NATIONAL COLLEGE OF ART AND DESIGN

CRAFT DESIGN - METALWORK

The validity of jewellery as an art form in relation to sculpture.

"by"

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INTRODUCTION

In recent times the question has been asked - is jewellery valid as an art form and has it gained the respect similar to that of sculpture or painting?

It is ironic that as early as the 16th century some of the finest sculptors began their work as a goldsmith. It was a time when craftspeople and artists were indistinguishable.

From the end of the 19th century to the present there has been a marked decline in the aristocracy and an ever increasing growth in the middle classes. This has meant that, whereas the market for jewellery before this century was exclusive to the privileged classes, now there is a huge market of people able to spend money on luxury items such as jewellery, particularly when it is available at reasonable prices. All these factors have combined to make this century a period of great change in jewellery design, and the history of how jewellery has progressed reflects much of the social history of our times.

As jewellery began to play such a different role in peoples lives, it started to divide itself gradually into three different mainstreams.

1. On one hand were the designers and makers of 'fine' and precious jewellery, who continued to make one-off pieces or limited production pieces for an established market with traditional ideas, perhaps occasionally adding a new design to their range.

2. In complete contrast was the costume jewellery trade benefiting greatly from the discoveries of plastics, a material with which one could not only imitate faceted or cabochon stones

but also metals and pearls. Plastic was light, cheap and could be moulded into any shape or form; it could be assembled with glue and easily handled by unskilled labour or automated machinery.

3. A third kind of jewellery emerged; unique pieces made by individuals who may have trained as jewellers and/or in the fine arts; some were even self-taught.

According to Patricia Meyerowitz the problem of wearability of jewellery was examined by many jewellers, whose main concern was with the process of assembling small scale parts into finished objects which can be worn. The method of contemplating what these parts should be - their proportions and their relationship to each other - need not differ from that applied to sculpture, painting or any other art. The fact that the finished piece can be worn need not determine what form it should take, nor what the component parts should be, for this kind of jewellery is rewarding to make and look at whether it is finally worn or not. One can in fact make a piece for its own sake, with the intrinsic ideas as its only idea for being. (Turner, 1976, p.55)

In jewellery design the importance of function is sometimes at a minimum. The most important part of design is the relation of form and how form, line and texture work together. Formal visual elements are important as jewellery has generally been on a small scale therefore the form must always be dramatic and the visual elements must work with maximum effectiveness.

In my thesis I will examine the validity of jewellery as an art form in relation to sculpture. Chapter One begins with the 16th

century - a period when artists and craftspeople were held with the same high respect. The various art movements of the 20th century briefly examine the various styles, explaining why such a division developed between the craftsperson and the sculptor.

Chapter Two - Margaret De Patta who trained as a painter, was greatly influenced by the Bauhaus ideologies. Disappointed by the uninteresting jewellery designs she intentionally set out to gain the necessary technical knowledge to establish jewellery as an informed and personal expression to the highest degree.

Chapter Three - examines the sculptural mobiles and jewellery of American sculptor, Alexander Calder. He was one of the more successful international artists who expressed an interest in the making of jewellery - his main concern being one of movement.

Chapter Four - I will analyse the interaction of jewellery and sculpture evident in the sculptural works of Vivienne Roche and personally chosen participants from the Vice-Versa Exhibition, 1991.

CHAPTER ONE

- Jewellery of the 16th century
- Changing attitudes of the 20th century

In the 16th century a new awareness of perspective was achieved by undercutting and throwing the figures forward into three dimensions. (Plate No.1) Despite the developments in technique, however, subjects from classical mythology retained their popularity.

The early jewellery of the renaissance, therefore, was influenced by its classical origins. The influence is understandable as the jewellers workshop was considered to be the finest ground for those wishing to progress to the major arts. As early as 1400 Lorenzo Ghiberti was trained as a goldsmith before he became one of the most distinguished of Florentine sculptors.

Jewellery in the Renaissance reached an artistic level comparable to that achieved in the fine arts. Artists as distinguished as Albrecht Durer, Hans Holbein and Guilio Romano were commissioned by princely patrons to produce designs which stimulated gold smiths to bring their traditional skills of enamelling, chasing and castings to an exceptionally high standard. New motifs derived from classical art joined the medieval themes of religion and sentiment, which were re-interpreted. (Plate No.2)

The lead came from Italy, where the elegant but conservative designs of the 15th century were transformed into the exuberant and sculptural style associated with Benvenuto Cellini, 1502-72 (Plate No.3,4) He is believed to have been more interested in sculpture and large pieces of goldwork than in personal

1.Hatbadge-early 16th century.

2.English gold pendant with enamel.

3

4

3,4.The Salt-Cellar of Francis 1,
by Cellini.

jewellery. From the beginning of his career there was a demand for hat badges. Chased or embossed with scenes from the Bible, classical mythology or history, they declared cultural interests or spiritual aspirations. Modelled in gold, bright with enamels and highlighted with coloured gemstones and diamonds, they represent the fully evolved Renaissance style of jewellery. By the end of the 16th century this sculptural style had given way to flatter, more decorative jewels in which stones play the principle role. (Plate No.5.6.)

The general style of the major arts of the Renaissance was derived from Classical sculpture with its sense of order and symmetry. This influence also affected jewellery which did not in fact emulate anything from jewellery of the Graeco-Roman period, examples of which must have been virtually unknown. The only real link between Classical and early Renaissance jewellery is the use of cameos and engraved gems, but even this was not a new phenomenon since they were consistently popular throughout Western Europe from the 13th century. Now they were used with even more enthusiasm, and this great increase in demand led to the opening of dozens of lapidary workshops in Florence, Rome, Venice and Milan.

It must also be remembered that in an era when craftspeople and artists were still indistinguishable great masters were often asked to provide designs for all sorts of ornaments.

Insignia, emblems and ensigns[1] all belong to the same category. An ensign was a jewel that men and women wore in their hats, head-dresses or hair. It was originally just a mark of

Front

Back

5,6.Front and back of 16th century ensign.

identity, sometimes of a valuable object that showed that the owner had taken part in an important pilgrimage. This type of ensign, inherited from the Middle Ages, persisted until the mid-18th century, but the significance of the ornament changed. After the end of the 15th century the badge gradually lost its religious meaning and modest simplicity. It became the most important jewel and was rich and finely executed. (Plate No.7.8)

The influence and benefits operated in both directions. Sculptors and painters entered their trades armed with the delicacy and precision already learned at the jewellers workbench, and they in turn produced work which inspired younger goldsmiths who tried to emulate the great masters in miniature. The sculptural genius of the early renaissance is best reflected in medallions - produced for ensigns and pendants.

The fact that many Florentine painters, sculptors and architects served their apprenticeships with a goldsmith, reveals the power of the Florentine goldsmiths guild and the respect in which their art was held. Painting, sculpture and goldworking were closely linked, progress in one advancing the other and all the arts benefitted from these continual exchanges.

The most dramatic transformation since the 16th century was a social one as a result of the Industrial Revolution. Until then there was little class distinction - objects of adornment, fine art and sculpture were associated with the wealthy aristocrats. A new middle class was born from industrialisation and technology, resulting in a market for mass produced designs.

7

8

7.Mid-16th century hatbadge.

8.Early 16th century hatbadge.

The Arts and Crafts Movement evolved at this time in reaction to the emerging society and its ideals. There was a common belief amongst its members, that mid-19th century design had gone astray. They wanted to revive the medieval ideal of the artist/craftsperson who designed and executed his own work, with the result that from original conception to finished product it never passed out of his hands.

Their main aims were as follows

- the survival of the traditional methods of handcraftmanship, despite competition with mechanisation
- to improve the working conditions of artists/craftspeople
- to encourage artistic collaboration amongst workers

There was a belief amongst its members that by restoring integrity to the objects common to daily life it would also improve the quality of ones life. William Morris had a deep loathing of mechanisation and dreamed of a return to the crafts-

> everything made by mans hand has a form,
> which must be either beautiful or ugly;
> beautiful if it is in accord with nature,
> and helps her; ugly if it is discordant
> with nature, and thwarts her.
> (Naylor, 1980, p.108)

His commitment to the creation of products that reflected the highest standards of design seemed constantly at odds with his desire to produce them at a cost that middle class consumers could afford. Despite this failure, the Arts and Crafts Movement succeeded in bringing about an awareness of design aesthetic which paved the way for numerous art movements of the 20th century and also a narrowing gap between the pure and applied arts.

The turn of the century brought about great differences in the art world particularly in jewellery. It's design and function became increasingly important as opposed to the obvious display of status and financial value of the materials used.

Art Nouveau was a radical movement within the decorative arts, developing internationally, and lasting at its full strength over a period of about ten years until 1905. It was a design philosophy with a strong desire to produce good craft design for a wide audience.

> It was not so much an attempt to squash mechanisation as to make the machine a servant rather that the matter it had become. (Black, 1974, p.267)

Art Nouveau design was evident in almost every aspect of the decorative arts throughout Europe. Jewellery provides some of the best examples of what this movement achieved. Designs for jewellery have generally been made to be pleasing, Art Nouveau gave artists and craftspeople free reign to exaggerate the romantic inventiveness of this new style (Plate No.9).
The work exudes enthusiasm for colour through painting, enamelling, gem setting and graceful flowing lines. Abstracted forms from nature conveyed freedom with the use of sinuous and undulating lines.

Sculpture during these years acquired a special significance as it became loaded with symbolism. To an extent this lessoned the barriers between 'fine' and 'applied' art. Sculpture was treated as a decorative craft incorporating ivory, semi-precious stones or details of enamel - work which was regarded more the work of a jeweller than a sculptor.

9.Lalique-chain and pendant,1900.

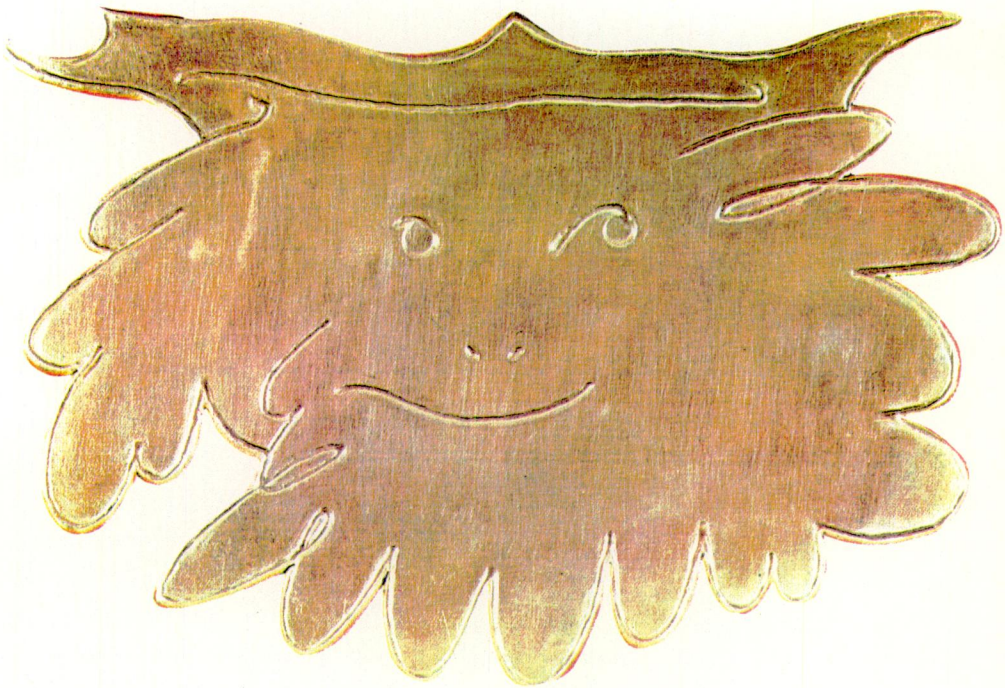
Lalique, the French artist/jeweller was one of the more influential people who regarded jewellery making as an opportunity to create an object of art no less serious than a painting or a sculpture (Plate No.10). He incorporated precious materials with horn and shell, materials which were rarely seen in jewellery before.

The 1914-18 war brought destruction to every corner of the civilised world which in turn led to a four year lapse in the production of jewellery. All areas of the art world were affected by the political and social structures which were undergoing swift and radical change. The years following the war saw further development of new movements and styles in jewellery which were closely related to painting and sculpture. With hindsight it is easy to trace the development of jewellery from the end of World War 1 to the present day and even call it a logical progression, but for the craftsperson in 1918 the outlook must have been bleak, with a return to the imitative banalities of the mid and late 19th century. Yet he was about to enter the most fascinating and valuable period in jewellery since the 16th century, with designs by major artists and small craftspeople workshops throughout the world. Inevitably there was a taste for luxury after the long hardships of the bloodiest war in history. Jewels were in demand but produced for a new commercially minded clientele who wanted a portable, public display of their wealth.

The Art Deco and Bauhaus period followed the war and many artists and sculptors experimented with jewellery, among them Picasso, Braque, Foquet and Salvador Dali (Plate No.11.12). Art

10.Lalique-serpent brooch,1898.

11



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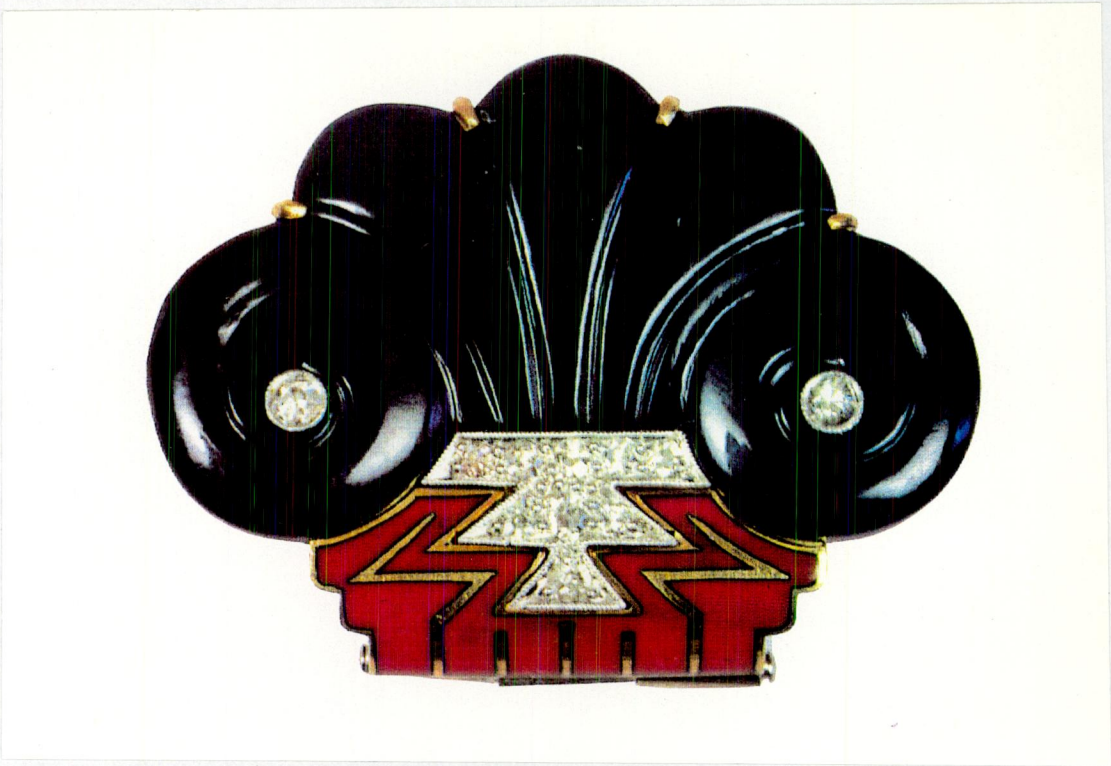
11.Georges Braque 18 carat gold ring 1960

12.Picasso gold brooch.

Deco illustrates the varied developments that occurred in the world of design between the war. This movement was completely modern in rejecting the sinuous whiplash qualities of Art Nouveau. Intense colour, bold combinations and concise, well defined lines in geometrical patterns were distinctive characteristics of Art Deco. Aspects of machine design were used as sources of inspiration and also the introduction of plastic - bakelite and chrome. It still retained good quality craftmanship in response to the new mass production. Art Deco was evident in every aspect of daily life and became recognisable by its abundant use of motifs such as the chevron, fan and zig-zag (Plate No.13). The main emphasis was on function and structure. The use of complimentary colours of stones set in a single piece was of great importance. The composition was based chiefly on the play of geometric form: smooth, polished or satin finishes for precious metal. Jewellery of this period became impersonal, functional and abstract with great emphasis on straight lines and an over-exposure of the diamond. Pure geometric jewels were now produced. There was a passing fashion for such forms using a mixture of traditional and new materials resulting in a sculptural quality (Plate No.14).

The famous Bauhaus, originally a school of architecture, rapidly widened its horizons and under its new director, Walter Gropius, introduced a school of fine art and applied art. His ultimate aim for the Bauhaus was the collective work of art, the building in which all the barriers between the structural and decorative arts are eliminated.



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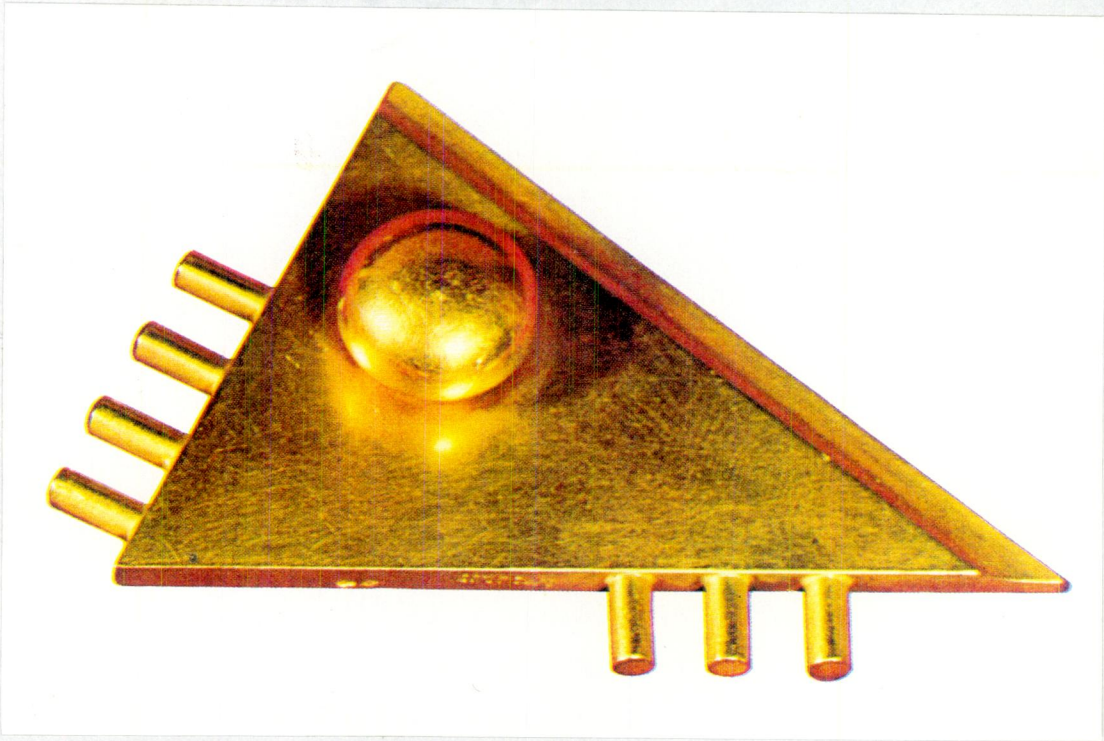


14

13.Art Deco style brooch.

14.Georges Fouquet,gold triangular brooch

It is questionable whether Gropius achieved this goal, but the effect of the school was enormous. He gathered round him other great innovators from every branch of the arts - painters like Klee and Kandinsky, sculptors like Gerhard Marks, other architects, furniture designers and typographers. The school was closed in 1933 but in 1937 it was reinstated at the Chicago School of Design where Moholy Nagy returned to the original teaching principles of the old school. It was a major source of inspiration to many artists/jewellers, namely Margaret De Patta whose work will be discussed at length in the following chapter.

In 1939 the holocaust of world war returned and jewellery production ground to a halt during six years of conflict, until the mid 1940s when the most dramatic event to affect jewellery design was the interest shown by international figures from other branches of the arts. A number of prominent painters and sculptors moved into jewellery making as a new area of artistic expression. The first of these were the Swiss sculptor Alberto Giacometti and the American sculptor, best known for his mobiles, Alexander Calder.

CHAPTER TWO

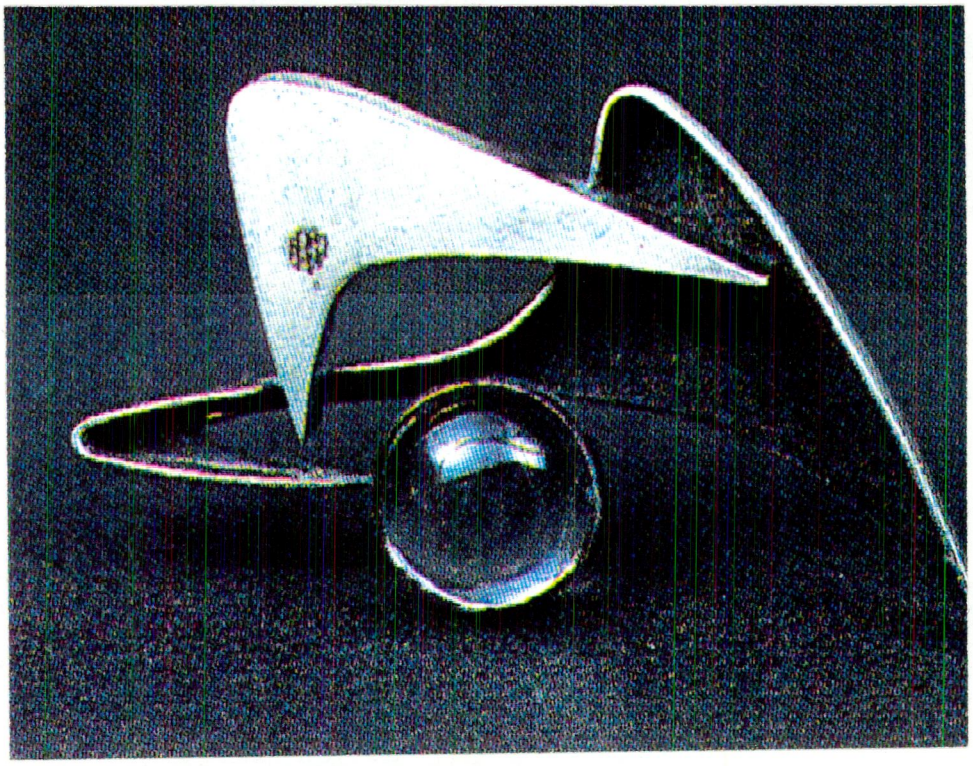
Margaret De Patta, 1903-1964

- influence of Bauhaus ideologies on her work
- attitudes to design and materials
- methods of working with stones

America was less affected by the war and started the post war period with one exhibition in The New York Museum of Modern Art. America was awash with hundreds of European artists and jewellers forced out of Europe by the war, bringing with them the influence of Bauhaus. In 1940, Margaret De Patta began studying under Moholy-Nagy first at a summer school, then at the School of Design in Chicago he had set up, which had a significant effect on her development. She created miniature silver sculptures and became a seminal figure in American jewellery with her bold use of new materials and techniques - (Plate No. 15)

The Bauhaus ideology of breaking with all traditional restraints found fertile soil in the U.S.A. Other jewellers and artists began to incorporate found objects in their work, aping other contemporary American fine artists who were using the sculptural and painterly technique of assemblage. These works further eroded the barriers between jewellery and sculpture. Large neckpieces and bracelets were now being produced; intended to be body adornment rather than simple fashion accessories. These also anticipated the revolution in jewellery that was to come about in the 1960's. (Plate No. 16)

The term artist/jeweller came into its own in the 1970's, but those who pioneered the concept can be picked out from much earlier, Margaret De Patta being one of the most prominent



15

16

15.Silver and quartz crystal brooch,1947.

16.Aluminium shoulder piece,1967.

figures. The influence of Mohloy-Nagy and 'the Bauhaus ideology became the core of her aesthetic.' (Turner, 1985, p.16)

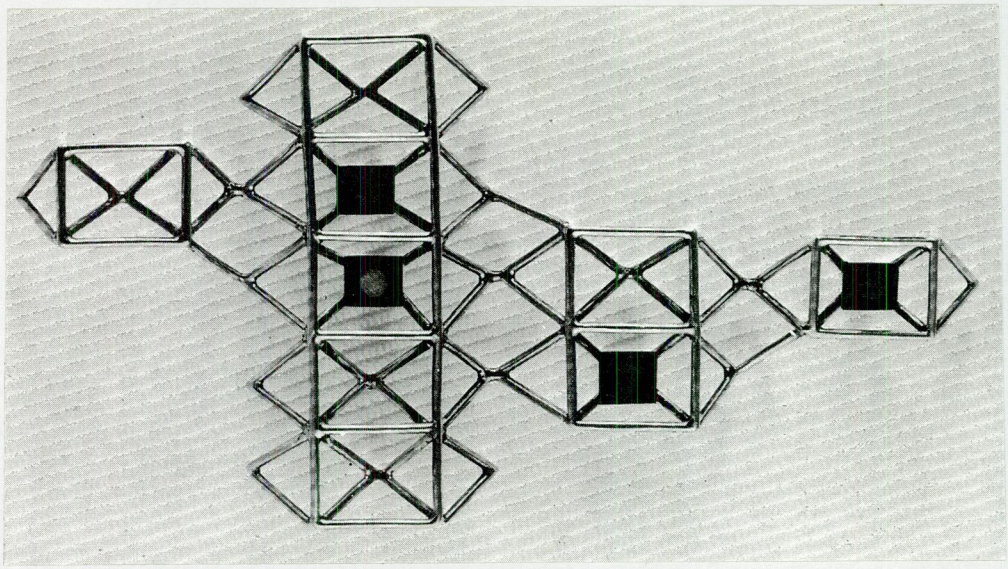
De Patta had been a full-time jeweller since 1935, although as early as 1929 she had begun to question the unimaginative interpretation of conventional jewellery. She spent the following years acquiring and mastering many different skills and disciplines in order to free herself from technical limitation and to be able to carry out her concepts using jewellery as an art form. She brought a fresh impulse to the craft through her inventive experimentation and creative spirit.

The distinguishing quality of her work suggests that if De Patta could have been something other than a craftsperson of jewellery, it could have been a sculptor or an architect. Her jewellery reflects the straightforward precision and boldness of an architect with the freedom of a sculptor -(Plate No.17). It would be an insult to categorise her work merely as 'craft' jewellery. She believed that as an artist/jeweller -

> the artist had a responsibility to relate, to present society and its methods and I believe there is great validity in designing for production.
> (Uchida, 1965, p.24)

She also found validity in designing for production, not only in the field of jewellery, but in ceramics and flatware as well. De Patta was concerned too with the individual craftsperson and their need to communicate, and also participated in numerous exhibitions - national and international feeling that such participation was a vital part of this communication.

Bauhaus ideas reinforced the validity of her experimental



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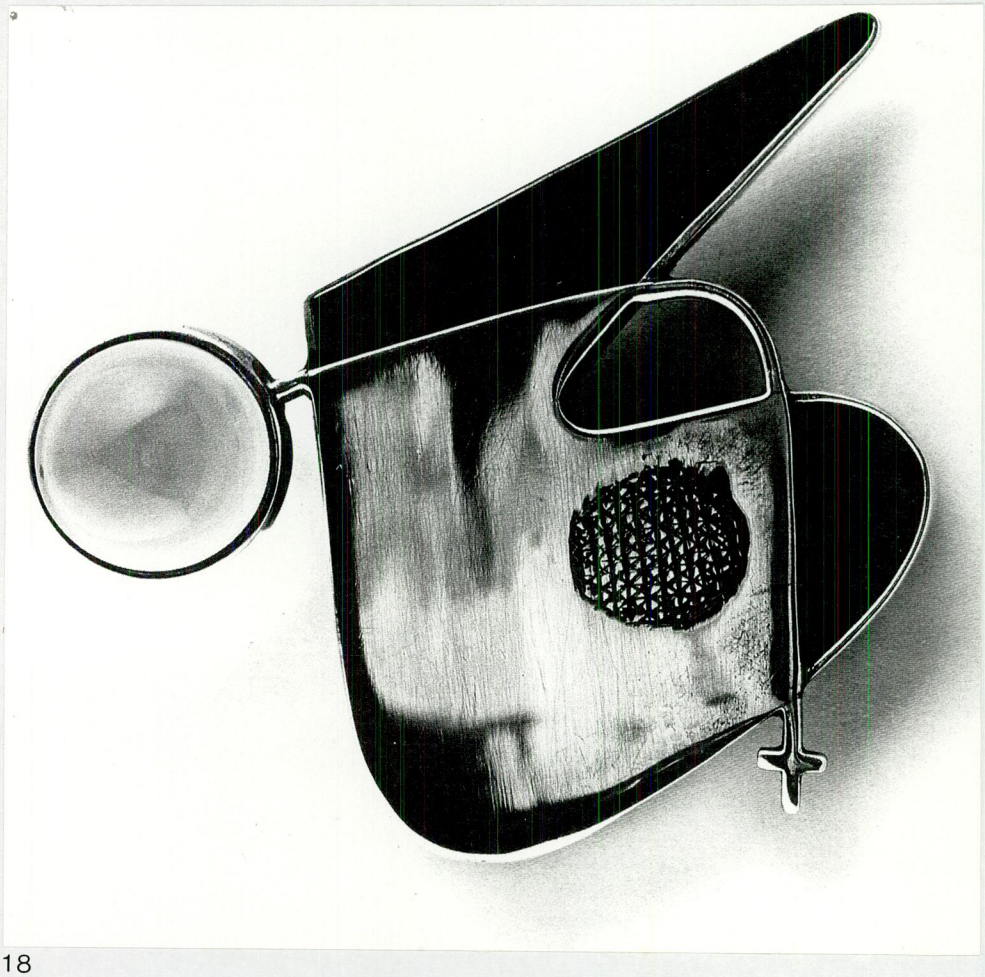


18

17.Pin of white gold,onyx,jade and coral.

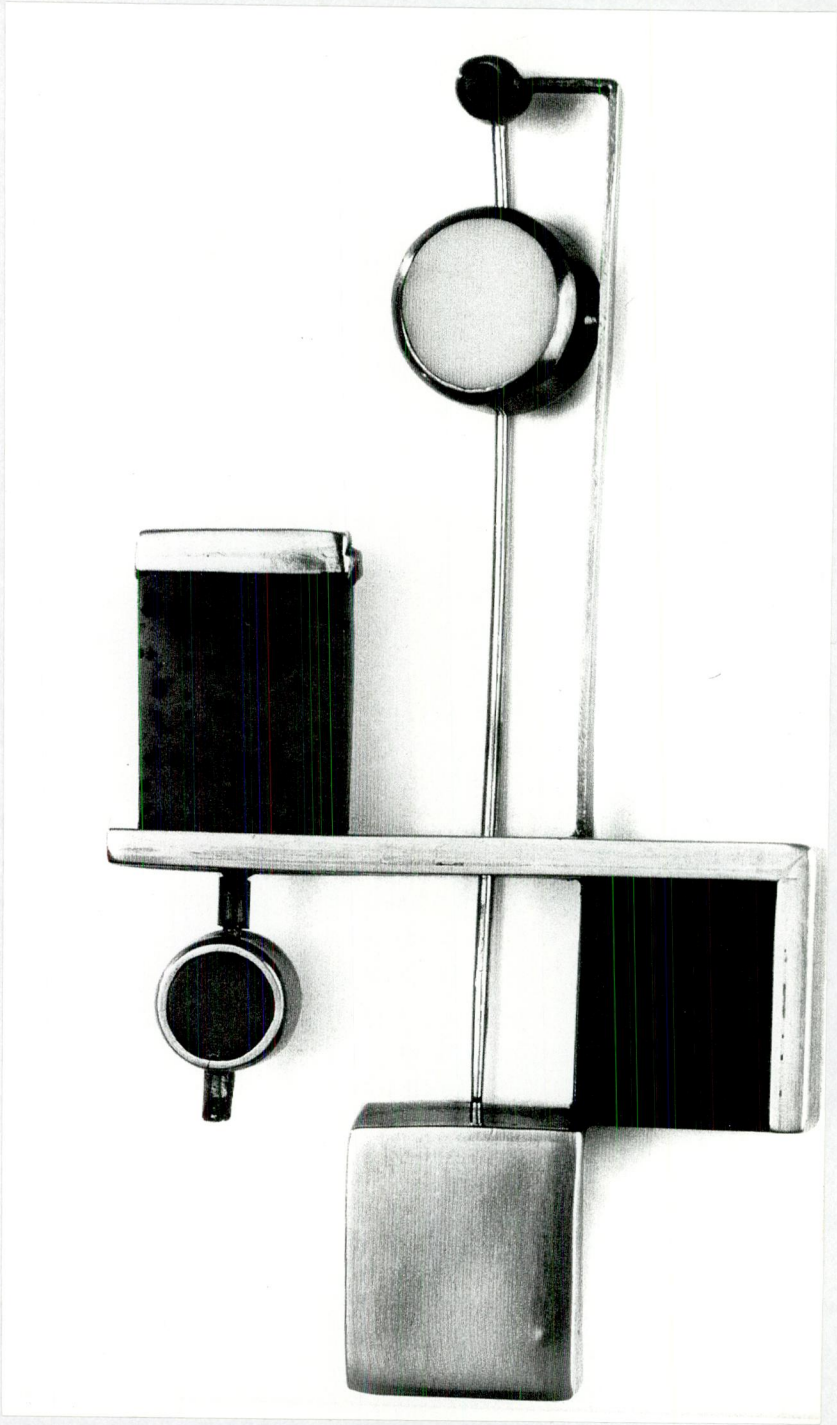
18.Silver pin and quartz crystal sphere.

methods; counter to the traditions of the time she used such materials as stainless steel and plastic in her work. Such materials were completely new to jewellery. Movement in each piece was often her actual as well as contained, and some of her early pieces were modular structures with part that could be worn in different positions to reveal varied colour accents or to change the shape of a piece as a whole. Always intrigued with problems of structure, she created such pieces as earrings with intricate locks, chains with special clasps, pendants that hang free of the body and rings with vibrating or moving parts, as well as shanks designed on the organic principle of finger construction.

Her innovative designs often required fastenings and settings that could not be produced with traditional jewellers techniques. At all times she was concerned with liberating her work from inhibiting and conventional attitudes. Such work clearly illustrates her strong motivation to establish jewellery as an informed and personal expression of the highest degree; probably because she never approached jewellery from the decorative aspect alone. (Plate No. 18.19)

She was one of the finest craftspeople to see the possibilities for modern design in jewellery through exploration from a spatial point of view. And one of her more noteworthy achievements was Moholy-Nagys seemingly impossible suggestion - when she studied with him at the Chicago School of Design - to "catch your stones with air, don't enclose them, make them float in space." (Uchida, 1965, p.23)

Traditionally the transparent gem was cut in regular cabochon[2]



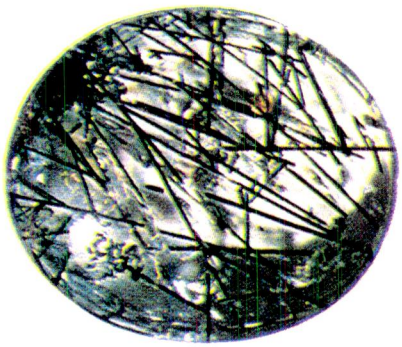
19.Silver pin with white gold,amber,coral
malachite,onyx and agate.

and faceted[3] stones designed to reflect light and enhance depth of colours. Soon after working out new forms in metal, she felt the need for fresh concepts in gemstones. Fascinated by semi-precious stones, by 1941 she began to work with the San Francisco lapidary[4] expert Francis Sperisen, not only designing new cuts but opening a whole new field of experimentation by utilising the transparent quality of gemstones (Plate No.20). The stones thus became something more than a decorative element and assumed a character of their own.

She studied the optical principle of light transmission and applied this knowledge to developing new techniques in faceting. Transparency required a new kind of cut which she called 'opticuts' to bring out of the qualities of transmission, magnification, multipication, prismatic effects and space enhancement. As a result the stones she used became an additional controlled design component. De Patta employed such stones as crystal, smoky quartz and topaz as vehicles for embedding or enclosing smaller gemstones and often, for instance cantilevered[5] a diamond over smoky topaz, adding a dramatic dimension to both stones by their complementary use.

The development of the stone as a transparent spatial object was made possible through the use of quartz - especially in its rutilated forms, (Plate No.21). The quality of the rutilated quartz[6] determines the sharpness of the line within it. This form of quartz stone allowed her to fully develop the transparent qualities. The lines within the stone gave the impression that the piece was in space as it appears to be suspended free from the body, (Plate No.22).

20.White gold pendant with rhomboid quartz crystal faceted.



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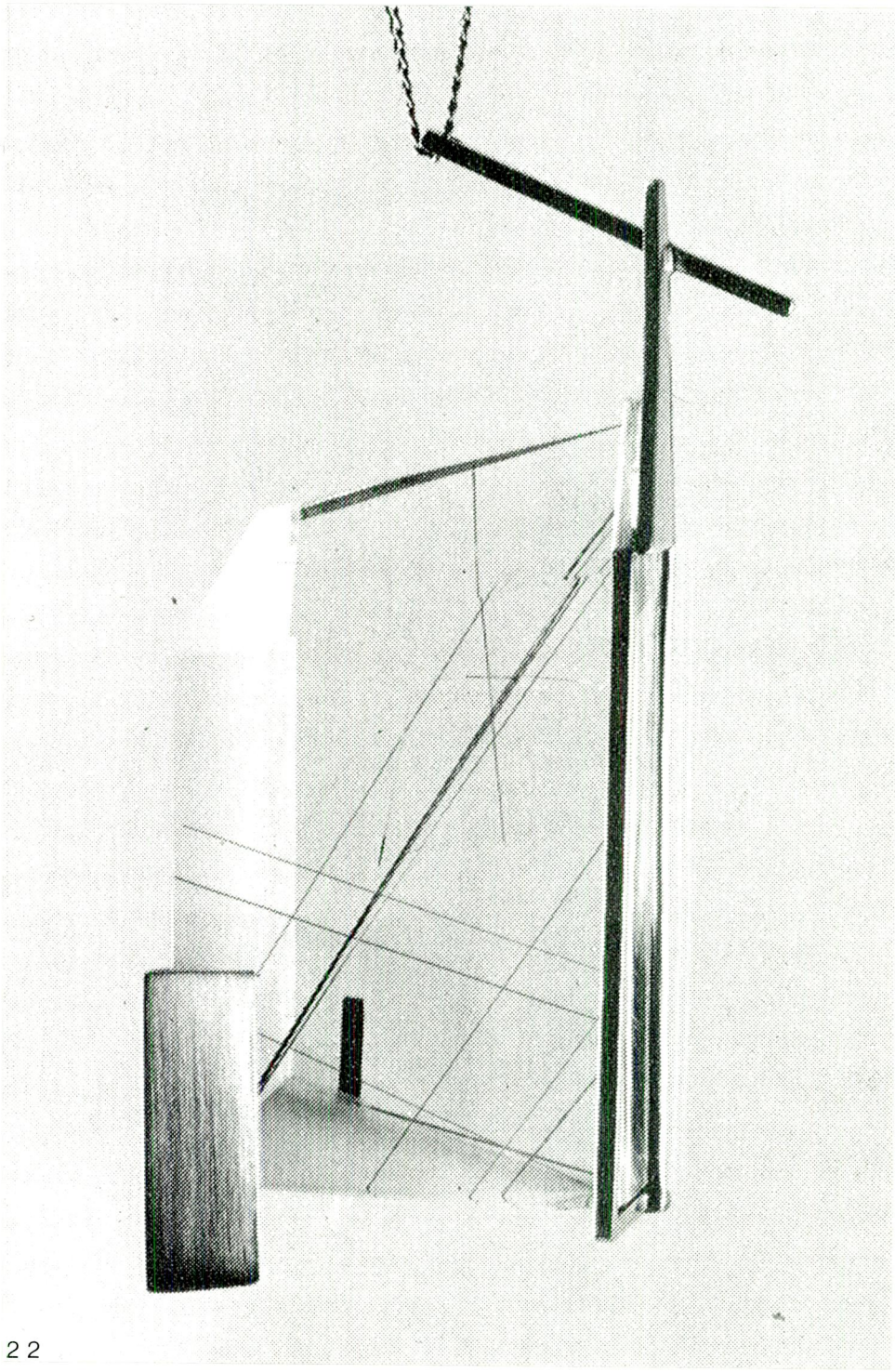


22

21.Stone-rutilated quartz.

22.Pendant with onyx and rutilated quartz

Sometimes she placed a strip of ebony behind a crystal which she faceted with wide sloping angles or with dozens of small uniform cuts to produce varying patterns with every movement of the wearer. The use of chemical bonding to attach stones to the flat surface of one piece of crystal and enclosed it with the concave surface allowed them literally to 'float' in space.

Her jewellery was so well received that in 1946 she began to produce prototypes for manufacture. Her jewellery proved to be a successful competitor to costume jewellery but she never lost sight of her original aim to create expressive art forms with her jewellery.

A piece of jewellery for Margaret De Patta, is not merely a decorative object that is added to ones dress. It is an object that is created through a structural need, a theory closely related to sculpture and architecture. Form and decoration evolve through a conscious investigation of the structural need of the object.

> We craftsmen engaged in producing objects for use find ourselves historically bound to search out fundamental forms rather than to decorate form. A mere simplification of a traditional form is not sufficient. New Form emerges, when a functional analysis is coupled with new materials, new technique or new human concepts. We live in a world of exciting new structural forms. We should be aware of the implications of such things, as the Maillart bridges, the geodesic dome and the pre-stressed contours that are supplanting the right angle aesthetic in architecture. We have discoveries just as revolutionary to make in our own field.
> (American Craft Council, 1965,p.2)

By 1946, when her output could not keep pace with demand and her prices were rising as a result, De Patta felt that her situation had begun to contradict her social views and the method of

working she preferred; therefore she resolved at once to try and devote more time to creating prototypes that could be produced at lower prices. She set up a manufacturing business that competed successfully with producers of conventional costume jewellery. Her output at popular prices surpassed that of others in design and quality.

Involvement in a commercial venture did not, however, detract her from a constant concern with original work, which she continued until her untimely death in 1964. For the year or so preceding her death she had given up custom work to devote her energies to experimentation, particularly in the field of sculpture, which along with architecture was of special interest to her.

CHAPTER THREE

Alexander Calder, 1898 - 1976

- sculptural mobiles

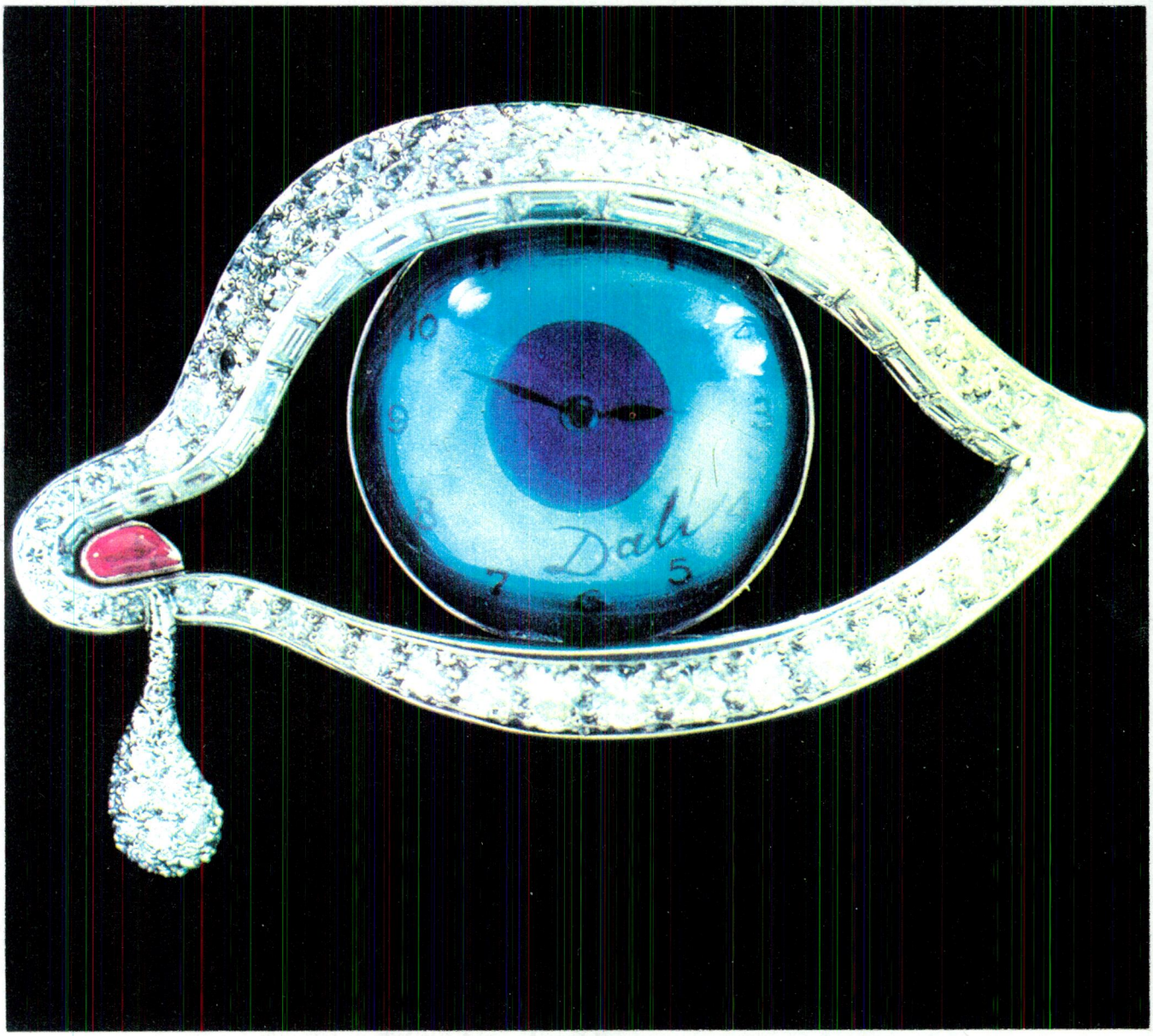
- his interest in jewellery

In comparison to the fine arts, jewellery was slower to react to new trends of the times. It was during the late 1950's and early 1960's that some international artists and sculptors expressed a genuine interest in the making of jewellery - among them was Dali. (Plate No. 23)

The interaction of their fine art work with jewellery became an important element in their work. They continued the move to discover imaginative and creative forms, to which the intrinsic value of the materials used was subordinate.

This can be viewed as one of the most exciting periods of contemporary art/jewellery since the 16th century, as never before had so many figures from other areas of art expressed such enthusiasm in considering jewellery as an art form worthy of their attention. Many people regarded this change of position as a new area of artistic expression, which it was to a great extent. However it is debatable how genuine this was or whether it was purely for financial reasons, considering the social climate after World War 2. Despite such doubts, it gave a younger generation of artists/jewellers the oppurtunity to use the medium as an expressive art form.

According to Ralph Turner, from the 1930's onwards the artistic life of America and especially New York had been considerably enriched by emigres from Europe which would have contributed considerably to a broader view of the arts generally. (Crafts Council, 1983, p.1)



23.Dali-"Eye of Time" watch.

This train of thought brings me to the work of the American sculptor, Alexander Calder who was born in Philadelphia in 1898 and began his career as an engineer. Calder invented a new type of sculpture which was translated into jewellery at a later date. Some of his constructions are capable of movement which earned them the title of 'mobiles'. In addition to his mobiles, he produced scores of non-moving sculptures, which he called 'stabiles'. Several of them are more than fifty feet high. (Plate No. 24) He made countless drawings, gouaches and lithographs and he designed tapestries and stage settings. Although he created impressive works in all these fields, it was his sculptural mobiles that gained him international recognition as one of the most original and inventive sculptors of our century.

Calder was also successful with jewellery, displaying a logical progression from his sculpture when other painters and sculptors were producing pieces which lost the true quality and style of their fine art work.

His primary source of inspiration was the movement of the sun and the moon across the skies. -

> It was early one morning on a calm sea, off Guatemala, when over my couch -a coil of rope- I saw the beginning of a fiery red sunrise on one side and the moon looking like a silver coin on the other. Of the whole trip this impressed me most of all; it left me with a lasting sensation of the solar system
>
> (Marter,1991,p.14)

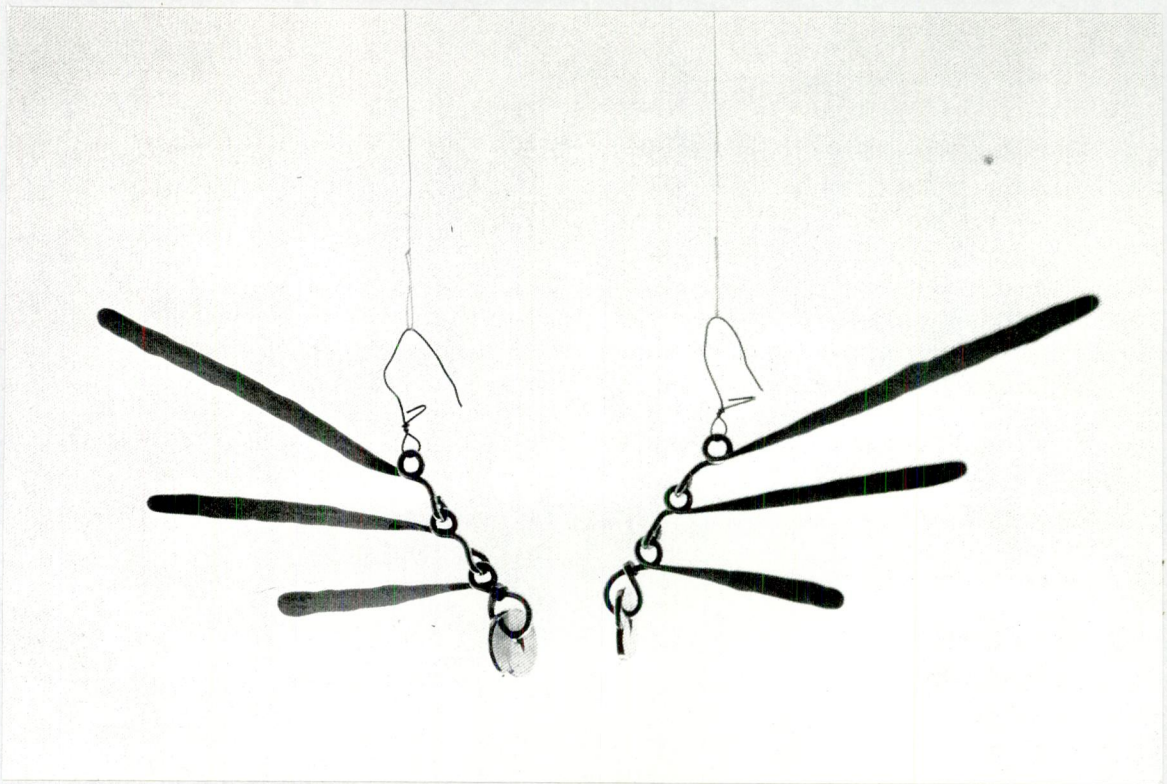
Unlike traditional sculpture, Calders mobiles generally hang from the ceiling and have no solid core. The majority of them were constructed using a combination of sheet metal and wire -

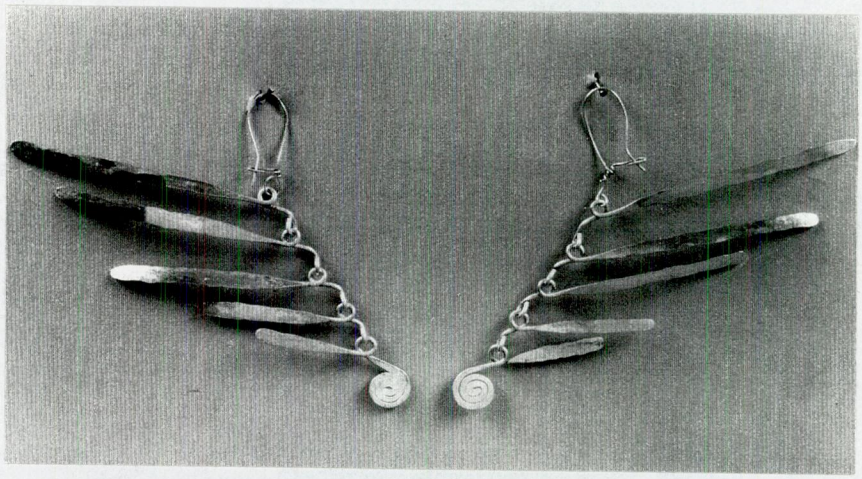
24.Calder-The Arch,1975.

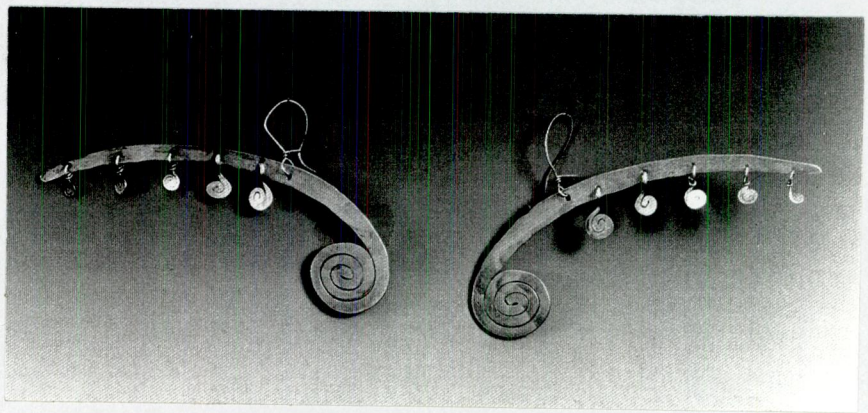
as is his jewellery. (Plate No. 25) The process of assemblage resulted in his mobiles being similar to the changing positions of planetary bodies in the solar system. He had an endless fascination with motion. This was quite revolutionary at the time because for thousands of years, most sculpture had been carved out of a mass of rock and marble or cast in bronze. Sculpture was almost always a solid free-standing three-dimensional object. The title or idea of such a piece may have suggested an action yet it would in fact remain motionless.

The 1930's is regarded as the most fruitful and prolific decade of his career. His work at this time was exploratory and enthusiastic as he searched for his individual style and sculptural strength. In 1931 Calder introduced a new sculptural form - the mobile, consisting of moving components powered by motors, though he was soon to discard these mechanical aids to create mobiles which relied upon air currents.

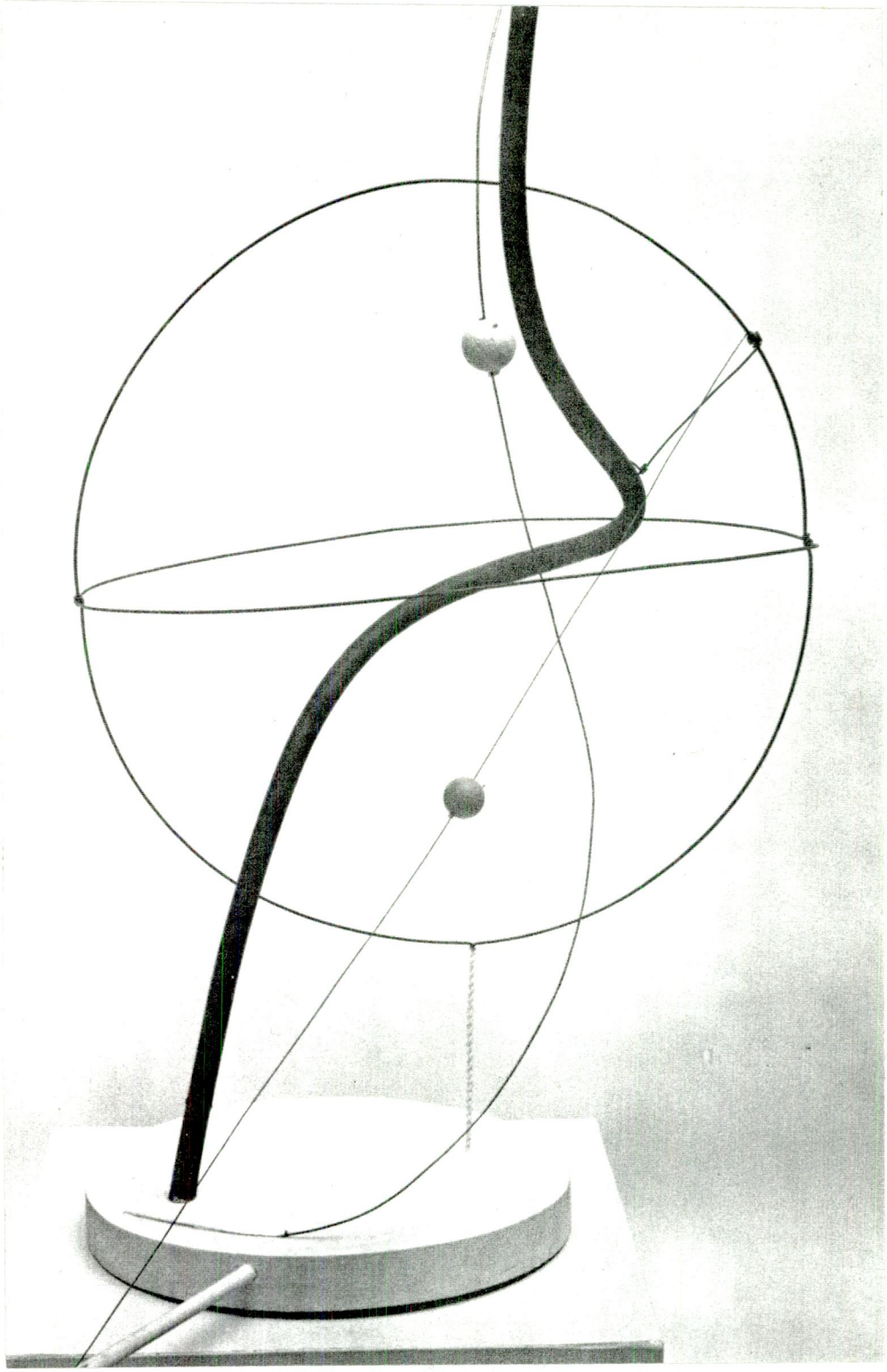
The motor driven mobiles were important to Calders development because they enabled him to experiment with various kinds of movement. (Plate No. 26) But they presented two main problems. The first was the repetitive, predictable patterns that result from mechanisation. He attempted to make his motor-driven mobiles less predictable by imposing relatively random patterns of movement. He felt he could achieve more interesting effects if he combined two or more simple movements with contrasting rhythms and rates of speed. But the process was difficult, and he was seldom pleased with the results. The second problem was that it was extremely laborious to make all the gears. The







25.Calder-silver mobile earrings,1940.



26.Calder-A Universe,1934.

motors presented numerous problems, so he looked for a simpler way to operate them.

It then occurred to Calder that the movement of his mobiles would be relatively free and capable of many more variations, if they were propelled by currents of air instead of electric motors. By the mid thirties he was making wind driven mobiles that hang from the ceiling. For thousands of years, sculpture had been oriented to the earth and it seemed a radical and startling idea to suspend sculpture. The mobile had no base or pedestal in any conventional sense and while it was still subject to gravity, it was easily stirred by air currents.

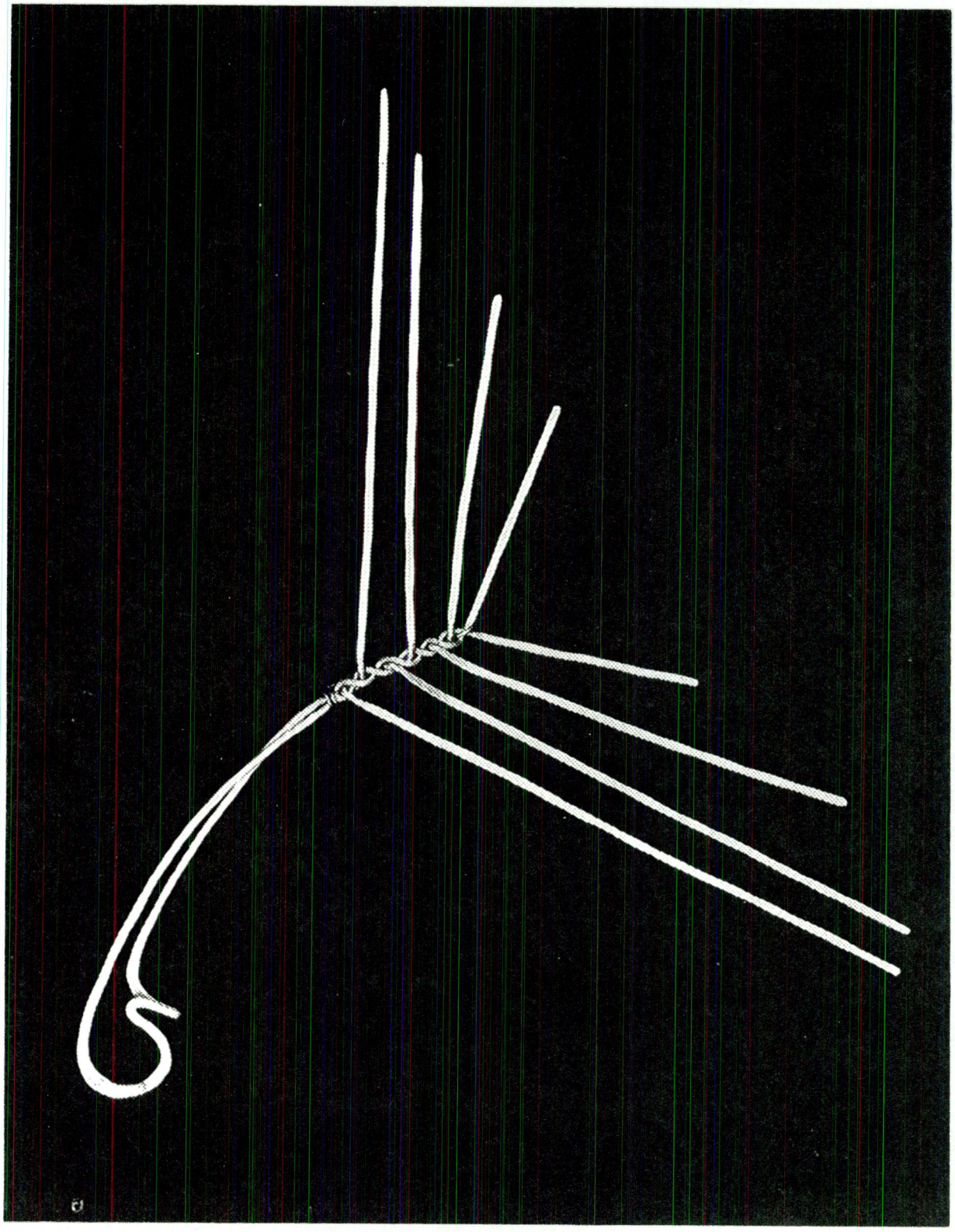
> But it was the innovative period of the late 1930's that gave rise to the vocabulary of forms, colour and movement that would occupy Calder for the next forty years (Marshall, 1987,p.13)

Almost all of his mobiles have an abstract quality about them. It is intentional that they are not literal translations of anything in nature. Even his mobiles and jewellery that are inspired by other subject matter, apart from that of the universe, capture the main characteristics and the real essence of them. (Plate No. 27,28) Calder was concerned with achieving a -

> Sense of motion in painting and sculpture... several motions of different types, speeds and amplitudes composing to make a resultant whole. Just as one can compare colours, or forms, so can one compose motion.
> (Marshall,1987,p.6)

The main features of his mobiles were numerous pieces of sheet metal, cut into rounded or angular shapes - rectangles were not used as they tended to stop - and firmly attached to

27.Calder-Indian Feathers,1969.

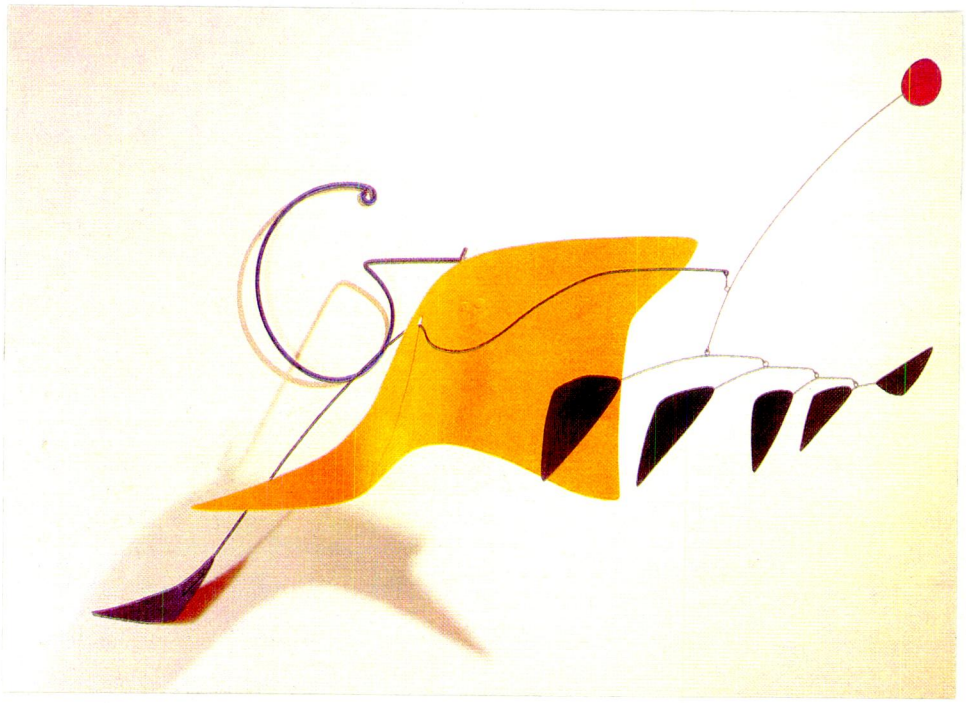


28.Calder-silver insect brooch,1940.

lengths of wire. They are then looped to one another so that each one has the ability to move or spin independently.(Plate No.29) Like sails, the flat pieces of metal are set in motion by any passing breeze. A touch of the hand or the slightest whiff of air is enough to activate a mobile, causing the various elements to whirl and glide through space, and recompose themselves in ever changing arrangements. The rhythmic movements that mobiles go through are just as important to the overall composition as the shapes of the metal blades and wire rods.

According to David Bourdon, many mobiles behave as if they have personalities of their own. Some move sluggishly, like big, ponderous animals, so lethargic in their movements that they could be imitating hippopotamuses lolling about in a mud bath. Others move with the brisk precision of an agitated bird, hopping from branch to branch. Some mobiles move with calm grace, while others are jittery and giddy. (Bourdon, 1980, p.4)

These sculptural mobiles are an endless source of delight today, particularly when jewellery has become more open to interpretation. Relation of form is most important in the design of sculpture and jewellery. Calder displayed two main elements that would appear constantly in every aspect of his work; intentional references to the solar system and a pronounced taste for curved form. He probably felt the curved lines were more graceful than straight lines, and were more in keeping with the nature of the cosmos.

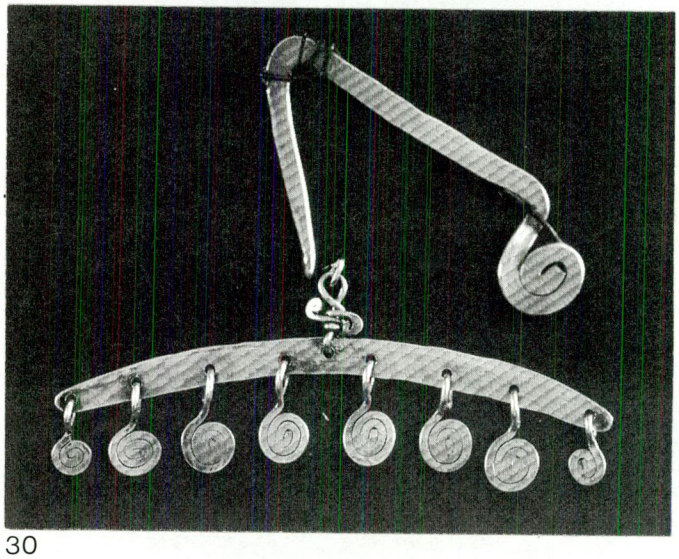


29.Calder-Yellow whale,1958.

Calder designed a large quantity of his jewellery during the years from 1933-52. The majority of his jewellery was made when he was in America as it was illegal to sell gold and silver items in France without them displaying a hallmark. As a result it was more economical to work with metals such as copper and brass. He worked swiftly which was obviously an important element of his working methods, considering the vast amount that he accomplished during his life time.

Within a forty year span, Calder had only five exhibitions of his jewellery. The first exhibition devoted to Calders jewellery was held at the Willard Gallery, New York, during the late 1940's. This exhibition illustrated Calders ability - with limited jewellery tools - to manipulate the silver, brass and copper wire and the malleable qualities of the sheet metal. His basic patterns included spirals, labyrinths, circles and rosettes; shapes that are truly suggestive of his sculptural works.

Like all the rest of Calders work, this jewellery displays an excellent ability for the simplification of form. It was both a lavish and spectacular range of bracelets, hair combs and earrings that are reminiscent of miniature mobiles. (Plate No. 30.31) His over-sized brooches and neckpieces - some of which were abound with found objects, spirals and curves - further emphasise the prominent features of his style. 'Harps and Hearts' 1950 (Plate No. 32) and 'The Jealous Husband' 1940 (Plate No. 33) reveal Calders true ability and sensitivity to movement with the unbroken line of sheet brass and the ever-changing images by his use of space within the pieces. Immediately the



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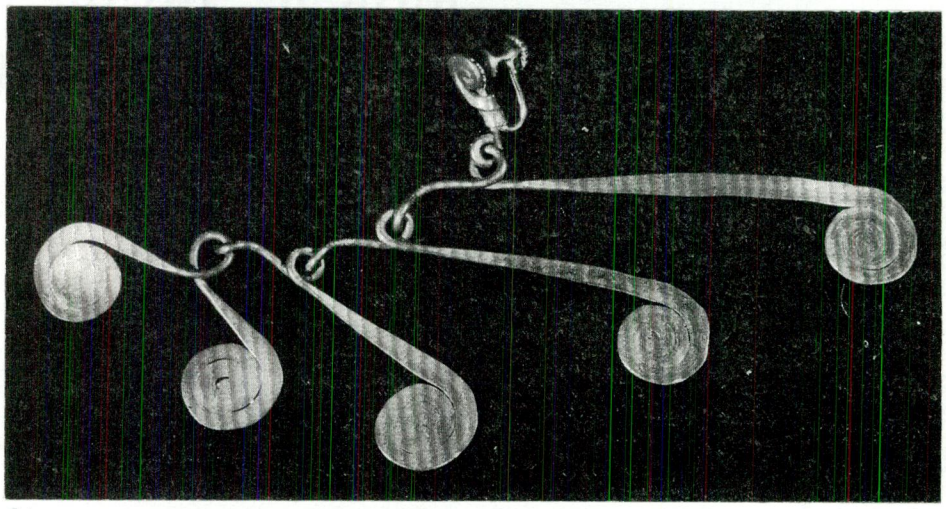

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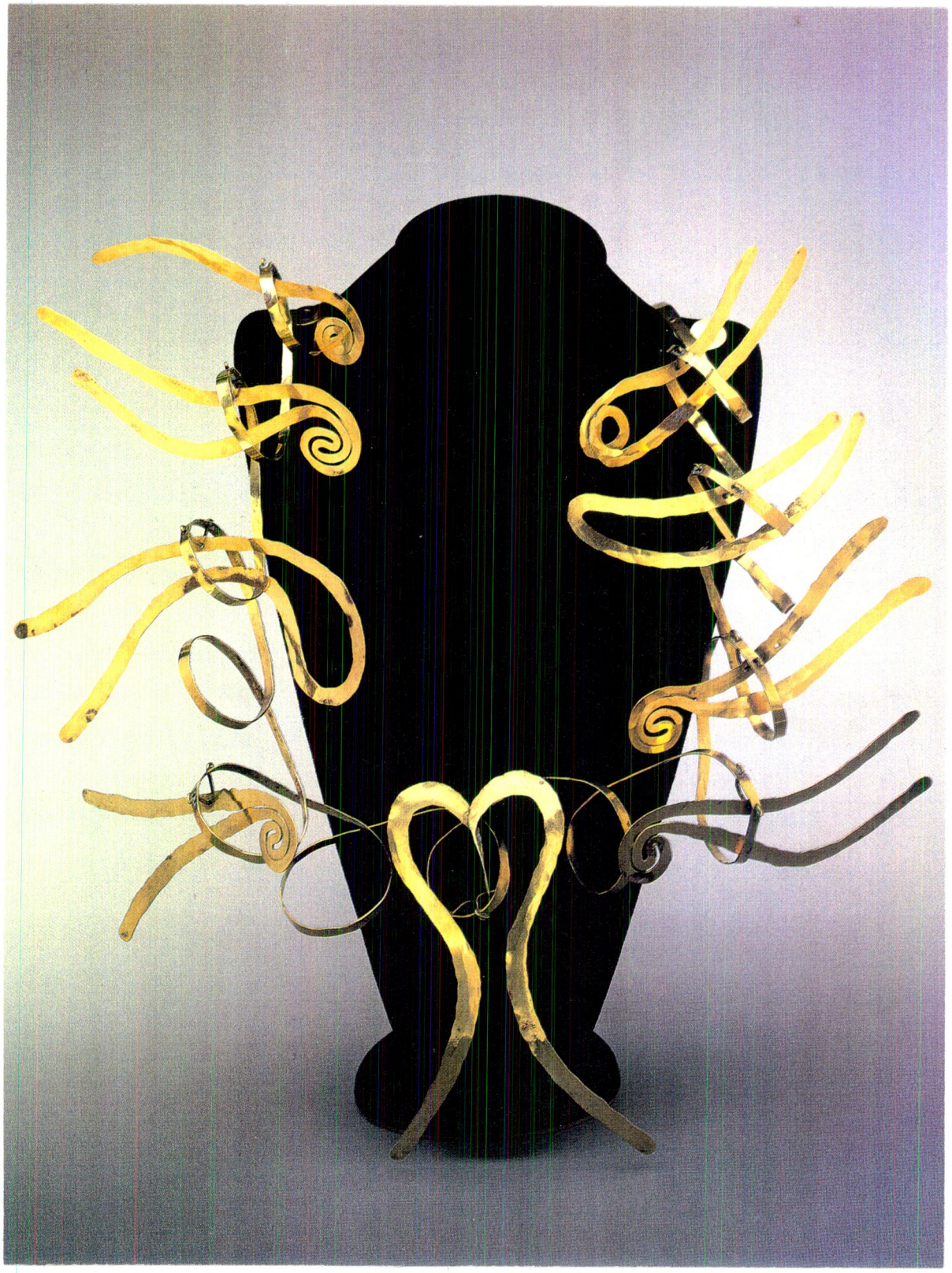
30.Calder-silver mobile brooch.

31.Calder-mobile earring.



32.Calder-harps and Hearts,1940.

33.Calder-The Jealous Husband,1940.

wearer is transformed to new heights yet such forms of body adornment have the strength to stand alone as wonderful sculptural objects. It seems very clear that Calders real talent, both in relation to conception and to execution, was in the three dimensional domain.

As far as technique was concerned, Calder deliberately avoided the use of conventional jewellery equipment -

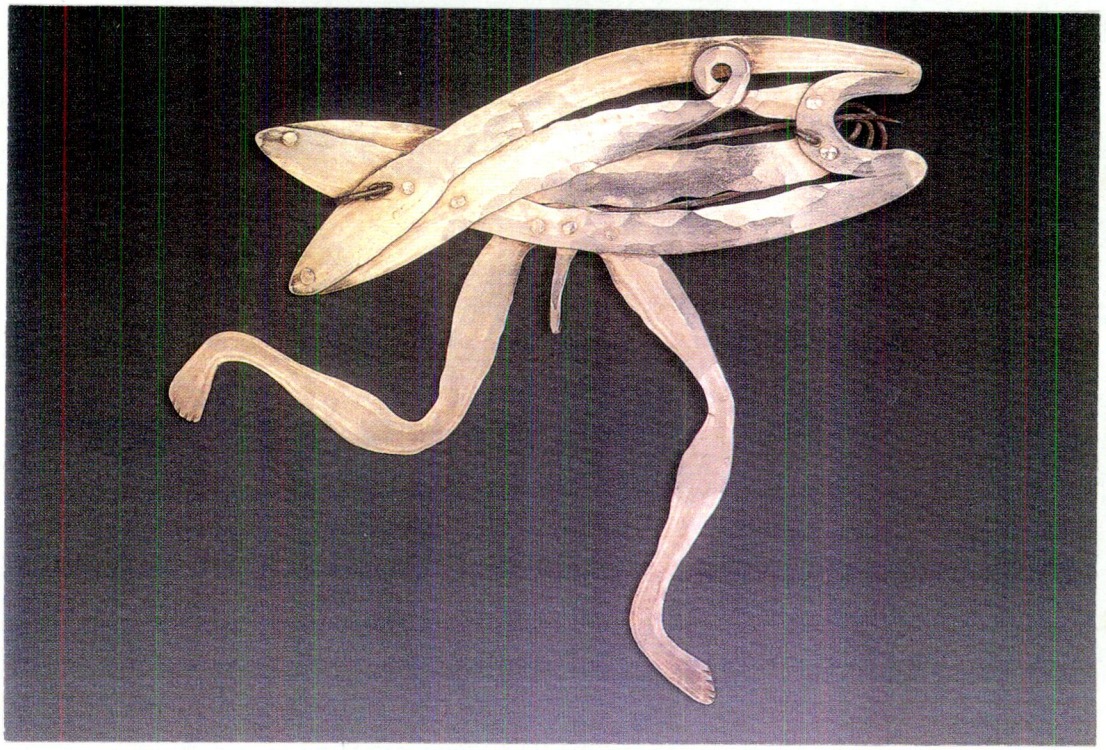
> a good heavy anvil, rounded at the end, a light hammer and a pair of pliers are all that is necessary. (Marchesseau, 1989, p.264)

Once the wire had been transformed it was hammered and riveted - techniques such as soldering and welding were never used. The deliberately 'plain' nature of the materials employed, the delicacy and the peculiar charm with which he imbued his work reveal a humorous and light-hearted nature. (Plate No.34) Using the most ordinary raw materials, Calder elevated them to the most intricately wrought decorative heights. For this reason he had no need to resort to precious gems and fine metals. Aside from a fairly large number of silver jewels, Calder worked primarily with brass. He never engraved the actual material and remained obedient to the rule in sculpture, which Louis Carre had formulated in 1934:

> Prefer forms without decoration to decorations without form (Marchesseau, 1989, p.270)

This approach was a complete contrast to that of Irish sculptor Vivienne Roche, who will be discussed in the following chapter.

His prolific output in the way of adornment is still underestimated, nor has the number of pieces ever been counted. In them all, Calders imagination and dexterity clearly emerged.



34.Calder-silver brooch,1942.

The movements of a hanging mobile are completely spontaneous and unpredictable depending only on the circulation of air. Part of the appeal of Calders mobiles is that they seemingly mimic things in the real world. In fact many mobiles behave like living things or people, in the sense that they conduct themselves according to certain patterns and rhythms. Unlike a machine, which repeats the same purposeful motions over and over, a wind driven mobile can be downright whimsical. It seemingly moves according to its own personality and temperament. When such ideas become the basis of design for jewellery, an entirely new experience or aspect takes place between the wearer and the piece, as if it suddenly communes with the wearer. One can imagine somebody, sub-consciously choosing a piece of his jewellery because they can relate to a particular rhythm or movement portrayed within the design.

> Within Calders remarkably varied production each genre is found to be linked to another in some significant way. Calders preoccupation with jewellery about 1940 seems in turn to have influenced his sculpture, for at that time his work became gayer, more slender, and the delicacy of some of the formal elements is reminiscent of the jewellery.
> (Lipman, 1977, p.209)

Similar to the work of Vivienne Roche, Calders primary concern was that of movement - not always necessarily mobile but the suggestion of movement within his work.

CHAPTER FOUR

Vivienne Roche, 1953 - Present

- sculptural forms and their source
- interaction of jewellery and sculpture
- Vice-Versa Exhibition, 1990 and the approach of the participants

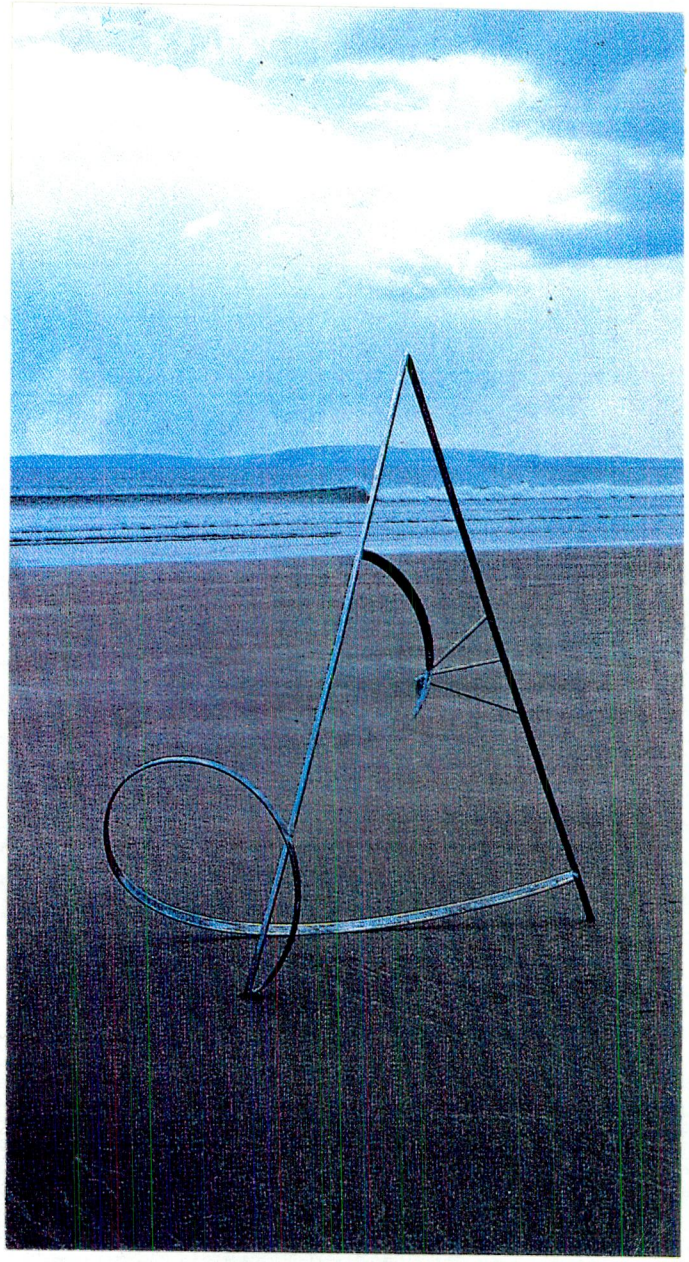
The interaction of jewellery and sculpture is beautifully portrayed in the work of Irish sculptor, Vivienne Roche. She works primarily with steel in an abstract fashion influenced by Calder and David Smith among others. For her sculpture is more than gaining mere technical knowledge.

> My work has always been responsive to my personal experience and different thematic pre-occupations have surfaced at different times. (Ryan, 1991, p.4)

While in America (1974/75), her major theme was architecture which enabled her to explore seriation, refraction, negative space and dynamic line, which is a strong feature of her work today.

Having moved to the coast in the late 1970's her awareness of nature grew stronger and wind and sea quickly emerged as sources for her work. Such an awareness is conveyed in 'A-Major', 1986 (Plate No.35). Her earlier influence is successfully combined with that of the elements. The piece has strong architectural qualities and movement of the line is truly suggestive of waves as they ebb and flow.

Vivienne Roche agrees that there is a fine line existing between sculpture and jewellery which is clearly demonstrated in her work. She believes that in both areas the physical aspects overlap, the only obvious difference being that of scale. While



35.Vivienne Roche-A-Major,1986.

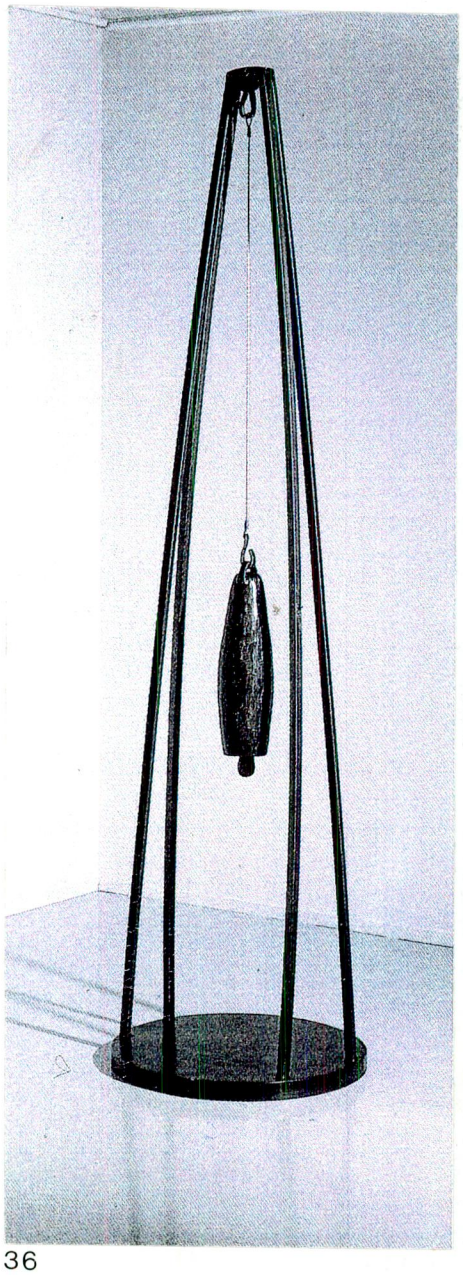
studying sculpture, her secondary subject was jewellery design because of her interest in adorning the body; suspension, partly influenced by the work of Calder, is also reflected in her bell sculptures (Plate No.36.37)

'Spiral Bell', 1990 (Plate No.38), can be easily perceived as a sculptural piece of jewellery and what is interesting is that there is a fitting as part of the design to enable the piece to be attached to the wall. All too often jewellery designers use the excuse that they had to alter the design because of certain attachments or fittings required to translate it into a wearable object. 'Spiral Bell' contradicts such excuses, it is a three-dimensional mobile form and also incorporates the element of sound. It is a brilliantly executed piece of design from both a sculptural and jewellery point of view.

Her method in getting from source to piece may derive from a definite image or an idea which she is working with. It is very interesting that she does not always make drawings first, but usually draws to resolve problems as a piece progresses. In contrast to the strict disciplines of sculpture in the early 20th century Roche responded immediately to steel -

> readily exploiting its properties as an industrial material in all its forms and finishes. Her rigorous abstract sculpture accorded with a mainstream modernist aesthetic, finding its inspiration in the geometric forms of modernist architecture.
> (Dunne, 1991, p.48)

Form is an emphatic characteristic in her sculptue - it is of utmost importance to her and they evolve as a result of both observing and seeing. 'Arc Assured' and 'Arc Rising' illustrate the strength of such forms, as they exude



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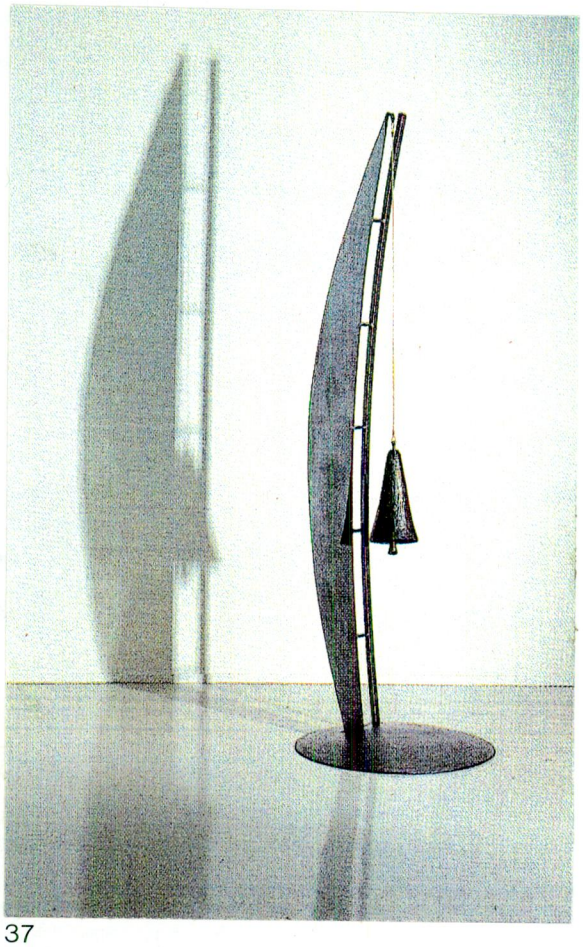

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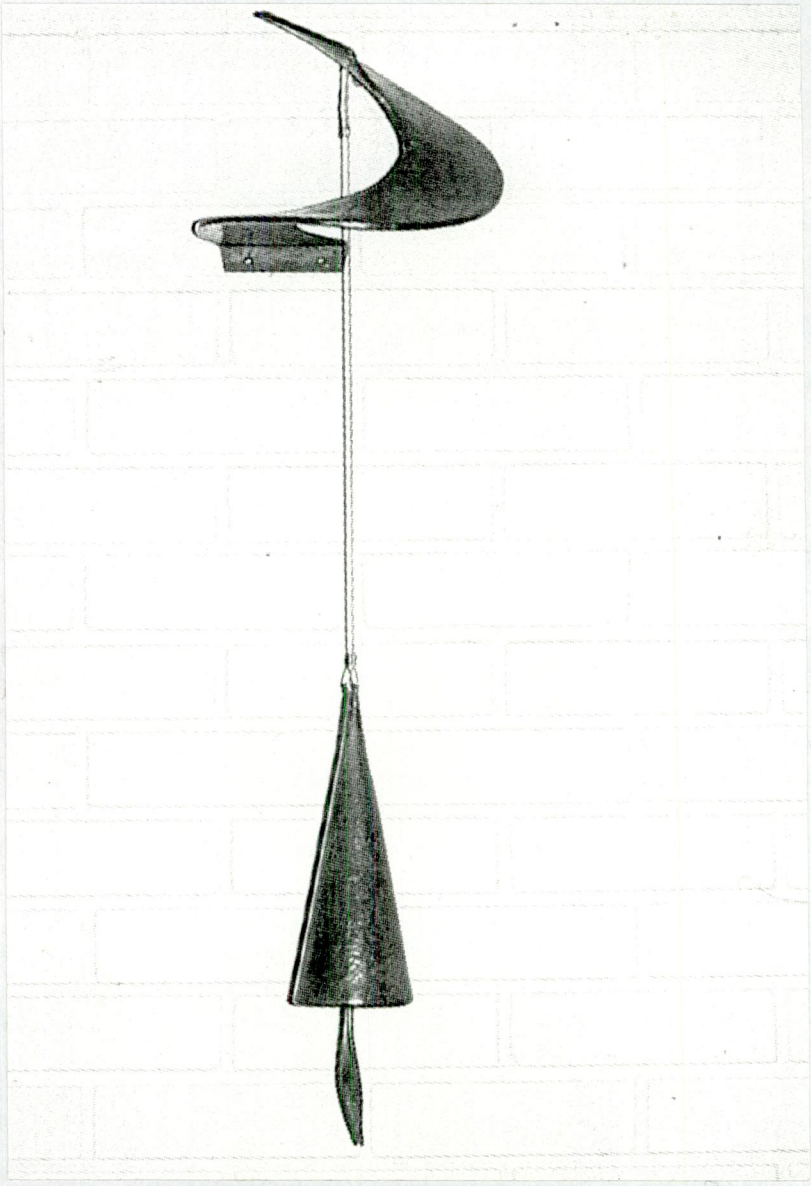
36.Vivienne Roche-Avesta,1990.

37.Vivienne Roche-Bow Bell,1990.



38.Vivienne Roche-Spiral Bell,1990.

a very intentional power and energy (Plate No.39.40). It is not power in the abusive or negative sense - it portrays the strength of her ability to control the metal and her working methods: practicality, abstraction and object based with a more subconscious concern. Her sheer enthusiasm for pushing steel to its limits can also be viewed in a series of wall-mounted 'drawings' in steel (Plate No.41.42). She successfully transforms the steel to imitate the adaptability of a drawn line with her skill and smooth flowing curves.

> I treat the wall as paper and the steel as pencil. I curve and layer the steel so that the shadows have different tones. Shadow is an element in itself not a by-product of making raised shapes.
> (Ryan, 1991, p.14)

More recently her sculptural pieces have been inspired by bells and musical instruments (Plate No. 43). At first, she expressed an interest only in the basic form of the bell but has now progressed to incorporating the element of sound. Traditionally, bronze was used to achieve a good quality sound which in turn has added 'a new colour' to her work.

Irish jewellers could be accused of being obsessed with technical skills rather than self-expression through their work. If you use sculpture or jewellery design as a means of expression it is not enough to be interested in forms simply because you like them. Such interests need to be combined with personal experiences and environment. We must forget restrictions, they have hindered our potential long enough. With a good knowledge of design and an honest response to our environment, contemporary in work this country alone can go from strength to strength.

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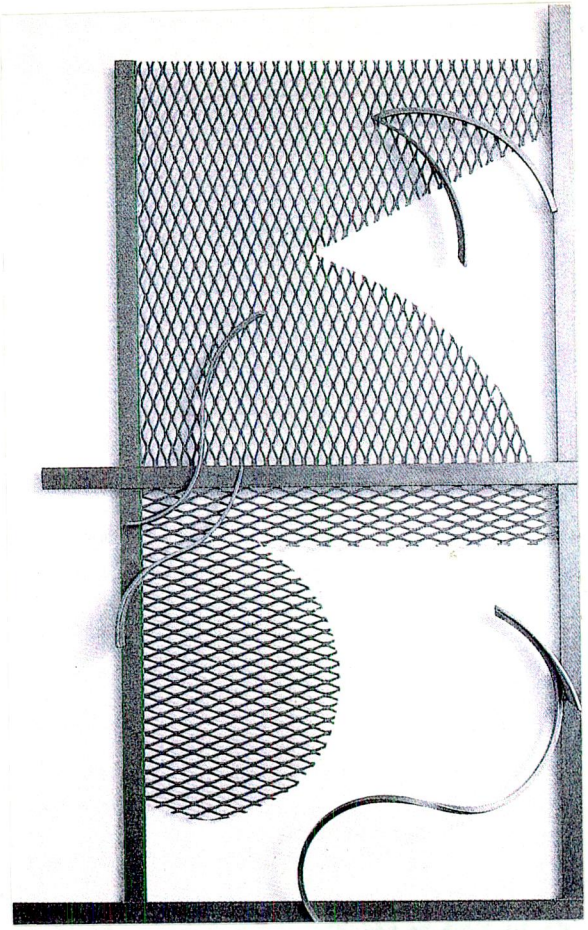
39.Vivienne Roche-Arc Rising,1990.

40.Vivienne Roche-Arc Assured,1990.



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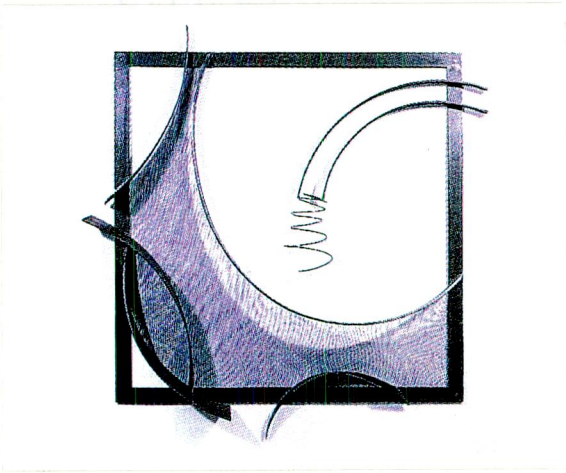

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41.Vivienne Roche-North Drawing No.1,1989

42.Vivienne Roche-North Drawing No.2,1989

43.Vivienne Roche-Freyjas Bell,1990.

In September 1990 the Vice-Versa exhibition offered Irish artists the opportunity to create expressive art forms in their chosen medium. The aims of the exhibition were to encourage public consciousness of jewellery and sculpture beyond their traditionally accepted norms: to explore the relationships between these two media, and to stimulate new directions to the use of the body as a medium of personal expression. Vice-Versa provided an exhibition which is thought provoking, accessible and enjoyable.

The idea - jewellery as sculpture, sculpture as jewellery - was first conceived by the Jewellers and Metalworkers Guild to discover where jewellery and sculpture interact. It evolved from the desire of its members to promote both themselves and their work through a new and exciting exhibition. The general theme was decided on and in conjunction with the Sculptors Society of Ireland, it took almost three years to organise.

Jewellery and sculpture are a universal and basic human response realised through mans unconscious desire to transform, metamorphise, enhance and decorate. Magical, superstitious, spiritual and other associative values are ascribed to items worm close to the body. Jewellery and sculpture throughout history, have been created for cultural identity and as adornment to enhance the wearer.

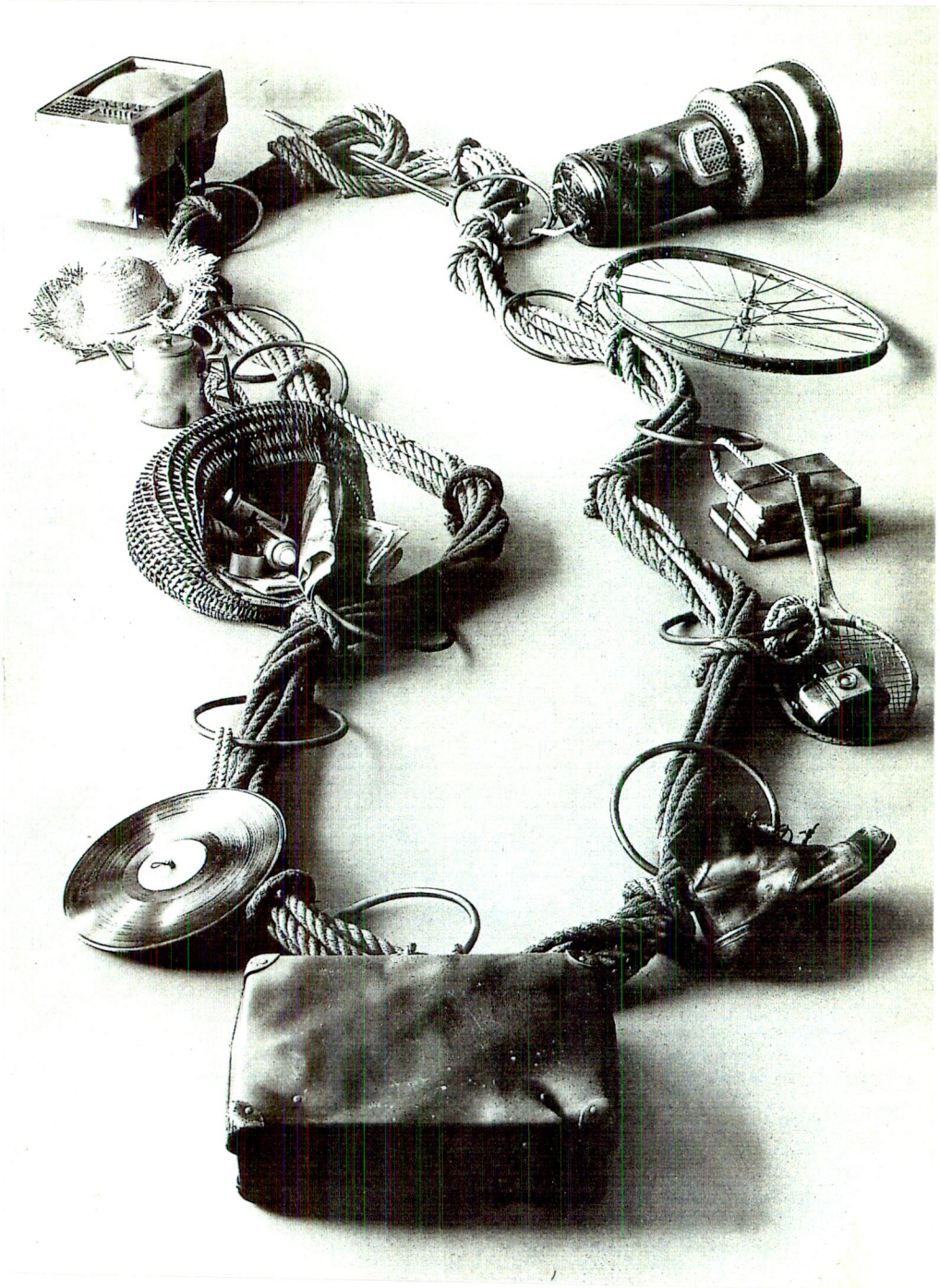
The exhibition examined various approaches of treating these media in terms of size, volume and the use of material. The work submitted was not strictly confined to that of jewellers and sculptors - included in the submissions was work from

ceramicists, fibre and textile artists and graphic designers. It gave free reign for participants to choose materials purely for their aesthetic values as opposed to the monetary values.

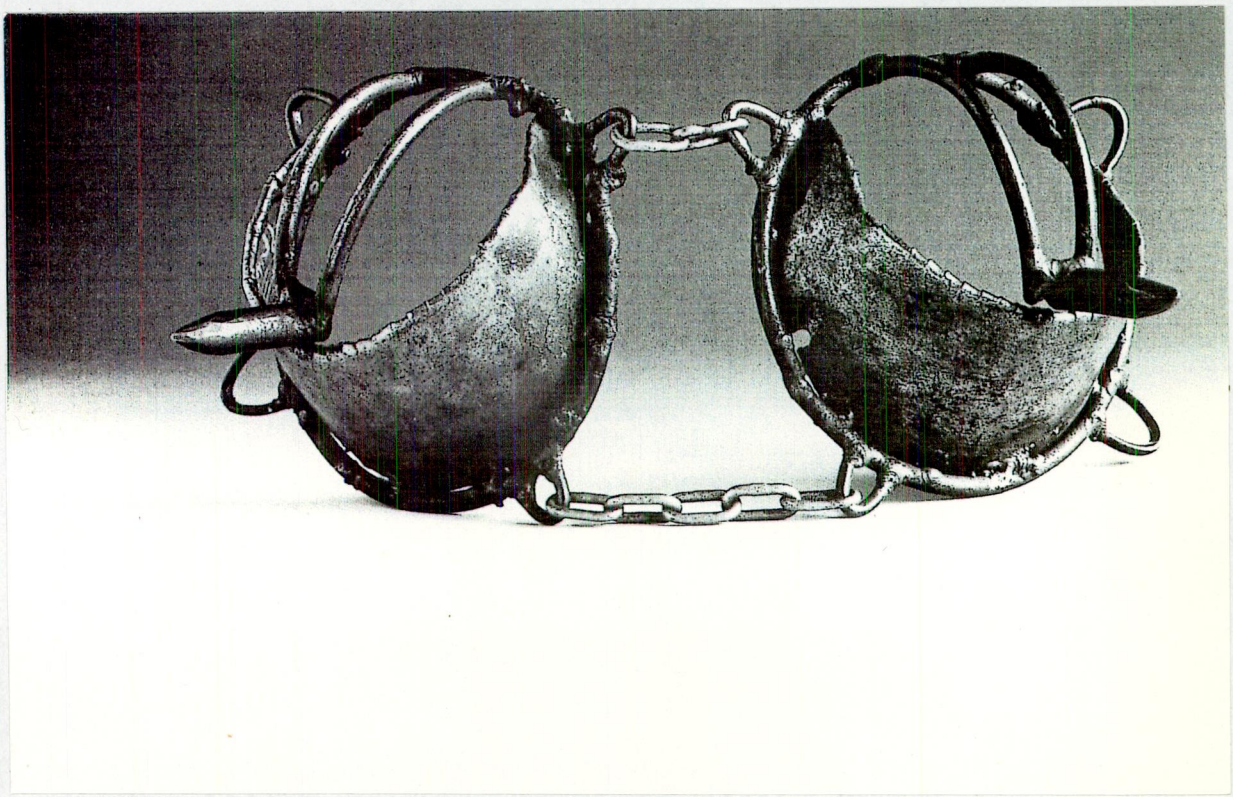
Breda Haugh, a jeweller who works mostly with precious metals took advantage of this freedom which can be seen in 'Circle of Life' (Plate No.44). It is a large scale piece measuring 250cm in diameter, incorporating rope, wire and found objects. The piece takes a more personal approach to the associative values of charm bracelets. Presumably the objects have a symbolic or sentimental value portraying her attitude to life, both past and present. From a sculptural point of view it could prove to be a very interesting concept when placed in a particular environment or community. One can imagine 'Circle of Life' as an outdoor sculpture alternating Breda Haughs 'charms' for objects that relate to the history of a community or town and its inhabitants.

Many of the works also make use of the body as an integral part of the concept, with the space around it often used to make bold statements having the pieces dominate the physical form (Plate No.45).Despite this approach which was obvious in some pieces, there still remained a stronger preoccupation with wearable forms rather than sculptural forms capable of being worn. The torso, as a source of design inspiration was overused to the extent that they became clichéd (Plate No.46.47.48.).

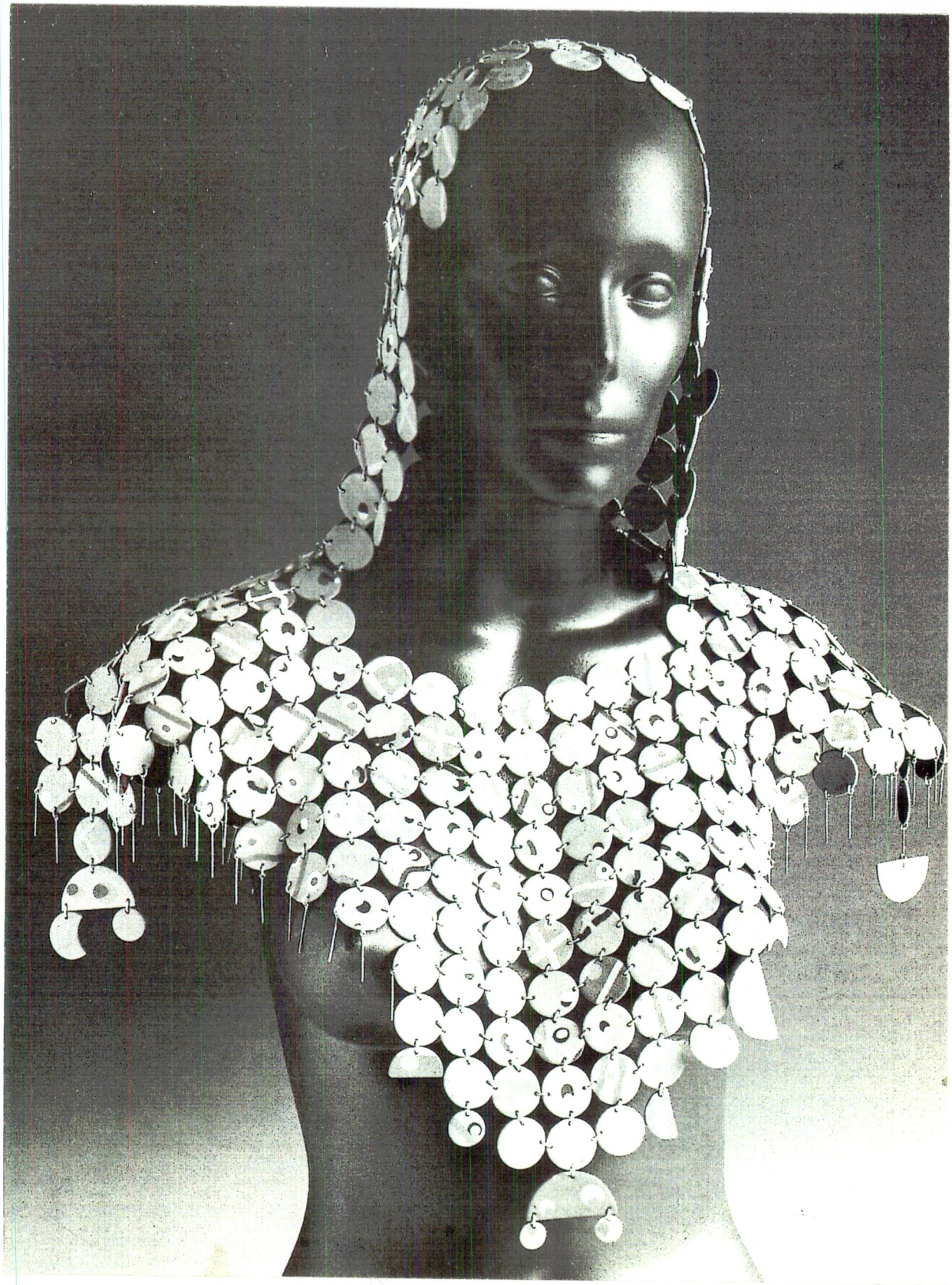
One of the more exciting and somewhat amusing pieces was 'Morris's Day Out' by Alan Ardiff (Plate No. 49). He describes himself as an artist/jeweller, because when people hear the



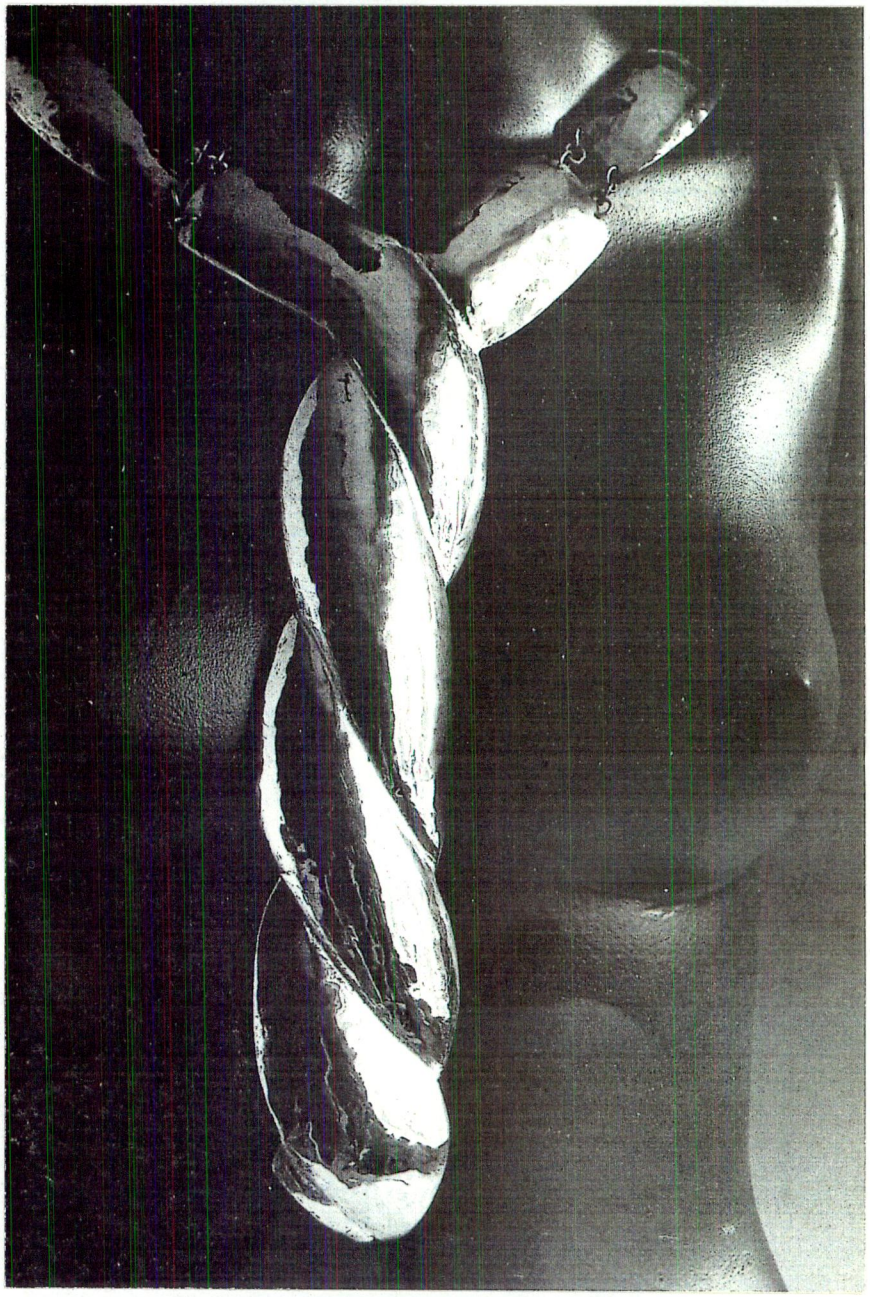
44.Breda Haugh-Circle of Life,1990.



45.Kevin Holland-Separator (More Vice than Versa!),1990.

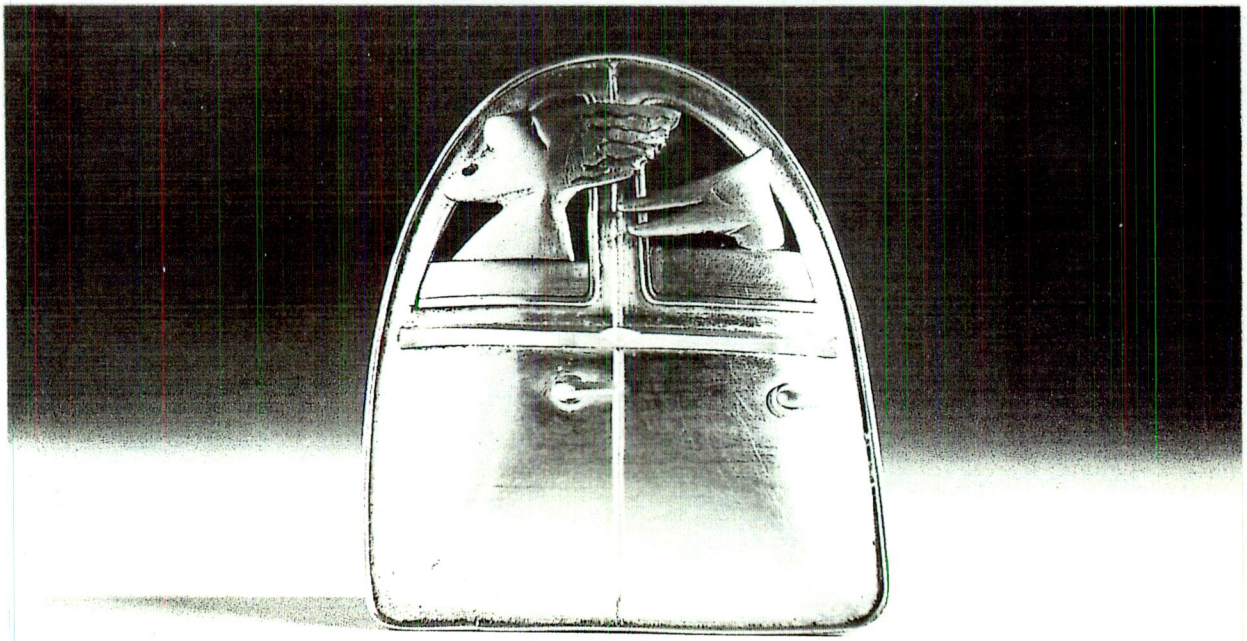


46.Patricia Vallely-Mood Hood,1990.



47.Diana Hickey-Tied Up,1990.

48.Margaret Ann Mulrooney-Waterfall,1990.



49.Alan Ardiff-Morriss Day Out,1990.

word jeweller, they conjure up images of claddagh rings and lockets. As one of Irelands most prominent contemporary artist/jewellers he still prefers to view the work for the retail commercial market as body adornment, to co-ordinate with the style of clothes someone wears and their individual characteristics. He feels these should not dominate the wearers appearance in contrast to the pieces he exhibits in galleries which are visually more extreme and would not be worn every day by those who purchase them.

All of his pieces have names which denote the story behind them - stories which are his own personal recollections and ideas. This further emphasises the idea of his jewellery as a means of artistic and personal expression. 'Don't Wake Me Now' (Plate No.50) illustrates beautifully his sense of humour and imagination. It depicts three nymphs floating under a male figure and carrying him away.

> It's one of those lucid dreams you have just before you wake up and I think it nicely blends humour with sensuality.
> (Murray, 1992, p.16)

Unfortunately, a strong affinity with Irelands past was evident in a large number of submissions. These deep rooted associations ranged through Celtic mysticism, the Vikings and folklore. There was a marked absence of influence in terms of design or use of materials from the fields of contemporary architecture, industrial design or graphic design which have inspired the work of many jewellers and sculptors. Most submissions involved the use of natural materials and traditional techniques.

50.Alan Ardiff-Dont Wake Me Now,19991.

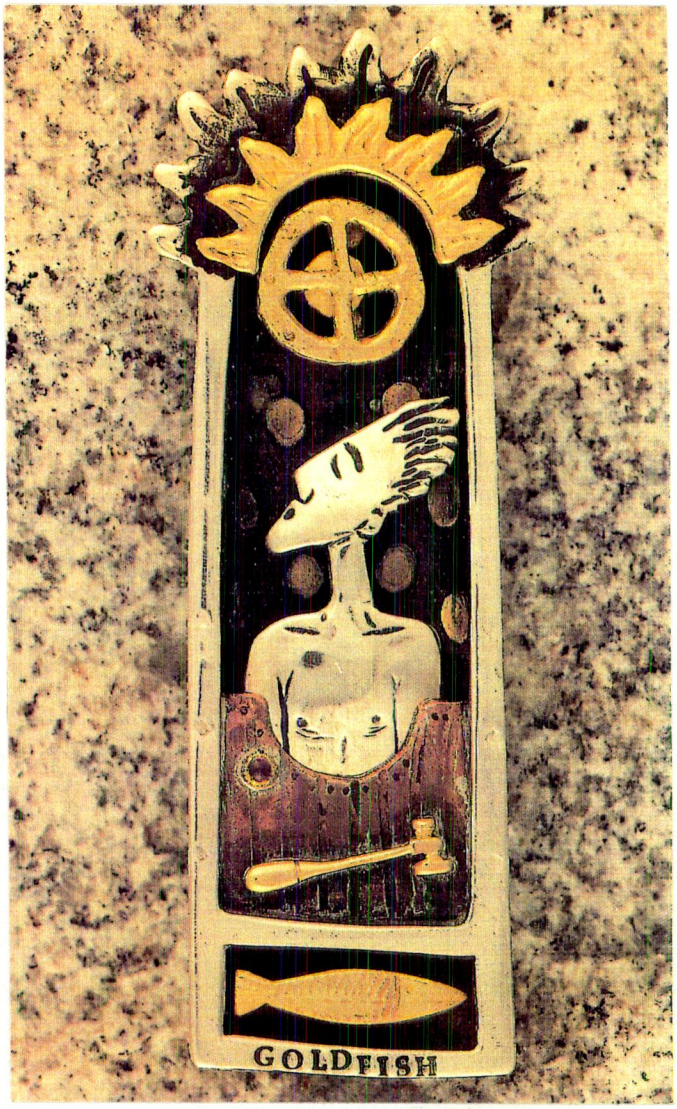
CONCLUSION

For my thesis I chose the work of both sculptors and jewellers which I believe best reflects the interaction of such media while also exposing the possibilities that remain undeveloped on the part of the jeweller. There is a common element in the work of De Patta, Calder, Roche and the various participants of the Vice-Versa exhibition. They have focused on sculpture or jewellery as an expressive art form. This includes a strong interest in movement, mobiles and the spatial aspect of construction and design.

The various art movements of the 20th century have demonstrated that there always existed a relatively small group of individuals whose primary concern was the use of jewellery purely for artistic expression. To some degree this has become increasingly difficult as a result of modern machinery and ideals. Jewellery of relatively good design and aesthetic quality can be mass-produced - even the one person jeweller is in a position to do batch production of particular designs.

The function of design in relation to jewellery and sculpture has undergone many tests. As society changes it is only natural that other means of expression also change. There is a growing interest in contemporary jewellery. Taking a look at exhibitions and contemporary design books it appears that the design of jewellery is gaining in size, expanding even to take on the form of a self-contained miniature object. (Plate No.51)

Some work has been produced specifically for market - conditions which, to an extent destroy its claim to be an art. Contemporary designers have paved the way as restrictions and limitations have become less important. Although commercial



51.Alan Ardiff-The Goldfish Maker,1993.

jewellery designs still dominate the Irish market it cannot always restrain the talents to which this medium has given birth. As early as the 1940's Margaret De Patta was producing jewellery that was capable of breaking down the barriers, that are still obvious between jewellery and sculpture. This was possible for her because the decorative or ornamental aspect did not overpower or dominate her designs. Fifty years on, her designs remain strong and do not appear dated when placed beside some of todays designs.

While discussing the various relationships evident between jewellery and sculpture with Vivienne Roche - it was brought to my attention that similarly with jewellery, sculpture is also produced for ornamental purposes. It is a division within the market that affects them both. This type of work says nothing about the maker or makers, it is devoid of sentiment.

> Anyone can have an opinion about what music is or is not, about what writing is or is not, about what painting is or is not, about what sculpture is or is nor and anyone can be right or wrong. But when you are involved making any of it an opinion is not enough. You have to find a way of proceeding that will lead you on. You have to believe in what you are doing and you have to be learning new things in the proceeding. If not why do it. My way is all of this. It is not the only way. It is one way. (Meyerowitz, 1984, p.6)

The only constraints on design are straight forward practical ones. Even these can be broken if the wearer can be persuaded to co-operate.

So if we are to consider jewellery and sculpture as a free form of human expressiveness, they have to shake off inhibitions and restrictions generated by traditional attitudes. These

attitudes are now being questioned and some work has reacted strongly against the status signification of jewellery, although not so much within this country.

> Both activities complement each other because both the jewellery and the sculpture follow the same principles - they are both constructed with units of material.(Meyerowitz, 1984, p.7)

ENDNOTES

1. Ensign - a brooch worn in the cap, extremely popular in the Early and High Renaissance.

2. Cabochon - a dome shaped stone. It is smooth-surfaced and ranges in size and shape from a low round, flat-based cabochon to a high domed oval one.

3. Faceted - a gem stone or crystal with numerous cuts on the surface.

4. Lapidary - refers to the art of cutting and polishing gem stones, to the one who cuts and polishes them, and the place where one works.

5. Cantilevered - a projecting bracket which supports a balcony or other structure.

6. Rutile - red dioxide of titanium
   Rutilated quartz - quartz crystal with rutiles as seen in Plate No.21

APPENDICES

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