

Design preferences for oral contraceptive packaging in Japan and the USA

Rineke Kuiper
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University of Twente
Faculty CTW
Postbus 217
7500 AE Enschede
The Netherlands
Phone: (+31) 053 489 91 11

Schering-Plough
Packaging& Device Development
Section NP&DD
5340 BH OSS
The Netherlands
Phone: (+31) 0412 668 478

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Rineke Kuiper
0039802

Company supervisor: Marieke de Weerd
UT-supervisor: Wouter Eggink

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This is a bachelors assignment report for the study Industrial Design at the University of Twente. This assignment is conducted at the company Schering/Plough, in behalf of the section New Packaging& Device Development.

Preface

This is the report of my bachelor's assignment for the study Industrial Design at the University of Twente. This assignment is conducted at the company Schering/Plough, in behalf of the section New Packaging& Device Development in Oss, where I felt welcome thanks to my friendly colleagues who were always willing to bring me coffee and help in other ways.

Special thanks to Marieke, my company supervisor, who was always very helpful and patient, and Wouter, my university supervisor, who often helped seeing things from a different perspective.

I hope you enjoy reading this report!

Rineke Kuiper

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Summary

This is a bachelors assignment report for the study Industrial Design at the University of Twente. The assignment is conducted at the company Schering-Plough, in behalf of the section New Packaging& Device Development, in Oss.

Schering-Plough is a pharmaceutical company with the following areas of research: cardiovascular disease, central nervous system disorders, immunology and infectious disease, oncology, respiratory diseases and women's health.

The section New Packaging &Device Development wants to learn if there are prominent differences in the packaging field for the different areas of the world and what the do's and don'ts are. Within this project frame, two following assignment is formulated:

The objective of the assignment is to do recommendations for the design of packaging of oral contraceptives for Japan and the US, by doing an analysis on different aspects of these two countries. These recommendations will be put in a model or a summary of guidelines.

This model or summary will be applied into a number of re-designs of packaging of one or more oral contraception products, at the level of prototypes or computer models. The (computer) models will show how the guidelines can be put into practice.

The cultures of Japan and the USA are unraveled with the cultural dimensions that are formulated by Geert Hofstede. The rankings of the cultural dimensions for the two countries are applied in a method that finds correlations with packaging design. For the USA, the dimensions have correlations with 'Expressiveness', 'Symbolism' and 'Context', and for Japan, the dimensions have correlations with 'Expressiveness', 'Symbolism' and 'Identification'. The consequences of these correlations are put in the design recommendations.

The perception of the population about OCs and how the users receive them is discussed. The different stakeholders and their relations in respect to OCs are investigated. In the USA, women have a lot of influence in this relation. They are influenced by advertisements and other forms of information, and go to their gynecologists with a clear picture of what they want. Gynecologists prescribe the pills and pharmacists provide them. Insurance pays for (part of) them.

In Japan, women don't have a lot of influence in the process. Low-dose OCs were only just approved by the Japanese Ministry of Health, Labor and Welfare in 1999. There is not much choice between different OCs, and often this choice is even narrowed down more to the little amount of different OCs the gynecologists or pharmacists have in stock. The gynecologists have the most power in this relation; they prescribe and often also supply the pills. Pharmacists have less influence than gynecologists; women prefer to get their supply at the gynecologist. Insurance doesn't pay for the pills and advertisement for prescription drug is not allowed in Japan.

From this research follow the design recommendations. These design recommendations are applied in two generic designs, one for Japan and one for the USA. For each country 3 packaging components are developed; the blister, the carrier compact and the cardboard box.

PART I -- OVERALL

In the designed components can be seen that the difference in the design recommendations for the USA and Japan is very big. Often they are precisely opposite each other. There is some overlap in the recommendations, but when used in combination with the other recommendation the results are very different. The graphic on the cardboard boxes for example in the USA have to be garish, loud, with a lot of contrast between color, where graphics on the boxes in Japan have to be very modest and matte. The design preferences for the blisters again are opposed to each other. This time it is the other way around; in Japan they have to be very colorful and exclusive, where in the USA the blister has to be simple and colorless.

The designs that are made can clearly not be interchanged, the Desogen packaging would definitely not be appreciated in Japan and the Marvelon packaging would not be taken seriously in the USA.

If the decision is made to do design research for other countries or regions Schering-Plough can use the format of this project as a template.

PART I: OVERALL

I. Introduction

1.1. Schering-Plough

Schering-Plough is a renowned pharmaceutical company with a strong commitment to health care. Products developed by Schering-Plough are sold in more than 140 countries world-wide. At the moment, Schering-Plough has approximately 55.000 staff members. Schering-Plough develops and produces prescription products, veterinary products and consumer products. The areas of research are: cardiovascular disease, central nervous system disorders, immunology and infectious disease, oncology, respiratory diseases and women's health.

In 2007 Schering-Plough took over the Dutch pharmaceutical company Organon.

The assignment is done in behalf of the section New Packaging & Device Development (NP&DD), situated in the former head quarters of Organon, in Oss. This section is part of the Product Development Department. It is responsible for the full development of packaging, devices and packaging processes on behalf of new pharmaceutical products for the international product locations.

The section NP&DD consists of 3 groups, namely projects, selection and innovation. The assignment will be executed within the innovation group.

1.2. Assignment

Schering-Plough delivers its products worldwide. At the moment, the development of packaging and devices is executed as universally as possible. Apart from the fact that local rules and legislation have influence on the development of packaging and devices, local preferences can also be crucial for the success of the product.

NP&DD innovation wants to learn if there are prominent differences in the packaging field for the different areas and what the do's and don'ts are. Which adjustments would lead to higher consumer acceptance? This knowledge can be embedded in future packaging and device development, which will lead to more distinctive products with more additional value.

Within this project frame, two countries will be analyzed, namely the USA and Japan. Schering-Plough is an American company, and the USA is a very large market. Japan on the other hand is a relatively new market for Schering-Plough. The countries have very different backgrounds, styles and cultures, which make it more interesting to compare.

One product group will be analyzed. A choice needed to be made between the different product groups, such as the illness focused or life style oriented groups. The choice was made to analyze a 'life style' product group, namely oral contraceptives (in short OCs). Contraceptives form a pharmaceutical group that is the closest to consumer products, which makes the appearance of the packaging matter more than the packaging of for instance hart pills.

1.3. Objective

The objective of the assignment is to do recommendations for the design of packaging of oral contraceptives for Japan and the US, by doing an analysis on different aspects of these two countries. These recommendations will be put in a model or a summary of guidelines.

This model or summary will be applied into a number of re-designs of packaging of one or more oral contraception products, at the level of prototypes or computer models. The (computer) models will show how the guidelines can be put into practice.

1.4. Method

The following project model is pursued:

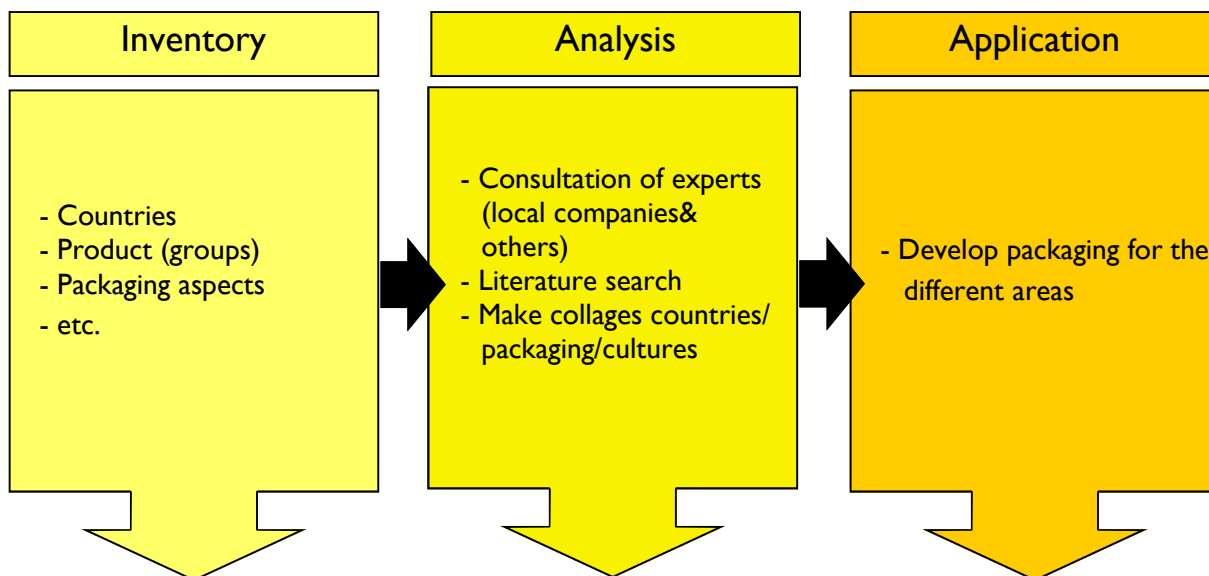


Figure I.1.1: Project model

The report follows this structure. This introduction represents the inventory phase.

Part I, II and III of this report comprehend the Analysis phase. In this phase interviews have been conducted, a literature search is executed and a study to current packaging design is done for both countries. The interviews are conducted with several experts, such as staff members of the marketing department, several people from Schering Plough in the USA and experts on the (OC) market in Japan. Unfortunately it was not possible to get an interview with someone from Schering-Plough in Japan. This was solved with a more extensive literature search for Japan and the information other experts had given. The outcomes of this phase lead to the design recommendations.

In part I, themes are discussed that apply to both countries. A method to explore cultures is studied and applied to the countries. The consequences of these outcomes for the packaging preferences are presented. Here the first design recommendations emerge.

In Part II and III the countries are analyzed separately, in part II the USA and part III Japan. These parts have a similar structure. First some country facts are given. Then the health care system is explained. In chapter 2, the perception of the population of OCs is discussed. There is told how the users receive the pills in the sub chapter 'Distribution amongst users'. A top 10 in sales is presented. In the USA part, a sub chapter about OC commercials is inserted. How these advertisements influence the different stakeholders and what their relations are with respect to OCs is discussed in chapter 3. After this a design research is conducted, which can be found in chapter 4.

PART I -- OVERALL

The analysis phase leads to design recommendations in chapter 5.

The design recommendations are put to the test in part IV. A blister, a carrier compact and a cardboard box are designed for both countries, using the design recommendations as a guideline. The final packaging presentation and the argumentation for the choices can be found in this part.

Because the objective of the project was to do recommendations for the *design* of packaging, the design recommendations refer to design preferences. For this reason, there has not been investigated what logo's or information should legally be on the boxes. Besides, this is regular procedure for Schering-Plough when a product is put on the market. The recommendations made in this project strictly focus on the design.

In the project, a firm generalization is made of women in the USA and Japan. Off course there are several subgroups in both countries, but the generalization had to be made because the aim of the project was to see if *local* preferences play a role in design packaging.

2. History Oral Contraceptives

To provide some historical background, the history of oral contraceptives is discussed in this chapter.

- In **1901**, a team of physiologist proved that hormones from the brain and ovaries regulate menstruation.
- In **1919** a breakthrough happened in the hormonal contraceptives field. A team of scientists transplanted the ovaries of pregnant animals to non-pregnant animals, herewith establishing a delay in the ovulation.
- In **1921**, Marie Stopes founded the *Society for Constructive Birth Control*. She opened the first birth control clinics in London, which gave women access to information about birth control.
- The German biochemist Adolf Butenandt examined male and female hormones and isolated estrone, a female hormone, in **1929**.
- In the **1930s**, more scientific research has been done to get insight into how contraceptive methods can influence the functioning of the body.
- In **1934**, Adolf Butenandt isolated the hormone progesterone from pig's ovaries.
- In **1936**, American scientists showed that progesterone prevents ovulation.
- In the **1940s** laboratories in the western countries were buzzing with activity, because everybody wanted to be the first to make a contraceptive pill.
 - o In **1942**, the American chemist Russel Marker pointed attention to producing synthetic hormones from plant roots.
 - o In **1944**, two German scientists, Bickenback and Paulikovics, did research on delaying the ovulation with progesterone.
- In the **1950s** the search continues.
 - o Gregory Pincus, an American endocrinologist, develops and tests a hormonal contraceptive for the first time.
 - o Chemist Carl Djerassi formulates norethindrone, the first synthetic progesterone, in **1951**. Norethindrone was the first ingredient for the contraceptive pill
 - o In **1956**, the first long lasting clinical trials for the contraceptive pill start. Gregory Pincus and Dr. Min Chuh Cheng study 60.000 women with Harvard gynecologist John Rock, and show that estrogen and progesterone in small doses prevents pregnancies.
 - o Adolf Butenandt receives the Nobel price for Chemistry in **1959**, for his revolutionary research on sex hormones.
- In the **1960s** the contraceptive pill is brought to the market. Women get a new way of controlling their fertility – and with that a new independence.
- In de **1970s**, the oral contraceptive pill is an accepted form of contraception in the western countries, with over 50 million women using it.
- In the **1980s** the formulation of the contraceptive pill is further developed, and pills with less estrogen and new multiphase regimes with varying hormone levels during the cycle came into market.¹ (The one phase pill contains a fixed dose estrogen and a progestogen. All pills in the strip are the same. Two and three phase pills contain estrogen and progestogen too, but the proportions differ per phase. One strip encloses different colors pills that have to be taken in the right order)

Nowadays, women in most western countries have over 20 options for choosing a birth control method. These methods can be divided in 4 categories: behavioral methods, physical methods,

medical methods and surgical methods. Besides the pill, which is a medical method, there are a lot of other hormonal contraceptives, such as IUD's (intra-uterine devices), patches, implants and vaginal rings.

3. Cultural dimensions

3.1. Introduction

There are several ways to unravel cultures. In this project the cultural dimensions of Geert Hofstede are used to get insight on the cultures of the USA and Japan. Of course, there are a lot of other ways to look at culture, but this theory seemed most orderly and useful, because of its clear structure.

A graduation student from Industrial Design in Delft, Lianne van der Berg, has done research on correlations between packaging design and the Geert Hofstede dimensions. The outcome of her research and the applicability for this project will be discussed in chapter 3.3.

3.2. Geert Hofstede

Geert Hofstede (Haarlem, 1928) is a Dutch organizational psychologist. He earned international fame in the field of intercultural studies. He became mechanical engineer in 1953 at Delft University and admitted to the degree of professor in psychology at the Rijksuniversiteit Groningen in 1967. Hofstede was professor 'Comparing cultural studies of organizations' at the University of Maastricht.

Hofstede's fame arose from his cultural model, which uses cultural dimensions as a measure for cultural differences. Hofstede came to his model as a result of a research for IBM in the 1960s. National and regional differences with influence on the functioning of institutional organizations (like governments, families, companies, school) became visible and measurable by his work. The model intends to give better insight in cultural differences and by this make them bridgeable.²

3.2.1. Hofstede's dimensions

Hofstede formulated the following dimensions:

Power Distance Index (PDI) is the extent to which the less powerful members of organizations and institutions (like the family) accept and expect that power is distributed unequally. This represents inequality (more versus less), but defined from below, not from above. It suggests that a society's level of inequality is endorsed by the followers as much as by the leaders. Power and inequality, of course, are extremely fundamental facts of any society and anybody with some international experience will be aware that 'all societies are unequal, but some are more unequal than others'.

Individualism (IDV) on the one side versus its opposite, collectivism, is the degree to which individuals are integrated into groups. On the individualist side we find societies in which the ties between individuals are loose: everyone is expected to look after him/herself and his/her immediate family. On the collectivist side, we find societies in which people from birth onwards are integrated into strong, cohesive in-groups, often extended families (with uncles, aunts and grandparents) which continue protecting them in exchange for unquestioning loyalty. The word 'collectivism' in this sense has no political meaning: it refers to the group, not to the state. Again, the issue addressed by this dimension is an extremely fundamental one, regarding all societies in the world.

Masculinity (MAS) versus its opposite, femininity, refers to the distribution of roles between the genders which is another fundamental issue for any society to which a range of solutions are found. The IBM studies revealed that (a) women's values differ less among societies than men's values; (b) men's values from one country to another contain a dimension from very assertive and competitive and maximally different from women's values on the one side, to modest and caring and similar to women's values on the other. The assertive pole has been called 'masculine' and the modest, caring pole 'feminine'. The women in feminine countries have the same modest, caring values as the men; in the masculine countries they are somewhat assertive and competitive, but not as much as the men, so that these countries show a gap between men's values and women's values.

Uncertainty Avoidance Index (UAI) deals with a society's tolerance for uncertainty and ambiguity; it ultimately refers to man's search for Truth. It indicates to what extent a culture programs its members to feel either uncomfortable or comfortable in unstructured situations. Unstructured situations are novel, unknown, surprising, and different from usual. Uncertainty avoiding cultures try to minimize the possibility of such situations by strict laws and rules, safety and security measures, and on the philosophical and religious level by a belief in absolute Truth; 'there can only be one Truth and we have it'. People in uncertainty avoiding countries are also more emotional, and motivated by inner nervous energy. The opposite type, uncertainty accepting cultures, are more tolerant of opinions different from what they are used to; they try to have as few rules as possible, and on the philosophical and religious level they are relativist and allow many currents to flow side by side. People within these cultures are more phlegmatic and contemplative, and not expected by their environment to express emotions.

Long-Term Orientation (LTO) versus short-term orientation: this fifth dimension was found in a study among students in 23 countries around the world, using a questionnaire designed by Chinese scholars. It can be said to deal with Virtue regardless of Truth. Values associated with Long Term Orientation are thrift and perseverance; values associated with Short Term Orientation are respect for tradition, fulfilling social obligations, and protecting one's 'face'. Both the positively and the negatively rated values of this dimension are found in the teachings of Confucius, the most influential Chinese philosopher who lived around 500 B.C.; however, the dimension also applies to countries without a Confucian heritage.³

3.2.2. Rankings for the USA and Japan

For this research, the rankings for the dimensions are put in a table for the USA and Japan, in this way constituting the countries cultural profiles. For reference purposes the world averages for the dimensions are also inserted in this table. The rankings are discussed below.

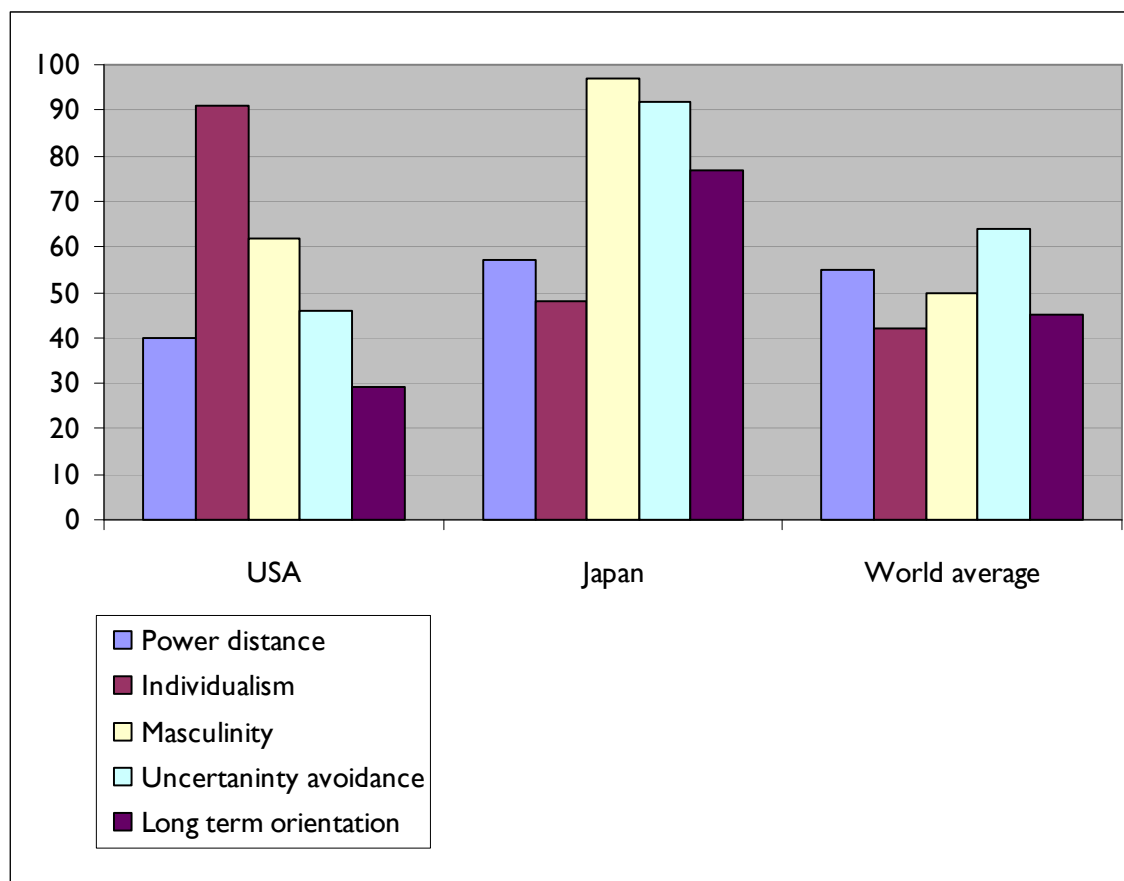


Figure I.3.1: Cultural dimension rankings for the USA, Japan and the World average

USA	Japan
The ranking Dimension for the United States of the Power Distance Index (PDI) is at 40, compared to the world Average of 55. This is indicative of a greater equality between societal levels, including government, organizations, and even within families. This orientation reinforces a cooperative interaction across power levels and creates a more stable cultural environment.	The Power Distance (PDI) ranking of 57 is very close to the world average, at 55. The Japanese society is based on a strong hierarchy. On higher levels, there is a lot of freedom; civil servants can fill in vaguely formulated laws via 'administrative indications'.
The high Individualism (IDV) ranking for the United States indicates a society with a more individualistic attitude and relatively loose bonds with others. The population is more self-reliant and looks out for themselves and their close family members.	Japan's Individualism (IDV) ranking is at 48 much higher than the average ranking of the Asian countries, which has an average of 20. Japan leans more to a society with relative loose bands between individuals, than to a collective society.

<p>The second highest Hofstede Dimension is Masculinity (MAS) with a ranking of 62, compared with a world average of 50. This indicates the country experiences a higher degree of gender differentiation of roles. The male dominates a significant portion of the society and power structure. This situation generates a female population that becomes more assertive and competitive, with women shifting toward the male role model and away from their female role.</p>	<p>Japan has the highest Masculinity (MAS) rankings of all countries. This indicates the country experiences a very high degree of gender differentiation of roles. The male dominates a significant portion of the society and power structure. Also, men are used to take the lead in relationships.</p>
<p>The Uncertainty Avoidance (UAI) for the US has a ranking of 46, compared to the world average of 64. A low ranking in the Uncertainty Avoidance Dimension is indicative of a society that has fewer rules and does not attempt to control all outcomes and results. It also has a greater level of tolerance for a variety of ideas, thoughts, and beliefs.</p>	<p>Japan's Hofstede Dimension Uncertainty Avoidance (UAI) at 92 is very high, indicating the society's low level of tolerance for uncertainty. In an effort to minimize or reduce this level of uncertainty, strict rules, laws, policies, and regulations are adopted and implemented. The ultimate goal of this population is to control everything in order to eliminate or avoid the unexpected. As a result of this high Uncertainty Avoidance characteristic, the society does not readily accept change and is very risk adverse.</p>
<p>The Long Term Orientation (LTO) rate is the lowest Dimension for the US at 29, compared to the world average of 45. This low LTO ranking is indicative of the societies' belief in meeting its obligations and tends to reflect an appreciation for cultural traditions.</p>	<p>Geert Hofstede analysis for Japan has Long-term Orientation (LTO) with a high-ranking factor, which is true for all Asian cultures. This Dimension indicates a society's time perspective and an attitude of persevering; that is, overcoming obstacles with time, if not with will and strength.</p>

The Geert Hofstede analysis for Japan is dramatically different from other Asian Countries such as Hong Kong, Korea or China. In Japan Masculinity is the highest characteristic. The lowest ranking factor is Individualism, which coincides with their high ranking in Uncertainty Avoidance. Japan is a more collectivist culture that avoids risks and shows little value for personal freedom.^{3,4}

3.3. Correlation Hofstede's dimensions and packaging design

3.3.1. Introduction

During her graduate assignment Lianne van der Berg searched for correlations between Geert Hofstede's five cultural dimensions and local preferences for packaging design. She assembled five product categories from seven countries, and formulated five design factors. These were: Expressiveness, Identification, Information, Symbolism and Context. Below her definitions for these factors can be found.

Expressiveness - This factor covers aspects such as the use of color (soft versus bright, harmonious versus contrasting) and shape (rounded versus angular), the aggressiveness of the typography and the contrast value of the brand name/logo. These aspects give packaging 'character'.
Context - The context factor has to do with the way in which information is conveyed through the packaging. In so-called 'low-context' cultures, people communicate explicitly (with an emphasis on facts, figures and other information); in 'high-context' cultures, communication is more implicit, for example through the use of symbolism. This factor includes location, size and contrast of the brand name/logo, verbal communication of the content and degree of structure.
Symbolism - Three aspects go to make up this factor: the use of symbolism, the creation of an emotional response (rather than an emphasis on product characteristics) and the amount of detail. This all has to do with the creation of the 'atmosphere' the image conveys.
Information - This factor relates to the way in which the packaging informs the consumer and comprises the following aspects: quantity of text, non-verbal communication about the contents of the packaging, the degree of structure, the amount of detail and the shape (rounded versus angular).
Identification - There are two aspects to this factor: the size of the company name (the producer) and the use of lower case (small) letters as opposed to upper case (capital) letters. ⁵

3.3.2. Correlations

The correlations she found differed between the different product groups. Women's deodorant turned out to be the most subject to cultural influences. Furthermore, the results for women's deodorant are the most interesting for the comparison with OCs, because its target group overlaps the target group of OCs. The correlations that were found for women's deodorant are the following:

	Correlation
Expressiveness – Masculinity	Negative
Symbolism – Masculinity	Positive
Context – Individualism	Positive
Identification – Uncertainty Avoidance	Positive

Expressiveness – Masculinity

There is a negative correlation between **Expressiveness** and **Masculinity**. This means the packaging of women deodorant in masculine societies is the opposite of expressive, with round shapes, soft and harmonious colors, low contrast and non-aggressive typography/layout. It seems that women deodorants in masculine societies need a feminine accent. This reflects the difference in role patterns as men and women that is characteristic for masculine cultures.

Symbolism – Masculinity

Another correlation found was **Masculinity** with **Symbolism**. In masculine societies, women are expected to be gentle and caring, in contrast to what is expected of men. This seems to be reflected in the design of packaging for women deodorants. The packaging uses nature symbols and the creation of an emotional atmosphere to communicate gentleness and softness. The brand name/logo is subdued in its contrast with the background.

Context – Individualism

Context and **Individualism** have a positive correlation. The Context factor is about providing clarity, which arises by a prominent location of a large brand name/logo that contrasts with the background, verbal communication about the contents of the packaging, structured and aggressive typography/lay-out. It fits in with 'low-context' cultures, in which verbal communication is the main form of communication. More use is made of text, argument, facts and information. Deodorant packaging in individualist cultures clearly communicates its own identity, in line with the behavior of individuals in these societies.

Identification – Uncertainty Avoidance

The last relationship found for deodorant packaging is between **Identification** and **Uncertainty Avoidance**. Consumers in strong Uncertainty Avoidance cultures have great brand loyalty. Recognition of a brand's familiar word image makes the consumer feel secure about purchasing his or her trusted brand. That is why often lower case letters are used (rather than capital letters), ensuring a more recognizable word image. Moreover, the company name on the packaging is large, larger than the brand name.⁵

3.3.3. Applied to the USA

For this project, the research is applied to the USA rankings and the following conclusions are drawn.

The USA has a ranking for Masculinity of 62, which is relatively high. This means the correlations with Expressiveness and Symbolism apply slightly to this culture.

The characteristics are:

- Round shapes
- soft and harmonious colors
- low contrast and non-aggressive typography/lay-out
- Natural symbols that create an emotional atmosphere to communicate gentleness and softness.
- Brand name/logo is subdued in its contrast with the background.

The USA's Individualism ranking is very high. There is a correlation with the factor Context. The corresponding characteristics are:

- Prominent location of large brand name/logo that contrasts with the background
- Verbal communication on the packaging about the contents
- Structured, aggressive typography/lay-out
- Lots of text, argument, facts and information

The characteristics of these two correlations conflict. The first one tells to subdue the brand name, and the other tells precisely the opposite. The masculinity ranking of the USA is high, but still far from the top of the ranking. The Individualism ranking on the other hand is at the top of the ranking. The correlation with Individualism therefore is more important. This means the correlation with Masculinity can be toned down a bit, keeping the round shapes, harmonious colors and natural symbols, but not subduing the brand name.

The Uncertainty Avoidance ranking is very low for the USA. Therefore the found correlation with Identification does not apply to the USA.



Picture I.3.2: American packaging for the OC Lybrel

This example applies accurately to the USA characteristics. The brand name is large and in a prominent position. Verbal communication about the contents is on the packaging. Much use is made of text in an aggressive lay-out. Natural shapes are used.

3.3.4. Applied to Japan

Japan has the highest ranking for masculinity, and accordingly strong correlations with Expressiveness and Symbolism. The characteristics that follow from these correlations are:

- Round shapes
- Soft and harmonious colors
- Low contrast and non-aggressive typography/lay-out
- Natural symbols that create an emotional atmosphere to communicate gentleness and softness.
- Brand name/logo is subdued in its contrast with the background.

Japan does not have a very high or very low Individualism rating, therefore the correlation between Individualism and Context does not apply for Japan.

The correlation between Identification and Uncertainty Avoidance applies to Japan, which has a high Uncertainty Avoidance rating. The correlation features the following characteristics:

- Consumers in strong Uncertainty Avoidance cultures have great brand loyalty
- Recognition of a brand's familiar word image is important
- Often lower case letters are used (rather than capital letters), ensuring a more recognizable word image.
- The company name on the packaging is large, larger than the brand name.

These characteristics have been compared to OC packaging. All of the above can be applied, except the last characteristic. The company name is not always larger than the brand name on OC packaging in Japan. It is always put in a prominent position though.



Picture I.3.2: Japanese packaging for the OC Triquilar

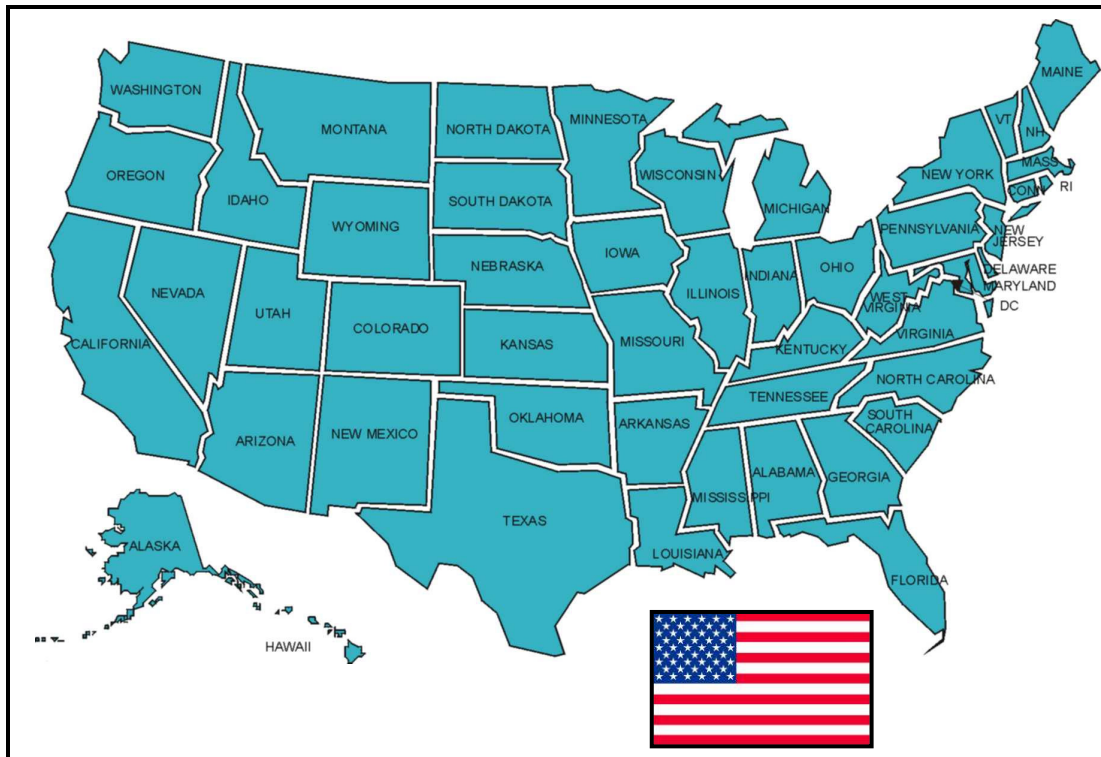
This accurate example applies to the characteristics for Japan. Round shapes and natural symbols are used. The colors are soft and harmonious and the contrasts are low. The brand name stands out because it is framed. The company name is prominent on the packaging.

PART II -- USA

PART II: USA

I. Country facts

1.1. Geographical facts



Picture II.1.1: Map of the USA

Area: 9,826,630 km²,
Number of inhabitants: 305 million
Density 33/km²
Capital city: Washington, D.C., 5.3 million inhabitants⁶

The United States of America consists of 50 states governed on a federal level, as well as a state level. Laws are written at both levels. The population of the United States consists of mixed races and heritage. The population is predominantly of European descent. The majority of American's (U.S.) is Christian.⁷

1.2. Health care

The U.S. health care system is not universal, it is not mandatory to be insured (except from the state Massachusetts) and 16% of the population doesn't have any health insurance at all. There are some publicly funded insurance systems, such as for the poor and the elderly. Some Americans receive health insurance through an employer, but usually have to pay an extra individual coverage.

The healthcare in the USA is generally provided by privately owned hospitals or physicians in private practice, but public hospitals are common in older cities.⁸

2. Oral contraceptives

2.1. Acceptation

Women in the USA are comfortable with Oral Contraceptives as a contraception method. About 25% of the women of reproductive age who are married or in union use them. OCs in the USA derive from a long history, as can be seen in chapter 2 of part I. For the most part, the product is accepted in the society, and is even paid for by health insurance. Religious beliefs though still prevent insurance to cover for OCs in some states, because the Christian/Catholic church sees it as sinful to use any contraceptive at all. In 21 states a law is in place which mandates insurers to provide OC coverage if they cover other prescription drugs. This means that 9 out of 10 employer-based insurance plans cover a full range of prescription contraceptives, and all federal employees are guaranteed insurance coverage. Therefore, to a large number of women cost is not currently an issue.

Next to the health insurance, there are publicly funded family planning clinics. These provide contraceptive services to a large amount of American women without health insurance, and provide discount contraceptives, which should make OCs accessible to women without health insurance. Nevertheless, recent research (Krings et al) showed that women who use OCs are more likely to have private insurance than women who use other forms of contraception. Despite the presence of organizations that provide discount contraception, there is still a significant population of women who are not benefiting from the more effective means of preventing unwanted pregnancy.^{9,10,11}

2.2. Distribution amongst users

A doctor (gynecologist) or a nurse practitioner prescribes the Pill. Before this, a complete physical exam will be done, which may include a pelvic exam. The doctor or nurse will often give prescriptions for 3 months' worth of pills and explain when to begin taking the Pill and what to do if pills are missed. After these 3 months there is a check up after which the doctor or nurse usually writes another prescription for 6 to 12 months. Subsequently, there are routine exams every 6 months to a year.¹²

Women receive their OCs at the pharmacy. Insurance usually allows buying one month supply per time of the pills. There are exceptions, e.g. the product Seasonique, which is a contraceptive that has to be taken for 3 months in a row without stop periods, which is of course provided for the length of the therapy.

The way OCs are handed out depends on where they are obtained. Most times, the pill is handed out in a hard cover casing. Sometimes the patient only gets the strip of pills with the instructions for use attached with a rubber band, or in a sachet. This varies from pharmacy to pharmacy and depends on the product.

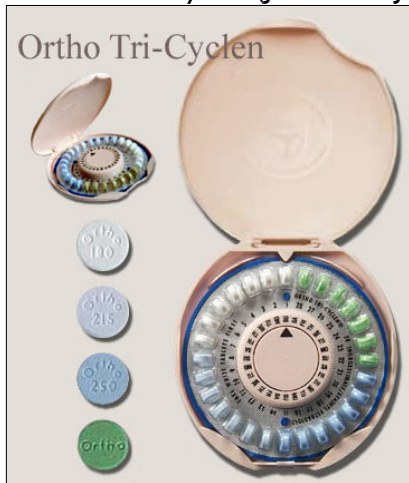
2.3. Top 10 in sales

1. Yasmin (Schering)



Picture II.2.1: Yasmin

2. Ortho Tri-Cyclen Lo 3. Ortho Tri-Cyclen (Johnson & Johnson)



Picture II.2.2: Ortho



Picture II.2.3: Ortho

4. Trinessa-28 (Watson)



Picture II.2.4: Trinessa-28

5. Apri (Barr Pharmaceuticals)



Picture II.2.5: Apri

PART II -- USA

6. Tri-Sprintec (Barr Pharmaceuticals)



Picture II.2.6: Tri-Sprintec

7. Seasonale (Barr Pharmaceuticals)



Picture II.2.7: Seasonale

8. OVCON 35 (Warner Chilcott)



Picture II.2.8: OVCON 35

9. Estrostep FE



Picture II.2.9: Estrostep FE

10. Aviane



Picture II.2.10: Aviane

2.4. Commercials

In 1997, the US government started to allow television advertisement for prescription drugs. For this reason companies try to create a larger brand identity and a relation with the consumer. This corresponds with the findings on cultural dimensions (part I, chapter 3.2), where is found that brand identity is important for a society with a high Individualism rate. Because of this competition, companies advertise with additional effects as in picture II.2.11 or improvements on the regular birth control pills as in picture II.2.12. The use of a lot of text, argument, facts and information also fits the correlation with the high Individualism rate.

READY FOR BIRTH CONTROL THAT GOES BEYOND?

YAZ® like all birth control pills, is 99% effective and can give you shorter, lighter periods. But YAZ goes beyond the rest. It's the first and only contraceptive proven to treat emotional and physical premenstrual symptoms severe enough to impact your life, a condition doctors call PMDD. Symptoms could include:

- Irritability
- Moodiness
- Feeling anxious
- Bloating
- Increased appetite
- Fatigue
- Headaches
- Muscle aches

YAZ can also help keep your skin clear. In recent studies, 9 out of 10 women saw improvement in their moderate acne.

YAZ is for women who choose the Pill for contraception. It should be taken as directed, and is available by prescription only.

Who shouldn't take YAZ?
YAZ contains a different kind of hormone that may increase potassium. Therefore, you should not take YAZ if you have kidney, liver or adrenal disease because this could cause serious heart and health problems. Tell your doctor if you are on daily long-term treatment for a chronic condition such as cardiovascular disease or chronic inflammatory disease. Women who take certain drugs (see below) should have their potassium levels checked in the first month of taking YAZ. You are encouraged to report serious side effects of prescription drugs to the FDA. Visit www.fda.gov/medwatch, or call 1-800-FDA-1088.

You don't have to take it anymore! Talk to your healthcare professional to find out if YAZ is right for you.

YAZ (drospirenone & ethinyl estradiol)
BEYOND BIRTH CONTROL®

www.yaz-us.com 1-866-YAZ-PILL

IMPORTANT SAFETY INFORMATION ABOUT YAZ:
What are the risks involved with taking any oral contraceptive (OC)? OCs can be associated with increased risks of several serious side effects. OCs do not protect against HIV infection or other STDs. Women, especially those 35 and over, are strongly advised not to smoke because it increases the risk of serious cardiovascular side effects including blood clots, stroke, and heart attack.

What cardiovascular or chronic inflammatory drugs may increase potassium? NSAIDs—ibuprofen (Motrin®, Advil®), naproxen (Naprosyn®, Aleve®), and others when taken long-term and daily for arthritis or other diseases or conditions, Potassium-sparing diuretics (spironolactone and others), Potassium supplementation, ACE inhibitors (Capoten®, Vasotec®, Zestrin®, and others), Angiotensin-II receptor antagonists (Cozaar®, Diovan®, Avapro®, and others), Heparin, and Aldosterone antagonists. See important patient information on reverse side.

In this advertisement, Yaz is promoted for its additional effects, the pill decreases acne and PMDD.

Picture II.2.11: Commercial for the OC Jaz

Take a look at LYBREL®.
Birth control with no regular monthly periods.

What is LYBREL?
LYBREL is the first and only FDA-approved low dose combination birth control pill that you take every day, 365 days a year without placebo. This means it's possible to go without your monthly period while taking LYBREL. While women stop having their regular monthly periods, most women initially experience breakthrough bleeding and spotting. This usually lessens over time. For some, this may continue, but regardless of any unexpected bleeding, LYBREL remains highly effective birth control.

Is it OK to not have my period?
Many health care professionals agree that there is no need to have a period while taking the Pill. Just ask yours.

How do I learn more about LYBREL?
Ask your health care professional. You can also visit www.lybrel.com or call 1-877-LYBREL-0.

IMPORTANT SAFETY INFORMATION
The Pill does not protect against HIV or other sexually transmitted diseases. Some women should not use the Pill, including women who have blood clots; breast, uterine, or liver cancers; a history of heart attack, stroke, or breast cancer; and those who are or may be pregnant. Serious risks associated with the Pill which can be life threatening, include blood clots, stroke, and heart attacks. Cigarette smoking increases the risk of serious adverse effects on the heart and blood vessels from oral contraceptive use, especially if you are over 35. Women who use the Pill are strongly advised not to smoke. LYBREL provides more hormonal exposure per year than conventional cyclic oral contraceptives containing the same or similar strength of the hormones estrogen and progestin. Because regular monthly bleeding does not occur on LYBREL, it may be difficult to recognize if you get pregnant. If you suspect pregnancy, or if you have symptoms such as nausea/vomiting or unusual breast tenderness, you should take a pregnancy test and contact your health care professional. The most common side effects reported with LYBREL in a clinical trial were headaches, menstrual cramps, upper respiratory infection, vaginal bleeding, and nausea.

Lybrel (drospirenone & ethinyl estradiol)
learn more at www.lybrel.com

LYBREL, LYBREL logo, and all other registered trademarks of Wyeth are trademarks of Wyeth. Please see Brief Summary of Patient Information on the adjacent page. You are encouraged to report negative side effects of prescription drugs to the FDA. Visit www.fda.gov/medwatch, or call 1-800-FDA-1088.

Lybrel is different from regular birth control pills because it has no stop or placebo period.

Picture II.2.12: Commercial for Lybrel

3. Stakeholders

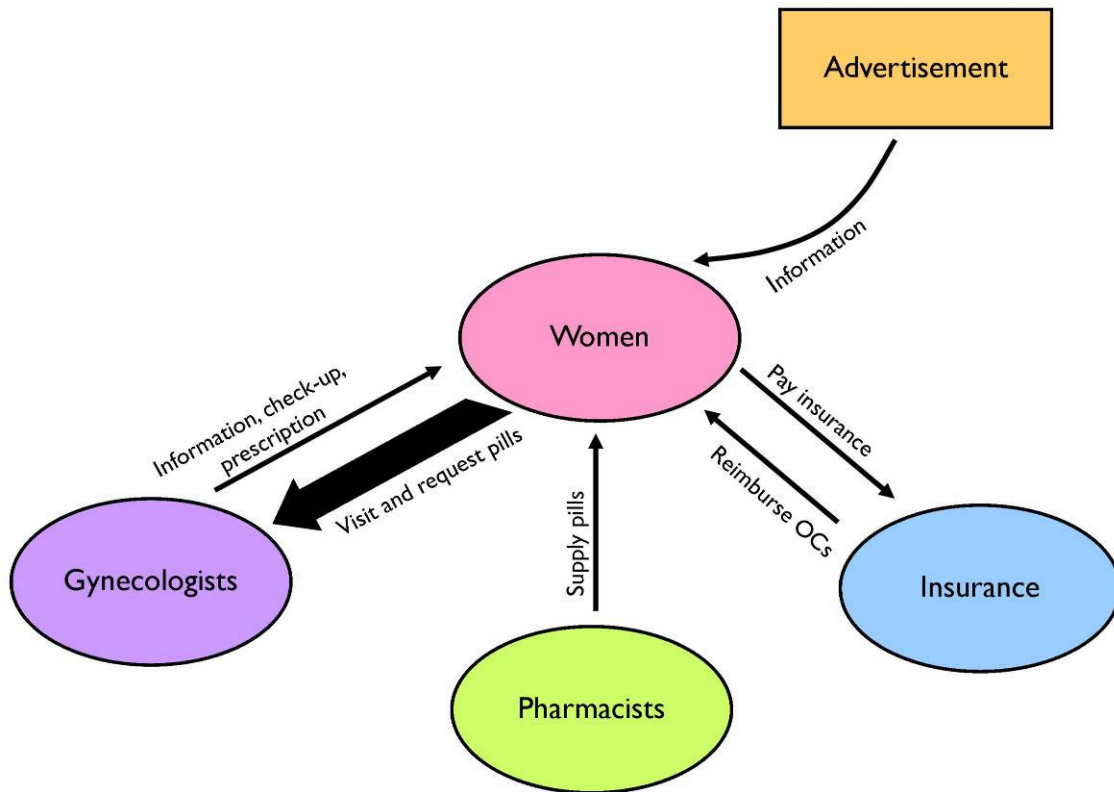


Figure II.3.1: Stakeholders

This figure illustrates the relations between the different stakeholders regarding to OCs. Women have a lot of influence in this figure, which is shown by the bigger arrow. They are influenced by advertisements and other forms of information, and go to their gynecologists with a clear picture of what they want. Gynecologists prescribe the pills and pharmacists provide them. Insurance pays for (part of) them.

3.1. Women

In the USA, it is accepted in most population groups to use OCs. Even though, women like a certain degree of discretion. There is a large market, in which competition is high, and women are influenced by advertisements and gadgets.

3.2. Gynecologists

Gynecologists prescribe the OCs. From this research there are no specific packaging preferences found from their point of view. If a woman doesn't have strong preferences for a brand they will probably prescribe the most sold OC that matches the requirements of the patient.

3.3. *Pharmacists*

The pharmacist supplies the OCs. Besides medicines, pharmacies in the USA often sell different products, from toys to tableware. There are different medication groups in America. These groups are over the counter, behind the counter and prescription drugs. Over the counter drugs are drugs that can be sold without prescription. Behind the counter drugs are drugs that can be bought without a prescription, but are handed out by the pharmacist after registering.

OCs are prescription drugs. These can be obtained by handing the prescription over to the pharmacist, who gets them out of the back. The drugs can't be seen or taken by the customer self. In some pharmacies, there are glass cabinets or pillars that present products. This serves as advertisement tool.

Before handing out the medicines, the pharmacist puts a sticker on the drugs with a pharmacy label that mentions the patient's name, dosage and several other things. With the drugs a patient information leaflet is provided.

3.4. *Insurance Companies*

Insurance companies reimburse (part of) the OCs and gynecologist visits for their clients. However, some people do not have insurance. How much is reimbursed differs between the different companies and policies. Insurance companies usually pay for one month's supply per time.

4. Packaging design preferences

To find characteristic elements for packaging in the USA, American packaging has been examined. Further, an inventory has been made of current packaging of OCs and other pharmaceutical products.

4.1. General

As said in chapter 3.3.3, American products communicate their identity through their packaging. The meaning of the packaging is to attract attention and to stand out.



Picture II.4.1: A gallon of milk, 3,78 liter

Big, bigger, biggest

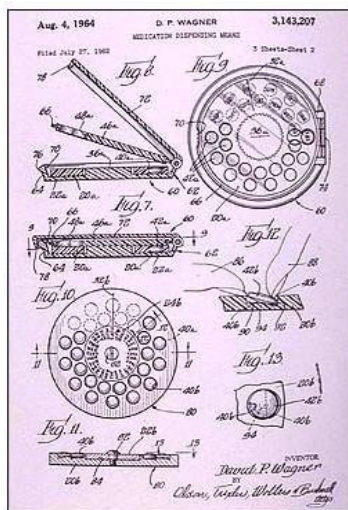
In the USA everything is big, compared to the rest of the world. This counts for drinks and food, but also for other packaging. Normal packaging in the USA would be considered as family-packs in other countries. There is no lack of space in stores.

New, newer, newest

The USA is a country with a very low uncertainty avoidance rate, which results in the fact that Americans have no aversion to new things. A lot of products advertise with the term 'NEW!' on the packaging.

4.2. Current look oral contraceptives

An inventory has been made of the current packaging of OCs in the USA. What strikes out is that all brands have hardcover boxes or other carrier covers. Most pills are handed out by the pharmacist per month, and often every month a new carrier cover is handed out. The first hardcover box designed for OCs is the contraceptive pill dispenser designed by David P. Wagner (pictures II.4.3 and I I.4.4) He designed the dispenser to be the size of a makeup compact, so women could carry it discreetly in their purses.



Picture II.4.2: Patent first OC dispenser



Picture II.4.4: First OC dispenser

Looking at the current OC packaging, the following characteristics are noticed. See picture II.4.5 for reference.

- The brand name on the packaging is very large and contrasts with the background
- Bright colors are used
- The contrasts between colors used on the packaging is big
- Often a gradient of colors is used in bigger areas, which gives an appearance of movement
- The above gives the lay-out an aggressive appearance
- The packaging is large (Loestrin, Lybrel)
- Some covers can be individualized
- Most common colors used are: blue, green, yellow, purple, light pink
- The pills are light colored; white, yellow, beige, light blue and light green
- Blisters are simple and don't attract a lot of attention

PART II -- USA



Picture II.4.5: Current OC packaging in the USA

4.3. Current look other pharmaceutical products

Earlier, the big difference between the USA and Europe was the use of bottles in the USA for most pharmaceutical products against the use of blisters in Europe. There is a shift in this trend; a lot of prescription packaging in the USA is also packed in blisters now. With bottles, pharmacists have to count the tablets for every patient, with blisters this isn't the case. A benefit that producers get is that blisters give a large facing of the carton on the shelf, and this creates a nice 'billboard'. Another advantage is the protection of the pills.

Many OTC-products have to be in child resistant blisters. The US child resistant regulations can be very challenging.

The characteristic elements found in the inventory of the other pharmaceutical products in the USA (picture II.4.6) are:

- Aggressive typography, it leaps out.
- The brand name is very big. Other text is very prominent.
- A lot of times the word 'NEW!' is used on the different packaging (Aleve, Claritin, Miralax, Alluna)
- The contrast between the colors of the packaging is very big. Almost every packaging in the picture has the combination blue-yellow or blue-white.
- Colors are very bright
- Most used colors are: blue-yellow, green, red, dark purple.

The different packagings clearly try to identify the identity of the products, and with this persuade the consumer into buying.

4.3.1. Applied to OC packaging

Some of these elements can be extrapolated to OC packaging. The difference between these drugs and OCs is that the drugs in the inventory of other pharmaceuticals are non-prescription drugs and can be seen by the consumer before bought. It seems there is an extra advertising element in the packaging, which is not so clearly found in the OC packaging. The colors in the OC packaging are bright, but softer compared to the colors in the other pharmaceuticals. The use of softer colors is to give the products a more feminine look. For OCs, there are no child resistance requirements.

PART II -- USA



Picture II.4.6: Current pharmaceutical packaging in the USA

5. Design recommendations for the USA

The results from the research are compiled in 15 design recommendations for OC packaging in the USA. The recommendations are divided in recommendations for the cardboard box, the blister, the compact and general design recommendations for OC packaging. The recommendations are numbered and marked with the U for USA, because they will be referenced to in part IV.

Cardboard box

- U 1. Give the brand name/logo a prominent location and let its color contrast with the background
- U 2. Put verbal communication on the packaging about the contents
- U 3. Make typography/lay-out structured and aggressive
- U 4. Make much use of text, argument, facts and information
- U 5. Use bright colors and high contrast between colors
- U 6. Create an appearance of movement and use a gradient of colors in bigger areas
- U 7. Make packaging large
- U 8. If packaging (elements) or product (elements) are new, state that it is 'new!'
- U 9. Build in space for pharmacy label
- U 10. Most common colors used in OC-cardboard packaging are: blue, green, yellow, purple, light pink

Blister

- U 11. Use light colors for pills, like white, yellow, beige, light blue and light green
- U 12. Do not use bright colors in the blister unless it fits the compact
- U 13. Keep the blister simple

Compact

- U 14. Include hardcover boxes or other carrier covers

General

- U 15. Give packaging a feminine look, use
 - a. Round shapes
 - b. Soft and harmonious colors
 - c. Low contrast and non-aggressive typography/lay-out
 - d. Natural symbols that create an emotional atmosphere to communicate gentleness and softness

This recommendation is submissive to the other design recommendations and has to be applied within the context that is created by these recommendations

Note

- In some pharmacies, there are glass cabinets or pillars that present products. This serves as advertisement tool.
- Some covers can be individualized
- Blisters are often packed in plastic pouches, sometimes only for the pharmacy, sometimes for the patient.

PART III -- JAPAN

PART III: JAPAN

I. Country facts

I.1. Geographical facts



Picture III.1.1: Map of Japan

Area: 380,000 km², of which 80% is mountainous and therefore not inhabitable

Number of inhabitants: 128 million

Population density: 339/ km²

Capital city: Tokyo, 12 million inhabitants¹³

Japan has a tradition of absorbing and rejecting the outside world, which influenced the history of the country. For times it was influenced by other countries such as China, Korea and later Europe, alternated with long periods of isolation. This has strongly colored Japan's culture, religion and health care system.

Shinto, the main religion of Japan, is an animistic belief system. Animistic belief systems attribute souls or spirits to animals, plants and other entities, in addition to humans. The religion is influenced by Buddhism which was introduced into Japan in the sixth century, through Korea and China. Nowadays, temples of both religions are literally grown together. Shinto rituals are used for everything that has to do with life whereas Buddhist rituals are reserved for funerals.

Japan is an aging society, which will increase over the years because of a very low birth rate. Women seem to be on 'birth strike'; it appears that the heavy workload is not easy to combine with having children.^{4,14,15}

1.2. Health care

All Japanese people are enrolled in health insurance programs. People without insurance through employers can participate in a national health insurance program administered by local governments.

For a long time, Japanese medicine was based on the traditional Chinese medicine, which consists a.o. of acupuncture and moxibustion medicine. The Japanese had modified these methods to suit the physiological constitution of Japanese and developed it under the influence of European medicine. However, in the period 1868-1912, German medicine became the official medicine in Japan, and the traditional methods had declined. Although acupuncture and moxibustion are no longer covered by health insurance, Kampo, the Chinese herbal medicine that is part of the traditional medicine method, had later been included in the medical system in Japan. These herbal medicines are regulated as pharmaceutical preparations, and most of them are covered by health insurance.

In Japan, services are provided either through regional/national public hospitals or through private hospitals/clinics, and patients have universal access to any facility. Hospitals tend to charge higher for those without a referral. Public health pays 70% or more cost for each care and each prescribed drug. Patients are responsible for the remaining 30%. ^{16,17,18,19}

2. Oral contraceptives

2.1. Acceptation

Since the beginning of the 1960s, oral contraceptives are approved in Europe and the USA. This was not the case for Japan, where the pill has been counteracted for a long time by gynecologists and condom producers. Condoms account for about 80 percent of the birth control methods in Japan; the rhythm method and spermicidal jelly are the next most popular means. Gynecologists were afraid that with the introduction of the pill their incomes would decrease because of the reduction of abortions, which were legalized in Japan in 1948. (Which is not approved of very much by the Shinto/Buddhists) Another reason was that people were afraid that HIV-infections would incline with the introduction of the pill. Furthermore, women in Japan have an aversion against medicines with hormones, because it sabotages the *chi no michi*, or the 'way of blood'.

Japan now has 1.4 live births per woman, and this is one other reason the Government has not been pushing the pill: it worries that OCs would lower the birthrate even more.

Although OCs were not approved for contraceptive use, high-dose OCs on the other hand, combined estrogen and progesterone OCs were introduced in Japan in 1957 for the treatment of menstrual disorders and were used off label for contraceptive purposes. Low-dose OCs, which contain much smaller amounts of the two components, were finally approved by the Japanese Ministry of Health, Labor and Welfare for contraceptive use in 1999. The gynecologists were convinced by the argument that the pills would not decrease their incomes, because the women still have to come by their clinics to get the prescription, information, and check ups.

Nowadays, only around 2 percent of the women of reproductive age in Japan use OCs. Unlike abortions, the pill and related doctor's visits are not covered by health insurance policies. Most common price range for a month's supply of OCs is between ¥2000-2499 (€12,50-€16,00 exchange-rate on May 9, 2008) and a woman must pay about ¥30,000 (€189) for a clinical visit

and laboratory tests and purchase a minimum of two packages when initiating low-dose OC use, which represents a considerable financial outlay. Women who use oral contraceptives must visit their gynecologists every three months.

There is a difference between the introduction of OCs in the USA and Europe in the 1960s and the introduction in Japan in 1999. In the 1960s, the pill was seen as an icon of feminism and sexual liberation. In Japan, this attitude towards birth control doesn't exist, because other birth control methods are already accepted, like condoms and abortion. The women rather see OCs as an untrustworthy chemical that affects the natural rhythm of their body.

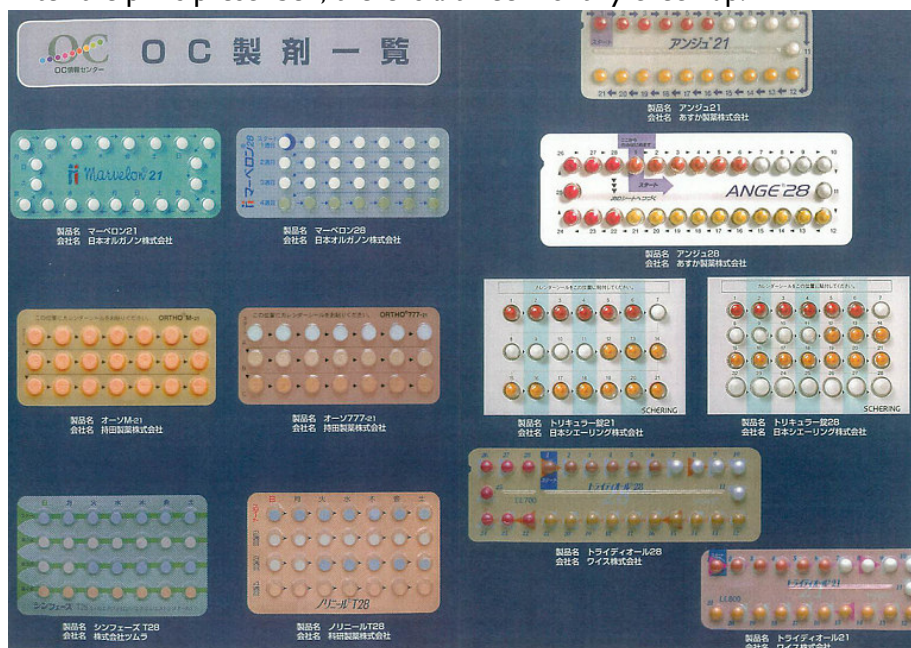
The fact that Japan is a country with a very high Masculinity rate (see chapter...) contributes to the lack of acceptance of OCs. Men usually take the lead in relationships, especially in sex. If women would take the pill, this would mean that they take the lead, which will hurt the pride of men. Even most married women dare not to discuss contraceptives openly with their husbands. Thereby women are afraid that taking the pill would send a signal of promiscuity.

Because advertising of prescription drugs is not allowed in Japan, a lot of women are not informed about the possibilities of OCs.

Another cultural dimension that correlates with the fact that the pill is not fully accepted in Japan is the high Uncertainty Avoidance rate. Societies like this do not readily accept change and are very risk adverse. 20,21,22,23,24,25,26

2.2. Distribution amongst users

The OC is prescribed by a gynecologist. A physical examination will be done and a laboratory test is conducted. The gynecologist has a kind of a board on which different OC strips are represented, and often samples of the different strips that are sold are shown to the patient. After the pill is prescribed, there is a three-monthly check-up.



Picture III.2.1: Presentation board that gynecologist shows

PART III -- JAPAN

Prescription pharmacies exist since 1985, before this year the physician both prescribed and dispensed the drugs. Most women prefer to get their prescription at the gynecologist's clinic where they have had their medical examination.

Most pharmacies only have one type of oral contraceptive in stock, and some pharmacies don't even have that. A few pharmacies are not able or willing to supply other pills than they have in stock. Most gynecologists don't have a big supply either; the choice is often between three pills; one mono-phase, one bi-phase and one tri-phase pill. This is because finding place to stock these medicines is an issue. In Japan, space, room and land are very expensive. OCs are unpopular by pharmacists because they are seldom purchased and often take more shelf space than other drugs by the bags or cases that accompany them.

There is no official margin system for pharmaceuticals in Japan. By this, the wholesale prices vary between different pharmacies and hospitals. Patients sometimes have to pay a dispensing fee that is not only classified by the type of service, but also by the size of the pharmacy.^{20,25,27}

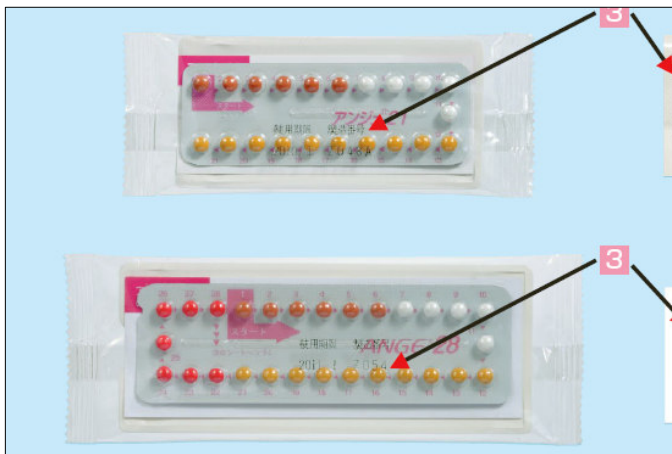
2.3. Top 10 in sales

1. Triquilar (Schering)



Picture III.2.2: Triquilar

2. Ange (Teikoku hormone)



Picture III.2.3: Ange

3. Marvelon (Organon)



Picture III.2.4: Marvelon

PART III -- JAPAN

4. Tridiol (Wyeth)



Picture III.2.5: Tridiol

5. Ortho L.U. (Janssen)



Picture III.2.5: Ortho L.U.

6. Synphase T 28 Tsum (Tsumura)



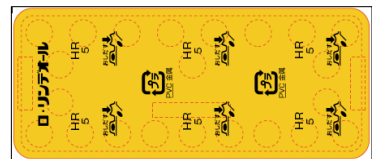
Picture III.2.7: Synphase T 28

7. Norinyl T 28



Picture III.2.8: Norinyl T 28

8. Lyndiol



Picture III.2.9: Lyndiol

9. Elliot 21

10. Libian 28



Picture III.2.10: Libian 28

3. Stakeholders

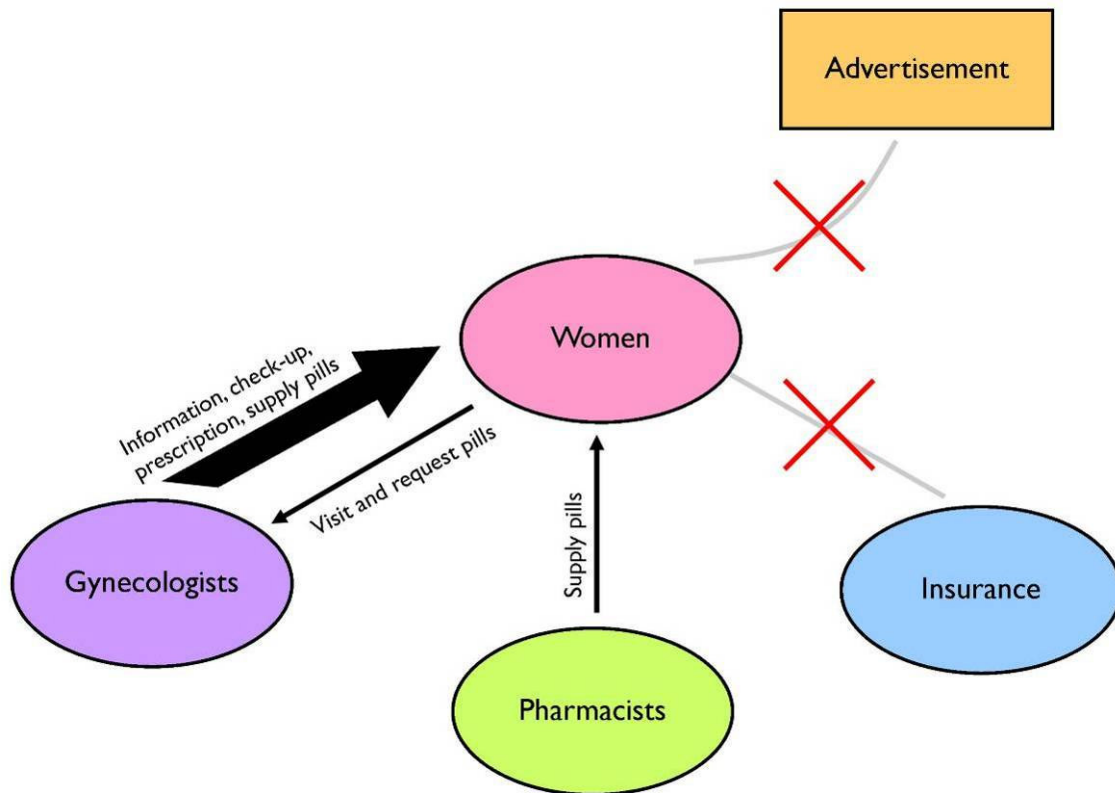


Figure III.3.1: Stakeholders

This figure illustrates the relations between the different stakeholders in Japan regarding to OCs. As can be seen by the thin arrows, women don't have a lot of influence in the process. There is not much choice between different OCs, and often this choice is even narrowed down more to the little amount of different OCs the gynecologists or pharmacists have in stock. The gynecologists have the most power in this figure; they prescribe and often also supply the pills. Pharmacists have less influence than gynecologists; women prefer to get their supply at the gynecologist.

Insurance doesn't pay for the pills and advertisement for prescription drug is not allowed in Japan.

3.1. Women

Because OCs in Japan are not accepted by society, women want their OCs to be packed discretely. Strips of pills above the sink next to the toothbrush, as can be found in Europe and the USA, will not be seen in Japan. Often women keep the strips safe and hidden in their purse. They prefer the strips to be packed in an extra cover, so the pills won't be damaged between the rest of the items in the bag.

3.2. *Gynecologists*

Gynecologists prescribe and sometimes supply the OCs. They prefer not to prescribe a lot of different pills, because there is only little room to stock them. They often have a kind of a board on which different OC strips are represented, and other materials, like samples of the different strips that are sold, or examples in Perspex as a paperweight are shown to the patient.²⁰

3.3. *Pharmacists*

In Japan, there are different medication groups. These are over the counter and prescription drugs. Not all pharmacies sell prescription drugs. Pharmacies in Japan can be divided into nonprescription pharmacies, prescription pharmacies, and combined nonprescription–prescription pharmacies.

Pharmacists have the same room shortage problem as the gynecologists, and mostly only have one type of OCs in stock. Other types sometimes can be ordered, though not all pharmacies are able or willing to supply them. OCs are unpopular by pharmacists because they are seldom purchased and often take more shelf space than other drugs by the bags or cases that accompany them.

Before handing out the medicines, the pharmacists labels the drugs with a pharmacy label that mentions the patient's name, dosage, indication, and warnings. With the drugs a patient information leaflet is provided. ^{25,28}

3.4. *Insurance Companies*

Insurance companies don't pay for OCs and related doctor's visits.

4. Packaging design preferences

For this research, Japanese packaging has been examined for its characteristic elements. Further, an inventory has been made of the current style of oral contraceptive packaging and other pharmaceuticals.

4.1. General

People in Japan care a great deal about outward appearance. This counts for their own looks as well as for products. An example is the way gifts are wrapped, the wrapping is more important than what is inside. Because of this the appearance of packaging plays a great role. Misprints are out of the question, and when a label is glued on slightly lopsided people will not quickly buy the product. In Japan, the quality of the packaging reflects the quality of the product.

The Japanese perform strict quality inspections on imported products and packaging. When they don't meet the requirements, the company supplying the products will get a bad reputation and is probably not able to do business in Japan for a long time.

QR

In Japan, almost every product has a 'quick response' code, or in short, a QR. People can scan this code with their mobile phones, which then opens the website of the product. Magazines publish QRs in their articles, they are on advertising, packaging, business cards and receipts.²⁹



Picture III.4.1: QR that links to the website of the OC Marvelon

Cartoons

Japanese like all kind of cartoons, from manga to hello kitty. This is reflected in a lot of things. Women like to accessorize with hello kitty bags and clothes. Characters are often used in the packaging of products; a few examples of this are shown below. Most instruction leaflets contain cartoons too.



Picture III.4.1: Cartoons in Japanese packaging

Environment

The impact of packaging on the environment is important in Japan. The Japanese are strongly represented in organized interest groups, like consumer unions and environmental pressure groups. These groups press to improve the environmental impact of the packaging.

Small packaging

Japanese people prefer small packaging and products. It gives the impression of exclusivity and quality. This is another reason why the OC packaging should be small, next to the lack of space in pharmacies.

Pink

Japanese women like the color pink. This is not only about the color pink, but more about being cute and girl-like to please men. This corresponds with Japan's high masculinity rate that causes the distance between men and women to be big. The striving for being cute also brings about the accessorizing with cartoon characters. Commercials for women's products are often in pink.

COLOR 使いやすい2色!
20 ブラック 13 ベージュ
どちらの色もヘビローテーション推奨!
SIZE 商品サイズ(単位:cm) 着丈(cm) 着幅(cm) 着長さ(cm)
日本サイズ(号) 5-7 7-9 9-11 11-13 13-15 15-17 17-19
ウエスト 54 67 70 73 76 79 82
ヒップ 86 89 92 95 98 101 104
ウタリ 27 28 29 30 31 32 33
素材:綿95%, ポリウレタン 5%

あの有名クチコミサイト 石鹸部門 堂々第1位!!
毎日使えばお風呂は春満開♪
春を満喫しちゃってください!!
桜名刺
TV・雑誌でも取り上げられ石けんといえはココと言われる程
有名なあの「ねば熟」の素地を使用!
Four Seasons Natural Soap

上まつ毛と下まつ毛で
パサパサ音をならすくらい
ボリューム感とこの長さ!
スゴイこの長さ!!
「まつげメーカー」

髪を洗うだけじゃない、
肌までもキレイにみえるような
艶と重みのある
「美髪」へ格上げ。
Rose Quartz

VOLUM EXPRESS NEW
ボリューム縁取りで
インパクト眼差し!
エクステンション級
細毛が伸びる!
「まつげメーカー」
2,000円

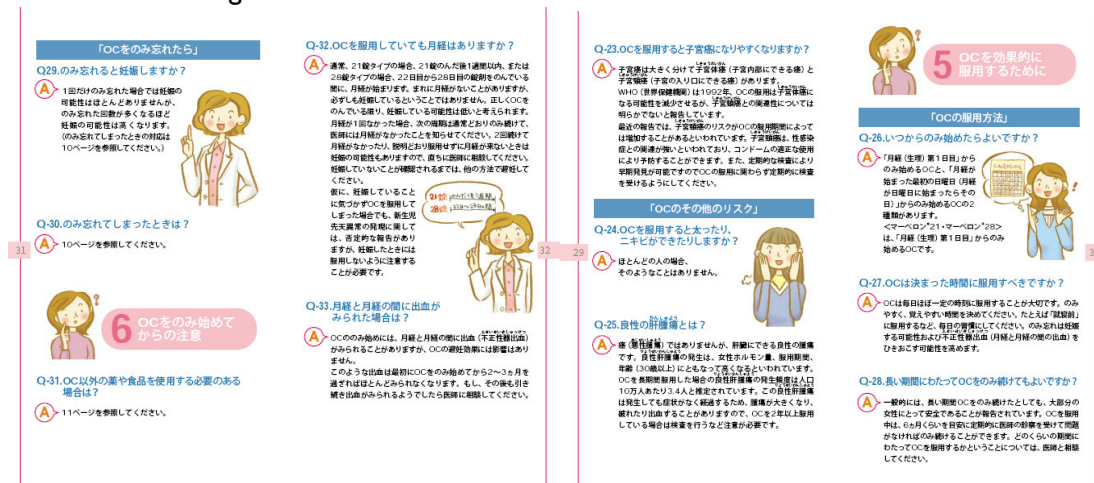
近づきたい、触れたい……
そんな欲望をかきたてる髪に。
1 髪質改善
「美髪」の格上げ
美容液シャンプー
2 フレグランス
髪にのびたびのびする
高級のフレグランス
3 入浴アロマ
心と体を癒す癒しく
優雅なバスタイム
4 恋愛成就
「愛されボーイ」の魔法
ローズクォーツ

Picture III.4.3: Commercials for women's products are often in pink.

4.2. Current look oral contraceptives

An inventory of current packaging of Japanese OCs has been made. (see picture III.4.5)

With the OCs an information leaflet is provided. Usually these information leaflets are booklets with cartoons, diagrams and flow-charts. Below is an example of some pages of the information leaflet of the Schering-Plough product Marvelon. The colors used in this leaflet are soft, pink and blue are the leading colors.



Picture III.4.4: Four of the 24 pages of the information leaflet of Marvelon.

In the inventory of OC packaging the following characteristic elements are noticed.

- A lot of colors are used in the carton boxes, but they are not real bright colors. There is little contrast between colors used on the packaging (e.g. Triquilar has dominantly blue colors in different tones, Tridiol 21 has different tones of pink, and Tridiol 28 has different tones of orange.)
- Blisters are colored. In Japan, a lot of attention is paid to the appearance of the blisters.
- Pills are bright colored. Most common colors are bright pink, red, orange, yellow, green and white. Because there are always extra control checks for products in Japan, it is important that pills show no discoloration, or they will be sent back to the manufacturer.
- Most brands have small pills compared to the rest of the world
- The brand name on the packaging is large
- Most pills have a carrier compact, there are hard cover boxes, and paper covers to keep them in.
- On the back of the blisters there is often an instruction on how to get the pill out of the strip.
- The packaging is compact and elegant, and is relatively small.
- Most common colors in OC packaging are orange, blue, green and pink.

PART III -- JAPAN



Picture III.4.5: Current OC packaging in Japan

4.3. Current look other pharmaceutical products

An inventory has been made of other pharmaceutical products. (see picture III.4.6) The characteristics elements found are:

- There has been made use a lot of cartoon-like pictures, on the carton box as well as on the instructions.
- Again, a lot of colors are used, but they are not very bright. The contrast between the colors is low. As a whole, it has a soft look.
- The brand name is big
- There is a lot of text on the packaging, with a lot of information.
- The tablets are brightly colored
- The packaging has an exclusive appearance
- The main colors used are green, blue and the combination gold-red-black.

4.3.1. Applied to OC packaging

Some of these elements can be extrapolated to OC packaging. The cartoons found on the other pharmaceuticals are not found as explicitly on the packaging of the OCs. In the information leaflet though, they are there. The inventory gives a good impression of Japanese products. OC packaging looks a bit more mature, compared to other packaging in Japan. The colors that are used on the OC packaging are a bit more feminine and soft, as a whole the OC packaging gives a calm impression.

PART III -- JAPAN



Picture III.4.6: Current pharmaceutical packaging in Japan

5. Design recommendations for Japan

The recommendations that follow from the research are compiled into advice when designing packaging for OCs in Japan.

Cardboard

1. Make the brand's word image recognizable
2. Put the company name in a prominent position
3. Use lower case letters (rather than capital letters), ensuring a more recognizable word image.
4. Use multiple colors, that are not very bright or intense, make it look matte
5. Use similar colors on one pack, with small contrasts
6. Make packs as small as possible (in an exclusive manner)
7. Put a QR code on the packaging
8. Create space for a pharmacy label
9. Most common colors in OC cardboards are different intensities of orange, blue, green and pink.

Blister

10. Use different colors in blisters
11. Make pills bright colored, without discoloration. Use different color pills on one blister. Most common colors for pills are bright pink, red, orange, yellow, green and white.
12. Make pills small
13. Put an instruction on the blister how to get the pill out of the strip
14. Make the blister stand out in an exclusive way

Compact

15. Include hard cover boxes or other carrier compacts

General:

16. Communicate femininity through the pack. Use
 - a. Round shapes
 - b. Soft and harmonious colors
 - c. Low contrast and non-aggressive typography/lay-out
 - d. Natural symbols that create an emotional atmosphere to communicate gentleness and softness
17. Use cartoon on packaging and/or instruction leaflets
18. Refine all details
19. Make sure there are absolutely no misprints or other mistakes in the packaging
20. Give packaging an exclusive look
21. Use the color pink, this is perceived as feminine
22. Make sure the packaging won't take up much space in the pharmacy
23. Make the packaging discrete, hide OC

Note

- Make patient material for the gynecologist

PART IV -- DESIGN

PART IV: DESIGN

Introduction

The design recommendations of part II and part III are applied in two generic designs, one for Japan and one for the USA. For each country 3 packaging components are developed; the blister, the carrier compact and the cardboard box. The brand names of Desogen, a Schering-Plough OC for the USA and Marvelon, the same OC under a different name in Japan, are used. The reason these names are used instead of an imaginary brand name, is to avoid accidental use of existing names or words. The designs for the two countries will be discussed in parallel, as they are designed in this way. This allows easy comparison of the two designs.

In the recommendations most guidelines concern the cardboard boxes and the blisters, this is why most focus is put on these two elements. First the blisters are designed, then the carrier compacts and then the cardboard boxes. The reason for this is quite simple; the dimensions of the blisters had to be determined in order to establish the dimensions of the compacts and the cardboard boxes.

I. Brainstorm

The design phase started by conducting 2 brainstorm sessions with the section NP&DD, on OC-packaging in Japan and the USA. The annotations of these sessions (both in Dutch) can be found in appendix A and B. The main themes that lead from these sessions are considered during the design process. These main themes are:

For Japan:

- Discrete
- Accessory
- Macho

For the USA:

- Balance
- Gadget

I.1. Japan

Discrete

As is said in the recommendations, packaging of OCs in Japan should be very discrete.

Accessory

Japanese women like accessories. A possibility is to individualize the carrier compact.

Macho

The idea with the theme 'macho' is to market the OCs towards men. Because the masculinity ranking is very high in Japan, men don't like it when women take the lead in the relationship and take OCs. The idea is to sell the pills to the men to solve this problem.

During designing, the last theme was eliminated. Although it might seem unethical to let men buy birth control pills for their wives or girlfriends, the main reason to exclude this idea was that the recommendations are made for packaging for women, and therefore most of them don't apply when the OCs are sold to men.

1.2. USA

Balance

OCs in America are promoted by their side-effects. The theme balance stands for a way to market the OCs. Because the use of the OCs, there is balance in the women's lives, balance in their bodies, the freedom and power to control their own cycle, and awareness. This theme can be implemented in the packaging by the shape of the blister or the carrier compact.

Gadget

In the USA, OC packaging should stand out from the rest, like a gadget does. Again, there was the idea to individualize the carrier compact.

2. Blister

The three main aspects of the design of the blisters are: lay-out of the pills, color of the pills and blister shape. The lay-out of the pills is the basis of the blister; it attends to the user comfort and later influences the shape of the blister. The colors of the pills influence the appearance of this shape.

2.1. Lay-out of the pills

Eight different lay-outs for the pills have been designed, as can be seen in picture IV.2.1. In the next chapters is explained which lay-out is chosen for each country.

2.1.1. Japan

In Japan, the blister is an important element in the packaging; the gynecologist shows a placemat with the different strips and the patient chooses from this. Therefore it is important to stand out in a manner that appeals to the women. To do so the blister has to meet the design recommendations. From these 8 shapes, option 7 is chosen because it communicates femininity (design recommendation J16); it is a natural symbol with a round shape. Another reason is that with this shape, it is clear where the starting point is. The packaging needs this clarity, because Japan has a high Uncertainty Avoidance rate and the product is relatively new in Japan.

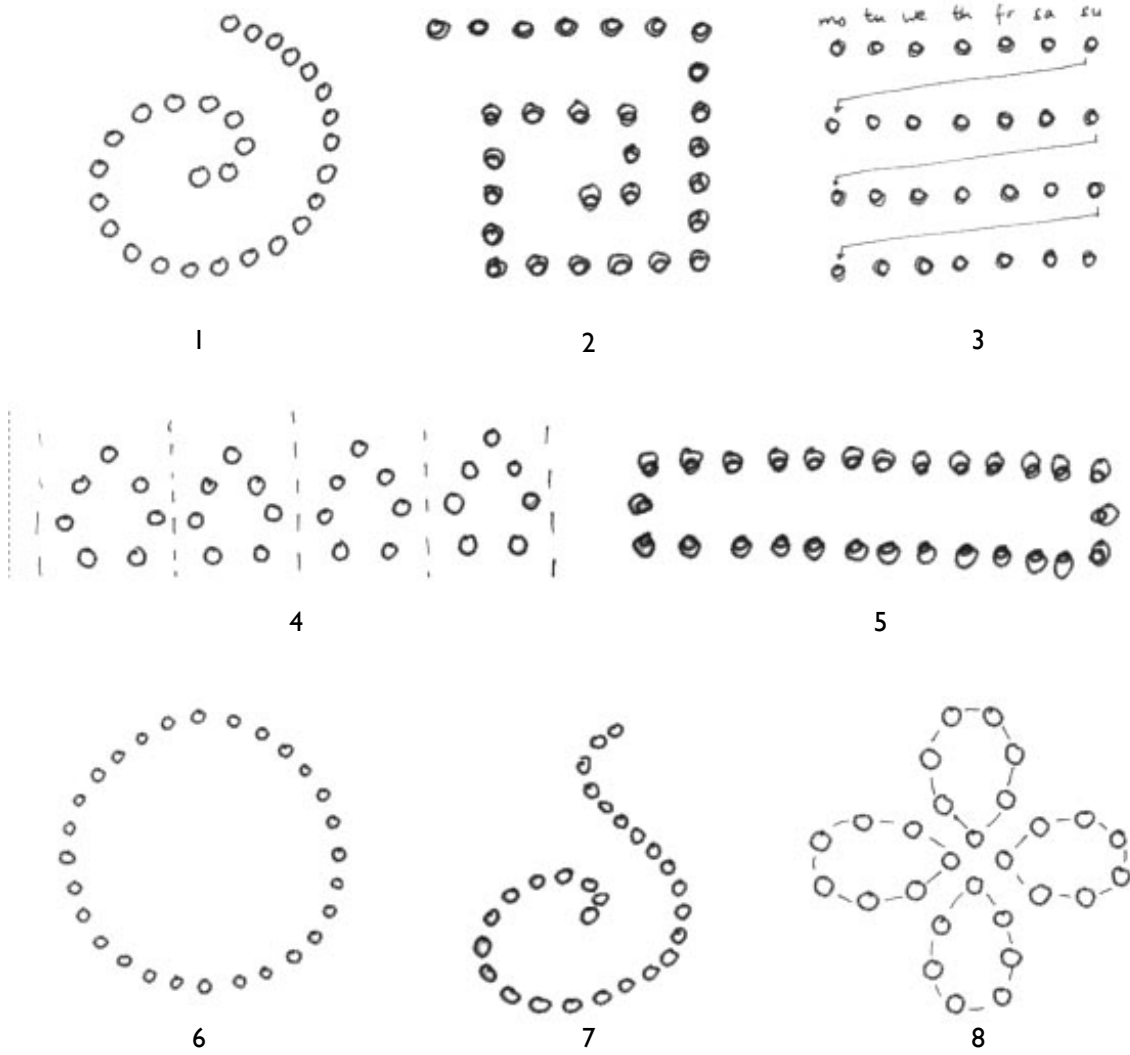
There are two other options with feminine shapes, number 8 and number 1. Number 8 is not chosen because it is not clear where to start and where to end. Number 1 is not chosen because it applies to all the points to a lesser extent than number 7 does.

2.1.2. USA

For the USA, again option 7 is chosen. It meets design recommendation U15, which is the same as the Japanese recommendation: The shape communicates femininity. It is a natural symbol with a round shape. Furthermore, the spiral shape communicates balance (which was an outcome of the brainstorm). Because of the shape it is clear to see where you are in the cycle, which brings awareness.

The other shapes don't have this same combination. Number 1 comes close to this form, but has a less feminine shape than option 7. Besides, balance is more communicated in shape 7 than in shape 1 because the start is more intuitive. Number 6 and 8 also are feminine shapes that communicate balance, but because they both are closed forms they don't communicate freedom as much as shape 7.

Coincidental, the same lay-out is chosen for both countries. This is caused by the fact that some design recommendations are the same for the USA and Japan. A benefit to choosing the same shape for both countries is that the outcomes are different although the same basic shape is used.

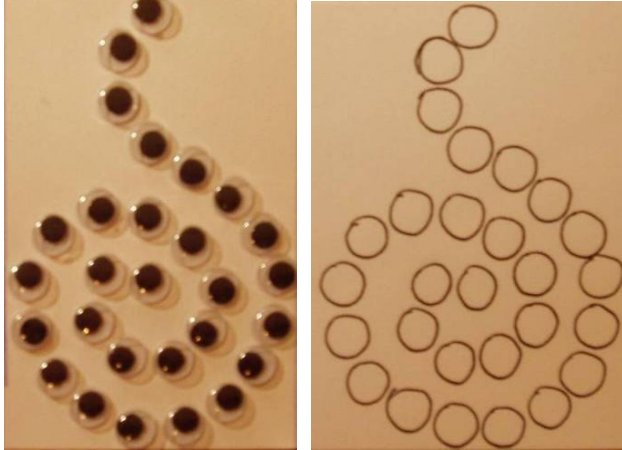


Picture IV. 2.1: Eight different lay-outs for the pills

2.1.3. Final shape

The design recommendations for Japan state that the packaging for Japan should be small. To make sure the blister will not be too large the maximum dimensions of the blister must not exceed the size of a credit card. For the USA this requirement is less important, the blister may exceed this size, but not too much as it has to be a manageable size.

The first try outs of the pills lay-out are made and look like this:



Picture IV.2.2: Pills order try outs

With this blueprint some models are made, after deciding the size and color of the pills.

2.2. Pills

2.2.1. Japan

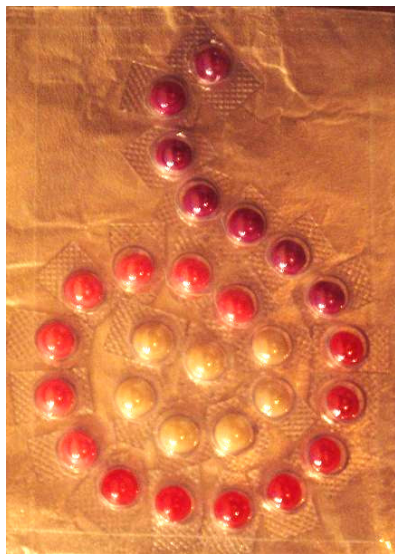
The following recommendations apply to the pills in Japan:

J 11. Make pills bright colored, without discoloration. Use different color pills on one blister.

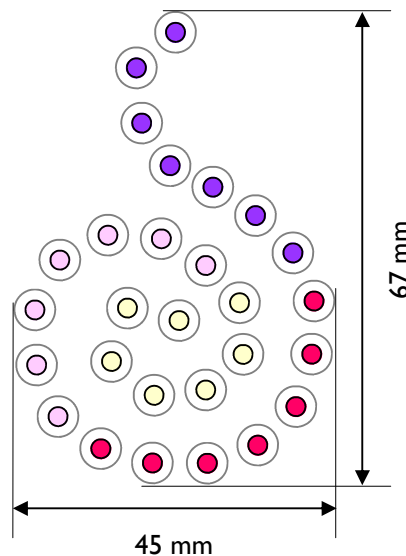
Most common colors for pills are bright pink, red, orange, yellow, green and white.

J 12. Make pills small

These recommendations are applied in the design. Because of the general design recommendation 21, 'Use the color pink, this is feminine' the color pink is chosen for the pills as the leading color.



Picture IV.2.3: Prototype blister for Japan smaller.



Picture IV.2.3: Pills for Japan

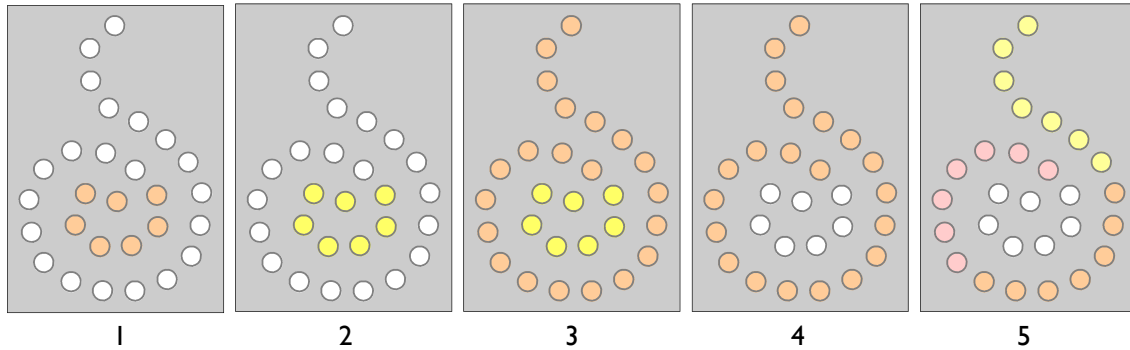
A first draft of a prototype is made to make the idea tangible. As can be seen in the pictures, the first seven pills are purple, then there are seven dark pink pills, the next seven pills are bright pink and the last seven are beige. The pills look like they are frosted and shine, in order to conceive an exclusive look. The size of the pills is small, which makes it possible to make the blister in total

2.2.2. USA

For OC blisters in the USA, the following recommendations are done:

- J 11. Make pills bright colored, without discoloration. Use different color pills on one blister.
- Most common colors for pills are bright pink, red, orange, yellow, green and white.
- J 12. Make pills small

This means the colors of the pills should be calm, soft colors. The size of the pills can be bigger than the pills for Japan, so the current size will be . With these matters in mind, some color combinations are tested.

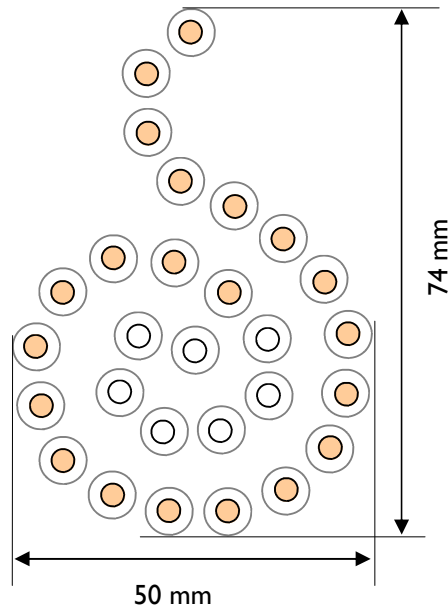


Picture IV.2.5: Color combinations for the USA

The spiral shape looks most natural when lighter colors were put on the end of the cycle, in the middle, and darker colors on the outside. The two color combinations that apply to this are 4 and 5. The different colors in number 5 don't apply to design recommendation U13, (Keep the blister simple), so the best color combination for the American blister is considered number 4, with one soft color for the first 21 pills and white pills in the middle. Again, a prototype has been made.



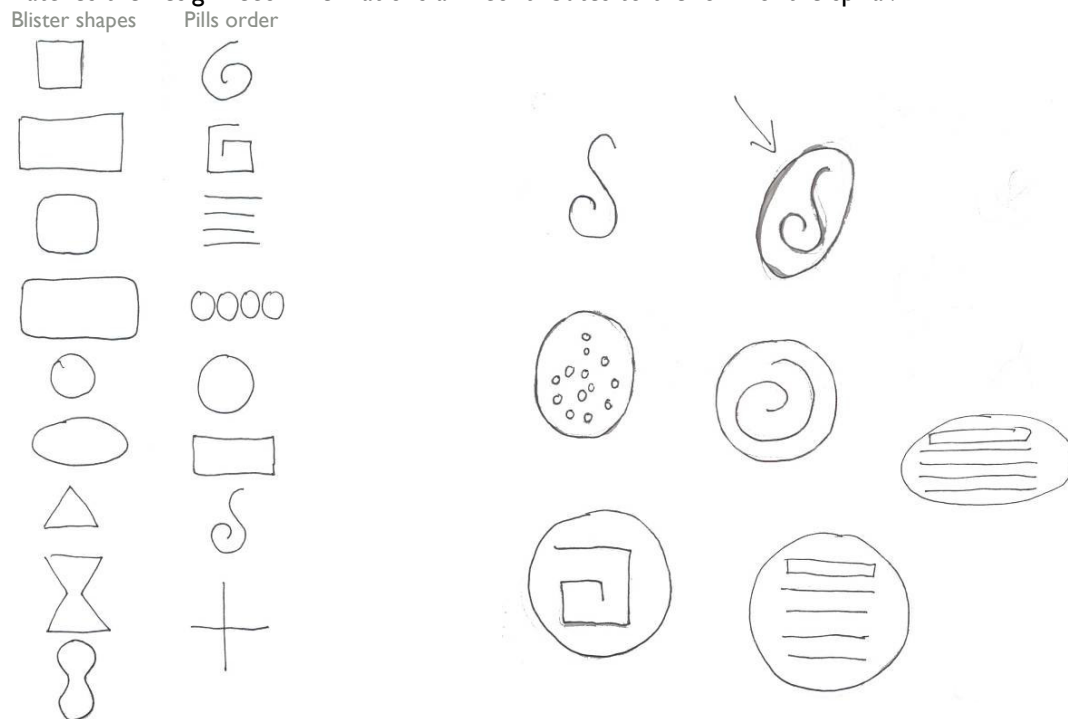
Picture IV.2.6: Prototype blister for the USA



Picture IV.2.7: Pills for the USA

2.3. Shapes of the blisters

First, the decision for the blister shape was made together with the decision for the lay-out of the pills. It was decided that the blister shape should be an ellipse shape for both countries, which matches the design recommendations and contributes to the form of the spiral.



Picture IV.2.8: Pills order and blister shapes sketches

This decision was made in an early stage. During the making of the prototypes it was noticed that a rectangular blister shape attracted more the attention to the spiral shape. To make sure what the best blister shape was in combination with the spiral form, sketches were made with different shapes. These sketches can be seen in picture IV.2.9.

Shapes with angles, like shapes 5 through 8 attract attention to the spiral. This effect occurs because there is a contradiction between the curves of the spiral and the angles of the blister shape. This gives the spiral much more body. The ellipse on the other hand distracts away from the spiral, and hereby decreases the strength of it.

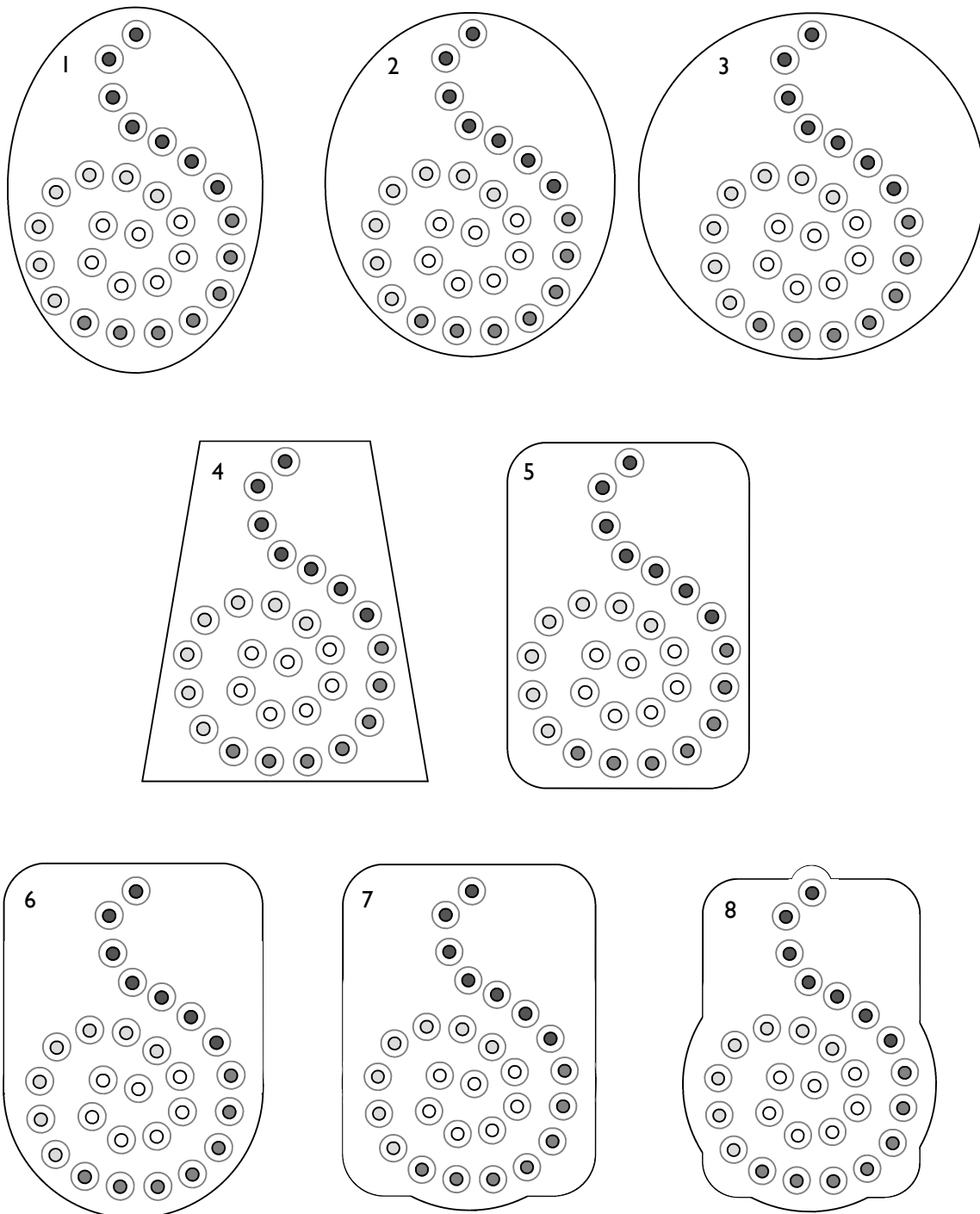
2.3.1. Japan

For Japan, shape 8 is chosen. It has the angles that give the spiral its strength, and it has an exceptional shape. This shape looks much smaller than the other shapes, which fits one of the recommendations for Japan. The big roundings give the blister a cartoonish look, which matches design recommendation J17, 'Use cartoon on packaging and/or instruction leaflets'.

2.3.2. USA

Shape 5 is chosen for the USA. This shape is very basic, which fits the American market (design recommendation U13; 'Keep blister simple'). Shape 6 is also considered. It was eliminated because the shape makes the blister look less elegant and bigger, although the shape is actually smaller.

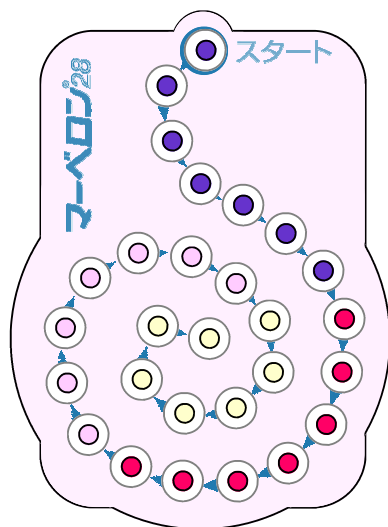
PART IV -- DESIGN



Picture IV.2.9: Blister shapes

2.4. Result

2.4.1. Japan



Picture IV.2.10: Blister Japan

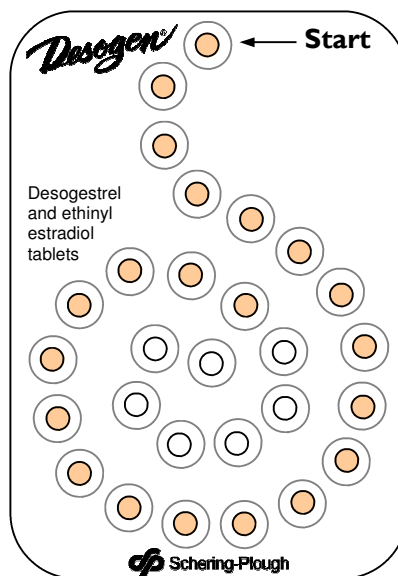
In the design for Japan, the pills are connected through little pointers. The first pill has a blue frame. This clarity has to be provided because of the high Uncertainty Avoidance rate Japan has. The blister itself is light pink with blue overprint.

On the back of the blister this picture has to be printed:



Dimensions: 54mmx73mm

2.4.2. USA



Picture IV.2.11: Blister USA

The blister for the USA has no background color, so the background is the color of the aluminum foil. This matches design recommendation U12, 'Do not use bright colors in the blister unless it fits the compact'. There is more text on the blister than on the Japanese one, which matches the design recommendations U2 through U4. The Schering-Plough logo is put on the blister, which is a way of communicating its identity (see Part I, chapter 3.3.2)

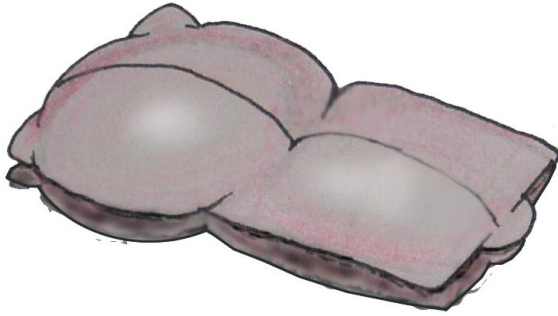
To fit the recommendations more text can be printed on the back of the blister.

Dimensions: 56mmx80mm

3. Carrier compact

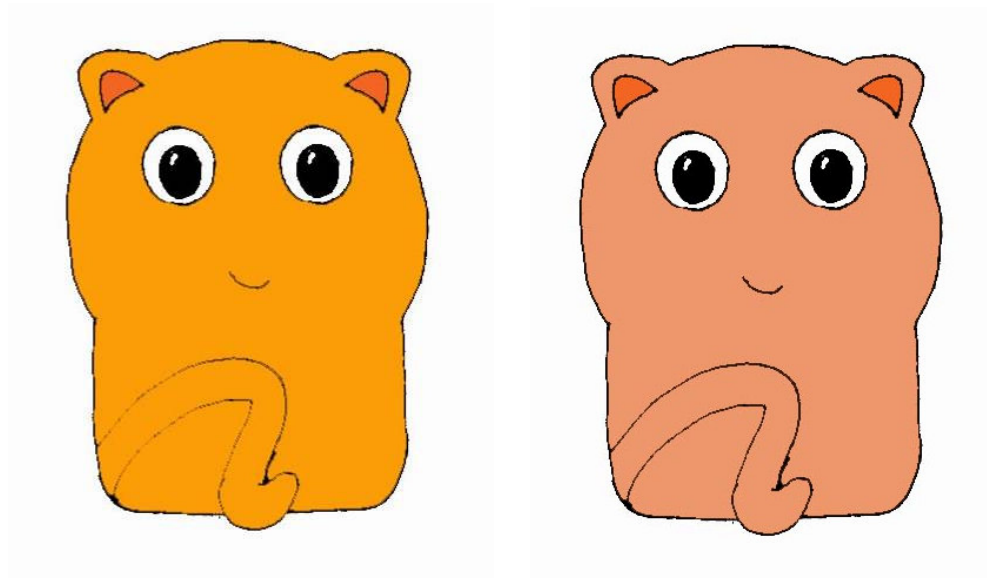
3.1. Japan

An outcome of the brainstorm for Japan was to make a carrier compact that serves as an accessory. In the research is found that Japanese women like cartoons a lot, and accessorize with them. The blister has a cartoonish shape, so the carrier box could be a cartoon accessory. There will be a hardcover plastic box that fits around the blister. In this way the special shape of the blister is used and the cover will be able to open and close correctly.



Picture IV.3.1: Hard cover carrier box Japan

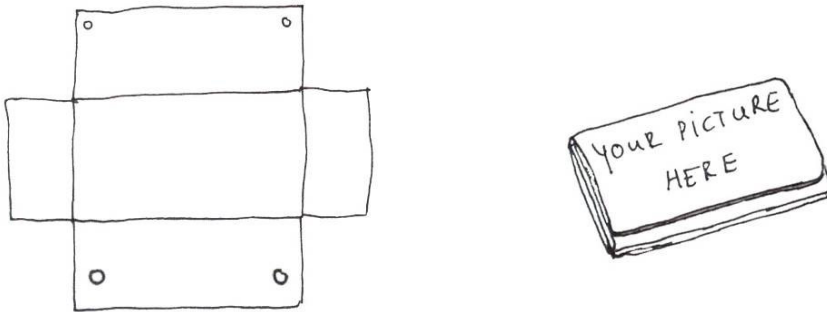
The cartoon picture printed on the carrier compact can look like this:



Picture IV.3.1: Cartoon characters for carrier box Japan

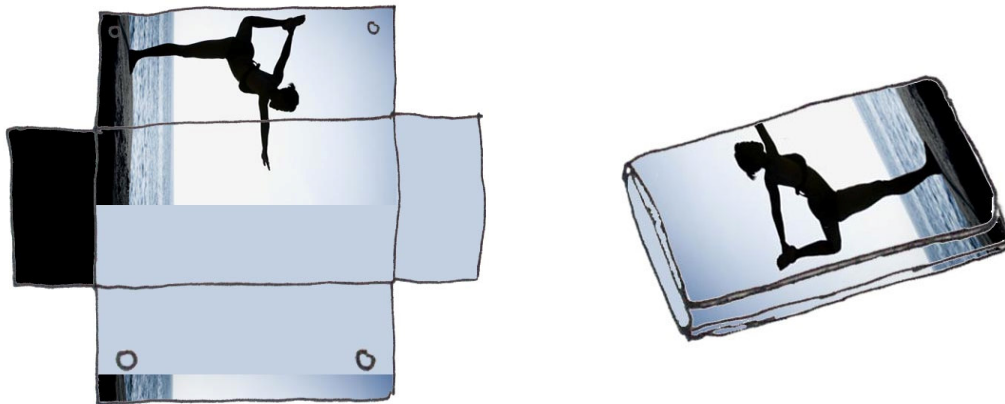
Because of design recommendation J22, 'Make sure the packaging won't take up much space in the pharmacy', the carrier compact will not be handed out with the OCs. The patient can order the compact online for free, with a code provided with the OCs. Some women might not want a cartoonish compact, so there should be an option to order a natural version. The idea is to release a new character every six months.

3.2. USA



Picture IV.3.2: Blank carrier compact USA

In the brainstorm the theme 'balance' came forward, and the theme 'gadget'. These two themes are combined in the carrier compact. People can customize their own compact by uploading pictures on the internet in combination with a simple drawing program. The idea is to let women put their 'balance-moment' on their compact. The created picture will be printed on a rubberlike material which closes as a folding leaflet and can be sealed with invisible embedded magnets.



Picture IV.3.3: Example of carrier compact with uploaded picture

The pharmacist should have some blank or standard compacts in stock to provide if the woman gets her prescription for the first time, or doesn't wish to make her own compact. With the OCs a code is provided with which the compact can be made and ordered online.

4. Cardboard box

In both countries a pharmacy label is put on the OC before it is handed out. Some brands or pharmacies in both countries hand out the pills in pouches instead of cardboard boxes. Sometimes the pharmacist has to take off the pouch and only give the blister, and sometimes the pharmacist has to hand out an instruction leaflet separate from the blister or the pouch with the blister in it. This varies from pharmacy to pharmacy and depends on the product. This makes it sometimes unclear where the pharmacy label should be put. To solve this issue, the choice has been made to design a cardboard box which contains a place reserved for the pharmacy label.

4.1. Dimensions

4.1.1. Japan

Because there is a preference for small packaging in Japan (design recommendation J6), and OCs must not take up too much space in the pharmacies (design recommendation J22), the cardboard box will be made small. To do so, the blister has to fit the box without too much margin. Besides the blister, the box has to contain an instruction leaflet. The carrier compact has to be ordered online and is not in the box. To have enough room for this contents, the dimensions of the cardboard box are determined as 78mm x 58mm x 13mm.

4.1.2. USA

The contents of the cardboard box are the blister and the instruction leaflet. The carrier compact has to be ordered online or a blank compact can be provided by the pharmacist, which will also be put in the cardboard box. The components are put in the box with a normal margin. The dimensions of the cardboard box for the USA are determined at 90mm x 65 mm x 14.5 mm.

4.2. Argumentation

4.2.1. Japan

It was difficult to find a solution for the contradiction 'make the packaging discrete' and 'use the color pink', because pink is a very outstanding color. Another challenge was how to use different extensions of the color pink (recommendation J4 and J5) in a cardboard box and still make it look like a professional medical product, instead of a candy packaging. These two problems are solved by making the main color that is used very light pink, from which the difference with white is hardly noticeable. An illustration with feminine shapes, with the spiral shape which is used in the blister, and flowers, is printed on in a slightly darker color pink, which is still very light. Because the small difference between the colors, the illustration is very discrete. The illustration gives the packaging an exclusive look.



Picture IV.4.1: Illustration with feminine shapes

PART IV -- DESIGN

A small white strip, separated from the pink with a line in the same color as the logos, is placed on the bottom of the cardboard. This is on the one hand to create a prominent position for the brand name, on the other hand to lay focus on the fact that the light pink is not white. Furthermore it gives the packaging a more professional appearance, a straight white line under the pink curls. The curl on the front side of the box peaks over the line to connect the two.

The logo's of Marvelon and Schering-Plough are placed on the box in a darker color pink. On the back of the box a place for the pharmacy label is reserved. The flowers are used again.

The QR-code is put on the right and left side of the box.



Picture IV.4.1: Front of the Marvelon box



Picture IV.4.2: Back of the Marvelon box

A model has been made for the cardboard box. The fold out for this can be found in appendix C.

4.2.2. USA

First the design recommendation U1, U2, U3 and U4 are met in a black and white draft. In this way, all the required text elements are gathered. The spiral shape is put on the draft, to meet requirement U15. It also gives a sneak preview of the blister form. The original Desogen logo is adapted to fit design recommendation U6, create an appearance of movement.



Picture IV.4.6: Black and white draft cardboard box USA



Picture IV.4.7: Old Desogen logo



Picture IV.4.8: New Desogen logo

After this, the colors are implemented. The first most common colors used in OC-cardboard packaging are used in the design, namely blue as the main color, yellow for the contrasting logo and green for the 'wave'. The blue evolves to white from top to bottom. In combination with the wave, this gives the packaging a moving impression (design recommendation U6). The back of the box contains place for a pharmacy label, and requirement U4 is applied, much use is made of text, arguments, facts and information.



Figure IV.4.9: Front of the Desogen box

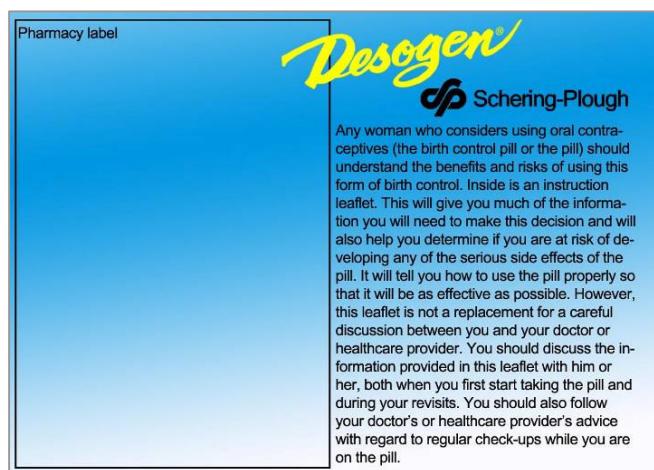


Figure IV.4.10: Back of the Desogen box

The fold out for the cardboard box can be found in appendix D.

4.3. Result

4.3.1. Japan



Picture IV.4.4: Marvelon box from the front

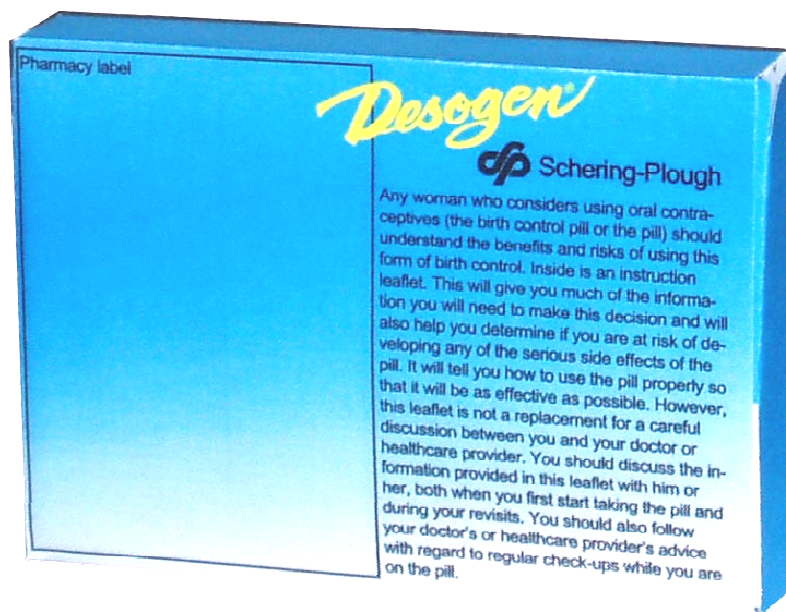


Picture IV.4.5: Marvelon box from the back

4.3.2. USA



Picture IV.4.11: Desogen box from the front

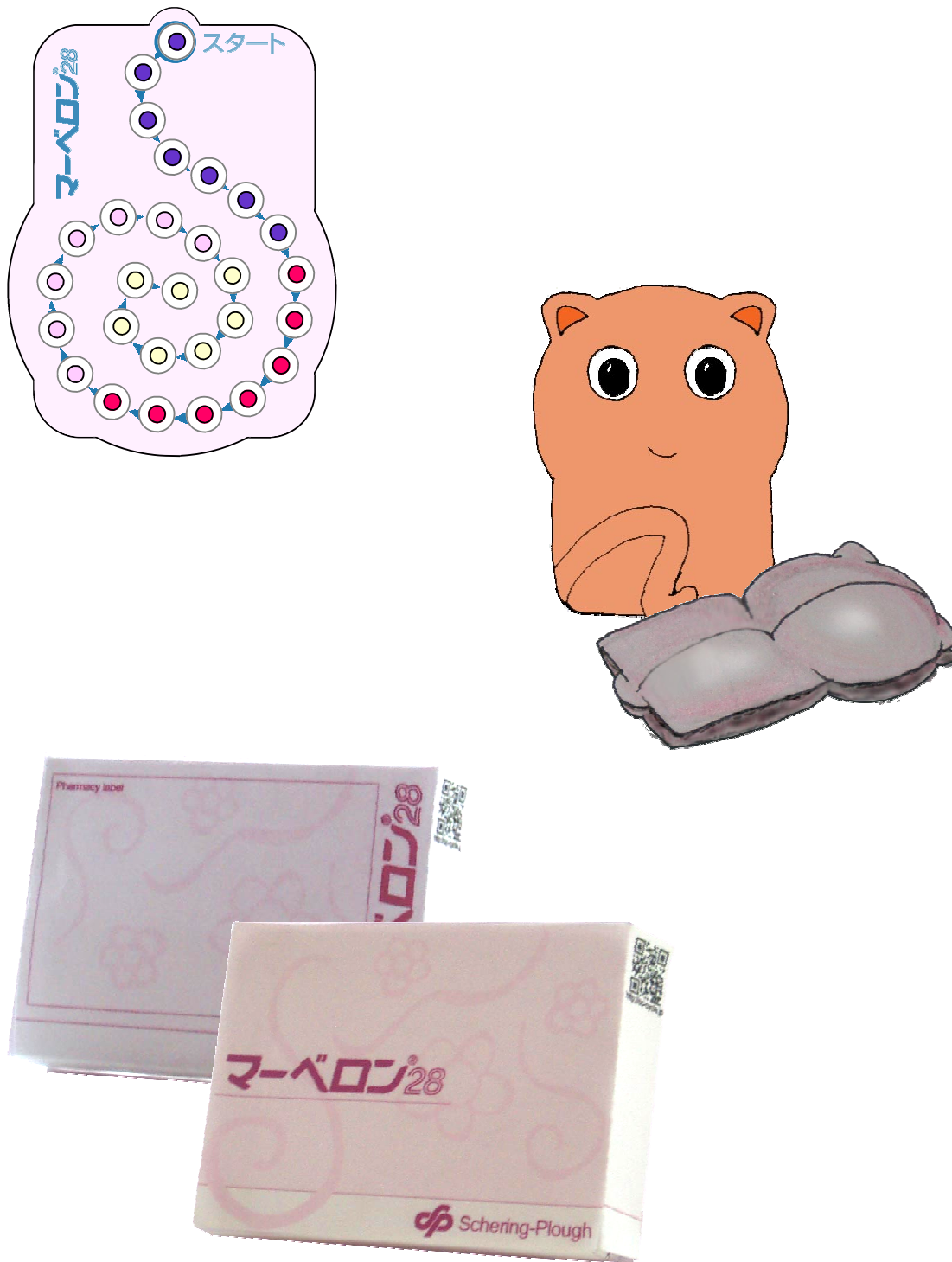


Picture IV.4.12: Desogen box from the back

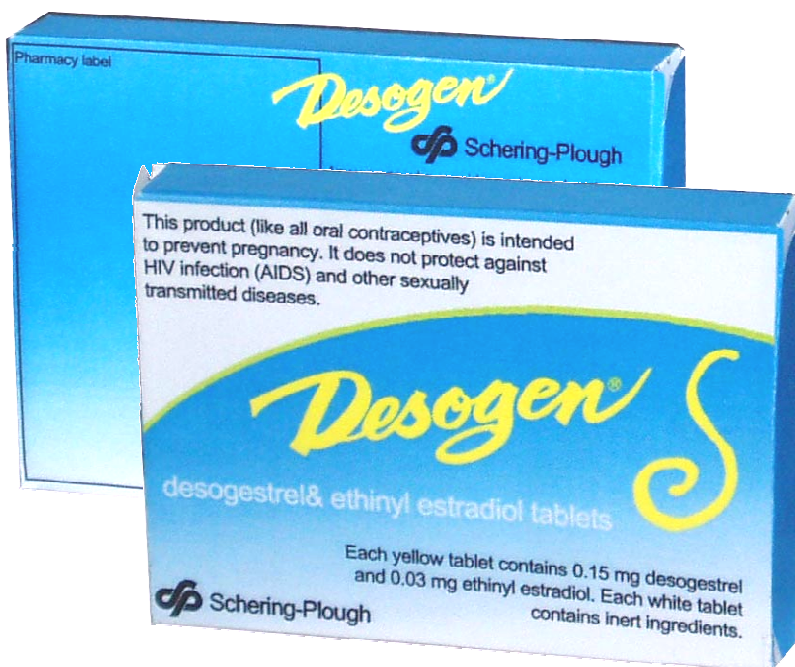
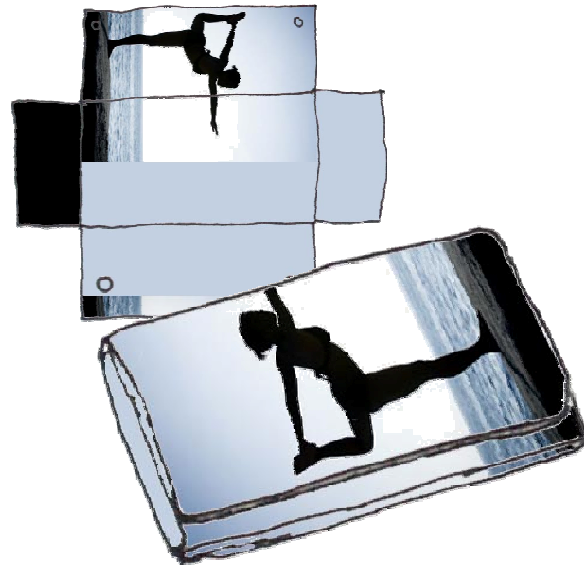
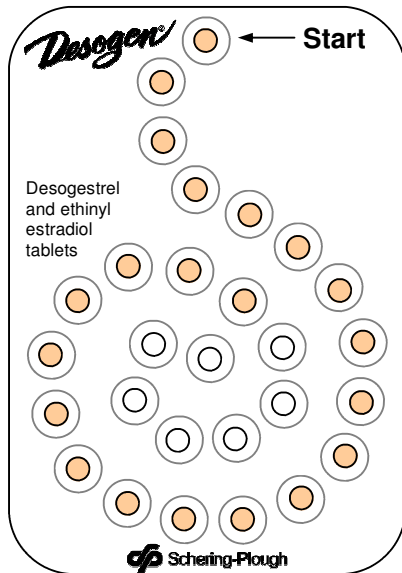
5. All components

Here an overview can be seen of all components for both countries. During the design of the components, the design recommendations are used as a guideline. Therefore the components can be used as an example of how the recommendations can be put into practice. Appendix E contains a checklist which clarifies the recommendations by examples from the components.

5.1. Japan



5.2. USA



CONCLUSION

In this project recommendations are formulated for the design of packaging of oral contraceptives for Japan and the USA. This is done by executing an analysis on different aspects of these two countries, such as cultural differences, the position of OCs in these cultures, and packaging design preferences. The design recommendations that result from this analysis are put in a summary.

This summary is used as a guideline to design two oral contraceptive packagings; a Marvelon packaging for Japan and a Desogen packaging for the USA. Both designs consist of three parts; a blister, a carrier compact and a cardboard box. The designs show how the design recommendations can be put into practice. Furthermore, the designs clarify the design recommendations, because they can be used as an example of how the recommendations can be put into practice.

The cause for this research was to find out if the current procedure, wherein packaging is developed centrally for all countries, is a good method, or if it should be changed and packaging should be designed separately for different countries or regions. Given the results of this project, it seems that the current procedure isn't sufficient. It is a good idea to look more closely to the different regions and investigate the local preferences for these regions.

In the designed components can be seen that the difference in the design recommendations for the USA and Japan is very big. Often they are precisely opposite each other. There is some overlap in the recommendations, but when used in combination with the other recommendation the results are very different. The graphic on the cardboard boxes for example in the USA have to be garish, loud, with a lot of contrast between color, where graphics on the boxes in Japan have to be very modest and matte. The design preferences for the blisters again are opposed to each other. This time it is the other way around; in Japan they have to be very colorful and exclusive, where in the USA the blister has to be simple and colorless.

The designs that are made can clearly not be interchanged, the Desogen packaging would definitely not be appreciated in Japan and the Marvelon packaging would not be taken seriously in the USA.

If the decision is made to do design research for other countries or regions Schering-Plough can use the format of this project as a template.

REFERENCES

- ¹ Geschiedenis van de anticonceptie, http://www.janssen-cilag.nl/bgdisplay.jhtml?itemname=evra_history&product=none, accessed July 2, 2008
- ² Geert Hofstede, http://nl.wikipedia.org/wiki/Geert_Hofstede, accessed July 3, 2008
- ³ Geert Hofstede cultural dimensions, www.geert-hofstede.com, accessed July 3, 2008
- ⁴ Lugt, Hans van der, 2003, 'Japan', KIT Publishers, Amsterdam
- ⁵ Van der Berg-Weitzel and van de Laar, 2001, 'Relation between culture and communication in packaging design', Brand Management vol. 8, no 3, page 171-184, February 2001.
- ⁶ United States, <http://en.wikipedia.org/wiki/USA>, accessed July 21, 2008
- ⁷ United States of America, <http://www.cyborlink.com/besite/us.htm>, accessed July 20, 2008
- ⁸ Health care systems; United States, http://en.wikipedia.org/wiki/Health_care_systems#United_States, accessed July 29, 2008
- ⁹ World contraceptive use 2007, United Nations, <http://www.un.org/esa/population/publications/contraceptive2007/contraceptive2007.htm>, accessed July 3, 2008
- ¹⁰ Datamonitor, 2006, 'Stakeholder Opinions: Hormonal Contraceptives; New directions in a competitive market'
- ¹¹ Katherine M. Krings et al, 2008, 'Contraceptive choice: how do oral contraceptive users differ from condom users and women who use no contraception?', American Journal of Obstetrics & Gynecology, may 2008, pp e46-e47
- ¹² Birth Control: Birth control pill, http://kidshealth.org/teen/sexual_health/contraception/contraception_birth.html, accessed July 7, 2008
- ¹³ Intranet Organon Japan, http://www2.oka.intra/HR-GA/webmaster/English_info_page/country%20info.htm, accessed May 28, 2008
- ¹⁴ Japan, <http://en.wikipedia.org/wiki/Japan>, accessed July 25, 2008
- ¹⁵ Animism, http://en.wikipedia.org/wiki/Animism#cite_note-bob-2, accesses July 25, 2008
- ¹⁶ Shigeo Yamamura et al, 2006, 'Current State of Community Pharmacy in Japan: Practice, Research, and Future Opportunities or Challenges', The Annals of Pharmacotherapy, Volume 40, November 2006, pp. 2008-2014
- ¹⁷ Japan, Education and health, http://en.wikipedia.org/wiki/Japan#Education_and_health, accessed July 18, 2008.

REFERENCES

- ¹⁸ Naoto Ishizaki et al, 2008, 'Public Status and Prevalence of Acupuncture in Japan', Evidence-based Complementary and Alternative Medicine, June 19, 2008
- ¹⁹ Kampo, <http://en.wikipedia.org/wiki/Kampo>, accessed July 18, 2008
- ²⁰ From: interview with Tetsuro Namba, June 16, 2008
- ²¹ Aiko Hayashi, 2004, 'Japanese women shun the pill', CBS news, Tokyo, August 20, 2004
- ²² 'Birth Control Pill Hard to Swallow for Some Japanese', Around the School, news& notices of the Harvard School of Public Health, February 25, 2000, http://www.hsph.harvard.edu/ats/Feb25/feb25_02.html, accessed July 8, 2008
- ²³ Jan M. Zeserson, 2001, 'Chi no michi as metaphor: conversations with Japanese women about menopause', Anthropology & Medicine, Vol. 8, Nos 2/3, 2001, pp. 177-199
- ²⁴ Sheryl Wudunn, 1996, 'Japan May Approve the Pill, but Women May Not', New York Times, November 27, 1996
- ²⁵ Kayoko Matsumoto et al, 2002, 'A Survey on Low-Dose Oral Contraceptive Transactions at Pharmacies', Yakugaku Zasshi, Vol. 123 (2003) , No. 3, Pharmaceutical Science and Human Society, pp. 157-162
- ²⁶ Yen, <http://nl.wikipedia.org/wiki/Yen>, accessed October 18, 2008
- ²⁷ Shigeo Yamamura et al, 2006, 'Current State of Community Pharmacy in Japan: Practice, Research, and Future Opportunities or Challenges', The Annals of Pharmacotherapy, 2006 November, Volume 40, pp. 2008-2014
- ²⁸ Donald T. Kishi, 2000, 'A glimpse of pharmacy practice in Japan: Déjà vu', Am J Health-Syst Pharm, Vol. 57, Jul 15, 2000
- ²⁹ 'Japan als inspiratiebron', Elsevier voedingsmiddelen industrie, May 2008, pp. 30-31