Part 1

(A) Introduction

(B) Background

(C) Objective (Statement of thesis)

(D) Methodology
Part 1.

(A). Introduction

A1. Singapore as a young nation in South East Asia
A tiny island located in South East Asia, just above the equator, Singapore was part of the British colony for 140 years. Since 1965, the country was separated from Malaysia and became an independent republic - the nation of Singapore. With its total area of 6461 square kilometres and a population of about 3 million (Actual population is 2,930,200 as at June 1994. This was an increase of 2.0% over the population in 1993), Singaporeans live in an urban environment lacking in natural resources. For the last 25 years, the government and the people of Singapore have striven extremely hard together towards the development of a prosperous and booming country.

With the right policies and plans, but more importantly the hard working nature and "willing to learn" attitude, Singaporeans have proved that hard work and affluence deliver sweet returns. Today the achievement of successful economic growth has resulted in the high standard of living in Singapore. The most significant example is that more than 85% of Singaporeans can afford to live in their own housing property. It is considered quite a miracle for a young country, which lacks natural resources to develop the way Singapore has.\(^1\)

To ensure that the young populations in Singapore have equal opportunities to have a good start in their basic education, the government has provided compulsory education of at least 10 years for all young Singaporeans. Of which, a majority will enter junior college and advance to University. Besides the educational system, the young nation has posted almost 100% employment rate and boasts excellent medical facilities, efficient public transportation services, high tech communication and comfortable living. Over the past 25 years, Singapore has become a thriving modern economy, with the second highest standard of living in Asia.

To maintain the successful economic and continued growth and progress towards the future, the Singapore government has communicated a clear message to the people of Singapore, "We have to stay united. Work hard, work smart, save and look after each other."

People were and will always be our most precious resource. It is an important direction to lead Singapore, a small country without natural resources but hard working and educated citizens to progress beyond the 20th century into the 21st.

\[\text{Fig.P1.1. Shenton Way skyline view from the sea (1975).}\]

\[\text{Fig.P1.2. Shenton Way high rise building (1998).}\]

\[\text{In Brief, Singapore: The Next Lap, 1991, pp15.}\]

From the Traditional Wet Market to the Modern Supermarket (Food Packaging Value In Singapore)
(A 2). **Singapore, the multi-racial and multi-culture society**

Within the 3 million populations, there are about 77.5% Chinese, 14.2% of Malays, 7.1% of Indians and 1.2% comprising of other minority ethnic groups\(^3\). Together, these races form the multi-racial society of Singapore. A successful bilingual education policy launched by the Singapore government 25 years ago has enabled all the young Singaporeans to become effectively bilingual. English is the official language of communication amongst the races.

Despite the strong influence of Western culture in the lifestyle of the younger generation, the majority of Singaporean are still in touch with their respective traditions and customs in their daily life and social gatherings. It is most visibly noticed in the various New Year celebrations, wedding ceremonies, religious festivals and other cultural and religious events. It is during these cultural events that the individual ethnic groups demonstrate their colourful, remarkable, strong tradition and heritage. Although these various events are so uniquely contrasting, a harmonious fusion of their visual impact and ceremonial procedures seem to form a strong identity for the multi-racial nation of Singapore.

![Multi racial young Singaporeans](image)

*Fig. P.1.3. Multi racial young Singaporeans (pictures adopted from "The next Lap").*

\(^3\) *Singapore. The Next Lap. 1991. 'The government of Singapore'.

From the Traditional Wet Market to the Modern Supermarket (Food Packaging Value In Singapore)
(B). **Background**

Due to urban re-development and resettlement projects in the last 25 years, the traditional 'wet markets' are fast disappearing in Singapore. In the past, housewives used to buy their daily marketing needs like vegetables, poultry and other small groceries at the 'wet markets'. Modern supermarkets are replacing today many traditional “wet markets”. In these clean, air-conditioned, and comfortable surroundings, local traditional foods, example, dried salted seafood, salted/preserved food items, delicious local snacks etc. are not popular sale items. Their prominence in the past has been gradually taken over by the imported goods stacking the shelves of the modern ‘dry markets’ or supermarkets.

The research will explore the many varied reasons why local traditional foodstuffs are fast disappearing from the shopping list of Singaporeans: -

(1). The change from an Eastern to a more Western life style as the younger generation of Singaporeans is English educated. This has led to less emphasis on traditional values.

(2). The growth in the fast food business in line with successful economic growth, higher disposable income and fast paced lifestyle of Singaporeans.

(3). The change in eating habits due to different demographics, different family structure and education policy.

The changes in the living environment is further accentuated by the fact that there are more nuclear families of young working couples and their off-springs, physically removed from the older generation that prepares meals with the traditional food. Furthermore, as both husband and wife now have to work to support the family. The convenience offered by the supermarket and also shortening of time required to prepare a meal is what appeals to the younger generation.

Not withstanding the probable link between socio-economic changes and higher educational background that may have brought about the declining popularity of traditional food, one important reason which is the form of this research is the dull and unhygienic packaging.
(C). Objective

This research proposes to focus on the packaging of traditional food in Singapore, by tracing its historical past, describing its present status, and predicting its probable future development. These will be related to social, economic, and education changes that have taken place where appropriate as an explanatory factor. However, the perspective adopted for this study is that of practicing designer, design educator and food manufacturers. Singapore’s multi-cultural environment in which different ethnic groups may prefer, for cultural reasons, different shapes, colours, and materials for packaging will also be studied.

Singaporeans have recently been reminded by the government of the need to venture to the neighbouring regions for further economic development and looking at East Asia as a big market of food products for Singapore. According to a government source, the rapid increase in food import and export signals the potential of the food trade in the international market has enormous potential.

The food and beverage industry in Singapore is the seventh largest manufacturing sector in Singapore, with a production value of S$ 2.8 billion in 1993. Of this, 60 per cent or S$1.74 billion was exported to the overseas markets of Japan, United States of America (USA), Hong Kong, China, Australia and Europe. “The local industry is also looking towards other emerging markets such as Vietnam, India and Myanmar.”

‘Being an export-oriented industry, Singapore manufacturers have, for years, promoted their products in key markets and flagship exhibitions such as SIAL Fair in Paris, Anuga Fair in Cologne and Foodex in Tokyo.'

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4 Singapore Trade & Development Board. SBF Main Menu Industries. 1996.
5 Ibid.
6 Ibid.
7 The Straits Times, Singapore. Saturday, May 1996.
As far as the international food market is concerned, the above comments and figures from government sources has obvious implications for Singapore food entrepreneurs, food packaging industry, design professionals and design education within design institutions.

Analyzing our local food market from the design perspective it can be noted that the majority of foodstuffs sold in the traditional wet markets and provision shops are packed with unhygienic and dull packaging. This is probably one of the main reasons why a large percentage of traditional foodstuffs with dull images have been rejected by the modern supermarkets. This means that there is a pressing need to improve the dull images in order for local foodstuff to find its place in the modern supermarket and finally be exported to the international market.

My research will therefore describe how local traditional foods can make a transition from the wet market to the supermarket, through the improvement of packaging design.

In order to demonstrate the importance of improving local food packaging, I will incorporate some outstanding food packaging works of my NAFA students' (assigned as their final year major projects) within my research to demonstrate this.

Modern food packaging criteria developed within my research will also be able to guide young designers in creating appropriate and outstanding food packaging to respond to the rapidly growing food industries.

The research will also attempt to propose the future trend and characteristics of food packaging that consider today's environment.
The diagram is a conceptual model to guide this research study:

(D). Methodology

Packages of traditional food of the past two to three decades will be sampled to illustrate their design characteristics in terms of the variety of shapes, colours, wordings, materials, and other relevant features. Changes over the years will be highlighted. These will be supplemented by examples obtainable in the regions for contrast.

Relevant publications will be surveyed for documentation of social, economic, educational changes as collateral factors of changes in packaging designs with reference to changed lifestyle, value, and language familiarity.

Social, economic characteristics of the neighbouring regions will be used as the basis of predicting the probable trends and characteristics for food packaging designs in the future regionalisation of Singapore food industry for regional market.

Interviews with people from different ethnic groups will be undertaken to elicit their food preferences and their reasons and values. Businesses of the traditional food industry will also be interviewed for information of the past and future trends and their views on the effectiveness current & future packaging.

From the Traditional Wet Market to the Modern Supermarket
(Food Packaging Value In Singapore)
Fig. P.1.4.(1). Traditional tidbits in Chinese Community.
Fig. P.1.5.(2). Traditional snacks in Peranakan Community.
Fig. P.1.6.(3). Traditional snacks in Malay Community.

My research will be composed of the following:

(A) Thesis
(B) Video Tape
(C) CD-ROM

The CD-ROM will be the main media. Through movie-style pictures, explanation and contrast between the traditional wet market and modern supermarket, in terms of marketing environment, product display and customers etc. The transition of traditional food from wet market to supermarket through an improvement in packaging will also be covered.
Part 2

(E) Food in Singapore, the multi-racial and multi-culture society.

(F) Food in the traditional wet market.
Part 2.

(E). **Foods in Singapore, the multi-racial & multi-cultural society.**

During the 1940s to the 1970s, when air cargo was still not so convenient and popular, almost 90% of all the regions import and export were delivered by sea. These neighbouring countries include Indonesia, Malaysia, Sarawak, Thailand and Philippines. These countries would ship their goods in small Chinese “junk boats”, over to Singapore, where traders (mostly wholesale traders) received the imported goods. Raw materials were a key import. They include grain, spices, sugar, coffee/cocoa seeds, tins, tea leave, latex and timber, and were temporarily stored in warehouses waiting to be re-exported. Once the orders came, they were then shipped on large cargo ships to developed countries in Europe and the United States.

*Fig. P.2. (1) Port of Singapore Authority (PSA).*

*Fig. P.2. (2) PSA container Port.*

*From the Traditional Wet Market to the Modern Supermarket (Food Packaging Value in Singapore)*
Today, The Port of Singapore Authority (PSA) plays a very important role in food import and export trading for the national economic growth. It has achieved the distinction of being the best port operator in Asia with its impressive record of successful planning, development and effective port management. Currently, "PSA had been voted 'The Best Container Terminal Operator in Asia' at the 11th Asian Freight Industry Award".1

During 1965, the young nation of Singapore government infrastructure building of its industrialized foundation. In the food industrial sector, there were only a few small-scale factories, being run by local businessmen. They were all managed by family members and specialized in one type of food product for many years. (One such company is the Yeo Hiap Seng company. This company was a small business then, manufacturing Soya Sauces. Today, it is one of the leading food manufacturers in Singapore's food industry. Another successful and popular processed food factory is the Kong Guan Biscuit factory. It was very well known in Singapore and Malaysia, since the 1950s.) But the main food sources were still imported, mostly from Mainland China. These were usually processed food like salted vegetables, salted eggs, century eggs, wax ducks & pork, Chinese sausages and all sorts of canned food. Processed spices were mainly from India, Indonesia and Malaysia. The nation could be said to have basically survived on imports. The local food industry was underdeveloped with the majority of the nation's food source imported from the neighboring countries.

In the 1950s, there was only one supermarket in Singapore, known as Cold Storage, and owned by the British. Their business was mainly supplying food to the British colonial government officers and the British armed forces that were stationed in Singapore. Food items were neatly displayed on clean shelves. Frozen foods such as butter, cheese and poultry were displayed in large refrigerators. These food items were mainly imported directly from England, Australia and New Zealand.

1 Reference adopted from 'The Port of Singapore PSA Corporation, 1997 Highlight..
At that time, there were very few locals who patronized the supermarket. Those locals were mainly in the high-income group and were also English educated professionals. The rest of the local population were not able to afford the expensive food items sold there. But the other reason was also because the locals eating and cooking habits were still very traditional. The Chinese, Malays and Indians all had their own traditional and culture on food. Almost 90% of the food bought by these communities were in raw and unprocessed form.

Fig.P.2.3. (1). Typical traditional wet market in Singapore
Fig.P.2.4. (2). Provision shop attaches within traditional wet market.
(picture adopted from “Singapore Food“ by Wendy Hutton).
Fig.P.2.5. (3). Roadside hawker outside the traditional wet market (1974)
Housewives would buy their daily ration from the numerous wet markets to cook a meal for the whole family. Refrigerators during that time were a luxury; locals were not able to afford one. Therefore, housewives had to make a few trips to the wet market each day, especially during festival celebrations where they had to cook and prepare for the family gathering dinner, because items like raw fish and meat cannot be kept uncooked for long, due to Singapore’s warm climate. During the 1950s to the 1980s, there were more than 109 wet markets in Singapore1 (This figure does not include roadside hawkers selling cooked food).

Processed food items were limited in the traditional wet markets. In the Chinese community, the most common processed food sold was bean curd. The Chinese ate it thousand of years ago. And today, this healthy food is still sold in wet markets in Singapore in the same form, without any sort of packaging. Only recently can bean curd be found in the supermarkets. These however are neatly packed in colourful and impressive airtight plastic tubes and boxes, displayed in the cold section.

As a multi-racial, multi-cultural and multi-religion nation, Singaporeans from the various ethnic groups celebrate a myriad of colourful and remarkable festivals. Under the multi racial harmony policy of the Singapore government, individual ethnic groups have been encouraged to develop their original culture and heritage whilst enhancing the unity and harmony of life in Singapore. Some important public holidays in the republic nation of Singapore include the following

1. New Years Day (1 January 1998)
3. Hari Raya Puasa (Malay New Year) (30 January 1998)
4. Good Friday (10 April 1998)
5. Hari Raya Haji (4 April 1998)

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2 Information provided from the Public Rrelation Department, Ministry of Environment, Singapore.1996
7. Vesak Day (celebrated by Buddhists) (10 May 1998)
9. Deepavali (Indian New Year) (19 October 1998)

In Singapore, the best time to witness the peace and harmony shared between the different ethnic groups would be during the traditional festivals celebrated. Regardless of whether it is the Chinese New Year, Malay Hari Raya or Indian Deepavali or Christmas, the respective ethnic groups will invite their friends from other races to join in their celebration and enjoy their food and drinks.

To welcome the traditional festival, goodwill and wishes will be sent through festival greeting cards, flowers and gifts of snacks and food. During this period, the celebrants of this festival will be engaged in the festival mood of shopping for festive goodies. Temporary road side hawker stalls will be erected at specific popular locations, stocked full with festival items which include everything from wall paper, curtains, drapes, table cloths, artificial flowers and plants, mostly used to decorate the home. Kitchenware including pots, pans and porcelain dinner sets will also be on sale. Clothes, shoes, garments, bags and accessories to look good for the occasion will also be on display.

Usually, almost two weeks before the festival, the market area would already be patronized by the relevant ethnic groups' buyers, in anticipation of a joyous and memorable celebration for family and friends. Homemakers are usually the busiest people at this time of the year. They are often the ones who would make all the preparation, from cleaning and decorating the home to shopping for the necessary festival items. Foods, during the festivals, are one of the most important elements in the celebration. A traditional belief in Oriental society states that food brings people together and serves as the most important link to one's family and friends.

In Singapore, festival foods have always been closely related with the multi ethnic heritage and traditional custom. The old myths and customs have in one way or another directly or
indirectly influenced food preparation and presentation during the various festivals and have even developed through the years to be served as a daily dish at home.

In Chinese community, the dish called ‘Kong Poh Hei’ which combines sea snails, broccoli and carrot fried in oyster sauce; to make the dinner looks prosperous. Another is the ‘Ho Pau Moon Yao Moom’. Which is the steamed chicken wrapped in lotus leaves. It symbolize full wallets3 This delicious dish often seen on daily dining table in a Cantonese’s home.

The festival foods of the multi-racial citizens in Singapore are extremely colourful and delicious. Whether it’s the shape, colour or the natural materials used in the packaging or presentation, strong individualistic cultural identities can be recognized through these ethnic dishes. Many have significant meanings related to myth, traditions and religion.

A good example would be the traditional Chinese Lunar New Year. The Chinese Lunar New Year may be considered, as one of Singapore’s most colourful, sensational and joyous festival in the Chinese community. The Chinese Singaporeans celebrate this important occasion full of traditional custom and pageantry. The strong culture have permeated to the festival events; from a tiny traditional red paper scroll being pasted on the main door of the many Chinese homes to bring good luck to the family members to a whole campaign of items for the season. The festivities have also extended to decorations along the streets and promotions offered by the department stores.

“Red” is the main colour symbolizing good cheer and prosperity through the festive season. It also represents good fortune and good luck, prosperity and happiness in traditional Chinese custom. There is also the colourful new year street parade celebrated with lots of music, noise and activity including the lion and dragon dance, inducing high spirits all around.

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Fig. P.2.6. (1). Popular Raw fish “Yusheng” in Chinese New Year
(picture adopted from Lianhe Zaobao)
Fig. P.2.7. (2). Malay New Year dish.
Fig. P.2.8. (3). Indian New Year dish.

Despite all the fanfare and pageantry, food still features as the main element which none of the ethnic groups can do without during the festival celebration. The following is an interesting article describing the food market during the Chinese Lunar New Year from a reference book: “During festival time, the marketplace is bursting with colour plum blossoms, red azaleas, oranges and with bright red paper couplets expressing good fortune, window decorations, lunar calendars and almanacs. Whole roast pigs are on display in restaurant windows, and candied kumquats, lotus nuts and melon seeds are available in grocery stores for the light-sided tray of togetherness...”

4 ‘Mooncakes and Hungry Ghosts festival of China’, by Carol Stepanchuk and Charles Wong.
To further describe the heritage custom and symbolism in festival foods of the various multi racial society of Singapore, the following references are some examples: -

**E1. Festival foods in the Chinese community**

The Chinese Reunion dinner comprises of meaningful dishes to celebrate the Chinese Lunar New Year, similar to the Christmas Dinner of Western countries. The reunion dinner is considered as one the most meaningful and important meal of the whole year for Chinese families. “The name used to refer to the Chinese reunion dinner means “surrounding the pot”. This also refers to the practice of having a “steamboat” meal during the reunion, which used to be ideal for warming the family as well as eating and cooking together...”

2. The significance is to send off the last day of the old year and to welcome the New Year. Family members will gather around the dining table to enjoy a delicious meal with joy and wishes of a happy and prosperous New Year to all family members.

*Fig.P.2.9. ‘Seafood Steamboat’ served at the reunion dinner table.*

*(Picture adopted from ‘Singapore food’ by Wendy Hutton)*
One of the main dishes at the reunion dinner table on New Year’s eve is the “steamboat”. The bronze or stainless steel ‘Steamboat’ is placed in the middle of the dining table which consists mainly of fresh seafood items like raw fish slice, abalone, raw sliced cuttlefish, prawns, fish balls, meat balls, sliced meat of pork or beef and a variety of fresh vegetables. Filled to the brim with boiling soup, heated by charcoal, electricity or gas. The family members surrounding the table will select their choice of food and dip it into the boiling pot to cook. Thus, this is how the Chinese name of “Surrounding the Pot” came about. It symbolizes the warm reunion of the family members. The other popular lunar new year dishes that would seldom be tasted except during this time is the “Hot Clay Pot” dish cooked with quality dried seafood products like Abalone, shark’s fin, scallop, fish maw and sea cucumber etc. It is brewed for long hours with traditional Chinese herb and contained in a giant clay pot. This luxury dish in Singapore is called “monk jump over the wall”. It could cost up to S$800 to S$1200 for a serving of 10 persons, in a restaurant. There are some other dishes popularly cooked for the lunar New Year festival as well. They all have a symbolic meaning during this festive season, mainly wishing for an abundant and happy New Year. For example, eating fish symbolizes bringing a lifetime of wealth and prosperity. Fresh leek fried with slice fish is representative of having more money to save. Dried oyster cooked with dried “hairy seaweed” and lettuce symbolizes good business and profit for the family members who run a business.

E2. Festival foods in the Malay community
The Malay ethnic Community in Singapore celebrates their Hari Raya Puasa (Malay New Year) which falls on the tenth month of the Islamic calendar. It is another important festival with an official public holiday in Singapore. The Malay ethnic group celebrates the Hari Raya Puasa with joyous greetings. During this festive occasion, visiting relatives and friends strengthens the Malay ties. As Muslims, they would start the festival by offering prayers for thankfulness and forgiveness at the mosque.
Homemakers are once again the busiest people during this festival. One to two weeks before the occasion arrives, the homemakers with other female members of the household would already have made a lot of preparation such as decorating the home with colourful new curtains, table cloths, cushions, replace some kitchen wares and other household items. The male members are given the responsibility of cleaning the surrounding living environment, re-painting walls, and windows and decorating the house with colourful light bulbs.

Fig P.2.10. Malay wedding ceremony. (Picture provided by Singapor National Museum).
Fig P.2.11. Popular Malay Festival Food 'Ketupat'.

In a particular district in Singapore, temporary hawker stalls are set up in anticipation of the big crowd of New Year shoppers. On sale are mainly foodstuffs and household items. Homemakers will be busy at the stalls selecting whatever foodstuff items needed for the dishes to be served. They will be busy preparing delicious traditional foods to welcome the occasion.

Food is still no doubt again the most important element in this Malay celebration. There are some festival foods, which are also symbolic in the Malay culture during this Hari Raya Puasa festival.
One popular food symbolized in Malay festival is ‘Ketupat’ (Glutinous rice packed in coconut leaf in a nice square shape). ‘Ketupat’ is one of the most popular traditional foods amongst the Malay community in Singapore as well as the surrounding Asian region. ‘Ketupat’ usually served with Satay (barbecued meat sticks) and a thick peanut gravy sauce. The beautiful coconut leaf packaging of the ‘Ketupat’ expresses the traditional food packaging skills and represents the traditional Malay culture in its shape and colour. In today’s modern society, the ‘Ketupat’ is symbolic of the Malay Hari Raya Puasa. From Malay New Year decoration items to greeting cards, the ‘Ketupat’ is used as a symbol of prosperity because being traditionally rice planters, the ‘Ketupat’ represents the paddy field being harvested.

“Other delicious snacks prepared to celebrate Hari Raya Puasa include ‘Kueh Lapis’ (glutinous rice cake covered with coconut and sugar), ‘Kueh Dodol’ (a coconut based sweet). Popular dish like ‘Sambal Goreng’ (Prawns, Beef, Soya Bean Curd, Long Beans and Spices cooked in Coconut Milk), ‘Sayor Lodeh’ (vegetable stewed in coconut gravy), ‘Sambal Udang’ (prawns cooked in spicy paste) ‘Satay Curry Rendang’ (Fried meat curry served with ketupat)”5 etc.

“The Malay style of cooking is similar to some Indonesia dishes. Almost no Malay meal would be complete without ‘Sambal Belachan’. This Chili-Hot condiment is made with fresh chilies, dried shrimp paste and lime juice. New packaging of this popular condiment had recently been seen in supermarkets, packed within modern vacuum package”.6

Despite other delicious Malay traditional foodstuffs, ‘Satay’ is still the most popular food within the Malay community for any celebratory occasions. The barbecued meat sticks

5 Indian and Malay etiquette - A matter of course (By Raelene Tan )
6 Ibid
comes in beef, lamb and chicken. ‘Satay’ usually eaten hot after grilled from the charcoal together with thick peanut gravy with cucumber and onion slices. In our neighboring country Malaysia, ‘Satay’ had been officially announced as ‘National Food’ by the government. It had been served in many formal and informal government’s entertainment functions.

‘Satay’ such a ‘National Food’ food is not only popular in Malay community but as well as other ethnic groups in Singapore, Malaysia and Indonesia. I have yet to find ‘Satay’ in supermarkets. Until recently, I set a modern packaging project for my 3rd year graphic design students; to design a modern packaging for this popular food to be sold at supermarkets. The students had worked out a remarkable package to contain ‘Satay’ and ‘Gravy’ together. Furthermore, the surface of the package bears impressive Malay culture graphic patterns. (Refer to NAFA student food packaging pictures at page --- ).

During the Malay wedding festival, guests are often presented with pretty decorated fragrant hard-boiled chicken eggs upon leaving. These eggs symbolized health, wealth and fertility.

In addition to the above mentioned delicious Malay festival foods, there is a large variety of traditional snacks sold in the markets and road side hawker stalls in Singapore, Malaysia and Indonesia. Many of these appetizing and colourful snacks are traditionally packed with natural materials like Banana leaf, Coconut leaf, Pandan leaf and Fig leaf. In the Malay ethnic group and other racial communities, these traditional snacks are convenient daily meals for them, especially for the working force. (Refer to CD-ROM movie under Malay food section).
E3. Festival foods in the Indian community

The population of the Indians in Singapore is about 7.1% of the total 3 million population, making them the third largest racial group in Singapore. The Hindus, from the south, comprises the major dialect group in the Indian community. They celebrate two important festivals each year, namely “Deepavali” and “Thaipusam”.

‘Deepavali’, which means festival of lights is a religious occasion for the Hindu community. According to the Hindus, this is the day when good triumphs over evil and light over darkness.

For example, during the ‘Deepavali’ Festival of the Indian Community, homemade square and rounded colourful sweets are customarily presented as gifts to relatives and friends to signify the giving of sweetness to each other. It was until recently that these festival sweets gift items had been selling in the Indian store during the festival occasion and without an appropriate packaging.

The traditional festival foods eaten during this period are mainly vegetarian dishes. “A typical vegetarian meal will include a variety of vegetables (prepared in different styles), rice or bread, soup and dessert. ‘Payasam’ (a milk based sweet porridge made with rice vermicelli and nuts, sugar and fruits) is a festival dessert that will be seen on many tables”.7 Besides their own Hindu relatives, other racial ethnic groups of friends and colleagues will be invited to celebrate this important festival together with the Hindu family. “At home, variety of sweets and savories will be served to relatives and friends who visit. “Muruku”, a pretzel-like crispy and crunchy is a favourite festival snack, including “Ladoo” (made with chick pea flour, sugar, cashew nuts and raisins) and “Rasagolla” (cottage cheese fried in ghee and mixed with sugar syrup.

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7 Indian and Malay etiquette - A matter of course (By Raelene Tan )
Fig.P.2.12.(1) The significant Indian temple in Singapore.

Fig.P.2.13.(2) Indian wedding ceremony in temple.

(Picture provided by Singapore National Museum).

Fig.P.2.14.(3) Indian festival meat pastries.
E4. Festival foods in the Peranakan community

The Peranakan cuisine is an important aspect of the local food market. Appetizing Peranakan foodstuff are generally spicy in nature with sweet desserts that are favorites of the various ethnic groups. This tantalizing cuisine is a mixture of Chinese and Malay cooking techniques and flavours with a strong usage of raw spices. Peranakan cuisine is basically Chinese food influenced by the Malay style of cooking as can be sampled in the Curry Beef Rendang, Chili Prawn, Sambal Fish Head and other Spicy Dishes. On the other hand, the dishes prepared during festive occasions are more Chinese in flavour. These include pickled cabbage duck soup, soyabean sauce pig leg with chestnut, stewed whole duck, white peppered pig stomach hot soup. Peranakan’s also celebrate the Chinese Lunar New Year. Besides spicy cuisine, Peranakan snacks are another mixture of various cultures, with bright colours, interesting shapes and patterns. Peranakan snacks are enjoyed by the various ethnic groups and can be found in the local food market. Like the Chinese, Peranakan families also savor traditional snacks of pastry and sweet rice to usher in the festive or religious celebration.

Even today, Peranakan cuisine continues to be very popular. The special style and methods of cooking has built popularity for Peranankan snacks. These snacks are found as mentioned earlier in the wet market and are often openly displayed without hygienic packaging, pricing or labeling. These snacks are often packaged with natural materials like Banana, Coconut and Pandan leaves. A customer’s selection will be packed into a small cardboard box or in a plastic bag.

Among the varieties of delicious Nonya Snacks, the traditional ‘Red- Turtle Pastry’ is one of the most popular snack within the Peranakan community. This turtle shape pastry with sweet soybean paste filling; the contrast of striking red colour always express the cheerful impact. (Refer to fig.P2.55.(2).)
In the Peranakan and some traditional Chinese community, this sweet Nonya ‘Red Turtle Pastry’ often appear at many celebratory occasions like wedding, newborn baby, birthday and religion worship etc. After the ceremony, sweet ‘Red Turtle Pastry’ will be given as gifts to relatives and close friends. In Chinese Community, these ‘Red Turtle ‘ sweet pastry symbolizes ‘Good Luck’ and ‘Longevity’.

To any graphic designer who is practicing in a multiracial and multicultural society like Singapore, a full understanding of the symbolic colour scheme, the particular shape and its relation to myths and the individual ethnic group is necessary. Because the research will help to develop more appropriate design concept to serve the proper object.

The Eurasians are another minority group in Singapore who has been strongly influenced by local culture and through the years have developed a preference for local cuisine. You might just find Fried Chicken and noodles at the Christmas dinner table instead of roast turkey and ham.

The above description of festival foods of the various ethnic groups are only some of the major examples in the multi-racial and cultural society in Singapore. There are still a lot of interesting festival foods which include the “moon cake” of the mid-Autumn festival, “Rice Dumpling”, of the Dragon boat festival” and some special food cooked for the wedding ceremony among the multi-racial ethnic group communities. Festival snacks are also plentiful and will be describe in another category. The many varieties of ethnic group snacks being sold in our food markets have remarkable shape, colour and original way of packaging. These will be covered in a late section “Traditional materials used in food packaging” of the thesis. (Please refer to my contents).
g.P.2.15. (1). 'Waxed Duck' and 'Sausages' - popular Chinese festival delicacies.
g.P.2.16. (2). Colorful Indian festival snacks.
g.P.2.17. (3). Traditional cakes and cookies served during Malay festivals.
g.P.2.18. (4). Different varieties of Chinese sweet tidbits sold at the roadside stalls during the festivals.
g.P.2.19. (5). Traditional Chinese New Year Pudding sold at road stall.

From a packaging point to review the above description of the multi-racial festival foods in Singapore; despite the individual ethnic group's heritage and strong potential in festival food market. There are a lot of traditional local festival foodstuffs being sold without packaging in town, her in the traditional grocery shops or in the food markets.
These situations are very obvious to be seen during the festival eve, from those temporary set up roadside festival goods stalls. *(Refer to my CD-ROM movie under ‘Food in Singapore’ category).* In the multi racial community in Singapore, festival foods have always been treated as social gifts. To express the respect to someone you wish or to maintain the relationship with relatives and friends. Previously, very often a customer bought the particular festival foodstuff from the market and had to re-pack it to look more presentable as a gift package.

Only recently, some of these festival foodstuffs were sold in the supermarkets with new image of modern packaging like Chinese New Year foodstuffs, ‘New Year Sweet Pastry’ (Pudding). The size had been reduced and packed with in a red package with festival patterns and greetings words, Dried Mushroom, Dried Oyster, Dried Seaweed and Dried Water Lily Bud. Four items packed in one festival package in gold colour. These are a ‘Must’ New Year dish for many southern Chinese family. ‘Chinese sausage’, the popular new year gift food item during the festival had packed within a tin container with remarkable new year decoration patterns on surface. Other traditional festival foodstuffs more or less already have the improved images sold in the supermarkets.

In Malay and Indian communities, festival foodstuffs are still hard to be seen in the modern supermarket. The reasons could be due to the market is rather small but even that some of traditional Malay new year cookies like ‘Egg roll cracker seems to packed within a transparent package with festival graphic patterns to catch attention of new year shoppers.

There are still a lot of festival foodstuffs in the local food market needs to change their dull image. Definitely, these festival foodstuffs have large and potential market to develop not only locally but in oversea as well. In Singapore, our packaging designers have important role to play.
(F1) **Salted sundries stalls in the traditional wet market.**

There are some rather old-fashioned yet very popular types of food stalls selling processed and preserved foods located in many of the traditional wet markets in Singapore and Malaysia. These stalls foodstuff are often more in demand by the older generation of homemakers. Although, the foodstuffs of these food stalls cater mainly to the Chinese community, many customers from the other racial groups also purchase similar foodstuff. To support my research to further describe how these similar traditional processed and preserved foods spread to other neighbouring country. I visited some traditional wet market in west Malaysia and found these salted sundries stalls are even more popular to the local residents. Their regular customers were mainly Chinese, like Singapore. In March 1997, I visited another Southeast Asian country, Thailand, where these traditional food items were also found. My video footage shows one of the roadside stalls located outside a very old traditional wet market, not far away from the city of Bangkok. Besides selling the similar general sundries food items, the salted preserved foods were mainly sea-foods like different kind of sea-sells, small crab, jelly fish etc. *(Refer to my CD-ROM movie ‘Salted Sundries Stalls in the Traditional Wet market’ under category Food in Singapore).*

In Singapore, the local term for the processed and preserved food stall is the "Salted sundries stall". Almost all the salted sundries stalls (in Singapore and other Southeast Asian countries) have a typical style of displaying their goods, which is usually haphazard and thus, untidy. The owner of the stalls will either expose their foodstuffs in the open or display them on old and disorganised shelves. A lot of the processed dried foods are packed in transparent plastic bags, big and small, dangled from the ceiling, making the shop cramped and dark. *(Refer to my CD-ROM movie).* But nevertheless, at these traditional salted sundries, the assortments of daily foodstuff items are amazing. From a tiny preserved black olive to a huge dried salted fish head, you name it and it will probably be available. In some of these stalls, you can even find cans of western cocktail sausages or vacuum packed English bacon. Actually these traditional salted sundries stalls provide almost any type of foodstuff required for preparing meals.
In Singapore and Malaysia, the Teochew dialect group of the Chinese community mostly runs these traditional salted sundry stalls. I have named these salted sundry stalls, "traditional mini supermarket". These traditional mini supermarkets cater mainly to the older generation of homemakers who are regulars.

Fig.P.2.20. (1) A typical Salted Sundries Stall found in the local traditional wet market.
Fig.P.2.21. (2) Dried and preserved foods dangling from the shops ceiling.
Fig.P.2.22. (3) Traditional preserved foods contained in glass jars.
Fig.P.2.23. (4) Traditional Salted Sundries Stalls found in Bangkok, Thailand.
As the processed and preserved food items that are sold in these traditional sundries stalls are so varied, from the packaging point of view, I have divided them into several categories for easy referencing.

**Category A:** Salted and preserved vegetables and fruits; these include all kinds of vegetables, roots, seeds, mango, plums, olives, young cucumbers, carrots and mixed chillies, papayas, ginger etc. (Sold without packaging. Normally exposed within a big plastic container or display within ceramic jar).

**Category B:** Preserved and salted dried food items like salted fish of various sizes, prawns and shrimp, cuttlefish, oysters, jellyfish and fish lungs etc. (Sold without proper packaging. Normally kept within big or small transparent PVC plastic bag and dangled from the ceiling).

**Category C:** Squid and dried processed vegetarian items like sweet or salted bean curd, rice sticks, noodle sticks, bean sticks, dried mushroom, black and white fungus, sweet potato slice, bamboo-shoot, dried prune etc. (Sold within PVC transparent plastic bag. But the packages are without any product name and manufacturer).

The above categories of A, B & C items generally appear in their raw form and are sold at the sundry stalls without any form of packaging. When customers buy any of these items, they are wrapped in a piece of newsprint paper or packed in plastic carrier bag for take away.

Besides the abovementioned items, traditional sundry stalls (traditional mini -supermarket) also sell a number of other types of traditional processed and preserved sauces packaged in bottles, cans or jars. These include soybean sauces, fish sauces, mandarin orange sweet sauces, sea cucumber sauces, chilli sauces etc. These traditional sauces are contained in interestingly shaped antique jars with labels printed in Chinese words. These are mainly imported from Mainland China and Hong Kong. From the graphic design point of view, these imported traditional food products; most of the label designs are decorative than informative.
The colour and lettering used on these imported food products are old-fashioned. There are also some sauces and canned foods imported from the West, for example sausages, tomato sauce, red bean barbecue sauces, corn beef etc. Other modern processed foods with modern day packaging (informative and with proper picture and colour scheme related to the product) are also easily available in these sundry stalls. These include peanut butter, canned margarine, coffee powder, etc. This is why these sundry stalls are infecting the mini traditional supermarket for most local homemakers. The peak business hour usually occurs in the morning when homemakers do there marketing.

Fig.P.2.24. (1) Imported Japanese salted sundries foods with modern packaging sold in the Modern supermarket.

Fig.P.2.25. (2) Traditional preserved foods contained in jars and bottles sold in the local traditional wet market.

In 1987, I visited the city of Tanagawa in Japan to attend a seminar on ‘Asia Pacific Arts and Design Education Conference’. After the seminar, I travelled to Tokyo where I came across various traditionally processed salted and preserved food shops. To my surprise, I found that many of the items being sold there were similar to those sold in the sundry stalls in Singapore. The only difference was that the Japanese traditional and processed salted and preserved items were neatly packaged and displayed systematically on the shelves.
From this area of food packaging alone, I could notice that the Japanese cultural had been developed in a series of modern graphics and had been applied to serve these traditional foodstuffs. By shape, colour and typographical layout etc. The modern design concept makes them work together and looks harmonious. Attractive packaging reflects the strong Japanese cultural image. I also realised that the Japanese food traders were so concern about the value of food packaging. These Japanese traditional preserved and salted food items are also easily available in Singapore’s Japanese-owned supermarkets, like Yaohan, Daimaru, Sogo and Seiyu.

The above mentioned Art and Design seminar trip to Japan provided a comparison point of view allowing me to analyse the traditional food packaging in Singapore. From the Japanese packaging design, traditional foodstuffs to modern cosmetic products. It reminds me of an important message; this is the concept of “use western ‘design concept’ to develop eastern ‘traditional culture’ and to make ‘commercial value’”. I had this concept since I was studying graphic design in UK during 1966-1969. The discovery of Japanese’s modern packaging used to served the traditional salted and sundry foodstuffs has encouraged me to continue with my previous concept and design career. To do so and the first step, I started this research on analysis of the traditional foodstuffs selling situation and development in Singapore. Focusing on the value of food packaging.

Salted sundry stall items like preserved and salted vegetables; fruits, seeds and roots have a long history in Chinese community (inclusive of the Japanese, Korean and Vietnamese). I have had the opportunity to meet friends who have tasted the above traditional preserved and salted items and almost 100% have answered that traditional Chinese foods tasted the best. There could have been a number of possibilities that it was because some of my local friends who travelled abroad could not get accustomed to the other ethnic foods. Even my Japanese friends who have lived in Singapore prefer the local food. Therefore, I raised the question of although the taste was better and prices were cheaper, many still do not like to patronise the local sundry stores today. The general answer was that they did not trust the unhygienic appearance of the food sold at the sundry stores and wet markets.
Therefore, in conclusion to the above observations, it is quite obvious that the traditional preserved and salted foods sold at the sundry stalls and wet markets have strong appeal with a high potential of being exported overseas despite being unpopular because of unhygienic packaging. Based on the Japanese success of packaging, I strongly feel that besides appealing to the Chinese overseas, these traditional foods if packaged enticingly will also appeal to non-Chinese customers. However, before that can be materialised, a series of modern food processing systems and modern concept of food packaging design should be launched to ensure that these traditional food items are entitled a place in the modern supermarket all over the world.

To gather more evidence of the existing selling situation of the salted sundry stalls and to find a more detailed information for the future development of the traditional business in Singapore's food market. I had visited two of the most typical salted sundry stalls located at the East Coast traditional wet markets. (Refer to Appendix L1. 'Interview with owner of Salted Sundries Stall in the traditional wet market').

(F2). Dried/salted seafood products in the Chinese community

There is another popular type of traditional foodstuff business within the Chinese community in Singapore, Malaysia and other Southeast Asian country, which deals in processed dried salted seafood products. The dried salted seafood business originated in the southern province of mainland China for example Canton and Fujian (These two provinces have rich resources in seafood). Several hundred years ago, after the Second World War, due to political crisis and the economic policy reforms, traditional dried salted seafood products spread widely from Southern China to Hong Kong, Taiwan, Singapore and other Southeast Asian countries.

From 1950 onwards, successful economic achievement in some of developing countries in Southeast Asia countries resulted in the raising of living standards of local citizens which in turn affected the eating habits and tastes of urban citizens. People were more interested in seeking
quality foods which were often more expensive. Whether there was entertainment for business or celebration of a special event, most people would visit restaurants for a hearty meal. As a result, the restaurant business flourished and many new restaurants were established to cater to the high demand. This scenario was significant in countries like Hong Kong, Taiwan, Singapore and Thailand. Traditional dried salted seafood products became very popular and were in great demand. Homemakers too, used traditional dried salted seafood in their dishes. The Trade and Development Board source reference shows that traditional dried salted seafood products was one of the most profitable business in the international food trading market. Below are updated tables showing the import and export trading volume of some dried salted seafood items: - The reference source provided by 1996 Singapore Trade Development Board (TDB).

Table A: Monthly Report for Exports
Product: Other Fish Dried or Salted (Tone) (SITC 0351900)
Selected Countries.

<table>
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<tr>
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<td>517</td>
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<td>6</td>
<td>Korea, Rep</td>
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<td>8</td>
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<td>31</td>
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<td>10</td>
<td>Thailand</td>
<td>3</td>
<td>71</td>
<td>3</td>
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</table>

Source: Singapore Trade Development Board
Table B: Monthly Report for Exports

Product: Cuttlefish & Squid Dried Salted Or in Brine (Tone) (SITC 0363120)
Selected Countries

Value in S$ Thousand

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<td>5 Hong Kong</td>
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<td>37</td>
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<td>49</td>
<td>513</td>
<td>58</td>
<td>747</td>
<td>141</td>
<td>1,514</td>
</tr>
</tbody>
</table>

Source: Singapore Trade Development Board

Note: Value “blank” indicated no trading.

Qty. (By tone), “blank” indicates no or insignificant amount.

In Singapore, one can find a wide variety of dried salted seafood products in daily meals among the Chinese. Some are even considered as luxury cuisine served only in expensive Chinese restaurants. The more common dried salted seafood products sold at whole sellers and shops in wet markets all over Singapore includes dried shrimp, prawns, salted fish, anchovies, squid & cuttlefish, jellyfish and seaweed. Those expensive and luxury items are sea cucumber, abalone, sharksfin, fish maw, scallops and oysters.

Traditionally, these items are believed to be health tonics, when brewed with herbs. These seafood delicacies can be found in dishes served to Chinese emperors, thousands of years ago, which are served at today’s average family’s dinner table. Among the Chinese, centuries ago, expensive
seafood items are considered luxury dishes, and till today, can still be found only at special festive occasions like the Chinese new year eve dinner, traditional birthdays and wedding dinners. Among all, one of the most popular and expensive delicacies served in Chinese restaurants, is the 'Monk jumped over the wall' dish. (Refer to page 10, Hot clay pot dish of the Chinese Lunar New Year dinner).

Fig.P.2.26. (1). A typical dried salted seafood stall located in the traditional wet market.
Fig.P.2.27. (2). Popular dried seafood 'exposed' in front of the shop.
Fig.P.2.28. (3). Raw dried shrimps without any packaging.
Fig.P.2.29. (4). 'Shark's fin' - An exclusive dried seafood product.
Fig.P.2.30. (5). Raw 'Sea Cucumber'.
Fig.P.2.31. (6). Exclusive 'Dried Abalone'.
To show how expensive and popular some of this seafood items are. I have listed out some delicious and exquisite dishes from a menu. Following menu was supply by one of the popular seafood restaurant within one of the 5 star hotel in Singapore. *(The name and management of the restaurant withheld).*

**MENU**

<table>
<thead>
<tr>
<th>No.</th>
<th>ITEM</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>(A) Dried Shark’s Fin</em></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Double boiled whole chicken stuffed with shark’s fin</td>
<td>$38/person</td>
</tr>
<tr>
<td>2.</td>
<td>Superior shark’s fin in supreme stock or braised in brown sauce</td>
<td>$68/person</td>
</tr>
<tr>
<td>3.</td>
<td>Braised superior shark’s fin in chicken stock</td>
<td>$65/person</td>
</tr>
<tr>
<td>4.</td>
<td>Braised shark’s fin topped with lobster served with superior soup</td>
<td>$38/person</td>
</tr>
<tr>
<td>5.</td>
<td>Braised shark’s fin with crabmeat and crab roe in “Tai Chi” style</td>
<td>$38/person</td>
</tr>
<tr>
<td>6.</td>
<td>Braised shark’s fin with crabmeat in clay pot</td>
<td>$38/person</td>
</tr>
<tr>
<td>7.</td>
<td>Double boiled shark’s fin with Chinese cabbage</td>
<td>$35/person</td>
</tr>
<tr>
<td>8.</td>
<td>Braised shark’s fin soup with scallops and bamboo piths</td>
<td>$30/person</td>
</tr>
<tr>
<td>9.</td>
<td>Bamboo piths stuffed with shark’s fin topped with pearl clams</td>
<td>$30/person</td>
</tr>
<tr>
<td>10.</td>
<td>Fried scrambled eggs with shark’s fin accompanied by lettuce</td>
<td>small $32, medium $48, large $64</td>
</tr>
<tr>
<td>11.</td>
<td>Braised bird’s nest with shark’s fin and crab roe</td>
<td>small $70, medium $105, large $140</td>
</tr>
<tr>
<td>12.</td>
<td>Monk jumps over the wall (Chinese herbs braised together with shark’s fin, scallop, abalone and sea cucumber etc)</td>
<td>$50 to $100/person (special order)</td>
</tr>
</tbody>
</table>
### (B) DRIED ABALONE

1. **Braised whole superior dried abalone in supreme sauce (advance order)**
   - Seasonal price

2. **Braised whole fresh abalone in oyster sauce**
   - Seasonal price

3. **Sautéed dried abalone with lily bulbs**
   - Large: $58/person

4. **Braised sliced abalone with black mushrooms and Yunnan ham “Kirin style”**
   - Small: $56, Medium: $84, Large: $112

5. **Stuffed sliced abalone with prawn paste**
   - Small: $48, Medium: $72, Large: $96

6. **Marinated diced abalone in plum sauce**
   - Small: $68, Medium: $102, Large: $136

7. **Sautéed chilli abalone shawl meat**
   - Large: $28, Medium: $42, Large: $56

8. **Braised abalone with chicken and salted fish in clay pot**
   - Small: $38, Medium: $52, Large: $76

### (C) DRIED SCALLOPS

1. **Fried rice with crabmeat and dried scallops**
   - Small: $20, Medium: $30, Large: $40

2. **Fried noodles with fresh scallops, squid in black pepper sauce**
   - Small: $20, Medium: $30, Large: $40

3. **Fried rice noodles topped with scallops bean sprouts and superior sauce**
   - Small: $20, Medium: $30, Large: $40

4. **Birds nest soup with dried scallops and winter melon**
   - Small: $70, Medium: $105, Large: $140

5. **Sautéed fresh scallops with minced ham and shredded chilli**
   - Small: $28, Medium: $42, Large: $56

### D) OTHER DRIED SEAFOOD

1. **Shredded coral clams and jelly fish**
   - $8/order

2. **Marinated baby octopus with cucumber**
   - $8/order

3. **Sautéed pearl clams with yellow fungus**
   - Small: $28, Medium: $42, Large: $56

4. **Braised tientsin cabbage with dried shrimps**
   - Small: $16, Medium: $24, Large: $32
In traditional Chinese custom and heritage, quality dried salted seafood product make fine gifts for relatives, friends, respected elders, business partners and close friends. During birthdays and some festive occasions, I remember my younger days when my mother would buy such items as gifts for relatives and close friends. The expensive dried seafood products bought from local wet markets, were often wrapped in pieces of newspaper and packed into brown paper bags, which bears the address and name of the shop printed on the sides. To make the gifts look more expensive and presentable; they would be repacked in pieces of flowery printed paper. I could still recall how my mother wanted me to cut a circular red paper to paste on top of the gift package. (In Chinese tradition, this red spot symbolises good luck and longevity.) Till today, I still think the simple form of packing is the best because it is packaged with love and respect.

From the above re-collection, which took place almost half a century ago, I have accepted the reality that our modern living conditions today will not be receptive to the untidy and haphazard image of the traditional dried salted seafood as they are sold in the wet market. (Refer to my picture attached on page 36 and my CD ROM movie 'Traditional wet market' under category Food packaging value). There is a lack of concern for upgrading the image of the traditional dried-salted seafood as many businessmen do not think it is a good business. It is rather sad to see that a popular product a few years ago, with such a great potential could suddenly be neglected because no one is interested in improving the look and image for current preferences.
Fig.P2.32. (1). 3 in 1 Packaging for Abalone, Scallops and Fish Maw. (NAFA student corporate identity food packaging project).

Fig.P2.33. (2). A Gift packaging for exclusive dried seafood products. (NAFA student C.I food packaging project).

Fig.P2.34. (3). Modern Packaging for a popular local dried seafood products-Shrimps, Anchovies and Salted Fish, etc. (NAFA student C.I food packaging project).

Fig.P2.35. (4). Another outstanding modern packaging for local popular dried seafood products designed by a NAFA student.
During 1996, when I set a food-packaging project to my students on dried seafood products, I require them to do a marketing survey prior the project. To find out the different exciting selling situation between local product in traditional wet market and imported products selling in modern supermarket. The result of survey shows that the majority of the young generation prefers to buy imported foodstuff product because of their exotic appeal and attractive packaging despite paying higher prices.

Reflecting on the above, I strongly believe that serious modification of these foodstuff should be implemented. At this point, I am only able to recommend on how to build up a new image of this traditional dried-salted seafood. A modern, hygienic and attractive visual image through packaging should be defined to improve the image. The objective of first improving the image is to:

(a). Establish a set of criteria to enable these products to be displayed at the supermarkets alongside imported foodstuff through the value of packaging design.

(b). Encourage the younger generation to purchase more of these items once these foodstuff looks more appealing with modern and hygienic packaging standards.

Being a design educator with one of Singapore’s leading Art and Design institute, I often encourage my students to study the existing selling conditions and environment of Singapore’s local traditional foodstuff, in order to design an appropriate and effective way of packaging for these traditional foodstuffs. During the last several years, all kinds of food packaging were set for my graphic design students. Some were set as major project for the final year student i.e.; one of the major projects was subjected to upgrading the image of local dried seafood product through packaging design. This project was divided to 2 areas as follow: -
(1). Design a gift box packaging for some dried seafood like abalone, scallops, fish maw or shark's fin etc.

(2). Design an appropriate packaging for some common dried seafood like shrimp, anchovies, squid and cuttlefish etc. (Preferably packed 3 items within one package).

Both packaging designs will aim at the export and local markets. I showed students a series of traditional dried seafood products which are sold in the traditional wet market and some same imported products sold in modern supermarket, through a series of slide show during my project briefing. In response to my projects, many students came up with exciting, progressive and impressive designs and ideas. *(Refer to attached pictures bellow and Refer to school projects on Part 4, (J1) Food packaging project in the design institutions).*

To further examine and understand the existing market situation of the traditional dried salted seafood in Singapore; I personally visited a few typical dried salted seafood shops within the traditional markets in Singapore. *(Refer to Appendix L2. Interview with shopkeeper of Dried Salted Seafood Products in the traditional wet market).*
(F3) **Raw Spices.**

Centuries ago, Europeans came to the east to trade. They took back with them spices like cloves, pepper and nutmeg. "Today, companies export their foodstuff in container ships or by airfreight to countries all over the world. Infect, historical events and developments were based on the trade of spices".1

In Singapore today, raw spices like pepper, dried chillies, ginger, cinnamon, cumin, turmeric, nutmeg and cloves, can be easily purchased in wet markets or in traditional Chinese herb shops. But in modern supermarket shelves, spices can also be found, except they are premixed and ground, and packed in attractive modern packaging. On these shelves, you can find brands from more than 15 companies. From industry sources, the spice market in Singapore is worth nearly $40 million annually2, which doubled in the last 12 years.

Whether it is a typical eating habit of people from tropical countries or this is a part of the Southeast Asia food culture, hot and spicy food are always a favourite choice to the multi ethnic Singaporeans. The most popular raw spices sold in the common traditional wet market is 'mixed curry paste.'

Previously when the modern supermarket was still not popular in Singapore (only a few established in city centres), housewives used to buy different varieties of raw spices in the traditional wet market. Indian women sold ‘Mixed curry paste’. The hawker used to stand behind the stall using both hands to control the stone roller on a piece of rectangular shape granite stone base. She would put several types of raw spices like fresh chilli, yellow ginger, small red onion, cumin etc., rolling under the pressure of stone tolls. Finally, she would mix the raw spices together with salt water and other type of ingredients and turn up a favourite mixed curry spices for the gourmet customers. This raw spice hawker stalls mainly sells two types of mixed curry paste. One for cooking ‘Meat Curry’ and one for ‘Seafood

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Curry’. Certain customers could request for special addition of other type of raw spices item for cooking Nonya’s favourite curry dish ‘Sambal Prawn’ or Malay popular dry curry dish ‘Beef Rendang’. These raw mixed spices are usually packed in a small pack of fresh leaves. Today, these traditional raw spices are still maintained within some traditional wet markets, but they are no longer rolled by hands. The stone rolling tool has been replaced by simple rolling machine. The form of packing has changed too, from fresh leaves to common plastic packet. (Refer to my CD-ROM ‘Raw Spices’ under category Food in Singapore, and picture on thesis.)

Fig.P2.36. (1). Local raw spices sold in the traditional wet market.
Fig.P2.37. (2). Chinese herds and spices sold in dull packaging.
Fig.P2.38. (3) Raw spices being processed by a simple machine at the back of a hawker stall.
Fig.P2.39. (4) Dried spices packed in simple plastic bag without any name or brand.
Other types of traditional raw spices in the Chinese community in Singapore and Southeast Asia countries are in dried forms. Normally these spices are sold at the salted sundry stall within the traditional wet markets and the Chinese traditional herb shops elsewhere in town. These common and popular of raw spices include cloves, cinnamon, nutmegs, cumin, turmeric, black and white peppers. Very often, these raw spices are sold together with traditional herbs. Infect some of them are herbs rather than spices. The old generation of Chinese used to cook tonic soup by putting these traditional herbal spices. Actually these common spices have been used in the Chinese cookery culture for a long history. They involved almost many of Chinese spice cuisine, from a luxury emperors’ official meal to the normal family daily soup.

Previously in Singapore, Chinese housewives used to buy these raw spices in separate forms. The stall hawker or the shopkeeper used to pick each of these spices according to the requirement of customers. Packed either in a plastic bag or some time by a piece of brown paper and the price was charged according to the weight of the spices. Infect these herbal raw spices have been used a lot during the festival season for either the restaurants or home dishes.

Standing on the packaging point to view, these traditional herbal raw spices in the existing food market are rather inconvenient for both the consumer and the seller. Without any packaging, the seller packs the spices according to the customer’s requirement. Since these traditional raw herbal spices were so widely used in the Chinese community, to design an appropriate packaging to pack them in order to individual variety with in a pack will be convenient to customer. Like the Indian women selling traditional raw spices in the wet market, the existing way of selling local raw spices without proper packaging could only serve to some regular customers and the market scope are rather narrow.

Review from the above existing local raw spices market and analysis the future possibility development to serve our local raw spice product through food packaging design. Let the local raw spice change the selling image through packaging and finally able to enter to the modern food market. Since 1988, I started to introduce my concept to my graphic students in NAFA.
Set several packaging projects for my graphic design students. Guide them to look into this inconvenient matter and come out with a new package. The new packaging design should be able to serve the following criteria:

(A). Should be able to combine revenant types of spices within one package.

(B). Provide transparent window to ensure that all raw spices packed inside the package are of good quality. (These raw spices are always sold even after the consumption date in market.)

(C). Indicating the items and a simple introduction on how to use the spices. (To attract other ethnic group of customers).

(D). Indicate the weight of spices on package.

(E). The new image of modern packaging. (Eye catching graphics, hygienic and easy to recognize).
As a result, many had hand up projects proved that the young design students had came out impressive and remarkable packaging to served the traditional spices market. *(Refer to pictures attaches)*.

Fig.P.2.40. (1) Local spices packed in modern containers *(NAFA student’s corporate identity food packaging project).*

Fig.P.2.41. (2) Garlic, Chilli and Pepper powder packed in modern containers.

*(NAFA students C.I. food packaging project).*

Fig.P.2.42. (3) Local spices packed in modern container *(NAFA student’s C.I. food packaging project).*

Fig.P.2.43. (4) Another NAFA student’s Spices packaging project.
Fig.P.2.44. (1). Different types and brands of spices displayed on shelves.
Fig.P.2.45. (2). Local and imported processed spices packed in modern packaging.
Fig.P.2.46. (3). Traditional Chinese herbs spices packed in modern packaging sold at the modern supermarket.
(F4). **Traditional foods produced in the ‘Home Factory’**.

In the multi-racial society of Singapore, there are quite a large number of home factories producing food and snacks. Their products are catered mainly for the local cooked food market and hawker centres all over the island. Family members usually manage these mini food factories. Some of these home factories already have a long history of dealing with traditional food. These home food factories have been handed down from ancestors to today’s generation. Many of them use simple tools and equipment as the food and snacks are usually prepared by hand. Most of the cooks are skillful in traditional spicy cooking and with many years of experience.

To further understand and find out more details about the food and snacks of the Singapore home factory, I visited three typical kinds of home factories and conducted interviews with the owners.

The three factories consist of (a). Rice Dumpling Factory, (b). Spring Roll Skin Factory and (c). Nonya Cake Confectionery Factory.

In fact, the snacks produced by these three factories are some of the most popular traditional food and snacks in the Chinese communities in Singapore as well as overseas.

(a). **Home Factory I. The Rice Dumpling Factory**.

My first visit was in June 1996 to the Duan Pandan Rice Dumpling Factory located at the junction of Mountbatten Road and Guillemard Road. The factory occupies the ground floor of a two-story shophouse. Besides the factory owner and his wife, there are ten other workers. The owner’s wife, Mrs. Low (in her early 40s) was responsible for washing and trimming the natural packing materials made up of dried bamboo leaves and fresh pandan leaves. A few others were seated at the front packing the dumplings with fillings of wet rice and spicy fillings made up of pork, dried mushrooms, shrimps and spices. After filling the spicy rice into the bamboo leaves, a plastic string was skillfully wrapped around the leaf to hold everything together. These used to be tied together with dried grass. Ten dumplings are then strung together to form a bunch. Several other workers in the kitchen are responsible for six giant boilers which steam bunches of packed rice dumplings.
Fig. P.2.47. (1) Production in progress in a ‘Rice Dumpling’ home factory.

Fig. P.2.48. (2) A worker preparing bamboo leaves for ‘Rice Dumpling’ packaging.

Fig. P.2.49. (3) ‘Rice Dumplings’ being put into giant containers for boiling.
Duan Pandan Rice Dumplings produce more than nine different varieties of dumplings. These are distinguished according to the packaging materials and colour of the string used. Historically, the majority of southern Chinese rice dumplings were packed in bamboo leaves. The Nonya (Straits Chinese) varieties of rice dumplings are packed with a pandan leave (a fragrant tropical leaf, often used as a cooking spice in Malay and Straits Chinese cooking). (*Refer to my CD-POM 'Rice dumpling Home Factory' under the category of Food in Singapore*).

The special way of Chinese Rice Dumpling packing could represent a remarkable presentation of cultural heritage and initiative expressed to ancient Chinese food packaging. The triangular shape bamboo leave package secured with grass string allows the food to be boiled in high temperature water for hours. When ready cooked, the food with the natural leaf fragrance could stimulate your appetite. The dumpling could be stored for a longer time as well being packed in this particular way. Our great grandmothers who created this remarkable way of packaging should be given a medal. (*To find out more detail of the Rice Dumpling, please refer to Appendix L3.Interview with owners of traditional foods Home Factory I. 'Rice Dumpling').

**b). Home Factory II, The Spring Roll Skin Factory.**

During January 1997, I went to visit another very typical home factory at Joo Chiat road. Established half a century ago by the family, this home factory specialized in producing traditional Spring Roll skin. Despite the re-development construction work progressing around the surroundings, this mini home factory still occupies the same space in an old shophouse building located very near a popular traditional wet market. Inside the shophouse, eight giant flat-shaped woks (Chinese frying pan) sits atop gas burners, which replaced charcoal used in the old days. Every wok is manned by one person as they pull out the wet flour from the giant clay pot, placed beside them, skillfully twisting the wet flour in their hands and “pasting” them onto the surface of the hot wok. It takes less than ten seconds for a white rounded shape of spring roll skin to be ready. (*Refer to my CD-ROM ‘Hand Made Spring Roll Skin’ under the category of Food in Singapore*).
Fig.P.2.50. (1). Making traditional hand made ‘Spring Roll Skin’ in the shop house.
Fig.P.2.51. (2). A skillful worker making ‘Spring Roll Skin’ in the shop house.
Fig.P.2.52. (3). Fresh ‘Spring Roll Skins’ being put into a plastic bag for the customer to takeaway.
Fig.P.2.53. (4). ‘Spring Roll Skin’ packed in modern packaging sold in the Supermarket.

Compared with the mechanical production, these traditional hands made spring roll definitely take a lot more time and effort. However, according to the 80-year old owner, Mr. Kwang, “Customers prefer the traditional type of hand made spring roll skin because they are fresher, taste better and have no added food preservatives. Despite the fact that hand made spring roll skin costs more than the mass produced packet sold at supermarkets, regular customers keep coming back. Peak periods are during festive occasions where business can run up to three times better (it means three times increased in production).
The traditional hand made spring roll skin produced by Mr. Kwang’s home factory are supplied mainly to cooked-food stalls at hawker centres and homemakers living around the area. I saw some customers purchasing the spring roll skin and noticed that the required amount is weighed and simply wrapped in brown paper and placed in a plastic carrier bag.

During the interview, Mr. Kwang echoed similar problems faced by Mr. Heng (who owns a salted dried seafood product located in the traditional wet market in city centre area). They both said that skilled workers are very difficult to find nowadays. The younger generation is not interested to learn the old trade and refuse to work in the uncomfortable working environment with long hours and uncertain prospects. Currently the spring roll home factory is being run by one of Mr. Kwang’s son who is already in his 50s. When I was talking with the junior Mr. Kwang, I had been told that the profit margin of such a business is very low. The reason for its survival today, despite stiff competition from modern processed spring roll skin is that, there is no rental to pay as the factory space belongs to the family and overhead are kept low. Besides, most of the workers are family members or relatives. When I asked if he would be willing to modernize and industrialize, to compete with the mass-production factories, he only offered a half-hearted smile and said, “Quite impossible, because it would take a lot of investment.”

Today, processed spring roll skin has become a very popular item in the supermarkets and a great quantity is exported to an international market. These “industrialized” spring roll skins are packaged in neatly in attractive plastic packaging found in the cold food section.

The contrast between home made spring roll skin and the “industrialized” type, is a strong example indicating that in order to cater to the new development in living environment and eating habits and lifestyle of the younger generation, improvement is necessary. Whether it is to improve the management, production and the appearance of the product, image is very important. Image development is applicable to many of the delicious traditional foods in the multi-racial society of Singapore, in order for them to “survive”.

To further understand the future development of this traditional home factory, I interviewed the Owner of the factory. (Refer to Appendix L.4 Interview with Owners of Traditional Foods Home Factory II, ‘Hand Made Spring Roll Skin’).
(c). **Home Factory III - The Nonya Cake Factory.**

On a very hot afternoon in April 1997, I visited a Nonya Cake Confectionery home factory located at Bedok North housing board estate in east Singapore. The home factory is housed within a two-story Housing Development Board shop house and occupies the ground floor area. (This is my second visit as the video recording of my first visit was damaged). There, I met the friendly Mrs. Chia, wife of the factory owner and in charge of production. This home factory specializes in making several varieties of Nonya cakes. There are five female workers, including Mrs. Chia. The day I visited them, they were making typical Chinese traditional snack called 'Red Turtle Pastry'.

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**Fig. P.2.54. (1). Nonya cake and confectionery Home Factory.**

**Fig. P.2.55. (2). 'Red Turtle Pastry' - a popular Nonya Snack.**

**Fig. P.2.56. (3). Different varieties of delicious Nonya Cakes sold at the hawker stall without packaging.**

**Fig. P.2.57. (4). 'Multi-Layers Pastry' - a favorite snack among the various races.**
Customers places their orders, which are then packed into very commonly used, white opaque package. 10 pieces would be packed into one package. Several packages will be packed into a cardboard carton and delivered to customers. (Refer to my CD-ROM 'Nonya Cake Confectionery Home Factory' under the category of Food in Singapore). I noticed that all packaging used here are not labeled, to identify the factory trade or contact details. I am curious as to how business has been established between the home factory and their clients.

F5. Natural leaves as packaging material used for local foods.

Natural materials have been widely used for foodstuff packaging in Southeast Asian countries. The tropical climate has created a conducive environment for huge rainforests to flourish. Surrounding the Southeast Asian countries, these virgin jungles have for many centuries provided a source of rich natural resources to benefit the inhabitants of these forests.

The rich source of natural vegetation includes timber, cane, bamboo, herbs, raw spices and fruit etc. Since a long time ago, South East Asian people have already been using natural materials to build their houses, furniture and other necessary tools. From the wide variety of natural materials, spices and leaves are most often food related. For example, leaves are used as packaging for daily food items. This form of packaging has had a long history in Southeast Asia and can still be found today and remains quite popular, despite the modernization of lifestyle.

I recall my visits to various Southeast Asian countries like Malaysia, Thailand, Indonesia, Sabah; where I discovered that many varieties of local cooked food and snacks are sold at the local traditional wet markets and roadside hawker stalls were ingeniously packed with leaves. However, due to economic reasons and for convenience, some of the food items were packed with plastic sheets as replacements for leaves.
Fig.P.2.58. (1). 'Banana Leave' is the most commons natural packaging material for foods in Southeast Asia.

Fig.P.2.59. (2). More than a thousand years ago, Chinese rice dumpling were packed in 'Bamboo Leave'.

Fig.P.2.60. (3). 'Blue Ginger leave' used to package Malay sweet pastries.

Fig.P.2.61. (4). 'Coconut Leave' brings out the flavor of delicious 'Nonya Otah'.

In Thailand and Indonesia, I noticed the hawkers selling a rather unusual type of rice, which consists of a 5cm diameter natural bamboo-cane as packaging contained with different varieties of glutinous rice. About 20 to 30 pieces are set to grill on a low fire.
From my research travels to the local food markets in some of the Southeast Asian countries, I noticed that the most common leaves used were banana leaves, coconut leaves, bamboo leaves, pandan leaves, lotus leaves etc. These natural leaves have become part of a rich food culture heritage of Southeast Asia.

As part of the Southeast Asian countries, Singapore has advanced most rapidly in its standard of living. Despite this modernization and the use of many other artificial processed form of packaging, such as transparent plastic sheets, polyester package and waxed cardboard etc.

Some local traditional ethnic food sellers still continue to use the above-mentioned leaves as natural packing materials. It is probable that there are 2 reasons why in the tropical countries of Southeast Asia, the natural materials such as leaves have been widely used as a packaging material. This is due to the abundance of such a natural material, which are easily found in the surrounding tropical rainforests and jungles. Another reason may be that natural packaging material sufficed as most of the traditional home made foods were sold at the local stalls and marketplace. These foodstuffs are meant to be eaten almost immediately while it was still fresh. Thus, the rich tropical jungle was a convenient and economic source for the inhabitants.

From a design perspective, I notice that the advantages of variety of leaves used for food packaging were very well matched and often complemented the flavour or appearance of the traditional cakes and snacks in their shapes and colour. Often the leaves also lend an appetizing appearance to the delicious food that's packed within. The disadvantages are (1). Natural leaves are almost impossible to go by machinery for mass production. (2). Natural leaves could not last for its freshness, especially for todays export modern food market.
From 1970, many Southeast Asian developing countries embarked on their new economic policy, thereby paving the way for new development plans to the economy, environment and standard of living. As a result, large areas of virgin jungles had to be cleared to make way for this rapid development. Furthermore, the rich source of timber and other natural resources were in demand and were often reaped and exported overseas. For example, the southern part of Peninsular Malaysia, Johore, vast areas of virgin jungle had to be cleared for more profitable palm plantations, as palm oil was in high demand. Housing development was another major reason for the disappearance of the tropical rainforests. Large parcels of land had to be requested from the virgin jungle to make way for modern housing and business facilities. The diminishing presence of the tropical rainforests has in turn decreased the supply of the natural materials to the local food market.

Singapore is an ideal example to analyze the change in living environment as mentioned above. 25 years ago, there were already very limited areas of virgin rainforests existing. These rainforests were pockets of land around the island designated as nature reserves. Since then, local hawkers had to turn to other countries in the region for their source of natural food packaging material. Yet, natural packaging materials remain ever popular today, especially during festive occasions for the various ethnic groups. Even hotel restaurants use this form of packaging to share with foreigners the cultural heritage of local food.
Based on the above discussion, I have concluded the following points:

1. Several centuries ago, natural leaves were the most common forms of packaging material used for local traditional foodstuff in Singapore and other Southeast Asian countries.

2. The natural texture and shape of natural leaves complement the local traditional foodstuff in both appetizing appearance and flavour. These natural materials have lent a sense of cultural identity to the multiracial heritage. (Refer to the classification of ethnic food and natural leaves).

3. The decrease in the once abundant supply of these natural materials due to urbanization have resulted in a marked increase in their demand and thus selling price.

4. Artificial forms of packaging such as plastic bags and carton boxes are fast replacing these natural materials, as they are more economical and easily mass produced. However, the aesthetically pleasing natural forms of packaging complimentary to the local foodstuff are fast disappearing.

Facing the shortage in supply of these natural leaves as a traditional food packaging material, from a practicing designer and design educator’s point of view, one has to find some solutions to resolve these packaging challenges. Ideally, it should be a method that would maintain the aesthetics of food culture of various ethnic groups while concurrently meeting the present mass-produced speed and standards of quality.

To research on the feasibility of the above mentioned design criteria, I set a school project for my final year graphic design students in July 1997 in NAFA, Singapore, requiring them to analyze today’s situation with traditional natural packaging materials and to propose innovative concepts and fresh ideas. (Refer to my CD-ROM under the category of Packaging Criteria).
School project for NAFA Graphic Design Course final year students: -
NAFA Graphic Design Department
3rd year full time graphic design course
School Project 2

Traditional local foodstuff packaging design
Subject: Ad and Comm. (Corporate Identity)

Brief Background
In the multi-racial society of Singapore, there are many delicacies and delicious ethnic food and snacks being sold in our local food markets. A long time ago these foodstuffs were more popular. The appearances of these local foodstuffs were mainly influenced by the cultural heritage of the various ethnic groups from which they originated. The interesting packaging of these popular foods created a strong identity, for example. Nasi Lemak (Malay Coconut Rice), Chinese Rice Dumpling, Indian Fried Banana snack and Peranakan Sweet Pastry. These local favorites share one strong visual image that is the use of natural packaging materials, mainly leaves.

Natural packaging materials for food and snacks have a long history in Singapore, so much so that it reflects a rich cultural heritage of various ethnic groups. However, in recent years, due to deforestation and urbanization, there has been a shortage in supply of such natural materials such as leaves.

From your perspective as a young designer:

1. Review the above-described situation.
2. Conduct a marketing survey to assess the packaging of our local foodstuffs.
3. Propose a new packaging concept for development and application to substitute the fast disappearing of natural materials.
The new concept will be subjected to the following conditions:

1. The original strong identity of snacks (shape and colour) should be maintained.
2. Appropriate packaging material applied to your selected traditional food should cater for mass production by machine.
3. Hygienic image, convenient as well as reasonable production cost.

Project:

1. Select one type of traditional local foodstuff found in our local food market packed in natural leaves.
2. Use the word “SOUTH SEA” as the brand and design a logotype for this new look.
3. Design a new packaging for presentation of minimum of 4 pieces in a box.
4. Design a full colour MRT (Mass Rapid Transit) poster to promote your foodstuff with the new package. Beside the food product, you are only allowed to apply the main title, subtitle and the SOUTH SEA logo on the poster. (Size. A2).

Criteria for your packaging:

a. Your new packaging of traditional foodstuff will be sold at the modern supermarket and to be displayed at the shop window. Therefore, ensure that your packaging should take into consideration that the customer must be able to see how the freshness of this foodstuff.

b. Material used for your packaging should be environmentally safe.

c. This foodstuff may be frozen and packed for export. Therefore, consider a packaging that will not incur unnecessary weight and space, which would result in high costs.

d. Date of consumption, net weight, logotype, ingredients, bar code and address of the manufacturer should be indicated on your new packaging

Duration: 5 weeks from date of project briefing (1/8/97)

Project set by Tan Ping Chiang (NAFA Singapore)
Following are some outstanding packaging design works by NAFA students.
Subjected to the strong image of ‘Natural Leaves’ applied on packaging work: -

Fig.P.2.63. (1). A Corporate Identity project for a Peranakan Snack House. Students had to make use of artificial banana leave as part of their design items.

Fig.P.2.64. (2). Take away food package. With the texture of the banana leave applied onto the surface of the package.

Fig.P.2.65. (3). Printed natural leave textures been used on other local traditional food packages.

Fig.P.2.66. (4). Other natural leaf patterns had been applied on modern packaging of various multi racial traditional snacks.
The following are classification tables of some of the popular natural materials used for packaging local traditional foodstuff found in Singapore’s multiracial food market.

**Table A: Category of local common traditional foodstuffs packed with natural leaves in Singapore’s food market.**

<table>
<thead>
<tr>
<th>Name of foods and ethnic groups</th>
<th>Packing material</th>
<th>Place of sale</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Nasi Lemak (Malay coconut rice).</td>
<td></td>
<td>These food stuffs are commonly sale at Hawker Center, Traditional Wet Market stalls, Traditional coffee Shop and Cooked Foods Hawker Centre etc.</td>
<td>The traditional foodstuffs and snacks show on thislist were some very popular types of common ethnic food usually packed by Banana Leave.</td>
</tr>
<tr>
<td>2 Tapai (Malay wine tapioca sweet pastry).</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>3 Kueh Lapis (Malay multi-coloured sweet pastry).</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>4 Lontong (Malay rice cake with vegetable soup).</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>5 Meesiam (Malay rice stick with chili shrimp).</td>
<td>Banana Leaves</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Meesiam (Malay rice stick with chili shrimp).</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Ikan Bakar (Malay barbecue fish).</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Hoon Kueh (Chines flour pastry).</td>
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<td></td>
</tr>
<tr>
<td>9 Peach Kueh (Chinese rice pastry).</td>
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<td></td>
</tr>
<tr>
<td>10 Ang Ku Kueh (Chinese red turtle sweet pastry).</td>
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</tr>
<tr>
<td>11 Seafood Barbecue (Chinese grilled seafood).</td>
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</tr>
<tr>
<td>12 Indian Curry Rice (Takeaway meal).</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>13 Kutu Mayam (Indian rice stick with coconut sugar).</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>14 Blue Ginger Rice (Nonya glutinous rice).</td>
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<td></td>
</tr>
<tr>
<td>15 Sweet Flour Pastries (Peranakan pastries).</td>
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</tbody>
</table>

There are more than 20 different varieties of peranakan snacks served with banana leaves during food promotions at Hotel Restaurants.
<table>
<thead>
<tr>
<th>Name of foods and ethnic groups</th>
<th>Packing material</th>
<th>Place of sale</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Ketupat (Malay glutinous rice mass).</td>
<td>Coconut Leaf</td>
<td>Seafood Restaurants, Hawker Centres and Food Court.</td>
<td>Coconut leaves and Pandan leaves are widely used in Malay and Peranakan foodstuffs in Singapore.</td>
</tr>
<tr>
<td>2 Otak Otak (Malay fish or prawn grilled pastry with strong spices).</td>
<td></td>
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<tr>
<td>3 Lepat (Malay glutinous rice and soybean pastry).</td>
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<tr>
<td>4 Kueh Lopes (Malay glutinous rice with coconut sugar).</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>1 Pandan Chicken (Nonya spices grilled chicken meat).</td>
<td>Pandan Leaf</td>
<td>Peranakan Restaurants, Hawker Centres and Food Courts.</td>
<td></td>
</tr>
<tr>
<td>2 Rice Dumpling (Nonya style rice dumpling).</td>
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<tr>
<td>3 Kueh Tu-Tu (Nonya white flour pastry).</td>
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<tr>
<td>4 Kueh Ko Swee (Nonya sweet pastry).</td>
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</tr>
<tr>
<td>5 Putu Pering (Malay sweet flour pastry with coconut sugar filling).</td>
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</tr>
<tr>
<td>6 Kueh Tako (Nonya sweet pastry).</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Lo Mai Kai (Chines glutinous rice).</td>
<td>Lotus Leaf</td>
<td>Restaurant and Hawker Centres.</td>
<td>Lotus leaves are used to pack foodstuffs mainly in the Chinese Community.</td>
</tr>
<tr>
<td>2 Steam Chicken (Chines herb steamed chicken).</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>3 Fried Mee (Chinese fried prawn noodle).</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Rice Dumplings.</td>
<td>Bamboo Leaf</td>
<td>Food Court and Hawker Centres and Food Courts.</td>
<td></td>
</tr>
</tbody>
</table>

Note: (There are other popular natural leaves used to pack local foodstuffs, hardly used now due to shortage of supply.)
(Part 3)

(G) Eating Habit

(H) Food Packaging Values
Part 3.

(G) EATING HABIT

G1. Changes in the living environment and eating habits.

Rapid social and economic development has enabled Singapore to achieve the second highest standard of living in Asia. Under the government’s housing policy, termed “Home Ownership Scheme”, today, almost 90% of Singaporeans own their own homes as compared to about 50% in many other developed countries. About 85% of Singaporeans own public housing apartments built by the Housing Development Board of Singapore.¹

A review of Singapore’s living environment for the last thirty years. There are more than half the number of Singaporeans living in traditional shop houses or simple wooden houses with a zinc or ‘attap’ (Malay word, a kind of dried palm leaves) roof either in the city centre or at the slum residential areas on the outskirts of town. The haphazard organisation and slum living conditions created hygiene problem. It was common for a family of five members to share a room on the top floor of an old shop house. Six to seven of these families shared only one bathroom and a small kitchen.

Beyond the city area, there were a lot of vegetable and fruit farms where the residents obtained their fresh food whilst also enjoying the fresh air and spacious living conditions. However, infrequent public transportation and a lack of electrical supply created many inconveniences.

Traditionally, the majority of Singaporeans ate at home. It was only the white collar who often ate outside the home. The common eating places included Hawker Centres or Food Stalls located near their workplace. There were often a wide variety of foods to choose from the various ethnic races, which were economically priced. On an average the majority of the white collar spent less than $2 on their lunch.

Take-away meals were also popular back then in Singapore. Although, these meals were eaten more as breakfast or as a night snack. Traditionally, take-away were crudely packed either in

¹ ‘The Next Lap” under the contents of Singapore Our Home, 1996.
natural leaves or brown paper. The customers were not too concerned about the packaging. In fact many preferred their food packed in a certain type of leaf from the palm tree known as ‘O-pay’. The heat from the delicious food blended so well with the ‘O-pay’ that a fragrant appetising smell was emitted. Many locals say this smell stimulates their appetite. However, in recent years, hawkers have cut down on the use of “O-pay” due to the stoppage of supply. Many have turned to simple plastic or brown paper packaging.

Most Singaporean considering the 3 main meals prepared each day, breakfast in local Chinese families consisted of porridge with traditional preserved or pickled vegetables or traditional pastry bought from morning shopping at the wet market. The other ethnic groups usually had traditional pastry snacks for breakfast. These items are often complemented with black coffee. These colourful and tasty traditional snacks were freshly made. Some would be packed in natural leaves; others were simply displayed for selection. These snacks were also displayed within a bamboo basket or a wooden case, which were then placed on the back of a bicycle for the hawker to sell, as he rode along the streets.

During the 1960s in Singapore, many families did not own a refrigerator; thus they had to visit the market almost everyday for fresh food. ‘There were about 16 traditional wet markets in Singapore then’. The fresh food consisted of poultry, meat and some vegetables gathered from local farms. Seafood and a wide variety of vegetables were often imported from neighbouring countries. For example, vegetables and fruits were often imported from a town in Malaysia known as “Cameron Highlands” whilst seafood was obtained from “Mersing” in Johor Bahru.

During ethnic group festivals like “Chinese New Year”, the Malay “Hari Raya” or Indian “Deepavali”. There would be an increase in demand for imported traditional foodstuff. These foodstuffs consisted mainly of dried or preserved snacks and titbits. (Some items imported for the Chinese New Year include Chinese sausages, wax duck, pork, preserved fruits or vegetables, traditional cookies and fresh mandarin oranges). These foodstuffs were packaged in either tin or ceramic containers. From modern packaging criteria point to view to these imported foodstuffs.

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2 Figure supply by The Public Relationship Dept. Ministry of Environment, Singapore.

From the Traditional Wet Market to the Modern Supermarket  
(Food Packaging Value In Singapore)  65
A lot of them were rather over decorative with unnecessary graphic pattern, in spite of informative to identifying the food and manufacturer on its labels. These foodstuffs were often delivered via sea cargo packed within wooden crates or bamboo baskets. Upon reaching Singapore, these items were stored in the warehouses located at the local harbour awaiting distribution by the whole sellers to retail shops and wet markets.

In 1960, only a small group of white-collar workers were able to buy branded goods. They came mostly from English-educated backgrounds and formed the majority of the higher income earners. They bought mostly imported products such as watches, leather products, cosmetics, liquor and motor vehicles and some foodstuff like milk powder, coffee and other instant drink powder. In their daily lifestyle, imported food was not a major concern. Due to the availability of fresh food at economical prices, the majority of Singaporeans rely more on the quality of the food they bought rather than on the brand or the manufacturers. A trusted favourite was usually established by word of mouth between consumers.

In South East Asia in 1960s, food packaging was an unfamiliar term for many Singaporeans and the locals of neighbouring developing countries. Since quality was the main concern, most consumers were not concerned with where the products originated nor was attractive packaging considered. For example, the popular Chinese traditional salted and sour preserved food items sold in the traditional wet market. These popular preserved foodstuffs were imported from either China or Hong Kong. They included salted bean curd, black olives and slanted sour plums contained in ceramic or glass jars. The brand and manufacturer details were printed on dull (dark and not impressive) labels. Some even lack this label and were just printed “Made in China” at the bottom of the jar. (Refer to my CD-DOM movie ‘Salted Sundries Stall under Food in Singapore).

On the whole, before the late 70s, the majority of consumers were not too concerned with the brand or the packaging of the products they bought. After assessing past habits and preferences, I believe they were influenced by the following trends:
1. There wasn’t a need for an attractive outward appearance of a product as the competition was scarce due to the limited budget most families could spend on food.

2. Due to the lack of choice above, customers were less picky and choosy with their selection.

3. Finally, only selected items were imported from overseas and these were often above the budget of the average-earning Singaporeans' income.

Fig.P.3.1. (1). A typical traditional grocery shop in Singapore (1965).
Fig.P.3.2. (2). A common kitchen shared by many families, in an old shophouse located in an urban area of Singapore (1965) (Picture adopted from URA Annual Report 1974/75).
People hardly ate out during the 60's, partly due to the low income earned. A Singaporean family ate out only once to twice a month, often at the end of the month, right after paid day or occasionally during weekends.

Yet cooked food stalls and hawker stalls were located all over Singapore, especially around entertainment spots at the city centre like cinema theatres, concert halls, lounges and other night spots. Chinese restaurants were mostly located in hotels and catered for business entertainment and other celebration occasions such as weddings, anniversaries and festivals.

![Image](image.jpg)

*Fig.P.3.3. (3). Dried foods exposed for sale in a traditional grocery shop.*

*Fig.P.3.4. (4). Traditional Chinese biscuits and cookies sold at roadside stalls.*

From 1975 onwards, the Singapore government strive for economic development as the top priority for the young yet rapidly developing nation. There was an increasing need to raise the standard of living in general in order to establish a better way of life.

“The face of Singapore has changed dramatically over 25 years. Elegant glass and steel skyscraper have taken the place of city slums. High rise satellite towns have replaced fishing and farming villages. New parks, town gardens and modern amenities....” 3

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The group of newly graduated young and upwardly mobile Singaporeans who had obtained a bilingual education soon filled a large proportion of the population and as a result, they were more aware of the vast array of choices of products or food items they wished to buy. They were as a result, also more exposed and readily acceptable to Western culture and products. Western values, cultures and way of life soon influenced many. Their parent's old-fashioned way of living was soon despised if not ignored.

Fig. P.3.5. The rapidly changing living environment within the urban centre area of Singapore.

Their food and eating habits also experienced a great change. With more disposable income and familiarity with English, they ventured into the modern supermarkets where a wide variety of choices of fresh, imported and quality foodstuff are available. The comfortable air-conditioned and clean environment was more favourable as compared to the old, dirty and smelly wet markets. The eye-catching, modern packaging of these Western imported items attracted them. With greater affluence, many more women began joining the workforce for better opportunities and also to support a better standard of living. Thus, fewer and fewer young housewives made their way to the wet markets early in the morning for fresh fish, meat, vegetables or household items.
It was more convenient to stop by at the supermarkets for some grocery shopping on the way home from work. Sometimes, they even preferred to have a convenient meal outside the home. Even meals at home became more simply prepared as compared to elaborate dishes cooked by their mothers who required long preparation and variety.

Fig.P.3.6. (1). A crowd of young Singaporean Professionals walking along the central District of Shenton Way.

Fig.P.3.7. (2). A Modern Food Court located at urban area.

Fig.p.3.8. (3). Lunch crowds in one of the Food Court located within the office building.

Fig.P.3.9. (4). A typical modern fully equipped kitchen found in today's New Generation Home. (Picture adopted from 'Modern living' Magazine).
In various studies on the modernisation of Singapore, I noted that often a correlation between a quicker, simpler and more convenient general daily eating habit with a higher standard of living.

The successful economic achievement has directly brought about higher income levels and increasing opportunities to Singaporeans. Almost 100% of young Singaporeans graduated from high school and a large percentage obtained a degree. With an overall betterment of education and of living standards and thus disposable income, Singaporeans came to spend more on their daily necessities. With continued successful economic growth and development, Singapore established the second highest standard of living in Southeast Asia.

![Fig.P.3.10. Boat Quay, a place where young professional Singaporeans hang out for dinner.](image-url)
(G2). The Raising of the Modern Supermarket and Western Fast Food Restaurant.

Dr. Liu Hui Shia, former dean of the Singapore Institute of Education and now a popular columnist and educationist pointed out in one of her forum articles, "...the estimate of "valuation" for our young generation has totally been westernised, as compared with Hong Kong." Her opinion had sought consensus with many educators in Singapore. The cause they point out is that with bilingual policy being introduced in schools after 1970.

I have explored key reasons that have resulted in a change of Singaporean lifestyle in the past 25 years.

1. Most newly wed couples consist of both educated and skilled professionals. Both are working so as to survive the high cost of living in Singapore.
2. The monthly expenditure has increased.
3. "Small Family" planning exercised by the government in the late 70s.

A correlation in changes of eating habits can also be observed. Previously, Singaporeans ate their home-prepared meals together with their family members at home. Now, there are a lot more Singaporeans eating outside the home for convenience sake due to longer working hours and less importance of family meals and togetherness. Food Courts, Hawker Centres and Restaurants are frequently packed with customers from the various multiracial backgrounds. Families also eat out much more these days due to the wide variety of restaurants available and convenience.

With the increase in demand, enterprising businessmen have taken advantage of the strong potential of the food market and introduced different food and restaurants from all over the world, such as French,

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*Dr Liu Hui Shia the former director if Singapore Institute of Education wrote the article regarding “The Valuation Estimate of the new generation of Singapore”. Published in the Forum page of Lianhe Zaobao (A local Chinese newspaper in Singapore).*
Italian, Japanese, Indian, Mexican and many more. I remember that there was only one Western restaurant located at the Bukit Timah highway centre in 1972, known as “A&W”. Today, there are more than a few hundred fast food outlets all over Singapore which include, McDonalds, Kentucky Fried Chicken, Long John Silver, Pizza Hut, etc.

One assignment that was set for final year graphic design students; I asked them to conduct a survey on the customers who patronised these fast food outlets. They concluded that the main customers were between the ages of 12 to 25 who cited the following reasons for these outlets’ popularity, such as:

(A). Environment: - Modern decoration, clean, air-conditioned
(B). Food: - quick, delicious, fresh taste, hygienic preparation
(C). Service: - friendly helpful staff
(D). Price: - reasonable, cheap
(E). Packaging: - eye catching, simple, functional, convenient, clean

Modern supermarkets have also increased tremendously in numbers during the last 25 years. Information from the Ministry of Environment states that the total number of modern supermarkets in Singapore today is 119 compared to only 3 in 1960.³

As the nation needs a more professional and skilled workforce to enable economic growth and development, many young professionals, both male and female are employed in the work force. Therefore, cooking at home has become less. Furthermore, many of them were only cooed for diner. Therefore a lot of young generation homemakers’ daily marketing has been cut down to once or twice a week trip to the supermarket during the weekends or on the way home from work.⁴ This trend of the 90s is also reflected in societies of the other developing nations in the region.

³ Information provided from Public Affairs Dept. (Environment). The Ministry of Environment, Singapore

⁴ Lianhe Zaobao, Singapore. Survey article 'Wet market stall owners facing supper competition'. Dated. 2 Dec.1998.
Modern apartment living comes with only a small compact kitchen equipped with the latest convenient gadgetry like microwave oven and dishwasher compared with spacious kitchens of the past. The kitchen for the older generation other than a cooking and washing area was also a place for gathering and meeting family members as the homemaker spent long hours in the kitchen. A dish can simply be whipped up with the help of modern home appliances like the rice cooker, spice grinder and food mixer, therefore allowing minimum time spent in the kitchen. Some say that today; the kitchen is one of the loneliest places in the home.

Dr Sandro Mangosi, food consultant of the BIS Schrapnels mentioned that “There is a fundamental change underway which will turn cooking from something we do as a duty to something we’ll do for fun”. This is a situation now with many young professionals in Singapore today.

Today’s modern foods contained in clean, hygienic, and attractive packaging appeal to the young consumers. From imported frozen half-cooked foods to local fresh foods that are conveniently located and easily found within the comfortable and clean environment of the supermarket, today’s food echo convenience and quick simple cooking.

As a practising designer and educator, I have always endeavoured to promote local foods through packaging. It is indeed very encouraging to note that quite a few local foods and snacks have taken the right packaging approach and criteria and which have enabled them to be readily available in the supermarket. These include traditional Nonya Sweet Pastry, Cuttlefish Balls, Beef and Pork Meatballs, Dimsum Pastry, Mixed Seasoning, Seafood Soup, Pre-prepared Vegetarian Foods and much more. (*Refer to my CD-ROM movie ‘Modern Supermarket’. Under category of Food Packaging Value*).

Smaller versions of the supermarkets known as Mini Marts have also sprouted around housing estates and 24-hour petrol stations for even greater convenience. The modern day supermarket of any size is fast overtaking the traditional wet market as a popular place to shop for food and home necessities.
During November, 1996, as I was working on my research on food packaging at University of Western Sydney (UWS), I was given the opportunity to film actual footage as part of my research references. The store named “Sing Kee” and owned by the Wong family (Chinese who immigrated to Sydney from Hong Kong).

“Sing Kee”, a grocery food store located at Church Street, Parramata town centre. (Parramata is a big town located in Western Sydney, Australia). The interior and food display is quite similar to the standard of the mini marts and modern family-run private grocery food stores in my home country Singapore. However, the size of Sing Kee is approximately three times larger than the average size of the standard grocery stores in Singapore. All kinds of Asian traditional foodstuffs, from fresh to dry, preserved to frozen, can be found at Sing Kee. Despite its rather narrow walkways in the food store, the shelves were well stocked, overflowing with many varieties of Asian traditional foodstuffs. Yet, what really caught my attention was that the many types of Asian traditional foodstuffs that were being sold at Sing Kee have changed their image with their modern packaging. The reason I termed the packaging modern was due to the same types of traditional foodstuffs were also available in Singapore. But, the packaging greatly differs. In Singapore, these foodstuffs found at the grocery shop at the wet markets had either dull or unattractive packaging, some even without any packaging at all. A good example were the Salted, Preserved Black Olives, vacuum-packed in a plastic container found at Sing Kee. These popular traditional salted olives have been available, without proper packaging for the last several decades in the Singapore traditional wet market. Many traditional snacks like “Nonya Sweet Pastry”; (made of tapioca, sweet potato and coconut cream etc.) had found in interesting packages, which further enhanced the colour and variety of the types of snacks. When I saw the “Nonya Multi-Layers Pastry” (one of Singaporean’s favourite sweet potato cake because of its fragrance and colourful appearance) it brought the feeling of meeting an old friend from my home in a foreign land.

My visit to Sing Kee awakened me to the fact that the change in the packaging of traditional foods was already taking place. These developments are more obvious in the food market overseas than in my home country. This analysis has presented an interesting fact that modern food packaging have already been used overseas. Thus, giving me even more confidence and determination in my thesis on the value of food packaging.
During my interview with Mrs. Sophia Wong, the wife of the shop owner, I found that the foodstuffs sold at their shop were almost 100% traditional Asian foodstuffs, imported from Asian countries like Hong Kong, Singapore, Malaysia, Thailand, China, Japan and Taiwan etc. Her husband and she started the business 15 years ago and their main customers were Asians living in Parramata. She told me that, more customers today, were increasingly concerned with food packaging, especially with the hygiene standard and attractiveness of the packaging. She felt that many countries have improved their food packaging, except for slow progress on China’s foodstuffs. She pointed out that even the quality of the foodstuff were also not up to expectation. I cannot help but agreed with her about this point that as I have myself experienced it. I also learnt that 20 to 30% of her customers were white Australians who were becoming more interested in Asian traditional foodstuffs. These also brought to my attention that with today’s global market and greater understanding of different cultures and nationalities, many Europeans are increasingly interested in Asian traditional foodstuff. Dr Sandro Mangosi’s comment (1994), “Hygiene, Taste and Quality are the three main factors affecting food product selection,” and I believe that improving the quality and selling image of food packaging, would encourage more Europeans to appreciate Asian traditional foodstuff.

By comparison, the traditional foodstuffs being sold in the mini marts and private grocery food stores in Parramata of Sydney and Singapore. There are still have lots of room for improvements. Both in the appropriateness of the materials used to protect the food inside the package as well as the impressive visual image of graphic design. I feel that the current existing change is only the beginning following this, I believe that there will be a revolution in modern packaging design in foods industry. The demands in the creativeness, impressiveness and quality of food packaging to solve the problem of diminishing traditional foodstuffs will have to be addressed.

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Dr. Sandro Mangosi (BIS Schrapner food industry consultant) 1994. Australian food service market.

Fig.P.3.11. (1). Traditional fresh foodstuffs with modern packaging displayed in the cool shelves of the modern supermarket.

Fig.P.3.12. (2). Traditional dried salted seafood products packed with modern packaging.

Fig.P.3.13. (3). Traditional herbs and spices with modern packaging sold in the modern supermarket.

Fig.P.3.14. (4). Local snacks displayed in the cool shelves of the modern supermarket.
Urban development and the highly competitive international food industry will greatly influence the importance of modern and revolutionary designs in food packaging. In Singapore and other developing countries, especially for the rapidly booming economies of the Asia Pacific region. The World Bank, as quoted in the Straits Times reads, “The fundamentals remain in place for the world’s fastest growing economies to sustain their economic success.” points to the growth of Asia exceeding 8% per annum and continued high growth extending towards the year 2000. 8

Fig.P.3.15. Local traditional cooked foodstuffs with hygienic packaging displayed in the cool shelves.
Fig.P.3.16. Daily milk and fresh juices packed in hygienic packaging.
A closer look at Singapore packaging compared to imported items reflects a simpler and less attractive image. However, it is already a big step in positioning local traditional items as attractive and readily available whilst improving the image. With more research and development and technology advancement, packaging material, aesthetics, shape and colour used by local manufacturers can be further improved and enhanced.

In recent years, there has also been more local produce available in the modern supermarket. The majority have simple packaging, (some simply indicating the name of the product and manufacturer) but there is still some outstanding one, which have strong visual appeal and excellent choice of material. Many have also been exported to western markets. These include local spices, instant noodles, biscuits, sauces and cookies etc. This points to awareness by local manufacturers of the value of food packaging to appeal to today’s discerning consumers. There has also been increasing concern and attentiveness to the quality of food, hygiene, convenience, and informative packaging. Manufacturers realise that with good packaging, their products would become more eye-catching, appeal to consumers and project a good, reliable image as it is the often external appearance which encourages the consumer’s confidence in purchasing." Packaging design is one of the most effective marketing tools often yielding high returns than advertising." 8

8 Book "Great Packaging Graphic" by the editors of PBC International. Glen Cove. New York.
(H). Food Packaging Values.

H1. Comparison of the purchases and sales environment between the Traditional Wet Market and the Modern Supermarket.

Many years ago in Singapore as well other developing countries and some less developed countries in South East Asia, traditional wet markets were the gathering point for many hawkers who occupied a stall within the wet market complex. In some villages, a distance away from the town centre, there were some hawkers who sold their products at makeshift stalls, which were often converted from a trolley or bicycle and were parked outside the wet markets.

The target consumers were usually those living around the vicinity. Cooked food stalls were also part of the wet market complex. In the urban centres, the wet markets could be three to four storeys high. The size of the wet market depended on the location and number residents of who patronised the wet market.

The major fresh food items sold at the wet markets include poultry such as Pork, Chicken, Beef, Mutton, animal intestine and all types of Seafood from various species of Fish, Crab and Prawns. Fresh vegetables and Fruits were either locally produced or imported from neighbouring countries. These fresh produces were delivered daily to ensure freshness and variety. Dried food stalls selling salted and preserved items also occupied a section of the wet market. Sometimes, other miscellaneous items such as Clothes, Toiletries and Kitchenware could be found in the wet market, making it a convenient, one-stop shop for many customers.

From 1970 onwards, Singapore saw a new generation of traditional wet markets being built. Most of these were located within housing estates and part of the government's resettlement project to ensure convenience for its residents. The new generation wet-market would house cooked food stalls, fresh produce stalls and the miscellaneous sundry items, all within the same building.
The foodstuffs sold at the traditional wet market were often untidily displayed and exposed. Customers were free to pick and select their choices, often touching and smelling the items for freshness. As the prices were subject to the daily wholesale price, the costs of these foodstuffs were not visibly displayed. Customers would simply check with the stall owner on the price of their selected item. Sometimes, this may involve some bargaining until an agreed price is reached. The stall keeper would then weigh and roughly pack the items with old newspaper or clear generic plastic bags. For poultry, fish and meat items, stall keepers provided the added service of slicing the meat or poultry into smaller pieces or cleaning the fish's stomach and descaling the fish for their customers.

As most housewives frequented the wet markets daily, they became very good friends with the stall keepers who would recommend them the catch or buy of the day at very reasonable prices.

The modern day supermarket on the other hand adopts a more professional and sophisticated management style. With its clean air-conditioned environment, bright lighting and modern facilities to its well-stocked shelves and racks of various foodstuff and household items, the supermarket is definitely a favourable place to spend a leisurely afternoon or evening shopping for foodstuffs and daily necessities.

The wide variety of imported and local products are orderly packed and displayed on organised shelving in clearly marked aisles (Refer to my CD-ROM movie 'Modern Supermarket' under category of Food packaging value). Prices are visibly displayed and no bargaining is allowed. Sales assistance is on hand to provide assistance only when required; thus customers seldom approach the sales assistance for casual talk. Customers select their purchases in an orderly manner and proceed to pay for the items at the cashier. Their selection would be packed into carrier bags bearing the name of the supermarket and sometimes, some advertisement or promotion.
Following are the interesting of comparison in the sales environment between traditional wet markets and the modern supermarkets by pictures.

**Standard Traditional Wet Market in Singapore.**

**Untidy, Noisy, Smelly and Over crowded marketing environment in traditional wet market.**

Fig.P.3.17. (1). *An untidy vegetable stall in the traditional wet market with some items displayed haphazardly on the floor.*

Fig.P.3.18. (2). *A stall selling fresh bean curds and fishcakes.*

Fig.P.3.19. (3). *Smelly poultry stall exposes their produce openly.*

Fig.P.3.20. (4). *At one of the busy fresh fish stall, hawkers help their customers to clean the fish stomach and descale the fish.*
Fig.P.3.21. A Modern Supermarket- Clean, Bright, Tidy with air-conditioned comfort, All goods are systematically display.
Following are the tables indicating different selling conditions between the modern supermarket and the traditional wet market in Singapore

<table>
<thead>
<tr>
<th>No.</th>
<th>Conditions</th>
<th>Traditional Wet Market</th>
<th>Modern Supermarket</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Business hours</td>
<td>5.00 a.m. - 2.00 p.m.</td>
<td>9.00 a.m. - 9.30 p.m.</td>
</tr>
<tr>
<td>2.</td>
<td>Variety of foodstuff and goods</td>
<td>• Daily raw and fresh foodstuff items</td>
<td>• Wide range of general daily foodstuff.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Dried salted and preserved traditional foodstuff item</td>
<td>From raw and fresh to frozen and preserved items (local and imported)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Limited selection of kitchenware</td>
<td>• Wide range of household and kitchenware items</td>
</tr>
<tr>
<td>3.</td>
<td>Target consumers</td>
<td>• Homemakers</td>
<td>• Young professional couples</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Cooked food hawkers</td>
<td>• White collar worker</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Residents living close by (Regulars)</td>
<td>• Expatriates and tourists</td>
</tr>
<tr>
<td>4.</td>
<td>Price</td>
<td>• 5% - 10% cheaper in general raw and fresh foodstuff items</td>
<td>• Slightly more expensive in general foodstuff items</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Often features special offers and discounts on particular food-stuff items</td>
</tr>
<tr>
<td>5.</td>
<td>Services</td>
<td>• Provide additional service requested by the customer e.g.: descaling and cleaning of the fish, chopping meat into small pieces</td>
<td>• Staff are more polite in general</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Develop a rapport with regular customers</td>
<td>• Provide clean and smart carrier bags</td>
</tr>
<tr>
<td>6.</td>
<td>Marketing environment</td>
<td>• Noisy</td>
<td>• Air conditioned</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Overcrowded</td>
<td>• Hygenic and clean</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Rushed and busy</td>
<td>• Comfortable</td>
</tr>
<tr>
<td>7.</td>
<td>Hours spent on marketing</td>
<td>• Less than an hour unless during peak periods like festive seasons</td>
<td>• Average more than an hour</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Comfortable environment</td>
</tr>
<tr>
<td></td>
<td>Rush is due to the unclean and stuffy environment</td>
<td>encourages customers to browse leisurely</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>--------------------------------------------------</td>
<td>------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>8. Food packaging situation</td>
<td>• 80% - 90% of general foodstuff items come without packaging</td>
<td>• 95% of the general foodstuff item are packaged hygienically and attractively</td>
<td></td>
</tr>
</tbody>
</table>

**H2. Analysis of the Food Packaging and Display in the existing Traditional Wet Market and the Modern Supermarket.**

In Singapore, almost all the traditional wet markets are housed in buildings owned by the government. Hawkers have to apply for a license through the relevant authorities to rent a stall for approximately $S per month. To cut cost on the expenditure, most of the hawkers are self-employed and manage their own stalls. If there were any assistants, they were usually employ with another family member. As the limited space of the stalls were mainly used to sale their daily products. Small cold storage installed within the market were share by hawkers who had to stock products over night. Raw and fresh foodstuffs displayed were often cramped in whatever available spaces, messily stacked or roughly arranged.

More than 80% of foodstuff sold at the traditional wet market are sold without packaging or with dull, unattractive or unhygienic materials. This is often the case for poultry, meat, seafood and vegetables. The other 15% of the foodstuff sold are from salted sundries stalls, sold in traditional jars or bottles with simple and dull looking labels.

Dried and salted seafood products, which include delicacies like scallops, shark fins, abalone and sea cucumber, were popular favourites during special celebrations for various ethnic groups. These were conveniently found at the traditional wet market. These items were sold without any standard packaging, they were placing altogether in wooden cabinets or baskets and the required quantity removed when purchased. Some of the raw and salted items, which were exposed often, attracted flies and other insects, which projected unhygienic and unprofessional images. Those dried
foodstuffs that were packed in clear plastic bags and dangled from the ceiling. (Refer to picture attached). Some did not have price tags and those that did were on hand written scraps of paper attached to the item. These stalls were often packed full with items and over-crowded and strong smells from these dried items made it quite unbearable to stay for long at the stall. Despite more space being allocated for these stalls, hawkers still cramped the stalls with as much variety and quantity as they could, thus giving a cramped, messy image. When these items were bought, they would be packaged in standard pink plastic bags, which carried no identification of the manufacturer, stall, brand or date of expiry.

Modern supermarkets on the other hand, have the necessary capital to invest in marketing strategies, interior decor and shopping concept. From the systematic aisles of various foodstuffs available from different brands and variations to the hygienic and eye-catching packaging of the items, the supermarket projects a competent and professional product, service and environment. Right from the minute a shopper enters the supermarket; they will push a trolley through the aisles of products and select whatever he wanted to purchase. Simply referring to the price displays and product packaging for relevant information on product name, brand, manufacturer contact details, net weight, expiry date, ingredients etc. they rarely speak with the supermarket staff and is out of the supermarket within an hour.

Food packaging thus acts like a “silent salesperson”, from its presentation to its packaging design and colours, it seeks to attract and appeal to as many customers as possible.

As I was writing this paragraph concerning the importance of food packaging and displaying in the local food market, coincidentally, there was an article published in the leading Chinese daily, Lianhe Zaobao on 2nd December 1997. Occupying three-quarters of a full page, the article covered the modern supermarket business versus the traditional wet market. The report also featured interviews with foodstuff stall owners and regular customers of the traditional wet markets. An analysis of the advantage and disadvantage of shopping within a traditional wet market as compared to the modern supermarket.
The conclusion drawn was that gradually, a large percent of the traditional wet market customers would be attracted to the modern supermarket, due to the following:

(a). The Modern Supermarket provides a wide selection of foodstuffs.

(b). The Modern Supermarket provides a more conducive and comfortable environment, customers can “enjoy” their grocery shopping.

(c). The convenience of the packaging of foodstuffs sold at the Modern Supermarket by storing into the cupboard for storage or popping it into the refrigerator without cleaning.

(d). The regular of special offers and promotions attract many customers.

(e). The longer hours at the Modern Supermarket and convenience of location and parking space appeal to the young professionals who tend to shop more in the evenings.

(f). The systematic and well classified shelves of products make for easy selection and made grocery shopping a breeze.

The above report had once again confirmed what I had been stated early, the marketing habit of majority young Singaporean had been changed.
H3. A marketing survey on customer buying habits in the traditional wet markets and the modern supermarket

On August of 1996, I set a food-packaging project for my graphic diploma course final year students at NAFA (Refer to project PA). The project involved a market research of customers’ buying habits in the traditional wet markets and the modern supermarkets in Singapore. 125 students responded to this food-packaging project. The students conducted interviews with customers from various backgrounds and presented a very interesting report. (Refer to attach reports 1,2,3,4 and 5). (Insert student survey report).

From this survey done by my students, I noticed that there are obvious conclusions that the customers can be divided into two different groups as follows:

**Group A: Traditional Wet Market customers:**
Mainly female homemakers between the ages of 35-65 who are residents living at HDB housing estates and other private estates located near a traditional wet market. Their marketing habits include daily trips to the wet market for their groceries and preference for fresh food and ability to bargain on prices.

**Group B: Modern Supermarket customers**
Mostly professional young couples, yuppies, and students ages between 20 to 50. The longer business hours of the Supermarket are a convenience to this target market. The younger generation prefers to spend the clean, bright, air-conditioned and comfortable environment of the modern supermarket. They are more concerned with the hygienic image of foodstuffs packed appropriate packaging. They also feel that there is more variety to choose from.

Recently, the local newspapers and marketing sources have reported that the numbers of the Modern Supermarkets, especially giant supermarket investments by international food traders or businesses have increased rapidly in Singapore. For example, “Carrefour” from France, “Tops” from Holland, and “Shop ‘n’ Save”. To ensure that their businesses attract more
customers and remain competitive, these Supermarkets use lots of advertising and publicity to promote themselves. Often offering competitive bargain prices and special offers and discounts. The number of customers has increased during the last few years. Despite the traditional wet market’s strength to provide fresh and cheaper foodstuff daily, the successful trading strategy and impressive advertising campaigns of promotion of the modern supermarket has won a lot of converts.

The article that appeared in the Chinese local daily, “Lianhe Zaobao” dated 2 December 1997, which I had mentioned previously included a survey table. This table depicts the advantages and disadvantages of marketing within the Traditional Wet Market and the Modern Supermarket. The survey is similar although more detailed than the school project done by my students last year. I’m translating it here to support my report.

ADVANTAGE AND DISADVANTAGES BETWEEN SHOPPING AT THE TRADITIONAL WET MARKET AND THE MODERN SUPERMARKET

<table>
<thead>
<tr>
<th>Modern Supermarket (Advantages)</th>
<th>Modern Supermarket (Disadvantages)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• More varieties of food items and goods</td>
<td>• All foodstuffs are already packed. Customers are not able to select on the spot.</td>
</tr>
<tr>
<td>• Fruits are fresher and cheaper.</td>
<td>• Fish stomachs are not cleaned and descaled.</td>
</tr>
<tr>
<td>• Special offer price esp. for chicken and certain vegetables.</td>
<td>• Expensive in some fresh items likes fish and other seafood.</td>
</tr>
<tr>
<td>• Clean, air-conditioned and comfortable.</td>
<td>• Some food items have been frozen for a long time and are not so fresh.</td>
</tr>
<tr>
<td>• Often features promotional. Sales discounts. Membership cardholders are entitled to refund and other specials.</td>
<td>• Delicacies like organs and intestines are not available.</td>
</tr>
<tr>
<td>• Longer and convenient hours for working professionals.</td>
<td>• Impersonal -little communication between supermarket staff and customers.</td>
</tr>
<tr>
<td>• Tidy and systematic display of goods for easy access.</td>
<td></td>
</tr>
<tr>
<td>• Friendly staff.</td>
<td></td>
</tr>
<tr>
<td>• High quality of goods which cannot be found at traditional wet markets</td>
<td></td>
</tr>
<tr>
<td>• Comfortable environment enables customers to relax and enjoy shopping</td>
<td></td>
</tr>
<tr>
<td>Traditional Wet Market (Advantages)</td>
<td>Traditional Wet Market (Disadvantages)</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>----------------------------------------</td>
</tr>
<tr>
<td>• Customers familiar with environment</td>
<td>• Environment is wet, untidy with strong foul smells</td>
</tr>
<tr>
<td>• Customers allowed to choose their purchase the quantity required</td>
<td>• limited business hours</td>
</tr>
<tr>
<td>• Additional services provided by stall owners like descaling of the fish and cleaning up the fish</td>
<td>• handling of food is sometimes unhygienic</td>
</tr>
<tr>
<td>• Food items are fresh</td>
<td>• prices are expensive on certain foodstuff</td>
</tr>
<tr>
<td>• Prices are comparably cheaper</td>
<td>• some rude stall owners</td>
</tr>
<tr>
<td>• More interaction with stall owners. Closer relationship</td>
<td>• no special offers/discounts</td>
</tr>
<tr>
<td>• Good meeting place</td>
<td>• Process of food items is more expensive than the modern supermarket during the weekends.</td>
</tr>
<tr>
<td>• Stall owners often give advise on selections and suggestions on preparing the meat</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>The reasons for favourable Business in the Traditional Wet Market</th>
<th>The reasons for unfavourable business in the Traditional Wet market</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Concerned the requirement to individual customers.</td>
<td>• Customers dislike the hot and stuffy environment.</td>
</tr>
<tr>
<td>• Provided additional services like cleaning and cutting to smaller pieces.</td>
<td>• Younger generation and small families prefer shopping at the supermarket.</td>
</tr>
<tr>
<td>• Customers can pick and choose.</td>
<td>• Not able to do they’re shopping during the week.</td>
</tr>
<tr>
<td>• Stalls owners can lower prices subject to bargaining, as rental is cheaper.</td>
<td>• Special offer process during promotion at the supermarket has attracted some regular customer away.</td>
</tr>
<tr>
<td>• Business could maintain stability supported by regular customers.</td>
<td>• The demand for higher quality food has increased due to the higher standard of living and changing lifestyle.</td>
</tr>
<tr>
<td></td>
<td>• Families are eating out more often and require less cooking in the kitchen and less need to purchase food daily.</td>
</tr>
<tr>
<td></td>
<td>• Customers now look for polite services.</td>
</tr>
</tbody>
</table>
(Part 4)

(J) Criteria on food packaging

(K) Conclusion

(L) Appendix

(M) Bibliography
Part 4

(J) Criteria on food packaging

J1. Food packaging project in the design institutions.

Currently in Singapore, Packaging design is offered only as a minor subject under Advertising and Commercial study in the general Graphic Design Course. This current syllabus was applied by the three design institutions namely NAFA, LASALE (SIA), and TEMASEK Polytechnic. This curriculum was planned with consideration of the small local market. However, following the rapid economic development which also led to a change in Singaporeans’ eating habit and changes in the living environment, coupled with the increase in the import and export food trading over the last 10 years, the demand for the packaging designer had increased. An obvious example is the increasing number of advertisements for packaging designers. Another example is newly graduated graphic design students who are offered higher salary as a packaging designer is (starting salary $1,400 - $1,600 per month). Rather than being employed as a general graphic designer (starting salary $1,200 - $1,400 per month). A lot of companies in the food industries in Singapore are looking for good food packaging for their foodstuff products sold in local and overseas markets believe this situation will soon be reflected in the developing countries in Southeast Asia countries as well as the giant food market of China.

A review of the above and analyzing the development of the processed food industry in the region, it can be noted that Design Education Institutes play a very important role in training the young packaging designers.

At NAFA, students are encouraged to look at both the local and regional food markets, to study and understand the value of the traditional local foodstuffs. From the selling and buying environment in the traditional market, to how the ‘images’ of these multi varieties of delicious foods are developed when sold in the local food stalls. The students are encouraged to explore food packaging design for local traditional foodstuffs because there is a lot of potential in our local delicacies and traditional foodstuffs that are currently sold without packaging. This packaging concern will then address the rapidly
changing living environment and the changing of the younger generations’ eating habits. Another reason based on a survey done by NAFA students that there are a large number of stable consumers in the local markets and overseas markets for traditional foodstuff.

The food packaging exercise I set for my NAFA 2nd year graphic students is targeted mainly at the local market. The target consumers are the different levels of Singaporeans and tourists. A more sophisticated food packaging project (especially processed foodstuffs) was set for the final year graphic students.

The packaging project I set is within the framework of a corporate identity form, to ensure that students learn about corporate image and marketing etc.

Following are the 4 steps of the student’s exercise designed for the packaging design subject applied to NAFA Graphic Design students:

(a). The basic of 3-D and construction techniques study. To understand the appropriate Form and Shape applied on the proposed packaging.

(b). Conceptual development and solving of packaging problems. To understand the appropriate material and right size applied on individual packages.

(c). Application of graphic on the packaging surface. Understand the use of appropriate colour scheme, typography layout applied on the proposed packaging.

(d) Project presentation, a project presentation will be held after the packaging project is completed. (Normally 5 weeks from the start of the project).
Throughout the exercise, the students will group themselves in their respective groups to discuss the marketing of the proposed product. During the discussion, individual students will be called upon to do the presentation on behalf of his/her group. He or she will be required to describe how the design work has progressed and the design concept developed. Questions from other students will be encouraged to pinpoint design errors and the group will have to reply. This type of interaction will also enable the students to communicate effectively and enable them to defend and explain their design works. Most importantly it will train them to learn how to market their design concepts.

At NAFA, when a food-packaging project is assigned to the students, a brief is given to explain the details of the proposed product. Some marketing survey will be required to carry out by students before developing the design concept. To ensure that students understand the relevance of the market and the product (the package), the project lecturer will establish contact with the manufacturer or sole agent for the students to approach for more marketing information.

This form of training has proven effective as a review of the NAFA graduation diploma show from previous years show outstanding food packaging design works of NAFA students which won the high praise and interest from the design field and the public.

One of packaging project I had set for my second year graphic design students on March 1997 was to create a ‘Modern’ packaging for ‘Traditional’ local dried foods and traditional snacks. When students completed the above project and having a presentation. It had attracted the interest of a local art journalist who wrote a special article introduce the progress of the project developments and interview with some of the students. The article was appeared on the leading newspaper on special addition.¹
Since I introduced packaging design as a mandatory within NAFA as training program in 1983. Graduates have worked in the design field in Singapore, Malaysia and Indonesia.

These ex-NAFA students have played an important role in developing and improving the local food packaging in their home countries. Following are the list of some NAFA outstanding students who had involved in food packaging design within the design field:

(1). Name of Student: Tan Tse-Guan (9 batch) 1994.
   Client: Dar Lee Frozen Food Supplies Ltd.
   (d). Prawn-balls etc.

(2). Name of Student: Annie Tan Sock Hwee (10 batch) 1994.
   Client: Fu Kwee Xiang Foodstuff Co.
   Food Packaging: (a). All different variety of Moon-cakes. (b). Festival Gift packages for B.B.Q Pork. (c). Different variety of traditional cookies etc.

(3). Name of Student Lee Soong Heng (8 batch) 1993.
   Client: Hong Fock Food Industry Ltd.
   Food Packaging: (a). Dried Cuttlefish Roll. (b). Traditional Sweet Pastry.
   (c). All different variety of traditional tidbits etc.

In Singapore, local food packaging has made significant progress to reach the international standard over the last few years. There are a lot of traditional foodstuffs and local cooked snacks, which already have a new visual image with hygienic modern packaging. (Refer to pictures on Part 3 pages 78).

From the above achievements, I feel a sense of pride and comfort that the efforts and cares what I have been contributed in improving and promoting our local food packaging through design education for the last 15 years has borne some results.
From the education viewpoint, I believe that this is the right time for Singapore Design Institutions to address the current design curriculum, to upgrade packaging design as major subject in their syllabus. This will prepare our designers of tomorrow to facing the high demand for good packaging designs and designers.

For example, food industry is entering to the new era with the production on 'Hygiene' and 'Convenient' modern foodstuff. On packaging technology, there will be new packaging material on research and development to serve the changing market trend. Packaging designer must always be alert in follow the product trend during thinking of design concept. In construct appropriate Shape, Graphic Design and appropriate packaging Material etc. (e.g. Recycling and environmental friendly material).
Following are some of the outstanding Food Packaging works display on NAFA Diploma Show 1997. These were the major projects for final year graphic design students.

Fig. P4. 1. 'Spring Roll Skin' Packaging Design by Wang Peiyuh, Joy. (1997 NAFA Diploma Shaw).

Fig. P4. 2. 'Tropical Fruits Juices' Processed Food Packaging Design by Tan Li Yong. (1997 NAFA Diploma Shaw).
Fig. P4. 3 'Seafood Fried Rice' Processed Food Packaging Design by Tan Kheng Tze, Eric. (1997 NAFA Diploma Show).

Fig. P4. 4. 'Nonya Cake' Packaging Design by Ng Shen Hui, Leona. (1997 NAFA Diploma Show).
Fig. P4. 5. 'Tropical Fruits Juices' processed Food Packaging Design

Fig. P4. 6. 'Biscuit and Cookies’ Gift Packaging Design
by Ng Hew Kang, Jean. (1997 NAFA Diploma Shaw).
Fig. P4.7. 'Curry Beef with Rice' Processed Food Packaging Design by Leo Pei Fern, Wendy. (1997 NAFA Diploma Show).

Fig. P4.8. 'Chicken Noodle' Processed Food Packaging Design by Lee Boon Por, Alvin. (1997 NAFA Diploma Show).
J2. Criteria applied on modern food packaging design

‘Simplicity is the Best’ is one of the golden rules for every designer working on their design project. In packaging design, ‘Simplicity’ is not enough. A good packaging should be based on 3 points as follow:

(a). Functional
Any single packaging must be designed to serve its purposed. The very functions of packaging are to Preserve, Contain, and Protect and inform results in a reduction of food wastage and environment benefits. Be it as small as a matchbox or as big as a coffin, the designer has to ensure that the proposed products or items packed within the packaging are well protected. The choice of appropriate materials used for packaging is very important. The right choice of material not only protects the item packed within; a functional package should be able to let its users feel a sense of trust and convenience.

(b). Economical
The packaging material and the shape of the proposed package design are subject to mass production cost considerations. The cost of the packaging will undoubtedly be reflected in the products’ selling price and the profit margin. The importance of packaging materials can be seen from the large percentage it accounts for in the total cost of a manufacturing business. “A sample of how packaging materials on average accounts for 17% of the total costs following the general split for a W. European food company cost breakdown as follow: -

<table>
<thead>
<tr>
<th>Foods</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Product materials costs</td>
<td>50%</td>
</tr>
<tr>
<td>Packaging materials costs</td>
<td>17%</td>
</tr>
<tr>
<td>Packaging operation costs</td>
<td>8%</td>
</tr>
<tr>
<td>Other production costs</td>
<td>25%</td>
</tr>
<tr>
<td>Total factory costs</td>
<td>100%</td>
</tr>
</tbody>
</table>

The percentage for which packaging costs account for different products. "The manufacturers of soaps, detergents, toys and luxury goods experience ever higher percentages for packaging materials expenditure, while, in the pharmaceutical industry, and in the cosmetic industry especially, packaging materials constitute largest part of the total costs".3

(c). Graphic message

"A package should communicate what 'Benefit' it will bring to it's buyers"4 Packaging is the ‘SILENT SALESMAN’ when the product lies on the shelf. In the modern supermarket and some self-service minimarts, same products offered by different brands are displayed side by side on the shelves. To ensure that consumers get the right information about the product, the Individual brands have to promote themselves through effective and eye-catching graphic messages printed on the package. The graphic design applied on a package is not only a decoration or just there to beautify the product, it is also used to discern similar products offered by different brands.

In order for the consumers to easily identify their preferred brand and product's quality, a clear message through graphic design printed on the surface of the packaging should be able to communicate clearly and effectively to the target consumer group. Therefore, from the consumers' point of view, Graphic design plays a very important role in packaging design.

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4 Ibid
An effective Graphic Design applied on a packaging should consist of the following criteria:

(a). Name of product (Clear and obvious).
(b). Brand of product or Name of manufacturer (Clear and preferably printed on the front of the package).
(c). Ingredients of product (Usually printed at the back of the package).
(d). Weight of product (Especially used in food packaging).
(e). Instructions (Only applicable for individual product).
(f). Illustration / Picture of product (A key attraction factor in food packaging).
(g). Die-cut window (Applicable for certain packaging without picture or illustration).
(h). Consumption date (Mainly applicable for food packaging).
(i). Price bar code (For retailers price reference).

The above graphic design criteria are important guides for young designers to apply to their packaging design. Although it does not guarantee the sale of the product it will prevent against some common errors on packaging designs.

An effective packaging should consist of a strong visual accompanied by a clear and useful message (product information) highlighting the product benefits. A strong graphic will also catch the attention of the consumer.
Following is a reference from “The packaging design procedure combine the following elements”⁵ to show the components of a total packaging design.

TOTAL PACKAGING DESIGN:

- Packaging Form
  - Size
  - Shape
- Packaging Construction
- Packaging Materials
  - Colour
  - Layout
  - Illustration
  - Text

⁵ Consultancy on packaging design. For consumer products. 10-14 April 1980. Singapore.
A review of the design institutions and some practicing graphic design studios in Singapore where young designers are assigned to a packaging project show that they often commit some common errors. These common errors always occur in their concept development and graphic layout. These common errors can be avoided if the above packaging criteria are adhered to.

Following are some common errors to be aware of and to avoid making:

(A). **Form and Material:**

1. Not fully understanding the project brief before the concept is developed. This will lead to the wrong direction in concept development.

2. Not fully understanding the character of the proposed products to be packaged. This will lead to using inappropriate form and material for the proposed package.

3. Lack of a 3-D mock up for detailed study and further analysis. (This error often occurs in design institutes). This will lead to loss in the accuracy of the form for which the proposed package should apply.

4. Lack of construction technique in 3-D form. This will result in the proposed packaging being either too large or too small.

5. Wrong use of material, which lead to high production cost. The wrong type of packaging material will also cause a greater increase in the likelihood of the products being easily damaged percentage during delivery, especially for export products.

6. Too much concern about designing an outstanding package such that the convenience and safety of the buyer/user is compromised.

7. Lack of a proper review of the delivery constraints and considerations. All products must be considered as being mass produced and packed into 12, 24 or 48 with in a carton. Any odd shape of package will waste space and cost more for delivery. Saving space in packaging design means reduced transport costs.

8. Finally, materials choice for the packaging should consider recycling due to environmentally friendly concern must also not be neglected.
(B). **Graphic and Aesthetics:**

(1). Too concerned about aesthetics and thus lose the main function of the graphic design on a package. This will lead to unnecessary use of colours, patterns and inappropriate typefaces used for the proposed package.

(2). Too many unnecessary colours and words used. This will in fact result in lesser visual impact to attract the consumers’ attention.

(3). Product without name or product names too small. (This error seems to occur usually in products imported from developing countries). Unless due to some special circumstances, the product name should always be clear so that the consumers are aware of what is the product packaged within.

(4). Very often there are no graphics nor even a die-cut see through window to show the freshness of the product. Graphic designers should consider see-through consumer packing or photographic graphics for packaging design.

(5). ‘Simplicity is the best’. This theory is effective throughout all types of graphic design applied on packaging. But the top priority is to provide a clear message which highlights the product benefits (refer to graphic criteria).
<table>
<thead>
<tr>
<th>Preference for Package Type</th>
<th>Proposed material and shape of package</th>
<th>Appropriate Food items to be applied</th>
<th>Advantages &amp; Disadvantages</th>
<th>Suggestion of Visual impact in Graphic Design</th>
</tr>
</thead>
</table>
| Type A                      | • Paperboard (Carton package) with or without lamination.  
• Different thickness and flexible shape subjected to size and quantity of foodstuff to be packed.  
• Wrap with PVC film to prevent the air from going in. | • Dried and crispy food.  
• Normally for products with indefinite consumption date. | • Advantages:-  
1) material easy for recycling.  
2) save wastage problem.  
3) better protection during long journey of delivery.  
• Disadvantages:-  
1) Higher production cost.  
2) Increase weight | • Highlight the name with eyes catching letterings.  
• Use contrast colour to stimulate appetite.  
• Showing products packed inside either with windows or picture (Illustration). |
| Type B                      | • Foil & (Gas Flushing) Package.  
• Flexible shape but handy in size. | • Dried and crispy food.  
• Normally for light snacks and tibits.  
• Product with short consumption date. | • Advantages:-  
1) reduce weight.  
2) keep food fresh and crispy.  
• Disadvantages:-  
1) Elaborate in recycling.  
2) Limited consumption date. | • A prominent name and strong colour for packaging surface to catch more attention. Reason is because foodstuff items are usually selling at public and crowded areas like bus terminals, cinemas, stalls, schools, etc.  
• Showing products packed inside through pictures or Illustration. |
| Type C                      | • Modified Atmosphere Packaging (MAP). Transparent plastic films in different thickness used for packing and keeping the foodstuff fresh and in good condition.  
• Shapes and size subjected to the quantity of food packed. | • Fresh and soft food (Frozen).  
• Normally for foodstuff which selling on short consumption period. | • Advantages:-  
1) protect the food in fresh condition in limited consumption period.  
2) reduce transportation costs (Light weight).  
• Disadvantages:-  
1) Not quite environmentally friendly. | • Highlight the freshness and tasty with colour and letterings.  
• Suggested typeface to be used are soft and harmonize with product packed inside. |
<table>
<thead>
<tr>
<th>Preference for Package Type</th>
<th>Proposed material and shape of package</th>
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<th>Suggestion of Visual impact in Graphic Design</th>
</tr>
</thead>
</table>
| Type D1                     | • Film and vacuum package (transparent sealed package) use different thickness of plastic films.        | • Wet/liquid and preserved foods.                               | • Advantages:-  
1) avoid leakage.  
2) keep foodstuff in good condition and hygienic.  
• Disadvantages:-  
1) limited consumption date.  
2) Not quite environmental friendly. | • Highlight the traditional preserved recipe and taste.  
• Avoid to use fresh colour.  
• Colour scheme; brown, olive green, beige.  
• Typeface could used classical letterings with graphic patterns. |
|                             | • Flexible shapes subject to easy and convenient.                                                     | • Normally for food with indefinite consumption selling period. |                                                                                           |                                               |
| Type D2                     | • Film and vacuum package (colour and sealed packed).                                                   | • Dried and salted preserved food items (mainly for seafood products) | • Advantages:-  
1) avoid the smell from leaking out.  
2) keep food in good condition and hygienic.  
3) longer consumption period.  
• Disadvantages:-  
1) Elaborated in recycling system. | • Show window to see the actual product inside the package. (seeing is believing which always the good way to convince consumers on these particular type of dried seafoods in Southeast Asia Market).  
• Highlight the hygienic and the traditional way of preserved methods.  
• Avoid to use fresh colour.  
• Colour scheme; dark brown, brown, olive green, red, beige, gold and silver. etc.  
• Lettering could use cursive typeface and not too exaggerate illustration or graphic patterns. |
|                             | • Different thickness of plastic films.                                                               | • Normally for preserved foods selling in long consumption period. |                                                                                           |                                               |
|                             | • Flexible shapes subjected to sizes and shapes of the foodstuff packed inside and the quantity.        |                                                                  |                                                                                           |                                               |

107
<table>
<thead>
<tr>
<th>Preference for Package Type</th>
<th>Proposed material and shape of package</th>
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<th>Advantages &amp; Disadvantages</th>
<th>Suggestion of Visual impact in Graphic Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type E</td>
<td>Glass or plastic containers (with sealed cap) recycle and reused materials for environmentally friendly. * Rounded or rectangular shapes.</td>
<td>Wet and seasoning with sauce food items. * Normally for preserved salted or soured foods with sauce.</td>
<td><strong>Advantages:</strong> 1) prevent leakage. 2) protect the foodstuff well in preserved and in good condition. 3) transparent container could let consumers justify the condition of the foodstuff packed. 4) longer in consumption times. 5) easy for recycled and revised. <strong>Disadvantages:</strong> 1) the weight might cost more on transportation. 2) storage space will be increase during the transportation through container cargo.</td>
<td>* Highlight the hygienic methods of preserved foods. * Preserved foods normally avoid to use fresh colour on label or package design. * Appropriate colour scheme to be used: Olive green, dark brown, brown, dark green, dark red, beige and black. * Letterings preferred are soft and cursive typeface with some graphic patterns for decoration.</td>
</tr>
</tbody>
</table>
## SPECIFICATION AND ANALYSIS OF PACKAGING AND PROPOSED OF MATERIALS USED APPROPRIATELY FOR TRADITIONAL FOOD

<table>
<thead>
<tr>
<th>Preference for Package Type</th>
<th>Proposed material and shape of package</th>
<th>Appropriate Food items to be applied</th>
<th>Advantages &amp; Disadvantages</th>
<th>Suggestion of Visual impact in Graphic Design</th>
</tr>
</thead>
</table>
| **Type F**                  | • PVC film package (transparent and sealed packed).  
• Flexible shapes.         | • General dried food items (without salt or sugar preserved and reducing the smell). | • **Advantages:**  
1) reduced weight and material cost.  
2) prevent insects.  
3) transparent plastic could show foodstuff condition directly to consumers  
• **Disadvantages:**  
1) not quite friendly for environment (elaborate in recycle) | • Graphic design enhances appetite appeal and hygienic.  
• Suggested to harmonize colour on surface of package.  
• Flexible colour to be used subjected to foods packed inside the package.  
• Appropriate letterings to be used like soft and cursive typeface.  
• Colour printing on package should consider transparent window for seeing through. |
| **Type G**  
**Note:** aims at special market.  
(Festival and gift) | • Metal, wood, cardboard, foil and plastic etc.  
• Gift box packaging are normally design for special occasions like New Year, Christmas, any ethnic group festivals etc. and selling only during the short consumption period.  
The packaging of gift box are designed with concerned on decoration rather than practical (on package surface).  
But however, the foodstuff packed inside are still have to be well protected.  
• Flexible shapes subjected to individual food items. | • Any foods which had involved in festival seasons and treated as gift to present to friends and relatives. | • Not applicable to this criteria. | • Highlight and emphasis the festival seasons greeting by striking colours.  
• Appropriate colour scheme: gold, silver, red, maroon, brown, purple, violet, etc.  
• Appropriate letterings to be used : cursive and decorative typeface with striking colour and relevant graphic patterns or illustrations. |
## Classification of Existing Traditional Foodstuffs Selling in Singapore

### Category A
Process/Salted and soured preserved items

| (A) Wet/Liquid | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| (B) Dried/Squid |   |   |   |   |   |   |   |   |   |
| (C) Other Forms/Shapes |   |   |   |   |   |   |   |   |   |
| (D) Selling in traditional wet markets/ Provision Shops/Hawker Stalls | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| (E) Selling in Modern Supermarket/ Mini-marks | √ |   |   |   |
| (F) Manufacturers
  1) Home made | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
  2) Mini Factoys |   |   |   |   |   |   |   |   |   |
  3) Factory with modern technology facility |   |   |   |   |   |   |   |   |   |
  4) Packed with natural materials and others |   |   |   |   |   |   |   |   |   |
| (G) Existing Packaging Status
  1) Without Package | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
  2) Dull Packed | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
  3) Modern Packed |   |   |   |   |   |   |   |   |   |
| (H) Type of Consumers
  1) Housewives | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
  2) Working Adults (M/F) | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
  3) Younger Generation (M/F) |   |   |   |   |   |   |   |   |   |
  4) Ages Group (M/F) |   |   |   |   |   |   |   |   |   |
  5) General Consumers |   |   |   |   |   |   |   |   |   |

### Preference for Package Type

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<th>D1 or E</th>
<th>D1 or E</th>
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<th>D1</th>
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<th>D1 or E</th>
</tr>
</thead>
</table>

110
### Classification of Existing Traditional Foodstuffs Selling in Singapore

#### Category A

...continue

| (A) Wet/Liquid | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| (B) Dried/Squid |
| (C) Other Forms/Shapes | ✓ | ✓ |
| (D) Selling in traditional wet markets/ Provision Shops/ Hawker Stalls | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| (E) Selling in Modern Supermarket/ Mini-marks | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| (F) Manufacturers
  1) Home made | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
  2) Mini Factorys | 3 | 3 |
  3) Factory with modern technology facility | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
  4) Packed with natural materials and others |
| (G) Existing Packaging Status
  1) Without Package | 11111111 |
  2) Dull Packed | 1111 |
  3) Modern Packed | 2222 |
| (H) Type of Consumers
  1) Housewives | 11111111 |
  2) Working Adults (M/F) | 4 | 4 | 4 |
  3) Younger Generation (M/F) | 4 |
  4) Ages Group (M/F) | 5 |
  5) General Consumers |

#### Preference for Package Type

*Preserved with soil and Dried Wheat Skin on surface.*
### Classification of Existing Traditional Foodstuffs Selling in Singapore

#### Category B1
Process squid & dried items (mostly vegetarian)

<table>
<thead>
<tr>
<th></th>
<th>Dried Seaweed</th>
<th>Dried sweet bean curds</th>
<th>Dried Bean Sticks</th>
<th>Dried Mushrooms</th>
<th>Dried Black &amp; White edible fungus</th>
<th>Dried sweet potato slices</th>
<th>Dried bamboo shoot slices</th>
<th>Dried ginger slices with chillis</th>
<th>Dried chillis</th>
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<tr>
<td></td>
<td>3) Factory with modern technology facility</td>
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<td>4) Packed with natural materials and others</td>
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<td>3) Modern Packed</td>
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</table>

**Preference for package type**
CLASSIFICATION OF EXISTING TRADITIONAL FOODSTUFFS SELLING IN SINGAPORE

### Category B1

... continue

| (A) Wev/Liquid | ![Image](image_url) |
| (B) Dried/Squid | ![Image](image_url) |
| (C) Other Forms/Shapes | ![Image](image_url) |
| (D) Selling in traditional wet markets/ Provision Shops/Hawker Stalls | ![Image](image_url) |
| (E) Selling in Modern Supermarket/ Mini-marks | ![Image](image_url) |
| (F) Manufacturers | ![Image](image_url) |
| 1) Home made | ![Image](image_url) |
| 2) Mini Factorys | ![Image](image_url) |
| 3) Factory with modern technology facility | ![Image](image_url) |
| 4) Packed with natural materials and others | ![Image](image_url) |
| (G) Existing Packaging Status | ![Image](image_url) |
| 1) Without Package | ![Image](image_url) |
| 2) Dull Packed | ![Image](image_url) |
| 3) Modern Packed | ![Image](image_url) |
| (H) Type of Consumers | ![Image](image_url) |
| 1) Housewives | ![Image](image_url) |
| 2) Working Adults (M/F) | ![Image](image_url) |
| 3) Younger Generation (M/F) | ![Image](image_url) |
| 4) Ages Group (M/F) | ![Image](image_url) |
| 5) General Consumers | ![Image](image_url) |

Preference for package type

---

113
## CLASSIFICATION OF EXISTING TRADITIONAL FOODSTUFFS SELLING IN SINGAPORE

### Category B2
Process squid & dried items (non-vegetarian)

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<tr>
<td>3) Factory with modern technology facility</td>
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<tr>
<td>4) Packed with natural materials and others</td>
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</table>

Preference for package type

114
## CLASSIFICATION OF EXISTING TRADITIONAL FOODSTUFFS SELLING IN SINGAPORE

### Category D
Process dried foodstuff items (for tibits)

<table>
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<tr>
<th></th>
<th>Dried jackfruit chip</th>
<th>Dried sweet banana</th>
<th>Dried topical chip</th>
<th>Fish cracker</th>
<th>Prawn cracker</th>
<th>Crab &amp; squid cracker</th>
<th>Dried melon seeds</th>
<th>Dried sunflower seeds</th>
<th>Dried sweet plum</th>
<th>Dried sour plum</th>
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### Preference for package type

Note: Category D food items mostly sell at Bus Terminal, Railway Station and outside Cinema Theatre etc.
# Classification of Existing Traditional Foodstuffs Selling in Singapore

## Category C

Process dried fruits & herbs items (mostly for boiling soup)

<table>
<thead>
<tr>
<th></th>
<th>Dried Lotus seeds</th>
<th>Dried Longan Fruit</th>
<th>Dried Chestnut</th>
<th>Dried Almond</th>
<th>Dried Apricot</th>
<th>Dried Jujube (dates)</th>
<th>Dried Persimmon slices</th>
<th>Dried Sugar Melon</th>
<th>Dried Chinese Wolfberry</th>
<th>Dried Lotus Roots</th>
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<tbody>
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## (F) Manufacturers

1. Home made
2. Mini Factory
3. Factory with modern technology facility
4. Packed with natural materials and others

<table>
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## (G) Existing Packaging Status

1. Without Package
2. Dull Packed
3. Modern Packed

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## (H) Type of Consumers

1. Housewives
2. Working Adults (M/F)
3. Younger Generation (M/F)
4. Ages Group (M/F)
5. General Consumers

<table>
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Preference for package type
## CLASSIFICATION OF EXISTING TRADITIONAL FOODSTUFFS SELLING IN SINGAPORE

### Category C

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**Manufacturers**

1) Home made
2) Mini Factorys
3) Factory with modern technology facility
4) Packed with natural materials and others

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**Existing Packaging Status**

1) Without Package
2) Dull Packed
3) Modern Packed

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**Type of Consumers**

1) Housewives
2) Working Adults (M/F)
3) Younger Generation (M/F)
4) Ages Group (M/F)
5) General Consumers

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Preference for package type

117
### Classification of Existing Traditional Foodstuffs Selling in Singapore

#### Category D

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Preference for package type
### CLASSIFICATION OF EXISTING TRADITIONAL FOODSTUFFS SELLING IN SINGAPORE

#### Category E1
Traditional local manufactured cookies, biscuits and candies

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<th>Rice cookies and crackers</th>
<th>Sesame cookies</th>
<th>Spring Onion cookies</th>
<th>Eggs rolls</th>
<th>Eggs cookies and biscuits</th>
<th>Cookies with black bean filling</th>
<th>Cookies with sesame seed filling</th>
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Preference for package type
## CLASSIFICATION OF EXISTING TRADITIONAL FOODSTUFFS SELLING IN SINGAPORE

### Category E1

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Preference for package type

120
## CLASSIFICATION OF EXISTING TRADITIONAL FOODSTUFFS SELLING IN SINGAPORE

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<td>(C) Other Forms/Shapes</td>
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<td>3) Factory with modern technology facility</td>
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Preference for package type
### Classification of Existing Traditional Foodstuffs Selling in Singapore

#### Category F
Row of Spicy Items

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#### (A) Wet/Liquid

#### (B) Dried/Squid

#### (C) Other Forms/Shapes

#### (D) Selling in Traditional Wet Markets/ Provision Shops/Hawker Stalls

#### (E) Selling in Modern Supermarket/ Mini-marks

#### (F) Manufacturers
1. Home made
2. Mini Factories
3. Factory with modern technology facility
4. Packed with natural materials and others

#### (G) Existing Packaging Status
1. Without Package
2. Dull Packed
3. Modern Packed

#### (H) Type of Consumers
1. Housewives
2. Working Adults (M/F)
3. Younger Generation (M/F)
4. Ages Group (M/F)
5. General Consumers

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Preference for package type
### CLASSIFICATION OF EXISTING TRADITIONAL FOODSTUFFS SELLING IN SINGAPORE

**Category F**

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<th>Zedoary powder</th>
<th>Five-spice powder</th>
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Preference for package type

123
### CATEGORY G1

Festival foodstuff items of individual ethnic group (Chinese)

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<th>(B) Dried/Squid</th>
<th>(C) Other Forms/Shapes</th>
<th>(D) Selling in traditional wet markets/Provision Shops/Hawker Stalls</th>
<th>(E) Selling in Modern Supermarket/Mini-marks</th>
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*TPNM: Traditional packed by natural material*
# Classification of Existing Traditional Foodstuffs Selling in Singapore

## Category G2
Festival foodstuff items of individual ethnic group (Malay)

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*TPNM: Traditional packed by natural material*
## CLASSIFICATION OF EXISTING TRADITIONAL FOODSTUFFS SELLING IN SINGAPORE

### Category G3
Festival foodstuff items of individual ethnic group (Indian)

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Preference for package type
## Classification of Existing Traditional Foodstuffs Selling in Singapore

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Dried/salted seafood products items

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Preference for package type
## CLASSIFICATION OF EXISTING TRADITIONAL FOODSTUFFS SELLING IN SINGAPORE

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Dried/salted seafood products items

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<tr>
<td>(B) Dried/Squid</td>
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<td>(C) Other Forms/Shapes</td>
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<tr>
<td>(D) Selling in traditional wet markets/ Provision Shops/Hawker Stalls</td>
<td>✔</td>
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<tr>
<td>(E) Selling in Modern Supermarket/ Mini-marks</td>
<td>✔</td>
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<tr>
<td>(F) Manufacturers</td>
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<td>1) Home made</td>
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<td>2) Mini Factorys</td>
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<td>3) Factory with modern technology facility</td>
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<td>4) Packed with natural materials and others</td>
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<td>(G) Existing Packaging Status</td>
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<td>1) Without Package</td>
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<td>2) Dull Packed</td>
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<tr>
<td>3) Modern Packed</td>
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<td>(H) Type of Consumers</td>
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<td>1) Housewifes</td>
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<td>2) Working Adults (M/F)</td>
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<td>3) Younger Generation (M/F)</td>
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<td>4) Ages Group (M/F)</td>
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<td>5) General Consumers</td>
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**Preference for package type**
(K) Conclusion

Over the last 25 years, Singapore’s economic growth has created greater job opportunities. This has resulted in more disposable income for each family equating to greater spending power. In turn this has encouraged them to spend more on a whole range of things, including various foods, especially on exotic, imported foods which usually boast better quality and hygiene standards. The results of these developments have clearly been changing the lifestyle and eating habits not only in Singapore, but also in other regional developing countries over the last 10 years.

Another trend is that lands within the urban areas of developing countries has become more valuable and is given the highest priority in economic planning. Old buildings and shophouses, including the traditional wet markets and open-air hawker stalls have been affected. Previously, these architectures were built in the heart of the town centre and usually occupied a big space. However today, faced with the policy of national economic development, the old has had to make way for new development projects and have even been forced by law to move from the city centre area.1

In consideration of the above, the trend in the future development of developing countries in Southeast Asia could be due to two circumstances:

(1). Economic growth has greatly altered the lifestyle and thus, eating habits of urban citizens.

(2). Economic urban development has resulted in more land being acquired to build modern buildings in urban areas, including more comfortable modern supermarkets and modern food courts with better facilities.

1 'Background' Annual Report 1974/75, Urban Redevelopment Authority, Singapore.

From the Traditional Wet Market to the Modern Supermarket
(Food Packaging Value In Singapore)
A key result of the situation in Southeast Asia's development countries is that traditional wet markets are replaced with modern supermarkets within the urban area. Singapore is a good example of such a pattern of change in the past 25 years.¹

However as I had highlighted earlier in my thesis. The rapid changes in the living environment and consumer pattern and tastes have resulted in the absence of traditional foodstuffs and daily snacks in the modern supermarket. As the research has demonstrated, one main reason is that these traditional foodstuffs are unable to fulfill the stringent requirements of the modern packaging criteria. These multi-racial traditional foodstuffs and snacks are well known to be delicacies, remarkable in their shapes and colours, usually found in the wet markets and traditional food stalls within the shophouses. Many of these traditional foodstuffs and snacks were actually reflect the various ethnic cultures heritage and myths. These are also foods that our older generation and the majority of Singaporeans once relied upon in their daily lives.

The following are the findings I have concluded upon in response to my research objectives:

(A). Preferences for shape, colour and material for food packaging in Singapore multicultural environment. (Refer to page 6 'Objective').

My research had led conclusively to the finding that different ethnic groups in Singapore had their individual preference for traditional colour, shape and taste of foods. These individual ethnic preferences are very clearly expressed in their religious and festive preferences. For example, The Chinese temple in Singapore are mostly painted in 3 major colours, Red, yellow and green. The round shape is popular with many Chinese, because the rounded shape symbolizes 'Perfection', 'Good luck' and 'Prosperity'. 'Red' is the most popular colour for many festival occasions. Especially on occasions like Chinese New Year, Weddings and Birthday cerebration etc. The older generation of Chinese are particularly concerned about the appropriate use of colour and shape for religious and festive occasions.

In the Malay community, yellow is the “privilege” colour amongst royalty. The groom and the bride usually wear yellow colour wedding attire during their wedding ceremony. Green is also a common colour for religious and festival activities.

The Indian temple is considered one of the most colourful religion architecture compared to other ethnic groups. But in their daily lives, light blue and purple are the favourite colours. These ethnic colour preferences are often reflected in costumes, foods and decoration items.

In the past, these colour and shape preferences were observed for individual ethnic culture and religious reasons. Yet today, these preferences can still be seen in daily living environment such as for interior decor colour schemes, furniture, household items etc.

However when it come to traditional foodstuffs, my research led to findings that these preferences for particular colours and shapes has weakened. This is due to our younger generation of English educated professionals who are more exposed to western media and who place less emphasis on traditional values. On the other hand, a lot of traditional ethnic foodstuffs sold in the food markets have already changed their original colours and shapes, to target the large number of young consumers. An example is the Chinese traditional Moon-cake, which is packed in green packaging (vegetarian flavour) instead of always red and gold colour. The shape of these traditional cakes had also been changed from round to irregular, and the size has been reduced to more fun bite-sized pieces.

The popular Malay traditional festival cookies ‘Pineapple tarts’ and other traditional festival sweet cookies are now packed within multi colours and gold package printed with modern graphic patterns.

The popular Indian yellow ginger rice ‘Nasi Brani’ can also now be found in the modern supermarket packed within a vacuum package. The other popular Indian daily meal of bread ‘Roti Prata’ is now available pre-packed in 2 varieties, onion or plain and comes with curry sauce in a cardboard package. Both are packed in modern packaging with graphic patterns.
Another good example of these changes is the Peranakan’s (Straits Chinese) ‘Red Turtle Pastry’, a delicious popular traditional snack which can now be found in purple, green and other colours to identify the different favourite filling (other than the traditional red colour). Even the size has been reduced to appeal to customers with smaller appetite. These ‘Multi coloured Turtle Pastry’ have achieved a breakthrough in the religious barrier, by being found on the dining table of the Malay wedding and many other occasions by different ethnic group in Singapore.

Reviewing my above description has led to the following finding: -

(1). **Today, the traditional preference of ethnic colours and shapes are only more commonly seen during the individual ethnic group’s festival celebrations and religion activities in Singapore.**

(2). **From a trading perspective, the importance of traditional ethnic colour has either diminished or even disappeared so as to attract younger consumers and to expand the food market opportunities.**

(3). **Traditional foodstuffs have been given a ‘facelift’ to meet the changing trends in the local food market.**
Main reasons why large percentages of traditional foodstuffs with dull images have been rejected by the modern supermarkets. Identifiable needs to improve packaging in order for local foodstuff to find its place in the modern supermarket and finally be exported to the international market. (Refer to page 7 'Objective').

Any foodstuff sold at the modern supermarket has to conform to certain criteria. For local traditional foodstuffs, the basic requirement criteria to be sold at the modern supermarket is ‘Packed to look hygienic’. To further understand the existing trading situation during my research, I interviewed several food stalls owners in traditional wet markets and shopkeepers in local food markets. I had found out that wholesalers or local home factories actually directly supplied many of foodstuffs they sold.

Many of them say they had been in the business for many years, and have never been concerned about the “selling image” of their foodstuffs in order to attract more customers. Their rationale is as long as the customers do not complain that the products are ‘not fresh’ or ‘fragrant’. (Many of their customers were residents who lived nearby and were often their regular customers), they are not concerned about the packaging.

On the other hand, when I visit other local foodstuff wholesalers like Dried Spices, Dried Seafood products and some home food factory owners, like those making Rice Dumpling, Nonya Cakes and Spring Roll Skin etc, almost all of them expressed their concern about the importance of food packaging design for their food product. Almost all of them I interviewed (except the owner of the Rice Dumpling factory) agreed that if their foodstuff products are to gain access to being sold in the modern market, an appropriate packaging to attract the attention of the more discerning young generation of customers must be present. Therefore, indicate that the emerging market trend and the changing eating habits of younger generation of Singaporeans, modern food packaging criteria should be concerned with improving the present unattractive image of their food products. During the interview, the Nonya Cakes factory owner Mrs. Chia Kiat Song even asked me to recommend my design student to design the packaging for their food product. (Refer to ‘Interview with home factory owners’ Part 4, Appendix articles).
In Singapore, common traditional foodstuffs are usually packed in unhygienic and dull package and can be divided to 4 main categories as following:

(A). Preserved foodstuffs selling at Salted Sundries stall in traditional wet markets.
(B). Dried/Salted Seafood Products sold at traditional wet market and traditional grocery shops.
(C). Cooked foodstuffs (traditional ethnic groups snacks) sold at food stalls and hawkers centres.
(D). Traditional ethnic group’s festival foodstuffs sold in traditional grocery shops and temporary hawker food stalls during festival seasons.

(The above mentioned 4 categories is cross-referenced to my CD-ROM under the category of Food in Singapore).

Although the majority of the traditional foodstuffs mentioned above still maintain their unhygienic and dull images sold at the usual places for regular customers, there are some foodstuffs mass packaged by local wholesalers. To save cost, a lot of preserved and cooked foodstuffs were often packed within a transparent package. These dull packages were usually lacking any information about the foodstuff ingredients or nutritional value. Some even without any name of the manufacturer or brand identity. Example like preserved Salted Vegetable, Black Olive and Ginger Slice etc. sold at Salted Sundries stalls. (Packing within transparent package). Some common daily dried seafood products like Anchovies; Shrimp and Cuttlefish etc. sole in wet market dried seafood product stall. (Packing within transparency PVC package) and varied types of traditional ethnic cooked snacks sole at food stalls. (Packing within Styrofoam package).

On the 2nd of December 1997, a local leading Chinese newspaper ‘Lianhe Zaobao’ had conducted a survey of several popular traditional wet markets in Singapore. Interviews were conducted with different foodstuff stall owners in the wet markets. The survey information reflected that the majority of the food stall owners had complained that their regular customers (residents who lived near by the market area) had rapidly reduced in number due to
the changing marketing habits, and the increase in number of modern supermarket around. Many of them claim that the younger consumers were “taken away” by the modern supermarkets. The reason given was that younger consumers are more concerned about the marketing environment; and the modern supermarket could provide meet more of their marketing requirements etc. Further more, systematic and attractive way the supermarket display goods offered ‘convenience’, ‘hygienic’ and ‘fresh’ foodstuffs and longer trading hours, were the other main reasons to attract them. ¹ (Refer to my thesis on Part3, H1. ‘Table indicating the different selling conditions between the modern supermarket and the traditional wet market in Singapore. The other table on page 8 and page 9, showing the survey result of ‘Advantages’ and ‘Disadvantages’ of marketing between traditional wet market and modern supermarket).

The finding of the above survey had further supported my research. It has proven that today, more educated young Singaporeans prefer to do their shopping within the comfortable and clean environment of the modern supermarket.

The message conveyed by the above survey is clear, most of the older generation may still prefer shopping for traditional foodstuffs in the traditional wet market, but the younger generation prefers shopping in the comfort and clean environment of the modern supermarket. It is essential that to respond to the changing market trend and to enable local traditional foodstuffs to enter the modern market, now is the time to upgrade their dull image through food packaging. The above survey also shows the rapid fall in number of younger generation customer from traditional wet market and is a telling sign of the lifestyle of future generations.

I have thus concluded the above finding as follow:

The survey showed that more educated young Singaporean prefer to do daily marketing in modern supermarket due to the following advantages:
(a). The comfortable marketing environment.
(b). Wide selection of foodstuffs.
(c). Systematic and attractive way of displaying goods.
(d). Hygienic image and convenience of foodstuffs packaging.
(e). Longer trading hours. (From 10.00a.m. to 10.00p.m.)
(f). Often had special offer and promotion.
(g). The longer hour and convenience of parking space.

(C). My research will therefore describe how local traditional foods can make a transition from the traditional wet market to the modern supermarket, through the improvement of packaging design. (Refer to page 7 ‘Objective’).

My research had also found out that recently, in response to the increasing market trend and the changing eating habits of young Singaporeans, some local food traders and foods wholesalers were fast enough to respond to the above-mentioned transition signals. Some modern supermarkets in town, especially those owned by local traders like NTUC (National Trade Union Conference) fair price supermarket, PRIME Supermarket and some other Mini Marts etc sell traditional foodstuffs. However these are mostly limited to dried food products like dried seafood, dried mixed spices for traditional soup, and other common dried daily food items. From the food packaging design perspective, the packaging for these foodstuffs are rather plain and unattractive compared to the imported foodstuffs at this stage. A lot of them were simply packed within a PVC transparent package. On the surface of the package is just printed the standard word ‘Assorted Pack’ and only the name or logotype of the manufacturer. There is no indication of any product names and ingredients printed on the packaging surface. This kind of standard packages seems to have been used for packing all kinds of local dried food products by the local supplier (wholesaler).
From the packaging point of view, the material used and the graphic design applied to these local dried foodstuffs packages might be far from sophisticated compared to those imported food products. But at least these are the first steps for the local traditional foodstuffs to find a place on the shelves of the modern supermarkets. At least, these simple packages have meets the basic packaging criteria ‘In Looking Hygienic’. (It linked with the above surveys on (c) & (d) requirements).

On the other hand, the traditional Chinese cooked and ready to cook snack can increasingly be found in the modern supermarkets in Singapore. The most obvious is the whole range of the typical Chinese daily cooked snacks ‘Dim Sum’. These most popular Chinese cooked snacks come in different varieties of filling as puffs or pastries, prawn and pork dumplings, carrot cake, spring roll etc. Normally these traditional Chinese snacks are served in Chinese restaurants and coffee shops. Now can seen them being displayed on the cool shelves in the supermarkets. (Refer to my CD-ROM ‘Comparison of selling environment between Traditional Wet Market and the Modern Supermarket’ under the category of Food packaging value.)

A further study into the packaging design on these popular local traditional snacks. I had found out that they have 2 standard type of packaging. Firstly, These aimed at selling in the local market were rather simple but packed with acceptable hygienic packages. The cooked snacks sit on a Styrofoam container and are covered with a PVC transparent film. This way of packaging is to provide a convenient and fast way for customers to heat up the food in the microwave. The other type of packaging is more comprehensive as it is vacuum packed. These are usually some attractive graphic design on the surface and information of the product is provided. These are mainly aimed at the international export food market. Both packages have clear indications of the name of product, ingredients, consumption and expiry date etc.

When I paid a visit to the above-mentioned leading supermarkets I realized that the traditional foodstuff, previously sold in traditional wet markets with dull images, have now increased One reason could be because of their images with modern packages.
These traditional foodstuff items now include dried seafood products like Cuttlefish, Shrimp, Anchovies, Oyster, Sea cucumber and Fish-maw etc., and other salted preserved items like Vegetable roots, Seeds, Olive, Plums and Ginger etc. Modern packaging has also incorporated appropriate messages of preparation instructions and information like cooked; half cook or ready to cook indications printed on the package.

Based on an analysis of the above situation, my research indicates that a trend in the food trading orientation is already present in Singapore. Subject to the changes in Society, Economic, Business and Education, these changes are also representative of other development countries within the regions, in time to come.

The conclusive finding of indicate the following:

1. From the few examples of traditional foodstuff, which have made the transition to being sold in the modern supermarket, it can be shown that some of the local traditional foodstuffs had already met the modern packaging criteria.

2. The concept of ‘Modern Food Packaging Value’ has already recognized and accepted by a handful of local food traders, in response to the changing market trend.

3. Surveys from various sources signal that the majority of food traders must improve the existing dull selling image through modern packaging to keep local traditional foodstuffs alive and available within the rapid changing society.
(D). The food and beverage industry in Singapore is the seventh largest manufacturing sector in Singapore. More than 60 per cent or S$1.74 billion was exported to the overseas markets of Japan, United States of America (USA), Hong Kong, China, Australia and Europe. “The local industry is also looking towards other emerging markets such as Vietnam, India and Myanmar” 4. As far as the international food market is concerned the above comments and figures from Government sources have obvious implications for Singapore food entrepreneurs, food packaging industry, and design professionals and design education within design institutions. (Refer to page 7 ‘Objective’).

During the time when I was reviewing my thesis conclusion, the unexpected economic crisis hit the Asian trading markets; especially the Southeast Asia markets. According to the newspaper and television sources; neighboring countries like Indonesia, Malaysia, Thailand and Philippine etc. had slowed down or even canceled their development plans in their countries. Despite the regional economic crisis, the food industry and trade in Singapore is still developing relatively well and have suffered only minor effects of the crisis. The government sources in fact show effective profits in food export trading, because the food export trading business of Singapore to-day are spread all over the world not only confined to Asia but extends to Europe and the USA.

Trade and industrial reports and newspaper information have reported that the food trading industry in Asia and the international food market is highly favorable. “Strategically located at the heart of Asia-Pacific, Singapore is well placed to play a vital role in international trade. Its geographical proximity to the booming economies of Asia as well as its cultural, language and trading links with the countries within the region have been factors which helped Singapore flourish as a gateway to the ASEAN and Pacific rim markets” 5.

The recent surge in the variety of local traditional foodstuffs with the new packaging image reflected that our local food entrepreneurs have looked beyond our shores for export markets.

As I had mentioned earlier, there are some local traditional foodstuffs presented in

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4 Singapore Trade & Development Board, SBF Main Menu Industries, 1996.
comprehensive modern packaging aimed mostly at international food markets. “With rising consumer affluence in the region, one of the fastest-growing in the world, there are good prospects for the development of Singapore as an international food and beverages trading hub”.

Through my research, I found out these series of well packaged foodstuffs products were mainly manufactured by some local leading food entrepreneurs like YHS (Yeo Hiap Seng), F&N (Fraser & Neave), Thong Siek and other newly established food companies etc.

These foodstuffs for the export market include different kinds of 'Local Spice' (powder form, packed with aluminum foil package). Different varieties local traditional Cookies and Tidbits, different varieties of Chinese daily snacks 'Dimsum' (packed with cardboard and aluminum-foil packages), Cuttlefish-ball, Prawn-ball, Meatballs, and Spring Roll Pastry (packed with aluminum foil package with indication ‘Halal’ for muslim market) etc.

These out-standing modern packages, with impressive graphic designs, give a bright and hygienic image. They have totally changed their original dull image from the traditional wet market and can now be found on display in the cool shelves within the local modern supermarket together alongside other imported foodstuff products. (Refer to my CD-ROM 'Modern Supermarket' under the category of Food Packaging Values).

An analysis of the above situation together with my research indicated that the new emerging trend in the food trading orientation has already started in Singapore. Subjected to the change in Society, Economic, Business and Education, these changes are also representative of other developing countries within the region, in time to come.

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As part of my sub-conclusion, I have identified 4 implication areas in upgrading local food packaging design to meet the competitive international food market standard as follows:

(a). As it is the market that leads change, it is crucial for local food entrepreneurs to have a first hand and updated information on product trends.

(b). Design professionals involved in packaging design must always be alert in fresh design concepts to follow product trends.

(c). Production of out-standing and quality packaging had to be supported by advanced packaging facilities in industry.

(d). Cultivate promising young packaging designers in design institutes through a series of updated training programs based on advance and effective curriculum.
(E). In order to demonstrate the importance of improving of local food packaging, I will incorporate some of my NAFA students' outstanding food packaging works (assigned as their final year major project) within my research to demonstrate this. (Refer to page7 'Objective').

Since 1983 onward in NAFA, when I was the head of the applied arts department, I had already implemented packaging design subject in the graphic course syllabus. To ensure that NAFA, as a leading Art and Design institute in Singapore should be able to cultivate a group of bright young designers for our fast growing design market. Finally help to raise the local packaging design standard.³

During the last 15 years, Food packaging design has been highlighted in the curriculum. Food packaging has been set as a major project for final year student turned out to be a popular choice in final year. Due to the demand in local design market. (Refer to Appendix L6. NAFA Graphic Design Course Final Year Major Project Briefs). By the effort and hard work spent and with support from colleagues, NAFA had gained a fruitful return. It could obviously be told by the food packaging market to day. NAFA students have a deep involvement in the upgrading of local food packaging in local design field. (Refer to Appendix L7. The name list of NAFA students who had handing food packaging account in local design market).

From my role as a practicing graphic designer and a design educator for the past 20 years, I have strongly encouraged an analysis of the changing situation versus the existing foodstuffs that are being sold in the traditional wet market. It is a crucial time to propose a new selling image, (in the aspect of food processing and food packaging design) for traditional foodstuffs to be able to be sold competitively with other foodstuffs in the modern supermarkets. This way we can ensure that greater and more interesting choices of foodstuffs are displayed and readily available. This will also enable the younger generation to develop an interest in our local traditional foodstuffs.

³ NAFA Diploma Show Annual Brochure from 1985 to 1992. 'Message from Head of Applied Arts Dept'. / NAFA Diploma Show Annual Brochure from 1993 to 1996 'The Dean's Messages').
(F). Modern food packaging criteria developed within my research will also be able to guide young designers in creating appropriate and outstanding food packaging to respond the rapidly growing food industries.

A series of modern food packaging criteria based on my research areas has been developed. (Refer to J2. Criteria applied on modern food packaging design from page.... To ......). This proposed modern food packaging criteria would recommend serving the following areas:


(A). To Design Institution: -
Incorporate a series of modern food packaging projects guided by the proposed criteria. The emphasis is placed on how to apply modern design concept to traditional foodstuffs. Based on (I). The elements of the total packaging design (Packaging Form, Pack Construction, Pack Materials, Pack Materials and Graphic Design). (II). The 3 basic points to design a good package (Functional, Economical and Aesthetically). These proposed rule and criteria could act as a major guideline to direct lecturers who set food packaging projects for design students in the design institutions. Shown below are only few examples of basic criteria in food packaging design. (Refer to table A and B).

(i). Total Packaging Design: -

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<th>Packaging Form</th>
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<td>Shape</td>
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<tr>
<td>Packaging Construction</td>
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<td>Packaging Materials</td>
<td>Colour</td>
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<td>Graphic Design</td>
<td>Layout</td>
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From the Traditional Wet Market to the Modern Supermarket
(Food Packaging Value In Singapore) 143
(ii). The 3 Basic Points to Design a Good Packaging:

   (1) Functional
       (a). Physical and Quality Protect the Product Content.
       (b). Brand Awareness.
       (c). Quality Guarantee
       (d). Efficiency in Use.
       (e). Convenience for the User

   (2) Economical
       (a). Save Production Cost.
       (b). Choice Appropriate Packaging Material.
       (c). Easy Operation and Reduce Damage during Delivery.

   (3) Graphic Design
       (Aesthetic)
       (a). Product Information.
       (b). Product Promotion.
       (c). Visual Impact.

(B). To Practicing Designer: -

The proposed modern food packaging criteria will be able to guide our professional designer during design concept brainstorming on how to construct appropriate Shapes, Colours, Materials and the use of more effective Graphic Design to appeal to consumer. In the design market, any product can’t sell is considered an unsuccessful product, so as design itself. Product as a result of seeing the packaging. In food product packaging design, a designer should be able to communicate to the target group what benefits the product can bring to them. This message has to go through a series of design concepts they had stated within my proposed packaging criteria. (Refer to J2. ‘Criteria applied on modern food packaging’ for detail). Following is the table to show how the usual procedure to design a food packaging. (Refer to table III).
(iii). **How Food Packaging Design Process:**

Product brief supplied by client. (Food Manufacturer)

Designer develops design concept based on product brief.

- How to contain, protect & preserve.
- What appropriate material is use.
- Who are the target consumer.
- How to communicate. (Graphic Design).
- Construction. (Size & shape)
- Product identity. (Special features)

Concern to food packaging materials, some traditional foodstuffs more or less had changed from natural material such as leaves to artificial materials like plastic. This shift is due mainly to the following reasons:

(a). Materials used must be suitable for mass production.
(b). Meets criteria of protecting the food that is packaged especially for frozen items.
(c). Meets the hygiene and aesthetic standards for being sold in the modern food market.
(d). The shortage of natural sources. Natural materials are often unable to meet these stringent criteria.

(C). **To Food Packaging Industry:**

The proposed modern food packaging criteria will be able to guide the packaging industry to use appropriate material (e.g. environmental friendly material) and cut cost in productions. Further more, information and references stated within this criteria will served as guide line to let packaging industry know better of the product trend.

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*From the Traditional Wet Market to the Modern Supermarket (Food Packaging Value In Singapore)*
(D). **To Food Entrepreneurs:**

The proposed modern food packaging criteria will help our local food traders to understand the beneficial returns of effective food packaging with the competitive modern food market. We believe that any packaging design started from a briefing. The food manufacturers have to determine what they want the consumer to understand about their product. What features of the food product need to be highlighted, how to discriminate the food product and make it different from any other product in market etc. All of these are in order to write a brief as clear as possible to guide packaging design according to their requirement. For example, The food product manufacturing by WHO (BRAND), WHAT (PRODUCT) is this, sell to WHO (CONSUMER) and at WHICH price. Information and references within my proposed modern food packaging criteria could help the local food entrepreneurs all about these and help them to understand how does the visual communication (graphic design) serves in a food packaging. With the necessary packaging design criteria to guide and design a good package.

Both the food entrepreneurs and packaging designer have to work together to ‘Position’ the food product to consumer and make it easy to choose. Furthermore the references and information within my proposed modern food packaging design criteria could also serve as guide to help local food entrepreneurs to write a unique brief on (a) Packaging Designer, (b) Exporter, (c) Transporter, (d) Importer, (e) Retailer and (f) Consumer. Most importantly, help our local food manufacturer to position their product in the market.

(F). *My research will also attempt to propose the future trend characteristics of food packaging that consider today's environment. (Refer to page 7 'Objective').*

As human civilization enters the dawn of the new era of the 21st century, the food industry has benefited from new technologies and science to improve the freshness and hygiene of our daily foodstuffs. On the other hand, the processed foods industry is also entering the new era with the production of Healthy, more Natural and more Convenient modern foodstuff.
Sources and information had proved that food trading is the worldwide global business especially within Asia countries. “According to the 1995 World Trade Organization Report, Asia’s trade in food was estimated to be worth US$151 billion in 1994 and accounted for more than 40 per cent of the world’s trade in food. More than 50 per cent of Asia’s trade in food are conducted within Asia itself”.

To respond to the above changes, we should also address how we are going to face the future domestic and export food market? Especially the export food market, which will encounter the competition of other countries’ foodstuffs in the international food market.

Through my research, I concluded that food trading and the food industry have a bright future in Singapore, with even greater potential in the Southeast Asian markets. Furthermore, developing countries like China and India also present a large market for traditional foodstuffs. Through research and references, I can foresee the food industry playing a major role in contributing to the country’s economic growth. Even countries like Australia and Japan will be involved in the import and export of traditional foods.

To respond to the above food market development trend, ‘Effective’ and ‘Remarkable’ food packaging value will play a pivotal role to attract sales. Furthermore, it would definitely lead our local traditional foodstuffs to the future trends.

In closing, I would like to quote Professor John Deighton’s words to end my research thesis “Packaging design is one of the most effective marketing tools, often yielding higher returns than advertising”.

However, through the new image via packaging and high technology processing, local traditional foodstuffs are gradually becoming a common sight in our supermarket.

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From the Traditional Wet Market to the Modern Supermarket
(Food Packaging Value In Singapore)
(L) Appendix

L1. Interview with owners of Salted Sundry Stall in the Traditional Wet Market.

Name of Stall: No Name
Location of the Stall: Bedok South wet market, Singapore.
Name of Owner: Miss Wei Ming Yao
Age: 36
Dated: 28 August 1996

Q: Who are your regular customers?
A: They are mainly Chinese housewives residing around this area.

Q: Can you tell me their income level? I mean are they mainly housewife living in the Housing Board flats?
A: Not exactly. In fact my customers includes all different income levels in the Chinese Community. I have regular customers who live in the private housing estates as well as those from the lower income Housing Board flat residents.

Q: How long have you been in this business?
A: More than 20 years. My mother started the business.

Q: Where did you order your salted su ndry goods?
A: From the whole-sale vendor located at Pasir Panjang (Whole sale market at West Coast of Singapore).

Q: How is your business faring?
A: Very busy, especially during weekend and public holidays. I don’t even have the time to take my meal.

Q: Don’t you agree that this traditional sundry business will disappear one day in Singapore, just as our traditional wet markets are disappearing as well?
A: No, it is not true, the government is still building new wet markets. The demands for the traditional salted sundry food are still very great. (I agree with her).
Q: What I mean is that our younger generation of Singaporeans might not eat these traditional salted sundry food any more. They can get a lot of other imported similar foods selling in modern supermarket with impressive packaging?

A: Well, I hardly see any young customers coming to buy my foodstuff anyway. I agree with you that this kind of traditional business will disappear one day. But it is not because our Singaporeans do not know how to appreciate the traditional salted sundry food items or the number of traditional wet market are decreasing. The main reason is that, nobody wants to take over this kind of business anymore. Because it is a messy, tiring and the long hours makes it a very hardworking type of business.

Remarks:
Miss Wei Ming Yeo has owned and manned the traditional salted sundry stall at Bedok South traditional wet market for almost 20 years. Since she finished her primary education, she started to help her brother at the stall. The day I interviewed her at her stall, I noticed that business was very good and she was busy rushing up and down to serve the customers. Her products retail from 50 cents a small packet of dried spices to a few dollars for a bottle of soybean sauce. She kept telling me that this kind of business is very tiring and has long work hours. She starts work from 6.00 AM in the morning and finishes in the evening, at about 6.00 PM. She took over the whole business since her brother was killed in a car accident 8 years ago and runs the business by herself. Halfway through the interview, I saw her niece (aged around 20) coming to the stall to help her attend to the customers. She introduced her niece as a polytechnic student who could only help her occasionally when she does not have too much schoolwork. She said it is almost impossible for her to find anyone to work in this kind of messy and dirty traditional salted sundry business. The main reason is the meagre pay. Secondly in Singapore today, younger Singaporeans are not interested at all to work in the traditional wet market run by a family.

Miss Wei Ming Yeo’s traditional salted sundry stall and her background is a good case to elaborate that the only one way to save and maintain our traditional salted sundry business in the future, is for the traditional business to modernize and to follow the trend of the rapidly
changing living environment. To cater the more sophisticated eating habits of today’s Singaporean.

The modernization concept and system should include new management style, modern food processing and modern packaging. It is very important thereafter to enable as many varieties of our tasteful and delicacies traditional salted sundry food items to be displayed and sold at the modern supermarket, attracting young customers from different ethnic groups to select their favourites from the shelves.
To further examine and understand the existing market situation of the traditional dried salted seafood in Singapore, I personally visited a few typical Dried Salted Seafood shops within the traditional markets in Singapore. (Refer to my video presentation dated 18 January 1997). Below is the record of my interview with one of the shop owners, Mr Heng Bak Toy.

L2. Interview With Shopkeeper of Dried Salted Seafood Products in the Traditional Wet Market.

Name Of Owner : Mr. Heng Bak Toy
Age : 68
Date : 18 June 1997

Q: How long have you been in this business?
A: 52 years. Since 16 years of age, 1944. Started off as a worker till 1964, when I established my own dried seafood products shop.

Q: Who are your consumers and where do you order your stock from?
A: I sell my goods mainly to hawkers in the cooked food business at hawker centres. The rest are mostly homemakers. Stocks are imported from neighboring countries like Indonesia, Thailand and Malaysia.

Q: According to Urban Redevelopment’s plans, this building will have to give way for the construction of the MRT project next year. Do you have any plans to moved to other areas to continue business?
A: Yes, I do. (Mr. Heng showed me the location map. Which is a shop provided by the government for the relocation project, located some distance from the town centre, east of Singapore.)

Q: Does the redevelopment construction work surrounding within this area affect to your business?
A: They have mainly remained stable.
Q: Do you agree that due to younger consumers buying habit, that dried salted seafood product should move on into modern supermarkets?
A: There had already have traditional dried salted seafood selling in modern supermarket. Recently, but only subjected to minor item and the price is very expensive in compared to what I selling here.

Q: Have you considered handing over the business over to your son once you retire?
A: One of my elder son is a Chinese physician and have his own clinic. The other son is in the restaurant business. I don't think they will be interested in such a business. But if they want to do it, I will hand it over. Otherwise, I may have to closed down my business and retire.

Q: Do you face any problems in employing workers?
A: Yes, younger generation have no interest in shops like these. The job requires long working hours and the environment is not conducive.

Q: What makes customers coming back to buy dried salted seafood products here, instead of at supermarkets?
A: It's cheaper here and I have a wider variety.

Q: What is your business hours?
A: 7am to 7pm. But during occasions like Chinese Lunar New Year or other traditional festivals, I close at 10pm.

Q: Do you have customers from the other races in Singapore?
A: Yes, mostly other races in the cooked food business in hawker centers in Singapore.
Remarks:
Mr Heng is one of the typical older generation of businessmen in Singapore. He has demonstrated the traditional style of trading and management in dealing with this particular food business. In Singapore Chinese Community, as well as the Chinese Communities in the Southeast Asian countries, many of the similar kind of traditional retail foodstuff business are run by family members. The family business had been handed down from generation to generation without any outsiders getting involved in the management. For the last several hundred years ago, this traditional way of old style management could maintain and keep the business alive was because during those times, when the country and the living environment were also underdeveloped. Today, Vietnam, Cambodia, Myanmar and Bangladesh are still considered underdeveloped. However, as the country develops and progresses economically, the standard of living will rise and the people will be forced to change their traditional living and working in order to keep up with the pace of urbanization and modernization. Old style businessmen, like Mr Heng will sooner or later have to accept the reality of the rapidly changing society and environment. Most of the younger generation would have foregone the loyalty to their family business for their personal career opportunities for a better and more comfortable lifestyle. That leaves the older generation with the dilemma of who would take over the family business eventually. This also poses a problem for the older generation housewives who have become accustomed to the wet markets and sundries stalls for their grocery.

According to the Urban Redevelopment plan of the Singapore government, the traditional wet market which Mr Heng’s shop can be found will soon have to make way for new economic development with greater economic potential. A new underground rapid transit station will also be located here to serve the citizens better. Under the National Development policy of Singapore government, the main objective is to develop a modern city with quality facilities to serve the people and to raise their standard of living. “In Singapore, we live in an urban environment. “We want a city that is pleasant to work and live in, a city of beauty, character and grace”. To match the new modern surroundings and amenities, traditional wet markets will increasingly be replaced by modern supermarkets.

Before I left Mr Heng’s stall, I asked him of he expected the modern supermarket to carry his traditional foodstuff. He replied with a smile “Well, it is not my problem anymore”.

Note: Mr Heng’s shop and traditional dried seafood products and the interview can be referred to my video record dated 19th June 1996.

One can find a wide variety of seafood products in daily meals among the Chinese. Some are even considered luxurious cuisine served in expensive Chinese restaurants. Common dried seafood products sold at whole sellers and shops in wet markets all over Singapore are dried prawns, salted fish (variety of sizes), squid & cuttlefish, jellyfish and seaweed. Those expensive and considered luxurious items are seacucumber, abalone, scallops and oysters. In tradition, these items are believed to be health tonics, when taken cooked with herb. These seafood delicacies can be found in dishes served on tables of Chinese emperors thousands of years ago, to toady’s average family’s dinner table. Among the Chinese centuries ago, expensive seafood items are considered delicacies, and till today, can still be found on special festive occasions like the Chinese new year eve dinner, traditional birthdays and weddings. To show how expensive and popular some of these seafood items are, I have listed out some delicious and exquisite dishes from a menu, from one of the leading Chinese restaurants in Singapore.
I.3. **Interview With Rice Dumpling Home Factory Owners.**

**Name Of Factory** : Duan Pandan Rice Dumpling  
**Name Of Owner** : Mr. Low Hong Peng  
**Age** : Over 40  
**Date** : Wednesday, 19 June 1996

**Q:** How many years in this rice dumpling business?  
**A:** 18 years.

**Q:** How many different varieties of rice dumpling does your factory produce and able to sell each day?  
**A:** We produce 9 different varieties, and can sell an average of 2,000 rice dumpling a day. But on occasions like the Annual Dragon Boat Festival in the Chinese lunar month, sale may go up to 7,000 a day.

**Q:** Who are your consumers and at what income level do they represent?  
**A:** My consumers come from all sorts of races and all levels of income group.

**Q:** How many retail outlets do you have in Singapore?  
**A:** Totally 5.

**Q:** What is the total number of workers employed at your factory?  
**A:** Over 10. Most of them are Malaysians (foreign workers).

**Q:** Why is there a need for foreign workers?  
**A:** It is a physical job, and many Singaporeans are unwilling to work under such conditions.

**Q:** Is it due to the poor working environment and the salary not attractive enough?  
**A:** Younger Singaporeans these days go for jobs in comfortable air-conditioned
environments and standard office hours, five and a half working days a week. They look for such conditions even if it means earning a lower wage.

Q: Have you plan of expanding business overseas, just like those western fast food outlets in Singapore, example McDonalds & Pizza Hut?
A: We can only do so if production move into machinery. Hand production is impossible.

Q: Rice Dumplings today are packed traditionally with natural leaves like bamboo and pandan leaves. Do you think if sales move into modern supermarket one day, would you consider changing the packaging material in order to meet criterions of the supermarket environment?
A: No. This is because packaging for traditional food like this can’t be replaced with any other materials available in the market today. It’s about ensuring freshness of the rice dumplings.

Q: Since rent and labour cost are on the rise in an urban city like Singapore, have you thought of other modernised means of sale, such as selling dumplings through vending machine, just like soft drinks, and place them at crowded public places?
A: Yes, I did consider it before. But I don’t think its feasible as a vending machine can only contain limited number of dumplings, and the cost of running is high.

Remarks:
The Chinese traditional rice dumpling is one of the most popular snack not only in the Chinese community, but is well liked by other races (except Malay Muslims) of Singapore as well. This traditional foodstuff have the demand and potential to move sales into modern supermarket, but is subjected to increase in supply from the factories to ensure freshness. Regarding suggestions to improvement of packaging to meet modern supermarket standards, dumplings could be packed in packet of 4. This is because an average family in Singapore has 4 members. On the factor of packaging, the leaves are definitely easier to destroy as waste than other packaging materials like plastic. Unless there is a high demand in the market or even in overseas market, modern technologies and materials should not come into the process so as to maintain its beautiful traditional image.
L4. Interview with Spring-Roll Skin home factory owner.

Name Of Factory: Kwang Kuan Huat Hand Made Spring-roll Skin
Name Of Owner: Mr. Kwan Kuan Huat
Age: 80
Date: Saturday, 20 July 1996

Q: How long in this business?
A: 60 years.

Q: Ever considered handing business over to your sons?
A: I have difficulty convincing them. Most of my sons have good education background and have their own business and jobs. The only son who didn't receive education might consider carrying on the business.

Q: How do you maintain this traditional hand made spring-roll skin business for so long, when there is already spring-roll skin produced with machines in the market?
A: Firstly, the shophouse belongs to me, so there is no rent, there are lowers cost of productions. Secondly, the majority of my customers are regular clients staying in near by area, and they prefer traditionally made spring-roll skin to those machines made. Hand made spring- roll skin taste is more original.

Q: If your old shophouse have to give way to economic development by the government, would you still consider continuing the same business elsewhere?
A: Fortunately my shophouse is not affected by the new development at all.

Q: Do you face labour problems in your business?
A: Yes, especially skilled workers are very difficult to find these days.

Q: Can you tell me how much do you pay your workers?
A: It’s a secret that I can’t reveal, but it depends on their experience and speed.
Remarks:
From the above interview, it's obvious that traditional hand made production like spring-roll skin etc. are facing the rapid change of society. The owner can still sustain his business is largely due upon that the old shophouse belongs to him since he bought it 70 years ago. But increasing labour costs and the lack of interest to work within the home factory environment by the younger generation may force him to choose either to invest capital to move into machine production, or otherwise give up this business.

Today, processed spring-roll skin have become a very popular sell in the supermarkets and a great quantity is exported to an international market. These individual brands of processed spring roll skins are packaged within neatly and attractive plastic packaging often found in the cold food section in local supermarkets.

The contrast between home made spring rolls and the machines produced, is a strong example indicating that in order to cater to the new developments in living environments and eating habits and lifestyle of the younger generation, improvement is necessary. Whether it is to improve the management, production and the appearance of the products, image is very important. Image development is applicable to many of the delicious traditional foods in the multi-racial society of Singapore, in order for them to “survive”.
L5. Interview with Nonya Cakes home factory owner.

Name of Factory: Lek Lim Nonya Cake Confectionery
Name of Owner: Mr. Sin Eng Hok
Production: Traditional Nonya Cake.
Location of factory: Bedok North Singapore.
Person for interview: Mrs. Chia Kiat Song (Wife of factory Owner)
Age: Early 40.

Q: How long had you been doing this kind of business?
A: 36 years. Since my grandfather till now.

Q: Is it a family business?
A: Yes.

Q: Who is your target consumer?
A: Our Nonya Cakes are supplied to local Hotels, Restaurants, Hawker centres etc. Besides, we involved in retailing to residents living around this area. We also take orders for Weddings, Birthday, and festival celebrations etc....

Q: How many varieties of Nonya Cake does your factory produce?
A: 7 varieties.

Q: How many Nanya Cakes does your factory produce per day?
A: About 5,000,. our production would increase to double or even triple during the festival seasons..

Q: Do you hope that your products could be sold in the modern supermarket?
A: We have to face the changing environment and follow the trend. Soon or later, our traditional cakes have to sold in modern supermarket available everywhere.

XII
Q: But don’t you think that you might have to provide a good packet for your traditional cake before they can enter into the modern supermarket?
A: Yes, I believe so, in fact I am very concerned about packaging for our products.

Q: Do you expect that your children will continue to carry on your family business in future?
A: I hope so but I do not expect them to.

Remarks:
Nonya Cakes (Peranakan sweet pastry) is one of very typical daily snacks in Singapore and Malaysia. These traditional snacks is in fact a combination of the cultural Chinese and Malay tradition. From the spices, the colouring, the materials used to pack or the way of wrapping the snacks etc... The actual Nonya snacks has over 80 varieties. The spices and pastry filling uses a lot of coconut’s milk, coconut sugar paste etc.. Other variety of Nonya Cakes are made from dried prawns and chillie bean paste, lotus seed paste, yam paste etc.. Natural material like coconut leaves, bamboo leaves, lotus leaves, pandan leave etc. has been widely used to pack the traditional Nonya snack. These Nonya snacks are also popular amount the various ethnic groups in Singapore and Malaysia.

Mrs Sin (Chia Kiat Song) is the wife of the Nonya Cake factory owner. She comes from a family dealing in the traditional Nonya Cake business for more then 36 years. She is one of very few business woman in traditional business with a modern outlook. During the interview, she expressed a desire to modernize the traditional foods business. She felt that surviving in today's competitive environment means that one has got to face the changing times and keep in synchronize with the trends of the younger generation lifestyle etc. She agreed with me that if the traditional Nonya Cakes were to maintain its values and further develop, new and larger mechanized systems should be set up and impressive packaging should be developed to attractive young as well as foreign customers. During the interview, she even expressed hope for her traditional Nonya snacks to be exported to the international market.
(M) Bibliography

(A) Annual Reports / Government Reports:


(B) Books / Journals:


XIV
(C) **Newspaper Articles:**


FROM THE TRADITIONAL WET MARKET TO
THE MODERN SUPERMARKET
(Food Packaging Value in Singapore)

TAN PING CHIANG (TAN PING)
PLEASE NOTE

The greatest amount of care has been taken while scanning this thesis,

and the best possible result has been obtained.
Multimedia item accompanies print copy
FROM THE TRADITIONAL WET MARKET TO
THE MODERN SUPERMARKET
(Food Packaging Value in Singapore)

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1999
DECLARATION

I TAN PING CHIANG (TAN PING) declare that the following thesis
'FROM THE TRADITIONAL WET MARKET TO THE MODERN SUPERMARKET'
(Food Packaging Value in Singapore) has neither in whole or part been submitted for higher degree to any other institution.

Signature: ____________________________________________
Date: ________________

(Stamp)
Synopsis

The successful economic growth and the rapid changing of urban development had changed Singapore from a developing to a developed country. The living environment of Singapore has been changed with in the last 25 years.

My thesis mainly describes FOODS and FOOD MARKETS in Singapore. Due to better educational background, higher consumption power and small family planning, the eating habit of Singaporeans has changed. A lot of young Singaporeans to day, don’t buy their daily marketing needs from the traditional wet market for they prefer to do their weekly marketing in the comfortable, clean, convenient and air conditioned modern supermarket.

With the advance electronic cooking equipment in kitchen, they save time in cooking to buy prepared or instant cooked food from supermarkets, instead of raw foodstuffs from the traditional wet markets.

These rapid changes of the Singaporeans’ life style and eating habit created an opportunity. For me to look into the area that directly or indirectly involved with my professional work as a practicing graphic designer and a design educator. The area I am looking into is ‘THE VALUE OF FOOD PACKAGING’.

I realized that the contrast of the traditional foodstuffs selling in traditional wet market and the imported foodstuffs displayed within the modern supermarket, the difference has signaled a strong message. If the traditional foodstuffs still does not improve their dull and unhygienic image to catch up with the rapid changing urban living environment. They will disappear from our dining table sooner or later.

My thesis has reach 2 aims. Firstly, to awake the design students (tomorrow’s designer). To be more sensitive towards the local traditional food markets. Discover the values of the local ethnic foodstuffs and going to find out why these delicious and remarkable local foodstuffs been rejected outside of the modern supermarket. To create a new image through PACKAGING DESIGN to replace with the original dull and unhygienic image.

Secondly, the contents and the CRITERIAS of the modern packaging design I proposed within this thesis, could be applicable in the practicing design field, food manufactory and most importantly, in the design institutions.
LIST OF CONTENTS

Part 1.
(A) Introduction
A1. Singapore as a young nation in Southeast Asia --------------------------------- 1
A2. Singapore, the multi-racial and multi-culture society ------------------------- 3

(B) Background --------------------------------------------------------------- 4

(C) Objective (Statement of thesis) --------------------------------------------- 5

(D) Methodology --------------------------------------------------------------- 7

Part 2.
(E) Food in Singapore, the multi-racial and multi-culture society ------------- 9
E1. Festival foods in the Chinese community ------------------------------------ 16
E2. Festival foods in the Malay community --------------------------------------- 17
E3. Festival foods in the Indian community -------------------------------------- 21
E4. Festival foods in the Peranakan community ---------------------------------- 23

(F) Foods in the traditional wet market
F1. Salted sundries stalls in the traditional wet market------------------------ 27
F2. Dried/salted seafood products in the Chinese community-------------------- 32
F3. Raw spices----------------------------------------------------------------- 42
F4. Traditional foods produced in the 'Home Factory'-------------------------- 48
   (a). Home factory I. The Rice Dumpling factory ----------------------------- 48
   (b). Home factory II. The Spring Roll Skin factory ------------------------- 50
   (c). Home factory III. The Nonya Cakes factory ---------------------------- 53

F5. Natural leaves as packing material used in local foods----------------------- 54
   (i). School project for NAFA Graphic Design Course final year students ------ 59
   (ii). Table A. category of local common traditional foodstuffs packed with
          natural leaves in Singapore's food market ----------------------------- 62
   (iii).Table B. Category of local common traditional foodstuffs packed with
          natural leaves in Singapore's food market ----------------------------- 63
Part 3.

(G) Eating Habit
G1. Changes in the living environment and the eating habit .......................... 64
G2. The Raising of the Modern Supermarket and the
Western Fast Food Restaurant ............................................. 72

(H) Food packaging value
H1. Comparison of the purchases and sales environment between the
Traditional Wet Market and the Modern Supermarket .......................... 80
   • Table indicating different selling condition between the
     Modern Supermarket and the Traditional Wet market in Singapore .......... 84
H2. Analysis of the food Packaging and Displaying in existing
Traditional Wet market and the Modern Supermarket .......................... 85
H3. Marketing survey on customer Buying Habits between the
   traditional wet market and the modern supermarket .......................... 88
   • Table shows Advantage and Disadvantage between shopping at
     The Traditional Wet Market and the Modern Supermarket ................. 89

Part 4.

(J) Criteria on food packaging
J1. Food packaging project in the design institutions .......................... 91
J2. Criteria applied on modern food packaging design .......................... 100
   (a). Tables show s specification and analysis of packaging and proposal of
       materials used appropriately for traditional food ......................... 106
   (b). Tables show s classification of existing traditional foodstuffs selling
       in Singapore .............................................................. 110

(K) Conclusion ............................................................................. 129

(L) Appendix
L1. Interview with owner of Salted Sundry Stall in the Traditional Wet Market ------ I
L2. Interview with shopkeeper of Dried Salted Seafood Products in the
   Traditional Wet Market ........................................................... IV
L3. Interview with Rice Dumpling home factory owner ................................ VIII
L4. Interview with Spring-Roll Skin home factory owner .............................. X
L5. Interview with Nonya Cakes home factory owner .................................. XII

(M) Bibliography ............................................................................ XIV
List of Figures:

Part 1

Fig. P1.1. Shenton Way skyline view from the sea (1975).
Fig. P1.2. Shenton Way high rise building (1998).
Fig. P1.3. Multi racial young Singaporeans. (Picture adopted from "The Next Lap".
Fig. P1.4.(1). Traditional Tidbits in Chinese Community.
Fig. P1.5.(2). Traditional Snacks in Peranakan Community.
Fig. P1.6.(3). Traditional Snacks in Malay community.

Part 2

Fig. P2.1. Port of Singapore Authority (PSA).
Fig. P2.2. PSA container Port.
Fig. P2.3.(1). Typical Traditional Wet Market in Singapore.
Fig. P2.4.(2). Provision Shop attaches within Traditional Wet Market. (Picture adopted from “Singapore Food” by Wendy Hutton).
Fig. P2.5.(3). Roadside Hawker outside the traditional wet market (1974).
Fig. P2.6.(1). Popular Raw fish 'Yusheng' in Chinese New Year.
(Picture adopted from 'Lianhe Zaobao').
Fig. P2.7.(2). Malay New Year dishes.
Fig. P2.8.(3). Indian New Year dishes.
Fig. P2.9. "Seafood Steamboat" served at the reunion dinner table.(Picture adopted from ‘Singapore food’ by Wendy Hutton).
Fig. P2.10. Malay wedding ceremony. (Picture provided by Singapore National Museum).
Fig. P2.11. Popular Malay Festival Food 'Ketupat'.

iii
The significant Indian temple in Singapore.

Indian wedding ceremony in temple. (Picture provided by Singapore National Museum).

Popular Indian festival snack “Meat Pastries”.

′Waxed Duck′ and ′Sausages′- popular Chinese festival delicacies.

Colourful Indian festival snacks..

Traditional cakes and cookies served during Malay festival.

Different varieties of Chinese sweet tidbits sold at road stall during the festival.

Traditional Chinese New Year Pudding sold at road stall.

A typical Salted Sundries Stall in the local traditional wet market.

Dried and preserved foods dangled from the shops ceiling.

Traditional preserved foods contained in glass jars.

Traditional Salted Sundries Stalls found in Bangkok, Thailand.

Imported Japanese salted sundries foods with modern packages sold in the Modern supermarket.

Traditional preserved foods contained in jars and bottles sold in the local traditional wet market.

Typical dried salted seafood stall located in the traditional wet market.

Popular dried seafood ′exposed′ in front of the shop.

Raw dried shrimps without any packaging.

′Shark′s fin′- en exclusive dried seafood product

Raw ′Sea Cucumber′.

Exclusive ′Dried Abalone′.

3 in 1 packaging for Abalone, Scallops and Fish Maw. (NAFA student corporate identity food packaging project).

A Gift packaging for exclusive dried seafood products. (NAFA student C.I. food packaging projects).

Modern packaging for popular local dried seafood products Shrimps, Anchovies and Salted Fish, etc. (NAFA student C.I. food packaging project).

Another outstanding modern packaging for local popular dried seafood products designed by NAFA student.
Fig. P2. 36 (1). Local raw spices sold in the traditional wet market.
Fig. P2. 37 (2). Chinese herbs and spices in dull packaging.
Fig. P2. 38 (3). Raw spices being processed by a simple machine at the back of hawker stall.
Fig. P2. 39 (4). Dried spices packed in simple plastic bag without any name and brand.

Fig. P2. 40 (1). Local spices packed in modern containers. (NAFA students C.I. food packaging project).
Fig. P2. 41 (2). Garlic, Chilies and Pepper powder packed in modern containers. (NAFA student C.D. food packaging project).
Fig. P2. 42 (3). Local spices packed in modern containers. (NAFA student C.I. food packaging project).
Fig. P2. 43 (4). Another outstanding NAFA student C.I. - spices packaging project.

Fig. P2. 44 (1). Different types and brands of spices displayed on shelves.
Fig. P2. 45 (2). Local and imported processed spices packed in modern packaging.
Fig. P2. 46 (3). Traditional Chinese herbs spices packed in modern packaging sold at the modern supermarket.

Fig. P2. 47 (1). Production in progress in a 'Rice Dumpling' home factory.
Fig. P2. 48 (2). A worker preparing bamboo leaves for 'Rice Dumpling' packaging.
Fig. P2. 49 (3). 'Rice Dumpling' being putting into giant container for boiling.

Fig. P2. 50 (1). Making traditional hand made 'Spring Roll Skin' in the shop house.
Fig. P2. 51 (2). A skillful worker making 'Spring Roll Skin' in the shop house.
Fig. P2. 52 (3). Fresh 'Spring Roll Skins' being put into plastic bag for the customer to takeaway.
Fig. P2. 53 (4). 'Spring Roll Skin' packed in modern packaging sold in the supermarket.

Fig. P2. 54 (1). Nonya cake and confectionery Home Factory.
Fig. P2. 55 (2). 'Red Turtle Pastry'- a popular Nonya snack.
Fig. P2. 56 (3). Different varieties of delicious Nonya cakes sold at the hawker stall without packaging.
Fig. P2. 57 (4). 'Multi-Layers Pastry'-a favourite snack among the various races.
Fig. P2. 58 (1). 'Banana Leave' is the most commons natural packaging material for foods for Southeast Asia.

Fig. P2. 59 (2). More then thousand years ago, Chinese rice dumpling were packed in 'Bamboo Leave'.

Fig. P2. 60 (3). 'Blue Ginger Leave' used to packed Malay sweet pastries.

Fig. P2. 61 (4). 'Coconut Leave' bring out the flavor of delicious 'Nonya 'Otah'.

Fig. P2. 62. In some traditional wet market in Singapore, Indian raw spices and paste are still packed in natural leaves. (Picture adopted from 'Singapore Food' by Wendy Hutton).

Fig. P2. 63 (1). A Corporate identity project for a Parakan Snack House. Students had to make use artificial banana leave as part of their design items.

Fig. P2. 64 (2). Take away food package. With the texture of the banana leave applied onto the package.

Fig. P2. 65 (3). Printed natural leave textures been used on other local traditional food packages.

Fig. P2. 66 (4). Other natural leaf patterns had been applied on modern packaging of various multi racial traditional snacks.

**Part 3**

Fig. P3. 1.(1). A typical traditional groceries shop in Singapore 1965.

Fig. P3. 2.(2). A common kitchen Shared by many family, in an old shophouse in an urban area of Singapore 1965. (Picture adopted from URA Annual Report 1974/75).

Fig. P3. 3.(3). Dried Foods exposed for sale in a traditional groceries shop.

Fig. P3. 4.(4). Traditional Chinese biscuits and cookies sold at roadside stalls.

Fig. P3. 5. The rapidly changing living environment within the urban centre area of Singapore.

Fig. P3. 6.(1). A crowed of young Singaporean Professionals walking along the central district of Shenton Way.

Fig. P3. 7.(2). Modern Food Court located at Urban Area.

Fig. P3. 8.(3). Lunch crowds in one of the Food Court located within the office building.

Fig. P3. 9.(4). A typical modern fully equipped Kitchen found in today's New Generation Home. (Picture adopted from 'Modern Living' magazine).
Fig. P3. 10. Boat Quay, a place where young professional Singaporeans hang out for dinner.

Fig. P3. 11.(1). Traditional fresh foodstuffs with modern packaging displayed in the cool shelves of the supermarket.

Fig. P3. 12.(2). Traditional dried salted seafood products packed with modern packaging.

Fig. P3. 13.(3). Traditional herbs and spices with modern packaging sold in the modern supermarket.

Fig. P3. 14.(4). Local snacks displayed in the cool shelves of the modern supermarket.

Fig. P3. 15. Local Traditional cooked foodstuffs with hygienic packaging displayed in the cool shelves.

Fig. P3. 16. Daily milk and fresh Juices packed in hygienic packaging.

Fig. P3. 17.(1). An untidy vegetable stalls in the traditional wet market with some items displayed haphazardly on the ground.

Fig. P3. 18.(2). A stall selling fresh bean curds and fishcakes.

Fig. P3. 19.(3). Smelly poultry stalls exposes their product openly.

Fig. P3. 20.(4). At one of the busy fresh fish stall, hawker help their customers to clean the fish stomach and descale the fish.

Fig. P3. 21. A modern supermarket-Clean, Bright, Tidy with air-conditioned comfort. All goods are systematically display.

Part 4

Fig. P4. 1. "Spring Roll Skin Packaging Design by Wang Peiyuh, Joy. (1997 NAFA Diploma Show).

Fig. P4. 2. 'Tropical Fruits Juices' Processed Food Packaging Designed by Tan Li Yong. (1997 NAFA Diploma Show).

Fig. P4. 3. 'Seafood Fried Rice' Processed Food Packaging Designed by Tan Kheng Tze, Eric. (1997 NAFA Diploma Show).

Fig. P4. 4. 'Nonya Cake' Packaging Designed by Ng Shen Hui, Leona. (1997 NAFA Diploma Show).
Fig. P4.5. 'Tropical Fruits Juices' Processed Food Packaging Designed by Phan Seow Yin, Diana. (1997 NAFA Diploma Show).

Fig. P4.6. 'Biscuit and Cookies' Gift Packaging Designed by Ng Hew Kang, Jean. (1997 NAFA Diploma Show).

Fig. P4.7. 'Curry Beef with Rice' Processed Food Packaging Designed by Leo Pei Fern, Wendy. (1997 NAFA Diploma Show).

Fig. P4.8. 'Chicken Noodle' Processed Food Packaging Designed by Lee Boon Por, Alvin. (1997 NAFA Diploma Show).
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