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WASTE MATERIAL AS ART MATERIAL

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INTRODUCTION

> Anyone can do anything with a million dollars, look at Disney, but it takes more than money to make something out of nothing and look at the fun I have doing it. (Greenfield, 1986).

We live in a world surrounded by a surplus of everyday junk and rubbish and the majority of materials that are discarded can be reused or recycled. Few people are aware of the full extent of this activity and in my Dissertation I intend to discuss the possibilities of using waste material as art material in the classroom. Many schools have a limited budget for art materials and recycling centers such as the Travellers Resource Centre run by the travelling community offer a wide variety of interesting materials that can be used effectively and creatively in the art classroom.

In my first chapter, I discuss the concept of what exactly is rubbish, the global waste pollution problem and Victor Papaneks theories of the role of the designer in relation to industrial pollution. In Chapter 2, I discuss the different reasons why people recycle and the philosophy of thrift. My third Chapter looks at the work of artists such as Marcel Duchamp, Pablo Picasso, Mr. Imagination, Tom Every, Jim Butler and Kieran Behan who have used recyclable material and found objects in their art. Finally, in my Methodology Chapter, I discuss two schemes of work undertaken with first and second year students using materials from the Travellers Resource Centre as the basis for my research.

CHAPTER ONE

WHAT IS RUBBISH?

Junk, trash, debris, dregs, garbage, litter, lumber, offal, refuse, scrap and waste are all terms commonly used to describe what we know as rubbish. "Rubbish is, by definition, an object that is not, or no longer, owned by anyone, that falls outside all categories of economics, culture and social control."(1) When we throw away an object it is because we see it as worthless and no longer hold any regard for it.(2) "That which we throw away we fail to value". (3) If has fulfilled its basic intended function and is of no infinite value to the person or society that once possessed it. In addition the way we perceive this object changes once it joins its place on the garbage heap usually taking on a negative value as something unsightly, unsanitary and distasteful. What once was useful and served a purpose is thrown away as trash and is reduced to a valueless object of socially sanctioned rubbish.(4)

Resource Consumption:

The last half of the century has seen the rise of "galloping consumptionitis" and as a result the garbage explosion has outdistanced the population explosion.(5) At present Americans manage to discard more than two hundred million tons of garbage annually but although it is still undoubtedly the world leader of consumption and waste production, it is closely followed by the global economy and consumer culture of the entire industrialised world.(6) The developed countries produce a billion tons of industrial waste each year with the average household producing up to one ton in household waste.(7)

> "Planned obsolescence" has become the mantra for an entire generation of corporate producers and advertisers who have shaped not only the nature of the commercial product, but the mental attitude of the consumer as well.(8)

As we approach the Twenty-first Century, modern culture is consuming more and more leaving behind a legacy of unnecessary waste and pollution. World energy use doubled between 1930 and 1960 and doubled again between 1960 and 1984, the vast amount of energy supply coming from oil, coal and gas".(9) Our resources cannot last forever and extending their useful life is a basic environmental concern which also encourages a more practical and substainable approach to consumption.

Ireland's Waste Problem:

In Ireland the quality of commercial and household waste is estimated at 1.1 million tons with a further 4.86 million tons of waste disposed of by private funds, twenty-five per cent of all commercial and household waste consists primarily of packaging.(10) With the ever increasing output finding new dumping ground and alternative solutions to waste disposal is becoming a problem both here in Ireland and abroad. Most garbage and industrial waste ends up in landfill sites, some is incinerated and some is simply dumped at sea.(11) However all of the individual methods of disposal mentioned above have serious consequences in terms of environmental pollution besides being a waste of valuable and often irreplacable resources. Because of the shortage of existing and available landfill sites in the developed world rubbish is often transported long distances to less heavily polluted areas.

Biodegradability of Materials:

Unfortunately rubbish deposited in landfill sites does not simply biodegrade into harmless substances and general materials such as newspaper and packaging which are considered to be fully biodegradable do not decompose in the airless atmosphere of most landfill sites.(12) The results can be disasterous as our universal "garbage mountains" build up causing

hazardous pollution and damage both to the environment and to public health.(13)

> Material in landfill sites often contain contaiminants, such as metals or toxic chemicals, that eventually leak out into the surrounding soil, and then into rivers and streams, and end up in the water supply. The gases created by the decomposition of organic material contribute to the greenhouse gases, unless they are taped and used for heating.(14)

This "throwaway spirit" or "Kleenex culture" mentality has only really materialised alongside the economic and cultural growth enjoyed by a relatively small yet priviliged section of the world population.(15) Today we only have to observe what a country or society regards as rubbish to ascertain its economic wealth. "In our world of material wealth, where so many broken items are thrown away, rather than mended.... we forget that most of the world fixes everything and discards nothing."(16)

Poor people and less affluent societies do not waste as much as wealthy societies do, simply because they cannot afford to and as a result usually place a higher value on their natural resources.(17) We only have to look at modern technology to explain the rapid "garbage explosion" evident in the latter half of the Twentieth Century. The speed of technological development is so advanced that this year's product is quickly outdated and replaced by a superior model and as a result there is a higher output and turnover of everyday commodities. "The accelerated pace of technological innovation frequently makes a product obsolete before artificial or stylistic obsolesence can be tacked onto it".(18)

The Design Decision:

Most items are designed specifically to decrease in value after their initial function is served and inevitably end up on the scrap heap after a relatively short life span.(19) Consumers no longer purchase an item with the intention of it lasting a lifetime and instead most goods are conveniently disposable and easily replacable.

> Much recent design has satisfied only evanescent wants and desires, while the genuine needs of man have often been neglected by the designer. The economic, psychological, spiritual, technological and intellectual needs of a human being are usually more difficult and less profitable to satisfy than the carefully engineered and manipulated "wants" inculcated by fad and fashion.(20)

Most consumer products and services that are produced use up our natural resources many of which are irreplacable and a lot of environmental problems are caused by the pollution involved both in the manufacturing processes and also by the build-up of waste from the use of these products. "Designers, as creators or specifiers, are in a postition *to* determine many of these issues".(21) It is sometimes difficult to see how individual decisions by designers about what can appear to be relatively minor issue such as packaging or disposal can consequently effect the environment, but only by rethinking some basic assumptions, functions, tastes, and lifestyles, will it be possible to make any significant progress towards a more substainable way of living.

> The designer planner is responsible for nearly all of our products and tools and nearly all of our environmental mistakes. He is responsible either through bad design or by default; by having thrown away his responsible creative abilities, or by "not getting involved" or by "muddling through".(22)

Design can be a very powerful medium in which designers have a considerable opportunity to influence the consumer public and to put into effect significant beneficial changes."Design can have an impact upon the environment in many different ways; through the extraction of raw materials; through the design of the manufacturing process; in how the product is used and distributed, and in what happens when the product reaches the end of its useful life".(23)

It can be the starting point through which the objectives of environmental education and social responsibility can be met. "The most effective way of addressing the waste disposal problem is to produce less waste. This is an area where designers will have a crucial role to play, and where good design can really make a difference".(24) Manufacturers and designers can have an immediate and invaluable effect on the waste pollution problem by simply designing and manufacturing easy to repair items with a longer life span thus making it easier to build to last.(25) "Durability, rather than disposability, is the more appropriate longer-term solution, but this requires a significant change in consumer attitudes before it is acceptable."(26)

Victor Papanek:

The idea that designers should take the environment into consideration is not new, and Victor Papanek argued convincingly in his book published in the 1970s entitled "Design for the Real World" that the designer was in a powerful position to create a better world to live in.(27)

> In this age of mass production, where everything must be planned and designed, design has become the most powerful tool with which man shapes his tools and environments and by extension, society and himself.(28)

Papanak believed that the way in which modern society perceive and look at everyday items as possible trash and rubbish once their initial function is served is a direct result of propoganda and conditioning by advertisers and the mass media."In a highly mobile, throw away society the psychological need for security and permanence is often viciously expoited by manufacturer, advertising agency, and salesman by turning the consumer's interest onto the superficial trappings of a transitory "in-group."(29)

Papernak traced this throwaway mentality to the introduction of the automobile where consumers were encouraged to trade for a new model every two or three years thus creating a whole new culture of obsolescence.

> Throwing away furniture, transportation, clothing and appliances may soon lead us to feel that marriages (and other personal relationships) are throw-away items as well, and that on a global scale countries, and indeed entire sub-continents are disposable like "Kleenex".(30)

Papernak could see that the whole concept of obsolescence was beneficial in developed countries or climatic situations where, for example, disposable surgical and dental equipment would be invaluable, but he also thought that the designer had a huge moral responsibility in a world which cannot sustain the capitalist cycle of making, buying, and selling. "When we design and plan things to be discarded, we exercise insufficient care in designing or in considering safety factors".(31)

Papernak believed that the designer should work for the majority rather than for the few and that the ultimate job of design is to transform man's evironment.(32) "Design must become an innovative, highly creative, cross disciplinary tool responsive to the true needs of men. It must be more

research oriented, and we must stop defiling the earth itself with poorly-designed objects and structures".(33)

The Commercial Imperative:

Papernak's ideas outraged most of the design establishment at the time, however today his ideas which once seemed utopian and revolutionary appear highly practical and relevant to today's society in context with the concern being expressed throughout the world over mass pollution and environmental problems.(34) Twenty years ago, environmentalism was regarded as an activity for the "radical fringe" or "born again hippy brigage", but nowadays governments and business make a point of advertising their environment and waste reduction credentials.(35)

> Many businesses are beginning to realise that long-term commercial success depends on acceptable environment performance. Environmental problems such as resource depletion and pollution are disruptive and costly, and poor environment performance, such as industrial accidents, can call into question the social acceptability of a company.(36)

There is a growing realisation that problems affecting the environment in relation to waste production can no longer be ignored. Today the contribution that intelligent design can make to improving the environmental performance of products is increasingly being recognised. "Design can have an impact upon the environment in many different ways; through the extraction of raw materials; through the design of the manufacturing process; in how the product is used and distributed; and in what happens when the product reaches the end of its useful life."(37)

Changing Consumption:

This Green Movement emerged during the 1980s with more and more consumers eager to adopt a cleaner and healthier lifestyle, and to take into consideration "Green" purchasing policies.(38) "Growing affluence in the developed world has created an opportunity for people to become interested in the quality of their lives, rather than simply in survival through the acquisition of basic necessities."(39)

A sense of urgency arose over new scientific evidence of the impending environmental problems caused by "Global warming" and the "Greenhouse effect" and rising public concern resulted in people taking action in many countries. People demonstrated their feeling through their voting preferences and by changing their behaviour to accommodate recycling or energy efficiency policies, and also by making a conscious effort to become more aware of the environmental criteria of their consumer purchases.

> This was long before Thatcher discovered the votes in the ozone layer, Sainsbury's discovered the profits in recycled toilet rolls, and we discovered that David Icke was a bottle bank short of a recycling center.(40)

In the 1990s there has appeared to be some recognition that quantitative consumption goals may not lead to satisfaction. "We are in a period of being more humble, of spending less of, being more frugal. These crosses just emphasize that sense of self-denial. Also, there's the AIDS crisis. Literally, we're keeping our pants up, and holding back - using our will power to control that hedonism that we had in the '80s.(41)

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The Role and the Responsibility of the Designer:

The new challenge for designers and industry is to make it possible for the consumer public to receive the products and services that they need in ways that are much less resource intensive.(42) It is essential for designers to address problems that ultimately effect the environment and to have an understanding of the underlying theme of substainability.

> The conservation of natural resources and the responsible management of renewable resources lie at the heart of the concept of substainable development, which will become an essential theme for politics and industry.(43)

Environmental awareness is becoming an important part of the design criteria in industry concentrating on ways to meet today's consumer needs without causing irreversable damage to the environment.

> When choosing materials, therefore, and in particular when introducing a new material, designers should take into consideration the likely impact of that material on the eventual disposal or recovery of the product.(44)

The idea that designers should consider the environmental impact of their work is more than just a moral one, and it has been accepted in several institutions "just as the medical profession observes the Hippocratic Oath, so designers have been urged to take responsibility for a "green ethic", because of the central role they play in influencing the environmental performance of so many things".(45)

Designers wishing to take on the task of improving the environmental performance of current consumer products will need a good knowledge and understanding of environmental issues and impacts.

> Designing to minimise waste will require a good knowledge of the life cycle of the product, and good information about the performance of different materials within the re-use or recycling chain.(46)

This may require a higher degree of scientific and technical knowledge and understanding that traditionally has been taught in many design disciplines. "It is now essential for designers to understand the impact of design decisions on environmental performance and thus environment must be part of the core curriculum".(47) Design and engineering courses are beginning to incorporate environmental issues into the syllabus which should influence all aspects of the course, but in most cases design has not been taught in the context of social and ecological impact.

> The need to build consideration of environment impact into the design process will pose enormous problems and challenges, but it will also be a stimulus for innovation and creativity. Above all, it will provide real opportunities for designers to demonstrate the value of their porblem-solving skills and the breadth of their contribution.(48)

Designers have considerable influence to effect significant beneficial changes and it is essential for designers to address problems that ultimately relate back to design and consequently effect the environment.

> Designers and engineers may play a significant role in the redesign of industrial processes to reduce the need for harmful emissions; the development of pollution abatement equipment also offers a rapidly growing opportunity for design skills.(49)

The redesigning of our society to minimise waste will demand an integrated approach both from manufacturers, designers and the consumer public.

FOOTNOTES - CHAPTER 1

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2. Ibid., p.15.

3. Victor Papanek, Design for the Real World. Great Britain: Thames and Hudon Ltd., p.74.

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5. Ibid., p.12.

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7. Dorothy MacKenzie, Green Design, Design for the Environment. New York: Harry N. Abrams Inc., p.31.

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11. Green Design, p.31.

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13. Ibid.

14. Ibid.

15. Recycled Re-seen, p.16.

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20. Design for the Real World, p.10, 11.

21. Green Design, p.11.

22. Design for the Real World, p.46.

23. Green Design, p.24.

24. Ibid., p.32.

25. Ibid., p.11.

26. Ibid., p.33.

27. Ibid., p.8.

28. Ibid.

29. Design for the Real World, p.11.

30. Ibid., p.74.

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32. Ibid., p.21.

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34. Green Design, p.8.

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36. Ibid., p.12.

37. Ibid., p.24.

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40. Recycling, Forms for the Century - Austerity for Posterity. England: Craft Space Touring, p.14.

41. Recycled Re-Seen, p.171.

42. Green Design, p.20.

43. Ibid., p.35.

44. Ibid., p.32.

45. Ibid., p.167.

46. Ibid., p.34.

47. Ibid., p.168.

48. Ibid., p.6.

49. Ibid., p.34.

CHAPTER TWO

RECYCLING AND THE GLOBAL MARKETPLACE

Recyling by definition is "to put through a cycle again" or "through a new cycle".(1) Recycling conjures a contrasting picture of the "creative salvage" and "Green wellies brigade", "Those who re-use materials as a touchstone for experiments in functionalism and aesthetics and those for whom re-use connotes virtue, thrift, and clear harmony with nature".(2) It also brings to mind images of bottle banks at the local supermarket or an industrialised process far removed from the consumer, once their rubbish or trash is taken away for collection. There are many different reasons why people recycle, for some there is a certain aesthetic pleasure derived from making useful and valuable objects from another person's "rubbish" or "trash". "It is clear that one man's rubbish can be another man's desirable object, that rubbish like beauty is in the eye of the beholder."(3) (See Fig. 2.1). For others recycling is a necessity, in cultures where money is scarce, it is thought dutiful to recycle even if this means hours of preparation. "Limited resources means mending, re-fixing and re-using everything. Things are not thrown away but saved and recycled, often in a different context".(4)

The United Nations estimates that two per cent of the people inhabiting cities in non- industrialised countries make a living from the refuse and rubbish discarded by the richest ten to twenty per cent.(5) (See Fig. 2.2)

> In Jakarta Indonesia, for example, women work in the intense ninty degree heat sorting through huge piles of liquid soap bottles, food wrappers, disposable diapers, and other plastic waste - most with familiar western logos - to sell back to industrial recyclers. In Medellin Columbia, workers pick through what they call the "Third Mountain" - five hundred tons of refuse from which they retrieve thirty tons of things to sell. And the city dump of Cairo is home to over thirty thousand christian migrants from southern Egypt known as Zabaleen, who collect, sort, and sell metal, glass, paper, and plastics to local middle men.(6)

Fig 2.1 1958 Photograph of a young woman holding a violin made by her grandfather from a Swifts Premium ham can

Fig. 2.2 Group of tin lanterns from Brazil, Ethopia, Mexico, Guatamala and Togo, makers unknown

Thrift and Waste:

People improve out of necessity when forced to recognise the unlimited potential of materials available adopting the philosophy of "thrift". Expressions such as "necessity is the mother of invention", "waste not want not", "make do and mend", "every little makes a miracle", "when the well runs dry we know the worth of water", and "a stitch in time saves nine" all embody the old fashioned values of thrift and resourcefulness.(7) All these phrases are part of a practical philosophy in which waste whether of time or material is considered morally wrong and reflect the long standing moral values placed on thrift and frugality that was particularly evident in 19th Century America.(8) Historically we can look to Benjamin Franklin who ranks "frugality" as fifth and "industry" sixth of his "thirteen virtues" which was published in his book "Poor Richard's Almanack'. Another proponent of thrift and resourcefulness was the writer, Sarah Hale, who edited The Boston Ladie's magazine and 'Godey's Lady's Book' which encouraged housewives to be creative and economical when dealing with household duties.(9)

Today we generally do not have the same deep seated moral values regarding "thrift" and resourcefulness mainly because we have such an abundance and choice of everyday commodities."Our age offers us more wealth, adventure and pleasure that could not be dreamed of a generation ago."(10) Our tradition of self-restraint and social responsibility has largely been replaced by an ethic of excess and national gratification. With this increased wealth, we are leaving behind unsightly and dangerous left overs from industrial and consumer waste for future generations, who will have to respond to the new conditions of contemporary lifestyles.

Fig 2.3 Wabag man from Papau New Guinea wearing an aluminium whole wheat biscuit tin on his head. Photograph early Twentieth Century.

> Living in a disposable, waste burdened, and socially atomized culture, we are called upon by ecological necessity to reconsider not only the manner in which we use and value things but the way we view ourselves and each other as well. In this enterprise, recycling is both a social responsibility and a way of looking at the world.(11)

The majority of materials that are discarded can be reused or recycled and recycling challenges and questions our whole perception of what we view as trash and rubbish. "The process of retrieving and transforming a consumer package or product that someone else has thrown away is a phenomenon that is taking place in the largest metropolises of urban America as well as the remotest corners of the Amazonian rain forest".(12)

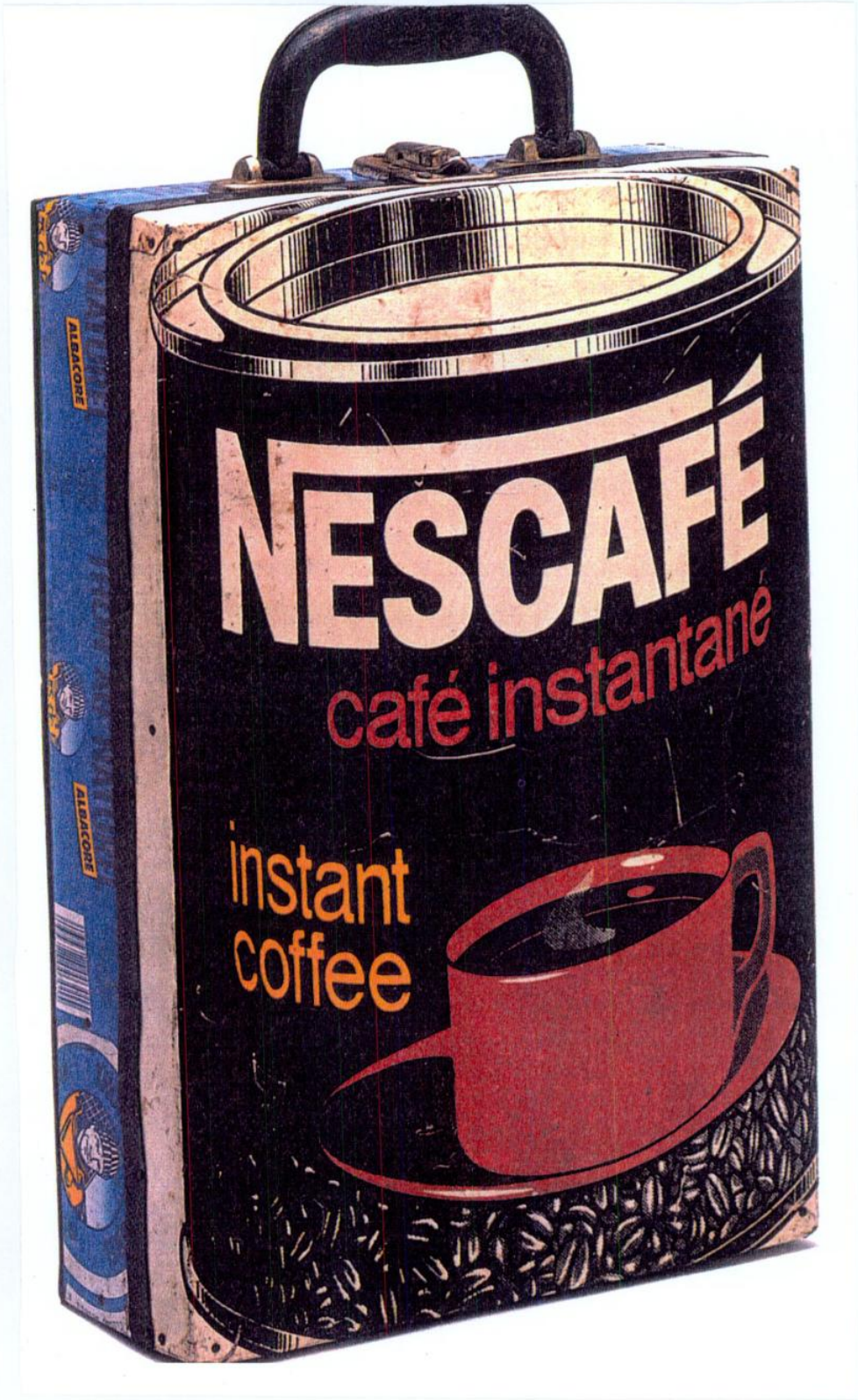
Today, what we see as local can no longer be separated from what is global and the material signs of our consumer culture are no longer limited to the market of the first world capitalist consumer.(13) The intrusion of modern material and consumer products is evident even in the remotest corners of the globe. (See Fig. 2.3)

> We are living in an age in which the mass-marketed and globally advertised corporate sponsors of these products - Levi Stauss, Seiko, Coca-Cola, and Reebok, to name but a few - enjoy a tremendous iconic recognizability and popularity on the international cultural landscape.(14)

The further fact that different objects have different life spans and degrees of disposability all contribute to the way in which we value these objects as they shift and slide across the geographic and socioeconomic boundaries of class, caste, and culture throughout the world.

Fig. 2.4 Nescafe Briefcase, Maker unknown.

Bakar, Senegal, c. 1980



> Drop a Coca-Cola bottle among the Bushmen of the Kalahari and you get the culture shock depicted in The Gods Must Be Crazy" - a film, its video jacket tells us, "that shows us (westerners) just how crazy we are" But drop Coca-Cola cans - or 7-UP or Heineken into Sengal or Burkina Faso, and you get them back - flattened out and made into briefcases, the logos proudly displayed, the insides lined with French comic books, shipped to the west for sale.(15)

Reuse and recycling is recognised as one positive alternative to simply throwing everything away as trash and rubbish. Solid waste management, global greening and ecological awareness are the buzzwords that guide and motivate consumers and industry to engage in the process of secondary and post-consumer waste recycling. In modern society which has created a desire for the newest and simply discards older items as junk or rubbish, consumer recycling faces an uphill battle.(16) Educating people about recycling through promoting waste preventing and the potential re-use of waste material is a beneficial solution to the problem. The annual cost of waste disposal is a huge drain on the world economy both in terms of finding new available dumping ground and also through the loss of valuable and often irreplacable natural resources. Recycling provides a valuable opportunity to review the potential of everyday waste and rubbish and it also encourages the learning and development of new skills and ideas. (See Fig. 2.4)

Irish Recycling Initiatives:

The Waste Management Act passed in 1996 in Ireland reflects the growing awareness of the possibilities and advantages of utilising waste materials and products consequently developing a more sustainable approach to consumption.(17) There was limited experience of separate collections for

recoverable materials until the establishment of Kerbside Dublin in 1991 which has clearly shown the feasability of recycling in Ireland. Kerbside Dublin was supported by industry, retailers and local authorities with a view to meeting recycling targets set by European and national legislation. Its main function is to divert as many recoverable materials as possible for landfill and since it has been established there has been an 18% increase of total waste management from the period 1991 to 1994. Through exploring the various possibilities available in dealing with solid waste, Kerbside recognised the potential link between artistry and recycling.(18) The art of recycling project was funded by the Consumer Policy Service of the Commission in Brussels and facilitated by Kerbside Dublin.(19) Kerbside recognised the need for a comprehensive workbook to foster creative thinking regarding the use of recycling materials in art, design and theatre and it helped to promote and develop this idea through a series of workshops and a workbook entitled "The Art of Recycling". (See Fig. 2.5) A video was also produced to demonstrate visually the different areas explored Art, Craft and Design. (20)

The basic concept of the programme encourages creativity in everyday life, drawing attention to the inherent value of materials and resources available generally referred to as rubbish and consequently stimulating a response to utilising domestic and industrial waste. Kerbside initially involved five professional artists, Yvonne Leon, Natalie Connolly, Sean O Laoighaire, Kate Malone, Ursula Retzlaff O'Carroll, in its project in November 1995.(21) It provided a valuable experience both for its participants and the general public in exploring the potential of waste products and also providing an opportunity to develop and learn new skills.(22) The benefits of Kerbside Dublin are unlimited, encouraging the re-use of domestic and commercial waste wherever possible, and also presenting simple examples

of how recycling can be part of day to day life in a creative but practical way.

> The less material goods a society has the more it recycles.(23)

The Nature of Trash Transformed:

We only have to look at the developing countries as an example of how they utilise their resources in a practical and economical way. In Western society we generally tend to be indifferent regarding environmental and economical advantages of the whole concept of recycling. "Self Help" a Carlow based Third World Organisation founded in response to the 1984 Ethopian famine recently organised an exhibition entitled "The Value of Rubbish". Through this Exhibition, Self Help aims to show how the African people have used their creativity and ingenuity to create useful household objects and appliances from rubbish and waste material.(24) (See Fig. 2.6)

> Oil cans become tools, or toys, or oil lamps. Wire skillfully bent becomes toys for children.(25)

There are numerous advantages to the project, the Africans become self-sufficient, potential eyesores disappear, and valuable employment is created. "The recycling economy generates income, which helps keep families together, and goods to help them enjoy their togetherness".(26) At a time when the world is becoming so environmentally conscious the ability of the Africans to utilise the resources that they have available is an example of what can be achieved with what we view and discard as rubbish.

Fig. 2.5 Paper Mache Doll, the Art of Recycling Workbook / Kerbside Dublin.

Fig. 2.6 Self-Help - The Value of Rubbish Exhibition.

Colourful food storage container made from wire salvaged from old tyres.

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3. Ibid., p. 15.

4. Ibid., p.39.

5. Ibid., p. 17.

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8. Ibid.

9. Ibid.,

10. Ibid., p.32.

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24. Ibid.

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26. Ibid.

CHAPTER THREE

THE ART OF RUBBISH

> The use of found materials layers into a work of art several levels of meaning; the original identity of the fragment or object and all of the history it brings with it, the new meaning it gains is association with other objects or elements; and the meaning it acquires as a result of its metamorphis into a new entity.(1)

Within the developing countries, recycling is still commonplace and works of extraordinary beauty are produced both in the high quality of their craftmanship and originality of ideas. Toys, scultpure, art, decorative artifacts, and household objects produced, set an example of how the African people have used their creativity and ingenuity through recycling and reusing everyday rubbish and discarded materials to create works of art. (See Fig. 3.1)

> Objects and materials that are not defined as ornaments in one society can be appropriated into the language of ornament of another. Shape, colour, texture and symbolic resonance are all analytically separated from the whole, for the process of recycling ignores the culturally given integrity of the original object.(2)

Artists re-use and recycle for a variety of reasons including financial, aesthetic, and environmental reasons, and considerable satisfaction is derived from creating or re-inventing a material which was previously seen as worthless, and giving it a whole new lease of life. "For some there is a certain pleasure derived from jumbling form and materials which belong to completely different spheres. It can produce all sorts of transformations which throw objects into an unusual light and give them new and unexpected meaning."(3) There is also the added freedom gained from working with found objects or items generally referred to as scrap or rubbish that otherwise would be absent if using an expensive or precious material.

Fig. 3.1 Telephone wire basket - unknown Zulu maker,
South Africa 1994.

> Then, too, there is an attraction in the redolent beauty of the trash heap. It is a place free of restraint, rich with possibilities, laden with discovery, layered with old meanings and associations, and tinged with voyeurism.(4)

There is a huge amount of waste material produced both in industry and by the general public where there is great hidden potential for creativeness and scope for inventiveness.

> Thus, recycled objects can be analyzed as a combination of two object languages; that of the first makers and users and that of the recyclers who impose their own aeshetic system on the finished product.(5)

Marcel Duchamp:

At the heart of recycling material for creative and artistic use lies the concept of alchemy which by definition, is a blend of science, magic and religion. It was the conceptual basis for Marcel Duchamps altered readymades exhibited in 1913 which transformed the nature of art in the 20th Century.

> Marcel Duchamp, Andy Warhol, and other modernist artists have taught us to see urinals as fountains, soup cans as paintings, and cheeseburgers as sculptures - thus making it easy for Western audiences to appreciate consumer products as recycled into art.(6)

Marcel Duchamp's work has had a huge influence on the whole concept of what is perceived as art and what is generally accepted as art. "Duchamp changed the whole course of modern art, taking it in a direction other artists, however great, did not even conceive of as possible".(7) Born in Blanville,

France in 1887 he first became noted around 1910 as a member of the Cubist Group of painters. "The age which Duchamp lived was exceptional, a time of rapid change, and Duchamp developed even faster than the rest, so fast that he quickly reached a point of no return, where the very definition of art was called into question."(8)

He influenced the Dada Movement which represented a pessimistic reaction against previously held ideas about the nature of art. In 1913 Duchamp exhibited a mounted bicycle wheel upside down on a stool, and in 1914 he showed his first "readymades", one of these a rack of empty wine bottles was exhibited as a work of art. Duchamp's bottle rack wittily questions the value that is placed on certain objects and also the context in which they are used. (See Fig. 3.2)

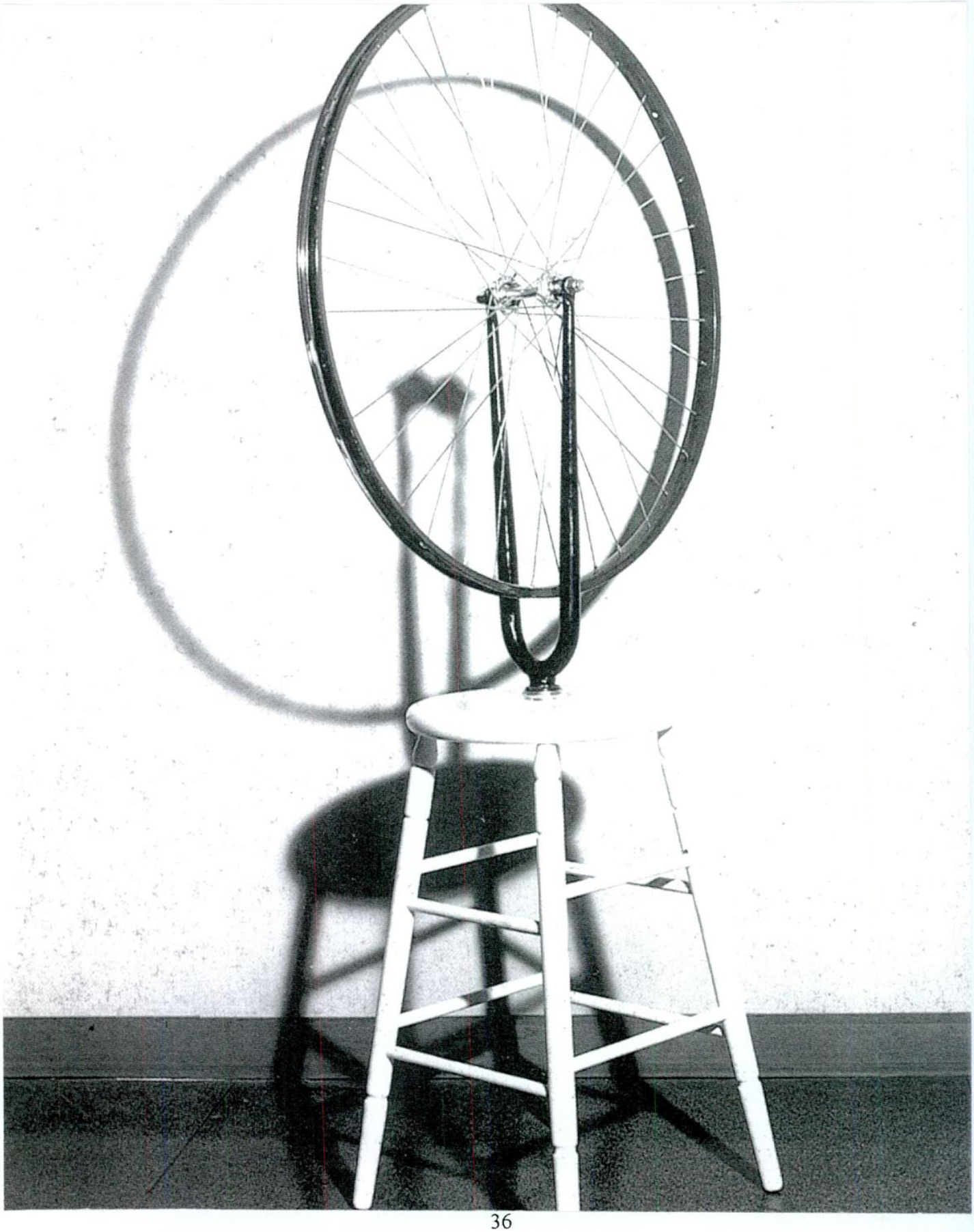
> His gesture elevated the ordinary mass produced object into a work of art or alternatively reduced all works of art to the same level of objects.(9)

His work indirectly challenges our perception of the way in which we view everyday objects that surround us. "His drive was towards insubstantiality and purity, essence and wit".(10) It is clear that Duchamp's principal motivation was to outrage and rebel against the traditional art institution, "He tried to extend art beyond the boundaries that the logic of his own development imposed on him".(11) He later summed up his intentions.

> Relating notions of aesthetic worth to a decision of the intellect and not to a faculty or cleverness at the hand which I have protested against in respect of so many artists of my generation.(12)

Fig. 3.2 Bicycle Wheel 1913

Marcel Duchamp



The body of work that he produced during his lifetime is full of amazing diversity, and his influence in the modern movement is considerable and remains so, even today. "It has provoked extreme reactions like no other, initially outrage but increasingly admiration and emulation.(13)

Pablo Picasso:

Pablo Picasso was also an advocator of the use of found objects in his art. One of the most renowned painters of the 1900s he also became known for his sculptures, graphics, and ceramic work.

> In some ways he was the artist most characteristic of this century, because he responded to changing conditions, moods and challenges so intensely and so rapidly. His searching style made him the leader in expressing the complexity of the 1900s.(14)

It is said that Picasso hoarded everything and this applied to whatever he acquired, found or made, as well as anything interesting that caught his attention as a potential material that could be manipulated or transformed. He was an inspired scavenger of "object trouve" picking up assortments of interesting objects, and sometimes it was actually necessary for him to search for a particular material that he intended to use. Picasso began including newspaper clippings, bits of debris and stenciled work in his paintings early in 1912. His sculptures range from the traditional modelling in clay or plaster to the least conventional approaches of assembling found objects and discarded scrap. The use of recycled material is clearly apparent in this work entitled "the head of a woman" whereby he incorporated springs and colinders together in his work.

Fig. 3.3 "The Bulls Head"

Pablo Picasso

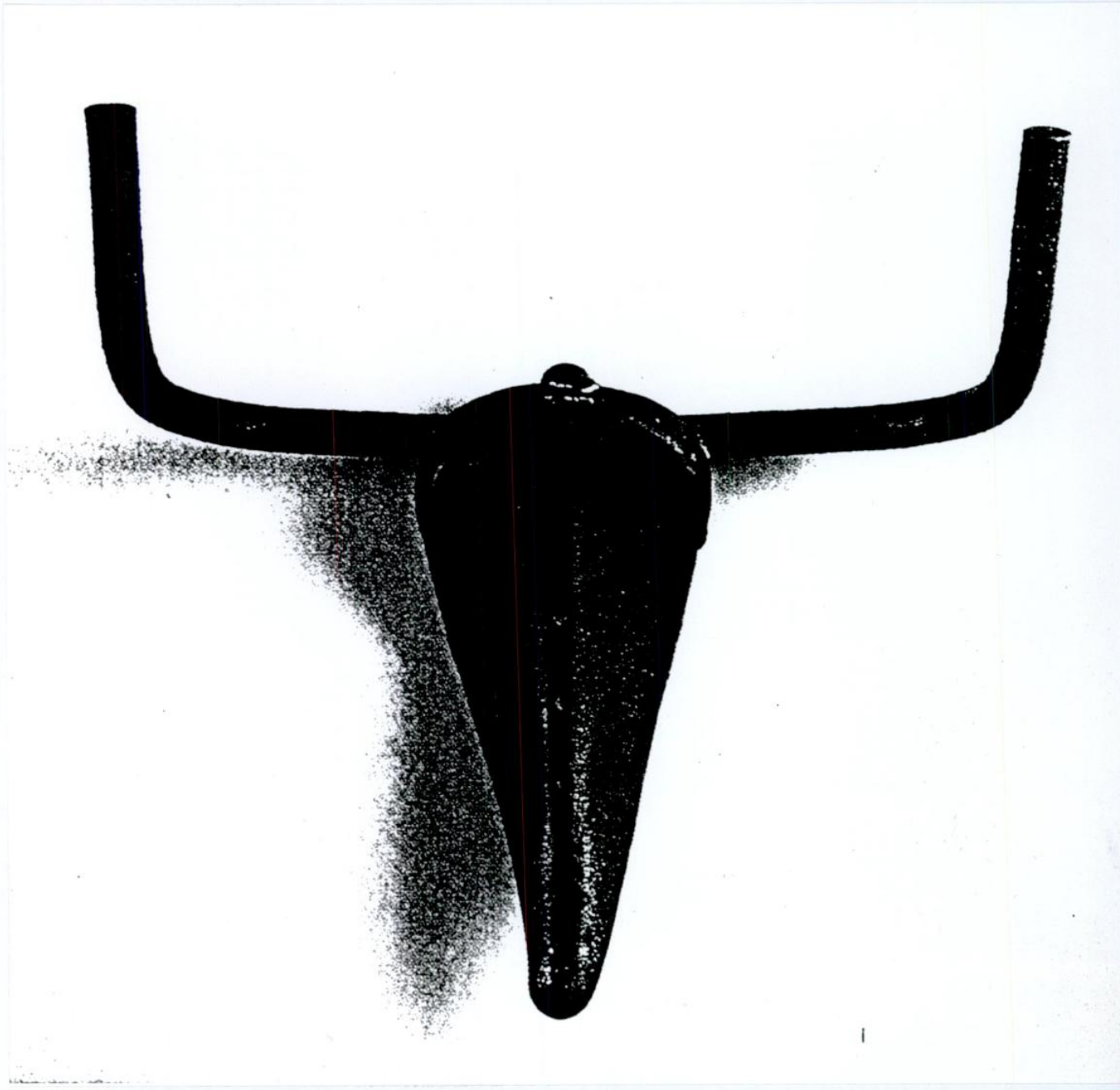
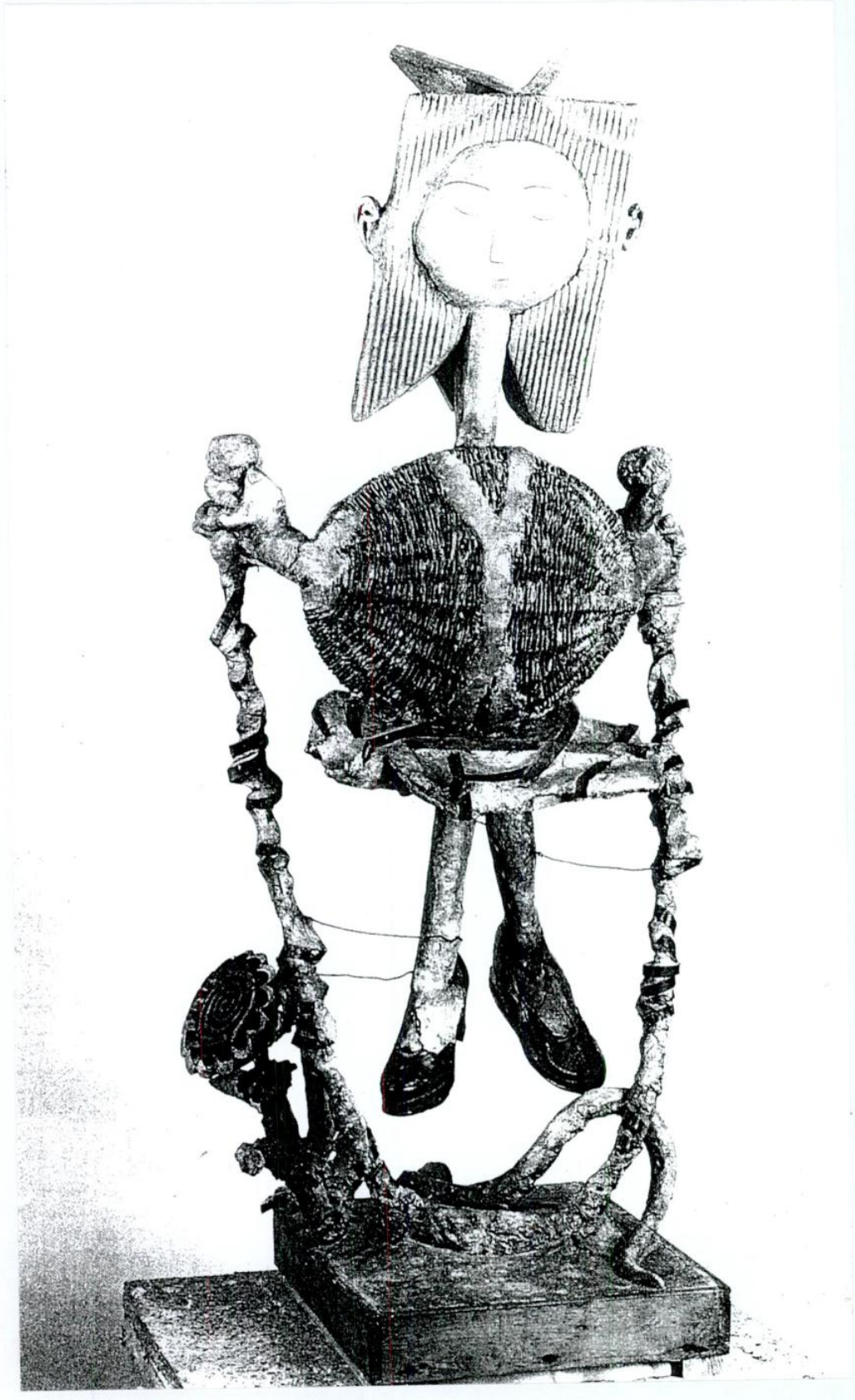


Fig. 3.4 "Little Girl Skipping"

Pablo Picasso



In 1942 he consructed the "Bulls Head" which became one of the most famous compositions of the Twentieth Century. It is a highly distinctive sculpture construced from a variety of materials which include a bicycle saddle, and a pair of handlebars picked up from a scrap heap. The actual components of the piece, the leather saddle and iron handlebars brought together the transitory nature of the piece. Part of the attraction for Picasso in using these objects was the possibility that the items used might fall apart at any moment, and return to their original purpose of being the saddle and the handlebars of a bicycle. (See Fig. 3.3) Another example of Picasso's work involving the use of found objects was a piece entitled "Little Girl Skipping" , "Petite fille" - sautant a la corde (1950-51) which is made up of stray objects selected by the artist entirely on the strength of their shape and texture. Picasso assembled the pieces together by smothering them in plaster and he only allowed the necessary form or texture to show through. The plaster conceals some of the objects in the piece "Little Girl Skipping" which include vine stocks, wicker baskets and a newspaper skirt. (See Fig. 3.4)

In 1956 Picasso made a cast of six character drawings for a decorative project entitled "Les Baigneurs", (The Bathers) which was originally made from assembled pieces of wooden planks cut in a variety of shapes and sizes. Picture frames, broomsticks, and bed legs were all part of the assemlage with various anatomical indications carved on the surface, including details of Torso, genitals, legs and facial features. The pieces are very flat and intended to be viewed from front presentation.

Through his work Picasso helped to break down the distinction between art and non-art, encouraging the viewer to rethink his relationship to traditional art. Picasso art challenges the viewers traditional view of life, he appeared

drawn to tension and conflict. (15) He defined all attempts at classification by technique and ultimately he wished to break up the traditional categories of painting and sculpture, and alternate between two and three dimensions. Duchamp and Picasso through their work indirectly challenge us to rethink the way in which we are conditioned and influenced to see certain items as useless and worthless once their initial function is served.

Mr. Imagination:

Skips are rich hunting grounds for a variety of materials and one artist who sees the hidden treasures in junk yards and scrapheaps is Gregory Warmack who is otherwise known as "Mr. Imagination".(16) Warmack is an American who transforms urban junk into images from ancient mythical times. He is a streetwise picker of discarded materials who throughout most of his life has created works of art from materials that are generally thrown out as trash and rubbish. In 1979 Warmack noticed a truck unloading sandstone blocks that had previously been used in the production of steel, and he collected some of the discards available.(17) He began to carve the soft stone into faces and figures, and in 1983 these pieces were debuted in the first of a series of solo and group exhibitions featuring his work at Chicago's Carl Hammer Gallery and at other museums and exhibitions throughout the country.

Warmack claims to have "the eye" to see what other people are blind to and his is a world where marvels can appear in dumpsters and treasures can be found in alleyways. "These are, for him, unpredictable places where generally held truths about the value and meanings of things can be rearranged to reveal dazzling new possibilities."(18)

Although he generally modifies the physical shape of most of the objects that he collects he sometimes leaves their original structure and appearance intact and merely represents the items used in a different context. Through his work, Mr. Imagination transforms trash into treasure changing objects like bottle caps into fabulous jewels and works of art. In Mr. Imagination's living room, there is a large totem pole opposite the bottle cap throne with six dark regal faces framed by shimmering chokers and hats made from bottle caps and crushed aluminium. (See Fig. 3.5)

> All piled up they look better than diamonds and rubies, he says. "If I could get all the bottle caps in the world, this place would be filled up with bottle caps, but they're thrown away every day. I love bottle caps. They're just like diamonds.(19)

One of the most revealing examples of this art is a single bottle cap in a large gilt frame.

> "Out of everything in the hallway, I like that one bottle cap because it makes my big statement", says Mr. Imagination. It makes people stop and think, they will see all that one bottle cap and remember the other bottle caps that are tossed away every day.(20)

Asserting that we are a society that discards and devalues people as readily as objects, his recycled art calls attention to this devaluation. In particular Mr. Imagination believes that it is the children in our society who are often uncared for, and he has worked tirelessly in his art activities to help encourage and support them. Like bottles, bottle caps, and paint brushes, children have been used and thrown away.(21) Through Mr. Imagination art's recycling and salvaging found objects and waste materials becomes a large mepaphor for the renewal of one's life and one's community, and the most important thing that he wants to be remembered for is teaching

Fig. 3.5 Mr. Imagination's Bottle Cap Encrusted Throne

"Other artists, when they run out of canvas, they probably freak out. But they don't really use what is there".

people how to see. "My art is meant for me to share", he says. "When my mission is done, the art that I've started will go on and on. The kids will teach their kids, and it will keep going."(22)

Tom Every:

Tom Every is another American salvager who primarily collects discarded machine parts and lost technologies.(23) He reassembles and transforms truckloads of industrial waste and debris into fantastic sculptures of his own inventions. Every has been collecting the raw materials for his sculptures for many years and for most of his life has been a recycler of found objects and industrial cast-offs. "I started recycling contaminated liquid plastics taking on large tonnages of by-products from the U.S. Rubber Plant in Stilton, Wisconsin and making things out of their secondary materials".(24) He is also very interested in auto salvaging and he built an automobile crusher from a big piece of steel and a magnet. Every worked for twenty-five years as a heavy industrial worker dismantling obsolete power plants, bridges, papermills, breweries, cheese factories and warehouses. His job mainly consisted of breaking, and disassembling what modern technology had built and abandoned and Every quickly became dissilusioned with simply tearing everything down.,

> Every's dismay over the continuous, wholesale destruction of outmoded industry was rooted in his strong belief in the practical and ethical importance of recycling and in his lifetime campaign to find a new use for the preexisting shapes and forms that would otherwise end up buried or on a scrap heap.(25)

He was also concerned with the loss of the cultural social and personal histories associated with the industrial inventions that he was otherwise obliged to discard and demolish "You think, my God, what wonderful engineers we had in those times", he says. I have a lot of respect for them, and I feel bad when the things they made so into the scrap heap.(26)

Through his creations he believes that he is saving not only the objects themselves, but also the human energy that originally designed, produced, and manufactured these machines. "I was part of the generation that destroyed the industrial age, but I saw magic and beauty in this stuff". Every's main aspiration was to preserve the industrial machinery and castoffs that he so values and admires through creating art and drawing attention to what we view and discard as rubbish. "I want to inspire people to look at things from a different perspective, without blinkers and without preconceived social ideas".(27)

Every's largest construction entitled "The Foreverton" is located in a scrap yard south of Barbaboo, Wisconsin, where it ascends above random fields of rubble. (See Fig. 3.6) This collosal sci-fi contraption weighs over 300 tons, running 110 feet in length and reaching over three stories high. The "Foreverton" is an impressive sculpture which is a combination spaceship, launching pad, observatory, and electrical power plant and according to Every, it is a reproduction of a device created by ninteenth century inventor and scientist from Egginton, England, named Dr. Evermor.

> Dr. Evermor reportedly believed that the force of lightening was a divine power that came directly from God. He also thought that he could design a machine capable of harnessing enough electromagnetic energy, he could transport himself back to the heavenly creator on a lightening force field.(28)

Fig.3.6 The Foreverton, Tom Every.

Every's "Foreverton" is an attempt to create such a machine which is a massive assembly of mighty "thrusters", "projectors", "exciters", "coil supercharges" and "magnetic generators" which Every constructed from an assortment of discarded fuses, boiler parts, dynamos, steam pumps, fly wheels and other real-world machines.(29)

Every has also used recycled bronze wire and old irrigation wheels to create what he humorously refers to as "Faraday Stray Voltage Cages" which stand as heralds guarding the four sides of the Foreverton. The original "Faraday Cage" was created by the Ninteenth Century scientist, Michael Faraday to protect and guard his own experiments and work from external electrostatic influence.(30) Every's creations comprise of huge spinning arms with blue balls that emulate "bug zapping noises" to create the sound of stray energy. Intended to parody Michael Faradys belief, Every says:

> The specific purpose of his cages, says Every mischeviously, is to "pick up dangerous electric and magnetic molecules coming off the doctor's generating devices", which, if left unattended, might eventually, alter the cell structure of his audience.(31)

Salvaging objects and machines throughout different periods of history from the industrial revolution to the present, Every has created a museum to the history of the machine age and through his art he hopes to continue to preserve the countless technological curiosities that he uses to assemble his creations. "It will be an art piece, and the best way to save that little truck".(32)

Joe Butler:

Joe Butler is an Irish artist from Celbridge who also uses old machine parts and scrap metals in his work. His sculptures could be described as monuments to the industrial age, comprising of anything metal, axes, flywheels, rakes, fences, old springs, cogs, wheels, magnets, and many other spare parts identifiable only to mechanics. (See Fig. 3.7)

> Butler pretends to use materials rudely, incorporating spanners and nuts 'n' bolts alongside cut off joinery, but what he achieves is a sophisticated way of articulating materials that owes as much to Epstein as to ancient Minoan Soliders.(33)

In July 1996 he exhibited a set of twelve towering scrap metal soldiers of considerable sophistication and technical intricacy. Butler manipulates materials that previously might have appeared normal in their own context into figures that quickly become menacing and intimidating. "They stand like a terrifying receiving line, every component of their bric-a-brac bodies ready to transform into a grisly weapon at a moment's notice.(34) The twelve scrap figures reminiscent of the twelve apostles stand in an arc across the gallery floor, each piece completely individual and unreproducable.

> In a similar fashion the significance of the individual figures is infected by the presence of so many others. Butler seems to attemp to exploit the dissonance between the bottled-up violence of his figures, and the exhuberant variety of shapes.(35)

He also made a series of smaller pieces from a combination of metal and bronze which line up like Chinese warriors. Butler's sculptures are very individual and each piece is constructed using different combinations of materials which have been assembled with great flair and technique. "David

Smith may stand godfather to some degree, there is some homage to Picasso, who began it all but the elan and originality are totally the sculptor's own".(36)

Kieran Behan:

Kieran Behan who trained at the National College of Art and Design and the Glasgow School of Art in 1988 also incorporates the use of scrap metal and found objects in his art. His work is not what might usually be expected of a phenomenon, in ceramic creation and his style is both original in its technique and magnetic in is style. (See Fig. 3.8)

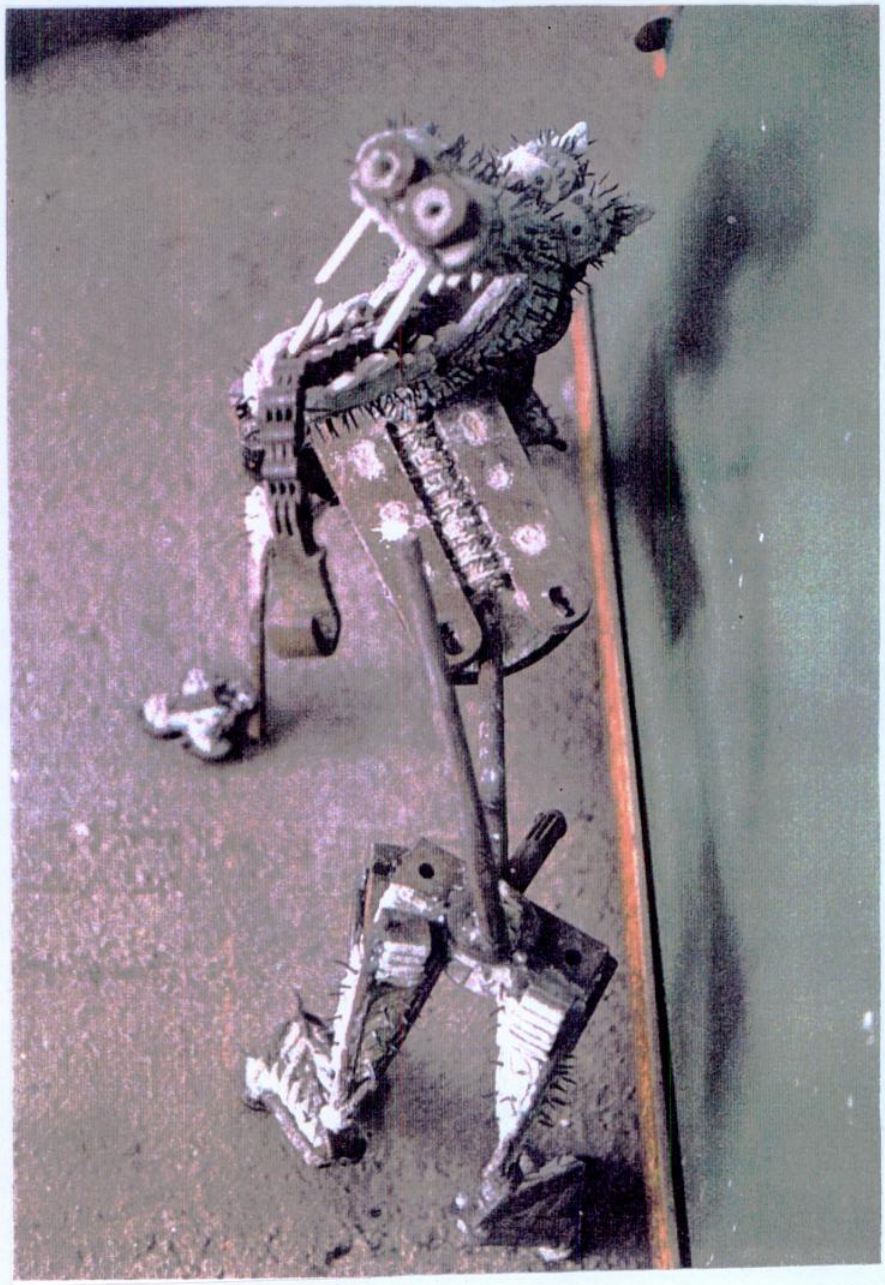
> I think most people were amazed at the diversity and scale of his sculptures in which he has used metal components in combination with clay and Egyptian paste, and also bricks in combination with other materials.(37)

Kieran has travelled extensively both as a student and budding artist who has represented Ireland at numerous clay and sculpture symposiums around Eastern and Western Europe, where he clearly enjoyed working with the variety of materials and facilities supplied by brick factories, poreclain and bone china manufactures. He has used since his college days a combination of clay and found objects, where he confounded many by practising the improbable, notably in the methods used to fit and combine such diverse materials. Kieran's reasons uses found objects and scrap materials in his work for both financial and aesthetic reasons.

Fig. 3.7 Jim Butler "Scrap Metal Sculptures"

Fig. 3.8 Kieran Behan

Dog made from clay and steel

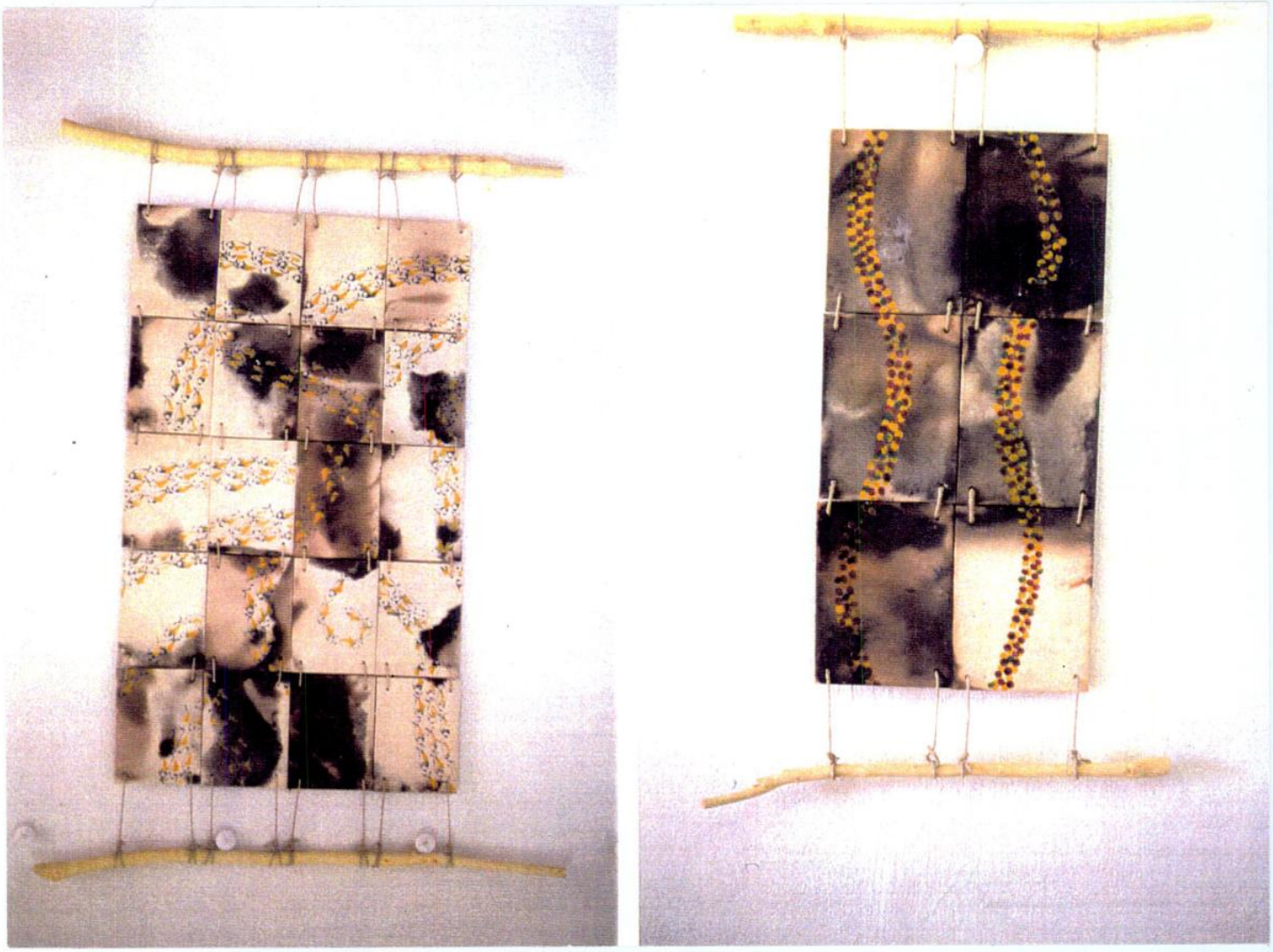


Materials are costly and expensive to buy and he also enjoys the interaction of working with a secondhand material that already has a history and feeling about it. Smashed bricks, tiles, old industrial parts and scrap metal all feature in his work, and working with recyclable materials allows a certain freedom to experiment. Kieran has developed his own individual style and techniques after a lot of practise involving many failures resulting today in the finely crafted work currently being produced. The main challenge for him involved in working with found materials is to take on board the nature and past use of the individual pieces in which we can clearly. (see Fig. 3.8) Using factory tile seconds, Kieran through the very nature of the materials used indirectly makes a statement reflecting the pollution caused by industry in Lucenec, Slovakia. The tiles were smokened and deliberately blackened using sawdust from the factory and the piece was joined together using waste packaging. Colour was created using rust and oil carefully applied to create the patterns required. The whole process was developed through using these materials and each piece has its own unique colour and textural quality. (See Fig. 3.9)

Kieran was also involved in Clean-Up Ireland Week where along with students from Athy he helped construct a "hippo" sculpture made from rubbish. Materials were donated and collected from local industry including barrels, scrap metal, sheets plastic, half empty paint tins, newspapers and sheets of cardboard. The basic structure was made from four large barrels which were stacked with a variety of rubbish and waste packaging material and covered with a sheet. Students involved worked from 9 a.m. to 7 p.m. in the evening taking turns at different tasks, and completed the "Hippo" in one day. The main challenge for Kieran was to encourage the students to take a second look at what can be achieved with a little creativity and imagination when using recyclable material.

Fig. 3.9 Tiles, work completed in Lucenec, Slovakia.

Kieran Behan



FOOTNOTES - CHAPTER 3

1. Charlene Cerny and Suzanne Seriff, Recycled Re-Seen. New York: Harry N. Abrams Inc., p.33.
2. Ibid., p. 153.
3. Transformations / Exhibition Leaflet.
4. Recycled Re-Seen, p.33.
5. Ibid., p.154.
6. Ibid., p.18.
7. Jean Christopher Bally, Duchamp. Paris: Fernard Hazan, p.18/19.
8. Ibid., p. 18, 19.
9. Ibid.
10. Ibid.
11. Ibid., p.88,89
12. Ibid., p.54,55.
13. Ibid., p.8,9.
14. The World Book Encylopedia, Vol. 15. Field Enterpise Educational Corporation, p.401.
15. Ibid.
16. Recycled Re-Seen, p.50.
17. Ibid., p.52.
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24. Ibid., p.57.
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26. Ibid., p.58.
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28 Ibid.
29. Ibid., p.56
30. Ibid., p.57.
31. Ibid., p.58.
32. Ibid., p.59.
33. Sunday Times, 14.07.96.
34. Irish Times, 16.07.96.
35. Ibid.
36. Irish Times, 17.06.93.
37. Kieran Behan Workshop, 21 September 1997, p.8.

CHAPTER FOUR

METHODOLOGY

In the following chapter, I describe the ethos and historical background of Old Bawn Community School which is situated in Tallaght, Dublin. I also give a detailed account of two schemes of work that I devised and completed suitable for first and second year students which involved working with recyclable materials in the art classroom.

> We were committed to ensuring that students under our care grew towards full maturity in soul, mind and body in an atmosphere which would help them best develop fully their talents and potential. Our commitment to the belief that education should be concerned not only with the communication of skills but with the formation of informed attitudes towards learning, work, truth, beauty, goodness and an understanding of the place and function of a citizen in a modern democracy would be manifest in all we would do formally and informally each day.(1)

Today, all aspects of Old Bawn Community School which include the organisational structure, the curriculum, pastoral care and learning for life programmes, outdoor pursuits, retreats, games, sports, visits and trips all reflect this commitment. From its humble beginnings in St. Maelruans National School in 1978 with a population of 150 pupils and a teaching staff of ten, Old Bawn Community School has expanded faster than any other community school in Ireland. The history and development of the school is in many ways a reflection of the growth and development of Tallaght itself. Today with a total of 750 students and a staff of almost 60, Old Bawn strives to provide an optimum environment in which learning can take place.

Situated near the sports hall, playing fields and the surrounding residential areas, Old Bawn's location ensures that the fullest potential of the school both as an educational and cultural amenity can be realised. The general teaching areas are grouped around small open courtyards surrounding the

school's library which is located at the heart of the building making it easily accessible for pupils and staff. The main teaching areas have been designed to provide for group social activities by opening most of the classrooms on to the school area. Strong emphasis has been placed on natural light and visual access to the several outdoor courtyards and gardens which create a general feeling of space throughout the building. There are three art rooms located in the school and a store room for a wide range of art materials which include clay, paper, paints, oil pastels, markers, crayons, scissors, varnish and rulers.

The Board of Management:

The Board of Management in Old Bawn Community School aims to look after the best interests of students and teachers and it decides how the school's staff can be utilised effectively.(2) It allocates the school's budget in order to maximise its resources and takes responsibility for the government and direction of the school. It is also responsible for the maintenance of the school building and determining the use of the school property for community purposes. The school's philosophy in relation to their selection of staff was based on a very simple principle.

> Endeavour to attract the very best available and through encouragement, involvement, leadership and motivation, build a team that would meet the challenge that a new school invariably throws out.(3)

School Discipline:

The organisation of the school's discipline system is through year groups or houses each under the guidance of a yearhead who is under the overall authority of the principal. The school operates a journal system which is effectively similar to keeping a diary and allows the students to understand

the basis discipline ethos of the school. The journal system is extremely effective and very fair, and both good behaviour and discipline problems can be noted, which can prove a motivating factor for the students. It also allows the students a certain independence and encourages them to take responsibility for their own actions. Overall, a student's work progress or behaviour can be effectively monitored by the teacher, and any problems can be addressed with the yearhead or students' parents if necessary.

The Role of Parents:

The role of parents in the school is clearly valued and their involvement in the education of their children is another essential part of Old Bawn's general philosophy. The parents representation on the board of management ensures a valid say in the governing of the school and parents are encouraged to be actively involved as much as possible with the various yearheads, class tutors, and teachers, "to ensure the closest harmony between the three principal components in a student's education - the student, the teacher and the parent".(4) In addition to Group, Intermediate and Leaving Certificate, a Vocational Preparation and Training Programme is available to all students, and Old Bawn Community School also serves its adult population through a variety of courses available.

Art Education:

> Art education provides an opportunity for individuals to ask fundamental questions about their environment as visually perceived about the nature of art, craft and design activity and about the nature and essential identity of individuals themselves.(5)

In structuring my schemes of work devised for a first and second year group, my main objective was that the activities concerned would deal with a variety of skills including research, observational, design, manipulative, and evaluation skills. Through working with a variety of recyclable materials from the Travellers Resouce Centre, I hoped that these skills would overlap and reinforce one another and that the projects assigned would help to develop the student's ability to work successfully with a wide range of materials.

> Craftsmanship in the creative use of tools and materials is a fundamental ingredient in the production of any worthwhile image or form.(6)

I also encouraged the students to re-think the 'items that they generally perceive as trash and rubbish as possible raw materials for projects in the art classroom.'(7) Students collected for their project work, objects and items that they would generally throw out as rubbish such as cardboard, packaging, sweet wrappers, old buttons and materials.

Tribal Leader:

The first scheme of work that I intend to discuss in this chapter was devised for a first year group comprising of twenty-two students of mixed ability. The aim of sequence was to design and make a tribal portrait based on a "Tribal leader" theme using a variety of recyclable materials. I introduced each lesson in the form of an introduction discussing the project theme, task and support studies, a demonstration showing how to complete the task assigned, and an evaluation encouraging the students to learn to discuss and critically evaluate their work. Week one began with the students concentrating on observational drawing, line and shape and through drawing a portrait they were developing their observational and drawing skills. My

demonstration emphasised the actual importance of looking and learning to train the eye.

> Observational skills are very important in developing a discriminating and critical eye. It enriches everything from descriptions in essays to characterisation in drama to art work and to nature study.(8)

A frequent comment heard from students is "Miss, I can't draw" and I encouraged the students to see what was in front of them in terms of basic shapes in order to simplify what they all see as much as possible. "Learning to draw and learning to see are synonymous".(9) Visual aids were very important at this stage showing clearly very basic step by step drawings of the proportions of the head which the students found quite easy to grasp. (See Fig. 4.1) They learnt how to sit properly, how to position themselves in order to have a clear and accurate view of the sitter, and also how to judge the proportions of the head through a very simple method of drawing a circle and dividing it evenly with a horizontal and vertical line.

Weel two of the scheme involved teaching the students how to design a surround for the portrait through "Thumbnail Sketches". I emphasised that "Thumbnails" are rough exploratory sketches used to help stimulate and develop ideas and also to assist in solving any problems in the design process. I encouraged the students not to erase any mistakes and instead to spend time quickly sketching as many different ideas as possible.

Fig 4.1 Portrait drawings

Tribal Leader Project

> The young persons experience of design in education should encompass both the process of design and the development of design awareness and appreciation.(10)

Support studies including drawings from Leonardo Da Vinci and Pablo Picasso's sketch books were very beneficial at this stage showing the students that preparatory work is essential for exploring and developing thoughts and ideas. The evaluation reinforced the objective of the lesson through questioning and discussion centered around the students final chosen design. Students were encouraged to verbally discuss and formalise the reasons why they chose a certain design and also to elaborate on how they developed their original idea. "Pupils are guided in the critical and constructive evaluation of their design solution".(11)

In the next stage of the scheme which was week three, I introduced the class to the basic principles of paint composition and application. The class began with a brief introduction discussing primary and secondary colours followed by a demonstration showing how to mix and apply paint. We discussed the correct way to hold a paint brush, the importance of frequently changing and cleaning the water, brushes, and palettes used. The students completed a primary and secondary colour worksheet and they also experimented with different shades and tones. Week four saw the beginning of the pupils painting the actual portrait and they were restricted to painting the tribal face in two colours and black. I deliberately limited the colour palette in order to prevent the students using too many combinations of colour and loosing the visual impact of the tribal face.

Week five of the scheme involved completing colour "thumbnails" for the final portrait. (See Fig. 4.2) This class began with a discussion regarding the colour studies that I had completed for my tribal leader portrait.

Fig. 4.2 Colour "Thumbnails"

Tribal Leader Project

Showing visual aids of a variety of different colour combinations of the same portrait, warm/cold, plain/patterned, complimentary and contrasting colours as well as my final work I encouraged the students to describe and give reasons why they preferred a particular portrait.

It was important that the students were able to verbalise and discuss the reasons why they preferred certain colours and to be consciously aware that they were actively involved in a selection process rather than just randomly picking any colour.

> Through making art, pupils encounter the nature of colour, the rainbow and the nature of light leading to a later application in toning, shading and mixing colours.(12)

The students had their final tribal leader portrait drawn by three on an A3 page and completed colour studies using oil pastels. Having the final portrait completed as a visual aid definitely motivated and stimulated the class and because they were so eager to move on to the next stage of the project, they worked very efficiently and effectively.

> The following week which was the sixth lesson in the scheme, I introduced the fabrics and materials collected from the Travellers Resource Centre. The learning objective of the lesson was for the students to gain an understanding of paint application and material and paper manipulation. This lesson lay the foundations of the beginning of my research regarding the use of recyclable materials as art materials. I was interested in seeing how the students would react to working with such a variety of materials and would the introduction of such new materials act as a stimulus and motivating factor.

> The junk lesson in which the teacher provides an exciting environment, plays a much more vital part in the development of creative potential than, for example, an hour's formal teaching of a lino-cutting skill. These junk periods are of value because they allow the child's imagination full play and, at the same time bring him in a practical way face to face with problems which have to be overcome. (13)

Displaying my own finished portrait as a visual aid, I questioned the students in relation to the starting point of the portrait and also about the following stages of development. I emphasised the importance of working in a logical sequence in order to avoid unnecessary mess and untidyness, e.g. painting the background area first before applying any surface material or paper decoration. The demonstration involved showing the students very basic but important skills necessary when working with such a variety of materials e.g. how to hold and pass a scissors, how to cut, curl and manipulate paper, and how to apply glue and material to a final portrait. It was essential at this stage to demonstrate how to use and fill a stapler necessary for attaching thicker pieces of fabric and card. All of the skills mentioned above were vital learning objectives in order for the students to be able to work successfully with the materials available.(See Fig. 4.3)

> The production of a work of art, craft or design is a complex experience and requires the student to employ practical, sensory, and intellectual skills. It involves visual analysis, the skill of acute visual perception and visual discrimination. It also involves powers of invention, combining and extending the limits of materials and processes. Most importantly it requires the skills of creating spatial order, aesthetic order, and impressive optimum visual communication.(14)

Week seven and eight involved painting different textures and surfaces and completing the final stages of the project. The students worked with a combination of fabrics and materials both from the Travellers Resource Centre and also items and objects that they themselves had collected throughout the project. They learnt how paint reacted when applied to different surfaces and textures ranging from wool fibres to shiny surfaces such as plastic or metal buttons. I also demonstrated different methods of paint application, ranging from applying paint with a brush and a piece of cardboard, to directly pouring the paint from the bottle creating different patterns and textures. Very obvious techniques were demonstrated showing how to separate and pull loose wool fibres from the bag, creating a loop, and finally to attaching and securing the fibres to paper.

> Through working with materials, instruments and equipment, pupils develop dexterity and appropriate techniques.(15)

The students produced interesting and richly textured "Tribal leader" portraits. (See Fig. 4.4/4.5) They clearly enjoyed and benefited from working with such a variety of materials and they also became aware of the possibilities of items that they normally discard as rubbish as possible raw materials for projects in the art classroom.

Animal Witchdoctor:

The second scheme of work that I devised was for a second year group of good ability with a class size of 22 pupils. The aim of the project was to design and make a headpiece from a variety of recyclable materials or found ojbects based on a tribal witchcraft theme. Similar to the last scheme discussed in this chapter, the first two lessons concentrated on drawing, line and shape, followed by a design class completing "Thumbnail" sketches for the final hat design. Secondary materials included a wide selection of tribal

Fig. 4.3 Students working with the materials from the Travellers Resource Centre

and jungle animal imagery as inspiration combined with the students jungle animal drawings from week one. Week three involved making the basic structure of the hat designed using cardboard, wire or any suitable materials. To reinforce the importance of design exploratory work, I asked the students to complete a worksheet showing the front, back and side view of the final design, and also to write a brief description of any ideas regarding the construction of the basic shape.

> Engaging in design means engaging in the pursuit of excellence in various manifestations - through problem solving, through practical research, through personal evaluation and scrutingy.(16)

The students learnt the importance of preliminary work which is necessary to develop ideas on paper and to solve any possible structural problems (e.g. would cardboard make a stronger structure than a wire base?).

A heavy roll of gold card collected from the Travellers Resource Centre proved an excellent raw material to make the basic structures. (See Fig. 4.6) Other students used wire from the metal room to create the shapes designed.

> Pupils address tasks or activities where they identify the key requirements or constraints and decide on appropriate solutions to the problem.(17)

Visual aids included both an example of a hat showing the basic structure, and an example showing the nearly finished piece. I also displayed support studies of other student hat projects and a variety of designs from designers such as Philip Tracy, Chanel, and Lolita Lempicka. In the demonstration I showed the students how to make very simple hat shapes from card, emphasising the importance of the finished product actually fitting the head.

"Design is apparent in the way things fulfill needs, in how things look, in how things work".(18) Students learnt how to cut and roll card, shape, glue and measure in order to make a functional structure of the hat designed.

In the fourth week of the scheme, the class completed colour "thumbnails" of the final design and it was important for the students to experiment with colour in preparatory sketches before working on the final structure. Colour was introduced in this lesson similar to lesson five discussed in the "tribal leader" scheme. During week five of the scheme the students learnt the various methods of paper and fabric manipulation which involved curling and folding paper, and tying and plaiting materials. I demonstrated the basic methods of glueing fabric and paper emphasising the importance of using and cleaning a glue brush. Week six and seven involved the students understanding how paint reacts to different materials and surfaces, and completing the final piece. (See Fig. 4.7) Students applied paint in a variety of different ways using pieces of card, pouring straight from the bottle, and applying with their hands. The final pieces when dry were very individual and interesting to look at in terms of colour, shape and texture. The students enjoyed and benefited from working with such a wide range of materials and they seemed really pleased with the final work. (See Fig. 4.8/9)

Fig. 4.4 Tribal Leader Portraits

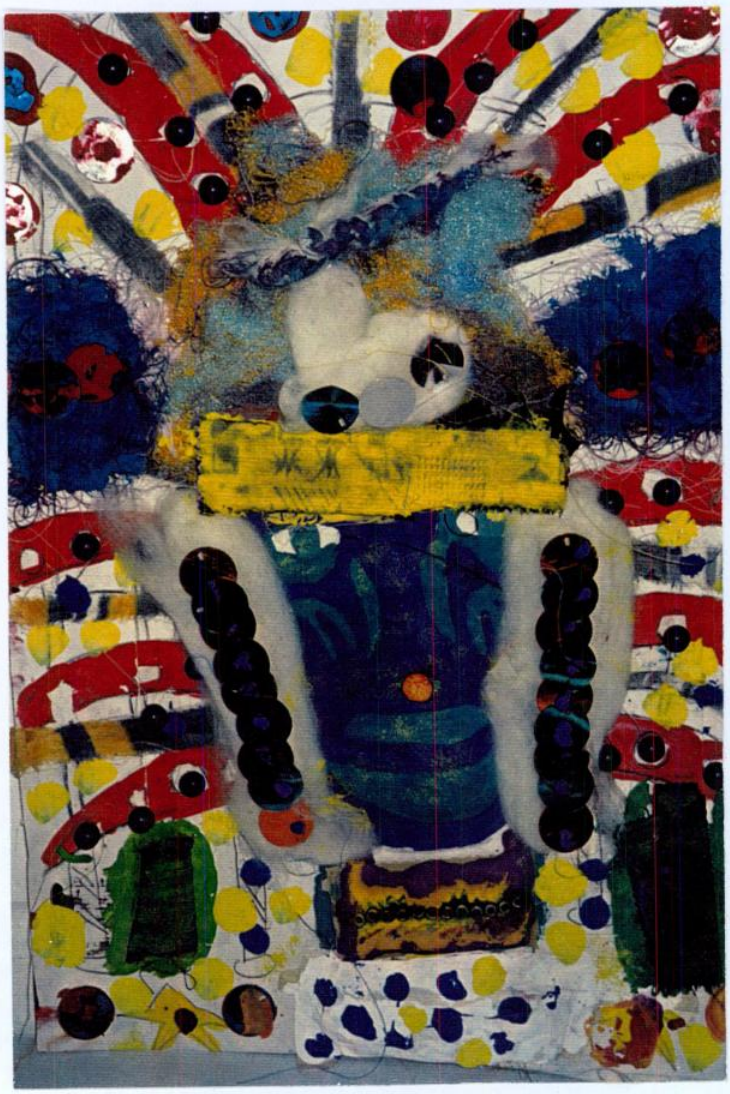

Fig. 4.5 Tribal Leader Portraits

Fig. 4.6 Making the basic hat structure

Animal Witchdoctor Project

Fig. 4.7 Students Finished Work

Animal Witchdoctor Project

Fig. 4.8 Students Finished Work

Animal Witchdoctor Project

Fig. 4.9 Materials

Animal Witchdoctor Project

FOOTNOTES - CHAPTER 4

1. Seamus MacGabhann, Old Bawn Community School Yearbook 1988. Dublin: Old Bawn Community School, p.6.
2. Ibid., p.16.
3. Ibid., p.7.
4. Ibid., p.7.
5. Kieran Meagher, The Art Craft and Design Syllabus, p.22.
6. Ibid.
7. Charlene Cerny and Suzanne Seriff, Recycled Re-Seen - Folk Art from The Global Scrap Heap. New York: N. Abrams Inc., p.54
8. Iseuit McCarthy, Gary Granville. Design in Education, 1997. Dublin: Snap Printing, Dame Street, p.10
9. The Art Craft and Design Syllabus, p.24.
10. Design in Education, p.6.
11. Ibid., p.16.
12. Ibid., p.9.
13. H. Pluckrose, Creative Arts and Crafts, 1996. Britain: Cox and Wyman Ltd., p.211.
14. The Art Craft and Design Syllabus, p.23.
15. Design in Education, p.14.
16. Ibid., p.2.
17. Ibid., p.11.
18. Ibid., p.18.

CONCLUSION

Time, effort, transport and storage space is required when collecting recyclable materials for use in the art classroom. Textiles, industrial packaging and found objects are excellent raw materials for project work in art, craft and design and can allow the opportunity for students to experiment and work with an interesting and exciting array of materials. A lot of time spent collecting recyclable material from different companies and locations can be avoided when availing of services such as the Travellers Resource Centre situated at Pavee Point, Dublin. This Centre is run by the travelling community and applies the principle of recycling, supplying their collected materials to community groups, schools, and resource centres at a minimum cost.

Art materials are costly and expensive to buy and the materials supplied by the Centre which include a selection of fabric samples, card, paper, plastics, packaging, cardboard and wool are all extremely suitable for two and three dimensional projects. It is important to take into account a number of practical but necessary factors when using recyclable materials in the classroom.

1. Solvents should always be checked for chemicals and those emitting toxic fumes should be avoided.

2. It is important only to collect and store clean and hygienic materials.

3. Sort and label materials into plastics, cardboard, paper, fabrics and wool fibres and apply the best possible form of storage.

4. Hidden costs have to be taken into account e.g. transportation of materials time and storage.

A supply of basic tools is also essential when working with such a variety of materials such as a scissors, exclusively used for cutting fabric, a stapler, used to attach and secure paper and cardboard, and supplies such as PVA glue, masking tape and cellotape. Good organisation skills are necessary from both the teacher and the student in utilising the time available for practical work effectively, and also in completing the tidy up quickly and efficiently. A rota system is essential when using such a variety of materials to ensure that all jobs get done and that there is a balanced participation from the class to complete the tasks assigned.

The benefits and advantages of working and creating with such a variety of materials is unlimited. From my own experience, students responded with great enthusiasm and excitement when they were allowed access to the materials available from the resource centre, and regardless of ability, worked efficiently and effectively. They also developed their own awareness and appreciation of the possibilities of using waste material in the art classroom, with a lot of students collecting their own range of recyclable materials during the seven and eight weeks of the project. In areas similar to Tallaght where local industry is easily accessible there is great potential for gathering and collecting the surplus of industrial packaging and waste produced, and students were challenged to re-think what they generally discard as junk and rubbish as possible raw material for use in the art classroom. Also, as a result of working with such a large supply of cheap

and inexpensive materials, the students were eager to experiment, and they gained a certain freedom in expressing their thoughts and ideas that would otherwise have been absent if working with a precious or expensive material. In conclusion to my research, I found that the students developed an appreciation of the endless possibilities in successfully using waste material as art material, and that they became more creative and experimental in their thoughts and ideas as a result of their own experience in using recyclable materials for their project work. "Recycling therefore, is a celebration of making, of simple technologies and hands on creativity with available materials, with which most of us have lost touch."(1)

FOOTNOTES - CONCLUSION

1. Recycling, p.4.

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