A COMPARATIVE STUDY OF LOCAL AND FOREIGN PACKAGES ON THE GHANAIAN MARKET

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PREFACE

It may sound absurd to take up a study of packages at this time when the majority of the people are more concerned with how to survive economically. However economic survival, to a greater extent depends upon productivity. This question of productivity has been the sing-song of many political eras. Production, necessarily has to go with packaging. Thus packaging, in one way or the other, becomes part of the survival syndrome.

The concept of packaging is not a novelty in the Ghanaian society. It has been part and parcel of the life style of the people. Packages of one sort or the other has been used since time immemorial. Changes in life style has brought corresponding changes in modes of packaging throughout the ages. Colonization left in its wake, the adoption or assimilation of foreign values and culture into the indigenous culture. This effected changes in the mode of packaging products. Industrialization and technological advancements brought new ways of life with a corresponding new modes of packaging. Urbanization and improved means of communication has ushered in a new way of living which also requires a new way of packaging.

It is against this background that the need to examine local packages is viewed. This forms the subject of this research.

This study is not intended to be a treatise on the entire subject of packaging. That would be too broad a field. Nor is this study conceived to be a panacea for packaging problems. That would presume stagnation in societal life style. The study concerns itself to examining local packages in relation to the basic attributes the present way of life of the society, expects of the package. It also identifies deficiencies in the packages.

It should suffice, therefore, to sample packages on the market, analyse their functional and aesthetic qualities and make comparisons with available foreign packages. This will isolate the deficiencies for the necessary remedial measures to be taken. The local package will thus play its role effectively in the society.

This Thesis is designed to give direction to the operations of all those who are involved in remedying the present packaging situation in Ghana. It is hoped that it will enjoy a wide readership among student designers, practising designers, manufactures and all those connected with the packaging industry.

S.B. OCKUMPAH-BORTEI
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ABSTRACT

AUTHOR: SETH BORTEQUAYE OCKUMPAH-BORTEI, B.A., D.A.E., M.A. (134 pages)

TITLE: A COMPARATIVE STUDY OF LOCAL AND FOREIGN PACKAGES ON THE GHANAIAN MARKET.

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The high standard of product quality in many local products cannot be disputed. The present drive in the export of local products, both agricultural and industrial, is a positive pointer to this assertion. Some local products have even gone to the extent of winning international awards and recognition.

However, many an enthusiastic exporter or manufacturer has had his expectations of a foreign market turned into a dream. His products are either not accepted for export or are rejected on the foreign market. Reasons for this state of affairs may be numerous. Though one cannot completely rule out ethnic undertones in some cases, packaging has been the accused and in most cases, has been found guilty. Instances abound where manufacturers had to export their products in bulk packages, to be re-packed into consumer units in the target country

This study has been undertaken to investigate what deficiencies there are in the local consumer unit packages, that make them unacceptable on the

international market. This will stream-line the necessary corrective measures. It will assist the packaging industry to tackle the packaging problem in the right direction.

The study made a random sampling of two hundred (200) packages. These were critically analysed and the interpretation of the results clearly indicated that the local packages do not compare favourably with the foreign packages. The deficiencies were identified as well as the caustive factors. Practical improvements were presented. However these should by no means be taken as the ultimate improvement that can be effected on the selected weak package. They should rather be viewed as suggested practical approaches towards improving the qualities of the visual designs of the packages.

This research has been made possible through personal observations, interviews with various resource personnel, studio and library studies.

CHAPTER ONE

THE PROBLEM AND ITS SETTING

The Problem Statement

The Government of Ghana has of late expressed much concern about the presentation of locally manufactured products. This involves the packaging of the product. Due to the effect this situation has on international trade, the Government has empowered the Ghana Export Promotion Council (G.E.P.C.) to explore possible avenues for rectifying the situation. The challenge has therefore been thrown to the College of Art and all designers in general, to work towards improving the quality of the presentation of "made in Ghana" products.

This research has been conducted to examine the state of package designs on the Ghanaian market, to identify the deficiencies in the local packages and to offer recommendations for improving the situation.

Sub-problems

The first subproblem identifies various forms of packages on the Ghanaian market.

The second subproblem makes a comparative analysis of the aesthetic and functional qualities of local and foreign packages.

The third subproblem identifies the factors influencing the quality of local packages.

The fourth subproblem seeks to explore approaches to improve the quality of selected local packages.

Hypothesis

Local packages are deficient in structure and visual design when compared to foreign packages.

Assumptions

1. There are no qualified package designers
2. Packaging materials are in limited supply and expensive.
3. Consumers have limited or no choice of brands of products.
4. Manufacturers are not conscious of the value of the right package in market promotions.

Importance of the Study

1. This study will meet the challenge thrown by the Ghana Export Promotion Council, to the College of Art, University of Science and Technology and all designers in general, to work towards improving the quality of the presentation of local products.

2. A critical study of the qualities of packages on the market will expose the deficiencies of the local packages for the necessary solutions to be effected.

3. The study will improve the performance of students of design and practising package designers.

4. It will make local manufacturers conscious of the value of quality packaging.

5. The study will improve the presentation of Ghanaian products and thus enhance the hitherto, relegation to secondary position of "Made in Ghana" products on the shelves of the highly competitive international market.

Delimitations

This study is limited to the functional performance of consumer unit packages on the market at the time of the study. It does not concern itself with the complexities and the technicalities of the physical aspects of packaging, packaging materials and package fabrication.

Definition of Terms

Package: Any structure, container or contrivance in which products are carried or contained.

Local packages: Packages that are made wholely or partially in Ghana. These include containers imported into the country, decorated locally and filled with local products.

Foreign packages: These are packages imported whole into the country with their contents or to be merely filled with local products.

Traditional packaging: Method of preparing products for distribution and sale, indigenous to Ghanaians.

Oligopoly: This refers to the market situation where the available products on the market are in limited qualtities.

Sellers-market: The market situation where the consumer has no choice but to accept what the seller puts on the market. The seller dictates the market situation.

Buyers-market: This refers to the situation where the consumer has a choice as to what brand of the product to buy. The needs and desires of the consumer dictate the market situation.

Clusure device: The sum of the parts which co-operate to close a container.

Pack: package in short form.

Research Methodology

The descriptive and analytic methods of research were used in this study. The descriptive method was used in identifying and describing the various forms of packaging and package designs and also for describing the practical approach in package designing.

The analytic method was used in the critical analysis of the aesthetic and functional qualities of the packages on the Ghanaian market.

Data Collection

The primary data were obtained through interviews conducted with local manufacturers, designers, resource

personnel from Ghana Export Promotion Council, sales personnel and consumers. This makes up the information on the forms of packaging in Ghana, the types of packages in use currently, the deficiencies of the packages and the problems and constraints of the packaging industry.

The secondary data, made up of literary materials on package and packaging, were collected from the following libraries:-

i. The main library of the University of Science and Technology
ii. College of Art Library
iii. Specialist Training College Library, Winneba
iv. British Council Library, Kumasi
v. Ghana Export Promotion Council Library, Accra.

Specimen of packages were obtained from manufacturers, from package designers, from the general market and from various other sources for study and analysis.

Arrangement of the Rest of the Text

Chapter two deals with the review of related literature. This chapter presents studied written evidence on package and packaging and relates it to this research. It offers relevant information on the need for packaging, definitions, functions and attributes of the package.

Chapter three is devoted to identifying various types of packages on the market. The chapter begins with a working definition of package and packaging. This is followed by a discussion on traditional forms of packaging, giving a brief account on packaging by the indigenous people before the emergence of the modern commercial packaging. Identification and classification of current packages on the Ghanaian market concludes the chapter.

Chapter four deals with the analytic study of the qualities of the packages. It compares the functional and aesthetic performance of the local and foreign packages and tabulates the results. The chapter also identifies the deficiencies in the local packages.

Chapter five identifies the causative factors of the deficiencies in the quality of the local packages. It identifies the causes from the point of view of the manufacturer, the designer and the printer. The consumer factor, that is the market situation is also discussed.

Chapter six is devoted to a description of the practical studio work suggesting possible improvement approaches on selected local packages.

Chapter seven ends the study with a summary, recommendations and conclusion.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

There is not much literature, both published and unpublished, available on the subject of packaging. However, concerning the nature, functions and qualities of the package, enough comments have been made by a few authors. These have been found to be of significance to this study. Such relevant literature is reviewed according to the following classification:

a. Nature and need for package and packaging

b. Functions of a package

c. Factors influencing package quality

Nature and Need for Package and Packaging

The word packaging means different things to different people. Davis (1967) says:

> "Packaging .... is a collective term for all kinds of containers in which goods are packed for sale to the consumer" [1]

This definition tends to be a little too narrow, since it excludes containers mainly intended for transit or for storage. It also limites packaging to 'kinds of containers', leaving out other activities involved in packaging.

Paine (1961) gives an all embracing definition for packaging. He says:-

> "Packaging may be defined as a means of ensuring the safe delivery of a product to the ultimate consumer in sound condition at the minimum overall cost". [2]

Commenting on the nature of the package Hanlon (1971) has this to say:

> "In its more familiar forms, it is the box on the groccer's shelf and the wrapper on a candy bar. It can also be the crate around a machine or a bulk container for chemicals".[3]

He continues:-

> "In the broadest sense, a package can be considered to be any structure that contains or limits its contents. This would include crates, nets and cocoons, as well as displays, utensils and conveyances."[4]

Hanlon[5] then put packaging into three categories; consumer packaging, industrial packaging and military packaging.

A package has two distinct but inseperable aspects: The structural design, that is, the construction of a package from the technical point of view, and the visual design, that is the appearance of the package and its promotional value.[6]

Leonard (1980) gave credence to this view when commenting on the nature of the package, and he says:-

> "A package .... consists of both structure and appearance".[7]

The two aspects of the package is thus clearly identified.

Writing on the need for packaging, Herdeg (1961) says:-

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> "The problem of packaging may appear of a relatively little importance at a time when people .... are faced with the problems involving their survival. However, survival implies successful transmition, and transmition is occuring in every phase of civilization."8

The survival of the people depends to a greater extent on what the society is able to produce to satisfy her needs, be they physical, emotional or spiritual. And as the World Book Encyclopeadia puts it:-

> "Almost everything grown, processed, or manufactured must be packaged."9

The Encyclopaedia Britanica (1984) shares the same view, commenting:-

> "Virtually all modern manufactured and processed goods need some sort of packaging at some stage in their production."10

It is thus established that production and packaging go hand-in-hand. One cannot be successful without the other. As Hanlon puts it, and rightly so:-

> "The product and the package are becoming so interdependent that we cannot consider one without the other."11

At this stage of our development it would be too naive, considering the above comments, to talk about increase in productivity in industry, without due consideration to a need for a proportional improvement in packaging. This study will examine the need and areas for improvement in packaging.

The above review has established the scope of package and packaging, as including wrappers, boxes, bottles of all sorts, crates, displays, conveyances and bulk containers. The fabrication, the visual designing of the package and all the other activities, the sum of which ensures the safe delivery of the product to the consumer in sound condition, form part of the packaging mix. This information gives direction to this study as to what may be included in the subject of packaging.

Functions of A Package

The functions of a package is a pertinent issue to this study. Most authors who ever wrote on packaging commented generously on the many functions of the package. Primarily, the package must carry, protect and preserve the product it contains. Commenting on this Pilditch (1961) asserts:-

> "The package carries the product from factory to end-user, across seas, over hills, through swamps. It guards goods in frozen freight cars or on scorching docks. And it delivers them, after weeks of jecks and bumps and abuse, as fresh and crisp as when they left the safe order of your works."[12]

About the protective function of the package Pilditch further states:-

> "The primary job of a pack is to protect goods .... against .... shock, vibration, light, odour bacteria, moisture, climate, pilferage, chemical reaction and physical risks."[13]

Joseph Hanlon (1971)[14], emphasizing the need of the package to preserve its contents commented that, in most cases the contents of the package may not be used or consumed immediately.

It must therefore be protected and preserved for an extended period of time, and this the package must be able to accomplish. The Encyclopaedia Britanica (1984) expresses a similar view. Commenting on food packaging it says:-

> "Most of food packaging is designed to intervene between a food and its surroundings to delay the process of deterioration beyond the time needed for transportation, marketing and consumption."[15]

In addition to carrying and protecting the product, the package is now called upon to perform other functions, and Pilditch (1961) discussing the new role of the package, points out:-

> "That the clasic view is .... that the pack exists to protect the product, ... But there is small point in carting things safely if no one buys them when they (finally) arrive ... The pack has acquired a new job; it must sell the goods it contains."[16]

In order to perform this new role, the package must perform all the basic functions of a salesman, namely: to communicate; to motivate; to promote; to display; to glamourize or to enhance.[17]

Commenting on the function of communication under "The package as a salesman', Pilditch (1961) quoting Bernard Bolter, writes:-

> "The need in packaging is not for art, but for communication."[18]

He further asserts that:-

> "The designers challenge is to communicate the right message as fast and forcefully as he can."[19]

Gould (1966)[20] commented that the package has to tell the shopper about its contents.

Hanlon (1971)[21] writing under 'Functions of a Package' also emphasized the need and importance of using the shape, colour and decoration on the container to identify the contents of a package. He further explained that this quality of the package has been realized and exploited to a very high degree. Manufacturers and merchandizers are constantly learning new and better ways to take advantage of this value of the package to improve sales.

The package is thus seen to have acquired an important and indispensable role in marketing. A role that determined the difference between success or failure in any commercial enterprise. David Judd (1989) makes a good point in this direction when he says:-

> "The package or its label is the silent salesman and the way in which we present his proposition and the inteligibility of his argument is the difference between sale and no sale, life and death."22

Many a manufacturer overlooks this role of the package to his peril.

Discussing the function of the package - to motivate, Pilditch (1961) says:-

> "After all your research, promotion and distribution, the product winds up on a shelf, by itself. The final step, from the shelf to the shopping basket, depends on the package."23

Herdeg (1961), writing on the need for the package to motivate, explains:-

> "The public has become much more discriminating and hard to please. It is rarely sufficient today to try to attract the buyer .... His appetite must be stimulated by more surprising, more fascinating presentations. The modern public must be tempted."24

And this is exactly what the package is expected to do. According to Hanlon (1971):-

> "The package becomes a potent force in motivating the consumer to make a purchase and to promote the sale of one brand rather than the other."25

For the function - to promote, Herdeg (1961) states:-

> "With all functional needs met, the well designed pack is not only aesthetically satisfying but is today an essential of sales promotion in an increasingly competitive field."26

Pilditch (1961) also commented on the ability of the package to promote sales, saying:-

> "The physical shape and structure of a package can influence sales."[27]

He continues:-

> "The 'reason for buying' covers the total character of the product and package: its weight, size, price, design, even retail selling environment."[28]

On the function - to display, Pilditch (1961) writes, quoting Ernest Dichter, an American motivation research expect, that:-

> "A package must literally shout attention to the product."[29]

He explains further:-

> "The package must be its own salesman, it must arrest the gaze of the passing shopper and entise her to pick up the product."[30]

Describing the package as an advertising design Henrion (1962) emphasized the relatively fundamental position of the display quality of a package. Writing under 'Whither Graphic Design?' he says:-

> "It must attract attention before it can inform or persuade."[31]

Henrion thus places 'attraction' as the primary quality for the sales promotion function of the package.

Today, the growth of the supermarket, the increased emphasis on self-service store, the proliferation of products and product brands, the open

display in many merchandising institutions have helped to direct efforts towards successful packaging as a competitive advantage. Many big companies, the world over, have therefore put more weight on packaging; what they once thought of as a lowly shipping-room function.[32]

With such socio-economic changes born of industry and commerce, today's shoppers face a dilema - how to decide between similar products. As Pilditch (1961)[33] puts it, this is directly due to standardisation as a result of high volume production and distribution. From the shoppers' point of view, how does one choose between ten, fifteen or more similar products. This type of situation is discribed as 'the misery of choice'.

Under such circumstances, Pilditch asserts, and rightly so, that:-

> "There is small doubt that the package can be a genuine help .... It can make similar products differ and give them qualities that people will like, buy and enjoy."[34]

He continues:-

> "When rival products are much the same, the package must be used to exploit what tiny variations there are. Quite often it is used to create uniqueness where none exists."[35]

This does not imply dishonesty on the part of the package designer and the manufacturer. Pilditch further explained that the design of the package

can be used to satisfy the emotional needs or cravings of the buyer. He states:

> "Package design would less be needed and price more important if logic were the key to the consumers purse. The emotional aspect of purchasing and ownership should not be ignored. Women can buy cold cream at a chemist's for few pennies. Why do they pay five times that price for brand name cosmetics in a fancy package? Because packaging converts the dull chemical into an elixir. Women don't want cold cream. They want self-confidence, poise, sophistication, youth, beauty,..... The design on the package can give products virtues of age, or youth, or strength, or delicacy, femininity, richness, cleanliness, power, almost anything you like. You can transfer sensation from the package to the product itself."[36]

The package therefore, can give products qualities they do not inherently possess, extrinsic qualities. He continues:-

> "Design on the package not only attracts .... shoppers, but sometimes shapes the character of the product itself."[37]

Concluding his discussion on the function of the package - to glamorize or enhance, Pilditch says:-

> "Take a product, put it in a new size, pack it in a different material, sell it for a new price .... you create a new product."[38]

Nevett (1982), commented on the emotional and psychological factors in sales promotion and he says:-

> "Consumer goods manufacturers were coming to realise that the products they were selling was more than the sum of the ingredients plus performance .... care was being taken in the design

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> of packaging .... and concerning themselves with the psychological factors involved in a products sucess."[39]

The functions of a package as established above is of great significance to this study. This forms the basis or background against which the functional qualities of packages on the Ghanaian market will be examined, to determine their effectiveness. As Leonard (1981) rightly puts it:-

> "Every package must 'do' something such as protect, open easily, perhaps reclose, measure, dispense; and must 'say' something, such as describe the contents in words or pictures, instruct in the use of the contents, define the manufacturer or distributor and name the product with a simple and impressive word or phrase that will be easily recalled by the customer."[40]

Factors Influencing Package Quality

Certain factors have been found to have a great deal of bearing on the quality of the package. These factors may be inter-related and the degree of their consideration may determine the quality of the package. Aesthetic considerations, choice of materials, choice of colour and economic considerations were identified as the most outstanding factors. This has been discussed by many authors, relating them to the functional quality of the package.

According to Herdeg (1961)[41], the successful package should not be just functional. It will be

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a good principle to think of package design as a demonstration that inventiveness and good taste can help produce an aesthetically pleasing environment for people. Herdeg continues:-

> "The good pack will prove to be a synthesis of function and aesthetics .... To be successful it must attract, explain, please and sell."[42]

Commenting on the aesthetic qualities of a package, Pilditch (1961) says:-

> "What sells is what appeals to the shopper's impulse: the colour, size, shape, even the shelf position of the package."[43]

He continues:-

> "We like colour and believe in an artistic approach. Shoppers are more content, stay longer and buy more when they are in attractive surroundings. Yes, aesthetics do come into package design. An aesthetically satisfying design is different from an ugly one. And if all the other things are looked after, it will outsell the poor one in most cases."[44]

From the consumers point of view, Henrion (1962), in his article. 'Whither Graphic Design'? says:-

> "The function of the pack is not only to sell itself (to travel from the shelves into the shopping bag, within a few seconds), but to 'grace' for many a week kitchen, bathroom and dining-room."[45]

The importance of aesthetic consideration is here emphasized and package designers will do well not to sacrifice this quality on the altar of

functionality. It is what causes the shopper to act. Gould (1966) asserts:-

> "As designers, it is their responsibility to add the aesthetic quality, the intangible essence, that causes the unlooker to respond, to want to have - to buy."[46]

This visual aspect of the package calls for a careful choice and use of elements of design. Discussing this Pilditch (1961), quoting Albert Kner, says:

> "Colour is the quickest path to the emotions."[47]

He continues:-

> "No one can doubt the marked psychological effect colour can have on people. Not only do colours have these psychological effects, but they also have physical effects. The great importance of colour lies in the fact that it can influence all the different aspects of man physical, emotional, mental and spiritual. Colours .... have meaning for people. You can use colour to help express the character of your product ..... Colour must be chosen for their market effectiveness, not simply because the client or the designer, both men of taste and sensibility, 'like' them."[48]

Roth (1981) expresses similar opinion on colour when discussing colour and its effect on people. He states:-

> "Colour creates a pleasant (or sometimes shocking) first impression. Color has the psychological advantage of fixing visual impressions in memory and stimulating interest. Color gives prestige to the package, product or advertising. Of course experiences differ and we cannot be sure that a given colour will suggest the same quality to all beholders. But we do know that the distinction between 'warm' and 'cool' colors is relatively constant."[49]

Colour therefore, can be seen to be of prime importance in the overall effect the package has on the shopper and also on the product. The sensitivity with which this element of design is considered will determine the impression the package will have on the beholder. Writing on the symbolism of colour Anderson (1961)[50] stated that colour in a design may have two meanings, one is its plastic content, and the other will be the meaning derived from the culture of the people. Colour may mean different things to different cultures. Anderson (1961) states:-

> "Traditional meanings attached to colour vary from time to time and from place to place. In design there are times when these traditional values must be respected."[51]

He continues:-

> "The immediate aim is to use color in communicating ideas .... If traditional ideas can help, then they should be used."[52]

However, inbetween these differences there are overlappings and linkages. Equiped with this knowledge, the designer will then be able to manipulate colour to achieve his objective.

Choice of materials for the package is one other vital factor that has direct effect on the quality and the success of a package. The designer need to have knowledge about the performance of the materials for the package. The qualities and inherent characteristics of materials for packaging is very essential.

Concerning this Pilditch (1961) stipulates that:-

> "The suitability of the material chosen to protect the product from all likely hazards must be tested."[53]

Henrion (1962) also commented on the need for knowledge about packaging materials and processes saying:-

> "It is important to know materials machinery, and processes, in order to be a graphic designer at the top of the profession."[54]

Kweifio (1981) asserts:-

> "For effective packaging, a knowledge about the packaging materials is necessary."[55]

On the bases of this knowledge, this study will look at the suitability of materials and the effectiveness of fabrication of packages in Ghana.

Economic consideration has also been identified by many authors as a factor that must be of concern in packaging decisions. The research and considerations that must go into the packaging process will all depend upon the availability of the necessary funding. Pilditch (1961) makes the following observations:-

> "A good design costs money .... But the cost of the right answer is a mere fraction of the expense of a wrong one ..... Have your pack designed overnight on hunch and guesswork - then count the cost of an advertising and marketing programme for the product when it fails."[56]

Continuing he says:-

> "The value of Tv and magazine advertisments cannot be denied. These deliver impact all right; reach mass markets for a moment of time. They cost money. But it must be negligible in relation to the job your pack does, working, as it is, year in and year out; seen, as it is, by people everytime they go into a shop. Viewed in these terms, the cost of package design is extraordinarily low."57

However, caution needs to be exercised when it comes to packaging decisions involving cost, considering what Gould (1966) says:-

> "The cost of a package is added to the selling price to the customer. Market surveys have shown that most consumers are willing to pay more for a convenience package, but not much more."58

For this reason the Encyclopaedia Britanica (1984)[59] cautioned that packaging cost must be kept at a minimum; the minimum necessary to do the job required of the package. The encyclopaedia stated further that, apart from luxury items like cosmetics and perfumes, packaging is not an essential part of what is to be sold but only the means of conveying it.

This view must be considered cautiously. Should cost be allowed to have control over packaging decisions, the result will be packages that fail to perform effectively. It will be necessary to consider the competition on the market and also the cost when the product fails. However, it will be very

necessary to keep the cost at the minimum that will be enough to accomplish the job. Hosansky (1966) made a good point in this direction. In his article 'Perking Up the Dairy case', he writes :-

> "Economics, while important need not be considered the immediate primary basis for packaging decisions."60

To allay the fears of many consumers on the the influence of packaging cost on the ever-rising cost of products, Roth (1981) states:-

> "Even with this widespread use, most packaging represent only 5 percent of the value of all finished goods. Packaging is definitely not the villain of our constantly escalating costs."61

The literature reviewed so far, has shed much light on the nature and function of the package. It has also emphasized the need for packaging. Factors that affect and influence the standard of package and packaging have been reviewed. These facts consitute the expected and documented standards for packaging and constitute a background or basis on which this study will be made. These standards are not limited or related to a particular country. As stated by the I.T.C. Functional Advice on Export Packaging (1975)[62] that packaging is now an inseparable and intergrated part of marketing. Marketing is today, if not in the past, a phenomenon of international dimension, thus putting packaging on the same

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international platform. Packaging will therefore need to conform to the international standards.

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CHAPTER THREE

FORMS OF PACKAGES IN GHANA

Package and Packaging

In Chapter Two, references were made to various definitions of package and packaging by many authors. These two terms 'package' and 'packaging' were used interchangeably by many of the writers. Though a distinction can be drawn in their meanings, there is always a point where the two seem to overlap. At this point of this study, it will be necessary to dichotomise the two terms in relation to the study.

Technically, the term 'package' refers to the structure or the container in which products or goods are carried.

'Packaging', on the other hand, is the entire process involved in preparing goods or products for distribution and for sale, ensuring safe delivery to the ultimate consumer in sound condition. This includes all operations carried out in a commercial enterprise after the product has been made. Packaging therefore encompasses a wide range of operations and activities, from the point of manufacture to the point of purchase. These operations and activities culminate in a composite item - the package and its ancillaries.[1]

The package thus emerges finally as the means of ensuring that the product or the goods is safely delivered to the ultimate consumer in sound condition. The package may, therefore, be referred to, in certain circumstances as 'packaging'; thus creating the overlap. However, throughout this study, care is taken to avoid ambiguity in the use of 'package' and 'packaging'.

For the convenience of this research, packaging in Ghana is put into two basic groupings. The first, termed 'traditional', is the indigenous way or method of preparing products for distribution and sale. The second termed 'modern', is the contemporary and foreign oriented mode of preparing goods and products for distribution and sale.

Traditional Packaging

Packaging is not a new concept in the Ghanaian society. Like all other societies, no matter how primitive, packaging of one sort or another has played a part in the way of living of the people for longer than most people are apt to realize.

History of packaging begins with the history of man in societal living. Packaging began with wrappers and containers of the most elementary kinds. These were objects provided by nature and were only accidentally suitable for the purpose to which man put them. Explaining the emergence or origin of packaging Davis (1967) says:-

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"As soon as our ancestors had any valued possessions, they must have needed vessels to hold them and wrapping materials to protect them. Men made use of gourds and hollow tree-trunks long before they had learned to make jars or boxes; animal bladders and skins were the far forerunners of cellophane; leaves, of wrapping paper".2

In her writings referred to by Pilditch (1961)[3] Margaret Mead the famed antropologist explained how even the most primitive tribes on earth use their own forms of packaging to enhance and to attract, as well as to protect. She explained how natives use leaves to hide products from the prying gaze of neighbours. She also mentioned how natives wrap gifts to make them more presentable, attractive and more exciting to receive. Thus, packaging, even from the earliest times, is seen to have done a lot more than simply serve as a means of carrying things about.

In this country, as in other civilizations, traditional and indigenous forms of packaging and vending have existed from time immemorial. Some are being replaced while others are still serving side-by-side their modern counterparts. For the purpose of this study the forms of traditional packaging is classified into two: wrappers and containers.

Wrappers: Before paper arrived on our shores, leaves, especially the broader varieties, served as wrappers for various products. This study looks at three of the most popular leaves used as wrappers in various ways in this country:

i. The plantain leaf

ii. The corn shuck

iii. The 'Ntentrema' (a calathea specie)

and other wrapping materials such as paper.

The corn shuck: By nature the corn shuck is not very broad, but due to its inherent favourable qualities, it is widely used as a wrapper for various products, especially in food preparations. The corn shuck does not have a stain or odour when used as a wrapper. It does not tear easily,especially across the grains. It is most popularly used in wrapping, 'kenkey' (a food preparation from corn dough). The wrapping is done as part of the preparation of the product, at the point of manufacture; thus the wrapper becomes an inseperable part of the product (see plate 1).

The corn shuck as a 'kenkey' wrapper plays a multiplicity of roles. Primarily it contains the product and also serves as a convenience for easy handling. It gives protection to the product against the immediate surroundings. In addition, it serves as a means of measurement for the producer and the

PLATE 1 : Kenkey

consumer alike. It glamourises the product and serves as product identification. In some extreme cases, it serves as a dispenser too.

Apart from its use in wrapping 'kenkey', the corn shuck is a ready-made wrapper for a host other corn preparations. It is also used in the markets as a point of purchase wrapper for small quantities of vegetables and other ingredient for cooking.

The plantain leaf: Vying with the corn shuck as a wrapper for 'kenkey' is the leaf of the plantain (Musa Paradisiaca). Though not as tough as the corn shuck, its broadness, soft and flexible nature in the dry state, make the plantain leaf a good material for wrapping. It is used both in the fresh state and the dry state for wrapping various mechanidise in the market place. However due to its easy-tearing nature when fresh, it is usually used when dry and more pliable.

The most popular use of the plantain leaf as a wrapper, is in the wrapping of 'kenkey'. The wrapping is effected at the production stage. It is applied in a multiply technique. The more the number of plies the better the function of the wrapper.

The primary function of the wrapper in this instance, is to contain the product and serve as a convenient means of carrying the product about. In addition, it protects the product against after-production contamination by acting as a heavy shield

PLATE 2 : Fanti Dokono

between the product and its surroundings, thus keeping out dirt, dust and insects. It controls the temperature of the product and also successfully contributes to postponing or delaying the deterioration process beyond the time needed for marketing and consumption. As a result, this type of 'kenkey' (Fanti Dokono) usually out-stays its other counter-parts, still fresh and intact. The wrapping also serves as a means of identifying the product (Plate 2).

The plantain leaf is also used as a wrapper for 'more' (a corn dough preparation) among the Fantis. Here, the main function is to retain the freshness of the food, at least throughout the day.

As a point of purchase wrapper, the plantain leaf is used at the market for wrapping various items in small quantities; items like vegetables, meat, fish etc. The wrapper in this case serves as a simple and cheap way of containing and carrying things about conveniently. It also enhances the presentation of the product.

"Ntentrema': (Akan), Ƭokobaa (Ga), Ganyie (Hausa), Kafamakpa (Ewe).

It is one of the most popular leaves for wrapping. Its popularity as a wrapper is not limited to Ghana. It is known throughout the West African sub-region and widely used too. It grows wildly as an undergrowth of the thick tropical rain forest. It is found in well watered valleys and also

a. Wrapping 'waache'

b. Dispensing 'waache'

PLATE 3: Ntentrema; a. Wrapping 'waache
b. Dispensing 'waache'

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along river banks. The main usable part of the plant are the leaves. The leaves are very broad, averaging about 25cm wide and about 40cm long. It has a high-gloss surface, and permits folding without tearing even in the fresh state. It is used both in the fresh state and when semi dry. It is however prefered when fresh due to a likable odour that is picked from it especially when it is used on a food preparation.

Its glossy surface and mild odour makes it exceptionally acceptable for wrapping cooked foods such as rice, rice-and-beans, gari-and-beans, 'akplejii' or 'aprapransa' etc. to mention a few. When used in this wise, it serves as a dispenser mainly, in addition to containing and carrying the product about. Among all the wrappers in this category, it ranks highest in functioning as a dispenser (Plate 3).

'Ntentrema' is widely used in wrapping various kinds of items sold on the market. Some of such items are fish, meat, all types of vegetables, salt etc. It is also used in the preparation of some foods such as 'kafa' and another type of 'kenkey', 'enifa-nifa', in the Fanti area. Its use in the food industry is so wide and diversified that to get into the details of it will go beyond the scope of this study. With the exception of the liquid

food preparations, any food cooked, fried or roasted for sale to the public can be wrapped with 'ntentrema' for convenient carrying, for protection for glamourizing and above all, for dispensing.

Paper: As a packaging material, paper came on to the scene in a most undignified way - as a second hand material; stated Davis (1967)[4]. Paper for wrapping in this country was mostly old newspapers and 'cement-paper' (a second use for the cement bag). Later, off-cuts of newsprint paper from the printing houses came on the market and were also used as wrappers.

With the arrival of paper on the scene, wrapping of products took a different turn. Though paper as a wrapper did not replace leaves completely, it succeeded in taking a good share of the job of wrapping goods and also succeeded in improving the technique of wrapping. Due to its nature, it can be wrapped round small quantities of items such as a spoonfull of groundnuts and will stay in place, unlike leaves. It can also be used for larger quantities that leaves cannot contain.

Paper was used in wrapping anything sold that may be conveniently carried by hand. In addition to wrapping prepared foods, where it was not favourably accepted, it gained a good and favourable

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position in the wrapping of larger quantities of uncooked products such as pepper, groundnuts, rice, gari, beans, 'kokonte' (cassava flour) and salt, to mention a few. To contain these items in the larger quantities, the paper is formed into a conical shape (plate 4). The only prepared food item that enjoyed the services of paper as a wrapper, without much complaint, was bread and other confectionaries.

PLATE 4 : Paper as point of purchase wrapper

PLATE 5 : Ntentrema market

Introduction of the polythene film into packaging has brought inovations into the traditional way of wrapping products. The polythene film, fabricated into bags, is now gradually taking over the point-of-purchase wrapping of products. This aspect will be discussed under 'containers' in the next section of this chapter.

Leaves as product wrappers still enjoy a good patronage in both urban and rural communities. Leaves serve side-by-side with other innovations in wrapping of products. Suppliers of this 'packaging material' are still in good business (Plate 5).

Containers: Like the wrappers, using containers for packaging is not a new concept in this country. Before boxes, jars and bottles were made, other forms of containers were in use for packaging. The most elementary containers were, as in the case of the wrappers, objects which in their natural state were found to be accidentally suitable as containers for various products. This study will discuss the gourd and the bamboo as natural containers. Other containers, fabricated to convenience such as the basket and the pot will also be discussed.

Gourds: Large hard-rinded fleshy fruits of creeping plants of the cucurbitaceae species.

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Gourds are mostly found in the savanna and semi desert belts of the country. There are different varieties of gourds, with different sizes and shapes. Each size and shape is adapted to the function that it suits best.

The very large and rounded ones are used as outer-containers for sale of cooked foods. Until recent years the gourd was used as an outer-container for hawking 'kenkey'. It contains a large quantity of wrapped consumer units of the product ('kenkey') and ancillary materials. Apart from containing and carrying the product, the gourd protects the contents from contamination by dirt, dust, insects etc. The gourd, inherently is a poor conductor of heat. This natural quality, together with the ancillary materials in the form of shreded corn shuck, control or slow down the reduction in temperature, thus keeping the contents warm. In some parts of the country, the gourd is still serving as a container for prepared foods such as 'abolo', yakeyake etc.

The gourd has been a good and suitable container for aqueous preparations. The natural insulating quality and the light-weightedness made it a convenient container for portable drinking water and also ideal for hawking indigenous beverages (Plate 6).

PLATE 6 : Use of Gourds in Hawking

The long-necked and the double-chambered species in all its varieties, give a good hand grip and are therefore normally used as 'water-bottles'. They also serve as containers for powdered products that will require a spout for pouring.

The Bamboo: "A gigantic tropical and sub-tropical grass with hollow-jointed woody stem."[5]

The bamboo grows wildly in the tropical rain forests and also in the savanna belt. The unique quality of the bamboo that makes it a container is the hollow stem. It is light and hard when dry. These qualities have made the bamboo a suitable container for the palm-wine tapper. Its weight and ability to withstand drops, make it ideal for the tapper who may have to climb to great heights to practise his trade.

Baskets: In addition to making use of objects provided by nature as containers, others were fabricated to serve specific purposes in packaging. One of such containers that have been used in this country long before the emergence of today's 'modern packaging' is the basket.

Baskets woven from various materials such as twigs, rushes, strips from the back of palm branches etc. have served as containers for many products.

The type of protection needed by the product, the size of the basket and the weight of the product that it will carry will determine the type of material that should be used in weaving the basket. The more delicate the product, the stronger the basket needed to protect it from damage. Also the mode of moving the product and the distance to be covered have some influence on the type of basket to be used.

The basket is best suited for products that need ventilation to keep their freshness. They are therefore mostly used for farm products such as fruits and vegetables. Baskets are also used for carrying fish, usually the smoked ones. In some cases where a high degree of protection is needed, cushioning materials in the form of grass and leaves are used to line the bottom of the basket to reduce the damage by crushing. This type of packaging is effected in moving tomatoes from the farm to the market.

Today, long distance houlage in heavy haulage trucks has increased the hazards some farm products are exposed to before reaching the market. Thus there has been a shift from the basket to wooden crates as containers for delicate products like tomatoes and mangoes. The wooden crates are constructed in a way to give the maximum ventilation needed, and at the same time rigid enough to give the necessary protection. The wooden crate as a container for

PLATE 7 : Packed Tomatoes for the Market

tomatoes or mangoes, gives a better product protection as well as better stacking possibilities (plate 7).

In addition to the containing and protecting functions, both the basket and the crate are used as means of measuring for the producer, the wholesaler and the retailer. These containers has the advantage of re-use, as many times as possible.

Pots: Ever since man learnt the art of pot making, pots have been of great service to him in various ways. As a container pots have successfully carried liquids of all kinds, powdered materials as well as solids. The ability of the pot to preserve and protect man's valuable possessions has been demonstrated by recent archaeological discoveries. During the first half of this century, great literary treasures, thousands of years old, tucked away in pots or earthenware jars in caves or under layers of earth have been unearthed[6] Our ancestors kept their valued possessions, gold-dust and gold nugets, in pots for safe-keeping, from one generation to the other.

Pots are made in various shapes and sizes to suit purposes they are intended to serve. The very large ones serve as water containers in the home, while the smaller ones serve as means of carrying water from the source to the house. By its

PLATE 8 : Palm Wine Hawker

inherent qualities, the pot keeps its contents cool, and protects the contents from contamination. The pot is very ideal for hawking cooked foods due to its insulating properties. Thus the food is kept at an appreciable hotness throughout the hawking period. The pot would have survived better against its modern competitors in the hawking of foods, but for its weight and fragility. However it is still striving along side other competitors in the hawking of cooked foods and indigenous beverages (Plate 8).

Paper bags: The use of paper bags as containers came as an improvement on paper wrappers. Many of the young men who rushed into the cities in the early years after independence found themselves without jobs. The making of paper bags, which were at that time gaining popularity as a shopping bag, became a worthwhile vocation for many such young men. By the latter part of the decade, paper bags have become the commonest shopping bags. They were very convenient for carrying light-weight items.

Manufacturers later started using paper bags for advertising, printing slogans on them. In some cases it was used as a means for multiple sales. As an example, a shopper in any of the grocery shops, could pick a paper bag pre-packed with a dozen tins of 'Ideal Milk'. The paper bag carried the corporate design of the manufacturers.

PLATE 9 : Garri in Polythene Sachets

PLATE 10 : Bread in Polythene Sachets

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Until recent years when it was displaced by the more durable and cheaper polythene bag, the paper bag served as a good and convenient container for shopping and other functions.

Polythene: In recent years, polythene has made its presence felt in packaging in the country. It has taken over most of the functions of the traditional wrappers. The polythene film is fabricated into a sachet, into which products that were hitherto, wrapped in leaves or paper, are tucked. Gari, beans, groundnuts, sugar, rice and peper, to mention a few, are now packed, take-home-ready, in polythene bags (Plate 9). Bread is now, in most cases, tucked into a polythene bag instead of being wrapped in paper (Plate 10).

One other area where polythene is making a favourable inroad, is in the 'iced-water trade'. Formerly this commodity was hawked in bottles, the consumer taking the water direct from the bottle. Later it moved into serving the consumer from a larger container, using one of the few cups the hawker carries along. Now at many places the comodity is served to the consumers in polythene sachets (Plate 11). This gives the consumer the convenience that he/she needs most; to make use of the water at the time and place most convenient to his/her circumstances. This inovation is a step forward towards the control of communicable diseases.

PLATE 11 : Polythene Sachets of Iced Water

The polythene, due to its transparent nature has increased consumer appeal in the package. The consumer is able to see the contents clearly and thus can decide whether to buy or not. What can be more motivating than for some one thirsty to see a sachet of sparkling cold water.

However, polythene for packaging, unlike those discussed above, presents environmental problems. It cannot be easily disposed of after use. For this reason, some urban authorities are not favouring its use where there could be other alternatives. Manufacturers are being requested to fulfil certain conditions pertaining to disposal, before they are allowed to operate. This is affecting the use of the polythene sachet for 'iced-water' in some urban centres.

The replacement of the traditional and indigenous forms of packaging has been an age-long process. A lot of growth and changes have occured during this transitional period. The replacement of the natural containers by the modern counterpart, is not completed. The process may yet take some time.

All the mentioned traditional forms of packaging are still used and they play their legitimate part in packaging in the country. Some have gone through appreciable changes for improvement, while others

have not changed very much or changed at all. One such example is the corn shuck as a wrapper for 'kenkey'; the society is yet to have an acceptable substitute.

The idea of packaging has not changed, neither has the purpose. Gifts were formerly wrapped in leaves to glamourize and make them more pleasurable to receive. Modern technology has made available other relatively more presentable wrapping materials and methods. The use of leaves for wrapping gifts may not come to mind. An alternative material will be used. The function of glamourizing in this case has been taken over by the new wrapping material. However the idea of wrapping to glamourize the contents and to make it more pleasurable to receive has not changed, only the material used has.

The leaf still serves as a wrapper. It has not been replaced as a wrapper but some of its functions as a wrapper has been taken over by other materials more suitable for the performance of that function.

The idea of wrapping a product or a gift to keep it from the prying gaze of neighbours and also to enhance its presentability is not new. Packaging for the convenience of carrying, for protection, for preservation, dispensing, glamourizing and in some cases for measurement is also not new. Both have been practised in this country long before the emergence of the modern "commercial packaging",

which will be the subject to be discussed in the next section.

Modern Packaging

No matter where you are and what you do, there is no doubt that your life has been influenced in a way since man learnt how to transport products across thousands of miles, still keeping the products fresh and intact. Packaging has been indispensable in the movement of many kinds of products. Today's method of moving products from the manufacturer to the consumer rests largely on the ability of the package to contain and protect the product.[7]

The great industrial revolution brought in its wake mass production of goods and subsequently the need for packaging great numbers of similar items for shipping. High volume production due to technological advancements forced standardisation, thus reducing product differences to a minimum. With the proliferation of products and product brands, the growth of the supermarket with the increased emphasis on self-service, efforts were directed towards successful packaging as a competitive advantage. Now the package has become a potent force in marketing.[8]

As Herdeg (1961) puts it:

> "Whereas the package was once viewed as a necessity only, it is now seen as an opportunity .... It is now evaluated for what it can do."[9]

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Many big manufacturing companies are now putting more weight on packaging as a means of improving sales. As a result, there has been a tremendous growth in the packaging industry world wide. Different forms of packages are fabricated each day, to meet the ever-expanding demands of products, product distribution and marketing. Todays commercial arena is a panorama of packages (Plate 12).

Classification of modern packages

A survey conducted on the market identified the following classes of packages on the Ghanaian market.

i. Metal cans and metal -ended composite containers.
ii. Collapsable metal tubes
iii. Glass bottles and jars
iv. Plastic containers - bottles, jars, etc.
v. Polythene sachets and wrappers
vi. Foil sachets and wrappers
vii. Folding and rigid fibreboard boxes and cartons
viii. Paper wrappers and envelopes.

Two hundred (200) packages were randomly sampled from the marked. In the selection of the samples, packages of different products from the same producer were recorned as one (1) package where all the packages carry a family identity.

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PLATE 12 : Local Supermarket - Shelf scene

A typical example is the fourteen (14) products identified on the market bearing the brand name of McVities (Plate 13). Twelve (12) of these products are in similar packages, the only difference being the change in colour of a particular area on the package and the different product names on them. In this case the packages of the twelve (12) products were recorned as One (1) package. The remaining two (2) were packed witn different packaging materials. These were recorned seperately, although they still bear the brand identity of McCities.

PLATE 13 : McVitie's Product

Of the two hundred (200) packages sampled, sixty-one (61) or 30.5% were local packages. Foreign packages were one hundred and thirty-nine (139) or 69.5%. One hundred and four (104) or 52% of all the packages carry paper labels. Fifty-one (51) or 83.6% of the sixty-one (61) local packages were found to bear paper lebels, while fifty-three (53) or 38.1% of the foreign packages carry paper labels.

Table 3.1 indicates the prevalence of the identified classes of packages.

TABLE 1 - CLASS FREQUENCY OF PACKAGES

CLASS OF PACKAGE	FREQUENCY		
	LOCAL	FOREIGN	TOTAL
Metal cans and metal-ended composite containers	16	26	42
Collapsable metal tubes	-	4	4
Glass bottles and jars	20	40	60
Plastic Containers	10	9	19
Polythene sachets and wrappers	10	26	36
Foil sachets and wrappers	2	4	6
Folding and rigid fibre-board boxes and cartons	8	32	40
Paper wrappers and envelopes	5	17	22

It should be noted that a single package due to its composition may fall under more than one class. The package of Kellog's corn Flakes, as an example is made up of a foil sachet tucked into a folding fibre-board box. The package thus falls under two (2) classes; the foil sachet class and the folding box class. Overall totals on the class-frequency table will therefore not make much sense.

Metal cans and metal-ended composite Containers: Two (2) types of this class of packages were identified; the close-end cans and the full opening cans with a closure system for easy opening and reclosing. Information on the contents is presented by direct pringing on the body of the can or by a paper lebel wrapped around the can (Plate 14).

PLATE 14: Metal Cans

PLATE 15 : Collapsable Tubes

Collapsable Metal tubes: This class of containers is the least common identified on the market. It was found in the packaging of semi liquids and pastes. Such containers identified on the marker were of aluminium, with the information printed on the metal (Plate 15).

Glass bottles and jars: This is the class of packages with the highest circulation. This is due, not to the ease of fabrication, but to the re-usable possibilities of this type of container. Those identified on the market all have paper labels to carry the necessary information about the contents. Glass bottles are found mostly in the packaging of liquid products such as alcoholic and non-alcoholic beverages. Glass bottles are also found in the packaging of phamaceuticals. Glass jars are prevalent in the packaging of preserves and other semi liquid products (plate 16).

Plastic containers: A varieties of shapes of containers in plastic were identified on the market; bottles, jars, bowls etc., of various sizes. Some were fabricated locally and used in packaging local products. Others were fabricated outside the country and then imported into the country to be filled with

PLATE 16 : Glass bottles and Jars

locally manufactured products. Still others also came into the country with their contents. In some cases the necessary information is printed on paper and pasted on the container. Others carry the necessary information printed directly on the surface of the container. (Plate 17).

Polythene sachets and wrappers: Polythene wrappers featured mostly among the confectionary products as over-wraps or wrappers. Polythene sachets and wrappers are very common on the market. It is the single material that can be easily handled by local manufacturers and also individuals due to its flexibility in nature and usage. Where the film is used in a sachet form, it is either printed or a paper label is tucked into it, to give the needed information about the contents (Plate 18).

Foil sachets and wrappers: One of the least common class of packages identified on the market. It was found used as a wrapper for chocolate. In the sachet form, usually reinforced with paper or polythene or both, it was identified as a container for reserves and also for confectionaries. The information is printed directly on the container.

Folding Fibreboard boxes: This class of packages was identified as one of the commonest on the market. Paperboard containers were found to be used as consumer unit containers or outer containers for a multiplicity of retail or consumer units. The outer or shipping

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PLATE 17 : Plastic Containers

PLATE 18 : Polythene Sachets

containers are mostly made of corrugated fibreboard, while the consumer or retail unit containers of solid fibreboard. In both cases the graphics is either printed directly on the box or in the form of a pabel label (Plate 19).

Paper wrappers and envelopes: The use of paper wrappers was found mostly in the toiletaries and the confectionary trade. Such wrappers were normally over-wrapped with polythene film. In all identified cases of paper wrappers the graphics is printed direct on the wrapper.

The following chapter will discuss the qualities, both aesthetic and functional of these packages with the view to identify deficiencies of the local packages.

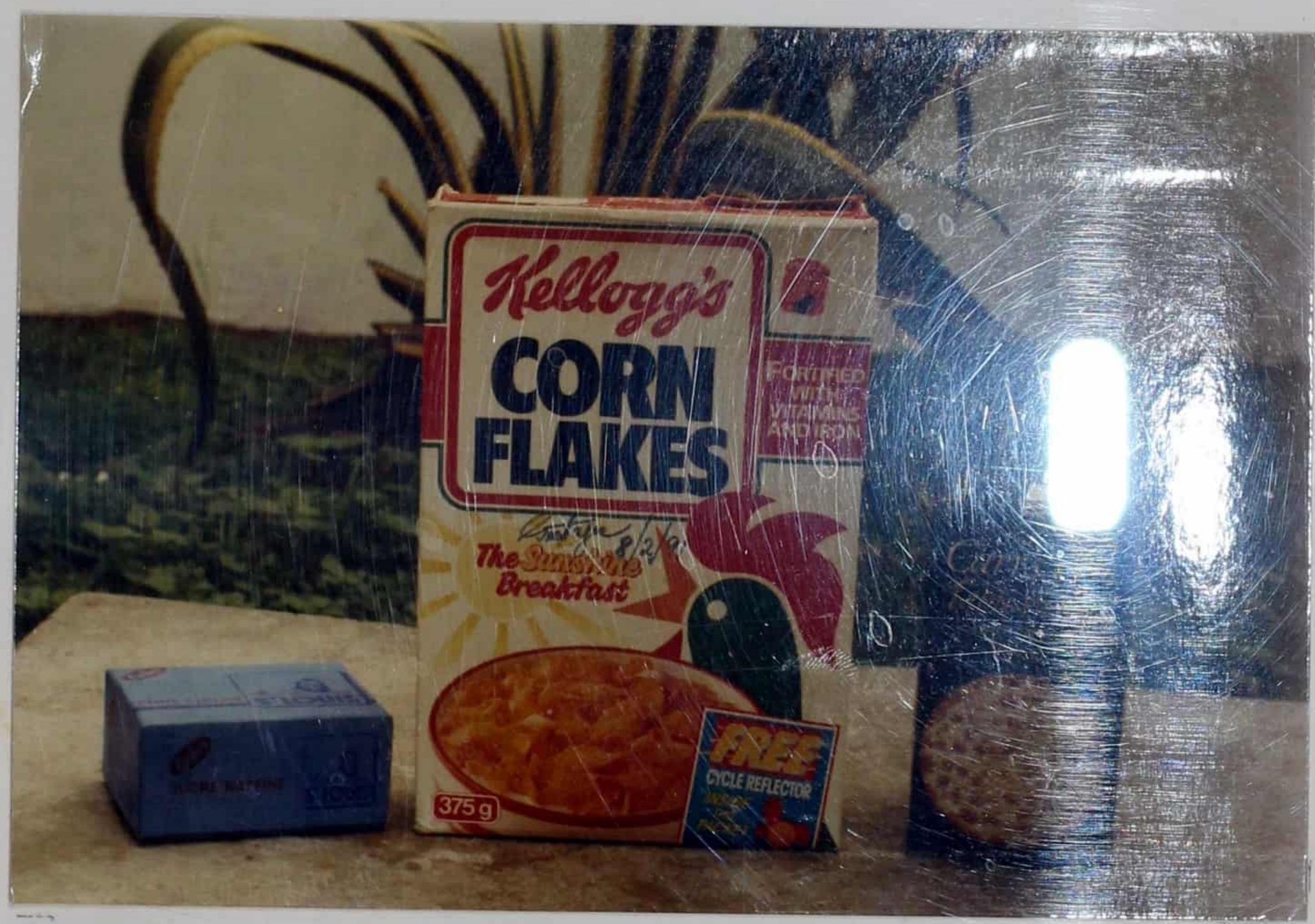

PLATE 19 : Fibreboard Boxes

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CHAPTER FOUR

AESTHETICS AND FUNCTIONAL PERFORMANCE OF PACKAGES

Qualities of Packages

The primary function of a package is to contain and ensure the safe delivery of a product to the ultimate consumer in sound condition. In addition to this purely protective role, the package is expected to perform other functions. The package may be expected to play the role of a salesman. The package is required to sell what it contains. It may be called upon to function as a dispenser after it has completed its function of delivering the product to the ultimate consumer.[1]

In order to perform these functions effectively the package must possess certain intrinsic and extrinsic qualities. It must possess qualities that would make it efficiently contain, carry, protect and preserve the product. The package must also exhibit all the qualities of a good salesman. It must therefore be able to attract attention, communicate, glamorize, motivate, promote, measure and in some cases dispense its contents.[2]

The success of the package does not lie solely in its functional qualities. To be successful the package must be a synthesis of function and aethetics, ie. the intangible essence that causes the unlooker

to respond, to want to have, to buy. As Pilditch (1961) states:

> "What sells is what appeals to the shoppers impulse: the colour, size, shape, even the shelf position of the package".[3]

He continues further:

> "Shoppers are more content, stay longer and buy more when they are in attractive surroundings"[4]

This emphasizes the need for aesthetics in package design. An aesthetically satisfying design is different from one that is ugly. If all other aspects were looked after, there can be no doubt that the aesthetically satisfying one will outsell the poor one in most cases, said Pilditch (1961)[5]

Package design must be judged by its ability to fulfil these conditions. Every manufactured product has some peculiar problems that the package must tackle and solve. The right package is the one the fulfils the conditions necessary for the safe movement of a perticular product from the manufacturer, through the wholesaler and the retailer, to the home of the ultimate consumer. It goes on to keep the product safe there until, when fully expended, it is thrown away.

This chapter will examine the degree to which local packages meet these requirements and relate it to the standard of foreign packages on the market.

PLATE 20 : Closure System Metals Cans

Analysis of Package Performance

The analysis of the packages was carried out in accordance with the guidelines in Appendix 1. As a point of convenience, the results were presented according to the classification of packages in Table 1. The performance of the packages were graded as follows.

A = Excellent; B = Very Good; C= Good; D = Fair
E = Weak

Metal cans and metal-ended composite containers:

Two types of metal can containers were identified on the market. One type has a closure device for easy opening and re-closing while the other type has no closure device. This type is sealed at both ends. It is opened by cutting through one end using a tin-cutter or a knife, like the Ghanacan Pineaple juice. In the case of some of these cans, the opening is effected by tearing along a scored line using an attached device as in Exeter corned Beef (Plate 20).

Forty-two (42) metal can containers were examined. Sixteen (16) of this number were local packages while twenty-six (26) were foreign packages. Table 2 presents the analysis.

As containers, the metal cans were found to efficiently contain, carry, protect, preserve and where necessary, dispense the product contained. Both local and foreign packages performed these functions equally well, scoring A in all areas (Table 2).

TABLE 2 - PACKAGE PERFORMANCE-METAL CANS

Type of Function	Local					Foreign				
	No. Graded					No. Graded				
	A	B	C	D	E	A	B	C	D	E
Contain & Carry	16					26				
Protect	16					26				
Preserve	16					26				
Measure	16					26				
Dispense					*	22	2	2		
Display/Attract		2	6	6	2	19	5	2		
Communicate		3	8	4	1	21	5			
Motivate			5	9	2	15	8	3		
Glamorize		2	3	5	6	26				

A - Excellent - 5 points

B - Very Good - 4 "

C - Good - 3 "

D - Fair - 2 "

E - Weak - 1 point

* Not applicable

The highest performance for the local packages in display qualities was B for two (2) or 12.5% of the packages sampled while the lowest was E for two (2) or 12.5%. For the ability to communicate, three (3) or 18.8% of the packages were graded B as the highest performance. The lowest was a D for one (1) or 6.2% of the sampled packages. The gradings for motivation were : C for five (5) or 31.3%, D for nine (9) or 56.2% and E for two (2) or 12.5% of the packages. The highest performance for glamorizing was grade B for two (2) or 12.5% of the packages while the lowest was an E for six (6) or 37.5% of the sampled packages.

The foreign packages performed better than the local packages in dispensing, communicating, displaying or attracting, motivating and glamorizing. For dispensing, twenty-two (22) or 84.6% were graded A and two (2) or 84.6% were graded C as the lowest performance. The highest for display was nineteen (19) or 73.1% in grade A while two (2) or 7.7% were rated C as the lowest. Twenty-one (21) or 80.8% and five (5) or 19.2% of the sampled packages were graded A and B respectively, for the ability to communicate. Motivation had fifteen (15) or 57.7% for grade A as the highest and three (3) or 11.5% for grade C as the lowest performance. All the twenty-six (26) packages were graded A for the ability to glamorize.

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Collapsable metal tubes: This class was identified as the least common on the market. Four packages were identified. All the four (4) were imported packages. No local package belonging to this class was identified on the Ghanaian market.

As containers, the metal tubes were found to be excellent in the structural performance. They contain, carry, protect, preserve and measure the products contained perfectly. The strongest point for the collapsable metal tubes sampled, was found to be the ability to dispense the contents.

The analysis showed a high performance for these packages in both the structural and visual design.

Glass Bottles and Jars

Glass bottles and jars were the commonest the researcher identified on the market. Sixty (60) packages were identified, twenty (20) local and forty (40) foreign. All the packages in this class found on the market carry paper labels. The performance of this class of packages is shown in Table 3.

From the information in Table 3, the glass bottles and jars, as containers performed very well in containing, protecting and preserving what is contained. They performed creditably well also as means of measuring the products.

TABLE 3 - ANALYSIS OF PACKAGE PERFORMANCE - GLASS BOTTLES AND JARS

Type of Function	Local					Foreign				
	No. Graded					No. Graded				
	A	B	C	D	E	A	B	C	D	E
Contain & Carry	20					40				
Protect	15	3	2			40				
Preserve	20					40				
Measure	20					40				
Dispense	6	4	4	6		35	5			
Display/Attract		6	8	4	2	30	6	4		
Communicate		4	3	8	5	36	4			
Motivate			6	8	6	32	5	3		
Glamorize			5	11	4	37	2	1		

A - Excellent - 5 points

B - Very Good - 4 "

C - Good - 3 "

D - Fair - 2 "

E - Weak - 1 point

* Not applicable

In the function of dispensing, the local packages fell short of the standard of the foreign packages. While thirty-five (35) or 87.5% of the foreign packages graded A, six (6) or 30% of the local packages got to the A grade. Five (5) or 12.5% of the foreign packages graded B while four (4) or 20% of the local packages recorded B, another four (4) recorded C and the remaining six (6) or 30% were graded D.

Six (6) or 30% of the local packages were rated B; eight (8) or 40% were rated C; four (4) or 20% were put in category D and two (2) or 10% in grade E, for display qualities. Under communication the local packages scored four (4) or 20% in B; three (3) or 15% in C; eight (8) or 40% in D and five (5) or 25% in E. To motivate, the local packages were graded six (6) or 30% were graded E. Glamorizing or enhancing the product was not well considered in the local packages. In this function five (5) or 25% grade C; eleven (11) or 55% graded D and four (4) or 20% attained the E grade.

The performance of the foreign packages in display qualities were quite high. Thirty (30) or 75% graded A; six (6) or 15% B and four (4) or 10% C. Thirty-six (36) or 90% qualified for grade A and four (4) or 10% for grade B for the ability to communicate. Under motivation, thirty-two (32) or 80% were graded A; five (5) or 12.5% B and three (3) or 7.5% C. To glamorize or enhance the product thirty-seven (37) or 92.5% of the foreign packages were graded A; two (2)

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or 5% graded B and one (1) or 2.5% graded C.

Plastic Containers (Bottles, Jars, Pots etc.)

Nineteen (19) packages of this category were identified on the market. Out of this number ten (10) were local packages and nine (9) were foreign packages. Table 4 shows the performance of these packages in relation to the functions of packages.

The table (Table 4) indicates that the plastic containers are very good as containers and can carry efficiently. They also serve as very good means of measuring the products contained. Under ability to protect product, six (6) or 60% of the local packages were graded A while grade B and C had two (2) packages each. Seven (7) or 70% of the local packages were graded A; two (2) and one (1) or 20% and 10% were rated B and C respectively for ability to preserve the contained product. The foreign packages, on the other hand exhibited maximum performance in the function of protecting and preserving.

All the nine (9) foreign packages registered grade A for dispensing while two (2) or 20% of the local packages qualified for grade A; one (1) or 10% for the B grade; five (5) or 50% for C and two (2) or 20% for D.

For effective display qualities one (1) or 10% each of the local packages qualified for grade A and B. Three (3) or 30% were graded C; two (2) or 20% rated D

TABLE 4 - ANALYSIS OF PACKAGE PERFORMANCE - PLASTIC CONTAINERS

Type of Function	Local					Foreign				
	No. Graded					No. Graded				
	A	B	C	D	E	A	B	C	D	E
Contain & Carry	10					9				
Protect	6	2	2			9				
Preserve	7	2	1			9				
Measure	10					9				
Dispense	2	1	5	2		9				
Display/Attract	1	1	3	2	3	6	2	1		
Communicate		2	2	4	2	8	1			
Motivate		1	2	2	5	5	3	1		
Glamorize			2	2	6	7	2			

A - Excellent - 5 points

B - Very Good - 4 "

C - Good - 3 "

D - Fair - 2 "

E - Weak - 1 point

* Not applicable

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and three (3) or 40% were graded E. In communication, the highest grade for the local packages was B for two (2) or 20% of the packages. Grade C also had the same 20%. Four (4) or 40% of the local packages were graded D while two (2) or 20% were graded E. The highest performance in motivation was one (1) or 10% of the packages in B grade and the lowest was five (5) or 50% while glamorizing had two (2) or 20% of the packages in grade C as the highest and six (6) or 60% of the packages in E as the lowest.

On the other hand six (6) or 66.7% of the foreign packages were graded A as the highest for display and one (1) or 11.1% in grade C as the lowest grade. Eight (8) or 88.9% in A was the highest for the function of communication and the lowest performance was one (1) or 11.1% in grade B. Ability to motivate had five (5) or 55.5% grade A as the highest performance and the lowest was one (1) or 11.1% in grade C while to glamorize had seven (7) or 77.8% in grade A and two (2) or 22.2 in B.

Polythene Sachets and Wrappers

The use of polythene as wrappers was found to be very common on the Ghanaian market. This is one of the class of packages that is fully fabricated locally. Ten (10) local and twenty-six (26) foreign packages, making a total of thirty-six (36) packages, were identified. In this packages the film is either used as a sachet or an over-wrap. The performance of this class of packages is shown in Table 5.

TABLE 5 - PACKAGE PERFORMANCE POLYTHENE SACHETS AND WRAPPERS

Type of Function	Local					Foreign				
	No. Graded					No. Graded				
	A	B	C	D	E	A	B	C	D	E
Contain & Carry		5	2	3		18	5	3		
Protect		2	5	3		23	3			
Preserve		2	6	2		26				
Measure	2	3	2	2	1	-	-	-	-	*
Dispense	-	-	-	-	-	-	-	-	-	*
Display/Attract		3	2	3	3	18	6	2		
Communicate	2	3	2	1	2	24	2			
Motivate		2	3	3	2	18	3	5		
Glamorize			2	5	3	20	4	2		

A - Excellent - 5 points

B - Very Good - 4 "

C - Good - 3 "

D - Fair - 2 "

E - Weak - 1 point

* Not applicable

From the table five (5) or 50% of the local packages scored B as the highest for the ability to contain and carry and the lowest was three (3) or 30% at grade D. For product protection the highest performance was two (2) or 20% of the packages in B and the lowest three (3) or 30% at D while the lowest for ability to reserve was two (2) or 20% at D and the highest was also two (2) or 20% graded B. Two (2) or 20% qualified for A, the highest for measuring and one (1) or 10% was graded E as the lowest.

The foreign packages exhibited better containing, carrying, protecting and preserving qualities. Eighteen (18) or 69.2% scored A; twenty-three (23) or 86.9% and 26 or 100% scored A in containing, protecting and preserving respectively. The lowest performances were three (3) or 11.5% in grade C for containing and three (3) or 11.5% in grade B for protecting. The highest for display quality in the foreign packages was eighteen (18) or 69.2% in grade A and two (2) or 7.7% in grade C was the lowest while the highest for ability to communicate was twenty-four (24) or 92.3 in grade A and two (2) or 7.7% in B as the lowest. Eighteen (18) or 69.2% and twenty (20) or 76.9% in grade A were the highest for motivating and glamorizing respectively while the lowest performances were five (5) or 19.2% and two (2) or 7.7% in grade C respectively.

In display qualities, the local packages had three (3) or 30% in B as the highest and three (3) or 30% in E as the lowest. Ability to communicate featured better with two (2) or 20% in A as the highest and the lowest performance was two (2) or 20% in E. Two (2) or 20% of the packages were graded B as the highest for motivation while the highest for glamorizing was two (2) or 20% in C. The lowest scores for motivating and glamorizing were two (2) or 20% and three (3) or 30% respectively in grade E.

Foil sachets and Wrappers

This class of packages is not very common on the Ghanaian market. The six (6) cases of the use of metal foil in packaging, identified on the market were in combination with paper for wrapping or reinforced with paper or polythene as a container. There were two (2) local packages and four (4) foreign packages in this class. The performance of these packages is tabulated in Table 6.

The performance of the two (2) local packages was limited to the structural performance of the material used. This is because they are under-wrappers. All the two (2) were graded B for containing, protecting and preserving the product. The two (2) were scored maximum A for measuring and dispensing. The remaining functions being mostly visual were not applicable to these packages.

TABLE 6 - PACKAGE PERFORMANCE - FOIL SACHETS AND WRAPPERS

Type of Function	Local					Foreign				
	No. Graded					No. Graded				
	A	B	C	D	E	A	B	C	D	E
Contain & Carry		2				4				
Protect		2				4				
Preserve		2				4				
Measure	2					3	1			
Dispense	2					2	1	1		
Display/Attract	-	-	-	-	-*	2	1			
Communicate	-	-	-	-	-*	2		1		
Motivate	-	-	-	-	-*	2	1			
Glamorize	-	-	-	-	-*	2	1			

A - Excellent - 5 points

B - Very Good - 4 "

C - Good - 3 "

D - Fair - 2 "

E - Weak - 1 point

* Not applicable

The foreign packages in this class were all sachets, three (3) outer-sachets and one (1) inner-sachet. All the four (4) packages were graded A for containing preserving and protecting. Three (3) were graded A and one (1) had B for measuring. For dispensing, two (2) were graded A and one (1) package each for B and C grades. Two (2) packages each qualified for A grades in the ability to attract, communicate, motivate and glamorize. One package got B for attracting C for communicating, B for motivating and B for glamorizing.

The last four functions: to display, to communicate to motivate and to glamorize could not be applied to the fourth package, being an inner-sachet for a folding paper-board box.

Folding and Rigid-board Boxes and Cartons

This class of packages was quite common on the market but mostly of the foreign type. Of the forty (40) packages identified, thirty-two were of foreign origin and eight (8) were local packages. Table 7 gives the performance of these packages.

As indicated on the table, the highest performance for the local packages to contain and carry products was A for three (3) packages, (37.5%) while the lowest was D for two (2) packages, (25%). Five (5) packages or 62.5% were graded B and three (3) or 37.5% grade C for product protection. For display qualities the highest for the local packages was two (2)

TABLE 7 - PACKAGE PERFORMANCE - FOLDING AND RIGID FIBREBOARD BOXES

Type of Function	Local					Foreign				
	No. Graded					No. Graded				
	A	B	C	D	E	A	B	C	D	E
Contain & Carry	3	2	1	2		32				
Protect		5	3			32				
Preserve	-	-	-	-	-*					*
Measure					*					*
Dispense					*					*
Display/Attract		2	3	3		25	4	3		
Communicate		1	4	2	1	28	4			
Motivate			5	3		22	4	6		
Glamorize			4	3	1	26	4	2		

A - Excellent - 5 points

B - Very Good - 4 "

C - Good - 3 "

D - Fair - 2 "

E - Weak - 1 point

* Not applicable

packages or 25% grade B and three (3) packages or 37.5% grade D for the lowest performance. Communication had one (1) grade B as the highest and One (1) or 12.5% grade E as the lowest. Motivating and glamorizing had five (5) packages or 62.5% and four (4) packages or 50% respectively in grade C as the highest performance. The lowest performance was three (3) packages or 37.5% in D for motivation and one (1) package or12.5% in E for glamorizing.

The foreign packages graded A for all the thirty-two (32) in the ability to contain and protect product. The highest score for display qualities was twenty-five (25) packages or 78.1% in grade A while the lowest was three (3) packages or 9.3% in grade C. For the ability to communicate motivate and glamorize the highest scores were twenty-eight (28) packages or 87.5%, twenty-two (22) or 68.8% and twenty-six (26) or 81.3% respectively in grade A. Four (4) packages or 12.5% were graded B as the lowest performance for communication while six (6) packages or 18.8% and two (2) packages or 6.3% were graded C as the lowest for motivating and glamorizing, respectively.

Paper Wrappers And Envelopes

Twenty-two (22) packages in this class, five (5) local and seventeen (17) foreign, were identified. The performance of the packages is presented in Table 8.

TABLE 8:- PACKAGE PERFORMANCE - PAPER WRAPPERS AND ENVELOPES

Type of Function	Local					Foreign				
	No. Graded					No. Graded				
	A	B	C	D	E	A	B	C	D	E
Contain & Carry	2		2		1	17				
Protect		2	2	1		15	2			
Preserve					*					*
Measure		3	2			13	2	2		
Dispense					*					*
Display/Attract				5		17				
Communicate				4	1	12	3	2		
Motivate			1	3	1	14	2	1		
Glamorize			2	3		15	2			

A - Excellent - 5 points

B - Very Good - 4 "

C - Good - 3 "

D - Fair - 2 "

E - Weak - 1 point

* Not applicable

To contain and carry, the local packages scored highest with two (2) packages or 40% in grade A. The highest performance in protecting product was grade B for two (2) packages while the highest score for measuring was grade B for three (3) packages or 60%. For the lowest performance,'containing' and 'protecting' had grade E and D for one (1) package each while the lowest for measuring was a grade C for two (2) packages.

Display qualities were weak for the local packages. All the five (5) graded D, and so was motivating ability, four (4) packages or 80% graded D as the highest performance with one (1) package making E for the lowest score. To communicate and glamorize, the highest scores were two (2) packages and one (1) package respectively in the C grade while the lowest were three (3) packages or 60% in D and one (1) package in E respectively.

The foreign packages performed better in containing products and display ability, with grade A for all the seventeen (17) packages in both cases. The lowest performance exhibited were in measuring and communicating where two (2) packages or 11.8% rated C in both cases.

Structural and Visual Design

Table 10 summarises the structural and visual design performances of the various classes of packages on the market. The structural performance was tabulated from the scores of the ability of the package to contain, to carry, to protect, preserve, measure and

TABLE 9 QUANTIFIED PACKAGE CLASS PERFORMANCE (%)

Package Score		Contain	Protect	Preserve	Measure	Dispense	Display	Communicate	Motivate	Glamorize
Metal Cans	I	100	100	100	100	*	50	56.3	43.8	41.3
	II	100	100	100	100	95.4	93.1	96.2	89.2	100
Collapsable metal tubes	I* II	100	100	100	100	100	85	85	75	70
Glass bottles and jars	I	100	93	93	100	70	58	45	40	41
	II	100	100	100	100	97.5	93	98	94.5	98
Plastic containers	I	100	88	92	100	66	50	48	38	32
	II	100	100	100	100	100	91.1	97.8	88.9	95.6
Polythene sachets and wrappers	I	64	58	60	66	*	54	64	50	38
	II	91.5	97.7	100	*	*	92.3	98.5	90	93.8
Foil Sachets and wrappers	I	80	80	80	*	100	*	*	*	*
	II	100	100	100	95	85	93.3	86.7	93.3	93.3
Folding and rigid fibre-board boxes	I	75	72.5	*	*	*	57.5	52.5	52.5	47.5
	II	100	100	*	*	*	90.6	87.5	90	95
Paper Wrappers	I	68	64	*	72	*	40	48	36	40
	II	100	97.6	*	92.9	*	100	97.6	91.8	95.3

* Not applicable

I Local packages

II Foreign packages

TABLE 10 - SUMMARY OF PACKAGE PERFORMANCE

Package Class		Structure(%)	Visual Design (%)
Metal Cans	Local	100	47.0
	Foreign	99.1	94.6
Collapsable Metal tubes	Local	*	*
	Foreign	100	78.8
Glass bottles	Local	91.2	46
	Foreign	99.5	95.9
Plastic Containers	Local	89.2	42
	Foreign	100	93.4
Polythene Sachets and wrappers	Local	62	51.5
	Foreign	96.4	93.5
Foil sachets and wrappers	Local	85	*
	Foreign	96	91.7
Folding and rigid fibre-board boxes	Local	73.5	52.5
	Foreign	100	90.8
Paper wrappers	Local	68	41
	Foreign	96.7	96.2

* Not applicable

TABLE 11 AVERAGE TOTAL PERFORMANCE OF LOCAL AND FOREIGN PACKAGES

Packages	Structure	Visual Design	Average Total
Local	81.3%	46.7%	64.0%
Foreign	98.5%	90.6%	94.6%

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dispense (Table 9). The visual design performance was obtained from the scores of the attraction and display qualities, the communicating qualities, the motivating and also the glamorizing qualities of the package (Table 9).

i. Structural Design: As indicated in Table 10, the local packages matched the foreign packages where the structural design of the packages were concerned. The only exceptions noticed were in the class of polythene sachets and wrappers and also in the paper wrappers class. In these types of packages the study identified appreciable differences in the performance of the structural design of the package.

The polythene sachets and wrappers for packaging locally recorded 62% for structural performance as against 96.4% for the foreign polythene sachets and wrappers. Another marked difference was noticed in the structural performance of paper wrappers. The local paper wrappers scored 68% while the foreign paper wrappers made 96.7%.

The difference in the structural performance of the folding and rigid fibre-board boxes and cartons also need mentioning. The local packages averaged 73.5% as against the maximum score of 100% for the foreign packages.

A common denominator was identified in relation to the structural performance of the local packages that is, how much of the fabrication is done locally.

The researcher observed that the source or origin of the structural design and fabrication of the package directly affected the performance of the package. Table 10 shows the local metal can packages scoring higher than the foreign packages in structural performance. The study revealed that these metal cans were not wholely fabricated locally. The metal cans were imported in knock-down state - the body of the can and the two ends. The local manufacture then fixed one end in place before filling and the other is sealed on after the can is filled with the product. In this situation, with the right machinery for the assemblage, there should be no reason why the local cans should not structurally compare favourably with the foreign ones in performance of package functions.

Similar conditions were noted in the case of glass bottles and jars. Most of the glass bottles and jars used by local manufacturers were obtained from the "second-hand" market for re-use. The only addition needed in the structure was the fabrication of a closure device for the bottles. The "second-hand" jars usually have re-usable closure devices. These bottles, the study noted, showed very good structural design qualities except in dispensing of the product (Table 9). The fabrication of an efficient closure device, the only part of the structure to be fabricated locally, affected the dispensing ability of the glass

bottles. This reduced the performance of the package to 91.2% for structure, as against 99.5% for the foreign ones.

This study observed that the fabrication of efficient closure devices locally has been a plague for the plastic containers, thus adversely affecting the dispensing ability of the local plastic containers (Table 9). For dispensing, the local plastic containers scored 66% as against the 100% score of the foreign plastic containers. The performance of the local plastic containers in relation to dispensing would have been lower, but some of the containers were imported with attached efficient closure devices, to be filled and sealed locally.

On the other hand, where the entire fabrication or a major part of it were locally executed, the researcher observed that the standard of performance went down. Thus local polythene sachets and wrappers performed far below the performance of the foreign ones (Table 10). Folding fibre-board boxes were found to have suffered a similar fate. They performed below the standard of the foreign boxes.

The underlying factors for this difference in performance of the structural design will form part of the points to be discussed in the proceeding chapter.

ii. Visual Design: The main disparity between the local and the foreign packages, this study observed, was in the visual design of the package. In all the classes of packages examined, the visual design performance of the local packages was far lower than that of the foreign packages (Table 10). As the table indicates, the highest performance of the local packages was 52.5% as against 96.2% for the foreign packages. The lowest for the local packages was 41% while the foreign packages made 78.8% as the lowest under visual design.

The basis of the visual design of a package is the artwork and its execution on the structure of the package. The greatest weakness in the local packages was therefore identified to be directly related to the artwork used on the packages. The quality of original artwork was low and so was the execution of the design, as compared to the designs and their mode and standard of execution on the foreign packages.

This study observed that low quality of original artwork was prevalent in most local packages (Plate 21). The following were some of the noted weaknesses in the artwork of the local packages:

i. Poor organization of design elements

ii. Unsuitable and inconsistent typography

iii. Poor and unimformative illustrations

PLATE 21 : Original Artworks (Local Packages)

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iv. Unsuitable, weak and pastelish colours

v. Lack of the necessary information.

The reasons for this poor state of the original artwork will form part of the points to be discussed in the next chapter.

The print quality of local packages were found not to compare favourably with the foreign packages. While most of the local samples used paper label (83.6%), the foreign packages show printing on various surfaces. Most of the metal cans were printed direct. 73% of the sampled (or 19 out of 26) foreign metal cans have the artwork and all necessary information printed direct on the metal can. While the artwork for local biscuit packages were printed on paper and over-wrapped with polythene, the foreign samples were printed on film laminates, mostly. The variation in the printing surface brings variation in the print quality. The luster of print on metal plate and the glossy appearance of a print on a film laminate could not be equalled by a paper lebel.

Where the foreign samples came as paper labels (38.1%), the print was finished with a vanish that gave the package the luster and freshness needed on the shelf. This lack of lustre and freshness gave the local packages weak, aged and faded looks on the shelf.

Saddled with this problem of low standard artwork and printing and print quality problems, the local package failed to play the role of a good salesman it is required to play. David Judd (1989) says:

> "The package or its label is the silent salesman and the way in which we present his proposition and the inteligibility of his argument is the difference between sale and no sale, life and death".[6]

The following chapter will discuss the factors and constraints that made the local packages not able to perform along side the foreign competitors in the functions as the silent and colourful salesman.

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CHAPTER FIVE

FACTORS INFLUENCING THE QUALITY OF LOCAL PACKAGES

The preceeding chapter has comparatively analysed the local and foreign packages and interpreted the results. The analysis clearly showed that the local packages have a quality lower than that of the foreign ones. The analysis further showed the distribution of the low performance of the packages (Table 9 and Table 10).

From the information garthered, this chapter identifies the causes of the low performances of the local packages. The research identified the following as the main factors that contribute to low quality of the local packages:

i. The Ghanaian market situation;

ii. The constraints of the packaging industry.

The Ghanaian Market Situation

The packaging industry in Ghana may be described as being in its swaddling-clothes. It is still very young with numerous teething problems. The Ghanaian market situation has been one of the major reasons for this late development of the packaging industry.

For a very long period, the Ghanaian market has played a consumer role in the manufacturing world. Most of the products on the market were foreign finisned products imported into the country. This

was the trend of colonial commercialism. Raw materials were exported from the colonies while finished goods were imported from the soverign state to the colonies. There were little or no effort towards industrialization during the colonial era. The post-independence era saw efforts towards industrialization. However, manufacturing locally has been on a low level. This gave a very slow pace to the growth rate of the packaging industry in Ghana.

In order to protect the few young indigenous industries, importation of certain products were restricted. This created a monopoly and, or oligopoly on the market. In this situation, the consumer had no choice than to buy what is found on the market. Thus, the Post-Independence period market situation could well be described as a sellers-market. This type of market situation is not conducive to the growth of the packaging industry.

The local manufacturer operating in this type of market situation, did not see the need and value of a high promotional packaging venture. Due to the market situation, his products never stayed on the shelves for long periods. This made local manufacturers not to be conscious of the value of the right package. These conditions stunted the local packaging industry.

The packaging industry strives on rivalry borne of proliferation of products on the market. These

conditions were absent on the Ghanaian market. Thus, the packaging industry lost its vitality for any appreciable growth.

The country is now gradually moving from a sellers-market situation towards a buyers-market. This gives the consumer the opportunity to choose. The manufacturer will then have to take the consumer's taste, needs and wants into consideration. The manufacturer will now need to find a way of getting the consumer to take his or her purchasing decisions in favour of his product. This becomes a problem for the manufacturer and it is on this problem that the packaging industry strives. Such a situation calls for a healthy packaging culture.

However, due to the stunted growth, the packaging industry in Ghana was ill-prepared to contain the demands of the changing market situation. It is now saddled with numerous problems and constraints, making it incapable of playing its role in the manufacturing industry.

Constraints of the Packaging Industry.

Raw Materials and Equipment: The research identified lack of raw materials and the necessary machinery and equipment as a major problem for the packaging industry. The main raw materials for packaging in this country were found to be paper and fibre-board, glass, plastics and metal sheets. In addition to the materials, and of equal importance, are equipment and machinery for working these materials.

Paper and fibre-board, both solid and corrugated are important materials in packaging. These materials were found to be inadequately available. Paper come in various grades and with various surface finishes. Each grade and finish has its characteristics and is therefore suitable for specific purposes. In most cases, the needed quality of paper or paper-board may not be available on the market. Ghana relies on importation of paper and paper boards. This situation restricts the choice of the quality to what is available on the market. It was found out that in most cases, the right quality of paper or paper-board needed to handle a specific packaging problem was not available. Package fabricators therefore had to use whatever poorer substitute of the grade of paper specified for the job, if they should stay in business. Product manufacturers, for the same reason had to accept whatever was available.

The non-availability of paper and fibre-board in the right quality and quantity, has direct influence on package fabrication. It directly affected the occurence of the folding fox on the market. Out of the sixty-one (61) local packages identified, the folding box made only eight (8) appearance. (See Table 1). Five (5) of these were as outer cartons and three (3) for consumer units.

The performance of these packages made from "near-right" substitutes of the specified materials were found not to perform as efficiently as those made with the right quality of materials (Table 7).

Glass containers such as bottles and jars, were found to be in high demand for local packaging. These were not adequately available for high standard packaging. The Aboso Glass Factory, the only glass factory in the country has been out of production. This means that all glass containers will have to be imported. Local manufacturers especially the small scale industrialists were not able to provide the necessary foreign currency to support such packaging ventures.

The only alternative for local manufacturers who needed the use of glass bottles as containers for their products was the "second-hand" bottle market. They had to rely on whatever shape, size and colour of bottle the market could provide. As a result of this situation, this study discovered that different shapes, sizes and colours of bottles carrying the same product from the same manufacturer were very common on the market (Plate 22).

This situation, the study observed, did not engender a healthy packaging culture. The uncontrolable variation in container shape size and colour did little to enhance the quality of the product and to improve consumer appeal and product identification. This was

PLATE 22 : Different Bottles containing same product

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found to be a big setback in local packaging.

Plastics could have been a solution for some of these glass-container problems. However the study discovered that the plastic industry also has its fair share of the local packaging problems. The availability of plastics is froth with various problems of technical nature.

Technology in plastics has advanced tremendously. The local plastic industry is not capable of meeting the market expectations for high technology plastic containers. These expectations are a result of exposure to international products of advanced technology on the local market.

This study is not competent enough to delve into the technicalities of plastics. It is sufficient for the scope of this study to state simply that there are various types of plastics and that various grades and characteristics can be achieved in the same type through various technical processes. Each type and grade has peculiar qualities that make it suitable for specific purposes.

This study noted that the right type or grade required to solve specific packaging problems were not always available. The manufacturer therefore made indiscriminate use of whatever type is available for the packaging of any product that can be carried in

a plastic container. These included foods, detergents, cosmetics, oils etc. The result was, in most cases, a misfit package on the market. Products that should have been contained in a clear plastic container were found to have been put into translucent or even opaque containers. The consumer is, in this wise, not afforded a clear view of the contents. Thus the package fails to glamorize the product and also fails to entice or appeal to the consumer.

This situation coupled with others that will be discussed later, resulted in the poor performance of the plastic containers as shown in Table 4.

This study discovered that the equipment and machinery for working, even the inadequate supply of raw material available, in the right way were not available. Those available were in some cases outmoded while others were in a poor state of disrepair due to lack of spare parts.

The printing industry which is a vital part of the packaging industry was found to be ill-equiped to meet the requirements of the packaging industry for high quality packages. Up-to-date equipment for colour seperation and colour mixing were not available locally. Modern packaging requires the services of colour seperation and colour mixing equipment. Todays high technology in printing machinery

has produced computerised equipment for colour seperation and colour mixing. These equipment help to get the right colours needed to make the package perform its role. The absence of these equipment on the local scene resulted in poor colour quality and colour reproductions on local packages. This study noted instances where colours specified by the original artwork could not be reproduced on the label. The printer could not mix that colour. Presentable product photographs could not be printed as specified on the artwork because the colours in the picture could not be printed locally. Colours in labels had no consistency in the various batches of the same product, due to lack of up-to-date colour mixing equipment. As a result, the local package could not match the foreign packages, which were produced with the use of such high-technology equipment.

Other auxiliary materials such as films, printing plates, inks vanishes etc. were not readily available to the printing industry. This also hampered the output quality. Thus; poor print quality of local packages on the market were produced.

Technical and Commercial know-how

The quality of the package is greatly influenced by the availability or lack of technical and commercial know-how in the packaging industry. During the designing of the package, whether structural or visual, there is the need for in-depth knowledge of materials, equipments

and processes involved at the various stages. There is the need for knowledgeable decision makers. Those who understand and are able to interpret and evaluate market trends towards good packaging decisions. Needed also are men of creative ability. Designers who are capable of translating dreams and design briefs into effective visual language for the presentation of the proposition of the package. Printers too must have the right expertise to facilitate good execution of the artwork on the package. The weakest point on this chain of expertise determines the strength of the final product.

This study discovered that due to lack of knowledge about the role of the package in marketing, management of most industrial set ups did not give packaging the needed consideration. Many view the package as an unnecessary but unavoidable appendage to the product. One representative of a local manufacturer, commenting about the colour of their product package, says:-

> "I don't know why they keep requesting for this colour or that colour. They are all the same. Just a mere wrapper for the product. I don't know what they do with the colour or what the colour does for them. However we print it for them as they want: red, blue, green or yellow".

As a buttress to the fact that management lacks knowledge about the value and role of the package in marketing, a top representative of a local industry has this to say, when he was responding to complaints about their product:-

"Do you know that when most converters buy semi-finished products from us, take them away and get them wrapped in their own wrapper with their label on it, people do not complain about the quality? Why is it that when people see S.P.P.C. label on them they start complaining,when in actual fact they are the same products with only different labels?"[1]

In answer to a question whether he thinks people are judging the quality of the goods by their labels, he answers: "certainly not".

Such views about the package will not lead to any good decision towards packaging. In the above example, the product loosing market. It was formerly enjoying a monopoly of the market. Now there is competition and consumers have started complaining about their product. Due to lack of knowledge about the role of packaging, he is putting the blame on sabotage.

This study realised that many wrong packaging decisions were taken by many manufacturers. This was the result of management not being conscious of the value of the right package. It was noticed that most of the original artworks were handled by 'free-lance' artists. Their services were preferred to the services of the professional designer. This, the researcher found, was the fear of the cost of the services of the professional designer. Others were for the lack of knowledge of the subtle difference between the 'artist' and the 'designer'. In the cases where

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management made use of the 'free-lance' artist, the artist merely expressed the dreams and ideas of the manufacturer in visual terms. This then became the original artwork for the package.

For lack of appreciation for good quality prints, manufacturers took poor decisions regarding the printing or reproduction of the artwork. The printing order was placed with small, cheap and incompetent printers. The end result was a package lacking most, if not all of the qualities that make it an effective package.

Package designing is a specialised field of design. It requires special knowledge and approach. Herdeg (1961) has this to say about the package designer:-

> " A certain amount of technical knowledge is expected of the designer in addition to his acknowledged creative ability. This familiarity with some of the essential aspects of manufacturing will stand him in good stead when discussing a project with a customer."[12]

In the developed countries, there are agencies and institutions set up to handle packaging. The situation is different in the developing countries like Ghana. With the exception of a few companies that work on the construction of the physical structure of the package, this study could not identify any agency that specialises in the design of packages. These were no graphic design outfits well versed in the technicalities and the intricacies of package designing. There are not many

individual designers who are highly knowledgeable in package designing. With this situation the quality of the package would suffer due to lack of the right expertise.

As a result, this study noticed the following deficiencies in the visual design of the local packages. Such deficiencies would not have occured, or would have been drastically reduced, if the work were handled by people who possess the right expertise.

i. Poor organisation of the elements of design
ii. Inconsistency in the use of typography
iii. Weak illustration, either in drawings or photographs
iv. Poor and arbitrary choice of colour
v. Unintelligible message
vi. Incorrect positioning of the design for the target group.
vii. Violation of packaging related laws and regulations.

With these deficiencies in the original artwork, the final package is found to perform poorly as evident in the results of package performance analysis (See Table 10).

Lack of the right expertise was noticed in the execution of the artwork also. The few printing houses that can boast of some degree of expertise usually have very tight work-schedules. As a manufacturer interviewed puts it:

> "To avoid disappointments, I usually place my order with small printers. They do brisk business. No bureaucratic processes to bore you down".

This research noted that the disappointment referred to above, stems from pushing package design considerations and decisions to the last stage of production, then rushing over the whole process to get the product on the market in good time. This is an indication of management not being conscious of the value of the package in marketing.

When the order is placed with the 'small printers', they satisfy the manufacturer quite all right. But due to their lack of sufficient expert knowledge about package standards and requirements, the final product turns out to be poor. They produce prints that fall below what can ordinarily be termed good prints, not to talk of prints for packaging. Very glaring deficiencies in print quality, such as poor registration, inconsistencies in colour, under-prints, etc. which could be avoided, were found on the market, a clear indication of lack of the right expertise. (Plate 23)

Fabrication, that is the construction of the package from the technical point of view, also exhibited signs of lack of the right know-how. Due to the lack of technical know-how, most of the locally moulded plastic containers for packaging have ill-functioning closure devices. The technical know-how for moulding a no-leak closure system for the local plastic container

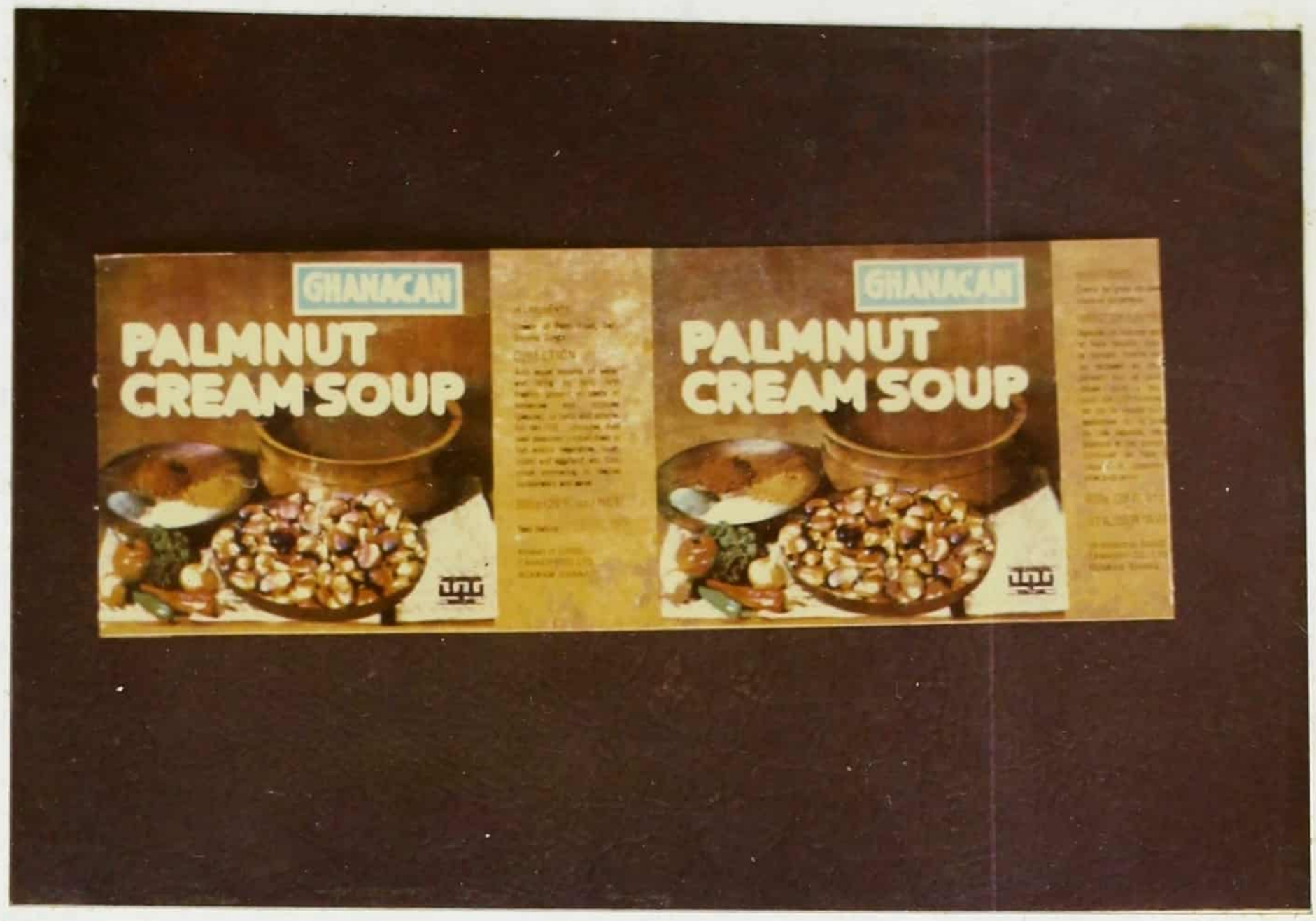

PLATE 23: Examples of Poor Print Quality.

is not available. Manufacturers use the ill-functioning closure devices on the local market. However when it comes to exporting the product, they resort to imported moulds. At Pro-Bio Laboratories, the manager when commenting about closure device of their plastic containers, lamented about the lack of the know-how for moulding a leak-proof closure system. According to him, they are not able to use the plastic bottles because none can be closed water-tight. That quality of closure system is very important to their products to avoid leagage during transportation and also on the shelf.

These factors have adversely affected the quality of the locally designed and executed packages. Chapter Four of this research identified the standard of the locally made packages in relation to the foreign ones. The local packages were seen to have fallen short of the standard of the foreign packages. The above factors have been identified as the causes for the low quality of local packages.

To be able to meet the international standards in packaging, most exporters, if not all, are forced by these constraints, to import their packages whole - ready for filling. Through the assistance of the International Trade Centre (I.T.C.), pineaple exporters and also exporters of vegetables, import the needed packages for their business, ready for filling. Such packages were found to be folding cartons made of corrugated fibre-board.

PLATE 24 : Golden Tree Chocolate Wrapper (Old and New)

In the same vein, the Cocoa Processing Company, Tema, was assisted by the Norwegian Government through the I.T.C. to develop a new package design for their products. Today, Golden Tree Chocolate is in a new package for the international market. (See Plate 24). This new package was designed and executed outside the country.

To remedy this situation, the Government, through the G.E.P.C. and with the assistance of the I.T.C. has proposed the setting up of a Packaging and Design Centre at the University of Science and Technology. This design centre will take care of the problems of the packaging industry. This study found this to be a timely decision in the right direction. Among the functions of the Design Centre are:-

i. To develop packaging prototypes, including structural and graphic design.

ii. To conduct comparative tests on prototypes.

iii. To serve as resource centre for clients; rendering services such as product photography, colour seperation and preparation of finished artwork.

iv. To provide a packaging library and a permanent exhibition of packaging materials and packages including typical samples from foreign markets.

v. To provide information on current developments in the packaging field.

vi. To organize training courses, seminars and workshops.

When this Design Centre starts functioning fully, it will be the axis about which all other institutions and agencies involved in packaging will revolve.

TEST OF THE HYPOTHESIS

The hypothesis is that, "local packages are deficient in structure and visual design when compared to foreign packages".

Chapter three of the study was devoted to identifying packages on the market. Two hundred (200) packages were randomly sampled. Sixty-one (61) or 30.5% were local packages and one hundred and thirty-nine (139) or 69.5% were foreign packages. The samples were classified into eight (8) categories.

In Chapter four the aesthetic and functional qualities of the samples were critically analysed with the use of an analysis check list (Appendix 1) and the results recorded. The results were quantified and presented in Table 10.

The interpretation of the results showed that all the eight categories of local packages were structurally deficient when compared to the foreign ones. The interpretation of the results further showed that the visual designs of all the eight categories of local packages were weak. Table 11 presents the average total

performances of the local and foreign packages.

Therefore the information presented in chapters three, four and five proves the hypothesis.

TABLE 11 AVERAGE TOTAL PERFORMANCE OF LOCAL AND FOREIGN PACKAGES

Packages	Structure	Visual Design	Average Total
Local	81.3%	46.7%	64.0%
Foreign	98.5%	90.6%	94.6%

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CHAPTER SIX

STUDIO WORK ON SELECTED LOCAL PACKAGES

The preceeding chapter has identified and discussed at length the deficiencies of the local packages. This chapter selects a few of such typical local packages and presents, in practical terms, ways of improving their qualities.

The major weakness of the local packages has been found to be the standard of the art work. The studio work in this chapter, for this matter dwells more on the visual design. However, since it is not possible to seperate completely the structural design from the visual design, at appropriate points, the structure of the package may also be discussed (or treated). The following local packages were selected for redesigning.

i. Rose Toilet Roll

ii. Ghanacan Palmnut Cream Soup

iii. Ghanacan Snails

iv. Ghanacan Garden-eggs.

<u>Rose Toilet Roll</u>

This is manufactured by Super Paper Products Limited, Accra. The following were the deficiencies of this product package.

i. The wrapper was too small to contain and protect the product efficiently.

ii. The fibre-board tube around which the tissue

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i. The wrapper was too small to contain and protect the product efficiently.

ii. The fibre-board tube around which the tissue

PLATE 25a: Rose Toilet Roll on Display

PLATE 25b: Rose Toilet Roll, Old and New Packages

paper is rolled is not rigid enough to support the product effectively.

iii. Layout of the original art work lacks organization.

iv. The typography for the brand name is not appropriate

v. Arbitrary use of colours

vi. Poor print quality.

The product thus creates a poor impression on the shelt (See plate 25a).

Plate 25b shows the re-designed package. To avoid increasing the cost of reproduction, the one colour approach was maintained, using the rose colour as an additional emphasis on the brand name. The illustration was treated in monochrome. The typography of the brand name was rended in a script type of letters instead of the Sans Serifs, as a way of relaxing the rigid feeling in the former design. The size of the wrapper was made slightly longer to be able to cover the entire product conveniently. In addition the new design will require a more rigid fibre-board cyliner around which the tissue paper will be rolled to make the package stronger to withstand handling at the point of sale and in the home.

Palmnut Cream Soup

This is a product of Nsawam Cannery. The product name, with the inclusion of the word 'cream' creates some ambiguity. The content is not effectively described by the name. The illustration

a. Palmnut Cream Soup
(Old Design)

b. Palmnut Soup
(New Design)

PLATE 26

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does not clarify the situation either. Whether the illustration represents a 'serving suggestion' or the contents, it is difficult to make out. The type of stencil letters used for the product name is quite unsuitable (Plate 26a).

In the new design the product name is modified to 'Palmnut Soup' and in addition 'half-cooked' is added to further describe the nature of the contents. A photograph of fresh palmnuts was used as illustration to further emphasize what is contained in the can. The typography was also changed to a more appropriate type. Provision was made for other information that need to appear on the package (Plate 26b).

The new design has played down the brand name Ghanacan. This was necessary if the product were aimed at the foreign market. Ghanacan is not known outside Ghana and the product cannot be supported with any promotional programme. This required a re-organized positioning of the design. The product name needed more emphasis.

Garden-eggs, Snails

Plate 27 shows the labels for Garden-eggs and for snails. These two products are also from Nsawam Cannery. Both labels were found to be weak in illustration, lay-out, and typography. The garden-eggs label can easily be mistaken for a pack for seeds for gardening. There are large areas of solid colour with very little information about the product.

PLATE 27 : Ghanacan Gardeneggs and Snail
(Old Designs)

PLATE 28 : New Design for Garden-eggs and Snails

The contents of the plate in the label for snails is anything than snails. Besides, the snail has a repulsively slimy skin and the less of it exhibited the better. If it must be shown, then it must be done with a lot of caution.

Plate 28 shows improvements on the design. In the new design, more emphasis was put on the products. Bolder and more appealing illustrations were used through photography. Suitable letters were chosen for each product name. Consideration was also given to information about the manufacturers and instructions to the consumer.

As Judd (1989) commented, naturalistic drawings of food products are very difficult to make and they seldom come out well in the final print. It will therefore be better to present such items through the use of photography. However, Judd cautioned that the taking of such photographs, that is, product pictures, should be left to professional photographers to handle for better results.

New Product Packages

The following packages, Plate 29 and Plate 30, were designed for local products that have not yet been put into consumer-unit packages. The products to be packaged are 'garri' (roasted manioc grattings) and 'kokonte' (Manioc flour). These products being hygroscopic must be protected from the ingress of moisture.

PLATE 29 : Chief Biney's Garri

PLATE 30 : Chief Biney's Kokonte

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To achieve this, a folding fibre-board box with a heat-sealed polythene sachet as an inner-container was used. The top and bottom flaps of the box are glued on, as a further measure to enhance the prevention of ingress of moisture.

The target market for these two products, Chief Biney's Garri and Chief Biney's Kokonte, was presumed to be the African immigrants and students in Western Europe and the Americas. The layout of the design was made to concentrate on the product and the target. Thus the product name was given much prominence, to stand out boldly against the background colours. Care was taken to keep the design very simple.

The two packages are for products from the same manufacturer, so the two designs carry the same family appeal. This will aid quick identification and subsiquent building of brand image on the market.

Information for the consumer on the directions for use is provided in French and English. Enough space is provided for manufacturer's identity and any information required by law, to appear on a package for export.

The projects described in this chapter were a result of studio research carried out by the researcher to buttress the findings and conclusions of this study. The packages presented have not been sufficiently tested to ascertain their marketing values. This study is not competent enough to carry out such tests. It

would be a new field of research to test the marketing values or the reaction of local consumers to shapes and colours used in local packages.

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CHAPTER SEVEN

SUMMARY CONCLUSION AND RECOMMENDATIONS

SUMMARY

This study was conducted to examine the state of package design on the Ghanaian market. The study established in chapter three that the idea of packaging a product to make it portable and to protect, preserve, measure, dispense and above all, to enhance the product is not a new concept in the traditional Ghanaian society. Various forms of packaging have been in use. These traditional forms of packaging have not yet been completely replaced. Some have undergone changes while others have seen no change. The study also identified commercial packages on the contemporary Ghanaian market and classified them into eight groups. This satisfied the first subproblem.

In chapter four, the sample packages were analysed and their functional and aesthetic qualities were comparatively examined; the local packages and the foreign ones. The results of the analysis exposed the deficienceies in the local packages. It showed that the local packages were weak in the visual design. Deficiencies were noticed in the structural design too. These were mostly related to closure devices, thus satisfying the second subproblem.

Reasons for the poor performance of the local packages were identified in Chapter Five. Two main factors were identified:-

i. <u>The age and growth potentials of the packaging industry in Ghana</u>

The packaging industry had a late start and a stunted growth. This was due to the state of the market situation in Pre-Independence and Post-Independence Ghana. The market was a sellers-market, where monopoly and, or oligopoly held sway for a long period. Thus the packaging industry had no impetus for any meaningful development.

ii. <u>Constraints of the packaging industry</u>

As a stunted institution, the change in the market situation met the industry ill-equipped. The study identified the numerous constraints that bedevilled the packaging industry in Ghana.

i. Lack of raw materials
ii. Lack of equipment
iii. Lack of the right expertise
iv. Lack of the right-package consciousness
v. National economic constraints.

This information satisfies the third subproblem.

In chapter six, the study gave practical demonstration on how some of the poor quality local packages can be improved, thus satisfying the fourth subproblem.

CONCLUSION

This study has brought to light the deficiencies and problems that have contributed to the relegation to secondary position of 'Made in Ghana' products on the shelves of the international market, as well as the local market. Highly promotional packaging may not be very necessary for the distribution of goods in the domestic market. However when the standard of packaging for domestic distribution is improved, it will accordingly reflect in the packaging standards for the foreign market.

Practical suggestion and recommendations for improvement have been provided. It is hoped that this will serve as a basis for further development on package designs for both local and foreign markets.

The aspiring package designer has a wide field of operation in the local packaging industry. There is no limit to the scope. Those who aim to be the best locally and nationally, can still look forward to compete and succeed internationally. So there is both scope and hope yet.

RECOMMENDATIONS

1. The researcher recommends that the information contained in this study should be made available to design students, practising package designers and all agencies and institutions involved in packaging of products.

2. Since the study identified the visual design aspect of the package as the major weak point in the local packages, it is therefore recommended that:

i. The graphic design courses at the College of Art, University of Science and Technology must be re-structured to strengthen the packaging content;

a) As an area of specialization during the fourth year of design studies, or

b) As a one-semester specialised training programme.

ii. A graduate course in packaging should be mounted for designers in the packaging industry, with the assistance of the International Trade Centre and its affiliates, through the Export Promotion Council and the Packaging and Design Centre at University of Science and Technology.

iii. Intensive short period courses and workshops should be organized for practising designers in the packaging business.

iv. The technology base in the field of design with special reference to packaging must be improved. This will involve the acquisition of machinery and equipment.

3. For the proposed Packaging and Design Centre at the University of Science and Technology to serve its purpose, it is recommended that:-

i. It should form a close collaboration between designers, printers and manufacturers through periodic seminars and workshops.

ii. The centre must help and also direct manufacturers, printers and designers to find sources for funding the procurement of needed modern equipment and materials for packaging.

iii. The centre must use the expertise of as many package designers as possible and available, to research into packaging of local products, and make the research findings available to the packaging industry, manufacturers and exporters.

iv. The centre should, in colaboration with the College of Art, organize intensive short period courses for practising package designers with the view to upgrade or improve their performance.

v. The Packaging and Design Centre should work out the modalities for forming a Ghana Institute of Packaging, affiliated to an international packaging institute, to help put local packaging into the international stream.

4. To the Ghana Standard Board it is recommended that:-

i. Efforts should be intensified towards raising of standards, not only of local products, but also of local product packages.

ii. An office must be set up, with personnel having the necessary packaging expertise,

especially in the visual design aspect of packaging, to examine and enforce the right packaging of products for both the local and foreign markets.

iii. The said office must work in collaboration with the Ghana Export Promotion Council and the Packaging and Design Centre for effective control of packaging standards.

5. It is further recommended that:-

i. The Government should waive or drastically reduce tariff on imported packaging materials.

ii. The Government should set aside, special funds for financing the production of right-quality export packages.

iii. The possibility of starting paper manufacturing in Ghana should be given serious consideration.

iv. The necessary groundwork towards reviving the Aboso Glass Factory should be considered.

6. Finally, it is recommended that, manufacturers, designers, printers and exporters, or any other individual or group of individuals, who have any problem with package and packaging should not hesitate to consult the Packaging and Design Centre at the University of Science and Technology, Kumasi for the necessary help and direction.

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APPENDIX

PACKAGE PERFORMANCE ANALYSIS GUIDELINES

A. Structural Design

1. Can the package contain the product effectively?
2. Can package provide protection for the normal life of the product plus a reasonable margin of safety?
3. Will the package stand under storage conditions in warehouses and retail stores?
4. Is the unit package the proper size for the consumer?
5. Is shape and size suitable for mass display?
6. Will package be able to prevent the loss of:
   - i. aroma, flavour ?
   - ii. Colour ?
   - iii. physical shape ?
7. Can package prevent ingress of:
   - i. foreign odour ?
   - ii. oxidation ?
   - iii. other chemical reactions ?
8. Is the closure device efficient for protection of product.
9. Is the closure device suitable for the product and production as well as consumer?
10. Can package be opened easily and effectively re-closed, if necessary, for further use?
11. Are there suitable label spaces on surface?
12. Is consumer convenience given consideration?

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B. Visual Design

13. Is brand name unmistakable as to position and style?

14. Is name of manufacturer given due prominence?

15. Is the product name featured so as to afford immediate product identity?

16. Does the package carry all information required by law and in an acceptable manner?

17. Are instructions and uses legible and easy to understand?

18. Are design elements well organised?

19. Are colours:-

    i. in good taste ?

    ii. appropriate for product ?

    iii. appropriate for consumer ?

    iv. compare favourably with other competitors?

20. Are the illustrations:-

    i. in good taste ?

    ii. appropriate for product ?

    iii. appropriate for consumer ?

    iv. compare favourably with competitors ?

21. Do the illustrations serve to:

    i. instruct the consumer ?

    ii. interest the consumer ?

    iii. attract the consumer ?

22. Is the typography suitable and in good taste?

23. Is the print quality suitable and in good taste?

24. Does the appearance of the package reflect the outstanding qualities of the product?

25. Does the package make a pleasing impression:

    i. from a distance ?

    ii. from a close view?

    iii. on shelf?