geometric forms were the cheapest ones to produce, and therefore economically functional — was fallacious and based, not on scientific analysis based on mechanical processes, but rather on wishful thinking alone. He states rhetorically, with reference to Le Corbusier's 'crooked' method of making visual juxtapositions of the motor-car and the Parthenon, thus persuading the reader that they are equally beautiful,

> "Naivety? Sharp practice? or Wishful thinking? a certain aesthetic parti-pris is undoubtedly there; a desire that certain wishes should come true." [9]

The strength of the language is characteristic of articles by Banham. He uses a succinct argument to refute the economically based theory by simply bringing the consumer into the picture and stating the obvious fact that what sells is economical to produce, whether it be decorated or plain. The argument against the association of Platonic forms with economic Functionalism is developed by Abraham Moles who writes, in 1967,

> "The product machinery of an affluent society creates a system of neo-kitsch by accumulating objects in the human environment." [10]

He is not, however, attackingFunctionalism as much as decrying the existence of decorative objects which reflect the production system of an affluent, capitalist society.

Le Corbusier had seen the economics of production solely in terms of manufacture and had ignored the laws of conspicuous consuption which were becoming so dominant in terms of their effect upon the organisation of society by the 1950's and which followed a pattern entirely divorced from the logic of cheap production. The new factors to be considered were the psychological and social aspects of consumer needs, dreams and aspirations.

Having put forward his first critique of the theories of the Modern Movement, in economic terms, Banham quickly went on to extract the positive implications of his misgivings. He entitled the article, which appeared in Civilta delle Macchine in November the same year Industrial Design and Popular Art, and in this he combined his dissatisfaction with the Modern Movement with his growing interest in the symbolism of the iconography (he was Courtauld trained) of popular objects. He presented a hypothetical solution for present-day society in terms of a diametrically opposed value system as the basis for a new design philosophy. In his last article he had stressed the fact that Le Corbusier and Gropius had ultimately worked intuitively rather than rationally, 'another Purist Image',[11] 'it is the Bauhaus atmosphere which needs to be studied'[12] ,and he criticizes not this but the fact that the theorists were practicing self-deception in believing that they were working according to rationalist principles. Banham states now that an intuitive feel for the mood of a period is the only real base for a design aesthetic. He said, speaking of the Futurist poet Marinetti,

"Such an opinion could only be expressed in the rare atmosphere of pure poetry." [13]

and later, when referring to the style of the 30's known as Borax,

"Basically its propriety to automative design lies in its symbolic content ... its symbols are as firmly built into the technical history of the product as were the useless flutings, guttae, triglyphs and so forth of Greek Doric temples." [14]

Banham denied the possibility of any universal criteria of taste as appropriate symbolism would evolve as society evolved, he believed, hence the need for a throw-away aesthetic.

In this second article he reiterates the fallacy of the 'objective' approach and establishes the need for flexible design values, giving two analogous models —

1.   Engineering where there are no universal norms, only temporary ones

2.   The 'throw-away' element in modern economic theory.

There is a possible paradox in this stage of his argument between the notions of an aesthetic of expendability(which is itself constant but symbolises change) and an expendable aesthetic which is renewable. Banham states further in the article, having posited the ambiguously descriptive or prescriptive statement,

"The aesthetics of consumer goods are those of the popular arts." [15]

that what was needed was a working methodology — a way of approaching design without absolute values. In fact he was rejecting form altogether which paved the way for his later neo-functionalist attitude. The turn towards symbols was also, however, a turning away from form as such towards meaning, which is another level of content in design.

Banham saw the role of the design critic as one of assessing meaning in objects, moving towards the anthropologist. His new position is summed up in the comment.

"design — as — popular-symbolism."[16]

What he had added to previous theories was the significance of style in any and every object. By attempting to redress the balance with theories which had negated style Banham emphasised the need for a relevant form of social expression, (stemming from stylistic analysis,) which he saw as deriving from the popular arts. This implied total acceptance of and faith in an unself-conscious symbolism that can be discovered by approaching the totality of culture without any preconceived notions of value, taste etc. This creates a problem for design practice inasmuch as there is a difference between a designer consciously including symbolism in his design and the 'natural' styling of eg., a 1950's American car, for which the only motivation, on the part of the designer, is to sell the product. The same problem was manifested by Corbusier as description of the engineer as a 'noble sauvage' and his subsequent advocation of an architecture based on the same principles.

Other writers, sharing the dissatisfaction with Functionalism, nevertheless refused to let go of concepts of taste, vis; Herbert Read whose ethical view contrasts strongly with Banham's 'suspended morality',

"the alienation and nihilism of our age erects into an aesthetic category or criterion the vulgarism which is the symptom of this condition." [17]

Abraham Moles also made such value judgements, describing,

"...the incapacity of the average human being to raise himself to the heights of his own philosophy." [18]

There is a split therefore, between those critics of Functionalism who look forward to a new 'democratic' design and those who don't.

The dualism is reflected early on by contributors to Architectural Review who published, in December 1950 a photographic record called Man-Made America in which they pointed to the architectural chaos that the lack of an overall plan had resulted in, whereas in May 1957 they republished similar material calling the article this time, Machine-Made America, and showing admiration for the country's development;

"Other countries have their highlights — one or two something more — but the U.S., by adding to generosity and willingness to learn, wealth, industrial potential and technological skill, is beginning to add a new dimension to the adventure of today's architecture." [19]

What had been disdain for quantity and admiration only for 'quality' became completely reversed and attitudes towards designs changed radically as a result of it.

Stephen Spender, in 1959, furthers Banham's interest in popular culture by listing the abstract qualities that design should contain if it were to move away from Functionalism.

"Utility should be reconciled with extravagance and imaginative delight." [20]

Unlike Banham, however, he does not reject the notion of taste altogether (which I feel Bauhaus only does theoretically) but suggests that it is bad taste that we should perhaps involve ourselves with,

"perhaps... expresso bars, jazz...show an underlying sense that bad taste is nearer to the truest inspiration of art... which is life... than officialized good taste." [21]

Spender is also conscious of the difference between mythifying a design theory in fine art terms (he mentions Brancusi who has made a myth of the functional), and producing objects which perpetuate the myth without commenting on it. He does not, however, draw the implications that this has for basing design upon popular culture.

Jane McCullough shows how the theory of Functionalism was itself derived from attempts to define philosophical absolutes – truth, virtue, beauty or divine law,

"Finally, in the sense of utility, it became an absolute to check irresponsible (unacceptable) beauty." [22]

Spender therefore, has not moved completely outside the Functionalist ethic. If functionalism was to be rejected, the notion of the design/morality/taste link, was also to be put to one side. Read, and to a lesser extent Spender cannot ignore their preconceptions. Read cannot accept bad taste or immorality, whereas Spender moves half-way to Banham but he cannot yet conceive of 'no taste'. Spender sees officialized good taste as immorality,

"Hermann Broch saw (modern) architecture as a reflection of the emptiness that is ultimately that of society itself." [23]

The reference to 'officialized' good taste and a later one to the Council of Industrial Design is significant as in 1967 Paul Reilly, the Director of the CoID, having taken over from Sir Gordon Russell in 1960, defends himself against the encroachments of the 'pop' ethic, which by that time had taken a large hold upon consumer goods. He defends Functionalism against the accusations of being,

"clinical, hygenic, aseptic, and so avant-garde as to be out of touch with the market place." [24]

and insists that the Council were not basing their selections upon stylistic features without realising that Functionalism and style are ultimately inseperable. What he was trying to do was to run counter to the power of symbolic necessity which was becoming manifest in England in the middle and late sixties, but at the same time was aware that he couldn't fight the market along and said,

"We may have to learn to enjoy an entirely new set of, for gaudy colours have long been associated with expendable ephemera." [25]

This shows a morally compromised position as Reilly is holding on fast to moral disapproval of and fear of accepting ephemerality but simultaneously is aware of the economic necessity of doing so. There is a paternalistic, authoritarian attitude displayed here which contrasts strongly with Banham's democratic attitude to the whole of culture. Reilly fallaciously solves his conflict by attempting to find temporary solutions to the problem of making design decisions. He sets out, however, no alternative criteria to those of Functionalism which can only imply permanence and never transitoriness. Reilly grudgingly accepts the necessity of new characteristics in design,

"Novelty and imagination in the outward appearance of consumer goods may go to a premium even at the expense of logic and commonsense." [26]

without showing either any intellectual or intuitive understanding of the changes — both social and aesthetic — behind design thinking. One way out of the dilemma for the Council was to concentrate more upon capital goods where symbolism was less important than function. The Design Establishment was unprepared for a new design philosophy. A letter in the following issue of Architectural Review said the problem,

"comes from the lack of a common language of description and analysis among designers." [27,]

and the writer asks,

"What do function, style and quality mean?" [28]

There was a need to go back to the beginning, to deal with the basic tenets of Functionalism before a change could be understood.

2.   Theory and Design in the First Machine Age

The critical debates about taste, morality and design which developed in the 1960's in England owed

their academic base to Reyner Banham and in 1960 he published his first long work on the subject.

It was a doctoral thesis and was amongst the first books to provide an objective, retrospective analysis of the

Modern Movement. Until the early 50's*the Modern Movement had been chronicled by writers closely

associated with it — Siegfried Giedion, Louis Mumford and Nikolaus Pevsner among them.

In 1961 Richard Hamilton, speaking on Art and Design at a National Union of Teachers

conference on Popular Culture and Personal Responsibility, questioned the idea of the Standard Type

put forward by Mumford in his book Art and Technics,

> "This cold expression of the death wish poses some difficult problems. How can we decide that
> the right form for a type object has been achieved? I would say that Sir Herbert Read is as good
> a judge as anyone, but if we take a look at some of the illustrated examples in Art and Industry
> we might well be glad that the pressures of markets and the self-indulgent caprices of men have
> since brought a hundred variants of each type object shown." [29]

He puts pleasure against classical form, stressing also that the mass media, through which the

public have their knowledge of the Modern Movement, refuse, themselves, to accept permanent values.

Giedion is attacked by Charles Jencks. He mentions that Giedion omitted to mention Gaudi and

Sharoun (figures who do not fit into the rationalist ethic), and by Banham himself who says of

Giedion,

> "His art historical training tends to make him assume that things that look alike must have
> some historical connection." [30]

Giedion was trained under Woelfflin, and Banham accuses him of being biased from a rationalist

standpoint, and that important aspects of modern architecture are neglected. Pevsner commits the

same crime in his Pioneers of the Modern Movement, in which, in the first edition he makes no reference

to many 'expressionist' architects, to the individualism of Victorian architecture, the fundamental

ornamentation of Art Nouveau etc. He refers only to what Banham himself calls the 'spoilsports', ie;

the direct line of evolution from William Morris to The Werkbund. Pevsner omits that the war upset

rationalism and produced a burst of Expressionism. Again, in the first edition he makes no mention of

the Futurists or to Sant'Elia, whom Banham makes constant reference to as the prophet of much that

is important to the Modern Movement.

> "He anticipates the anti-Functionalist mood of Le Corbusier and Gropius in the 20's and 30's." [31]

This quotation goes right to the heart of the book, ie; that the idea that Functionalism derives

from the theories of the architects of the Modern Movement or the International Style, is fallacious.

The most controversial statement in the book is probably this one.

> "Nowhere among the major figures of the 20's will a pure Functionalist be found, an
> architect who designs entirely without aesthetic intentions." [32]

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*   Peter Collins, de Zurko, Wittkover and others were re-analysing Functionalism in a historical
perspective at this time.

In some ways he goes backwards from his writings of 1955, as he is not presenting a contemporary

solution for the Functionalist crisis but rather going back into a detailed analysis of the reasons for

the situation he had already diagnosed. He realised that a solution lay not so much in pushing forward

as in going back as the confusion in design thinking in post-war Britain was a direct result of mis-

understandings — both those of the early theorists of their own intentions and, inevitably, later

interpretations of them. Banham based his analysis almost entirely on theoretical writings as it was

here that the paradoxes and fallacies actually existed.

He is less inclined, than in 1955, to accuse the theorists of self-deception or of deliberately

misleading people, although Le Corbusier and Gropius come under some attack from this quarter.

Accidents of photography and personal closeness to historians are held responsible for the great

significance bestowed on Gropius' Fagus Factory. Of Le Corbusier's Vers.Une Architecture, Banham says,

> "Vers Une Architecture has a series of rhetorical or rhapsodical essays on a limited number of
> themes, assembled side by side in such a way as to give the impression that these themes have
> some necessary connection." [33]

Banham is still very conscious of the workings of false evidence, but at the same time he says

that Le Corbusier himself stated that Functionalism was not enough, and Banham calls his tone

'Futurist' on many occasions. Ultimately he puts little or no blame at the feet of the theorists. He

reiterates Gropius' statement of intent,

> " ... to create forms symbolising the world." [34]

The main point is made in statements like this one,

> "This shows again how far Gropius at the time from any functionalist ideas of formal determinism,
> though his contemporaries appear to have seen his position very differently." [35]

The theorists were not as limited as their contemporaries who only picked up the Rationalist

aspects which were superficially verified by the appearance of the objects.

> "Phileban forms, space-grids ... a basically de Stijl manner of typography." [36],

but nobody saw it for what it was, a symbolic style and a limited symbolic style. Some attempt is made

to show why the theories were interpreted in such a narrow way. Banham explains in his conclusion that

the political pressures of the 30's were partially responsible.

> "Under these circumstances it was better to advocate or defend the new architecture   on
> logical and economic grounds than on grounds of aesthetics or symbolism that might stir
> nothing but hostility." [37]

One would have liked a development of this point. Jencks makes similar slight references to

fascism in History as Myth. We get no nearer to understanding why we inherited such a limited

conception of Functionalism. In a review of Banham's book in 1961, Paul Goodman said that he wished

Banham had included more political, economic, moral and religious background material.

The book fluctuates, however, between information and opinion, and the fact that design history

is given serious academic treatment is as important as Banham's ideas about the material he chooses to

discuss.

The Futurists are given priase for initiating the Modern Movement by Banham. He makes constant reference to their influence, showing how both their attitude towards the new technology and their aesthetic based on space and change resulting from this are characteristic of almost everything that the Modern Movement was founded upon. It was their interpretation of cubist form and space that was to provide a stimulus for the Machine Aesthetic. Discussing a piece of Boccioni sculpture, Banham remarks,

> "... we are presented with a spatial experience analogous to the Prairie House architecture of Wright, or the work of architects under De Stijl influence in the early 20's." [38]

and it is the Futurist 'tone' that is remarked upon in the writings of Le Corbusier and Gropius. The Futurists' radical approach to design lay in their awareness of symbolism,

> "...the subtlety lies in seeing that the straight line would be symbolic of, and not inherent in, mechanical design." [39]

De Stijl was responsible, according to Banham, for pushing Futurism into the post-war situation and defining the Machine Aesthetic fully. Throughout this analysis, Banham stresses the influence of painting, particularly of cubism, upon design theory. This accounted for the problem of communicability of a symbolism, in everyday objects, which derived from intellectual, avant-garde, elitist aesthetic theories. Herwin Schaefer reiterates the fine art element in the formation of the Machine Aesthetic,

> "Picasso and Gropius, Braque and Breuer, Mondrian and Mies Van Der Rohe are one family." [40]

Philip Johnson, in his review of Banham's book, wished that Banham had omitted the last chapter and he presents a very circular argument which showed clearly how Banham's ideas were falling on deaf ears and blind eyes in the 'Mainstream' world of architecture. Johnson claimed that Banham was calling Functionalism a false propaganda term, saying that it was not practiced anyway, and wishing that another belief, also propaganda and illusion had lain behind the theories of the designers of the First Machine Age. Johnson is in fact so entrenched in the Modernist ethic that he calls propaganda what Banham would remove the normative implication from and call natural symbolism. Johnson assumes it to be always false whereas Banham sees it as either true or false according to its assumptions. Johnson takes a deterministic stance,

> "The international Style 'expressed its age' merely by the fact of being prevalent at that time." [41]

completely missing the point that Banham has taken great pains to express, namely that the fact that architecture does not simply exist, that it is based, in this century at least, upon a tight theoretical background which works on either true or false assumptions according to the perception of the architect and/or his critics. Added to this is the necessity for the aware historian to disentangle fallacies and attempt to put architecture back into its right evolution. Peter Collins comments on Johnson's remark,

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"Forms beget more forms," [42]

saying,

> "It is precisely the idea of what forms may most appropriately be selected which creates the architecture of a particular age." [43]

The implications of Johnson's words are based on the Zeitgeist idea and eradicates the necessity for anybody of architectural criticism at all. His criticism of Banham is thus irrelevant as he has not tackled the argument on its own ground, but worked, rather from the very Functionalist prejudices of which Banham sees the limitations.

Banham does not demolish what the early 20th century architects were actually producing, only the fact that they failed to see its limited significance,

> "It was a language that could only communicate under the special conditions of the 20's."[44]

The gap between Johnson and Banham is a gap between two worlds, one in which there is a fixed rational relationship between man and the environment and their mutual historical development and the other in which all such relationships have to be constructed and which follow no fixed laws. No criteria or values are shared by the two worlds. The fact that Banham will,

> "...further the chaos by analysing away the last of the beliefs of the last generation." [45]

could only be seen as praise by Banham and not as the adverse criticism it was intended to be.

In the review which appeared in Design, in October 1960, reference to Banham's,

> "dubious art historical terminology." [46]

is made. The point is a significant one as the question of critical language is opened up fully in the 1960's If the old values no longer applied then the language which had contained them also needed overhauling. In painting this resulted in the visual linguistic form/content dislocation of Pop art and Banham, among others saw the need of transposing this into the written word. This was obviously much easier to do in Fictional rather than critical writing, but Banham, in an article entitled Who is this pop?, of 1963, breaches the gap between art and art criticism, by putting all the characteristics of Pop into his written analysis of it (collage, humour, dislocated grammar, etc.) In Theory and Design, Banham is beginning to realise the limiting implications — ie; it contains its own value system — of conventional critical language. This idea leads into several methodological problems which I shall discuss in a later section. Suffice it to say that the critic in Design, still held as permanent truths the implications of the use of conventions of language structure per se.

Another misunderstanding of Banham can be found in the review of him in the American periodical Industrial Design, of December 1960. The writer says,

> "like other contemporary critics, he thinks style is a cul-de-sac," [47]

making Banham into a Functionalist. What Banham in fact thought about style was that it was of fundamental importance, providing that it was linked symbolically and socio-culturally to the society which contained it.

Finally Paul Goodman's review in Arts, January 1961, took a tangential position to Banham. He shared the values conveyed but felt that the analysis could have been taken further by laying less responsibility on the designers themselves and more on the shoulders of society.

"Our author does not at all think of the human - personal and community factors that underlie our failure of style." [48]

Goodman and Banham end up, however, in the same position vis-a-vis the shortcomings of the Modern Movement and the problem this presented for contemporary society.

3. The Architecture of the Well-Tempered Environment

A gap of nine years lies between Banham's two long works which contain his diagnosis and his cure. In 1955 he had gone part of the way towards this, but it was not until 1969 that he really achieves his synthesis — his union of thesis and antithesis into a solution which leaves his other work behind completely. He now elucidated a theory of an approach towards architecture which was entirely based upon technological change. What Banham did in an article entitled Environment of the Machine Aesthetic, which appeared first in Design November 1968, (it was a chapter of his forthcoming book) was to leave aside abstract philosphical arguments about the limitations of the symbolism of the Modern Movement, and a new design philosophy based upon opposite criteria, and concentrate upon the practical aspects of the architecture of the age of technology. It was a tangent of the basic tenet that the consumer had been neglected, now not in terms of symbolic necessities, however, but of practical comfort.

The cry from the heart for a new, radical aesthetic based on expendability had resulted, in design terms, in many literal interpretations of Banham's abstract ideas —whether consciously or unconsciously Cardboard chairs, throwaway paper knickers etc., fulfilled the dictum of ephemerality, and manifestations such as the return to the decorativeness of Art Nouveau, a general breakdown in the form/content fusion in consumer goods filled the shop windows. The myth that Banham had put forward so enthusiastically had become reality. The problem was that what was simply advocated as an antidote, as a way out from the stranglehold of tradition, was picked up as the solution to everything. This was emphasized by remarks like the one from Ken Baynes *   . An historical dialectic had been engaged in, but no positive design philosophy, based on change, had yet emerged. A limited had given birth to anti-style which by negation, still perpetuated the old values negatively or simply left a hole where they had been. No radical position or cultural unloading had taken place, just an antithesis which ran the risk of becoming as meaningless as Functionalism. The theory had been put into practice but it left Banham without the methodology that he had seen as necessary in 1955. (I shall be looking later at the actual symbolic content and historical development of the Pop style and also at different ways in which the idea of style can be put into an analytical continuum which transcends stylistic change.)

Charles Jencks put forward the need for a 'transcendent theory of meaning,'

"There seems to be no escape from this dialectic unless perhaps a theory of value adopted which is supra-ideological." [49]

He had already shown that he felt Banham to be as ideologically biased as the historians he had opposed. His ideology, or myth, was that of Futuristic radicalism, according to Jencks,

"Much of this book (Theory and Design...) is concerned with mediating his own conscious position or myth." [50]

This indictment was written, however, before the publication of Banham's Architecture of the Well-Tempered Environment, and therefore Jencks does not show how Banham's ideology took a twist in maintaining the idea of architecture's developing parallel to technological change, but rejecting the obsession with the Futurist attitude and concentrating rather on a new definition of architecture based on services rather than volumes. This interpretation of architecture renders the notion of style redundant. Banham has therefore ducked the accusation of his previous theories resulting only in the rejection of one style and the adoption of another. He had not been able to evolve a supra-ideological value theory, in Jencks' terms, but rather developed a structure for design analysis and criticism which allowed for stylistic change and which was based entirely on the dictates of technology.

There was no longer any metaphorical or symbolic objection of the theory into architectural practice, but instead a literal relationship between architectural theory and practice. The aesthetics of change, based upon the value system inherent in a technological culture became, instead, an emphasis upon the actual content of technological change — eg: lighting, drainage, ventilation, etc.

Banham was still concerned with giving a firm base for both architectural criticism and history and he says in the first chapter of the book, which he calls rather guiltily, an Unwarranted Apology.

> "Architectural history, as it has been written up till the present time has seen no reason to apologise or explain away a division that makes no sense in terms of the way buildings are used and paid for by the human race, a division into structure which is held to be valuable and discussible, and mechanical servicing which has been almost entirely excluded from historical discussion to date." [51]

The book is intended to restore the balance and is written with the same missionary zeal that characterises Banham's other works. He became his own critic in one instance, when he talks about the dominance of stylistic change in historical debates,

> "...the great bulk of so-called historical research is little more than medieval disputation on the number of influences that can balance upon the point of a pinnable." [52]

Banham had become increasingly aware of the complexity of the influence on architectural development and this new book was,

> "less about firsts than about mosts." [53]

The consistent concern with the limitations of the Modern Movement is developed along new lines in this book — lines that are true to the new involvement with the literal implications of technology. One explanation for the new tack is offered by Jencks,

> "His (Banham's) refutation fell on partially deaf ears, because Le Corbusier's equation seemed so perfect," [54]

Banham is now no longer concerned with the inadequacy of Functionalist symbolism, but rather with the fact that white hurst people's eyes. Le Corbusier had said,

> "Aimons la maison neuve,
> Aimons la maison blanche." [55]

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Banham quotes Paul Scheerbart as saying that white environments caused a large percentage of the neurosis in the world.

In some ways, this practical approach is in line with the original Functionalist theories and Banham is updating the Functionalism that preceded the involvement with symbolism etc., which in fact went against any considerations of true practical function, (function in terms of the consumer, that is). The example cited is the fact that the lamps at the Bauhaus were designed for ease of production rather than quality of illumination.

The constant in Banham's critique of the Modern Movement is its repeated neglect of the consumer and therefore a redefinition of Functionalism. He spoke now, though, not of unfulfilled psychological needs, but of physiological requirements of objects. White light from architecture was seen as harmful, Gropius' room at Dessau was later filled with carpets and extra lighting to make it appear inhabitable, and Philip Johnson stated that he could stay in the Dessau buildings for no longer than 40 minutes - these and other facts were the measurable inadequacies of the International Style, according to Banham. To stress just how inhuman these buildings were, Banham made a highly emotive statement about the use of white light,

> "In the end, pure white light was to survive only as the weapon of the Secret Police interrogator, the brain-washer, and the terrorist." [56]

He was using shock tactics here. If we were not yet convinced that Le Corbusier and Gropius were misguided, we were now made to feel that we had been brainwashed by them.

Banham was perhaps overstating his case and running the risk of giving suspect evidence, of which he accused Breuer who counter-defended his generation's architecture against the alternative 'brown sauce of wallpaper' that he felt was meant when cosiness was invoked. Banham rejects this comment and said,

> "The way in which questions which were susceptible of straightforward physical investigations are nudged up to the 'higher' plane of cultural problems, so that they may be dealt with as manifestations of mere old-fashioned prejudices is extremely striking." [57]

This is another occasion when the real object of his attack was really his former self — the writer of Theory and Design in the First Machine Age, who answered most things in terms of 'culture'.

A change occured in Banham. He gave up his attempt to evolve a 'throwaway aesthetic' and moved towards the realm of ergonomics which will be seen to be one of the key concepts of those who had cold feet — the Design establishment who couldn't face the implications of the new style and withdrew into the safety of the logic of measurable functional considerations and maintained a rational relationship between product and public that Functionalism had implied. The differences between Banham and these others was that he was using his theory as a means of re-defining the concept of architecture and therefore completely overthrowing the status quo, not struggling hard to maintain it as the latter were.

Banham had already made the move towards architecture as services in 1965 when he published an article in Art in America entitled, A Home is Not a House, in which he put forward the proposition that America was on the way to destroying the conventional concept of the house. He was moving back to his original radical position, showing that he hadn't meant the new aesthetic to simply mean a new style but rather a reassessment of the concept of architecture itself. Thus not an 'anti-house' but an 'unhouse' was called for. Charles Jencks, in an article entitled Semiology and Architecture, showed how any new concept is conditioned by tradition, inasmuch as we use the same language to contain and describe it. He said,

> "Contrary to what Marx, Gropius and Banham wished, it is impossible to get rid of all pre-conceptions. All we can do is substitute one pre-concept for another, and bring it closer to a percept." [58]

This ignores the fact that these people worked in terms of a historical dialectic which meant that they moved in stages, as Jencks suggested, and explains the necessity of Banham's 'pop' stage in terms of this dialectic. 'Unstyle', 'amorality', could only be conceived through the intermediacy of 'anti-style', 'immorality', etc. The latter are still concerned with ideology inasmuch as they are anti-ideology, the former are nearer to Jencks' 'supra-ideology'.

Herbert Read gave a speech to the S.I.A. in 1962, in which he outlined his theory about the necessity of design remaining traditional and not falling into what amounted to, for him, a state of anarchy. What he failed to understand, however, was that the anarchy he described,

> "Hollywood films, science fiction, strip cartoons, and Jazz...' [59]

was in fact direct anti-tradition — popular as opposed to high culture — which is adjacent to tradition and a natural continuation of it. Jencks said,

> "The only way one can create a new matrix is by active use of those past codes, schemata, conventions, habits, traditions, associations, cliches, and stock responses (even rules) in the memory. To jettison any one of these decreases creation and freedom." [60]

This is not a deterministic argument, but a concern with communication. Meaning relies upon a context in any language. Thus Banham's 'unhouse' has meaning only in the context of 'house' and 'anti-house'; once the Machine aesthetic and the 'throwaway' aesthetic have been conceived and understood, one could move on to the 'unaesthetic' or neo Functionalist stage — the position that Banham reaches in the second half of the 1960's.

4. The Independent Group

The rest of the Independent Group did not share the same development pattern as Banham. Like him John McHale, Lawrence Alloway, Toni del Ranzio, Richard Hamilton, Eduardo Paolozzi, the Smithsons, Nigel Henderson and others sensed however in the 1950's the need for a new attitude towards the aesthetics of the visual world and they set out ideas about how this could be achieved. Banham was obviously a very strong theoretical stimulus upon the others (see how his talks on the iconography of car styling inspired Hamilton and the Smithsons to produce a painting and a building respectfully based on the same theme) —many of the other members of the group chose to integrate their desire for a new aesthetic into the creative process of producing an art-work which in fact was performing the function of a piece of design criticism.

The dominant theme which obsessed them all and which derived from a dissatisfaction with the psychological implications of Functionalism was 'expendability'. Banham states in 1963,

> "The addition of the word 'expendable' to the vocabulary of criticism was necessary before Pop Art could be faced honestly." [61]

This was the key to an aesthetic which derived from the mass arts which implied a non-elitist, and therefore non-heirarchical attitude towards objects in the environment. In theoretical terms a new value-system was evolved which simply meant that the design/cultural critic no longer viewed the object world with a preconceived set of criteria, which, when filled, constituted 'good design' but rather that any and every object was considered equally important inasmuch that it constituted part of man's environment and therefore was significant. This new critical relationship with designed objects, whether fine or popular, solved the tautological problem of the Functionalist value system inasmuch as it referred outside the form/function system, (ie. the production/artefact union,) to the user/consumer. It was the degree of anthropocentric meaning, or symbolic power which now distinguished a successful from an unsuccessful object. This attitude lay behind the theoretical writings of Alloway and McHale in the last years of the 1950's. The emphasis was upon iconographical studies of mass media objects. In 1958 Alloway stated,

> "Mass production techniques have resulted in an expendable multitude of signs and symbols." [62]

and he referred in the same article to the influence of anthropology and sociology on the humanities which was the model that these theorists were using in establishing a horizontal rather than vertical attitude towards the structure and meaning of designed objects in the environment. Form and meaning took precedence over form and function and the general system of objects was seen to run parallel to and in fact create of its own a communication system. By looking to the mass media as a source for a new value-system, whose meanings are ephemeral and in a state of constant renewal, rather than universal, the Pop theorists in fact used the model of a general communication as the base for a renewed attitude towards the products of the mass media.

They approached design therefore not directly through its connection with the Modern Movement and therefore the prevalent aesthetico/ethical system but via its communicative power as one of the product systems of the mass media. In City Notes, Alloway calls the city 'a complex of communications'[63] and in The Expendable Icon, McHale explains that the Icon is a 'function of visual communication'.[64]

Among the strongest implications of the use of a new critical structure within which to consider objects of the mass media were the rejection of the autocratic attitude of the Modern Movement, and an elimination of the necessity of making moral judgements about objects. The anthropological approach excludes the moral and the aesthetic dimension inasmuch as it works through the mediation of 'what is there' rather than 'what should be there'. The only preconceived notion is that there are recognisable patterns in human behaviour. This points to the last factor that is implicated by this new approach and that is the inclusion of the human factor. McHale says that the expendable icon is 'anthropocentric' meaning that in a discussion of the symbolic meaning of an object, it is its meaningful relationship with human characteristics that is of prime importance.

The members of the Independent Group did not succeed in creating a fixed structure for object analyses of this type although many of their writings included symbolic material, although often simply on an intuitive rather than a profoundly philosophical basis. Hamilson's writing which accompanies his Homage A Chrysler Corps in Living Arts in 1963 in one such example,

> "Metals are in. Aluminium is this century's colour. Underwear in fine lustrous lame for maximum radiation protectivity with the rivoted, or seam-welded, corsage for external use; gun metal, gold and platinum, however, still find support among the smart set. The trend towards electronics in male accessories is on the upgrade for outward looking bucks styled to the needs of tomorrow and the pleasantest present." [65]

The prose manifests an interest in the notion of styling and its meaning in terms of lateral connecting patterns of visual associations connected humorously in a verbal collage effect. John McHale includes a small marginalia in Architectural design in 1958 in which he shows the stylistic and symbolic similarity between a rifle handle and the rear of the 1957 Chrysler (a car which obsessed the group). He says that the key to the meaning of the styling is simply

> "current consumer preference." [66]

In The Expendable Icon, McHale moves towards a structure for an analysis mentioning the necessity of 'cross-category features like 'gesture'. He explains that because of the defining quality of obsolescence shared by all products of the mass media 'classification is premanently tentative'. The main principle he describes for analysis and categorisation is to mark where images overlap into different media.

This use of an ahistorical method of design analysis to make a break with the theory and value-system of Functionalism was developed most thoroughly by a group of people, mostly European, who developed analogies between the study of design as a communications system and linguistics.

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NOTES TO CHAPTER 7

Page 68 *   In Industrial Design and the Community, Ken Baynes states optimistically that "One day 'Carnaby Street' could rank with 'Bauhaus' as a descriptive phrase for a design style or legend".

Page 70 *   Herein has the so-called contradiction in Banham — ie. that he reverts to Functionalism after having rejected it. The truth is not as simple as this as he is not perpetuating the aesthetic Functionalism of the Modern Movement (which he finds inadequate), but searching for a more all-encompassing definition of the theory, which avoids the notion of a single style. Style is in fact subordinated to services.

CHAPTER 8   THE LINGUISTIC MODEL

In 1959, the same year in which Alloway and McHale were developing Banham's iconographical studies based on the notion of designed objects creating a communications system of their own, Banham was invited to visit and do some teaching at the Hochschule fur Gestaltung at Ulm. One of his talks was an iconographical analysis of the cover of a popular men's magazine. The director of Ulm, Tomas Maldonado, rejected to the idea of a truly democratic taste being present in popular art, but developed his own theory of the role of communication in design in an article, written in the same year, entitled Communication and Semiotics. [67]

    Maldonado taught a course on semiotics from 1957-1960 and in it he established the groundwork for a theory of design based upon analogies with linguistic studies. He states in 1959 that all human communication takes place through the medium of signs, that all signs belong to systems, and that the signs of a system are always symbolic. The basic anti-functionalist characteristics of this theory are dependent on the fact that it stresses the factor that the functionalists understressed — the relationship between object and human participant. This means that the introverted quality of the Production/ object relationship was broken down, in theoretical terms and substituted by a non-deterministic form/ content relationship in which content is determined externally by psychological and sociological factors. Jencks states in 1969,

> "The rejection of the 'universal style' of Modern Architecture may likewise be based on semantic rather than economic grounds," [68]

and

> "We do not need a single style, but instead the semantically coherent use of existing alternative styles." [69]

Thus demonstrating how semantic theory serves both to criticize the limitations of the Modern Movement and to point the way forward for an architecture founded upon alternative criteria. The dialectical historical link with Functionalism conveys the link that semantic theory holds as necessary with tradition and convention. It sees change as a gradual process founded upon the substitution of one element in a code system by another. Thus the Modern Movement plays an historical role in the formation of a theory of design and architectural semiotics.

    The other key characteristics of semiotic theory also derive from anti-Functionalist attitudes. They are a search for meaning and a search for a structure for design which is based in non-rationality. Meaning assumes anthropocentricity in design which the Functionalists had neglected and a non-rationalist structure means that no design relationships are fixed. This allows for flexibility. In 1961 Maldonado rejected the use of information theory in this context because of its 'desire to stereotype symbolic structures'. In 1959 he had already stated,

> "The absolute, officially stipulated, stereo-typing of all symbols would lead not to perfect communication, but to the death of communication." [70]

The analytical method of design semiotics must be flexible enough, therefore, to accommodate the irrationality of communication rather than impose an ideal absolute pattern on to the structure, as the Functionalists had tried to do.

The primary difference between Banham and the I.G. and the Italian and German theorists was the degrees to which they suspended their value judgements of contemporary products of the mass media. Banham sees them as inevitable and rejoices in them, to a certain extent, whereas Dorfles and Moles both retain a notion of good taste. In 1964, in an article in Living Arts entitled Communication and Symbolic Value, Gillo Dorfles stated that Barthes had been the first to notice that new myths are provided by the mass media (Barthes employs the anthropological model for an analysis of signs). Dorfles refers to this as

"A frightening changeability of taste."

and in 1968, in his book entitled Kitsch [71] he equates it with 'bad taste' which presupposes a moral distinction between good and bad taste and therefore not the suspension of value judgements that we find in Banham's writings.

In 1973, Umberto Eco repeats the same interpretation of Roland Barthes, ie: that he wrote,

"a theoretical criticism of bourgeois ideology" [72]

I have already shown how Moles makes aesthetico/moral comments about the products of the mass media and he states in his book on Kitsch that it means,

"une negation de l'authentique." [73]

He presents the same dualism that we find in Dorfles, good/bad, art/non-art, authentic/unauthentic etc; which revolves around value judgements and contrasts strongly with McHale's notion of Both/And,

"there is no inherent value contradiction implied in enjoying Bach and the Beatles." [74]

Maldonado is accused by both Norberg-Schulz and George Baird of having an aesthetic doctrine. Norberg-Schulz says that ultimately the work at Ulm was 'free play with forms' devoid of any application of a theory of meaning.

Thus there is a sense in which certain design theorists, who based their ideas on semiotics, failed to go as far as Banham and reject the notion of value judgements in a search for a new theory of meaning in design. Banham defends himself against the accusation of being apolitical in an article entitled The Atavism of the Short Distance Mini Cyclist, written in 1964,

"most of us are in some way Left-Orientated, even protest-orientated." [75]

he asserts also in this article his desire for meaning and communication

"It (pop) has become the common language, musical, visual and (increasingly) literary,
by which members of the mechanised urban culture of the Westernised countries can
communicate with each other in the most direct, lively and meaningful manner." [76]

The route by which thoughts about the theory of meaning in design in terms of linguistic analogy came to England and the Architectural Establishment was via the publication of a book in 1964 by a Norwegian, Chriatian Norberg-Schulz, entitled Intentions in Architecture[77]. Before that the only evidence had been provided by Ulm magazines and occasional pieces by Dorfles and others in Living Arts. Roland Barthes' Mythologies was not published in England until 1972 (it was published in France in 1957) and there was little evidence or writing based on the Saussurian tripartite semiological system of sign, signifier, and signified, until the middle and late 60's.

Basically Schulz claims that there is a need for an architectural theory as Functionalism did not go far enough,

> "The Bauhaus method ought to be supplemented and developed on a basis of a better understanding of psychological and sociological factors." [78]

He bases his theory, therefore, on an extended definition of the word 'function' or rather on a redefinition of the 'content' of designed structures. It derives its nature from external rather than internal factors. There is, however, a substitution of the old determinism for a new, more flexible one which relates form to meaning. Norberg-Schulz takes his theory beyond a simple request for the inclusion of the human factor in design. He analyses the way in which human beings relate to built structures, via the medium of perception. He claims that perception is not an arbitrary activity, that it follows conception and is therefore affected by it. This is his main thesis – that perception is conditioned or 'intended' and it is therefore possible to include this fact into the designing stage by the installation of 'expressive meaning' into buildings via an analysis of the relevant 'building tasks'. This last phrase is the least well defined area of the book and the most crucial one as it includes the psychological, physical, social and cultural factors that are so vital to a theory of meaning in design and architecture.

Emphasis is laid upon the union between functional and symbolic features of architecture and Norberg-Schulz claims that of the two, symbolism preceded physical function and is still more important. The theory leans strongly towards an Expressionist direction as he claims,

> "There is no perception free from an emotional content." [79]

and

> "We need a heirarchy of meaningful signs which may serve the purpose of expressing the way of life of the society." [80]

and

> "Society has become so complicated that an expression of its structure is imperative." [81]

This last statement is the only one which relates the theory to its contemporary context. Except for the rejection of the Functionalist theory there is little historical consciousness in the writing although the author continually states the need for architectural historians to analyse buildings by semantic means, showing where some fail and other succeed. Whereas Banham's theories are not taken so far they nonetheless show that in an accelerated society it is not simply symbolic meaning that is important, but

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specific meanings which conform to the fundamental expendability and ephemerality of an admass society. Norberg-Schulz, by refusing to name 'building tasks' for fear of restricting flexibility, commits the same fallacy as the Functionalists by attempting to evolve an absolute theory, suitable for any architectural situation.

There is little awareness of the historical context and commercial/economic background to the increasing role of symbols.

Norberg-Schulz states,

"...the theory is capable of covering all possible historical 'contents'." [82]

He fails also to give any indication as to how one would arrive at a 'heirarchy of meaningful signs' by giving examples or attempting to show how semantic analysis would function in practice. He is doing little more than to provide a structural base for a theory which is not really there. In doing so he pinpoints many inadequacies of existing theories but fails to provide a working alternative. Roland Barthes 'Systeme de la Mode (published in France in 1967 and as yet untranslated) provides a strong contrast to the very theoretical work of Norberg-Schulz. Barthes' work is an example of semantic analysis at work. He explains his method and his terminology in the first section and then proceeds to apply it to a very specific subject matter — the written description of fashion in magazines like Elle and Jardin des Modes. He refers constantly to excerpts from magazines thus retaining contact with a real semantic situation, eg;

"Lorsqu'on lit; 'l'apres-midi. Les robes froncees s'imposent', ou encore; 'que toute femme porte des escarpins bicolores,' il suffit de poser, 'les robes froncees sont signe de l'apres-midi' ou les escarpins bicolores signifient la Mode', pour atteindre tout de suite le systeme terminologique ou code vestimentaire ecrit que l'on vise dans cette premiere transformation." [83]

By examining the relationship between what is written and what is meant, Barthes succeeds in reading below the surface into an understanding of the phenomenon known as 'fashion'.

This kind of analysis was not influential in England, whereas Norberg-Schulz had a certain amount of influence. In The Architectural Review 1965, Donald Smith wrote a review of the book in which he took the opportunity to examine the absence of a real theory of architecture and to examine the shortcomings of existing ones from Pugin and Ruskin to the Modern Movement. He points out that,

"All C20 architectural theorists are incomprehensible, except in terms of faith." [84]

and states that of the seven dominant architectural theories that he considers to exist at the moment, five of them perpetuate the introspective character of the Modern Movement, whereas only two — Brutalism and New Expressionism step outside this trap,

"...the architect is trying to do more than make an immediate reference to the building itself." [85]

Having stated that a building needs to refer outside itself Smith goes on to define his idea of a theory of architectural criticism in the words,

"A real theory — how and to what purpose the building obtains its delight." [86]

Such a theory would need an understanding of the psychologico/aesthetic function of buildings but it leaves a lot of problems unanswered eg; How does one establish a set of criteria for the notion 'delight'? is it an aesthetic category or not? How does one turn what is a critical theory into architectural practice? This last is the fundamental problem for the semiologists, as it was for the Pop theorists, ie; how can theory be transformed into practice. Functionalism was essentially a practical theory involving as it did production so emphatically. Theory based on external factors is not so directly related to practice except inasmuch as it provides a set of criteria to be considered after production.

In The Architectural Review 1967, the problems of an architectural theory was developed by Peter Collins who maintains that it is wrong to impose any set of architectural ideals on to students but desirable, rather to teach the 'history of Theory'ie; the totality of architectural theories,

"in such a way that each student can then go on to create a theory valid for his own generations." [87]

Collins is not against architectural theory but considers them all to have some importance,

"If philosophers limit themselves to the architectural implications of symbolism and semiotics ... and if historians limit themselves to digging in Anatolia, no harm will be done. but each architectural student will then have to fend for himself."[88]

He sees the necessity of a practical application of theory meaning that architects know not only how to produce work but how to assess it afterwards. This is the logical place for semiological analysis.

In the same year, Arena [89], the periodical of the Architectural Association devoted a whole issue to the question of meaning in Architecture, which consisted of a number of articles on architectural semiotics. This was the first sign of an emphasis on the subject from this particular educational institution and it simply reiterated the themes I have already outlined and put forward a strong case for a theory of architecture based on semiotics. Reference is made to the work of the anthropologist, Levi-Strauss in George Baird's introduction, thus recalling Barthes, to communication theory, and perception psychology, Rykwert discusses the fundamentally symbolic nature of the sitting position, thus rejecting rationalist ergonomics, and Baird applies Saussurian terminology to the architectural context showing where the parallels lie.

From this point onwards into the early 70's architectural semiotics became a subject in its own right with its own internal theoretical debates. For example, there was the question of whose termi-nology one was employing —that of the structuralists Saussure and Barthes, that of the behaviourist Morris or (in the case of J.P. Bonta [90]) that of Buyssen and Prierto The connection with architectural practice became more and more remote. The historical dimension became lost in synchronic analyses.

The significance of the development of this theory for this study lies in the way that it evolved out of the dissatisfaction with the introverted, limited Functionalist theory, its historical position and context, ie; its relation to architectural and design practice of the period.

SECTION 4   ANTI-FUNCTIONALIST DESIGN

CHAPTER 9   THE INDEPENDENT GROUP AND DESIGN

One of the major differences between the Pop theorists and the semiologists was the former's constant attachment to physical objects and phenomena as a base for their search for a new theory for design. This meant that their ideas had particular application to the contemporary objects they referred to and did not provide a general analytic approach to any and every object. This emphasis upon contemporaneity was emphasised by the particular theme that they chose to stress — a theme which foisted its attention on to them via the objects they studied rather than from any abstract theoretical considerations. This theme comes under the various headings of 'expendability', 'built-in obsolescence', 'the throw-away aesthetic' etc. all of which were observed objectively as characteristic features of the products of the mass media. Banham explains that it was at this point that universal architectural analogies ceased to function for consumer goods because of the difference in life-span expectations.[1]

In 'Who is this Pop' of 1963 he also explains that,

"The addition of the word 'expendable' to the vocabulary of criticism was necessary before Pop art could be faced honestly". [2]

and in his letter to the Smithsons Richard Hamilton described Pop Art as

"popular, transient, expendable, low-cost, mass-produced, young, witty, sexy, gimmicky, glamorous, big business." [3]

What they were describing as pop art were objects of the mass media — among them Hollywood films, magazines, popular books, ads and consumer goods, rather than the art works which depended upon these as subject matter which later earned the title 'Pop art'. In the first years of the 1950's, expendability implied,

1.   The rejection of Idealism in Design theory.

2.   A new aesthetic based upon the expressive function of form and colour.

3.   A realignment with the admass society for which the notion of fashion was an economic and technological necessity.

This same structure is to lie behind all the anti-Functionalist design of the 1960's.

Characteristically, however, the I.G. did not take the word 'expendable' from economic or technological theory but from a film or 'movie' about U-boats entitled They Were Expendable[4]. This points to their emotional rather than rational involvement with icons, themes and objects from a culture which was non-elitist and based on fantasy fulfilment. Writing in Ark 1957, Richard Smith comments,

"Hollywood along with the home magazine can give some public reality to an essential unvoiced communal fantasy." [5]

The early stimulus to them was visual material derived from American films, ads or popular magazines.

John McHale sent over a bundle of such material in 1955 at the time of the group exhibition This is Tomorrow; Eduardo Paolozzi projected a set of images in a random fashion on to a screen at the first meeting of the group in 1952, among them,

> "...painted covers from Amazing Science Fiction, advertisements for Cadillac and Chevrolet Cars, a page of drawings from the Disney Film Mother Goose Goes to Hollywood, sheets of U.S. army aircraft insignia, and, inevitably, robots performing various tasks, usually accompanied by humans." [6]

The emphasis on two-dimensional images was enforced by the Smithsons' article in Ark 19 entitled But Today We Collect ADS, and by the illustrations to the articles by Alloway and McHale mentioned in the previous chapter — ie; images from films, ads, magazines etc* [7,8]. There was, however, also a great deal of interest, particularly by Banham, in three-dimensional objects which were also seen as containers for the symbolic content of an ad-mass society. The particulars looked at were those in which the anti-Functionalist notion of 'styling' was employed and this was most evident in American car styling of the period. Banham gave a talk at Newcastle about Detroit car styling and this provided a base for iconographical studies of the designs. In an article in 1961 [9] Banham acknowledges his debt to an essay by Hayakawa entitled Your Car Reveals Your Sex Fears, which undoubtedly inspired him to undertake the analysis in question. In Jan 1955 he published an article in Art, an art newspaper with a limited lifespan entitled Vehicles of Desire, in 1956, the Smithsons produced their House of the Future, which was directly influenced by Banham's words about Detroit styling and manufacture, in March 1958 Richard Hamilton published his Homage a Chrysler Corps in Architectural Design and in 1958 Peter Smithson stated,

> "Motor Cars in general seem nearer to American design truth than buildings." [10]

The American car, or rather the styling of the American car had become the new metaphor for design, based as it was upon an appeal to fantasy, rapid obsolescence, and what Hamilton calls 'urban sophistication".[11]. What had happened was that a designed object had come to provide a model for a theory of design. Abstract qualities were drawn from a designed object — a 'popart' object — and transposed into, in the case of Banham, critical writing; in the case of Hamilton, a painting and in the case of the Smithsons, a building. Practice was determining theory and the theory took the form of 'fine art' pieces, which acted as design criticism. Alloway's desire, expressed in 1958 that,

> "...the new role for the fine arts is to be one of the possible forms of communication in expanding framework that also includes the mass arts."[12],

was proven fallacious even before it was stated.

The reason for the impossibility of Hamilton's and the Smithsons work functioning on a primary level exists in their metaphorical use of the original source. For the Smithsons Detroit car styling and production provides no more than a model for a new architectural statement which itself only functioned

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* This 2D emphasis led to the interest in the icon as an expendable symbolic element in mass culture. Its meaning is seen by McHale as lasting a little longer than its physical image.

in the exhibition manifesto context. Hamilton took one step back from the car as physical object and saw it through the ad man's depiction of it in glossy magazines. He is concerned, therefore, more with the mechanics of mass communications than with what is communication. Thus the car is for him no more than,

"an anthology of presentation techniques." [13]

In an article in Living Arts 1963, Hamilton elaborates on the themes he sees as important – the images he puts together in his piece of work. He recreates them romantically, both visually and verbally.

"The flick and flourish to simulate the sparkle of fashioned metal ...

"Voluptia shapes her lips for a goodnight kiss that sends us off to a dreamy T.V. fantasy of the sexiest machine that ever took us from point a to point b." [14]

This is an example of the iconographical studies that the I.G. were developing at this period – attempts to plunge below the surface meaning of objects and images via symbols understood in what amounts to a thought association process. The Marinettian evocation of the car as equal to the Victory of Samothrace is recalled by Hamilton in this lyrical passage which ultimately serves to justify his search for a valid subject matter for a work of 'fine art'. It is the qualities that are selected in the objects rather than the objects themselves that are significant in a discussion about the relationship between the I.G. and Design.

In an article in 1960 entitled Persuading Image, Hamilton describes the professionalism of the new creators of 'pop' art.

"...they stem from a professional group with a highly developed cultural sensibility." [15]

There is a sense, therefore, in which this is seen as a manipulative popular art rather than an innocent folk art and it is this quality of professionalism that is admired above all else by the I.G. Banham refers to

"high shine and high finish" [16], and "personal luxury" [17]

summing it all up in his statement that pop is concerned with

"dreams that money can just buy" [18]

The emphasis is upon conspicuous consumption and the goods that echo this by their quality of being unnecessary luxuries, products of an affluent society, symbols of status aspired to rather than realised, and above all 'professional' meaning finished. Among the items referred to by Banham and Hamilton are hi-fi, polaroid camera (Banham specifically refers to the Ilford camera by Ken Lamble which he describes as 'a small cheap camera which looks like a small cheap camera with ideas above its station' [20]), the Citroen D.S.19, transistor radios etc. The only anti-Functionalist feature observed in these objects is the emphasis on styling which relates to the consumer's dreams, aspirations and fantasies. There is little thought given to anti-Functionalist aesthetics in greater detail and it appears that paradoxically, many of the objects they support in fact conform to the Functionalist aesthetic of the

'neat job' viz; designs by Braun and Olivetti. Banham shows, however, that even these were styled,

> "The neat squarish case he devised was constantly being held up as an example of pure straight-forward design in contrast to American 'styling', but was in fact a styling job, since Nizzoli was in no way responsible for the machinery inside." [20]

Style becomes as much a question of intention and attitude as of object appearance, and very few objects can escape symbolic analysis in terms of style, according to the I.G.

The relationship between the I.G. and Ulm also may appear paradoxical in that they were perhaps the first to respond to the theoretical work undertaken at Ulm even the design methodology studies. Again, however the reasons were emotional rather than rational inasmuch as Maldonado appealed to the group as a personality and the enthusiasm manifested in Ulm matched their own.[21]

Hamilton was attracted strongly by the surface appeal of metals in consumer goods. He wrote in 1960

> "Post-war values were made manifest in chrome and steel" [22]

His studies of the car and the Braun toaster bear witness to this obsession and the metallic surfaces are transformed into elements in a fine art piece divorced from the market context in which they gained their original meaning. He had said in 1963,

> "Metals are in. Aluminium is this century's colour. Underwear in fine lustrous lame for maximum radiation protectivity with the rivoted or seam-welded, corsage for external use; gun metal, gold and platinum, however, still find support among the smart set." [23]

His industrial designer's trained eye comes into play but it is used more to comment upon the communication system which transfers meaning from object to consumer than with the aesthetic property of any one object. In 1958 he had spoken of ('the adman's sign meaning "chrome" rather than of chrome itself' [24]).

The relationship between the I.G. and designed objects is a parasitic one in which they use such objects as an original source of inspiration as a means of defining a throwaway aesthetic but this is extracted from the area of mass culture proper and left in the form of theory, fine art and architecture.

The Fine Art context of the I.G. is demonstrated by the role that the exhibition played in the history of its relation with popular culture from Parallel of Art and Life in 1953, to Man, Machine and Motion in 1955, to This is Tomorrow of 1956 to An Exhibit of 1957. At the same time, however, they managed to elevate the notion of the immediate environment and design into a more prominent position. In City Notes of 1959, Lawrence Alloway describes the necessity of extending one's idea of architecture into a wider definition than buildings alone, into one which must involve change and thus pop art which depends on being frequently replaced,

> "The mass arts contribute to the real environment of cities in an important way." [25]

The idea of the environment was the central theme of the 1956 exhibition This is Tomorrow. Groups of people associated with the I.G. set up stands which displayed in the words of Alloway, ideas

that they wanted to communicate about 'design and ways of life' with the emphasis upon the latter. The vagueness of the term was justified by its being an attempt to move across art specializations and simply present a set of visual messages to the spectator. A mixture of constructivist and pop ideals were manifested. Hamilton presented a stand, together with John McHale and John Voelcker which consisted of a collage effect of images from popular culture sources, together with visual illusory effects achieved by use of inverse perspective and other means. The spectator was expected to order the environment for himself.

The involvement with the environment is at one remove inasmuch as an artificial set is created in order to encourage the public to order the 'real' environment in a more meaningful way. The exhibition functioned, however, as little as a metaphorical recreation of the complex communication patterns at work in the real environment. To populate this secondary environment with cardboard images that the spectator already meets in his work-a-day context is to create a second-level mythological system which complexifies rather than simplifies the original. There was a Dadaistic attempt to make people 'look again' at familar objects, but the result is not to bring art down to the continuum of popular culture but to aestheticize the objects by virtue of the artists'selection of them.

Two other exhibitions, an Exhibit in 1957, organised by Hamilton and Victor Pasmore, and Place organised in 1959 by Roger Coleman who was a link man between the I.G. and the second-generation of Pop painters at the R.C.A. showed how the ideas could only be contained in an artificial environment. The first was a 'drama of space' [26] created by the spectator (his increased role in the exhibition context in a sign of the increased human participation in both art and design) deciding upon the manner in which he related to the given structure. The elements of spontaneity, improvisation were important and the fact that the exhibition could be dismantled and reconstructed in another place showed how flexibility was becoming part of the current aesthetic. Place was more fine art orientated inasmuch as it not only presented an artificial environment but one which depended upon the aesthetic illusionistic space of paintings to determine it. This presented obvious interactive problems—like that of trying to enter the door of a painted house. Pop Art, defined now as painting using imagery from mass culture was to move more and more in this direction and the I.G.'s original ambition of breaking down the boundaries between art specialisations failed in destroying that between fine and popular art.

The I.G.'s attitude towards designed objects and the environment was anthropological inasmuch as they analysed what was there without putting forward a prescription for a new design. Their analysis of an expendable aesthetic came, however, near to a hypothesis for a relevant design inasmuch as they defined its characteristics as it functioned already.

Ultimately, they stand as fine artists and theorists only, pinpointing, nonetheless, abstract features of the hypothetical new aesthetic which would include - flexibility, emphasis on the spectator, openness

of form, and an emphasis on psychologico/sociological implications*. They produced only metaphors for such an aesthetic, acting as they do so, as catalysts by focusing upon the mass arts as their starting point.

Reyner Banham said that by 1960 the issue of expendability was no longer a burning one as fashionable change had been accepted by the Establishment [27], and so they showed little reaction to the plethora of designed goods that appeared after that date, under the name of 'pop design'.

The most direct implication of the pop aesthetic for design lay in the area of consumables, which already contained the use-value of ephemerality (this varies according to varying function and price of the object concerned) inasmuch as the economic principle of consumption became more and more associated with rapid turn-over and change in the 1950's and 1960's. In 1963, in his article Who is This Pop? Banham had this to say,

"Physical and symbolic consumability are equal in Pop culture." [28]

He, more than anyone else was determined to remain within the area of Pop culture proper and not simply use it as a basis for a new art form. His was an analytical rather than a prescriptive mode and he sought to find a suitable critical approach for the pop phenomenon. In describing the actual workings of the pop aesthetic he said,

"The aesthetics of Pop depend on a massive initial impact and small sustaining power and are therefore at their poppiest in products whose sole object is to be consumed." [29]

This notion of 'massive initial impact'defines the fundamentally aesthetic nature of the pop phenomenon. Richard Hoggart, describing the same stylistic feature of pop, uses the word 'poise' when describing the impact of Tom Wolfe's prose and McHale describes the interaction between pop icon and public as one of 'gesture' ie. of captured ephemerality, transmitted via the language of style, of aesthetic impact. I shall look at this notion when I examine the objects of pop.

The words spoken by Banham completely reverse the intentions of many members of the I.G. They had extracted abstract qualities from pop culture, analysed them in socio/symbolic terms, stressing the function of the mass media in conveying the signs and images to the public and then developed a branch of fine art which became Pop Art and Pop architecture. These were hybrids, mixtures of the ideals of Fine Art that implied the long term value of the art object. Experiments in the design area by Pop artists were few and far between – (eg. The record cover and accompanying poster designed by Hamilton for one of the Beatles L.P.s). In general the works of the I.G. by no means fitted into the continuum of popular culture as had been the ideal of the early theorists.

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*   They also provided, through their iconographical studies, a set of iconic images derived from mass culture which contained all the symbolic properties of that culture which gave birth to them.

Richard Morphet, in his catalogue to the Hamilton exhibition at the Tate Gallery in 1971 said,

> "In all his work of the 1950's, Hamilton, very far from trying, as some thought, to jettison painting as a fine art, was seeking to revive it by openly deploying its essential elements in terms relevant to its own day." [30]

Banham, however, turned back to the raw material of pop and David Sylvester, in his article, Art in a Coke Climate, which was the first article on the subject to reach a wide audience via the Sunday Colour supplements, stated in 1964, that what he called the coke as opposed to the wine culture — ephemerality as opposed to stability — was composed of,

> "Posters for movies, posters for commodities, brand labels and packagine for cigarettes, food and drink, record sleeves, strip cartoons, juke boxes, slot machines, hamburgers and cars." [31]

He is describing two things;

1. The accessories of what was rapidly emerging and becoming evident to the public via the mass media, ie. the new youth culture.

2. The visual sign system which accompanies and announces all consumer goods, from film to food.

He stresses, like Banham, the symbolic qualities of these objects and shows clearly how Pop art had betrayed the aesthetics and values of the 'coke' culture,

> "These artists are using the most mass produced of emplems as subjects for paintings which emphasise above all the value of the unique object. A reverence for the unique object is, I take it, the basic moral assumption of a wine culture, which is the kind of culture to which art can't help belonging." [32]

Sylvester puts into words the break between Pop art which is seen to further the ideals of the Functionalist ethic, although by different aesthetic means (a sign that the Modernists had not found the answer to ideal form, that permanence had as much dependence on price, uniqueness etc., as formal qualities alone.) The pendulum swung back, therefore, to consumables. This is not to say that the ideas of the I.G. were totally irrelevant. Their concentration upon the imagery of the mass media — be it from 'pulp' novels, science fiction, strip comics or Hollywood films — became in many cases, the material of the ad-man as it contained the essence of immediate impact which is the way in which a consumer society must advertise its products to maintain a system based on change and obsolescence.

Both the sources of Pop art and the images developed into lifesize charicatures of themselves, became, in the 1960's material for the ad-men who exploited their 'public' appeal. Thus a pop iconography emerged — outside the area of Fine Art — in the commercial world. Examples of images used repeatedly as 'myths' were the monster from the horror film, the space man, the comic character etc., accompanied by the 'sign-systems', the communicative techniques of the mass arts, ie., blown up comic dots, multiple images, the juxtaposition of sharp focus and blurred images, collage effects etc. By concentrating upon the workings of the aesthetics of pop culture the Pop artist had done the ad-man's research for him and left him with a bank of powerful imagery and persuasive visual techniques.

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NOTES TO CHAPTER 9

Page 81 *   This use of American terminology was characteristic of the I.G.'s desire to

absorb American popular culture and use it as the base for a new aesthetic

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is the fact that the mass arts encroach, they encroach on the high ground. For example, into architecture itself as Edmund Burke Feldman wrote in Arts and Architecture last October: 'Shelter, which began as a necessity, has become an industry and now, with its refinements, is a popular art'. This, as Feldman points out, has been brought about by 'a democratization of taste, a spread of knowledge

The definition of culture is changing as a result of the pressure of the great audience, which is no longer new but experienced in the consumption of its arts. Therefore, it is no longer sufficient to define culture solely as something that a minority guards for the few and the future (though such art is uniquely valuable and as precious as ever). Our definition of culture is being stretched beyond the fine art limits imposed on it by Renaissance theory, and refers now, increasingly,

The ghost of flesh : a fashion model converts diving apparatus into a new hat (Charm)

Love Diary : one of the specialized branches of mass communications, a comic book for teen-age girls

Mickey Spillane, are available wherever you go in the West.
However, fantasy is always given a keen topical edge; the sexy model is shaped by datable fashion as well as by timeless lust. Thus, the mass arts orient the consumer in current styles, even when they seem purely, timelessly erotic and fantastic. The mass media give perpetual lessons in assimilation, instruction in role-taking, the use of new objects, the definition of changing relationships, as David Riesman has pointed out. A clear example of this may be taken from science fiction. Cybernetics, a new word to many people until 1956, was made the basis of stories in Astounding Science Fiction in 1950[*]. SF aids the assimilation of the mounting technical facts of this century in which, as John W. Campbell, the editor of Astounding, put it, 'A man learns a pattern of behaviour — and in five years it doesn't work'. Popular art, as a whole, offers imagery and plots to record the changes in the world; everything in our culture that changes is the material of the popular arts.

Critics of the mass media often complain of the hostility towards intel-

about non-material developments, and a shift of authority about manners and morals from the few to the many'. West Coast domestic architecture has become a symbol of a style of living as well as an example of architecture pure and simple;

to the whole complex of human activities. Within this definition, rejection of the mass produced arts is not, as critics think, a defence of culture but an attack on it. The new role for the academic is keeper of the flame; the new role for the fine arts is to be one of the possible forms of communication[*] in an expanding framework that also includes the mass arts.

Pop art dada : Hermione Gingold does the Mona Lisa

West Coast Architecture extrapolated as a setting for leisure on the planet Altair 4 (Forbidden Planet, M.G.M.)

Robert Adams

An exhibition of recent works by Robert Adams, the abstract sculptor, opened at Gimpel Fils Gallery on February 4th. All his new work is in welded iron and steel and deals with space, either forms or lines moving through space, or space caught by curved planes and then sent shooting outwards. This is not an art of Becoming ...

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...... on man. For the first time in recorded h...... he occupies the centre of the picture. I...... mass media he certainly has the main ro...... Content, in the main, is about people. A ...ount of space allocated in popular magazine, m...... or TV, overwhelmingly shows that the

any of their historical predecessors. They are, at any rate, consumed in common by more people.

We can, then, set up a positive tendency to an anthropocentric ikon—richly symbolizing,

emphasis given in a richly fertile field of visual experience which covers every major (and most minor) aspects of human activity. It is here that modern man finds and creates his own expendable ikons to fit the particular needs of his time.
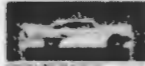
Selling **TOMORROW**. These demonstrate the use of images such as the rocket, computer, view of the galaxy and launching plans which have arrived and are acceptable as connoting man's future. Firmly fixed as iconic symbols, they can be trusted to convey a complex atmosphere of adventure, speed and efficiency in whatever setting they appear. Also they show how symbols mature quickly in the media, and travel fast. Yesterday—hot news—today, pressed into service to give a lift to the new sales product.

2 2

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SYLVANIA
Thunderbird
7-TRANSISTOR
PERSONAL RADIO WITH SPORTS-CAR STYLING

new Ronson
Varaflame
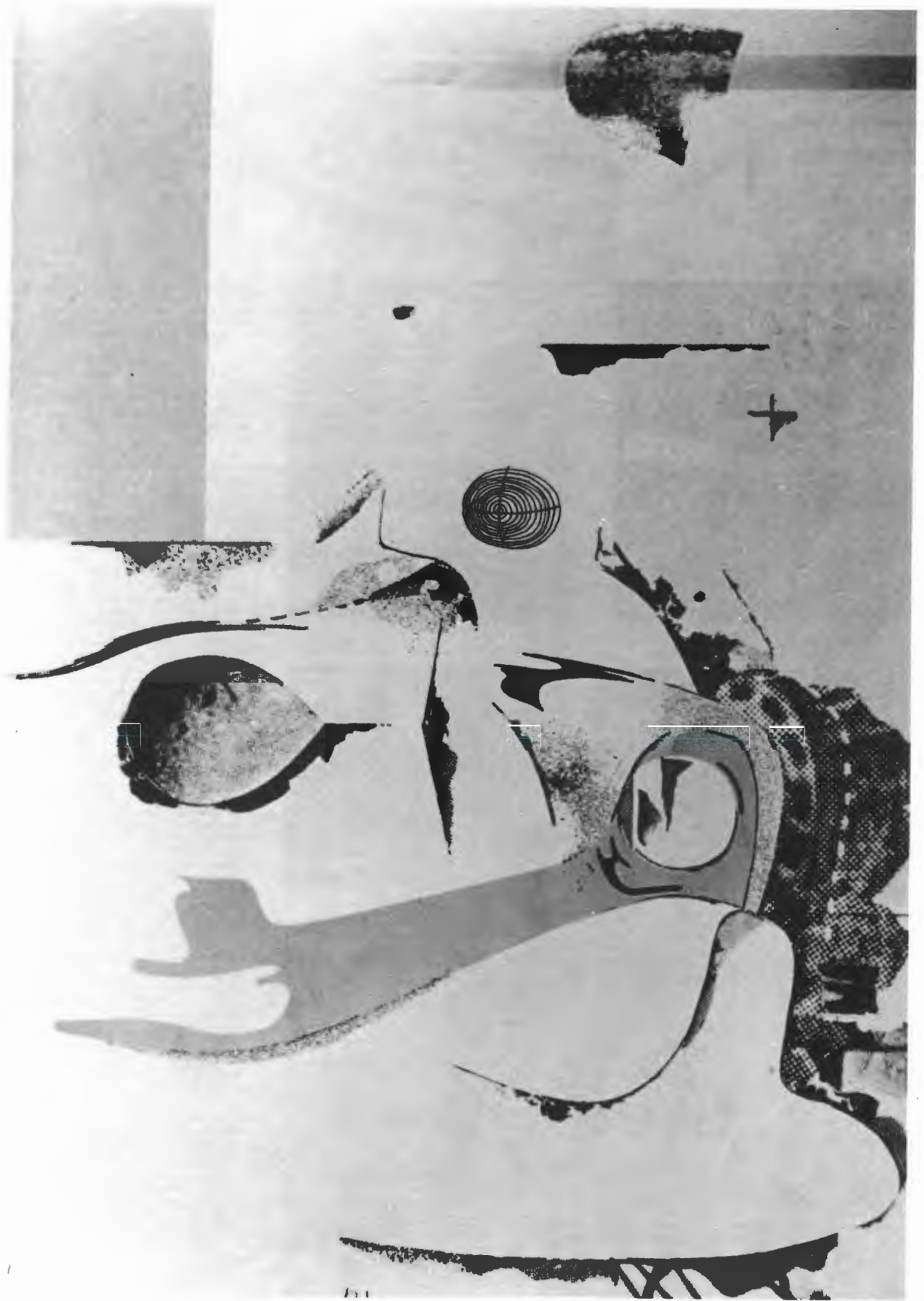
Symbols are interchangeable. Autos borrow
imagery from rocket missiles as readily as lighters
adopt the visual language of science fiction,
or radios the terminology of sports cars.

The dead cert that came home last.

25

LIFE

INTO FRONTIERS
BEYOND EARTH

AN ANSWER TO KENNAN
BY DEAN ACHESON

2/

FEBRUARY 195

26

27
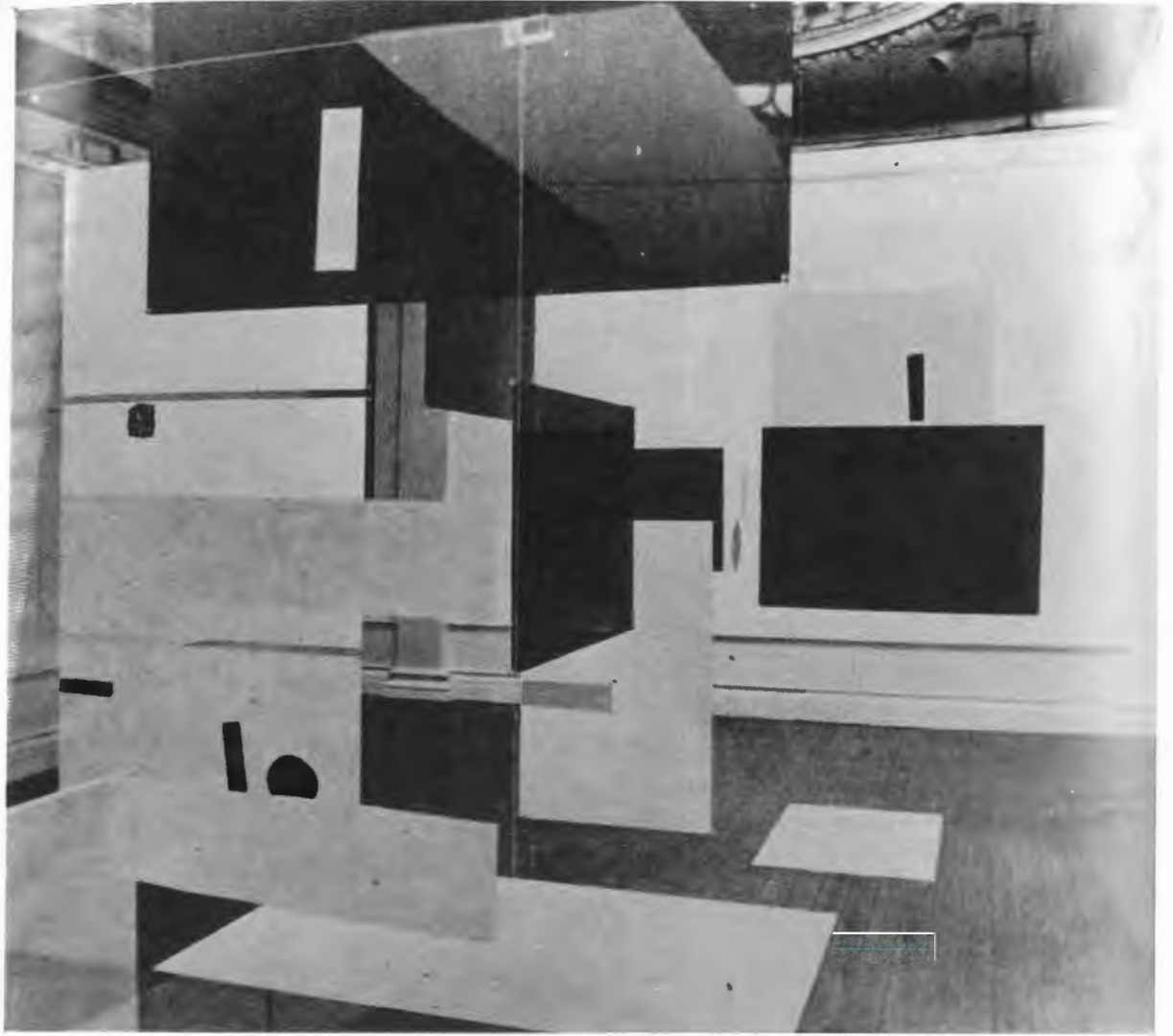
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CHAPTER 10   TOWARDS A 'POP' DESIGN – DEFINITIONS

If the I.G. served to focus upon the aesthetics of pop culture, others went further towards a definition of a 'pop' design. Banham's determination to remain with the commercial world in his description of pop art provides a starting point for a categorisation of pop design inasmuch as he concentrates upon consumer goods, seeing them as the containers of mass cultural symbolism. He refutes, in 1963, however the concept of a pop architecture, maintaining that buildings are "too damn permanent"[1]. David Sylvester in 1964 sees pop design more in terms of the 2D visual accompaniments and supports of the emergent youth 'pop' culture. Both these accounts precede the sudden emergence of a public 'pop' design which occurred in the early sixties, reaching its climax around 1965-6. It focused upon the increasingly important socio/economic factor of fashion which increased the role of expendability in all mass-produced goods.

Among the attempts made to categorise this outburst of "post-modern" design is one by Corin Hughes-Stanton in an article entitled What Comes After Carnaby Street? which appeared in Design February 1968. In it he defined pop design as,

> "...an umbrella movement, embracing all the design schools except 'contemporary' or 'repro-contemporary' – and tradition, it has cheerfully encompassed Pop, Op and Surrealist Fine Art, cottage pinewood furniture, Buckminster Fullerism, amusement arcades, hot dog stands and Archigram; it has been as much influenced by close-up pho photography of complex constructional engineering and models of moon vehicles as by American comics and ice-cream stands outside the V & A." [2]

The obvious inadequacy of the 'pop' to cover this pluralistic 'movement' outlines the problem inherent in structuring a discussion of much of the design of the 1960's Whereas the Modern Movement provides its own accompanying theory which in its turn provided a logical structure of analysis for any object conforming to its ethical and aesthetic laws, post-modern design is characterised by its lack of conformity both to the tenets of Functionalism and to other contemporary objects which may also claim to be anti-Functionalist. The reason for this pluralism depend both upon the multiple inter-pretations of Functionalism and thus the different bases to criticisms of it, and to the fact that one of the most commonly rejected notions of Functionalism was the idea of 'universal style'. To reject Functionalism meant therefore rejecting the idea that there is one design or architectural style which will provide a new paradigmatic design theory. The only way to approach this new design is therefore via the analytical method which emerged from the same critical reaction as anti-Functionalist design, which allowed for stylistic inconsistency; ie. analytical theory derived from the analogy with linguistics. I shall examine the manner of application of this theory in the following section.

The problem that Hughes-Stanton presents us with is one of how to deal with stylistic variance under one category and how to determine what one includes in that category. In his selection he has done little more than look through the popular press of the time and decide what constituted 'popular'

design in the 1960's. One would be hard put to find common elements, whether stylistic or attitudinal, in all the components of his list, other than that they were all fashionable in their turn — fashionable, that is, among a public which had become increasingly design conscious in the 1950's and 60's, and which by now consumed design whether abstractly by reading about it or concretely by buying it.

One could add numerous items to his list — among them knock-down and inflatable furniture, revivalist Victorian and Art Nouveau design, posters and record sleeves — but one would be no nearer to a solution to the problem of categorisation. Hughes-Stanton mentioned the 'values'[3] contained in the movement but does not go very far towards defining except to say that they are 'near to people'[4], that they are 'non-static' [5], 'anti-puritanical' [6] and 'without preconceived forms'[7]. These tentative suggestions are a key to an approach to anti-Functionalist design inasmuch as they contain three implications,

1. The use of negative attributes implies that one is dealing with the antithesis of something which immediately puts an historical perspective on to the inquiry,

2. That the design in question is anthropocentric and therefore human values and attitudes precede any other basis for the inquiry, and

3. There is no preconceived form, implying that these are free to be selected according to the particular human value in question.

The choice of the word 'Pop' in Hughes-Stanton's description confuses the issue because of its historical and contemporary definitional complexity. It is a word loaded with confusions about high and low culture. It can refer to a particular youth culture described thus by sociologists because of the stress on the mass media and its sociological effects to products of the mass media whose sole function is to support that culture and the economic framework which determines it; or it can refer to self-consciously produced works of art or architecture whose aesthetic derives from that of mass culture. This discussion of anti-functionalist design will cross this entire spectrum because in each area the emphasis is upon expressive and 'non-Aristotelian' ideas.

Because of the human base to this design area, attitude will be seen to prevail over object, idea over any one style.

Another chronicler of pop design is George Melly in his book Revolt into Style, written at the end of the decade in 1969 (some sections were in fact written earlier). He states that he is writing about 'non-moving visual pop' [8] and describes his categories of relevant objects as

"1. Works of art created quite consciously in homage to pop culture.
2. Sophisticated artefacts created to sell the produce they either advertised or decorated to the pop public, or
3. Visual decoration or visual selection which either the pop public or a section of it decided to be relevant to its life-style." [9],

thus pinpointing the different levels in self-consciousness and manipulation which are undoubtedly present in pop. He gives as examples a Richard Hamilton painting, a juke box and a rocker's brass

studded leather jacket. The section in his book which follows in fact includes comments on the I.G. and what he calls the 'graphic style of pop culture' [10], ie. Underground posters, the record sleeve, fashion photography and fashion itself — both male and female — scimming through references to Carnaby Street ephemera;

> "...brightly coloured enamel jugs, Victorian chamber pots and so on... the resurrection of the Union Jack as a potent symbol." [11]

He sees the last set of objects as superficial — "a question of surface and marketing" — manifestations of pop. Melly is searching for a 'true style' to contain the values of pop, a style which would, paradoxically reject the notion of the unique object and present a finite, recognisable, visual unity to the world. He claimed that mass production was the answer, thus emphasis on the poster, but paid little attention to the necessity of an expendable aesthetic or even an aesthetic of expendability. Although a 'true style' could have symbolised and eventually carried through the concept of change or turn-over, Melly fails to carry through the implications of the fact that the idea of 'truth' contained in a single style cannot fail to imply universality and therefore contradict the basic tenet of the pop ethic which was to substitute expendability for stability.

Admittedly the associations with the graphic style in question, which Melly rightly describes as;

> "...almost a collage of other men's hard won visions. Mucha, Ernst, Magritte, Bosch, William Blake, comic books, engravings of Red Indians, Disney, Dulac, ancient illustrations of treatises on alchemy.." (He omitted Moroccan prayer sheets, Beardsley and Japanese prints.)[12],

imply the idea of expressive decoration, fantasy as communicative means and is therefore far removed from the purist notion of unadorned 'ideal' form, and Melly admits,

> "that which spreads (through mass production) becomes thinner." [13]

Nonetheless the notion of a heirarchy of styles is a negation of the pop principles of change. He bestows praise upon Martin Sharp's Dylan poster, claiming,

> "...if such a deliberately art form as the Underground poster can produce a work of permanent interest, this could well turn out to be it." [14],

thus fixing the final nail in the coffin of the throwaway aesthetic, which cannot be judged by any preconceived set of aesthetic criteria, permanence among them.

The section on record sleeves acknowledes the fact that the poster had by now become irrelevant and aesthetically diluted. Melly now states,

> "The record sleeve is at present the natural home of a visual pop style. The fact that it has a practical function, far from inhibiting its practitioners, appears to stimulate them."[15],

showing now an awareness of the transitoriness of any one right style for any one time. This naturally presents problems for the critic.

Melly makes an analogy with the evolutionary element in modern art — ie, from Cubism, to Dada to Surrealism, claiming that it is the anonymous element that characterises these and pop design.

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"The poster and the record sleeve, unsigned, without value, are true pop." [16]

This, however, is to underesti mate the role that the public in the form of the market play in the area of pop, whereas in the avant-garde art movements listed above the spectator had not yet found a position vis-a-vis the artists' intentions.

Melly demonstrates an ambivalent attitude, therefore, towards pop visuals. He is concerned to find a true pop style but realises that each style cannot appeal for long, that their 'non-uniqueness' kills their aesthetic impact and that the idea of 'truth' becomes redundant as it cannot be a relative concept, only an absolute one. He realises that what he is describing is no more than a stance (cf. The 'poise' and 'gesture' of Hoggart and McHale).

"...pop culture came about as the result of a deliberate search for objects, clothes, music, heroes and attitudes which could help to define a stance." [17],

and he sees this translated through,

"personal style rather than a search for content or meaning." [18]

This emphasis on style per se fails to understand the fact that style and meaning are always connected. Melly does in fact feel that there is meaning in pop and he describes in this statement,

"Its (pop's) principal faculty is to catch the spirit of its time and translate this spirit onto objects or music or fashion or behaviour." [19]

Style and spirit (content or meaning) are united, although not necessarily in a logically deterministic fashion. George Melly feels that a style can suddenly emerge out of nowhere, which was true for pop, but he won't admit that each style is equally significant in terms of meaning. He creates a heirarchical system for pop design, demonstrating how qualititative judgements can be made. This seems dangerous inasmuch as one cannot extract the qualities of universality or durability from the 'old' aesthetic or retain criteria which are, in Melly's words the opposites of,

"...uninventive and sloppy." [20]

If one were to construct a heirarchical structure around the objects of pop, it would need a new set of criteria, eg. symbolic efficiency or truth to expendability.

Melly's emphasis in categorising visual pop is on the graphic side of design and no mention is made of furniture or architecture or any objects of the design mainstream which also underwent aesthetic modifications. He is dealing strictly with the accompaniments of the pop generation and their particular solutions to the problems they inherited. He mentions only briefly the idea of 'Pop' colours,

"...clear primaries or what would have been thought of as unfortunate or vulgar juxtapositions."[21],

but doesn't compare them with the aesthetics of Modernist or 'Contemporary' mainstream design which still used muted, soft, 'Scandinavian' colours if black, white and grey were not used. He dismisses, also the products of Carnaby Street, as Hughes-Stanton does in his article,

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"Red mugs, orange colanders, jolly washing up cloths, bulls eye trays and chests of drawers export-reject flowered cups and French peasant casseroles do not add up to a school of design." [22]

One is reminded instantly of Ken Baynes' more positive note expressed in 1966.

"One day 'Carnaby Street' could rank with 'Bauhaus' as a descriptive phrase for a design style or legend." [23]

The reason that such opposed opinions could exist side by side is perhaps surprising but owes its explanation to the nature of the critical stance taken vis-a-vis the material described. Hughes-Stanton and Melly both take a pseudo-objective position towards the objects of pop. They are in fach both using value judgements that derive from a wish for;

1.   A universal design theory, and

2.   A consistent stylistic approach towards design.

While recognising the role of change, of ephemerality, in the world of pop design, they neverthe-less find it fundamentally unacceptable as a foundation for a design theory because all the criteria they want to apply to design, are negated by it.

Ken Baynes, on the other hand, takes a more democratic stance and, like the 'pop eggheads', adapts his criteria in the face of a new set of values,

"The origins of the movement are deep in the large revolution which has grown out of teenage affluence and the wider rejection of conventional values." [24]

He sees the objects in the continuum of a general design and social revolution. Even he, however, stops short of seeing the importance of this attitude, which functions adequately in the world of fashion and household trivia, in the area of furniture design and he makes no reference to the possibility or otherwise of a pop architecture,

"...a good many questions are to be asked about the ultimate value of the link between fashion, society and mass production, particularly when it affects furniture." [25]

Abraham Moles, in his study of kitsch makes some observations which bear as much relevance for pop. He uses two phrases which are directly applicable; that kitsch is "a way of being of which style is a support"[26] and "a state of mind crystallised into objects"[27]. The emphasis is upon a transformation of an abstract quality of the human psyche and resulting behaviour patterns into objects which communicate these qualities through the medium of style..Mind exists before object (no mention is made of the possible reciprocal effect of objects upon human behaviour) and determines the physical characteristics of the environment. Inasmuch as pop is a state of mind which derived directly from the environment a slightly stronger emphasis must be laid on the circular relationship of environment/ mind/ environment. It is significant that no metaphysical or other external forces enter into this relationship. The effect of the environment, both that of inherited Functionalism and the mass media and its offshoots, resulted whether consciously or unconsciously in a reconstitution of values and an

accompanying environment which emerged both naturally and as a manipulative tool of an economy based on accelerated consumption. In order to analyse this design adequately one must explain the psychological interaction between man and pop object, (see Banham and McHale), consider how this takes place and assess the meaningfulness or otherwise of such a relationship.

The apparent paradox of upholding the dual creeds of a new aesthetic based on a set of criteria which oppose those of Modernism and maintain the notion of change creates a problem for the historian of the period. This implies either an anti-Functionalist style — one based upon bright colours and expressive form — or infinite stylistic possibilities. Both reactions in fact took place, varying according to whether they were rejecting the formal theories or the abstract ethic of the Modern Movement. Because the theoretical base for the design in question is in fact very nebulous the two issues tend to be confused, so an aesthetic of expendability and an expendable aesthetic both emerge in the period in question.

NOTES TO CHAPTER 10

Page 100   *   These influences became evident in a discussion between the author
                 and Michael English in 1974.

Page 102   *   This is Banham's word for the intellectuals in the I.G. who discussed
                 and theorized about the nature of pop design without contributing
                 to it.

CHAPTER 11   POP AND THE DESIGN PROFESSION

1)   Pop Architecture

The concept of 'Pop Architecture' requires some definitional treatment before it can become a useful term for the present study. It could theoretically encompass

1. Buildings which serve as display stands for items of 'pop' culture and pop icons, ie. ads, etc., and which are therefore part of the pop environment.

2. Buildings whose function is to perpetuate the life-style of pop culture, ie. pop concert halls, or boutiques.

3. Buildings whose appearance manifests a form/function dislocation, or the use of generally expressive form*.

These three categories would deserve the description 'pop' through stylistic features first and foremost and only incidentally contain the ethical or attitudinal implications of the Modernist reversal. They speak a formal language which is not exclusively that of an architectural aesthetic.

The implications which the Pop movement had specifically for architecture were more parallel to the consciously defined theories of the Pop fine artists than they were to the vernacular stylistic innovations associated with the effect of pop culture on consumer goods. As such they were more concerned with a new model for architectural theory and practice, aligning them with the new directions in mass society, than with simply imposing pop icons and stylistic features on to existing structures. This meant a radical reassessment of the definition of architecture itself, in terms of attitude and methodology rather than mere formal innovation. The radicalism of the implications of the pop ethic for architecture lay in the fact that the reversal of the Modern Movement, the substitution of expendability for universality, which was the basis of the pop revolution, meant more in architectural terms than in any other design area because of the fundamental symbolism of permanence expressed by the 'building' which was what our culture equates with architecture. Thus the move towards anti- and non-architecture in the 1960's (cf. Banham's 'Une Architecture Autre of 1955) derives partially from the pop experiment. The direct link was the 'keeping up with technology' ethic which determined the move from the conception of architecture as 'style' (traditional inasmuch as this preserved the notion of the building) to that of architecture as services. Banham was the spokesman of the latter theory. He wrote in an article in Architectural Review, in 1960,

> "Architecture, indeed, began with the first furs worn by our earliest ancestors, or with the discovery of fire — it shows a narrowly professional frame of mind to refer its beginnings solely to the cave or primitive hut." [1]

This basically Functionalist, in the Tatlinesque sense, attitude is not pop as it denies the existence of style as a necessary social sign and deals solely with the object/function relationship. This circumvented the problem of style and therefore the misunderstandings of the Modern Movement.

*   See R. Boyd. The Engineering of Excitement in Arch. Review Nov. 1958

Banham seems to be torn between the emotional exhileration of the visual and stylistic aspects of pop but is intellectually seduced by the radical implications of a 'non-architecture' stemming from a concentration on services and an exclusion of style. He seems ultimately ambiguous, also about his commitments to a selfconscious or an unselfconscious Pop architecture, and unaware of the confusion involved in using the same word to describe both streams.

Broadbent recognises the two parallel areas, pinpointing one as the pop culture of Hoggart which includes 'weekly magazines, popular songs and sex in shiny packets' [6] and the other as 'the unpopular paintings by different artists' [7], thus distinguishing between fine and popular pop. Ultimately Broadbent is doing no more than to advocate a strong emphasis on the 'consumption' side of the profession which is still based on 'high' cultural values. His view is not democratic as is Banham's, but rather of one who wishes to maintain architectural standards but to modify the existing ones. His attitude is condescending (parallel to that of Paul Reilly in 1967) and potentially manipulative rather than simply analytical. This is revealed in such statements as,

> "There is a need for a highly skilled operator who will be prepared to smile tolerantly at the odd pink-footed goose." [8]

We are no nearer a theory of pop architecture other than it has to do, in Broadbent's eyes, with working class taste and desires, and an inclusion of these into architectural practice. What constitutes a piece of pop architecture is not defined.

Charles Jencks, in his chapter entitled Pop - Non Pop in Modern Movements in Architecture[9] covers the architectural historical background to the move towards pop in the 50's and 60's. He deals solely with the conscious moves by a set of architects to include aspects of mass culture into their work, notably the elements of 'change and expendability'. He shows how this grew out of ideas that developed during discussions of the I.G. at the I.C.A. in the 50's This opposes Banham's view of 1962 [10] that pop architecture developed independently of the I.G. citing Stirling and Gowan's 'market orientated' Langham House Close as being conceived before the discussions at the I.C.A. In 1965 he calls work of the Archigram group "easily comparable with the visual language painters like Peter Phillips, Derek Boshier and Joe Tilson" [11] – there is no mention of any influence however. Jencks defines pop architecture more closely than its merely being 'market orientated'. He defines the attitude of Pop as deriving from Pop art, ie. one of

a) the 'possibility of anything, if not everything', and

b) the dislocation of accepted form and content, thus creating an 'anti-sensibility'.

He explains how in practical terms this meant the self-conscious creation of a throwaway aesthetic as propounded by Banham, and that this meant the aesthetic of consumer goods. This leads him directly into a discussion of the 'expendability' architecture of the Smithsons, and the Archigram nexus.

No mention is made of any architecture which could be classified as pop in Banham's sense of simply fulfilling the dictum of 'Dreams that money can just buy' regardless of any intentions on the part of the architect. The unconscious/conscious confusion that occurred in distinctions between objects of popular culture and paintings using these as their subject matter, both being called 'pop' has moved into the architectural field.

Pevsner adds another qualification to the definition of Pop architecture in his article Architecture in our Time which appeared in the Listener on the 29th December 1966. He reverts to the notion of style and talks about the emergence of an 'anti-pioneers style' showing the dialectical relationship of the new architecture with that of the Modern Movement. What he calls 'post-modern' is not the pop of Jencks but rather the expressive buildings of Corbusier, the Brutalists, Stirling and Gowan. His entrenched Modernist sensibility forbids him to sympathise with any of this work and he claims that it is no more than an expressive interval,

> "So in my opinion what we are experiencing now may well be another interlude such as Art Nouveau and Expressionism." [12]

What he failed to realise was that the expressive style was just the first step towards the dislocation of a necessary relationship between form and function — this process was helped on its way by pop — which has radical implications inasmuch as it means a break from formalism and the possibility of a real Functionalism emerging.

Pop therefore, formed a hiatus, in the evolution of modern architecture, inasmuch as it diverted eyes away from the paternalism of the architectural profession towards consumer desires. It covered

1.   Using both the production model and symbolism of consumer goods which were already moving in this direction, and

2.   a critical evaluation of those buildings which unconsciously had captured the public's imagination. In the former category were the architects that Jencks covered in his chapter on Pop — more or less the same line-up that Banham describes in his article Clip-On Architecture. It is only by analysing their work that a further understanding of the ethic and aesthetic of conscious Pop architecture will be grasped.

The Smithsons

The different definitions of Pop architecture were the result of the ambiguity of architecture itself in being both part of the popular and the fine arts traditionally. Thus Banham saw it as a consumer object, whereas others, the Smithsons among them saw a direct alliance between fine art and architecture in terms of their dependence on an aesthetic and ethical theory being formulated in terms of the technological dictates of the day. This was the stimulus behind the meetings at the I.C.A. and the architecture and painting that resulted from the discussions can be seen in a theoretical continuum. Thus a painting like Hamiltons Homage a Chrysler Corps is in many ways identical to the Smithsons' House of the Future of 1955.Their cultural models are identical — American car styling and the imagery of advertising symbolising consumer needs and desires — and their functions, as art objects both present a prototype for the way forward for the theory for their respective art forms. This function, that of manifesto, is the mark of the real piece of intentional Pop architecture. The 'house' function is restricted, because of the visionary aspects of the works which places them in a future, as yet non-existent and therefore unknown, context. Many buildings which contain only some Pop characteristics, were built and functional on a primary level, but nonetheless contained a prophetic aspect.

The Smithsons had a short-lived relationship with Pop architecture, moving towards a climax in 1956 and then gradually retreating, until such statements as this one of 1966,

> "We have... begun to understand the reasons for enjoyment of the Citroen/Braun mode, as opposed to pop." [13]

It is almost as if they had always had this preference but could not explain it and that their flirtation with pop was circumstantial only. The two reasons why they should have produced the first pop building were,

1. Their involvement with the I.G. from 1952 onwards, which drowned them in discussions of popular culture, and

2. Their long-term concern with flexibility and change, which was, for them, a simple question of motor and human mobility in terms of urban planning — a practical problem, and not the intellectual concern that it was for members of the I.G. who saw it as the key concept in modern technological culture, in a more abstract way.

The Smithsons saw the necessity for Banham's 'aesthetic of change', however. Writing of the scheme for Sheffield University of 1953, in 1957, Peter Smithson proclaimed in a typically rhetorical manner,

> "New buildings should indicate by their 'scale in change' the 'size in change' of the whole complex ... postulating a relationship with something that does not yet exist and possibly cannot even be imagined. Their shape must not be able to 'take change' but should imply change." [14]

This notion of change was associated with the circulation of people and services in buildings rather than with the literal or metaphorical obsolescence of the building itself, although this was being tentatively implied by the need of an accompanying aesthetic. The topological element became a recurrent feature of Smithson building and town planning from the Golden Lane housing project of 1952 to Cluster City of 1957 onwards. Although people moved around the buildings and greater flexibility was implied than in more monumental architecture, the buildings were themselves permanent. This side of their preoccupations derives from their Miesian Hunstanton School of 1950 which was basically a formalist study in exposed concrete and steel framing (the first Brutalist building). Banham, in his book The New Brutalism, subtitles it Ethic or Aesthetic? and concludes with this statement,

> "I make no pretence that I was not seduced by the aesthetic of Brutalism, but the lingering tradition of its ethical stand, the persistence of an idea that the relationships of the parts and materials of a building are a working morality — this, for me, is the continuing validity of the new Brutalism." [15]

Whether or not ethic dominates over aesthetic there is undoubtedly a Brutalist aesthetic, which consists of rough surface treatment of concrete, exposed structural frames etc, — albeit a minimalist one, and it is this which makes it stand apart from the pop area. Banham sees it as the beginning of 'une architecture autre' which he defines this way,

> "...an architecture whose vehemence transcended the norms of architectural expressions as violently as the paintings of Dubuffet transcended the norms of pictorial art." [16]

He is concerned with a linguistic norm in terms of conventional form and content relationship, and sees the Smithsons beginning to step outside this. He explains this idea in relation to the Sugden House at Watford which was decried by many critics as 'ugly'. Banham claims,

> "...it was a subtly subversive building." [17]

The notion of Brutalism as subversive or breaking conventional architectural codes is debatable. Pevsner denies that the Hunstanton School was brutal and the Smithsons themselves put forward in their work Without Rhetoric — an Architectural Aesthetic the idea that they were continuing the work of Mies and Corbusier ,

> "We believed New Brutalism to be the direct line development of the Modern Movement." [18]

and speaking of Mies,

> "Mies was never interested in Machine-age rhetoric. He had a banker's calm, a love of orderliness and a quiet built into him." [19]

These were not the characteristics of Pop. Brutalism lacked the irony and aesthetic distance of the Pop movement. Ultimately the 'respect for materials' and orderly form connected directly with content were the Smithsons prime concerns. They saw the need for aligning themselves with technology, but the alignment was achieved in a uni-dimensional manner, eg. concentration on the circulation of traffic, of urban identification, etc. They said in 1957,

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"We are still functionalists and we still accept the responsibility for the community as a whole, but today the word functionalist does not merely mean mechanical." [20]

The exception to this direct approach was the House of the Future of 1955.

The importance of the accessories as the dominant features of the house led the Smithsons on to their Appliance House of 1958. This still drew its stimulus from the world of consumer goods, and continued the emphasis on the service function of the house rather than monumentality. In an article in Design the Smithsons make this clear.

"The House of the Future demonstrated... the disintegration of the kitchen by means of mobile appliances, and pre-packaged food etc." [21]

Architecture was being revolutionised not by an internal sollipsistic examination of itself, but by the inevitable implications of mentally positioning a car against a house, expendability and change against permanence and monumentality. The white formica of the Appliance House constitutes, however, a throwback to Le Corbusier. Ultimately, this experiment was neo-Functionalist inasmuch as it was an attempt to perfect the role of architecture as service in a very practical way.

The House of the Future had introduced, however, the 'clip-on notion' — ie. the unlimited addition of extra parts on to original structures. This was the first architectural solution to such problems as the incorporation of growth and change in buildings. Added to this is the implication of an aformalist approach, an indeterminate aesthetic which is never conceived as a gestalt whole or in any aesthetically ordered way. The Smithsons wrote in 1958,

"...rejection of Cartesian aesthetics, since they are incapable of carrying the cultural loading of our time, inevitably leads to an 'aesthetic of change' — the plastic revolution of the problems of mobility." [22]

The Modern Movement was here being rejected on both ethical and aesthetic grounds, and Pop was providing a new sensibility which would lead architects out of the cul-de-sac they found themselves in.

Archigram

In terms of a theory for Pop architecture the group who came to be known as Archigram (it was the name of the publication in which they commited their thoughts to print) contributed nothing original. They extended the hypothesis, begun by the Smithsons, of using themes from popular culture in an architectural context. The same missionary zeal that had been felt in the middle 50's was expressed. In Archigram we read,

"Archigram I was an outburst against the sterility of architecture surrounding one in London in the winter of 60/61." [23]

and in Archigram 2,

"Our concern is to liberate buildings from preconceived formal disciplines and art ideologies." [24]

The same instinctive frustration that we found with the I.G. with both the ethic and aesthetic of the Modern Movement, and now with its watered down revival in Britain in the late 50's and early 60's, is evident. Whereas the first generation sat down however to analyse the deficiencies of the aesthetic they had inherited for the present day and began to study, in theoretical and practical terms, of an alternative in terms of popular culture, this new generation (parallel to developments in the R.C.A. in the same years) set about an umpremeditated imaginative projection of what the new theories meant, not in terms of real architecture as present conditions made such radical thinking possible, but of a vision of the future. One must consider Archigram in this visionary science-fiction* sense, as it is a sensibility that they are exploring – one possible way of using the technology of the future, rather than a logical construction of science-fact in terms of architecture as we know it. The initial basic premise that, in the words from the catalogue to the exhibition <u>Living City</u> (I.C.A.1963),

> "Man Gloop – City is an organism housing man, man made for man. We have tried to determine the characteristics of man in the future" [25]

man, not buildings, is the fundamental determinant of architecture, meant that no convention of architecture could serve as a starting point as it was always associated with monumentality to a greater or lesser extent. A shift in interest and aim left a void which only the Smithsons had gone a little way towards filling. If none of the ideas or material used by Archigram was original, they nevertheless applied an original vision to it in their ability to see beyond the limits of art, architecture and philosophy to a hybrid which was life itself.

The criticism they received revolved round either a basic suspicion of or firm belief in visionary thinking. Writers in <u>Arena</u> in January 1966, accused them of narrowness,

> "Archigram presents a very narrow field of vision limited by one sort of graphical expression. What about social and organisational changes which have no visible expression?" [26]

and lack of realism,

> "What is needed now are suggestions about how to build what is necessary, and an understanding of organisation, development work, market research." [27]

Neither criticism understands the need for cultural change to precede architectural innovation and that Archigram were projecting ideas about culture and not about buildings. Banham, with his constant admiration for anything futuristic characteristically came to their rescue,

> "What matters about the Movement is its insistence on relevance... It could still turn out that the round-cornered zoom-styling of the Movement's page lay-outs will have quite as much to do with the future architecture of democracy as any A.A. Symposium on Decision-Making." [28]

The comments showed how conventional standards, because they were expressed in conventional language structure could not reach the visionaries who were striving to reach a new paradigm which would leave all convention behind. As has already been observed this could only be done outside architecture proper, as the restrictions there were too great.

*   Peter Blake called them "a gang of wild-eyed poets"

The group, comprising eventually of six architects — Peter Cook, Warren Chalk, Dennis Crompton, David Greene, Ron Herron and Mike Webb — evolved their main ideas and visions in the years 1961 - 1964. The years following these up to the last edition of Archigram (Archigram 8 in 1968) simply consolidated and developed in linear fashion the projects of the first years.

Their first themes echo directly those of the Smithsons, namely a concern with 'flow and move-ment' moving directly into the more complex 'expendability and change' — the first being an observed quality of human and mechanical existence, and the second the sum of this added to the particular values inherent in contemporary society as reflected through objects of popular culture. Again the problem was one of finding an architectural equivalent, but one which simultaneously took into account the fact that conventional architecture could not help.

Whereas the Smithsons included movement in Sheffield University by emphasis on circulatory planning, the Archigram group published a diagrammatic collage conglomeration of visions of 'organic' buildings, juxtaposed with rhetorical exhortations to found a new architecture and key words — 'skin', 'expendability', 'move' etc — scattered on the page. Form and content were equally important, the latter echoing the former inasmuch as the impressionistic, almost subliminal effect of this piece of graphic work functioned on the level of Futurist and Dadaist typography — to create a 2D equivalent to a world of flux in which linear logic was redundant. The significance for architecture lay in the desire for a new sensibility in which a new environment would be an inevitability.

The move in the next year towards a concern with the more culturally based notions of expendability and change, led to a use of the pop iconography which the I.G. had played such a large role in developing. The areas they turned to were space comics and science fiction (of which they were a branch themselves), consumer goods, pop music and fashion, Detroit car production and do-it-yourself (the only original contribution to the list of pop objects). What they admired was the

"...gestural tradition of comics and space hardware." [29]

These objects inspired more collages (Archigram 2) this time mixing Daz packets with Fuller dymaxion cars and geodesic domes, and ads. for 'do-it-yourself' garden sheds from the back of newspapers. Again the message was invisible, contained in the sum of the parts and not spelt out in such a way as to reduce itself to nothing. This is conveyed by the accompanying words,

"There is a gap between idea and image," [30]

implying that it is the spectator alone who can supply the missing link.

In 1963 The Exhibition Living City was held at the I.C.A. and this provided an occasion for the group to put all their ideas together in the form of a futuristic urbanism. The exhibition was seen as a set of possible situations in which man could place himself in the future environment of the city. Two interesting points emerge from the exhibition, which was ultimately just a continuation of their

established ideas (the use of both a target and a Union Jack on one collage is a very early use of the image showing how iconographically conscious the group were). These are

1. The Reference to This is Tomorrow in the catalogue which shows them to be in a direct line of evolution to the I.G. and

2. The use of accompanying flickering lights and music and the notion of the 'assault on the senses' which prefigures the style and aims of the light show which became one of the aesthetic landmarks of Pop.

In architectural terms Archigram developed several projects visually in 1964. These included Plug-in City, Computer City, Underwater City, Walking City and the Capsule. They were all modelled on science fiction/fact images of flexible almost anthropoid conglomerations of cells which were all a city in a single complex building all of 'indeterminate form'. The emphasis on fantasy was very strong. These initial projects developed through the next few years into modification of the car (seen as a mechanical extension of the human body as was the space capsule) and finally into an inflatable extension of clothing, as a support system, There were no real conclusions, only tentative explorations along a range of possibilities deriving from the products of technology – this second level interest in technology is a characteristic of Pop. A member of the group writes,

> "We are in pursuit of an idea, a new vernacular, something to stand alongside the space capsule, computers and throwaway packages of an atomic age." [31]

If Archigram produced no architecture it served to pinpoint a sensibility which is vital to the renewal of environmental values. Banham defines the attitude when describing how 'clip-kit' can be seen as a metaphor. He explains that 'kit' is a word used to describe a bundle of ideas and inspirations drawn in a lateral manner from different areas, and 'clip' is a description of the quick way that they are mentally putting together to create intuitively a whole which is greater than the sum of its parts. To develop this idea, one can see the whole of the work of Archigram as a metaphor for a mental attitude, the 'poise' described by Hoggart when writing about Tom Wolfe. Here we have another manifestation of the same ethic or anti-ethic at work.

The development of Pop ideas in architecture in the 1960's was not just an English phenomenon. It occurred in Europe and in America although the flavour was different in each country. In France the question of mobility and change was a burning one. Among the attempts to create an architectural solution were the works of Yona Friedman and the G.E.A.M. group, Shein and Coulon. Friedman's Space City and Mobile Furniture (Arch. Design, September 1960) were reinforced by his book L'Architecture Mobile; the Magnant-Coulon-Schein plastic pre-fabricated motel units were developed in the late 50's, resolving, both physically and aesthetically the problem of mobility; and the Belgian Jacques Baudon went further by designing a connector between different cell units. There was a growing internationalism in the late 50's and early 60's and this was made evident by the periodicals of the time, which increased the possibility of influences.

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America had developed its own branch of Pop art by the early 60's, and it was there that perhaps the most sophisticated architect to have deserved the title Pop developed his theories through the 50's and 60's. Robert Venturi stands apart from the theoretical evolution that I have described and is only relevant in English terms towards the end of the 60's (his book Complexity and Contradiction in Architecture was published in 1966). Like the British architects I have described he saw popular culture as part of the necessary environment of the present,

"The main justification for honky-tonk elements in architectural order is their very existence." [32]

This was not based, however, on the English Pop architects concern with an architecture for Pop culture, but rather with a passive acceptance of complexity in life (not just in this decade) and therefore for the deliberate manipulation of all that is complex, contradictory, ambiguous, ironic, etc. in architecture in a formal sense, as this increases its poetic intensity .Venturi puts this idea against the Mannerist, Baroque and Rococo periods in architecture, showing how it opposed the pseudo-simplicity and purism of the Modern Movement. In terms of sensibility, this was a long way from the visionary ideals of Archigram, but filtered, nonetheless, into British architectural thinking (which was so in need of a theory) at the end of the 1960's .

Reyner Banham was undoubtedly the key spokesman and critic of the Pop architectural movement in Britain. He demonstrated, by moving away into a neo-Functionalist position of Architecture as services, how the movement had served as a catalyst in the renewal of architectural ideals. By concentrating on popular culture, the emphasis was swung away from conventional form which had become sterile and towards questions of movement ., flexibility etc. which were being solved in the world of consumer goods, through the dictates of economics and fashion primarily but creating also a revitalised ethic and aesthetic which threw the emphasis, in the field of architecture, away from monumental form towards different aspects which could never have been considered under the Modernist ideology. For example, how does one create an expendable building?How can one make a house more like a space capsule? and finally, how can one do away with the house altogether? It was when this position had been reached that Banham uttered his simple but prophetic statement,

"The hardware could stand up by itself, without any assistance from the house." [33]

This kind of gestalt vision had been made possible by the experiments done by the Pop Architects as form had been freed from function and two things, liberated, could pursue their own destinies. Anti-architecture moved into non-architecture and the monumental building lost its credibility amongst the architectural avant-garde.

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'ULLER

PROBLEM : IS THIS EXPENDABLE ARCHITECTURE ?

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Signal

ALL THESE....
(1)ABSTRACTA SYSTEM DOMES, (2)..
DYMAXION CAR,(3)LCC TEMPORARY
HOUSE,(4)PLaSTIC TELEPHONE EXCH.,
(5)WICHITA HOUSE,(6)PANEL FOR LaB.
BUILDING IN PLASTIC FOR THE ANT-
ARCTIC SURVEY; AND THE DISPOSABLE
PACKS OF FOOD, RAZOR BLADES, ETC.;
ALL SHARE THE DISTINCTION OF a,
BEING SERIOUS ATTEMPTS AT DIRECT
DESIGN FOR OBVIOUSLY LIMITED
LIFE-SPAN OBJECTS; AND b, HAVING
SUCCEEDED IN BEING PRO-
DUCED AS SUCH.
    THEY ARE, BY THEIR VERY
EXISTENCE, AN ENCOURAGE-
MENT TO DESIGNERS WHO
HAVE TO FOLLOW ON TO PRO-
DUCE THESE SORT OF THINGS
IN QUANTITY.
ALSO, THE CONNECTION IS
MUCH GREATER BETWEEN THE
TRULY DESIGNED EXPENDABLE
BUILDING AND THE PACKAGE,
THAN BETWEEN IT AND THE
    20 YEAR LIFE-SPaN HOUSE
    WITH THE 80 YEAR LIFE-
    SPaN LOOK.
    This is the significant
    sameness of all these.

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TV antenna

Radio antenna

Water tank

Cooking fume extract

External thermostat

Breather stack

Air-conditioning intake

Ventilator

Air-conditioning ducts

Air-conditioning ducts

Wiring

Thermostat

Thermostat

Power points

TV-radio-stereo

Kitchen appliances

Kitchen plumbing

Bathroom plumbing

Telephone cables

Main switchboard

Air-conditioner

Basement drain

Sump

Mains main

Well

Septic unit

30

117
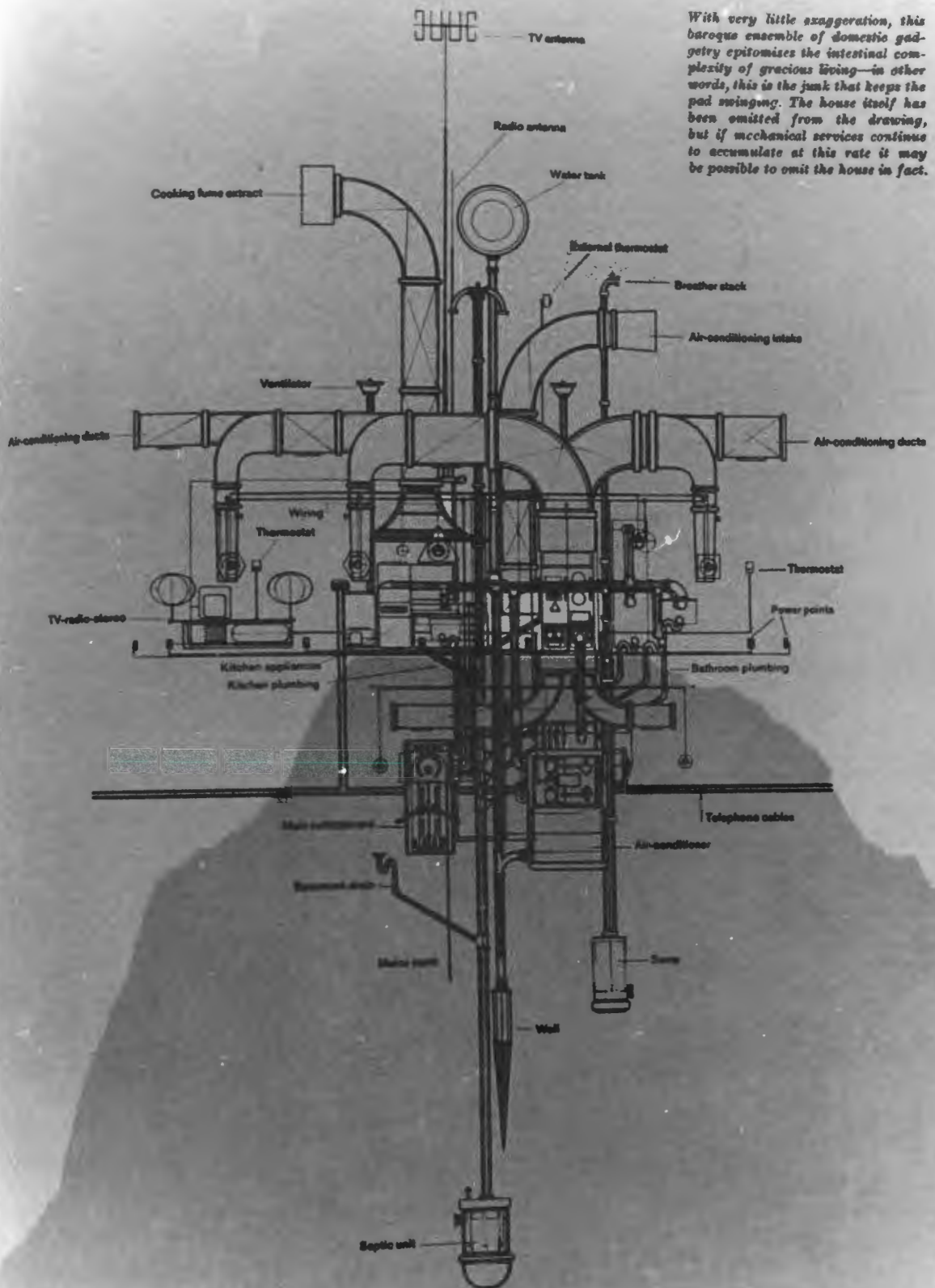
2. Pop Furniture and Interior Design

Certain conventional pieces of furniture have had a long existence eg. the chair, the bed, the table, etc. Other articles have emerged and disappeared according to the history of taste, eg. the dresser in the Victorian kitchen, the three-piece suite in the twentieth-century British 'lounge' etc. Although the life-span of some pieces of furniture has therefore been shorter than others, nevertheless the notion of the 'piece of furniture' which functions as something to sit on, eat from, lie on, put things in or on, ie. as immobile accompaniments of living, has in the past received little or no questioning from designers. Furniture has served to symbolise stability and security, and later, as materialism increased, status. As such it has functioned as a stable background to the necessary mobility of human life. The materials used have generally echoed this function, eg. wood has perhaps created the notion of heaviness and immobility that has been associated with furniture. Moving house is associated with 'uprooting' oneself, continuing the image of the planted tree, the moving of a weighty object from a fixed position, as well as the psychological implications of tearing oneself away from stability.

The Modern Movement designers, although rejecting the physical heaviness of traditional furniture materials, sought a more abstract and symbolic interpretation of stability, seeing the individualised furniture 'piece' (this notion was enhanced by the sculptural quality of their furniture) as an immobile symbolization of the human need for security in terms of durability, permanence and universality. This implied a concentration on the aesthetic meaning of the object which now signified permanence by symbolic rather than physical means. Thus all the aesthetic characteristics that I have described in a previous section, were developed as a means of reinforcing the psychological function of furniture, which in turn reinforced the separation, in identity terms, of one piece of furniture from another. The only real change that had occurred, in terms of the evolution of furniture design, was an increasing concentration on the aesthetic meaning of individual objects, a self-conscious move which produced a gap of intelligibility between object and public, and a minimisation of the use-function of furniture.

Margaret Duckett wrote an article on flexible furniture in the Weekend Telegraph Supplement on the 17th November 1967, in which she referred to the Modernists' obsession with visuality and fixed identities for objects, and draws the psychological implications of this out into the open,

> "All this is a far cry from the static room arrangements propogated by the American glossies, and earlier, by the painter Mondrian who positioned his furniture and objects so neurotically that he was known to remove an ashtray from his guests in order to replace it in the exact spot it occupied in his finite composition.
>
> Most of us know the stultifying atmosphere this dogma imposes, and whilst no-one seriously wants to change a room around constantly, it is good to feel that your already confined living spaces are flexible." [1]

An awareness of the need for the humanization of furniture as service accessories and direct psychological stimuli rather as oppressively fixed sculptural surroundings, was growing in the early

Britain was exported abroad, and described British design as 'Noddy Furniture". The pessimism was relieved by this statement,

> "The most important innovation this year is knock-down furniture which can be stored and moved around easily." [7]

She pinpointed one of the first manifestations of the 'post-modern' furniture design to threaten the notion of permanence, of sculptural wholes and a fixed identity. The motivation was, at this stage, more concerned with easy stocking and delivery, and it became, later, justified, by the idea of space saving, but, nonetheless, symbolically it meant a break with autocratic furniture. Among the objects described in this passage, it is only, however, the Hille storage system that recognised that the convention of individualised furniture 'pieces' was obsolete.

> "...it recognises that rooms are used interchangeably and that traditional storage furniture — sideboards for one — are awkward to burrow in." [8]

The criteria for innovation are made on utilitarian grounds, not theoretical ones, and in fact what has happened is that one convention — the sideboard — has simply been replaced by another — the storage system although the latter contains a flexible identity inasmuch as it changes its character according to which room it is used in and what is stored in it.

The chairs by Nicholas Frewing for Race and Conran's long chair both question no other convention than that of the sculptural solid pieces of furniture in which a mystical union of parts is implied (cf. Rietveld's red and blue chair). Aesthetically these follow the Modern Movement in their visual simplicity and geometrical construction, and Frewing uses hide and beech in imitation of Scandinavian 'natural' materials.

Constructional innovation was coupled with aesthetic conservatism.

In speaking of the attempt to revitalise the environment, in this case restaurant interiors, Ken Baynes said,

> "The values that are going into the restaurant interiors are design values, however crudely expressed. They are not grey non-design." [9]

by which he assumes design to be a humanizing process first and foremost. A design dialogue was set up once this and other similar opinions had been expressed as the Design Establishment was predominantly neo-Functionalist and design education was still based on the Bauhaus model.

Some chairs were produced in 1965 which served to straddle the gap between the two attitudes. They came from two graduates of the Royal College —Jean Schofield and John Wright. Peter Collins describes their work,

> "The new furniture is transitional, at a stage between the functional stuff and designs with a bit of wit and colour." [10]

The notion of formal innovation was extended to the basic shape of the pieces which were based on the

curve and knock-down construction. Also bright primary colours were used but they are tastefully complemented by white and there is no sense in which the design could be called brash, or manifesting a different conception of taste from that of the modern Movement. The couple obviously felt a strong dilemma as other pieces of theirs were made of tubular steel and black leather, a la Mies van Der Rohe and Marcel Breuer. Their work is ultimately sculptural and the innovations only reinforce this. The pieces are ultimately sophistication rather than fun. Their stated intention to move into throwaway furniture would have meant a radical change in attitude, towards the role of furniture.

The idea of 'throwaway' furniture was the literal interpretation of expendability in furniture and emerged later in 1965. It was more radical than the knock-down concept, which only threatened the theoretical existence of an object, not its physical life-span. The throwaway notion implied immediately the use of previously unacceptable materials in the furniture world. In the Modern Movement, wood had been replaced by the highly durable steel and leather, Scandinavia had returned to the naturalness of wood and the plastics revolution had simply provided a substitute durable material (Rietveld had produced a moulded plastic chair back in 1926). Although Hille's, with Robin Day as designer, had produced a relatively cheap polypropylene chair in 1963, and cheapness was part of the move away from 'high' furniture in the 1960's, nevertheless, in aesthetic terms, the plastic chair echoed the simplicity and durability of the Modernist designers. Disposability of plastic was in fact soom to become a problem in itself.

Zeev Aram, also in 1965, extended this neo-modernism by simply reviving what had become the 'modern classical' furniture and developed it into the area of flexibility, incorporating the knock-down principle which renders the furniture 'piece' theoretically redundant. Ultimately, his furniture conformed to the Modernist aesthetic, with a predominance of white and juxtaposed colours, and a sculptural quality conveyed by each 'piece'.

Another manifestation of the search for an anti-modernist furniture was the innovation of inflatables which challenged most radically the idea of solidity, stability, fixed identity etc. The challenge is made intuitively — anti-solid space replaced solid, but this is not a change in the aesthetics such as the Moderns brought about by substituting space for mass, but rather an ironical statement about the existence of the chair on the level of 'now it is there, not it isn't'. Rigid form is eliminated and the concept of sitting ie. of user participation is heightened by the welcoming aspect of a ball of air which moulds to one's shape as opposed to the distancing austerity of, eg. a Marcel Breuer chair. Archigram took this idea to its logical conclusion and challenged every conventional furniture object. Peter Collins describes their contribution to the exhibition 'The Breakthrough Designers', which took place at Woollands in September-October 1965,

"Chairs, claims Cook, are on the way out and pneumatic seating, which forms to the body when sat on, will take its place. The floor in the living area would be warmed and soft enough for sitting or lying down on, and sunk into the floor is a C-shaped couch or 'snug' and a dining table which pulls out from under the floor... For lolling about on there will be a low-level 'lie-down, an upholstered pad with a bolster headrest at one end." [11]

The action takes over from the object, the verb from the noun. The language of pop furniture is moving nearer to the word 'change' which, as verb or noun, implies lack of stability, of subservience of furniture function to human activity. This was interpreted literally by Archigram and the paper furniture *and metaphorically by the painted furniture.

The concept of the neologism is relevant inasmuch as not only a questioning of conventions took place and a modification of existing domestic objects occurred, but also there appeared a new set of objects which owed their existence to the new attitude. These covered a number of essentially non-functional objects or objects whose decorative function was equal to or greater than their utilitarian function, eg; the decorated tea towel which could just as well be hung on the wall as dry the dishes. (I shall look further at this very important aspect of pop design in the next section when I consider the effect on the day-to-day environment of the pop ethic and aesthetic. The aestheticization of the pseudo- Functional object forms part of that.)

The formal innovations conceded finally to the Modern Movement, as once the Design Establishment had refined them, they conformed to Le Corbusier's system of reclining chairs based on the curve, manifesting simple sculptural form. In an article in Design December 1968, Jose Manser claimed that the new forms were direct results of the technological developments in the plastics industry, combined with,

"...our permissive and youth-orientated society." [12]

Robin Day's polypropylene chair of 1963 had set the pace for cheap plastic furniture but now the material had moved into the area of 'high' design and is seen combined with metal (Richard Evan's prototype for Genesis). Strength, ie. durability, is one of the benefits of this material, claims Philip Pollock of Aeroform. Jose Manser explains that polyurethane   contains,

"solid yet flexible properties which are being exploited in a purely structural way." [13]

Plastic, therefore, had taken the place of wood and, although sometimes cheaper, conveyed the same ethic of durability, solidity, individualised pieces seen as sculpture, founded, however, now on the curve rather than the straight line, (the dictates of the technology involved). Even the photographic techniques in Design, echo the 'purist' image of form. The only 'pop' element in this article is a picture of a cushion, with the image of a foot on it, 'scattered' on the floor next to an undulating coffee-table. It is purely decorative and receives no mention in the text.

Earlier in the year Manser had written,

"Backed by the wit and insouciance of bright young designers, and the business acumen of vested interests like Imperial Tobacco, Reed Paper Group, and Thames Board Mills, expendable furniture is one of the most interesting design developments for many years." [14]

* I shall examine this in the next section

His analysis of pop furniture included the young designers — Incadinc Inflatables, Anderson Manson etc in the same breath as Murdoch's paper chairs, thus making no distinction between real throwaway innovations and modified mainstream furniture. He then stated his ideas about the necessity of permanence in furniture, thus revealing his total commitment to the Modernist ethic,

> "It is a feathering of the nest which will always, for emotional reasons, incline towards the permanent to the extent that when the nest becomes impermanent or expendable... the transportable feathering will remain the constant factor." [15]

Manser speaks on behalf of the British Design profession as a whole. While learning the lessons of pop for sales purposes, it failed to move outside its inherited conventions and question its own existence and role in society. Any real questioning came from outside the profession, from;

1. Individuals, mostly art school trained, who put their stamp on the environment.

2. The general public which, helped by entrepreneurs like Conran, found their taste suddenly moving towards the decorative, the ethnic, the handmade, and what before would have been termed 'second-hand junk'. Thus the interest in revivalism, in peasant ware, in pattern in general, and in the second-hand rather than the new. All these interests made the design profession redundant.

3. The pop public   a)   the new generation designers, Mary Quant etc.

                   b)   the youths themselves who wanted colour, excitement, posters, clothes and general accessories for their new life-style.

4. The architects who questioned the nature of the house, the room and thus its contents.
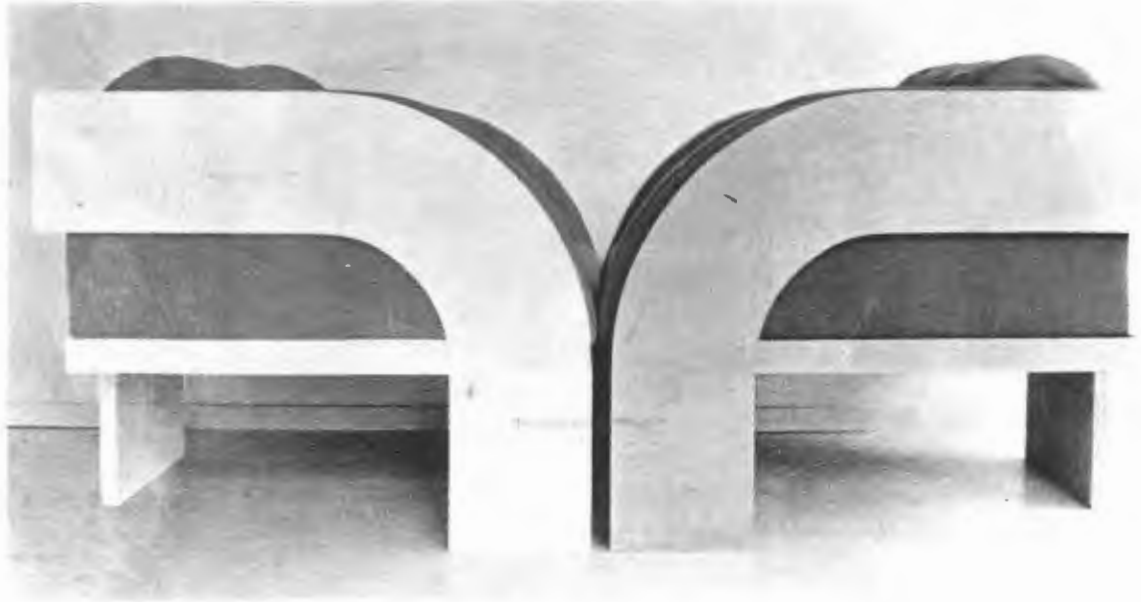
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3. Pop Fashion

Pop design can be seen to be deriving from three different areas:

1. The new young design profession which saw the need for a new basis for design which rejected Modernist universality and moved towards the values inherent in the new society with its emphasis upon youth and change. Designers like Ken Baynes and Michael Wolff could articulate this development while others followed more intuitively.

2. A set of young people who moved outside the design establishment and became designers in an alternative set-up, creating their own markets and catering predominantly for the 'pop' public.

3. A commercial exploitation of both.

If the design profession began with preconceived notions of chairs, houses, tables etc. which have traditionally provided a stable background for human existence, the designers of the second category started from the instability of the human body and its decoration. This automatically implied greater flexibility and it was in this area in which, next to music, the new 'style' and the values it encompassed were first projected.

In the first of the Sunday Supplements, 1962, the year in which the Beatles first made a real impact, a series of Design articles were entitled, Design and Function, and they described the Functional aesthetic of the time including discussions of an Earnest Race chair, steel kitchenware, a Hoover iron and the Kenwood Chefette. Alongside this British Neo-Functionalism was an article on Mary Quant who was the first of the young fashion designers to reject European 'haute couture' and realize the expressiveness of clothing, and an article about fabrics which contained the statement,

"baldness and bareness have weakened." [1]

In January 1965, a Cossack Vodka advert picked up the 'new' hair stylist Vidal Sassoon and called him,

"A leader of the English taste revolution which demands simplicity in everything."
(Taste was another paradigmatic concept of the Modern Movement.)

Hair and clothes were not seen as distinct objects, but all part of the will for style which could contain the opposite qualities of serious good taste — ie. zest, humour etc. The qualities of sobriety and boredom were implied by, in the words of Stuart Hall.

"...their (the pop generation's) assumptions about a clearly defined and unchanging traditional culture." [2]

In an article in the Observer Colour Supplement October 1964, a writer called Jack Lenor Larsen said,

"Early twentieth-century intellectualism has left a yearning for romantic diversion." [3]

A stratum of cultural activity which was neglected by the I.G. because of their concentration upon America, was the youth 'pop' culture which was emerging in England and brought with it, parallel to

The myths of the 'Chelsea Set', 'Swinging London' etc. developed in the first years of the 60's, and through the mass media became more than the sum of their parts. In a Sunday Times Colour Supplement, of May 1964, there was a picture of Sassoon cutting Cilla Black's hair thus visually uniting two 'pop' myths.— those of Swinging London and the Liverpool Sound. A new vocabulary developed around the myths-mods, the mini-skirt, Carnaby Street etc. — which in its turn developed an accompanying iconography and set of signs which meant youth, freedom, spontaneity etc. — an iconography which depended largely on the fashion photograph and made a god of the photographer (Bailey, Donovan and Duffy being the most popular ones) and the fashion model, from Jean Shrimpton to Twiggy. The 2D photographic image, whether in the Colour Supplements or the fashion glossies, Queen, Vogue and Town, served to freeze and communicate Hoggart's notion of 'poise' [4] which in the fashion model context becomes interchangeable with 'pose' The pictures conveyed symbolically and iconographically all the values of the young generation.

The creators of style were all older than the teenage market they catered for. Vidal Sassoon had set himself up by 1954, Mary Quant opened the first English 'boutique' Bazaar in the King's Road in 1955, and John Stephen rented a shop in Carnaby Street in 1959, but the years 1962 - 1966 delineate the time in which their innovations combine with teenage affluence and enthusiasm to create public awareness of the urge for style. It is during this period that Pevsner's notion of 'post-modern' becomes a relevant one, and what Ken Baynes calls the Carnaby legend.

I am using the word style not to mean visual consistency but to cover the plurality of visual possibilities which were found to communicate the anti-establishment values of what in its turn became a new design establishment. High design was challenged by a series of gestural knife stabs.

Fashion, by definition depends on rapid turn-over. In the words of Toni del Renzio,

"Fashion... is interesting because, frivolous as it is, it is one of the most successful and most moving examples of the expendable arts of a technical age." [5]

It was the realization and exploitation of this notion of popular values and taste based upon mass produced clothes rather than the fallacy inherent in haute couture of creating a unique pseudo-permanent piece of clothing, that characterises Mary Quant's attitude to dress design and marketing. She managed to convey this in both practical terms — by mass-producing relatively cheap and yet characterful clothes — and symbolic terms — by injecting all the anti-modernist tenets of fun, wit, short-lived impact, into the clothes she designed.

She did this by constant renewal, by continuously finding different and novel ways of transmitting the values she saw as relevant. Thus she moved from exaggerating Courreges' mini-skirt, to the schoolgirl symslip with emphasis on freedom of movement, to fantasies like Bank of England, a pin-

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revivalism and the so-called influence of pop which became a generic term for any influence from the visual arts, among them colours and icons from the third generation of pop painters centred at the R.C.A., and technological imagery which had been filtered through the areas of pop and op painting.

What emerges from the successive 'pop' fashions was the openness towards stimulus from the whole visual environment in a non-heirarchical manner. Clendenning's words of October 1965,

"I'm influenced by painting, machinery, aeroplanes, ads, Fellini films and dress fashion." [9] characterise this democratic approach to style. Any style, providing it expressed the right mood or 'gesture' — ie. one of expendability and fun, was acceptable. This, in turn gave rise to the growth of the alternative design establishment that I have described. By the summer of 1967, however, a move had taken place from anti- to non-design inasmuch as there was a desire among the young to.

"...do their own thing,"
outside the dictates of any establishment designer — to move design to an individualistic basis, and with this production from an industrial to a craft basis. Added to this was the notion of environmental design by which I mean Tom Wolfe's idea of the aestheticization of any and every object in the environment regardless of its function. The development of this idea meant a move away, from 1965-7, from a design establishment towards design as an attitude, as the manifestation of individualised taste, and from design as object towards design as decoration, activity or event.

Alongside these three traditional design areas — architecture, furniture and interior design and fashion — there appeared a host of other designed objects and ephemera which had in common little besides the reflection of a shared attitude. The only way of categorising this amorphous design is to abandon design areas defined in terms of specific objects and analyse anti-Functionalist design in terms of the meaning it signifies, laying less emphasis upon the self-conscious designer and his profession and more upon the social significance of the objects produced and the attitudes conveyed and reflected.

NOTES TO CHAPTER 11

Page 106   *   Banham's statement of 1960 about expendable clip-on components can be found in an article entitled Stocktaking in Architectural Review February 1960

Page 127   *   This is an example of the new onomatapoeic descriptive language that emerged simultaneously with the pop generation. It describes a way of life which is founded on spontaneity and the importance of fun. By extension it is used to describe life-style accompaniments, predonomi-nantly fashion clothing.

Page 127   **   The word 'immoral' is used here not as a value term but as a diammetrical opposition to the concept of morality implied by the Modernists and their theories of 'good design'.

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CHAPTER 12   THE LANGUAGE OF POP

1.   Introduction

As I have shown in the section on semiotic theory, theories of meaning in design focus upon the idea of 'reading' objects*.

Some of the characteristics of semiotice need to be described before I can apply its structure to the design in question.

The notion of 'transformation' is fundamental to semiotic analysis, which rejects the notion of historical cause and effect and concerns itself instead with the transference of stable 'mythic' meanings into different forms. Thus the abstract implications of a particular symbol, icon or sign can be manifested in an individual's behaviour, in a picture or an object.

Many writers on design have pinpointed the 'language' element in design analysis without being semiologists. Van Lier refers to 'plastic semantics' in the introduction to an exhibition catalogue entitled 'Que'st ce que le design? ' [3], and Tom Wolfe maintains that 'fashion is the code language of status' [4] in his introduction to Renee Konig's book entitled The Restless Image. Once such general statements about the possibility of considering design from those particular have been made, more specific statements can be made about the way in which the reading actually takes place. This is generally considered to be through the intermediary function of style.

Style is seen as a communicative factor which functions in a similar way to language. Eva Schaper says 'style speaks' [5]; Meyer Shapiro maintains that it is 'like a language' [6] and Dorfles discusses the 'interaction of a style and a culture' [7]. Style is the immediate link between an object and society inas much as it refers simultaneously to:

1.   The formal features of a specific object or signifier;

2.   The relationship between the sum of the parts of one object and those of every similar object — therefore every object which contains the same content or 'signified' is the same.

3.   The abstract meaning in terms of user interaction, whether perceptual or behavioural — ie. the meaning of the 'sign'.

Synchronic analyses of style are undertaken by describing the relation between the three categories outlined above. It is done in terms of transformation rather than cause and effect as the historical dimension is absent at this point. Barthes describes the new Citroen in his book Mythologies,

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*   The theory of semiotics has been developed as a meta-language to discuss the language of everyday phenomena. In the words of Dorfles meaning is a result of a process linking events, minds and objects.[1]
Barthes maintains that
"An object is the best messenger of a world above that of nature —
a transformation of life into matter" [2]

"Until now, the ultimate in cars belonged rather to the bestiary of power; here it becomes at once more spiritual and more object-like and despite some concessions to neomania (such as the empty steering wheel), it is now more homely, more attuned to this sublimation of the utensil which one also finds in the design of contemporary equipment." [8]

He describes formal features — the steering wheel — a relation to other contemporary objects — the household equipment — in terms of shared formal features and abstract significance, and the anthropomorphic meaning of the car expressed in such words as 'homely' which describes human desires, projecting, by a process of transformation, qualities on to the car. Style is seen to be evident in the afore-mentioned categories, although the word itself is not mentioned.

Implied in this interest in style and its symbolic meaning is the lack of a deterministic connection between form and function. This is described by Jencks,

"... although a form may be initially arbitrary of non-motivated as Saussure points out, its subsequent use is motivated or based on some determinants." [9]

It is this initial arbitrariness that is significant.

A useful function of semantic analysis in design and therefore in design history is its non-heir-archical nature and therefore its ability to deal equally well with objects from both high and low culture, from the fine and the popular arts into which latter category the great majority of mass-produced designed objects fall. The criterion of success for such objects is no longer the fine art ideal of 'beauty' but the linguistic criterion of 'semantic richness' . This means that objects of popular culture can be analysed semantically and be judged in terms of meaning within their own context, in terms of their symbolic content

The question of motivation — whether or not the formulation of any language or code is active or passive — or 'intention' is a fundamental one in a semiological analysis of the object world. Norberg-Schulz claims that we read, in every piece of architecture, the learned perceptions of a culture and can therefore understand that culture through the building whi·ch is an expression of its active use of its learned experience. He presents a method of analysis for design, claiming,

"By means of semiotics, meaning can be studied objectively." [10]

he does not provide a semiological analysis other than to say that the components of design — form, technics and the building task (ie. everything else peripheral to design) are related semantically and that semiotics treats the relations between the sign and its designatum. (These terms are the equivalent of the ones that Barthes borrows from Saussure —signifier, signified and sign.) It is significant that Norberg-Schulz refers to the sign first and then to its components. This is the equivalent of Barthes' second semiological system which begins with the first sign becoming the signifier of the second system, thus creating, what he calls, in the anthropological terminology of Levi-Strauss, a 'myth'. By this Barthes implies a deliberate distortion of reality by bourgeois ideology — a consciously arrived at or

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'intended' message or code. Norberg-Schulz makes no such comment on the nature of ideology, seeing the 'semantisation' of the object as a more natural process. The idea that the semantic content of design is actively arrived at is also complied by those semiologists – among them Maldonado [11] and Bonsiepe [12] at the Hochschule fur Gestalting at Ulm, who discuss the notion of rhetorical analysis of objects in both visual and verbal terms. Rhetoric implies the desire to persuade and therefore self-consciousness.

Another characteristic of this analytic / descriptive method is the substitution of empiricism by speculative imagination. The lack of a logical deterministic element in the perceived object is echoed by a similar absence in the metalanguage used to describe it. Thus the object is described in quasi-poetic language.

The notion of poetic description is put forward by Gaston Bachelard, a phenomenologist, in his Poetics of Space. He is concerned with,

"...consideration of the onset of the image in an individual consciousness" [13]

The same principle applies in the perception of objects. He maintains also that 'we read a house', that the house is a 'tool for analysis of the human soul"[14].

The categories which have been listed as characteristic features of semiotic theory serve as a structural base for a discussion of the attitudes and resulting artefacts of much anti-Functionalist design.

2.   Style

The notion of style comes uppermost in an approach to the material at hand. A rejection of autocratic design ideas occurred in the 1960's and a public taste developed, which was unfulfilled by the Design profession but picked up by designers who associated themselves with the new youth culture and the new aesthetic which was based upon the directness and pre-verbal immediacy of the musical messabe. The commercial pick-up of this thrust into the environment a plethora of life-style accompaniments and ephemera. The common ground behind them was a sharing of an attitude , one of reflecting anti-autocratic values, rather than a belief in any one object of form. Attitude was communicated through style which related finally to life-style, and accompanying activity and behaviour.

The Modernist notion of true design meaning faithful construction, thus forcing together design and object, developed therefore into design as an attitude which existed independently of any specific object, and which could manifest itself through anything in the environment.

The Suprematist/Constructivist debate about style was now being relived, in which Malevich saw design as an application of something abstract that could be added to design and Tatlin, one of the purist of the theoretical Functionalists, considered design to be the sum of the parts of a utilitarian object. Malevich used a reductivist aesthetic to imply universality but in the 1960's there existed an

unlimited number of aesthetic possibilities.

The emphasis upon the communicative power of the object led to an involvement with style for style's sake: that is with the formal/symbolic features of the object. Richard Hoggart reviewed the book written by the American journalist Tom Wolfe, entitled The Candy Color ed Tangerine – Flake Streamline Baby in 1966, and concluded with this statement,

> "It ain't what you do, it's the way that you do it. Mr Wolfe's medium, his stylistic prose, is more important than his message." [1]

The book appeared in England in 1966, and it served to bridge the gap between Fine Art affiliations of the I.G. and the sensibility which they were describing which was unconsciously felt by the majority of society. Banham[2] also reviews the book and stated that it conveyed the sense of returning to working-class roots and culture that the I.G. had felt. American Pop didn't have the same class bias, and Wolfe was able to make High/Pop cultural links in such statements as,

> "crazy baroque custom cars" [3] and "Plato's Republic for teenagers" [4]

without cutting across the sensitive class barriers that the I.G. felt.

Wolfe describes the role of money in the metamorphosis,

> "Suddenly classes of people whose styles of life had been practically invisible had the money to build monuments to their own styles." [5]

Life-style, reflected in the style of the object, is put above the function of monumentality and Wolfe feels that the values of the Modern Movement had become redundant.

> "Free form! Marvellous! No hung-up old art history for these guys. America's first unconscious avant-garde! To hell with Mondrian, whoever the hell he is! The hell with Moholy-Nagy, if anybody ever heard of him. Artists for the new age, sculptors for the new style and new money of the ... Yah! lower orders." [6]

He pinpointed a mood which characterised the attitude behind the emphasis upon design as style – as communication and reflection of life style via shared formal characteristics. Wolfe describes this move towards style, by saying,

> "These kids are fanatical about form," [7]

Hoggard describes the same phenomenon with these words,

> "Young people settle not for ends or purposes, but for balance on the spot, for overall openness, knowingness, for poise." [8]

and George Melly,

> "Pop culture is for the most part non-reflective, non-didactic, dedicated only to pleasure ... its principal faculty is catch the spirit of the age and translate this spirit into objects, or music or fashion or behaviour." [9]

McHale's notion of 'gesture'[10] falls into this area also. They all describe a balancing point which is the relationship between the initial impact – the style – of the object and their own lives which are ones for which style, or how they live their lives, is its most important feature. Style in

3. The Form/Content Dislocation

Semiotic theory, which is based upon the idea of any social sign being composed of a signifier and a signified, assumes the arbitrariness of the relation between the two until they become a conventional unit or message — eg. the words 'cow' or 'boeuf' are arbitrary sounds whose signifieds are however the same. The two words have however been conventional signifier's for an Englishman and a Frenchman respectively and the sign is complete in each case. For design this idea has anti-Functionalist implications inasmuch as there can be no absolute relationship between form and content until it is fixed by convention. Thus the Functionalist idea that form emerges from different Functional considerations — whether organic or economic, is fallacious as the final decisions about form are always arbitrary.

In the 1960's the rejection of Functionalism resulted in a great proliferation of designed objects, mostly ephemera, whose formal features, or style, bore no relation to the Functional nature of the object in question. This led to a strong emphasis upon surface decoration, and a great deal of borrowing of decorative icons from the fine arts and other visual stimuli in the environment. The logical seperation of form and content, or rather a redefinition of content as expression rather than function, allows a study to be made of the objects in iconographical or semantic terms.

The ephemera concerned all fitted into the category of consumer goods, generally speaking at the cheaper end of the scale. The decoration was of a two-dimensional nature owing, as I shall show in this section, to the fact that the iconography derived largely from the visual arts.

Among the numerous images that appeared decorating every available surface during this period were two very dominant ones — ie; the image of the bull's-eye target and the Union Jack. Both these images shared the qualities of possessing minimal figurative meaning (although they never completely lost this) while at the same time consisting of a simple, geometrical, form which was very near to abstraction. This meant that:

1. They were easily transcribed on to different objects because of their formal simplicity, and

2. Their minimal figurative significance allowed flexibility around the area of their meaning, permitting them to become almost simple graphic signs conveying only as much of their brilliance of colour and clearly defined shapes mean in plastic terms. (This is truer of the target than of the Union Jack which was less easily divested of its symbolic significance.)

The evolution of the images as design motifs almost certainly derives from the paintings of the American proto-Pop artist Jasper Johns, who used both the images of, in his case, the Stars and Stripes and the bull's eye form in the middle 50's as means of re-affirming paint and canvas as a flat surface, but not stepping outside the painterly tradition. The images were almost arbitrary but useful because of their flatness, and the small abstract/figurative threshold that they contained. There was no attempt to make his painting become flags and targets, they were only manipulated paint and canvas which

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The Allen Jones picture raises more questions about ambiguous levels of reality. The target shapes are made to stand for moving wheels of a bus and as abstract motifs in an abstract composition. The increasing complexity of levels bestowed on the same image freed it more and more from its figurative meaning and enabled it to become a convenient abstract visual sign for geometrical, colour compositions. This became more obvious as it left the hands of the Pop artists, most of whom retained some links with figuration and reference to an external subject-matter and became a motif for the 'op' artist whose aims were only plastic although they may have made reference to or been inspired by shapes in the environment. Brian Rice says that the road signs in London had a strong effect on him when he returned from the country, and this combined with an already strongly developed interest in heraldic and Japanese signs.

He began to paint what against his will were continually referred to as pop paintings, but what he refers to as 'optical', around 1962, and he developed the target motif as his prime image. He set it in square and diamond shaped frames, shaping his canvas sometimes around the outlines. The works were colour studies with a concentration on red, blue,, green, black and white juxtaposed with highly vivid results. It was this target shape reduced to its fundamentals, ie. concentric circles of colour (sometimes the true target colours were used and sometimes not, it didn't really matter) that moved into the design area. Rice himself painted furniture in a manner resembling his paintings.

Style had triumphed over painterly intentions and the abstracted motif, devoid now of semantic or the complex meanings that Johns and the Pop artists had used it for, stood for itself along and became a tool of the pop decorator whose aim was to stamp the environment with instant excitement.

There is a direct connection between these paintings and the adoption of the motif by the pop designers. Foale and Tuffin were the dress designers who picked it up. In 1963 they had shown their concern with the expressive role of clothes,

> "You dress to assert yourself. The way you dress is part of your personality. The girls who wear our designs have a well developed artistic sense." [4]

At this time they described the look they were after as 'soft and feminine'. In February 1965, Sally Tuffin said this;

> "Marion and I have just designed some shifts with targets in the middle, rather like my pop art paintings by Brian Rice." [5]

Pictures of Sally Tuffin's room appeared in the press, full of paintings by Rice and also contained examples of his painted furniture. From this point onwards the motif proliferated in all sizes and colours. Examples were the Orbit Boutique in Bristol which was decorated with giant targets, designed by Peter Fowler, Tessa Smith and Peter Swan. Brooches appeared rapidly with the same motif and Paul Clark, a graphic designer designed a ceramic tile and mug with targets on them. James Wedge

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created carrier bags with one on and at the end of 1965, it moved from the area of cheap ephemera to a piece of furniture called the 'chaise ronde' designed by Jonathaon Groves for Anderson Manson. The chair, which resembled a barrel with a bull's eye design at each end, unfolded to reveal a lounging chair, a trick which echoed not only the 1930's love of sharp geometrical design but also their fascination with disguise eg. the golf ball/cigarette lighter. There are several parallels between the design of the 1960's and the extravanganzas of the 1930's. The Art Nouveau and Art deco revivals of the 1960's are not mere nostalgia but a real need for the same psychological fulfilment from designed objects. Eventually the target became a mere graphic sign used in advertisements and packaging.

The Union Jack motif underwent a similar evolution except that there is more debate as to its origins, (the Union Jack appeared in its present form in 1906). Gear of Carnaby Street sold a replica of a tea-caddy which dated back to the days of the empire which was decorated with a Union Jack with a head on it. The image appeared whenever patriotism and national feeling ran high. In the 1960's however, there was an ambiguity about nationalistic feelings inasmuch as the Flag was used both as a symbol of the increasing role of British exports on the International Market, and as a debunking symbol by the young generation who poking fun at what they considered to be the out-moded notion of patriotism. This second attitude was manifested by the satirical magazine Private Eye in 1965, when it published an offer for Union Jack handkerchiefs with the idea, "Blow your nose on the flag." Also there was an ironical intention behind the products based on the Flag sold by Gear. According to the Daily Telegraph 30th May 1967

> "It was an old cartoon of Lord Kitchener wearing a Union Jack hat that gave the owner of Gear the idea of using the flag to decorate souvenirs." [5]

Symbolically the Union Jack is richer than the target as it contains abstract notions of patriotism/satire according to its context. When the Council of Industrial Design approved of the image on souvenirs in 1965, one wonders if they realised the ambiguous implications of the nation's flag decorating household ephemera, or the World Cup cap. (A case of somebody objecting to an au pair wiping her greasy hands on a Union Jack apron was reported in one daily paper..)

Once the cult for what was christened 'Swinging Patriotism' had hit the mass market, the flag lost its satirical or other implications and became a 'bright and cheap' image which sold. It was described as a 'pop decorating symbol', the reasons for which were:

1.   Anything that was decorated in bright primary colours was described as 'pop'.

2.   The use of bright colours had been picked by the artists who earned the generic label 'Pop' and it was members of this group also who, as with the target motif, had used the image of the Union Jack in several works.

Again the immediate roots probably derive from Jasper John's Flag paintings which he began in 1955. His concern was for a visual examination of the relativity of perception and meaning inas-

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much as some of his flags are obviously pictures of flags whereas others are painterly exercises in which there are similarities in the finished work between the positioning of the paint and the image of a flag. In the exhibition catalogue, of 1964, Alan R Solomon describes effect of a Johns' painting as:

> "...the tension between the familiar condition of the painting and our accustomed ways of looking at it on the one hand, and on the other, the new condition of the behaviour of the objects of images, presented to us in terms which prevent us from assigning fixed or clear meanings to them, and which therefore force us to consider constantly both the meaning of the object and the meaning of the painting." [6]

This ambiguity is ultimately more about the nature of paintings than about flags.

In his Everly Wall of 1961, Peter Blake used hard edged areas of red, white and blue, thus picking up the specifically abstract communicative means or 'sign system' of the flag, the colours became as much a vogue as the image of the Union Jack, showing how important were the stylistic implications of visual communication. Derek Boshier painted his England's Glory in 1962, in which there are images of both the Stars and Stripes and the Union Jack. In the Young Contemporaries Exhibition of this year, three categories are distinguished. (Obs. Review Feb. 11th 1962) They are:

1. Geometric, abstract works — (this is the work that will soon be referred to as 'op').

2. 'Pop' works - labelled together because their subject-matter derives from science-fiction, comics, film magazines, the mass media etc., and,

3. A more traditionally orientated group of painters, in terms of subject matter.

Boshier belonged to the second category at this date, and his techniques manifested a mixture of hard edge and soft edge use of colour. The flags and lettering on the work are treated in a formal manner and work as strong images projected in the manner of the adman. His formal concerns are emphasised by the change in his paintings from 1964 onwards, in which (influenced by the hard edge geometric figurations of the American Kenneth Noland), he turned to powerful abstract images of communication techniques, eg. abstracted and blown up depictions of the interference patterns on the T.V. screen. His images of the flag are tempered by these later works and function as colour studies. He says of his later work in 1965,

> "I am trying to be more direct and honest about colour and simply using it in a way I enjoy." [7]

Other painterly uses of the Union Jack in this period increased the decorative function of the image. Alexander Weatherson used it in his work, Resting on Laurels of 1963, and Joe Tilson used it in his decoration of the Interior of the Dome and Mural at the Milan Triennale of 1964. It formed part of a strongly geometric design.

The ways in which the image was transposed into the design area are complex. Firstly it had been a decorative motif as a symbol of patriotism right back to the days of the empire and it seemed therefore a natural symbol of Britain's increasingly important role in world trade. David Phillips commissioned Paul Clark to produce a Union Jack clock for British Fortnight at Woollands which took place in

September-October 1965. This led to the design of many other objects by Clark with the same motif, including mugs, ashtrays, tiles etc. By 1966, it had become a national phenomena and a host of articles in the national press devoted articles to 'swinging patriotism' attempting to explain it away without much success. Ultimately it seemed to come down to the visual appeal — the stylistic meaning of image and very little more.

Another reason for the popularity of the image lay in its symbolization of the pop generation. This was associated with the Carnaby Street connection that I have mentioned and the revival of old military uniforms which led to the connection with Lord Kitchener and the flag. This conveniently echoed the anti-patriotic feelings of the young generation but nonetheless become as commercial and stylistically a success as the patriotic flag. Also in 1965, which seems to be the year of the multi-originals of the design use of the image, in May, a boutique called Palisades was opened in the Carnaby Street area by a girl called Pauline Fordham who had previously worked with Foale and Tuffin. She provided a link in the chain between the R.C.A. Pop painters and the design world. She was closely acquainted with Derek Boshier (Boshier did lettering for Palisades) and chose as curtains for her changing rooms, fabric which was printed with images of the Union Jack and the Stars and Stripes. This decoration carried on the purely stylistic implications that the pop painters had perpetuated.

The extent to which the image was ultimately associated with 'Swinging London' and the 'pop scene' was demonstrated by the pop group the Who, wearing Union Jack jackets. (A fellow student of Pete Townsend at Ealing College of Art, was Michael English who in fact designed some Union Jack carrier bags before he 'opted out' and became a poster designer for the Underground.)

Apart from the proliferation of specific images on objects in the environment, which functioned ultimately as coded signs for a particular life-style with ethical implications (the aesthetic/ethical connection has existed in British Design since the days of Ruskin), there were less specific styles or moods which also modified the appearance of many objects, specifically in the consumer area, in the years 1965 and 66.

The most extensive style was the one which was simply referred to as 'op'. Ultimately this simply meant any surface decoration which was abstract, geometrical, black and white or with brightly juxtaposed colours. The actual painters that these patterns came from were, the post 1964 work of Derek Boshier, Bridget Riley, Jeffrey Steele, Vasarely and others. According to Cyril Barrett, the word 'op' was coined by a writer in Time magazine in 1964.[8] John Bannenberg created an 'op' art kitchen for Mary Quant in 1965.

The most frequent image in the fashion magazines of the years 1965 and 66, was the 'op' image of black and white geometrically patterned shirts, dresses, pyjamas, etc. Stylistically this referred back to the expressive interpretations of machine Aesthetic predominant in the 1930's and thus superfically

could be said to be perpetuating the aesthetic of Functionalism, but ethically and most importantly the pattern was no more than a passing eye-catcher in design terms and was thus highly expendable, conforming to the throwaway aesthetic of pop. Pop implied aesthetic anarchy, whatever caught the eye was valid for as long as it held the public's attention. Intentions in Fine Art and Design were thus very different however stylistically similar they may have seemed. The form and content dislocation accounts for this and the fact that Bridget Riley on more than one occasion sued the producers of 'op' dresses shows the difference of intention clearly.

In an article in Queen, 5th January 1966, entitled Op-position, the birth of the fashion is said to be February 1965 in America,

> "Art collector Larry Aldrich ... made his first batch of Op dresses to coincide with a big Optical Art exhibition The Responsive Eye, at the Museum of Modern Art in New York. Overnight the exhibition became a New York rage..." [9]

In fact Royal College dress designers had produced Proto-Op dresses by 1964, but by 1965 their popularization had become a reality.

According to the article op fashion was in Britain by the end of May 1965. (This was when it appeared in the Colour Supplements.)

The definitional confusion between pop and op increased and pop became simply to mean 'popular' — its original meaning. In an article in Queen, Prudence Fay wrote 'Op went Pop' [10] and in a Woolmark advert. which appeared in the Weekend Telegraph Supplement, 17 November 1965, were the words,

> "Op art, Pop art, Woolmark fits the scene." [11]

Pop now meant everything expendable, young, fun etc., and in its 'op' stage it swept across Britain. Just as the op painters moved from black and white into strong colour juxtapositions to obtain powerful visual effects, so the fashion designers imitated. As in a Bristol fashion boutique, Orbit,

> "...it hits her right between the eyes, like the kind of thing that goes on behind Cilla in Thank Your Lucky Stars." [12]

According to Queen, in February 1966, it was time to add a third colour to 'op', and the confusion between op and pop thus became greater.

In a consideration of why this visual style rather than any other should have been so widely used and accepted is the fact that, 'op' emphasised the role of the spectator's eye above everything else. I have shown already how important the consumer was in the period and also how superficial visuality without the necessity of attached meaning was the prime communicative means between consumer and object. Thus a style which depended in effectual rather than intentional terms, upon visual shock tactics to the extent of using what amounted to trick effects, had a ready audience. A Critic, Seitz, called 'op' paintings,

"generators of perceptual responses." [13]

Another causative factor was the 'decorative' factor contained in the flatness and pattern-like quality of the 'op' designs which made them directly applicable to fabrics etc. Vasarely in fact first developed his op technique in fabric designs in the 1930's. Other relevant factors are;

1.   The way in which 'op' mythified scientific features which characterised the mood of the 1960's move away from art as the visual paradigm to science and technology creating popular myths which in turn had visual accompaniments, and

2.   The democratic sense in which everybody could get something from it without specialised 'fine art' knowledge.

A common fallacy about 'op' design is references to its similarity to Bauhaus' work and to De Stijl works. This would imply that it worked in a continuum with the Modern Movement which would negate my thesis that it was part of a reaction against it. In fact, the Albers works that it is likened to are experiments only and never intended as finished works of 'universal' implication. Also the implications of eg. applying a Mondrian design to a pair of shoes (which Lotus did in 1966) completely removed form from Function by the arbitrariness of its application and puts it into the category of expressive fulfilment.

The major critical comment about 'op' painting in the early 1960's was that it was no more than glorified Basic Design. In the design area this criticism obviously didn't apply and it provided a successful branch of fabric design, which became dresses, bikinis, pyjamas, ties and shirts, interior design (see article on Bannenberg rooms in Weekend Telegraph Supplement 17th September 1965), ephemera, including clocks and lampshades and graphics (see Woolmark).

In the second half of the 1960's two-dimensional decoration moved into the aestheticization of any and every surface by the painting of decorative images on to cars, walls, shop fronts, and other convenient surfaces in the pop environment. Banham wrote an article in 1966 about the images added to the surfaces of American racing cars. He said that their function was 'decorative, informative and totemic'[14]. As with his former iconographic studies he was attempting to create an academic structure which could accommodate analyses of such areas of pop culture.

The decorated surfaces which appeared, evolved from the painted furniture of people like Binders, Vaughan and Edwards, and Brian Rice. In 1965   there appeared on the market, and publicised in the Colour Supplements, a number of pieces of furniture – chairs, chests etc. of which the notable feature was their painted surfaces. The decoration ranged from an all over coat of one bright colour to strong pattern stripes, flower patterns, Union Jacks and sentimental slogans etc. In the words of a contemporary commentator,

"This hand-painted chest hasn't the clinical appeal of Danish furniture but it is likely that as walls get plainer, furniture will get more florid." [15]

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and at the Victoria and Albert Museum an exhibition of Aubrey Beardsley influenced the rapid transition from pop to psychedelic. George Melly described his visit to the exhibition

"I believe now... that I had stumbled for the first time into the presence of the emerging Underground.
That this confrontation should have taken place at an art exhibition is ... significant. The Underground is the first of the pop explosions to have evolved a specifically graphic means of expression, and, Beardsley... was one of the earliest formative influences in this openly eclectic process." [17]

The new style emerged in a public way with the poster which was the ultimate form of expendable art, in terms of anonymity and mass production. The Underground poster artists among they Waymouth and English, the Australian illustrator for Oz, Martin Sharp, Christopher Logue, Mike McInnerny and others, developed a style which allowed for individual differences but which depended on common icons and themes which derived from and illustrated visually the philosophical concerns of the Underground. These included the influences of eg. Moroccan prayer sheets and Japanese prints on English which reflected the association of decoration with some form of transcendentalism or spiritual ideal. This replaced the pop ethic of style for style's sake. The poster artists expressed beliefs. In the case of Logue, they were ones of political and social, and sexual freedom. The divorce achieved by pop design between form and function had left the way open for form to express anything.

The fundamental role of the poster as a means of propaganda was extended into individuals using it to express convictions. English said his intention was to increase,

"Mind expansion."

This was in line with the non visual ideals of the Underground with such introductions as the club— U.F.O. (Unlimited Freak Out) the interest in 'mind-expanding' drugs, and numerous references to oriental mystic religions.

Other recurrent icons and themes were references to pop music, (see Sharp's Dylan poster, English's The Soft Machine Turns On and the Hendrix poster, etc.) specifically to the kind of pop music which perpetuated the ideal of 'total sensation'.

This close association with other art forms — with music predominantly and in Logue's case with poetry, showed how visuality was now seen as only part of a total experience, but a very important part when intuitive reactions and not logical ones were being sought after. Logic required a linear thought process and these artists were only concerned with instant impact which rendered thought redundant. The styles adopted by the poster artists reflected the importance of irrationality, of dream images, (to the extent of producing Surrealist images in the case of McInnerny) symbols, and general images of escape. Pop iconography filtered in comic strip format and lettering — and overt sexual imagery, concealed cunningly when thought to be too overt. The posters expressed graphically a Utopian vision of release through fantasy, made possible by the expressive liberty given to the designed object in the first half of the 1960's The art/ design boundary becomes blurred at this point as fine artists, Derek

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Boshier with Logue, among others, worked on posters. Peter Blake and his wife and Hamilton designed record covers for the Beatles.

The disillusionment with commerce and its exploitation of youth cults encouraged the Underground artists to form their own business organisations and thus a real attempt to bypass the Establishment was made. Inevitably, however, psychedelia became a tool for the ad-man and a package designer's dream. Whenever design could be connected with an object in the environment, even an object as ephemeral as a poster, it became manipulatable. When it moved into the area of events, of entertainment, however, it became more intangible. In the words of Peter Fryer,

"The only original art form associated with the Underground is the light-show." [18]

Here groups like the Pink Floyd enacted, in performance form, the concept of 'total sensation by bombarding the audience's senses with electronic sound accompanied with slide shows of flowing biomorphic shapes. Fryer remarks on the influence of drugs,

"Our entertainments will simulate the mind expanding effects of our drugs." [19]

Form and function had now become so divorced that only form now existed in a nebulous manner and its meaning or content didn't extend beyond the immediate effect upon the senses. There was no time for further meaning to be interpreted and one was jolted out of the state in which rational understanding could, anyhow, be reached. This is the ultimate freedom of form to exist in and for itself. Banham calls the evolution to this point,

"A faltering transition from a culture based on autocratic taste to one based on free-form self-fulfilment." [20]

4.   Metaphorical and Symbolic Themes

Semiotic analysis approaches the world of objects in the same way that it would a piece of spoken language, prose or poetry. Thus figures of speech — metaphors, hyperbole, simile etc. — are used as tools in such an analysis. They are the rhetorical means by which persuasive communication is achieved. We have noted that communication or expression is important in the designed objects in question and this communication is made possible by the use of themes which relate the objects to personal fantasy and imagination.

The concepts of metaphor and symbol are used by the semiologist and are relevant in this context. A metaphor is a form of analogy by which an equation is made between the subject on hand and an external factor which illuminates what is being said by the poet or writer. Strength of expression is thus increased and the final image of speech becomes a rhetorical tool. Symbols, however, are the means by which meaning is achieved by reference to a conventional code. Thus if we use the metaphor 'her flaming red hair', the strength of meaning is finally achieved by associations between fire and heat with strong passion. Metaphors can enhance the symbolic power of a concept's meaning, whether verbally or visually. It is visual metaphors and symbols that are relevant in this context. Through a

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discussion of the metaphorical themes that were used in 1960's design, a greater understanding of their symbolic meaning will be revealed. Among the many metaphors and symbolic themes employed are those of technology, which provided themes of science-fiction and science-fact — (a dominant fantasy subject in the period), involving futurology, cybernetics, etc.and the symbolic associations of such cluster concepts as fun, play, entertainment, the innocence of childhood, etc. These fantasy themes all provided a degree of escape through the use of the imagination rather than the application of logic and contributed to the semantic richness of the consumer design of the period.

i)   The Space Age

Among the most recurrent visual themes of the 1960's were those derived from the technological and imaginative implications of man's venturing into space. What had been the science-fiction that had inspired members of the I.G., Hamilton, McHale and Paolozzi were all inspired by space comics, monsters and flight, and had provided through their mediation a set of iconic images which moved into the area of consumer goods, became space fact in the 1960's with the American and Russian voyages into space. These events caught the public's imagination and objects resembling spacemen's outfits, space capsules, images of weightlessness and general echoes of the amoral concerns of technology to simply push forward into the future, filtered into the environment. The concept of public taste and fantasy were highly developed and cross-fertilization quite likely occurred. Christopher Finch develops this idea,

> "It is strongly rumoured that the hardware of the American's Apollo space programme has not been conceived without a glance at the popular idea of what a space-craft should look like according to the canons of pulp science fiction. (and after all, Werner von Braun has himself written sci-fi)." [1]

The mythification of space research and technology generally was expressed publicly through design particularly in the years 1965 and 1966.

Among some of the earlier interpretations of the idea of the Future being expressed through advanced technology was the prototype building by Alison and Peter Smithson, entitled the House of the Future.

The house was exhibited in The Ideal Home Exhibition of 1956, and put the I.G. group's ideas about popular culture into architectural practice. The image of society for which it was produced was culled from advertisements of the time. In their statement in Ark in 1956, the Smithsons showed how this was a continuation with the Modernists concern with technology,

> "Gropius wrote a book on grain silos,
> Le Corbusier one on aeroplanes,
> And Charlotte brought a new object to the office every morning;
> but today we collect ads." [2]

The technical sophistication of ads was as important as their role as indicators of ways of life. Undoubtedly the discussions by McHale and Paolozzi at the I.C.A. at this time would have influenced

their views and equally Banham's work on car styling was a direct stimulus on the production method and appearance of the House of the Future. It imitated Detroit car production in its series of mass produced units — none of which were repeated in a single, living cell. Thus additional appliances could be added to each house, like the mirrors and trimmings on a car, in such a way that even structural components, like the bonnet, bumber or door of the car, could be replaced by an upstyled version whenever fashion or boredom so dictated. This was a theoretical solution to the problem of expendability which the car manufacturers had solved with evident built-in obsolescence — which architects also practiced, while pretending, with the dominance of the standardised, repeated 'universal' prefabricated unit, not to.

The appearance of the joints between the components was also modelled on car construction with rounded edges (to facilitate cleaning) and the notion of styling was enhanced by the inclusion of chrome strip streamlining. This was the first house which diverted the architectural paradigm of form not simply by questioning the real nature of materials and architectural structure which is what all innovation had resulted from the days of the Modern Movement but by looking outside architecture for a parallel model which was naturally integrated into contemporary culture. This meant a radically new form for architecture by the simple transposition of the style of one consumer good into another. Other features of it which make it a piece of Pop architecture are,

1. Its futuristic 'fun' quality of quasi-'science-fiction' elements, ie. mechanical accessories which functioned at the touch of a switch.

2. Its quality of 'aestheticized technology' in which technology is not included in a 'brute' fashion but is reflected in the sophisticated styling in the moulded plastic frame and the heavy gauge aluminium foil.

3. Its basic appeal to fantasy rather than to mechanical Functionalism.

Futurology, or an imaginative concern with predictions as to how the future will appear, led to the appearance of many structural and symbolic innovations in architecture, interior design and consumer goods. High-speed travel, one sure indicator of future developments in technology provided a justification for greater flexibility in designed objects. In architecture this led to the involvement with symbolic and literal interpretations with change and expendability in built structures (see section on the Design profession). In furniture this led to such innovations as 'knock-down' and 'throwaway' pieces. The flexibility of such pieces was to ease travel from producer to retailer, from retailer to customer, or with the customer as he moved around his house or the globe. The 'jet-age' required furniture which would not hold it down and Max Clendenning showed how this in fact evolved directly from Le Corbusier's concern with the world of technology. In his work, permanence did not exclude knock-down and reconstruction possibilities. Plywood replaces steel and bright colour adorned the surfaces, but this was not enough to overthrow the sign-language of furniture which signifies security

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the space machine. Just as the Futurists added the notion of dynamism to the Cubist aesthetic, so the designers of this object have added a dimension to the machine aesthetic – visual rationality, tidiness and 'good-taste'.

Just as in the Modern Movement the idea of keeping up with technological change implied,

a)   a new aesthetic

b)   a romantic desire to soak up the new environment,

so, in the 1960's space and cybernetic (this showed in typography) technology, were translated similarly in a dual fashion. On the one hand utilitarian justifications were given to what amounted to a new style, and, on the other, the excitement of the 'space-age' was expressed in fantasy which moved through from fashion to domestic equipment and ephemera to a general upsurge of science-fiction. This was then translated back into the art sphere in a form of 'optical' and 'kinetic' art which in their turn became styles for the designers and the market to exploit.

Thus the same fallacies and paradoxes that the Modern Movement perpetrated ran through British Design in the 1960's, and what was visually potentially radical was supported by a conservative neo-Functionalist raison-d'etre. The texts accompanying the post-modern design manifested this tendency. In the Daily Telegraph Magazine, 23rd August 1968, Margaret Duckett describes inflatable furniture,

> "Low prices apart, inflatables are comfortable, easy to clean, light to move and stow away and full of visual excitement." [8]

Materials underwent a similar technical revolution and plastic became the 'space-age' material in Architecture, furniture and fashion. Accompanying the severe shapes of P.V.C. holster dresses, in shiny colours, went 'space-shaped visors' (Sunday Times Colour Supplement Aug. 15th 1965).

The robot-like mechanical image was reinforced by sharp poses and severe haircuts. Technological justifications,

> "In the last two years, plastic has been much improved and scientists are discovering it has as many permutations as the football pools." [9]

were used to consolidate the desire for an instant modern image;

> "It's a material you can't work nostalgically." [10]

which conveyed style for style's sake.

The French designer Courreges had been the stimulus behind the space age look in fashion. In march 1965, in an article in the Sunday Times Colour Supplement, were examples of the Black/White severe look. Ernestine Carter described him,

> "Courreges sticks to his geometric purity of line." [11]

Other features were his white plastic glasses with slits in them and the robot-like poses of his models. He created a futuristic image for women with a strong flavour of science-fiction (cf. A for Andromeda on B.B.C. television). His creatures contrasted with the smooth elegance of Dior, Ricci,

and Balmain. The playful little girl aspect was stressed by the calf high white plastic boots with no toes and bows round the top. His complete image functioned as a total expression of the potential of clothing to create a fiction. The clothes contained the girl like a suit of armour and the body became accordingly a machine or toy soldier (see girl on cover standing stiff and saluting).

Another offshoot of space age imagery was the emphasis upon the metallic quality of some materials. In the Observer Colour Supplement of Jan. 3rd, 1965, was a picture of American astronauts in 'silver foil suits', looking like helpless dummies inside them and the huge helmets. This was echoed by a proliferation of silver P.V.C. anoraks, and metallic dresses which were constructed at home by fitting the discs together.

Courreges saw himself as an 'engineer of clothes' and echoed Corbusier's idea of creating pieces of sculpture to symbolise his age. The difference was that Corb. was concerned with houses and a search for universality whereas Courreges only wanted a style for the moment. The expressive Function of his designs be far exceeded the utilitarian. His designs were meta-scientific, translating technology into an expressive medium in a similar way to the Pop artists. British designers, particularly young ones at the R.C.A. acknowledged their debt to him (Observer, May 2nd, 1965.).

The metaphorical use of such concepts as the space man, the space rocket, the power of technology and the future became evident in the environment in a more general way than simply being transposed directly into objects.

They developed into a mythology whose meaning was articulated through a style which was manifested in the stance of the models wearing space-age clothes, in the angularity of the fashion photographic image, in the popularity of films like Alphavelle, Barbarella and 2001, which accounts for much more than a simple interest in science-fiction and which by now were seen on the same continuum. The space race was a living example of fantasy turning miraculously into fact and it became a symbol of the possibility of such a thing happening in any sphere. The future and the present became united through the smaller and smaller barrier than divided one from another and imaginative pre-dictions based on fantasy became real possibilities rather than absurd impossibilities. This realignment between fiction and fact thus threw open new opportunities and freedom for the imagination to function outside the bounds of reality as it was then conceived because reality was seen to be changing at such a rate that it could not be held down to a specific moment in time. Historical continuity, the logical connection between the past, the present and the future was cast aside in favour of an obsessive involvement in the moment which was restricted by nothing. The weightlessness of the spaceman symbolised this lack of temporal and physical restrictions, and the rejection of gravity symbolised a casting off of all the bonds of intellect and reason, giving free rein to fantasy, the imagination and physical sensation and experience which signified the moment only.

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Writing about Kubrick's 2001 A Space Odyssey, in Art Forum in 1969, Annette Michelson pinpoints some of these ideas when she says it is

" ... a master metaphor of the mind it grips with reality." [12]

and that the lack of gravitational pull symbolises

"... the difficulty of purposeful activity" and "floating freedom." [13]

The film functions on the relationship between style and meaning.

ii) Fun

If one metaphor of escape to fantasy in the 60's was that of projection into the future, the other dominant one was towards the innocence of the past, with references to childhood, to play, and entertainment, and to the decorative objects of the nostalgic past, associated with the Art Nouveau and later the Art Deco periods.

The alliance of Pop architecture and entertainment is an interesting one. The few projects which become near to reality were all in this category, eg. Cedric Price's (not a member of the group but concerned with similar ideas). American Museum in Britain of 1963, and his Fun Palace for Joan Littlewood which was conceived at about the same time – both were flexible structures allowing different activities to take place at different times, each structure being on a hydraulic jack – Michael Webb's Sin Centre of 1962 and Archigram's Monte Carlo scheme of 1970. This association with entertainment brings up all the Pop implications of 'fun play' etc. which run through all levels of Pop attitude and design, but in this case the serious intentions behind the fun are also manifest. Humour is part of Pop because it is another of breaking down form and content and the conventions of recognition and expectation. It served as a strategy for the Pop artist/architect in moving beyond conventional codes of order to a new ethic and aesthetic.

In the Sunday Times Colour Supplement of September 1965, there appeared an article by Peter Collins in which furniture was displayed for which paper, plywood and canvas were the dominant materials. These prototypes could be seen to derive from two areas;

1.   children's furniture

2.   garden furniture

both of which imply the notion of play as opposed to work, of spontaneity rather than consistency and stability. The child theme, implying innocence is one which ran throughout many design innovations of the 1960's. Mary Quant, speaking of her clothes' designs, said

"I saw no reason why childhood shouldn't last for ever. I wanted everyone to retain the grace of a child and not have to become stilted, confined, ugly beings. So I created clothes that worked and moved and allowed people to run, to jump, to leap, to retain this precious freedom." [14]

This, and the quality of 'captured movement' of the models she used, captured the quality of 'gesture' that I have described earlier. She conveyed the concern of not being forced into a category or made to imply universal truths. Added to this is her plea,

"Clothes must have wit." [15]

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The polkadot and striped chairs that Peter Murdoch had produced in New York (he was R.C.A. trained), fulfilled this dictum as well as manifesting a completely new shape for a chair. The chair has been reduced to a gesture, to a Dadaistic refusal to conform. Peter Collins described the chairs,

> "They will cost about $3.90 there (New York) and may be available over here shortly for around 30 shillings. Printed in brightly coloured patterns... the chairs last from three to six months depending on the amount of wear. After that, you crumple them up — by then a new pattern has probably appeared." [16]

Again there are practical advantages also — cheapness and quick delivery, there is no need to order.

Ironically, the stacking paper tea-set by John Elson is described as,

> "...coated with durable nylon inside and out." [17]

The intentions behind such designs display only an intuitive reaction to any theoretical base that they may seem to manifest. Their justification is limited to practical considerations and a vague need for 'liveliness."

The garden theme is developed in the furniture evolution, probably as here there existed a convention of fold-away brightly coloured furniture which implied ephemerality. The traditional wood and canvas folding chair suddenly changed identity and became the seat of a company director. In 1967 a Sunday Supplement article photographed K.D. and inflatable furniture were shown in an open field and the final indoor/outdoor ambiguity was achieved.

In 1964, Mary Quant expressed the young values that she wanted to achieve.

> "I want a baby look, but worn by a naughty baby." [18]

and the plaster models that she used lost the stiffness of the Parisian 'middle-aged' mannequins. Ernestine Carter described the fashion takeover which by 1964 was clearly visible,

> "The ragtrade is now a playground for young talent who cheerfully set up their workrooms in basements off Baker Street, in their own flats in Knightsbridge." [19]

A New structure for the professional designer was thus established. The words, 'playground' and 'cheerfully' are key ones in conveying the attitude that the new designers brought with them.

Mary Quant was involved more than anything else with identities, expressed by what almost amounted to fancy dress costumes. The identities derived from all levels of society, one could be a bank manager one day and a coal miner the next with no change except of costume. This furthered the notion of freedom of inspiration, the implication was of clothes providing much more than mere protection, warmth and facility for movement, rather of their providing the possibility of push-button character change through visual style which went clothes deep only. In a review of Rene Konig's book The Restless Image, Peter Conrad said,

> "...the hunger for new clothes testifies to our urge to become spectators of our own lives." [20]

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According to Quant's doctrine, we would see our own lives through a set of pre-selected instant-aneous personae which we can select to fulfil our own wishes and desires. The opportunity of using clothes as an expressive means was presented.

Inasmuch as Quant picked and appropriated current ideas and translated them into clothing, she was playing the role, like Conran, of an imaginative entrepreneur. Her designs based upon 'op' art and space imagery bear witness to this.

The image she and others (among them Foale and Tuffin, Ossie Clark, James Wedge, and Sally Jess and Barbara Hulanicki for Biba) were projecting on to the teenage market was one of liberation, expressed by clothes which spoke a new language of play, of a refusal to take life seriously. This meant the production of

1. Alternative identity clothing which functioned as fantasy fulfilments.
2. New structures in clothing, eg. the mini-skirt, the hot pants, the shift, which increased both physical and symbolic freedom.
3. Printed patterns on dress fabric deriving from varied visual sources, eg. from the fine arts – op, pop, kinetic etc. and bright colour – and from general cultural phenomena like space imagery (this influenced new materials like plastic to become popular, and revived patterns like paisley and art nouveau decoration.
4. Combinations of all these things.

A nostalgia for old design and 'peasant' accessories developed into one of the characteristics of design thoughts in the 1960's George Melly claims.

"By wrenching these objects out of their historical context, they are rendered harmless." [21] implying that this was yet another way of rejecting the past. It was more than that as well – it was part of the search for an integrated popular base for the production of objects for the new environment, an attempt to create a 'popular art' which the painted canal boats had been in their time, an art which can contain a public symbolism which bears no necessary relation to the function of the object it decorated. In an article in a colour supplement of 1967, one reads,

> "The established nostalgia for white wood and copper jelly moulds is a betrayal of the functional kitchen which architects have attained after 50 years struggle from the yellow stained sink and archaic gesture." [22]

Another implication of this area of design in the 1960's is that it forms a continuation of the Arts and Crafts ethic of the unity of art, design and society in a pre-industrial society.

Again this metaphor of fun or innocence extended further into the general environment and was particularly obvious in films which demonstrated 'the new morality' which was amorality rather than immorality. Thus films like The Knack, Billy Liar, Whatever Happened to What's his Name, the Beatles two films ,directed by Richard Lester, and a host of others exchanged a sense of morality for 'zany' humour which meant that fun or irrational behaviour was the only ethical rule to follow, that humour and youth

were the only guide to a correct life style. The films were about life-style in terms of both medium and message. There was a complete form/content fusion which depended on a jerky strongly contrasted black and white imagery (similar to that used by the fashion photographer) which showed fantasy juxtaposed by fact in a collage effect which again showed there to be a continuum between them. There was no jaring effect between the Beatles walking along a street to a sudden switch which showed them skiing down a snowy slope clad in long cloaks and singing without any signs of cold or breathlessness. Images of fantasy and escape were real alternatives to reality.

Other metaphorical and symbolic themes conformed to this same pattern, emphasising fantasy by a general infiltration into the environment, through style, gesture or poise, and allowing it to assert itself over the rational determinism of an older generation whose symbolic poverty had manifested itself in an arid environment.
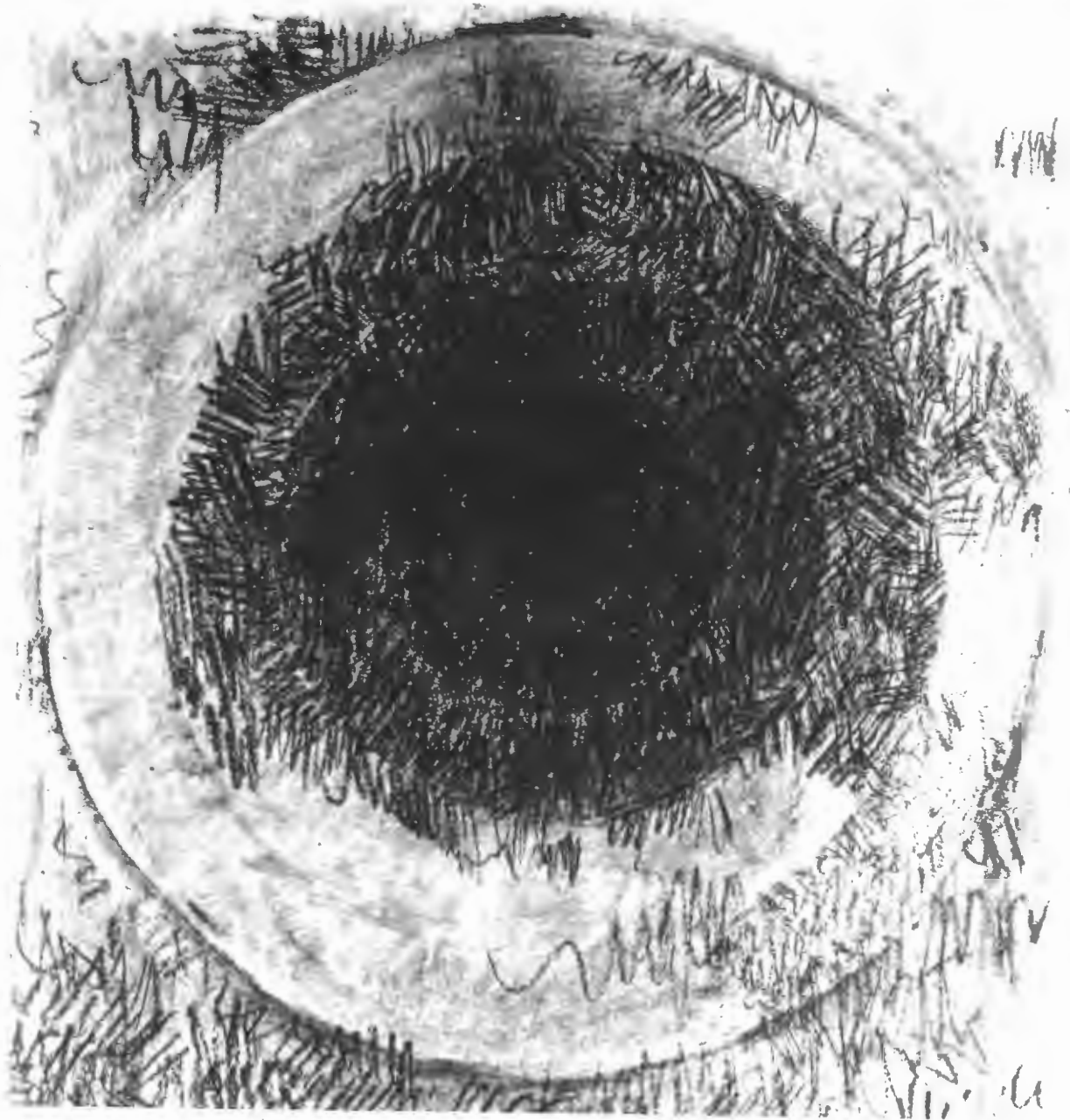
38

THE FIRST REAL TARGET?
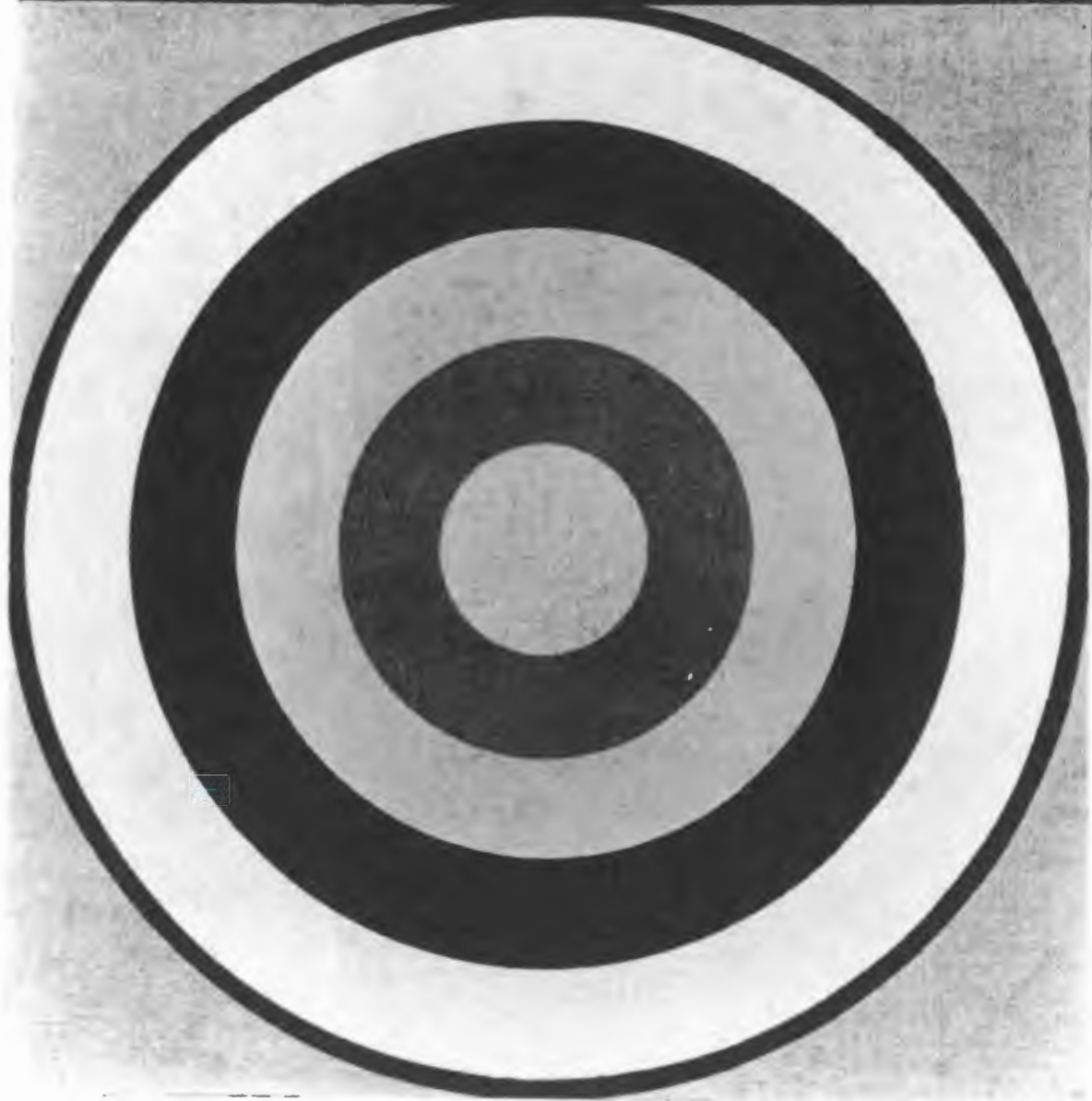
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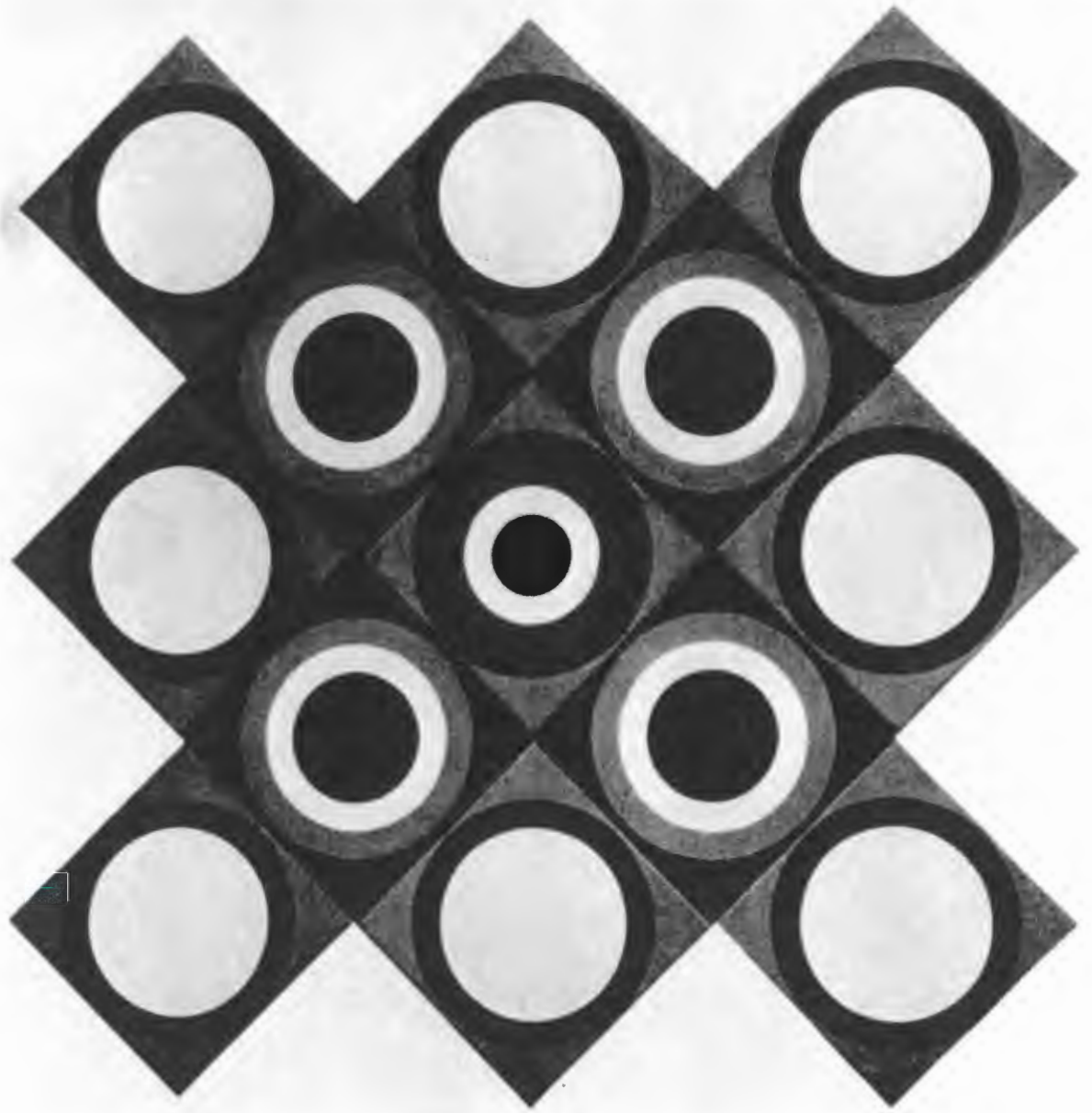
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41

The Chaise Ronde is an ingenious piece of now-you-see-it-now-you-don't-type furniture, the first design of newcomer Jonathan Groves, produced by Anderson Manson, 105 Fulham Road, sw3. The chaise longue is carefully calculated to fit an exhausted human being and to fold, like an armadillo, into a neat drum
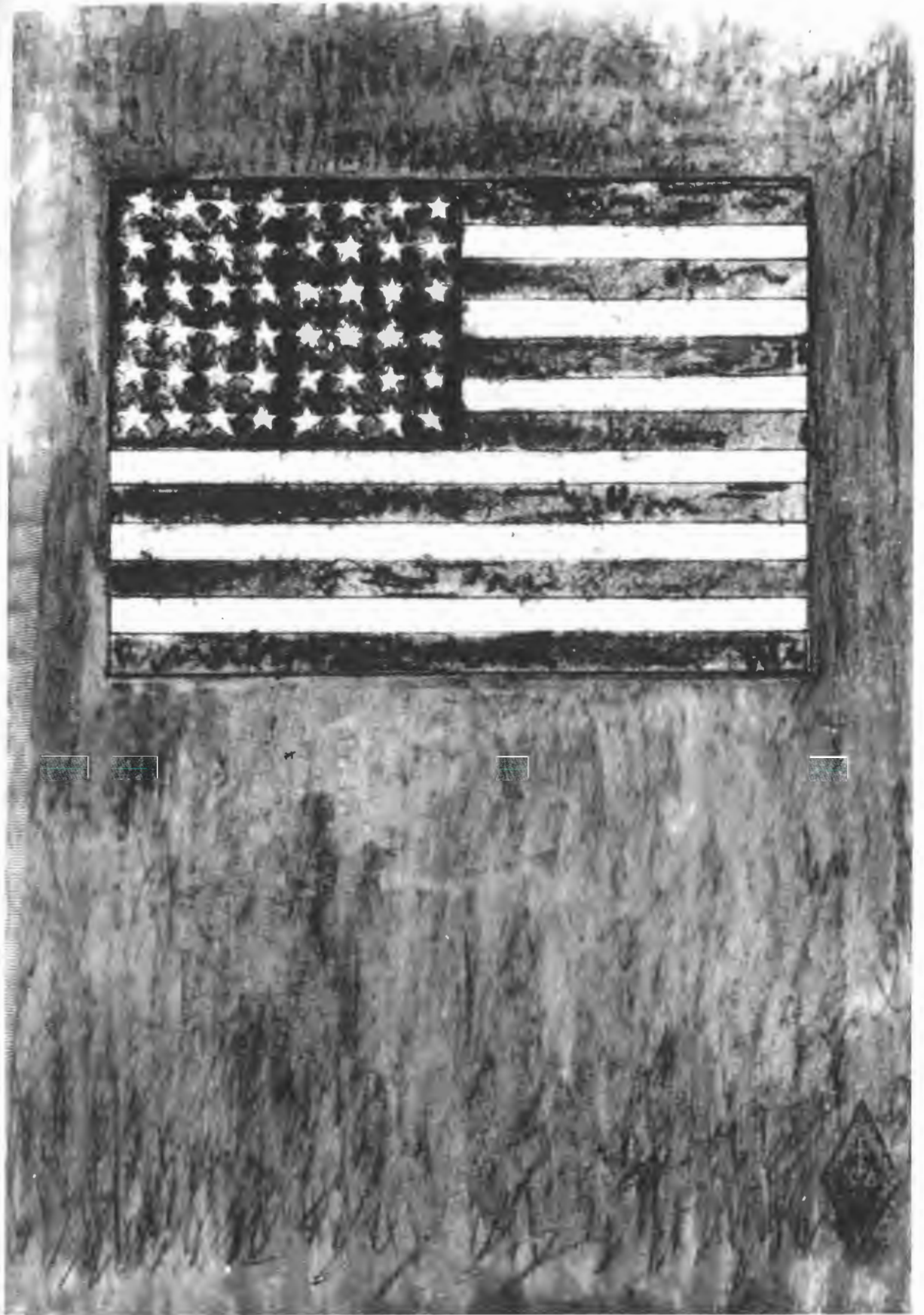
42

43

THE OBSERVER

THE WHO

The prediction business (2)

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Text within image: BLOWIN' IN THE MIND

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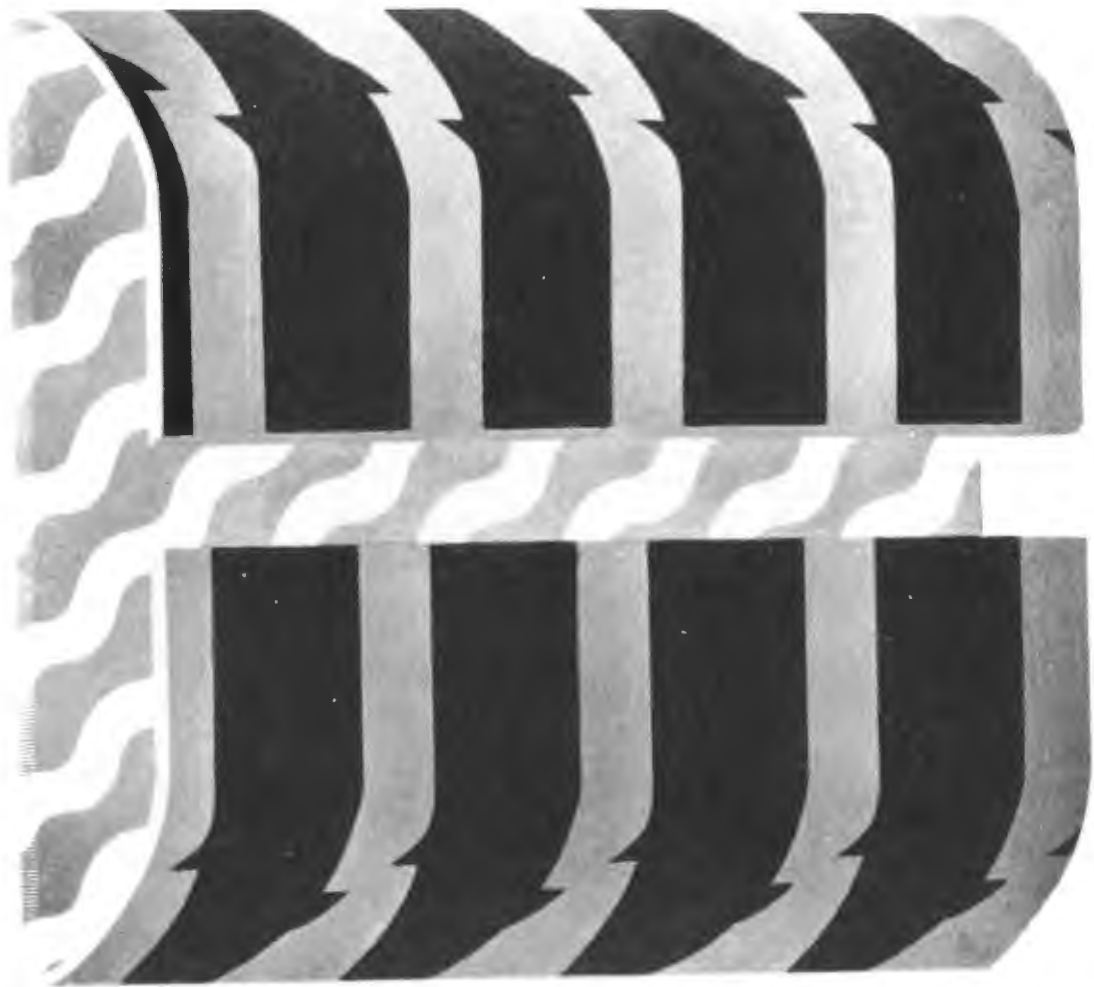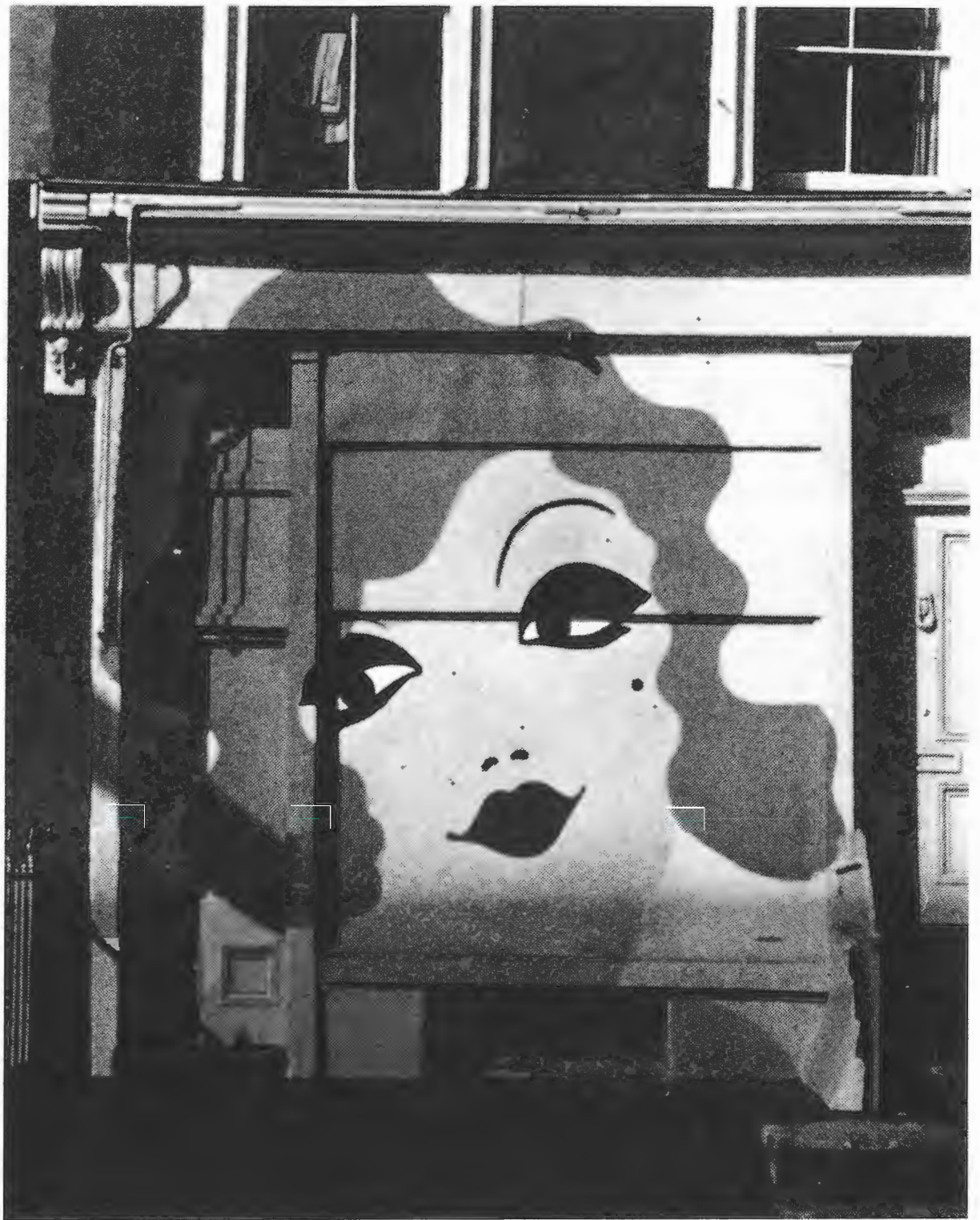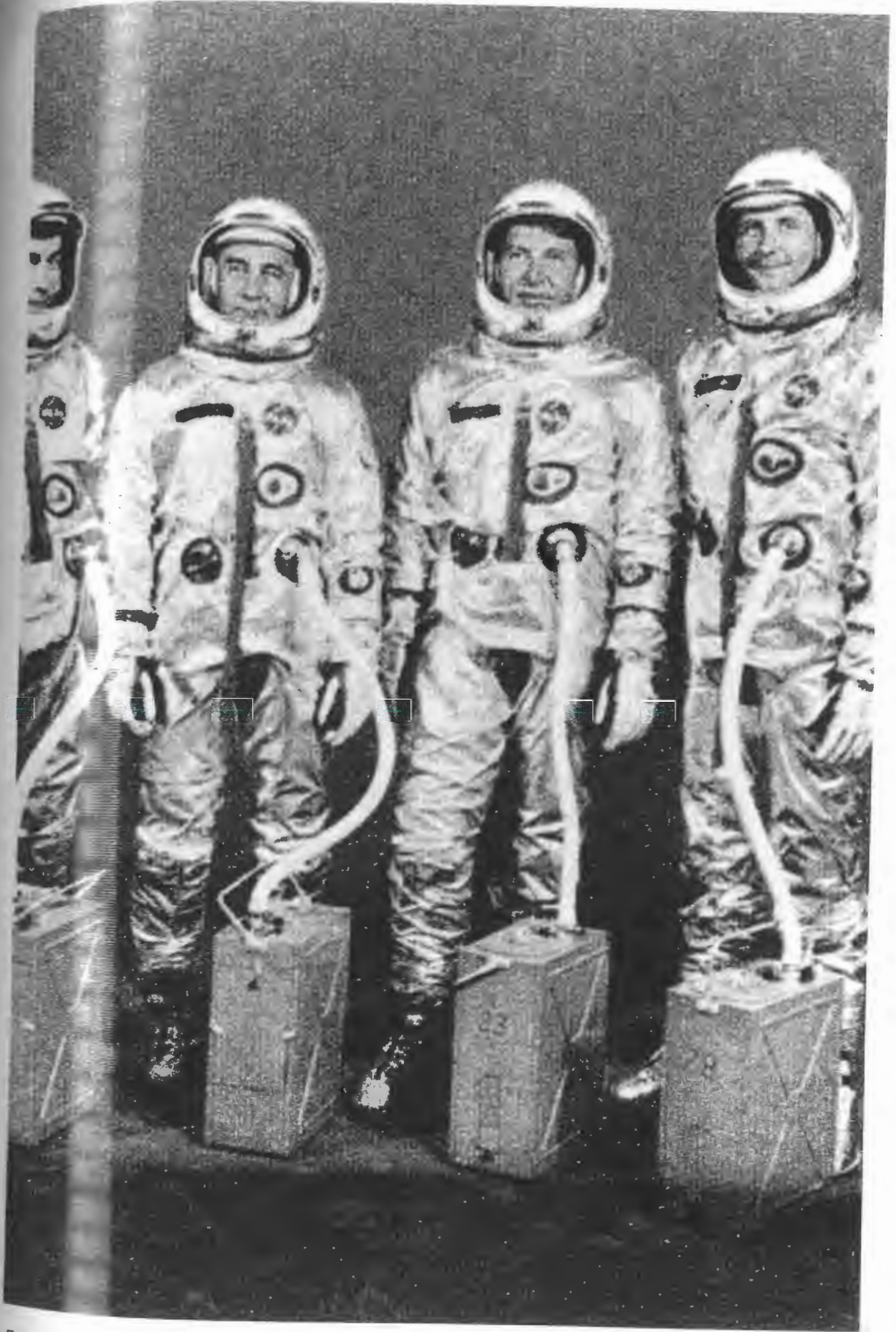
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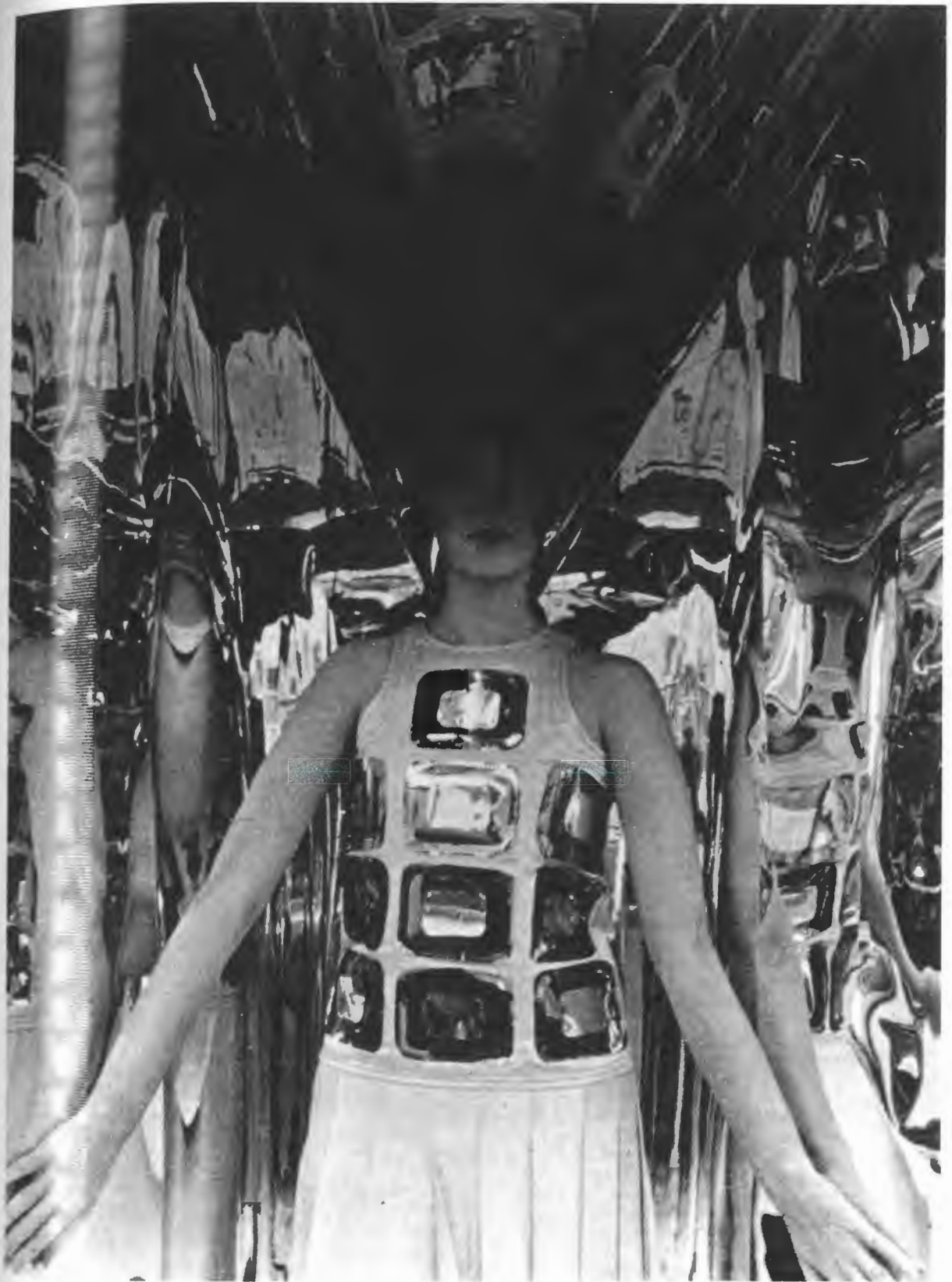
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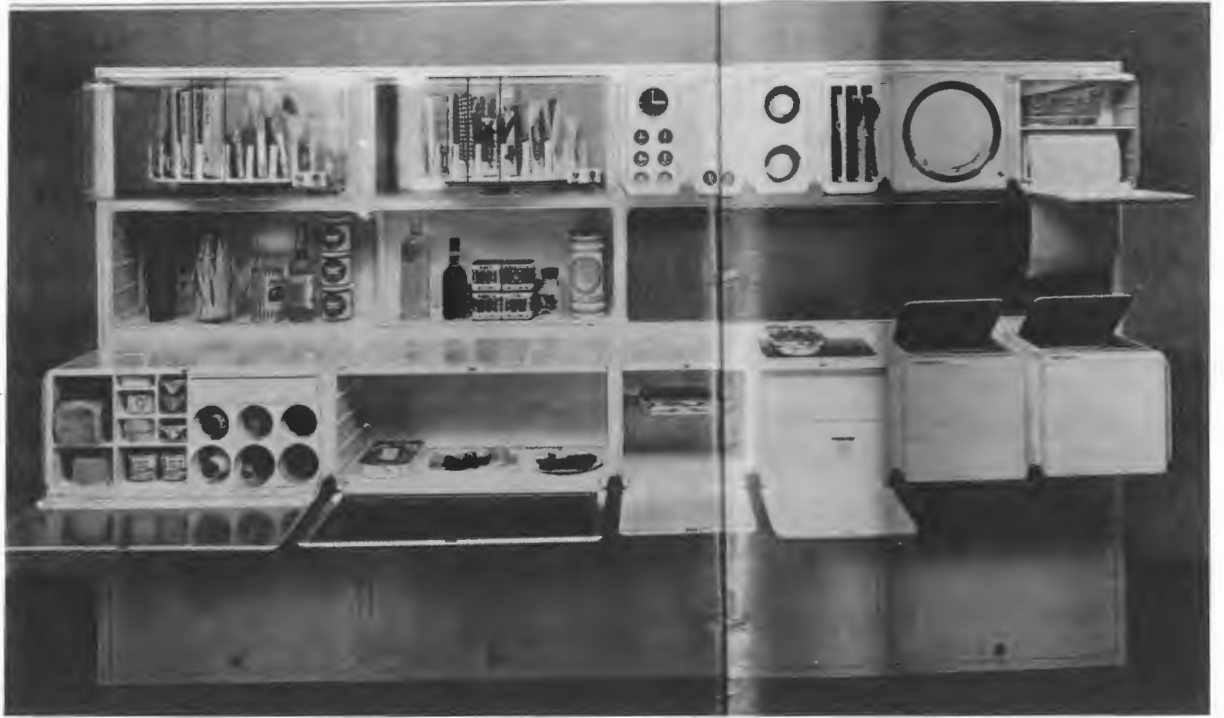
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59

AMAZING
ARCHIGRAM 4

ZOOM

ISSUE
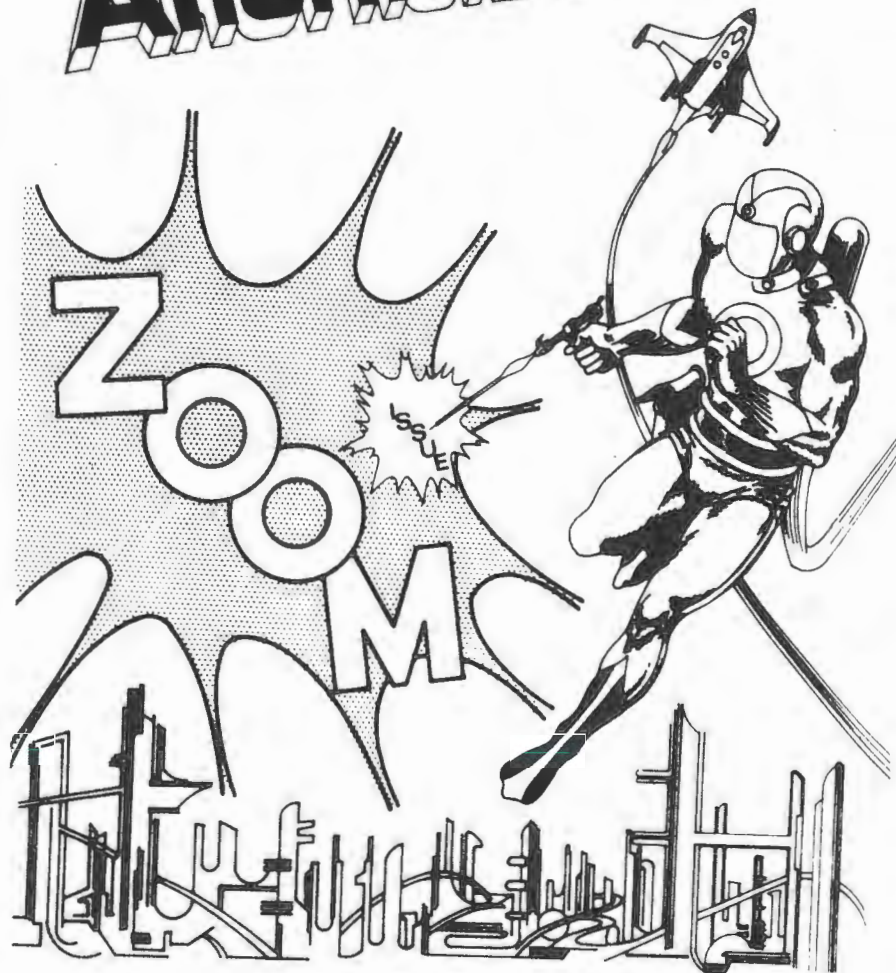
ZOOM!

SPACE PROBE !

THE YEAR IS 2000! CIVILIZATION AS WE KNEW IT HAS PROGRESSED ALMOST BEYOND RECOGNITION!
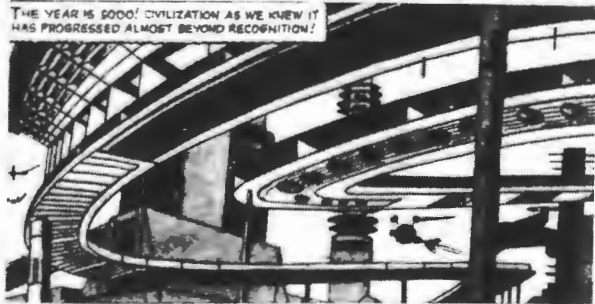
A respectfull salute in the general direction of Roy Lichtenstein and we're off---ZOOM ARCHIGRAM goes into orbit with the SPACE COMIC/SCIENCE FICTION BIT. Interesting is the fact that these goodies produced outside the conventional closed architect/aesthete situation show a marked intuative grasp of principles underlying current in-thinking.Which is great----

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PUBLIC

Auditorium, Bath: air-view of concrete base showing the six
jack positions around the periphery and the stage at the top of
the picture with fire escape routes on each side

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SECTION 5   CHAPTER 13   CONCLUSION

It has been said that Pop design and culture functioned outside reality in a two-dimensional world. The success of anti-Functionalist design was certainly most consistently strong in the area of two-dimensional graphics — illustration, packaging, record sleeves and posters. This is not to relegate it to a world of unreality however, as these were the visual accompaniments of pop culture itself and reflected a whole life-style. They contained a coded message of the values of a society which were those of a post Functionalist era. If the designs were unsuccessful then so was the society that produced them.

The importance of pop design lies in its antithetical nature, opposing, as it did, the values that preceded it, and providing tentative alternatives. The greatest problem lay in the unification of pluralism, and a desire for a new consistency. The turn-over of design that occurred in this period was a symptom of the constant need for change and at the same time a need to find a constant structure which would accommodate such surface change. The turn-over of symbols indicated a search for meaning which would function outside the object and its limited life-span. The search was for the most part an intuitive one on the part of the designers and the public who searched for security. Unable to find it in the rapid acceleration in symbolic turn-over, a compromise situation was arrived in which two major streams can be recognised. The first was the unification of Functionalism with some formal features from pop, thus giving lip service to the humanizing element. This is demonstrated by Braun and other mainstream designers including bright, usually primary colour in their designs. This was enforced by the revival of 'Art deco' which was ultimately no more than a humanised Modernism, in which style had asserted itself over function. A new formalism was thus developed. The other stream found a design alternative, in the craft revival and the rejection of industrial supremacy. This was reflected in the ideas associated with ecology, ad-hocism and self sufficiency in the late 60's. Both streams developed from ideas that had been thrown up during the pop period but which evaded the real problem of pluralism by looking back to past models.

It has been shown how, in the architectural sphere, pop provided an interlude in the search for a redefined Functionalism, by forcing apart form and content, and introducing a new external model which allowed fresh views to be seen. The result, is however, in practical terms, less of a move from the Modern Movement that may have been imagined. Neo-Functionalism in the form of services or world resources determining form have once more evaded the question of aesthetics in architecture which pop was attempting to confront.

This is reflected in other three-dimensional design fields. Furniture has returned to the chrome and steel, and decorated fabrics of the Bauhaus period. The Bauhaus exhibition in 1968, was the first real confrontation incurred between Modernist design and the British public and it showed them how little they had really understood it.

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The influence of pop has ultimately been one of modifying taste — the desire to remove the notion of taste and aesthetic judgements from design has been totally unsuccessful.

Pop and semiotic theory, however, provided a real possibility for a new design philosophy, because they both assumed pluralism to be inevitable and set out to find an analytical structure to encompass it. The difficulty comes from the move from theory to practice and in the period in question, as has been demonstrated, the only real transference from theory to practice occurred on the level of formal influence, and adoption of motifs from pop art. The use of symbolism, the form/ content dislocation and other themes developed in post-Functionalist theory were included intuitively on the designs of the period. Semiotics serves as a useful analytical tool and structure, therefore, but had little if any influence on practising designers.

The implications of this study for design history in general are many. The question of the problem of a definition for design in terms of production and design as finished artefacts is raised. The former led to the tautological arguments of the Design Methodologists which proved inadequate as a philosophical base, whereas the latter introduced the ideas of a study of design in terms of objects and their social significance. Even this, however, failed to provide a rule as, when it became obvious that what defined design was an attitude rather than qualities of the objects, the role of the object became diminished and design became equated with behaviour and events. It quickly became evident that design is a relative term defined according to predominant stresses in the flexible structure that supports it which is composed of industrial production, (including the human role involved whether by designing or making the object), the design profession, and the role of objects in the environment and their effects upon human behaviour patterns. The history of design has to assess the defining qualities of design at a given point in time. This in turn determines and is determined by the material through which this is revealed.

Design history contains a primary function therefore of defining design within a given context. It also serves to stress the meaning of design in social and cultural terms by determining the role that it played in relation to the social and cultural history of the period. This shows that design is important not only for the design profession who are inclined to be concerned only with specialised design criticism and cannot take a broader view of the matter to the point of questioning the prevailing philosophy which maintains design. Design history, by taking a wider view can do just this.

What emerges from this particular historical study is the close alliance between theory and design in a given period. Whether or not one actively determines the other, they stem from the same intellectual and emotional root and therefore illuminate each other. This is true of both Functionalist theory and design and anti-Functionalist theory and design. In each case the theory provides an analytical structure for the latter.

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This continues into design history in that the structure must be the same throughout. This means that when Functionalism became inadequate the notion of formalist design history also became redundant and meaning was sought in design, in design theory and in design history.

The theory and design of the 1950's and 1960's serve, therefore, to highlight many of the problems encountered in any design study, analytical and/or historical and provide a possibility of examining them.

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                        December 1966

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                        in Architectural Association Quarterly, Vol 6, No 2. 1974

Spender, S.   Thoughts on Design in Everyday Life in S.I.A. Journal, 1959

Sylvestor, D.   Art in a Coke Climate in The Sunday Times Colour Supp. Jan. 26th, 1964

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Whitford, F.   Paolozzi and the Independent Group in the Catalogue to the Paolozzi
                    Exhibition, Tate Gallery, 1971

Willoughby, T.   A Rational Approach to Design in The Architectural Association
                    Quarterly, October 1970

Wolf, M.   Life-Enhancing in the S.I.A. Journal, January 1965

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EXHIBITION CATALOGUES

1946	Britain Can Make It	V & A, London
1951	Festival of Britain	South Bank, London
1951	Black Eyes and Lemonade	Whitechapel Gallery, London
1953	Parallel of Art and Life	I.C.A. Gallery, London
1955	Man, Machine and Motion	I.C.A. Gallery, London
1956	This is Tomorrow	I.C.A. Gallery, London
1957	An Exhibit	Hatton Gallery, London
1959	Place	R.C.A., London
1959	Onwards... The Young Contemporaries	Whitechapel Gallery, London
1960	Designers of the Future	Heals, London
1962	Bridget Riley	Gallery One, London
1963	Bridget Riley	Gallery One, London
1963	Mucha	V & A, London
1963	Living City	I.C.A. Gallery, London
1964	The New Generation	Whitechapel Gallery, London
1964	Jasper Johns	Whitechapel Gallery, London
1965	Craftsman Exhibition	Design Centre, London
1965	The New Generation	Whitechapel Gallery, London
1965	Derek Boshier	R. Fraser Gallery, London
1965	British Sculpture in the 60's	Tate Gallery, London
1965	Peter Blake	R. Fraser Gallery, London
1965	Young Sculptors at the R.C.A.	Arts Council Gallery, London
1965	Gute Form	Design Centre, London
1966	Aubrey Beardsley	V & A Museum, London
1967	Recent British Painting	Tate Gallery, London
1968	Mackintosh	V & A Museum, London
1968	De Stijl	Camden Arts Centre, London
1968	Bauhaus	The Royal Academy, London
1970	Qu'est-ce que le Design	Centre de Creation Industrielle, Paris
1970	Modern Chairs	Whitechapel Gallery, London
1971	Paolozzi	Tate Gallery, London
1971	Richard Hamilton	Tate Gallery, London
1973	Mary Quant	London Museum, London

Periodicals

Architectural Design

Architectural Review

Architectural Association Quarterly (formerly Arena)

Ark

Daily Telegraph Supplement

Design

Design Quarterly

Form

Industrial Design

Living Arts

New Society

Observer Colour Supplement

Queen

Stile Industria

Sunday Times Colour Supplement

The Architect's Journal

Town

Vogue