Contemporary printmaking: the nature and development of an identity in technique and form

This item was submitted to Loughborough University's Institutional Repository by the/an author.

Additional Information:

- A Master's Thesis. Submitted in partial fulfilment of the requirements for the award of Master of Philosophy of Loughborough University.

Metadata Record: https://dspace.lboro.ac.uk/2134/10482

Publisher: © M.P. Talbot

Please cite the published version.
This item was submitted to Loughborough University as a Masters thesis by the author and is made available in the Institutional Repository (https://dspace.lboro.ac.uk/) under the following Creative Commons Licence conditions.

For the full text of this licence, please go to:
http://creativecommons.org/licenses/by-nc-nd/2.5/
<table>
<thead>
<tr>
<th>AUTHOR/FILING TITLE</th>
<th>TALBOT, M P</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCESSION/COPY NO.</td>
<td>007258/02</td>
</tr>
<tr>
<td>VOL. NO.</td>
<td>CLASS MARK</td>
</tr>
<tr>
<td></td>
<td>LOAN COPY</td>
</tr>
</tbody>
</table>
Contemporary Printmaking: the Nature and Development of
an Identity in Technique and Form

by Michael Patrick Talbot

a Master's Thesis by Research

Submitted in partial fulfilment of the requirements
for the award of Master of Philosophy
of the Loughborough University of Technology 1984

© by M.P. Talbot
This is to certify that the author is responsible for the work submitted in this thesis, that the original work is his own, and that neither the thesis nor the original work contained therein has been submitted to this or any other institution for a higher degree.
Abstract

The dissertation sets out to consider the development of printmaking forms, during the course of the twentieth century, in order to trace the conceptual and technical concerns which, in particular, have defined the nature of a contemporary identity in relation to the visual arts as a whole.

It is proposed that printmaking and printforms possess a unique identity because they form a link between art and a technology in which certain common denominators are a fundamental part of both. Therefore the nature of this identity is particularly of its time in relation to a contemporary technology.

This proposition is pursued through the consideration of a prevailing situation which specifies, in general terms, those concerns which currently define the nature of the printform. An historical observation isolates particular activities and events which have played a primary role in structuring both conceptual and physical developments. This is followed by the consideration of a contemporary situation which correlates the outcome of the historical process in relation to current activity in printforms and technique.

A dialogue relates the contentions of the main argument to the concerns of the practical print works produced in parallel with the dissertation.
Introduction

The intention of this thesis is to investigate and discuss the manner of development of the 'editioned-multiple' art forms which have been produced during the twentieth century in the areas of printmaking and low-relief forms. (1.) The hypothesis is that the nature of this art form - or forms - has developed in a manner which is peculiarly a part of its time in relation to the combination of esthetic and technology inherent in its ideological makeup, and in its relationship with the visual arts in general.

Initially, the principal concern is to consider how the whole and general area of work has evolved through a resolution of those developments in the visual arts which engender a fundamental relationship with the print/multiple and have produced a cumulative, and accumulative, result over a relatively long period of time, that is approximately eighty years.

Inevitably, when considering ideas relating to print it is impossible to divorce this area from the other visual arts - in particular painting and to a large extent the graphic arts. Where necessary, therefore, reference will be made on the basis that this encompasses a view of the visual arts whose configuration, in relation to print, is interwoven on different levels of interpretation. Although most artists tend towards a particular specialisation it is the understanding that there should be no fundamental intimidation or barrier concerning movement or flow from one discipline to another which is central to this consideration of how print-multiples have developed. (2)

As the essential qualitative concerns of art (subject and format aside) are intrinsically of the same order, whatever technique may be used, there is a common ground upon which this relationship exists. Of course, this does not mean that there are no violent disagreements as to purposes and philosophy. For example, the figurative and the abstract might be contentiously opposing forces but their derivation is from a common concern for 'art' and its ideologies; in this respect there is a common ground. As such
this provides a point of referral upon which to base a cross-linking relationship of reference.

However, it is considered that it is possible to isolate print, and related multiples, in respect of their relationship to the growth of contemporary concerns within that specific field. Viewed over a period of time it seems apparent that earlier developments and possibilities have been re-assessed and re-vitalised because conceptual avenues and technology have developed to a point where fresh interpretations are possible, and desirable.

As art forms have developed during the twentieth century there have been shifts of influence and balance in those relationships relating to editions and multiple print-works. In particular there has developed a much more intimate cross-fertilisation of the use of media and techniques so that boundaries between specific disciplines have become less confining and restricting, at least in a technical sense. As this is a two-way process printing, and print related experiments in technique and form, have played a part which is of a singular nature in relation to its contemporary evolution. In many respects print-making has responded to a particular aspect of its contemporary environment e.g. technical advances which other art forms could not do in the same way, simply because that same relationship did not, and could not, exist.

It is contended that this development represents a situation within the visual arts which has not existed before on such a scale, and in such a form, because the rapidly developing technology which has extended its base and which in itself, to a large degree, has created a period of upheaval of forms and ideas in the visual arts which had not existed before in such magnitude and with such diversity - and received incomprehension - (that is, in particular, the misinterpretation of the use of techniques which transcend the fine art/graphic arts boundaries where association with, or of, one or the other precede and preconceive any lateral transposition of form and concept).

As a working environment this situation provided the means by which concepts and ideas could be developed in a form which related directly, not only to a specialised and developing technology, but also to a social infrastructure heavily based on (and thereby
dependent on) elements of this same technology.

As a first stage in the assessment of how printworks and multiples have developed a consideration of current concerns, but not specific activities, will provide a basis for further consideration as to how developments have reached this stage and to where they have led, or might lead in the future.
The Prevailing Situation

During the twentieth century the printed/multiple edition art form has made the transition from a relatively minor form to a major area of influence and activity in the Visual Arts which, by its own nature, and those events and ideas which have shaped its development, has played a particularly significant and exclusive role in the development of the contemporary arts.

There has been a ferment of activity in those areas defined by the terms 'printmaking', 'editions' and 'multiples' (in this case that is those related to printmaking). An ideology has developed from a generally practical and 'commercial' view of the use of printing to one of an expansive, open-ended art form ranging from intimate, hand-worked blocks to multi-media mechanical productions. This range of application in producing fine art printworks engenders a responsive relationship within the Fine and Applied graphic arts which has a profound effect on the manner in which print influences other art forms, although those influences may not be directly apparent.

Throughout their history, essentially a twentieth century phenomena, printed limited edition artworks have in the main tended to be of a secondary ranking to the major visual art forms, that is essentially painting and sculpture. Most usually prints have been a development, whatever their intrinsic value or quality, from or of either an artist's primary activity or a style which has evolved through another medium. This still holds true. Many artists use the print/edition as a means of exploring a graphic imagery which is polarised by their major work.

What are the factors which differentiate print from other media? Scale is perhaps a particularly obvious concern which has not evoked an entirely satisfying response within the form of printmaking. Essentially, a relatively small scale seems to be endemic to the form. Although there are certainly technical determining factors related to the possibilities and function of scale in print/multiples it is an area which can lead to conceptual interpretations which play a part in defining a role and identity.
There have been individuals who have produced large printed works but essentially their nature has simply been that of an image (or style of work) which has been blown up in size. Making the image larger does not effectively deal with the possibilities of 'scale' as opposed to 'size' - which are quite different considerations in this context. An example of the conceptual possibilities of scale lies in the use of photographic and graphic techniques. The notion of using a photo-mechanical half-tone image and progressively enlarging that image results in a distortion and re-interpretation. In this case the scale is almost infinitely variable depending on the original starting point - and is also endemic to the nature of the techniques used. (4)

This is not an interpretation which is exclusive to print but it has evolved through the use of photo-mechanical processes, the conceptual capabilities of which have been developed through printmaking - which has become progressively more involved with these techniques.

There is a long and continuing tradition of small prints - wood engravings for instance - which relate to a limitation imposed by the materials being used. Another parameter of 'scale' is the size of the edition being made. A copper printing plate may wear, lose definition, and limit the size of the edition. These are intrinsic limitations which may play no part in the conception of 'the print' itself.

However, it is in the nature of contemporary visual arts that form and format are investigated in an attempt to define, or re-define, characteristic forms and intentions. A consideration of not only the form of the print but also the structure of the edition creates a situation which encourages an increasing breadth to those areas concerned with print and print derived works.

The point has been reached where a relationship has evolved which is a reciprocal duality. Rather than printworks being a derivative of their contemporary art forms (technique aside) they have asserted an identity which is feeding into other areas of work, in both technique and concept. To some extent this leads to a merging
of form but also a refreshed capacity for the potential of the particular work.

Again, this situation is, in part, a result of the re-alignment of technique, or technology, which artists working exclusively with print/multiples (and derivations) have developed as formal concepts of working and experiment. This has become identifiable as part of a structure which defines a primary identity.

Another of the major factors which has led to a re-evaluation in the form of printmaking is the establishment of 'commercial', but fine art based, print studio/workshops. The technical and collaborative expertise developed by these studios has essentially developed from a demand to produce works which used refined or complex contemporary techniques, particularly those derived from mechanical and photo-mechanical processes. There has been a tradition of printmaking studios using traditional techniques such as etching and engraving, but lithography and screenprinting - evolved essentially through rapid technical innovation and development - have, in some respects, created their own milieu. This is particularly so in respect of screenprinting (the essential qualities of lithography relating much more immediately, at least in a physical sense, to drawing and painting) although the assimilative and repercussive effects of developments feed into print generally.

The demand for a sophisticated development of screenprinting has led to the institution of technician (or printmaker) assisted printings which, combined with non-autographic photo-mechanicals, has led in some instances to the complete absolvement of the artist from any actual physical part - aside from perhaps a physical presence - in making the print. The role of 'director' becomes a mantle for utilising a whole range of skills to achieve an end. However, in this respect, the print is still visualized and constructed by the artist. Neither is it impossible, bearing in mind the technical facilities which are now available, for a print to be produced at a distance - but in a far more sophisticated manner than has been previously possible using the capabilities of computers and visual relays for instance. The ethical problem which this generates is the distinction between 'production'
and 'reproduction'. There can appear to be a very fine dividing line between the two which leads to misinterpretation. There is no doubt that there are original prints which have been produced using methods and means which lie very close to commercial reproduction (both in form and technique) - hence the potential confusion of intent. Indeed, as a work may in itself be, or contain, a comment on the nature of these processes then the issues become further complicated and distinctions can be contentious.

The necessity to define parameters is also an intrusion on the creative use of techniques which have overt connotations of mass commercial reproduction. Unfortunately, although these influences may not concern the artist/printmaker, (they may well be a stimulating source of material and reference) the overall picture of contemporary printmaking and editions will be related to these associative elements although the concerns and products may be quite different.

It is unfortunate in the nature of printed works that confused distinctions can lead to a devaluation (in an esthetic sense) of prints which are concerned with making artworks from the process, as opposed to prints which reproduce another form. This is especially so since the distinctions are quite clear. This process has now effectively developed as an unexceptional manner of production in this and other areas of the visual arts. Indeed there are many historical precedents and antecedents outside the particular field of printmaking which illustrate a theoretical justification for this manner or working. Problems have occurred because the context in which the process is being used has changed dramatically. The contributing elements have been generated from within a society which has undergone radical developments as a result of expanding technology and communications. This process has altered the balance of the visual arts to being print forms into a position of much greater significance - both in relation to its audience and to other art forms.

One of the most significant of these, if not the most significant in terms of quantity and variety, is the printed image. Or images which are disseminated in a form which relates to print. Even
images which appear on a television screen, albeit moving, have a direct relationship with print — that is a two-dimensional surface image formed by coloured particles and dots. The different technologies which relate the two together form a visual link when viewed. Although there may, or may not, be a direct comparison in terms of intellectual and esthetic content — or even more particularly picture quality in a technical sense — there is an assimilation of form. There is a contact point of association with elements of mechanical picture making, the construction of which is particularly of its own time.

This proposition may be more immediately apparent with the comparison of various forms of printed material although the same thinking applies to photography, upon which so much of print and printmaking depends, where the associative elements are likely to be more immediate and obvious even within the broad span of usage which this involves.

As the philosophies involved in the Visual Arts have developed and changed, the conceptual activity concerned with print related works has also developed radically but within a format which expresses a nature of, if not conflicting elements, then certainly disparate elements of auto-mechanical, autographic, painterly and constructive forms and imagery. The resulting melee has generated expressive forms of controversial nature (both within and outside of the practising art world). They, in their turn, have produced a reactive process feeding back into the visual arts generally on both a physical and a conceptual level. So, for instance, traditional graphic techniques such as etching assimilate photo-etched plates and a commercial process is developed as part of a format (and this form can be used outside of a pure etching situation as a multi-media element). Or physically printed elements might be utilised as the basis, or base, of a painterly form and are most likely to consist of a photo-graphically produced image. This process integrates the nature of that technology — both image and form — into a work. Most important is that 'climate' which has developed from this interaction of many parts for the fulfilment of ideas which utilise its capacity.
The print/multiple is particularly significant in the manner in which technology and concept have been integrated into the visual forms and structures of printworks in a more specific and cohesive manner than other traditional art forms - whilst at the same time integrating these traditional forms into its own shape since the basic processes and the way that images are formed is essentially the same.

Contemporary print multiple art forms have evolved from a base considerably influenced by techniques developed by artists able to see the potential of technical developments in response to their view of the contemporary environment (in society and art). This is, in a particular sense, quite different from painting, and even traditional print methods whose history in the form that they are presently used is essentially short.

Since the 1920's there have been movements which have utilised the technical capacity of media, essentially developed as a commercial proposition, to produce imagery and develop ideas which derive from the same context of involvement with an immediate present. (5)

It is contended that the circumstances and combination of situation, technical development and an environment related to this, very directly coupled to a rejection of repressive historical values in the visual arts, has led to and provided a situation within which, and part of which, the print/multiple edition has been able to flourish and develop a more forceful identity, particularly to itself.

The printed edition, and derivative forms which use the same techniques as a base for different end results, provide a representation of development in the visual arts. It has been in the nature of printmaking to bring together many elements of unique and relatively rapid development. Not only does it reflect graphically the range of artistic activity but at the same time produces a double mirror image.

It reflects issues and situations but is itself an intrinsic part of a society, different from painting for instance, which generally finds its place in the museum/gallery. Printworks,
although part of that same situation, are more approachable in both their physical form and their immediate context. They have a graspable quality, in a physical sense (although this does not necessarily make them any more easy to understand as 'works of art' in the context of intellectual or conceptual forms) because they mostly present a familiar presence which is not intimidating. Being constantly surrounded by graphic images reduces the trauma of confrontation with printed artworks and should allow a more accessible situation to develop. With the rapid build up of both technical influences and avant-garde conceptual thinking, the philosophical stance of the arts has undergone rapid changes in movements which has caused upheaval and dissent. The printed image became part of a situation which allowed, even encouraged, the assimilation of activity, ideas and technique which evolved directly from the essential qualities of an age which, apparently, was increasingly dependent on a technological infrastructure.

Potentially the medium, in all its various forms, has a unique ability to assimilate and reflect developments in the sense that its identity is a part of those developments. This has led to re-assessments as to what can, or cannot, be produced or justified as an art form. The machine made image, particularly in respect of photo-mechanical reproductions, has been especially relevant in this context. Until the second quarter of the twentieth century, although the conceptual ideology was developing - reflected in the changing concerns of the arts generally -- the real nature of contemporary multiples had not begun to move towards a cohesive form. When the German Dadaists began to use photography and collage (of printed images) to express their ideas and concerns in a truly contemporary form which could be taken into the streets - and given a political urgency - they were producing work which structurally belonged to its century as well as the immediate period, largely through the nature of the image making process. (6)

Part of the particular nature of printmaking media is that of technique (not necessarily a restricting or inhibiting ingredient) producing a dominant influence on the nature of the final artwork. All printmaking has, by its very construction, a degree of auto-
mechanical content. No matter what the degree of 'handwork' there is always the interposition of block, plate, press, etc. Even the most casual or free interpretation fits into this general format. This leads to the likelihood of inherent characteristics affecting the visual quality of the work and also, from this, how the work is interpreted. Print processes are able to assimilate a great many diverse elements into one physical surface but in a manner which is particularly different from, for instance, a painted surface even though that surface may be produced in an equally sophisticated manner. Whether the artwork is concerned with figurative representation or conceptual abstraction, the visual qualities inherent in using contemporary printing techniques imbue those images with a quality stemming from the same techniques, which relate their existence together. This relationship is more specific, more definable (and perhaps apparently more relevant) than the similarities of painted surfaces.

As contemporary imagery and contemporary forms of structuring images have come together in print form there has been a disruption and fragmentation of values which were derived from a tradition based on thinking which failed to come to terms with new potentials. Ethical conflicts have arisen when artists have used techniques to express visual concepts, regardless of whether their use of these new formats and technology complied with current and historical ideology laid down as canon and dogma. A fundamental illustration of how, and to what extent, this has developed and furthered the establishment of print and print related forms as a primary entity is the growth of unique works produced with an amalgam of print techniques. (7) Selective embellishment of editions is not an unusual practice. (8) Colour changes during a print run (9) have established a format for sets of prints with inconsistent features - and this is taken further with the integration of surface additions which are also editioned, expanding the dimensions of the print and the nature of its identity. (10)

Even more relevant to the establishment of a primary role is the movement towards producing prints which are 'one-offs' -
or singular works which are part of a limited series - where print techniques are used in a form which does not include the traditional, or formal, concept of an edition. Although 'mono-prints' have established a place in the genre of printmaking their identity as such must remain a tenuous one. The end result of this process whilst being on paper, and in that sense a print, is essentially a singular autographic form with limited control. Compared with the overall capacities and character of printmaking then the monoprint, in its traditional formulation, is relatively remote in form - although its spontaneity allows rapid experiment within a limited range which can be transposed using more refined print techniques.

However, considering the concept of monoprints, but used in a more specifically printerly manner or form, can result in works within which it is possible to assimilate the technical formulations of print with some of the fluid capacity of painting. Works produced in such a way can include and use the notations and refinements of print but in a defined format which identifies the work as a print. The print format defines a certain context (in terms of ink surface and image making methods) to which such work belongs but allows the freedom to make statements which can develop as a freer form, possessing the capacity to be open-ended in their development.

Structural concerns perform a complimentary role to the 'one-off' work in a definition, or re-alignment of the role and nature of contemporary print forms. Through a consideration of the printing surface as a fundamental part of the process its significance spans a concern from simply being the best quality surface to accept ink for a particular technique to a three-dimensional extension in forming (literally) the particular orientation of the printwork. Intrinsically, and traditionally, paper has been the substratum of the print in virtually all its forms. Although other materials are, and have been, used the varied qualities of paper - in its surface, structure and pliability - continue to be the mainstay as a printing base. It has the capacity to be re-formed and/or moulded into a diversity of forms which are receptive to the application or integration of print. As such
it plays an ever increasing role in assuming new shapes developed by printmakers concerned with the relationship of print, both to itself and the other visual arts.

Contemporary prints have established their generally diverse identity through the technical progresses developed by artists and printmakers in relation to ideology and style - although many of the most potent and innovative developments, both technically and graphically, have been by-products of some form of commercially inspired interpretation. The technical concerns of the artist/printmaker may be secondary to the figurative or conceptual content and intent of the work but at the same time techniques are developed and adapted to fulfil these demands.

During the twentieth century the rapid changes of movement in the arts, and developments in technology, generally defined the continuing progression of activity related to print. This has produced an art form which in its diversity has matured far beyond the role of a convenient form of re-interpretation or reproduction.
It is not the intention of this chapter to discuss, in particular detail, the total range of twentieth-century printmaking and associated forms. Rather, it is to consider those situations, ideas, and activities which have played a primary and significant role (in the long term) as part of a development which has evolved a broad-ranging art form related to a widely based scale of reference encompassing major technological, expressive, and conceptual considerations which place the printed/multiple form in a context of primary identity as opposed to being a secondary extension to other forms of art media.

As the twentieth century began, there existed a catalytic situation poised for change in terms of a social and technical infrastructure which would provide a scenario and the means by which a radical dislocation in the direction that the arts were to develop and which, by their very nature, stimulated the questioning and participatory role of the visual arts.

Techniques and forms of making visual images were undergoing difficult and intriguing transformations. Given that new and growing technologies, specifically photography and printing, were responsible for a development of awareness both visually and socially and that the twentieth-century world was contracting partly as a result of new or refined forms of visual communications, then artists naturally responded to this situation.

However, the very nature of the print is an accumulative one in that it can absorb and re-define images (and ideas) in forms whose nature is subject to influences which are a common property. Although new technologies were developing, they did not, in themselves, produce an immediate and new form of expressive image making. Particularly relevant in a technological sense, the advances in the fields of printing and photography provided possibilities and stimuli but not a direct production of new art forms. As the structure of living and the form of many people's lives began to change more rapidly than conventional social structures could fluidly cope with, so there was, in some areas of the visual arts (as in other art forms) a growing dissatis-
faction with contemporary values related to a neo-classical tradition which did not appear to be able to seriously consider the concerns of a changing world. That is within the visual arts at least.

In the long term, the developments in ideology which ensued from this elusive confrontation produced the most radical influence on the printed artwork and essentially the very nature of the editioned and multiple form. From the early part of the twentieth century there seem to be two major elements which fused together to redefine the notional boundaries of progressive twentieth century art. First, a move away from 'real-space' and towards abstraction which began to develop in the nineteenth century, and a more direct involvement with 'real world' forms of visual interpretation and commentary. Second, the pursuit of formal problems and the intellectual embodiment of abstract ideas in visual form developed alongside the new ways of handling the picture-space. This took various forms but Cubism serves as an example where the structural form of the image may owe a debt to the influence of photography in devising new ways of seeing and interpreting human and natural forms - a multiple view. (11) This debt, of secondary importance perhaps to the realignment of form in Cubist works, for instance, is however, one part of an accumulation of elements. The inclusion of found material in Cubist paintings is another element which has had a long term development and significance in relation to print forms. (12) Perhaps far more significant were the collage and photo-montage works produced by various members of the Dada movement over a period of time. In a move towards establishing a mode of working which did not relate to a cultural hierarchy (of art) Dada works in general, and in an attempt to break down formal conventions, developed the use of particularly contemporary forms to assimilate imagery and related ideas.

In one form, by developing and using collage and then photo-montage in a socio-documentary form they introduced, literally, the contemporary world into their work - not only its images but its technology and new visual structures. (13) Although other artists had been using photography for reference since it became
a feasible commercial proposition - Courbet, for instance - in an attempt to sustain some form of notional reality, certain Dada works used this material directly and lifted it directly from commercially printed formats with a much more direct link to the original source than had previously been the case. (They are, however, distinguished from mainstream printmaking in that their intentions were not concerned with confining repressive definitions related to the constitution of a particular 'art' form).

This direct relationship with contemporary images, and the specific use of them, appears in the developing printed form at intervals until its adoption, and adaptation, as a major form in the 1960's. Generally construed as a sudden outburst of frenetic statements during that decade there had in fact been previous and singular examples of this form - the 'Mertz' portfolio of Kurt Schwitters in the 1920's, for example, which combined photographically produced found images with commercial tones, the actual print being produced by using commercial photo-lithography. (14) The character of these works, in both their intent and form, bears a much closer relationship to later and similar forms than do the 'foto-montage' works of, in particular, John Heartfield. (15) A distinction can be made between the use of similar materials and methods of printing but with a different end in view so that is a distinction between a graphic(arts) form and a 'fine art' form.

An assessment of how printmaking, as a whole, has developed is made complex because there is not one single form or movement which ties the issue together, apart from the different techniques. From the beginning of the century the nature and form of prints not specifically related to a 'new technology' has developed essentially as a response to movements in painting or ideas which stem directly from a particular movement in art relating, through the artist, to printmaking. The character of the prints is developed from essentially painterly forms (of their time) although invariably with some concession to the nature of the materials being used. German Expressionist woodcuts emanating from the 'Brücke' (16) and 'Blaue Reiter' (17) groups, together with the French 'Fauves' (18) shared a common energy towards the medium despite their
differing backgrounds and traditions. New found interest in the expressive possibilities of this medium formed the beginnings of a synthesis of style and form which encompassed old and new techniques. Essentially, the need to experiment with print through woodcuts (an ancient, traditional form) and also lithography (a relatively new technology) in the same expansive manner defines a point of departure leading towards the open-ended structure of current printforms.

It is possible to perceive two manners or groupings of art work developing during the twentieth century with a radical division based upon those opportunities which technology provides. If, for example, a comparison is made between the movements already considered there is a distinct contrast between prints which relate to an expressive, autographic form and those which relate to a technical and mechanical derivation. That is in terms of the way in which the prints are made and in relation to the inherent concerns of the work. There can never be a total demarcation between any notional boundaries which relate to the visual arts but a perspective relating to this parallelism allows for a clearer view of separate developments of print related forms which have developed into a conceptual whole.

A common factor concerning and affecting the early twentieth century print form was, and still is, the changing nature of commercially orientated printing. Easily dismissed as 'inferior' - in relation to art - technical advances in the printing industry meant that reprographic illustration with cut blocks and engraved plates became outmoded and uneconomical. These techniques were revitalised by artists exploiting the relationship between new forms and a re-assessment of traditional technique or process. The regeneration developed what had become a generally mechanical process as a means of fulfilling expressive graphic forms. Subsequently this process was generally reversed in that specifically commercial (or technical) developments, as they occurred, eventually became starting points for new approaches in form and concept.

Without overstressing the relationship of technique via technology in relation to printed forms the environmental changes brought
about by this technology construed to produce an atmosphere which
drew together elements within the arts which were equally diverse.
Although the technology derived visual material could provide
a stimulus and means, the influence of science and contemporary
thought are also part of this construction - and hence the movement
towards a more philosophical and intellectual approach to the
artform. (19)

Literate forms also played a part in changing and refining the
nature of prints. It is possible to construe a connection or
derivation from the influence of periodical and book forms -
again there is a contrast between German activist art periodi­
cals (20) and related publications, which, have a more graphic
basis, and the illustration of classical texts with prints by
French artists, although the nature of these prints was expressive and
lyrical. This form provided an introduction to printmaking for
many artists but illustrates the essential polarities of the
two approaches. Whilst it would be difficult to maintain that
the particular form had any specific or finite influence on French
artists (essentially painters) in the production of later prints
in their own right, it did stimulate an interest in print, the
techniques involved and particularly, the use of print studios,
e.g. Mourlot Freres (Paris), designed to meet the needs of the
artist.

However, the nature of printmaking and its usage in Germany (or
by artists of that tradition) bore a marked contrast to this.
It is possible to perceive a gradual insinuation of elements
introduced into the forms and structures of artworks through
found and related items so that words and letterforms begin to
play, not only a purely visual part, but a sensory and communicative
part additional to this in the processing of the image. This
process forms a diffuse area of common ground for elements which
provide, albeit tenuously, a linking between the elements of
typography in Cubist painting and Dada graphics and photo-collage.
Although the form and intent remain quite apart there is the
pervasive presence of a contemporary milieu, the influence of
which would provoke not only enthusiastic response, particularly
within the field of printmaking, but also an aggressive reaction
in terms of a quantifiable art form which is questioned and restructured.

Dada, being an international movement based as much in literature as the visual arts, and loosely made up of diverse and sometimes incompatible characters, (21) was in more intimate contact with specific contemporary concerns. The diffused nature of its identity provoked multi-level interests whether they were related to the technicalities of a process or the prevalent political situation. The questioning of the 'conventional' or 'traditional' art form as 'anti-art' (22) was in the form of that art - not in the making of art as such. In this sense collage in particular, as well as montage, were interpreted as 'painting' but with different materials. This was obviously in the sense that collage provided a freedom of expression within a contemporary form and with a contemporary material in the same way that painting might. By extending this argument then the same form of interpretation applies itself to printmaking and the nature of its structural development.

The essential point, especially in relation to print, as well as the other visual arts, is that a situation was arrived at which drew together a concept of freedom of attitude and approach to the inception of the artwork. Although movements still developed separately, a reflection of the concerns of individual characters, a scenario had been set for the artist to practice a disregard for the conventional element and a regard for devising a form to best exploit an idea. In pursuing the development of printmaking the nature of this freedom is fundamental in the bringing together of so many elements to provide the inception and basis of a contemporary form and identity.

Even within the boundaries of the Dada affiliates it is possible to see a marked contrast between the photo-collage related works of Max Ernst, (23) which were concerned with reorganizing a sense of reality in a more pictorial sense pointing towards Surrealism, against that of the hard-edged Berlin amalgams of Raoul Hausmann, John Heartfield, Hannah Höch and others. (24) It is in the nature of the print that there has been a defined structure of 'traditional' and 'avant-garde' interpretations of use within
the format of the various media. This context can be further defined as between the conventional use of a traditional form and one which uses the conventional form but applies it in a new manner of interpreting the picture space and, in so doing, expanding the capacity of that medium. In the progression of many movements since the turn of the century, in particular the movement towards abstraction, the capacity of traditional techniques such as engraving and etching has been developed and expanded through these new applications but still remaining essentially within a traditional structure.

The development of a tradition - or a conventional form - has taken shape in the 'limited edition' which is an intrinsic part of the print format. This has established a format within which the media has developed, with artists and printmakers exploring the nature and limitations of their materials. Therefore, been individuals who have extended the configuration of their work but within the quite particular boundaries of the block or plate. The nature of that work extends to a relationship of interpretation, in print form, of issues or forms which were essentially evolved from their contemporary painterly concerns, or at least the prevailing movements, rather than the nature of the printmaking form itself. Within the format of the print 'edition' it has been possible to develop fresh interpretations of that form in a visually orientated sense relating to line, tone, volume and colour. Taken as a particular example the techniques of etching have developed, within the confines of the etching plate, as a complex and sophisticated medium - but that development has resolutely remained within the form of a traditional identity although new ways of forming and considering the plate surface have been devised.

As a practitioner of this process Stanley William Hayter, whose work and influence transcends the first and second halves of the twentieth century, provides an archetypal example of an artist and influential mentor developing the concept and execution of a particular medium, but within a clearly defined format. (25)

The international influence of Hayter and the 'Atelier 17' studio/workshops which he established can be assessed in two ways. One,
in playing a major role in establishing printmaking as a consider-able and primary form of expression because of his total involvement with the use and development of etching and engraving processes as an expressive artform. Two, in the development of a defined theoretical philosophy concerning the nature and form of the print which provided a foundation for later developments, even if only as a standpoint from which a reactive process might develop.

Although working from within a specialised area of technique Hayter nevertheless considered printmaking as a whole entity and in this respect constructed part of a bridge between the concept of print as an adjunct to other major artforms and printforms as a major and primary form in their own right. This contribution to a cohesive development of printforms is as considerable as the influence, by example, of other artists concerned with printmaking in a purely practical form.

If the year 1940 is taken as a staging point in the continuing development of print forms it is possible to propose an evaluation of a situation which was to undergo radical changes but for which the preliminaries had largely taken place. Printmaking itself had achieved a position within the visual arts which gave it a viability and credibility because a format had evolved which defined its nature. The notion of originality, that is prints which were conceived as such and evolved out of working with the materials, had essentially been asserted. Perhaps the most important consideration being that associations with the nineteenth century stigma of stale, mechanistic reproduction had essentially (if not entirely) been eliminated as the creative impetus of artists and printmakers had taken the print in new directions. However, there was still a problematic situation which consisted of artists, many of considerable reputation, condoning the reproduction of both paintings and original prints - but by skilled craftsmen using hand printing techniques to make both plates and print and not by photo-mechanical reproduction. The nature of these methods did not, in any way, assist the role of the artist/printmaker concerned with asserting a primary role for a method of expression (albeit that the quality and content of
these reproduction prints might be considerable). Nor did this process help to clarify the situation with regard to the use of photography and photo-mechanical techniques used to make original prints - a form which had yet to make its major impact on printmaking.

At this stage what did exist was the potential for printmaking, through the amalgamation of the various conceptual and technical developments evolved since the turn of the century, to emerge as a medium with the capacity to bring together the impetus and energy of new art movements, photography, collage, construction, technology and communications whilst not repudiating the traditional values associated with technique and craftsmanship.
Radical Changes in Identity

At this point in the development of the visual arts printmaking forms were again moving into another major phase of realignment. The necessity for many artists to leave the European continent in the 1930's meant that their resettlement, particularly in the United States, brought about a new interaction between not only artists outside of a European tradition but also the whole ethos and activity of American culture and a rapidly expanding print technology. American artists, although they may have been familiar with European work for some time, could now come into direct working contact with important figures in the development of twentieth century art. The face to face relationship which this situation engendered meant that the exclusivity (but not the content) of European work became diminished and a direct contact with these influences became a possibility. As the centre of Western art moved away from Paris (and Europe) an interactive process began to develop which was far more positive than could have been possible previously.

It is possible to see three major factors as defining the seminal growth of printmaking in the United States which were eventually to have major repercussions on a global scale. First, the introduction of printmaking to artists working for the Works Progress Administration Federal Art Project during the depression of the 1930's. This project brought together artists of considerable diversity - and hence the interaction of diverse ideologies (e.g. figurative and abstract) which were to reach a maturity in the next decade. It also instigated the very beginnings of a new awareness of printmaking forms which, although it would take some years to mature, marked the beginning of a transition which moved printmaking away from its still traditional craft derived base and into the realm of experiment and new technology. Second, and something of an offshoot from the first point, was the development of the screen printing process. By 1940 a basic technology had evolved which provided the means to print (or stencil) large areas of flat colour but the form of this process, an almost totally commercial development, bore no inherent relationship to traditional techniques in a directly autographic sense.
At this stage, although it was used by a very small number of artists, (28) conceptual developments relating to image and photo-technology had not reached a point where the screenprint would, or could, assert its particular identity. However, the concept of using a 'commercial' technique in a fine art context was established - albeit tenuously. The associations between screenprint and commercial technology were, however, to retain their significance in the much longer term as the nature of the medium was one which ultimately could assimilate the nature of other forms, and not only those related to print but also painting, photography and to some extent sculptural forms. In this respect screenprinting was to become a much more expansive, or expanded, medium than any other print technique.

The third factor in relation to a growing awareness of printforms on the American continent was the establishment by S.W. Hayter of the New York 'Atelier 17' studio. This physical move essentially brought the concerns of European printmaking into the practical perspective of American art. It is reasonable to assume that it must also have had some influence in propogating the division, between the printmaker and the artist/painter/printmaker where for the former the print was a primary and exclusive form and for the latter it formed a secondary occupation pursued at varying intervals. Although Hayter had developed the engraving and etching processes as expressive mediums with their own particular characteristics this also formed a certain degree of insularity, if only at a practical level. The problem is not one which can ever be entirely resolved if the technical use of a print medium provokes a dogmatic or systematic response denying that medium (or its derivatives) the capacity to expand beyond its conventional limitations.

The identity of printmaking was still involved in a transition of values which was for some time to be delineated by the activities of painters whose concern was not for the 'integrity' of a technique but for the manner in which it might be manipulated into expressing their ideas and concerns relating (for the most part) to painting. In this sense it was possible for printmaking, as an entity, to develop a stage further in that through the influence of
movements from Abstract Expressionism to Minimalism each artist making a print, or prints, which utilised the form to develop or demonstrate a visual concept brought nearer the possibility and capability of the printform to instigate a structural identity apart from that related to or derived from other artforms.

Four decades of the twentieth century had seen representational notions of figurative imagery dismembered and restructured in more abstract forms. These concerns had been reflected in printmaking but the most significant distinction between printworks and other media came about through a complete displacement of the figurative so that the nature of the print material imposed itself on the finished work. That is that the identity of the print related not to a translation of imagery but to a redefined 'imagery' related to the structural capacity of the material itself. Although the inherent characteristics of any particular print technique might be apparent in any work the rejection, or displacement of figurative elements allowed a sharper perception of the intrinsic identities of a technique and the artists interpretation of it. In this form, although the style of other forms, e.g. painting, may be apparent it is the effectiveness of using the print technique without recourse to imitating the painting technique which will be of significance in defining the qualitative terms of the work.

This circumstance, or process of style without imitation, defines a major confrontation of interests in printmaking and perhaps indicates the point at which, in a practical sense, a movement away from a defined distinction between printmaking and other artforms becomes a necessity for artists who see the perception of one media format as irrelevant to the manner in which they wish to work. But first there need to be forms - or formats - which are distinguished by being engenuous to a particular concept of printmaking and it is necessary to identify these, in a historical sense, in order to define a clear construction of this development.

The points of distinction at this stage are first, the use of a particular material e.g. wood block, metal plate (or whatever)
in a manner which utilises the intrinsic qualities of that material so that this figures as importantly as the imagery. Second, the movement into expressive or abstract forms of image making which take the process a stage further in establishing a causal identity for the printmaking materials, rejecting an overt imagery altogether, and third, (bearing in mind that this process has taken place over a relatively long period of time) the gradual bringing together of elements into a concept of printforms which develop out of a concern with multiple format works. Whether this last process stemmed from painting or printmaking, painters or printmakers, is essentially irrelevant except in that the process started to develop and continued to expand the capacity for 'printmaking' as a total concept to take a shape which, eventually, would not be defined only because a certain technique was being used but because a work was part of a collective format within which the 'traditional' techniques still functioned, but not as totally defining elements.

A further element, gradually undergoing a transitional process, was the relief or 'sculptural' element in printmaking. Essentially this was developing as an extension of intaglio and block work in that the relief, however it was produced, became deeper and more dominant. The identity of the final print was dependant on the nature of this relief. When blind relief became established as a print form - in this circumstance the inking process becoming redundant - the relationship of the relief shapes and the paper in which they were embossed became the totality of the work. The potential of this form provided a format moving aside from traditional structures of printmaking, the potential being that the common element would be 'multiplicity' and the physical manipulation of surfaces using selective printerly techniques.

Leading up to the next major physical and conceptual redirection in printmaking a general situation of intense activity was taking place, moving into the 1960's, as it became the convention for artists to augment their work, to a greater or lesser degree, with printmaking forms. The varied displacement of this work essentially covered the whole spectrum of subjective and objective concerns but it is significant in that printmaking, especially
in Europe, was being developed as a form which could, much more readily than had been the case previously, disseminate certain ideas to a wider public. This appeared to make sense both theoretically and commercially but also began to pose questions concerning the elements of multiplicity versus exclusivity which became two conflicting elements in the conceptual displacement of the print form and the question of identity.

The 'respectability' of the print as a major art form was further enhanced with the establishment of the International Biennale. (29) Whatever the reasons for inaugurating these 'grand' shows their impact was two-fold. Printmaking was provided with a defined status and the print as an exclusive 'museum' piece became established (or entrenched). However, multi-media international shows brought together a diversity of material which, at least subliminally, can be conjectured to have had some penetrative effect upon the merging of formal structures. The growing influence of internationalism in art and the form of communicative print media creates a situation of cross-reference to which print forms are particularly sensitive because the physical lines of reference cross so many visual and conceptual boundaries. Images and forms are available as visual references for adaptation and manipulation not only from fine art material but also from commercial and media material, and presented in an equally diverse range of forms.

With the increasing popularity of prints the print studio began to proliferate but in a form which was designed to facilitate the needs of the artist. The previous lack of indigenous facilities in the United States appears to have encouraged a wider perspective which fostered the development of a more free-form concept. The nature of an imagery and form which was to have a radical effect on the distinctions involved in making printworks (and a longer term influence on the conceptual form of many image making processes) was to develop out of the work of a number of artists using these facilities, initially in the particular milieu of a contemporary American society. (30)

While artists and printmakers continued to pursue those concerns which had accrued into a contemporary vocabulary, aspects of
new activities began to make an impact which presented, in overall terms, a radical revision of the potential schematic boundaries of printmaking and related forms.

Specifically these were one; the development of 'Pop-art' (so called) two; the adoption of screen printing as a major printmaking medium, and three; the use of photo-mechanical techniques and forms in printmaking.

As far as it concerns the effective long term position of printmaking forms 'Pop-art' is a loosely defining terminology which covers an enormously diverse range of material. The essential common denominator is that the work took as its inspiration, in general, aspects of the material values and images which made up a contemporary world of mass-communication images, but the techniques used to express these concerns were eclectic and not stylistic (that is in terms of the 'movement'). This appears to have been a response - in part - to those particular aspects of a culture which utilised the technology of the twentieth century to satisfy demands which it - the technology - had itself created. There tends to be a resolution of the processed image, an image which has been defined by a social technology and then re-processed by the artists. (31)

From this the adoption of the screenprinting process appears as a perfectly logical development. Having been developed in the United States almost entirely as a commercial process from relatively crude stencil beginnings to a highly sophisticated printing technique all its associations were with the massproduced market image. Screenprinting had been developed to produce those same images and forms, which Pop-art centred on, and not only could it be used to print bold solid colour but also fine detail print from photographic images. Equally significant in the long term was the influence that the associative elements of these techniques had in changing the pattern of use of media in other areas. Although screenprinting made as much of an impact in being ideal for printing hard-edge and colour field abstraction it is in the area of derived imagery where the medium brought about a reconsideration of accepted definitions relating to print in
general and the genesis of a reconstruction which would define a new role for print derived or related forms. In this context imagery and style were derived from materials and images already processed - that is printed - whose source was the mass media. This reprocessing of imagery and form was not exclusive to the screenprint but the nature of the technique was essentially commercial. The associations of this non-'fine art' technique, which in itself had no real history relating to the arts, created a conflict which in some respects still lingers. Theoretically screenprinting emphasised the 'popular' forms endemic to a contemporary culture but in the long term the most important and significant influence which these associations and connotations had was in changing the pattern of use and development within the field of printmaking as a whole.

In addition, the photo-mechanical reproduction of images relates to these forms in a similar manner. Because the use of these techniques interposes a mechanical process (albeit controlled, in some form, by the artist) the definition of what constituted an acceptable form and process of printmaking was brought directly into the creative process. Superficially these techniques produced a degree of impersonal automatism reflecting a contemporary vision but the differing manners in which they have been used relates them to a much wider sphere of influence.

The development of printmaking during the twentieth century has been directly related, in a conceptual sense, to the activity and influence of painting. By the 1960's there came about both a movement in the opposite direction and a further evolution of the print by addition. In order to eliminate both the hand made mark and to present the image in a photographic form (although not necessarily at the same time) images and surfaces were printed onto canvas and other supports. (32) In part, the outcome of this activity was that the structural nature of painting began to undergo radical changes alongside and influenced by activities in the printmaking field. In this sense there developed a reciprocating activity between different media which generated a more open-ended attitude to their roles.
As the structural nature of the image making process was brought into question a further development came about which altered the concept of the 'edition' and the inherent multiplicity of print as variations within a limiting format. The initial form of this developed out of alterations to a basic structure, for example, colourway changes during the run of an edition, the addition of autographic marks, collage or assemblage to the print, as well as different print techniques used together. In an even more definitive escalation of this broadening configuration printworks began to cross a boundary into more overt three-dimensional forms. This could be construed as an additive process arising out of a gradual (and literal) deepening of relief printing processes to gain a more pronounced surface which led into totally three-dimensional structures, which could be related to print forms either directly, because they were assemblages of printed material, or, in a more radical form, because they had been formed as multiples derived from that same tradition in the printed edition. (33)

At the same time, this pervasive breakdown of insularity brought into question, as part of the process, the direction or directions which printmaking could take. Although the qualities and images of mass-production might be extolled in certain works printmaking forms have remained an exclusive form within the fine arts, even the largest editions remaining small in terms of commercial production capacity, so that there has been a reluctance to plunge into the form of real massproduction which is endemic to the character of printing in whatever context it is used.

The form of the 'edition', by the 1970's, had essentially remained unchanged despite the manipulation of relief, forming, folding and book or cased works. The potential qualities of a considered form of edition relate most collectively in the concept of a 'multiple' form; in the concern of numbers by replicative techniques, be it a single one or an infinite number. Conceptual art forms with their considered use of text and also photo-realism, which again reconsidered the nature of a reproducible 'photographic' image, brought into the visual debate the use of forms which relate to printing and printmaking from their earliest antecedents to the most sophisticated technical process available.
A Contemporary Printform

In approaching the definition of an intrinsic contemporary identity which not only unifies the nature and concerns of contemporary printmaking, including those specifically related forms derived from a multiple concept, but also recognises the prevailing concerns of the visual arts which do not easily form themselves into tidily coded structures, it becomes necessary to anticipate a form which relates to an abstract notion of a totality rather than a physical one.

Working from the basic premise that print and multiple forms have, to date, been defined by a relationship developed from the conceptual and figurative concerns of other art forms, primarily painting and drawing, and that the significant advances in printforms are due to the development of techniques which provide both the means and a contemporary emphasis, then this various technology has borne the formation of an interpretative totality which relies on a will and ability to combine and amalgamate. In this way the printed/multiple form attains a position from which it is possible to assert its own particular identity whilst still maintaining that flow of concern with traditional technique - and not promoting a rejection of formal derivations.

As an observed process the field is composed of all those diverse elements which have evolved through specific developments of technique and concept - yet not only do these elements and their practitioners remain a diverse conglomeration but the intentions and forms which represent the broad span, particularly of what have been considered the essentially traditional forms of printmaking, also retain that diversity. The form which this takes is defined by the artist's intentions and not the technique, or techniques, which are used.

The potency of a contemporary art lies in the understanding that the whole diversity of ways and means of making images (or more aptly, forms of portrayal) presents itself and is not confined to purely autographic gestures, from whatever source. Printforms have essentially reached a platform of maturity in that the totality of developments during the twentieth century has established
the capacity for a freedom from the exigencies of restrictive concepts. The emotional and stylistic content of new, or revised methods of working is now becoming apparent and has moved on from the 'basics' of reinterpreting mechanical reproductions and those related subjects and conventions which played such a major role in the 1960's by forcing the reconsidering of what were, then, almost totally commercial techniques and forms.

However, in a sense, these transpositions of form were simply a means to an end - that end being a situation where the technicalities associated with these commercial forms become less overt and, while still being used, can be appreciated within a greatly expanded framework which concerns the format of the image and not the mechanical construction of the print.

As an accumulative process has evolved around the form of printmaking, tying idea and technique together in an equally constructive partnership, certain techniques have come into use which owe their 'eligibility' as a printform to this accumulative process, which has defined printmaking in a larger sense. For example, taking the conceptual concerns which relate to 'readymade' forms and transposing them into print leads to forms which are not a reinterpretation of the original concept but are the result of the accumulation of possibilities which those concepts engender.

In this manner, for example, the use of photocopies becomes formally acceptable as a valid means of image generating process because of the relationship to a philosophy which has evolved through a consensus use of materials and techniques, and in so doing established a credibility of its own.

In practical terms this amounts to a situation which provides the scenario for a more inventive and imaginative form of multiple which is print, or print derived. The input to this is able to feed from every source and resource of all the visual arts, particularly in a technical sense, yet without being dependent on merely a technical virtuosity which is possibly, in part, responsible for the still prevalent antagonism towards certain mechanical techniques when they can be easily recognised as such in particular artworks. However, because printing techniques
of this kind can be manipulated and absorbed, particularly in multi-media work, with considerable flexibility and ingenuity then these same techniques become part of a greater whole and as such their non-autographic identity becomes blurred and less quantifiable. The principle of mechanical and photo-reproduction as valid contributory forms has been absorbed in a contemporary sense and, in its original form at least, presents no equivocal or formal hindrance to artists in performing their activities.

However, if the nature of the arts is in being able to consider visual or metaphysical problems (and/or situations) in a contemporary form then the same recurrent questions are posed. When those forms undergo change, even though a general principle may have been established, the same criticisms are voiced. This might apply to the use of the photocopier - it most certainly applies to the photographic print as a 'printform' and as an 'editioned' form. Although it is probably wise to assess each work on its own relative merits, in relation to printmaking, the issue of photography (seen as a print related form) involves those negative concerns which, in some respects, still cling to the process of photographic forms and techniques used in printmaking.

The basic common denominator appears to be the interposition of a mechanical form, or device, which is construed as limiting or circumventing the artists capacity to make a viable and authentic statement. But this again is a question of degrees. The less apparent the use of the mechanical hardware (or electronic or chemical process) the less contentious the final result - irrespective of other qualities which a work may, or may not, have.

In applying this condition to photography the contentious nature of the process only becomes apparent when the photographic print form is represented and presented as an editioned or multiple form - and particularly when in the same company as prints. Yet, essentially, the same concerns may be involved and many of the same processes may be used. The actual process of making the 'print' is likely to have many similarities, both technically and conceptually, which draw them together and will no doubt gradually undergo that same process of evolution as a technique.
through which printmaking has evolved. Again, through a fusion of creative concerns the boundaries between techniques become diffused. If photographic processes and forms had not been developed through printmaking it is difficult to conceive of photographic prints assuming the role of editioned multiples or even one-off forms in the same context as printmaking. So the role of these chemical and electronic processes benefits and evolves from an accumulative precedent to which they relate on a number of levels.

By using these techniques to produce new variations or interpretations of visual forms a situation which investigates the nature of the print (in whatever form) continues to explore a relationship within both the contemporary setting and also with other creative media. This relationship fosters the breaking down of insular barriers which might limit or intimidate forms which interpret a contemporary view in a contemporary manner - which argument also applies to 'traditional' forms and techniques.

Both the photocopy and the photographic print represent the continuation of what, in twentieth century terms, may be considered as a 'traditional' form of exploration in contemporary technique and format. In so far as photography has played such a singular role in the development of printmaking (and that the roles may now, in part, be reversed as the concerns of printmaking and art can transcend the purely technical facility of photographic prints). The questions posed by the form of photograph as 'print' is probably the most radical concern of contemporary printmaking - in a theoretical sense at least - as it relates to mechanical processes.

Another concurrent but distinct development has evolved from a concern which, initially, would appear to bear a far greater relation to the traditional format of printmaking. This stems from the use of paper as a printing ground. As printmaking processes have been refined so the nature of the support (or ground) has come under closer scrutiny. A particular paper may be selected for a combination of one or more qualities, such as absorbency,
surface texture or its relationship to the nature of the image or intent of the print so that the selection process becomes a relatively complex one. In order to further refine this process artists have, for some time, taken to either producing paper themselves or commissioning specifically designed papers from paper mills which specialise in this type of production. (34)

From this point a process began which has again brought about a reconsideration and re-alignment of the identity of a contemporary printform (and the distinction must be made between the 'print' and the 'printform' where the 'form' is a derivation which alludes to not only the print as a technique but also the associative elements, such as multiplicity, which pertain to it).

Since the structure of a paper surface can be modified during its making it becomes a simple step to use the potential of that structure in partly defining the form of the print. At the same time, if that structure is considered in its own right then it may become a predominant feature. The use of paper pulp to produce relief or moulded forms, as well as paper, develops almost directly from this but the 'printerly' concerns are still generally apparent, particularly in the multiple potential.

The use of print combined with three-dimensional forms is not a new phenomena. Moulding processes can be used to make relief printing plates, deep reliefs or objects which are printed onto or can be replicated and editioned (i.e. multiples). However, the nature of these forms is quite distinct and apart from a conventional form of printmaking surface or multiple element, although the conception is of the same family. In this respect paper, whether it is cut, shaped, folded, or re-formed through-pulping retains a much closer affinity, what might be termed a natural affinity, with the nature of contemporary printing and printmaking. This proposition can conceivably be traced back to the use of blind relief from printing plates (or surfaces) as a re-structuring of the paper surface, and an extension of this form, but one which has perhaps greater concern with the relief than with the print, although essentially the only phy-
sical difference, albeit a significant one, is the lack of ink in the printing.

If paper variants have a particularly important role to play in a relationship with printmaking it is probably within the intimacy which they have shared which has a certain purity of form and development relating them together over a long period of time.

Following on from a consideration of formal, physical structure leads to the more contentious concern of a conceptual structure which must contemplate an activity going beyond accepted, or even physical definitions of the print and yet acceding to a notional form which encompasses all its variable properties. These can be simply defined as printforms using printing techniques (i.e. with the application of ink) and printforms which use the form of an edition (or multiple). Photographs would probably fit into the latter; paper forms could fit into either category. The problem defines itself in deciding if and where 'printmaking' ends and some other definition begins. Depending on the specific nature of a particular work any definition could move from one area to the other because of the variables involved. As the exclusive nature of printmaking is penetrated, in so far as there is a breakdown of conventional boundaries associated with print, then a terminology which describes the scope of this process becomes useful. Since the forms which are produced in this context all have associations of some degree with printmaking then the term 'printerly' seems an appropriate one which describes the nature and association of the forms without recourse to a dogmatic assertion of identity - which would mitigate the essential fluidity which is so much part of the character of contemporary printforms - or 'printerly' works. (The association which the term 'printerly' may have with the term 'painterly' is deliberate in that it further enhances the notion of a term which, while specific in its terms of reference, refers to applications which can be used in a variety of formats). In this way the term is used to define more than simply the printmaker working spontaneously with his material in a direct (i.e. auto-
graphic) manner. It encompasses both the autographic and the mechanical capabilities which, to a greater or lesser degree, are a part of all print forms and works, the effect of which - if not the construction - is a unique amalgam of material. This is especially so since print can be applied to virtually any form or material, and the structure of the printform is therefore freed from any convention of intrinsic limitations.

If an identity which encompasses the totality of printmaking or 'printerly' forms is possible then the convention of the edition or, of more significance, the structure of presentation is vitally important in defining a contemporary attitude from which an involvement in these forms produces a workable format.

The limited edition can work on two levels. One, a purely practical concern to do with the effort required to produce more than a small run of prints - a large run of prints may also be irrelevant to the concerns of the artist but in no way related to making the work more exclusive because of it. Secondly, it can work in a commercial sense by both producing a relatively large number of prints in the edition and yet exacerbating the exclusive factor by the very fact of editioning. In reality, in terms of an intellectual process, the edition as a positive concept plays little part as a creative agent in the majority of contemporary printworks. As it is used as a quite arbitrary agent (now not even limited by the concern of technical process) it also means that the edition as a 'printerly' concern can be effectively used as a creative form in both a positive and a negative sense. For the most part this means forms which dispense with the formal concept of an edition altogether - either by the production of one-off pieces of print or runs of prints which, at least in theory, have no limitation to their number (with the form and process being designed to allow the retention of whatever qualities are required of the prints).

This would encompass a print which was a singular event because of the manner in which it was conceived and produced (in effect an extension of the monoprint principle but in a more controlled form using specific printing techniques). This leads onto, or
perhaps has developed from, the use of a series of prints which at some point are each worked on individually in terms of colour, additional printing or other additions and manipulations - but the distinction must be made, in this case, between 'editions' which have variables as part of the regularised editioning/printing format, and that of each print being different, although upon a common base, because of a variety of other changes and additions (or even subtractions).

Finally, there is the capacity of the print form to be extended infinitely. This is both a technical and conceptual possibility although it represents a different concern from that of producing a very large but still limited edition - where the latter may simply be a means of disseminating a piece of print to a large audience. The concept of a theoretically infinite number also circumscribes the means of producing the prints in relation to time in that numbers could accumulate over a long period of time, and not as result of continuous production, or that a high speed process (probably requiring the use of commercial equipment) would produce large numbers over a very short period of time. The essence of these possibilities is that the resulting prints would produce an accumulative whole representing a capacity which printmaking has - a form of printing event - which makes a statement about its identity.

The intention in attempting a definition of these processes, capabilities and possibilities is to outline an identity which, while it recognises the role and concerns of traditional forms of printmaking as such, also envisages the potential of experiment with the format of printing so that they take an active part in a statement rather than a passive, or even negative one. It is in this way that a contemporary, or radical identity develops within which all 'printerly' forms and concepts can assume a role which reflects their actual capacity in a contemporary form - and continues to do so.
<table>
<thead>
<tr>
<th>Illustrations</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>II.</td>
<td>Screenprint</td>
</tr>
<tr>
<td></td>
<td>Edition of 15</td>
</tr>
<tr>
<td>III.</td>
<td>Screenprints</td>
</tr>
<tr>
<td></td>
<td>'Green, green fields ....'</td>
</tr>
<tr>
<td></td>
<td>'a merry dance ....'</td>
</tr>
<tr>
<td></td>
<td>Edition of 25, Edition of 10</td>
</tr>
<tr>
<td>IV.</td>
<td>Screenprint</td>
</tr>
<tr>
<td></td>
<td>'he sometimes sat and thought and sometimes just sat ....'</td>
</tr>
<tr>
<td></td>
<td>Edition of 15</td>
</tr>
<tr>
<td>V.</td>
<td>Screenprint</td>
</tr>
<tr>
<td></td>
<td>Embossed relief with overprinting</td>
</tr>
<tr>
<td></td>
<td>Edition of 15</td>
</tr>
<tr>
<td>VI.</td>
<td>Screenprints</td>
</tr>
<tr>
<td></td>
<td>Embossed relief with overprinting</td>
</tr>
<tr>
<td></td>
<td>State proofs</td>
</tr>
<tr>
<td>VII.</td>
<td>Paper pulp pieces - with ink workings</td>
</tr>
<tr>
<td></td>
<td>'FOUR/4' and 'PIECES'</td>
</tr>
<tr>
<td>VIII.</td>
<td>Paper pulp</td>
</tr>
<tr>
<td></td>
<td>cast piece with over painting</td>
</tr>
<tr>
<td>IX.</td>
<td>'Three of three' - cast paper forms with overpainting</td>
</tr>
<tr>
<td>X.</td>
<td>Laid paper works - cast laid pulp with overpainting</td>
</tr>
<tr>
<td>XI.</td>
<td>Paper pulp</td>
</tr>
<tr>
<td></td>
<td>cast piece with over painting</td>
</tr>
<tr>
<td>XII.</td>
<td>Laid paper works - cast laid pulp with overpainting</td>
</tr>
<tr>
<td>XIII.</td>
<td>Laid paperwork - cast laid pulp with overpainting</td>
</tr>
</tbody>
</table>
The intention of the dialogue is to form a link between the concerns relating to a wider view of print forms and the ideas and concepts involved, developing from the practical work, which relate to them. The body of the dissertation is written from a viewpoint developed from working with print forms and takes a particular stance in interpreting printmaking with as much concern for technique, in defining the form of an identity, as with a relationship to art forms in general - so that the true identity of printmaking lies in its unique technical properties which can be exploited in forms which are different in both a structural and social sense.

Certain ideas have developed conceptually from a concern with identifying a structure derived from 'printerly' forms which utilise the essential characteristics of the print yet at the same time develop or define a format and/or context which enlarges the formal capacity of the print form. Printing, or printmaking, can be seen as an accumulation of many parts - some technical, some conceptual and some expressive - but essentially it represents a drawing together of these parts to define both a nature and a structure which is part of the expansive relationship of the visual arts within themselves. The powerful ability of printmaking, combined with various technologies, is in being able to expand (or to be expansive) when concerned with its own dissemination. This may well represent, in terms of debate within the visual arts, a clash of conflicting philosophies but the capabilities and possibilities remain nevertheless.

As an initial consideration of the concerns involved in approaching the print form - in a printmaking sense - certain aims have to be defined as to what is being sought as an end product in the practical work, and also as a continuing development. First there are conceptual concerns which define the nature or formulation of the print/multiple. It is not intended to question the traditional limited edition form of the fine art print because this is simply not, as such, a particular concern which relates to the work being produced, even though the editioned form is
being used in certain contexts. Rather that the possibilities of extending this form develop from it (and are more important to a continuing development). A basic tenet of 'the print' is the facility to produce a number of generally identical works to form 'the edition'. However, it is the concept of using the edition in a different formulation which is of particular and specific interest. Inherent in the basic form of an edition, that is a number of identical or near identical 'units', is the possibility of assembling these 'units' to produce structural works - 'unitary constructions' - as a multiple. So it becomes possible for the scale and configuration of the completed work to be defined and expanded dependant upon the form and volume of the prime edition (or print run).

As this possibility has developed from the notion of producing print/multiples which have an identity endemic to their essential form and less derivative of other art forms it has become an assertion of an identity which introduces scale, density and structure into the process. There has developed a primary need to question the possibilities of the multiple form within the work itself, that is the inherent characteristics of assemblage, movement, the number of parts and the method of putting them together. This relates to a development of using relief as a means of constructing some part of the structure of a printed image because, when printed upon, it defines where ink will further define a surface with colour and/or image.

It should not be construed that this is an arbitrary development however. The complex possibilities of evolving a form of multiple entity from the print 'edition' has established itself through an initial concern with figurative elements and their relation to a dimension(ality) and a visual movement on the different planes of a (relief) surface. This develops a structured surface which is the result of using a combination of two particular print techniques and is peculiar to that process. In part this is an example of a 'printerly' form, the physical nature of which depends on the inter-reaction of two printmaking techniques and the result of which retains, quite obviously in this case, the
qualities and characteristics of print - although the figurative content and the form of presentation (the edition) deny it a totality of intent at this stage in relation to the structural concerns which are to develop from it.

Built into the structure of the printed relief prints is a conflict between flatness - a two-dimensional viewed surface - and the three-dimensional structural form of the relief which maps out a surface field upon which the imagery plays out changes of stability and dimension as it dissolves and resolves due to the changing contours of the relief. By breaking up the ink surface tonally, which is further broken up on the surface by the relief, a total surface develops which further breaks down any static dimension and produces, at least optically, a floating structure. The particular form of tonal image making within the print relates to a manner of looking at a situation - 'a flickering eye' - where multiple relationships exist at any one moment and the reality is an interaction - 'a sum of different glimpses' - which express an instability both for the subject as well as the viewer.

This has developed from a consideration of the relationship between a print and its inherent dimensional qualities. That is the paradoxical nature of a two-dimensional image making system which can be applied mechanically to a relief surface (screenprints can be printed on paper selected to provide a surface which affects the quality of the ink layer - that is, in effect, an ultra-low relief). The use of blind relief 'prints' which are subsequently printed onto is a second stage of development in producing an image/surface which is sympathetic and constructive in evolving a ground which is whole and yet broken, and which changes the nature of the flat, printed ink layer relative to its own structure. This technique has developed in a manner which is designed to use certain inherent qualities of what are essentially 'print' media to develop a visual format which best expresses the conceptual imagery of the work(s).

As the concept has evolved of using the paper surface to define part of the visual structure of the print then the possibilities of re-structuring that surface have taken on a dominant role
in the development of subsequent works. The capacity to use structure in various forms - but still related to printmaking - has grown as a primary concern in its own right as the outcome of considering the techniques in relation to a desired form of imagery.

In considering the possible ways in which a surface might be re-structured in relation to the particular concerns of the print-form and as a development from paper printed as blind relief the question of re-forming the paper in other ways, which provided both a greater flexibility and advanced the capacity for interpretation, became part of the developing construction. The most malleable form possible, which is also consistent with the aims of making a surface which itself brings about a tonal quality (and is an even more physically integral part of the print image process) emerged as paper pulp. This form of producing a surface also has qualities which can be varied and controlled, either by using techniques which utilise a form of mould (providing the capacity for multiples) which the material will faithfully record or alternatively, by using it in a free form manner. In this way it is possible to control the degree to which an imposed structural form is placed on the material by way of defining the nature of its role.

A secondary result of re-forming the paper is that the resulting surface is in an unfinished state in that it is highly absorbent. It is possible to control the degree and the area of this absorbency by further treatment of the surface. In practice this means that the way in which the ink (or whatever) is taken up by these surfaces can, if required, undergo a further controlling process which is additional and separate to any others and increases the tonality of the printing with a more diffuse way of disrupting the ink layer. Although not a primary concern this does represent a further means of developing or exploiting the surface which, particularly in an abstract sense, further defines an identity developing from this material combination of form and technique.

As a result of experimenting with paper pulp the possibilities
took shape of not only manufacturing three-dimensional prints but also of extending the conceptual form in a further dimension which develops the relationship of identity and form still further. Although these concerns have initially evolved from visually orientated interpretations of a figurative nature certain abstract notions relating to the structure of printforms have developed from the pursuit of a means to interpret these configurations.

From the changing structure of the print within a conventional format the first consideration in this progression was that of scale. Rather than being simply a matter of increasing the physical size of a print this posed the question of how scale related to the actual form of the image. In one respect this has connotations of a mechanical process. That is, tonal surfaces (in a structural form) which are points of colour, making and breaking the parts of an image and being that image at the same time. By extending or expanding this form the parts of the 'edition', or each print, become those tonal points. So the individual point, or multiple, becomes in effect part of an assemblage which makes a 'printerly' form and the edition of prints becomes an entity in itself.

This is a theoretical position which is intended to further the concept of a structural form of print, or print sourced work, which is part of a schematic approach to both integrating and expanding the capacity for assimilating other forms, but at the same time achieving a defined statement about its physical reality. In this respect there is a lesser concern for image making processes and a greater concern for an abstract structuring, or even compilation.

Having established a feasible format which develops the notional identity of a multiple form based on an extending edition, certain questions are posed in approaching the possible capabilities and use of the form.

First, there is the bringing together of the one-off and a multiplicity in the assembling of an edition (or run) of prints. The concept of a constructed series allows for that series to evolve from zero to infinity - the capacity is available but
does not have to be used - and therefore the series (edition) encompasses both the singular printform and the multiple in its formulation. This could also take shape as the assembly of singular one-offs works (or monoprints) in a constructed assemblage as an editing process, by addition rather than subtraction.

Secondly, there are further possibilities developing from the form of assembly. In the first instance the structure of the assembly can be defined by the shape of the component parts of the edition. If the form of the print is not based on right angles then the structure of an assembly can develop as an interlocking or a random structure which, given a reasonable scale, can build into a form which is only defined by the action of assembly making the process in this form an intrinsic element in the identity of the resultant final work. Another element which devolves from assembling the edition is that the assembly does not have to be inviolate. The multiple could be re-assembled at will and the structure re-formed in a different shape allowing a participation in the forming of the edition by various parties.

A third issue, which is subsidiary to the second, is the concern that there is a necessity to avoid the obvious making of pattern in assembling a number of units unless such a form plays an intrinsic part in the formulation of the whole work. The inference is that the structural concerns should play a primary role in a conception and not be a merely convenient form which follows on from the prints - in the same way that the idea of a structural edition printform is fundamental to the realising of this particular notion of identity. As such this can be controlled, or circumvented, through variation and the 'designing' of a totality which relates the image to the structure or vice versa, perhaps in the form of a mosaic structuring of elements which grow from one or more points.

Although the structural form of an editioned series is concerned with breaking down, in personal terms, the exclusivity of a limiting format and as such has become more than an incidental concern the initial impetus for the development of this process stems from a form of figurative image making. In order to resolve the
means of making a tonal image and surface which does not appear to be mechanically produced in a conventional manner, e.g. photographic half-tones, but is more of a continuous tone whichdiffuses a multiple image. The resolution of this is that, because a tonal structure is used to make images - or parts of the imagery - they become part of the three-dimensional structure of the surface and not simply a covering. The apparent solidity of the physical image is belied by a physical dissipation or disintegration (in a visual and structural sense). At this stage the dimensional concerns take on a primary role in further defining the construction of a printform which will most aptly express both the visual concerns alluding to a physical nature or state, and the structural concerns which both emphasise this and define a form that expands the scale of reference.

In conclusion, as the concerns of the 'printerly' form have been expanded, at least in relation to a theoretical concern, and a resolution of structural possibilities has been devised then what were the initial concerns of image and state (within the print) have been resolved through experiment with print techniques and materials but in combined forms which have been devised to exploit both the diverse technical capacity of the media and the concept of a multiple view of a situation, both from within and without.
Twentieth century developments in printmaking maintain a general relationship with other art forms which has a unique character in that print relates to so many diverse elements of a variegated network of visual forms. Although other artforms may draw upon the imagery and associations of both a contemporary and an historical situation (both from within the arts and out of a social environment) the printform, in its widest sense, is an inalienable part of both as a physical and conceptual entity. Processes of print and printmaking make demands upon interpretation and manipulation which, quite simply, may be ignored.

Considering the major conceptual changes of form which have been pursued in the visual arts generally the actual physical identity of the print has remained largely unchanged in its conventional form. This is partly because, as an artform, the technique is essentially a means to an end so that traditional techniques tend to retain the same format because the form in which they are best resolved has been defined by the circumstance of time and familiarity. For example, the form of etching and printing the plate on paper is a highly resolved and refined process but one which has intrinsic technical limitations. The last eighty years have produced those opportunities for developing certain techniques which do not have the same technical limitations (although the way in which they are used and resolved depends upon the artist and not the mechanism).

The question of what is art, and what is not art, has been applied equally vigorously to printforms and in a sense remains equally unresolved. Essentially, any real definition comes about by the determination of the individual to persist in a course of action and to define those actions in relation to other artforms. But this still leaves printmaking in a temporal limbo, as a definable form, because of its very nature of association and accumulation. Mechanical forms, and this includes photography, have undoubtedly played an enormously significant role in developing the content of prints as contemporary forms but do not appear to have played an equally formative role in expanding the structure. Perhaps
it should not be surprising that this appears to be taking place, in some part, through essentially craft based forms (e.g. paper pulp) which are being revitalised by concerns developing via printmaking and as such may be seen as a return to a basic form from which to re-define them through more mechanical contemporary techniques.

Viewed optimistically, the diversity of printforms and applications should play a unifying role which breaks down separatist elements within the arts, not only on the physical plane but also in terms of a philosophical stance relating to the cross-fertilisation of concept and theoretical form. In this sense traditional techniques can now play a renewed role because their form reflects a contemporary image within a context which has been refined - by time, precedent and expectation. The contrast between what might be expected and what is found may be more illuminating about the nature of printmaking and how it has developed than the overt form which utilises many of what can be obviously determined as contemporary mechanical techniques.

Most importantly the print form, the printerly work, has developed to a stage where it is inherently capable of being used to instigate major conceptual concerns, and works which are independent of other primary motivating sources - that is in the simplistic sense of 'the print' developing directly out of material evolved from and through other forms.
NOTES AND REFERENCES

1. A form which has developed from traditional techniques through heavy embossing (etching, engraving and cutting) see GILMOUR, P. Modern Prints 1970 p. 54, 64-5, 121 and extended into multiple relief forms via cut and folded prints, Richard Smith 'Edward Gordon Craig No. 1' 1968 - lithograph, cut and folded, edition 95 p. 159 and vacuum forming of plastics, particularly with combined print media, Joe Tilson 'Transparency: Che Guevara '1968 screenprint on acrylic and cellulose on wood relief, edition 20 p. 159.

A renewed interest in paper and paper forms has extended the context of the low-relief form and print by fusing the concerns of print, paint and to some extent, multiplicity (via moulds) and construction viewed as extensions of the print form (see note 2.).

2. The nature of print-multiples has developed into one which can pull together a number of related techniques which develop out of printerly concerns although - at the extremes of this development - no actual printing as such may be involved. The use of paper and multiplicity along with other print associations may define that identity, see FIELD, RICHARD S. RICHARD Hamilton. Image and Process 1952-82 'Instant painting' Polaroid 1980 photograph pl. 61-63 pp. 74-77, works combining photography (printing), painting and editioning (as a print form).

3. In particular the extension of print forms from dimensional scale to structural scale via, for instance, the capacity of a run, or edition to be assembled into a finalised form. see ARTS COUNCIL OF GREAT BRITAIN Big Prints 1982 (cat.) Daniel Buren 'Framed/Exploded/Defaced' 1978-79 25 etchings 20.5 x 20.5 cm each '....people will be aware of the installation as a problem, and not any more as a habit'.

HAROLD COHEN Series 'Richard Hamilton' 1967 screenprints
in edition of 40 pp. 73-75.

5. In particular 'DADA' and 'POP ART'.

6. Anti-imperialist political periodicals
   John Heartfield/Wei1and Herzfelde - 'Neue Jugend' (New
   Youth) left-wing pub. 1916
   Raoul Hausmann - 'Die Freie Strasse' (The Open
   Road) anarchist, see
   WOLFRAM E. History of Collage 1975 p. 77.

7. see FIELD, RICHARD S. Richard Hamilton. Image and
   Process 1952-82 'I'm dreaming of a black Christmans' 1971 Collotype
   in 7 colours, screenprint from 24 stencils and collage pp. 36-39.

8. see ARTS COUNCIL Big Prints 1982 (cat.)
   Richard Smith 'Diary 1975' Screenprint, seven sheets with
   string and wooden rod p. 36
   SPENCER, CHARLES (ed.) Decade of Printmaking 1973
   Jim Dine 'Tool Box' 1966 Screenprint and collage pp. 44-46.

9. The use and development of colour changes during a run,
   or as part of an editioned series, established a significant
   potential in the breakdown of limitations induced by 'rules'
   relating to conventional formats. see
   GODFREY R.T. Printmaking in Britain 1978
   Eduardo Paolozzi 'As is When' 1965 series of twelve screen-
   prints pl. 12 p. 106 'Futurism at Lenabo' from 'As is When'
   pp. 128-129
   SPENCER C. A Decade of Printmaking 1973 six images from
   'As is When' series edition(s) of 65.

10. see NEWTON, CHARLES. Photography in Printmaking 1979 Richard
    Hamilton 'The Critics Laugh' 1968 Offset lithograph, laminated
    and retouched with enamel paint and screenprint pl. Q pp. 46-47.

11. see FRY, EDWARD F. Cubism 1966 George Braques 'Still -
    life with Harp and Violin' 1912 pl. 34 Pablo Picasso 'Portrait
of Daniel-Henry Kahnweiler 1910 pl. 28
also HAFTMANN W. Painting in the Twentieth Century 1965
Picasso 'Woman Weeping' 1937 pl. 562 p. 239.

12. see FRY, EDWARD F. Cubism 1966 Pablo Picasso 'Still life with Chair caning' 1912 pl. 41
also WOLFRAM E. Collage 1975 Juan Gris 'Violin and Engraving' 1913 oil and collage on canvas pl. 5 p. 20.

13. The exponents of Dada manifested their ideas in forms which used mechanical reproduction commercial formats as publicity and Dada works. This developed particularly through typography and periodicals. see
RUBIN, WILLIAM S. Dada, Surrealism and their Heritage 1968
Johannes Baader 'Collage' 1920-1922 pl. 54 p. 44
also RICHTER, HANS. Dada, Art and Anti-Art 1965
Raoul Hausmann 'Linocut' 1918 p. 103
Dada typography p. 170
Front cover, the periodical 'Der Dada' ed. Raoul Hausmann 1919-20 pl. 60
Photo-montage developed as a media form which served a several purpose from advertisement to artform. see
RICHTER, HANS. Dada, Art and Anti-Art 1965 Raoul Hausmann Pamphlet 1918 pl. 49
RUBIN, WILLIAM S. Dada, Surrealism and their Heritage 1968
Hannah Hoch 'Cut with the Kitchen Knife' 1919 pl. 52 p. 42.

14. The concerns of Kurt Schwitters, artist, poet and Mertz (1887-1948) Hanover were of Dada but as much related to Cubist and Futurist concerns of structure and form - and a total dedication to the production of 'art' but in a manner of his own, independent of Dada 'anti-art'. Schwitters developed a very personal interpretation of collage and assemblage techniques (from cast off and found material i.e. rubbish) particularly in three-dimensions which he generically termed 'Merz' (from Kommerz) and which developed into 'Merzbeau', 'Merstructure' and 'Merzbild' - all of which distinguished his work from other Dadaist collage.
RUBIN W.S. Dada, Surrealism and their Heritage 1968 Kurt Schwitters 'Merz Picture with Rainbow' 1939 oil and wood on plywood p. 52, also 'Fec 1920' 1920 collage of pasted papers pl. 66 p. 54, also Views of the Merzbau (photographs) Hanover c.1924-1933 pl. 73-75 p. 58 (which represents some of the 'environmental' aspects of Schwitters work).

Schwitters produced photo-mechanical prints as early as 1916 but in 1923 produced his 'Merz' portfolio of prints (Hanover) which consisted of collage images composed from photographs, mechanical tones and commercial print forms - printed using photo-lithography. see CASTLEMAN, RIVA. Prints of the Twentieth Century: A History, Kurt Schwitters plate 4 from 'Merz portfolio, Hanover, Merz, 1923, photo-lithograph.

15. John Heartfield - Johann Herzfelde (1891-1968), possibly the inventor of photo-montage in its Dada form and certainly accredited with being the Dada 'photo-monteur'. A politically motivated figure who, with his brother Wieland Herzfelde, contributed left-wing political propaganda via Dadaesque periodicals e.g. founded 'Neue Jugend' 1916 and also montage propaganda posters. see RICHTER, HANS. Dada, art and anti-art, 1965 John Heartfield, Dada-Potomontage, 1920, pl. 53

ADES, DAWN. Dada and Surrealism, John Heartfield, 'Das ist das Heil, das sie bringen' (This is the Salvation they Bring) 29 June 1938, photomontage, p. 27

16. Die Brücke (the Bridge), a group formed in Dresden in 1905, first exhibiting in 1906, their printworks developing out of a German printmaking tradition reaching back to Durer and particularly important for the revitalised of woodcuts in an 'expressionist' form. Members included Ernst Ludwig Kirchner, Erich Heckel, Emil Nolde. see CASTLEMAN, RIVA. Prints of the Twentieth Century: A History, Ernst Ludwig Kirchner, 'Nude Dancers' 1909, woodcut pl. 12 p. 23.
17. Der Blaue Reiter (Blue Rider) a group formed in Munich in 1912 and concerned with an intuitive art as a direct expression of unadulterated feeling and expression. Members included Wassily Kandinsky, Franz Marc, Paul Klee. see CASTLEMAN, RIVA. Prints of the Twentieth Century: A History, Wassily KANDINSKY (1866-1944), plate 8 from Klange, 1913, woodcut, pl. 23 p. 33.

18. Fauves (Wild Beasts) the name being derived from the use of violent colour in which it (colour) is removed from the descriptive role. Exemplary prints are woodcuts using bold, gouged cutting - a passionate reaction to introverted and refined print technique. Includes Henri Matisse, Andre Derain, Maurice de Vlaminck, Raoul Dufy.

19. For example; psychological research, dreams etc. (Freud, Jung) and the questioning of the ordered universe (Einstein).

20. For example; 'Neue Jugend' (New Youth) No. 1 1st May 1916, Berlin, a Dada inspired left-wing literary and political paper. 'Die Freie Strasse' (The Free Street) pub. Franz Jung, Raoul Hausmann - of anarchist persuasion. also 'Jedermann sein Einer Fussball (Every Man His Own Football), Berlin, 1919. 'Der Blutige Ernst' (Deadly Earnest).

21. The first group activity of Dada, The Cabaret Voltaire, at No. 1 Spiegelgasse, Zurich, 1916 was organised by HUGO BALL (writer, poet, philosopher and performer) and included performances by TRISTAN TZARA (Rumanian poet) and RICHARD HEULESENBECK (poet and physician).

22. Dada philosophy related to 'the destruction of art by artistic means' and 'the destruction of art in order to build a new art'.

23. MAX ERNST, (1891-1976) Cologne. Dada/Surrealist painter, sculptor, constructor and image-maker. His printed work is related to collage/montage and detailed, literal, figurative imagery of a surreal nature 'Beyond painting but not beyond art'. Ernst developed the technique of 'frottage' (rubbing
- from the French 'frotter'). A large number of works are in bookform comprising photo-etchings of montaged material, see RUSSELL, JOHN. Max Ernst, Life and Work, 1967. 'La femme 100 tetes' 1929 pp. 183-191 pl. 'Une Semaine de Bonte' 1934 pp. 193-195, 198-199 pl. also 'Le Facteur Cheval' (The Postman Cheval) 1929/30 pl. 19 p. 105, collage on pasteboard.

24. All members of the Berlin Dada group were, to a greater or lesser degree, politically motivated and used their 'art' to illustrate and foster their convictions. The general imagery of their work was much more intimately related to their day-to-day surroundings than say, Ernst or Schwitters. see RUBIN, W.S. Dada, Surrealism and Their Heritage, 1968 Haoul Hausmann, 'Tatlin at Home' 1928, collage, pasted papers and gouache. Hannah Hoch, 'Cut With the Kitchen Knife through the Last Weimar Beerbelly CulturalEpoch' 1919, collage of pasted papers and photo-reproductions. also WOLFRAM, E. History of Collage, 1975. John Heartfield (and George Grosz) 'Dadamerika' 1919, photomontage pl. 45 p. 83.

25. STANLEY WILLIAM HAYTER (b.1901), an Englishman who spent most of his working life as a printmaker in France and America. Exhibited with the Surrealists in Paris, 1933 but began printmaking in 1926 (aged 25). Founded a Paris studio/workshop at 17 rue Campagne-Premiere (Atelier 17). A considerable experimenter with intaglio techniques (strongly influenced by Joseph Hecht) his innovations produced in the medium attracted artists to work at the atelier e.g. P. Picasso. Alberto Giacometti. Hayter invented a method of intaglio colour printing using different viscosities of ink working at different levels of the bitten plate. He also promoted theories of 'automaticism' and fluid use of the burin cutting freely with undirected movements of the hand and plate - tone could then be added to the resulting linear forms. see REYNOLDS, GRAHAM. The Engravings of S.W. Hayter 1967. Hayters establishment of an 'Atelier 17' workshop attracted
artists working in New York to experiment with intaglio techniques e.g. Jackson Pollock (1944), Joan Miro (1947) although Hayter returned to Paris in 1950.

26. Emigrant artists from Europe included; Kurt Schwitters to England, Joan Miro to Spain, and S.W. Hayter, Marcel Duchamp, Max Ernst, Yves Tanguy, Andre Breton etc. to New York.

27. The Works Progress Administration Federal Art Project, initiated in 1935, provided work for numerous artists during the American depression. Overall the project served the purpose of bringing together artists from quite different backgrounds whose work ranged from social realism to abstraction, and also instigating the use of commercial techniques for producing cheap prints. Some artists involved included Stuart Davis, Hans Hoffman, Jackson Pollock, Willem de Kooning, etc. During this period Ben Shan began to use the screenprint (serigraphy) process extensively. (see note 28).


artists, e.g. Sam Francis, Ed Ruscha, Andy Warhol.
Gemini G.E.L., Los Angeles, California, Founded by Ken Tyler (formerly Technical Director at Tamarind) in 1965, developing new techniques and machinery for lithographic printing. Visiting artists include Robert Rauschenberg, Frank Stella.

31. see LIPPARD, LUCY R. Pop Art 1966, Richard Hamilton (b.1922) 'Just What Is It that Makes Today's Homes so Different, so Appealing?', collage, pl. 26 p. 38. also
Larry Rivers (b.1923) 'Lucky Strike in the Mirror II' 1960-63, lithograph, pl. 148 p. 174. also
Peter Blake, 'Beach Boys', 1964, screenprint, pl. G p. 38.

Richard Smith, 'Sphinx 4' 1967, three-dimensional screenprint, edition of 50, p. 163. also
ADAMS, HUGH. Art of the Sixties 1978, Andy Warhol (b.1930), 'Black and White Disaster' 1963, acrylic and silkscreen on canvas, pl. 29 p. 42. also

33. see SPENCER, CHARLES (ed.). A Decade of Printmaking 1973,
Peter Sedgley, 'Vide9 Disques' 1969, 75 cm. diam. edition 100, portfolio of six prints on spun aluminium with motor and ultra-violet light unit, p. 97.

1. 'Pages' - free form sheets
2. 'Fuses' - moulded paper form, both works made with wet paper pulp and editioned but with differences between 'prints', p. 151.
GLOSSARY OF TERMS

ABSTRACT - a form of values theoretically independent of figurative subject matter in the art work and therefore entirely concerned with form and colour.

AUTOGRAPHIC - marks or image formed by direct hand working

BLIND-RELIEF - a blind embossing or inkless intaglio producing a relief form in paper which is formed under pressure (see intaglio)

COLLAGE - a work assembled, or built up, from pieces of various material glued to a ground or support

COLLAGRAPHS - a relief print taken from a plate made by glueing various materials to a surface (as in collage)

COLLOTYPS - a photomechanical process from a printing plate produced by coating a sheet of glass with bichromated gelatin.

CUBISM - a movement which developed concerns relating to an analytical two-dimensional picture space and the interrelationship of forms in the sense of a 'multiple viewpoint' which expressed the nature of the object rather than a singular view.

DADA - a group movement, essentially in existence from 1915 to 1923, and based on a cult and theory of 'anti-art' with particular literary antecedents.

EDITION - (Limited edition) a set of identical works, sometimes numbered and signed, the production of which is performed or supervised by the artist.

ENGRAVING - an 'intaglio' technique where the direct cutting of a block or plate produces incised lines which are inked and printed under heavy pressure (see intaglio).

ETCHING - an 'intaglio' process with a metal plate (copper, steel, zinc) covered by an acid resistant layer which is worked away with a tool - the metal thus exposed is 'eroded' in an acid
bath (nitric acid). The depressed areas created receive ink and are printed.

GRAPHIC ARTS - In a traditional usage the term defines artforms which depended upon line and excluded colour e.g. drawing and engraving. Contemporary usage generally relates to those areas of work which relate to design and graphics e.g. typography, illustration, photography, etc.

HALF-TONE - A photographic process whereby an image is broken up into dots of varying size which, when printed, simulate the effect of a full tonal range.

INTAGLIO - Printing technique(s) where dampened paper is forced into depressions or recessed lines in a metal plate which are filled with ink e.g. etching, engraving.

LITHOGRAPHY - a printing process which is based on the antipathy of grease and water. The image is applied to a stone or plate with a greasy substance e.g. tusche which retains the ink for printing, ink being rejected by the water bearing surface of the plate.

MERZ - (Merzbild) A term originated by Kurt Schwitters to describe his collage and collage assemblages.

MONOPRINT - (Monotype) A singular print usually produced by working ink on a surface e.g. glass and taking an impression on paper. The traditional form of monotype is worked on a metal plate (copper) and passed through a press.

PHOTOCOPY - An instant photo-mechanical process for the reproduction of copy and image (in both monochrome and colour).

PHOTO-MECHANICAL - Any image which is formed by using an intermediate photographic negative process to produce the final image - a photo-mechanical transfer (PMT).

PHOTO-MONTAGE - The placing together and juxtaposition of various photographic images, which may be derived from a variety of sources, to form a visual whole although the juxtapositions may be bizarre or alien in relation to each other - (assembly of images: monter; French).
PLANOGRAPHIC - Printing techniques where the image is produced from a single flat surface, either directly or by offsetting e.g. lithography.

REPROGRAPHIC - Photographic reproduction of an image which may alter the nature of that image depending on the particular type of process used.

SCREENPRINT - (Serigraphy) A printing technique which uses a rubber blade (squeegee) to force ink through a stencil, which is adhered to a woven mesh cloth. The ink is then forced directly onto the printing surface through the stencil.

SURREALISM - A movement which superceded and evolved from the essence of Dada. It found expression in an attempt to project the subconscious using imagery and forms which related to dreams and the bizarre.

TONES (COMMERCIAL) - Unlike the tones which are produced by hand which are continuous, mechanical tones simulate the effect of a tonal mixture of dark and light e.g. 'half-tones'. The same tones can be used in their own right independent of an image to produce tints and dot areas.

WOODCUT - A relief technique where the plankside of a piece of wood is cut away to leave a relief printing surface. WOOD ENGRAVINGS are produced using the endgrain of the wood cutting with engraving tools to produce a fine, detailed line.
### SELECTED BIBLIOGRAPHY

**ADES, DAWN.** Dada and Surrealism London Thames and Hudson 1974

**ADHEMAR, JEAN.** Twentieth-Century Graphics London Elek Books Limited 1971

**ARTS COUNCIL OF GREAT BRITAIN.** Big Prints (cat.) London 1982


**AXSOM, RICHARD H.** The Prints of Frank Stella - A Catalogue Raisonne New York Hudson Hills Press in association with the University of Michigan 1983


**CASTLEMAN, RIVA.** Prints of the Twentieth Century London Thames and Hudson 1976

**CORNELL, SARA.** Art: A History of Changing Style Oxford Phaidon 1983


**EICHENBERG, FRITZ.** The Art of the Print London Thames and Hudson 1976


FRY, EDWARD F. Cubism London Thames and Hudson 1978


GODFREY, RICHARD T. Printmaking in Britain, a General History Oxford: Phaidon 1978

HAFTMANN, WERNER. Printing in the Twentieth Century London Lund Humphries 1968

HAYTER, S.W. About Prints London Oxford University Press 1962

HAYTER, S.W. New ways of Gravure London Oxford University Press 1966

IVINS, WILLIAM M. JR. Prints and Visual Communications Cambridge Massachusetts The M.I.T. Press 1969

JOHNSON, ELAINE L. Contemporary painters and sculptors as printmakers (cat.) New York The Museum of Modern Art 1966

KIRKPATRICK, DIANE. Eduardo Paolozzi London Studio Vista 1970

LIPPARD, LUCY R. Pop Art London Thames and Hudson 1966

LUCIE-SMITH, EDWARD. Movements in Art since 1945 London Thames and Hudson 1975

NEWTON, CHARLES. Photography in Printmaking London V and A/Compton/Pitman 1979

RAY, MAN. Man Ray Photographs with 347 Duotone Plates and Three Texts by Man Ray London Thames and Hudson 1982
REYNOLDS, GRAHAM. The Engravings of S.W. Hayter London Victoria and Albert Museum (HMSO) 1967


RICHTER, HANS. Dada, art and anti-art London Thames and Hudson 1965


ROTHENSTEIN, MICHAEL. Frontiers of Printmaking, New aspects of relief printmaking London Studio Vista 1966

RUBIN, WILLIAM S. Dada, Surrealism and Their Heritage New York The Museum of Modern Art 1968

RUSSELL, JOHN. Max Ernst Life and Work London Thames and Hudson 1967


SPENCER, CHARLES. A Decade of Printmaking London Academy Editions (Editions Alecto Limited) 1973

THE TATE GALLERY. Kelpra Studios (cat.) London 1980

WALDBERG, PATRICK. Surrealism London Thames and Hudson 1965

WALKER, JOHN A. Art since Pop London Dolphin Art Books 1975

WOODS, GERALD. Art without Boundaries 1950-70 London Thames and Hudson 1972

WOOLFRAM, E. History of Collage An anthology of collage, assemblage and event structures London Studio Vista 1975