

“BrainPacs”

Pro Carton



- Branding
- Consumer Targeting
- Cue Management
- Strategic Planning

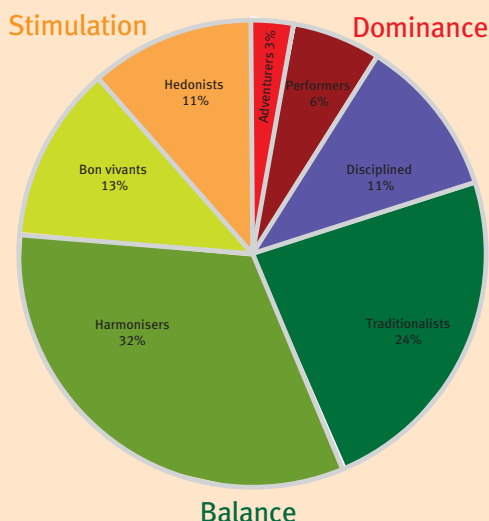
The power of “limbic packaging”

BrainPacs: Using advanced research on the brain to make packaging more targeted, effective and successful



Results of a study by

Gruppe Nymphenburg Consult AG



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EXPERTS



PRO CARTON

Association of European Cartonboard and
Carton Manufacturers

The power of “limbic packaging”

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There is still much unexploited potential in packaging. New market shares and new markets can be captured by introducing strategic conceptual and design improvements! The BrainPacs study is another report in a series published by Pro Carton.



Differentiating between target groups in terms of design and form

Future market success will be determined by understanding what triggers buying impulses in the brain and to make use of this knowledge in “brain-based” packaging. Important success factors for so-called “BrainPacs” include brand typical designs, the clear and unmistakable addressing of the emotional zones and the triggering of emotions. Brands must present themselves as personalities with characteristics and unique features and convey this personality clearly and consistently in every detail. To inspire hope and satisfy desires – that is what product packaging can and must do.

It has long been proven that successful packaging leads to successful sales. The results of the new Limbic® study provide completely new insights and data which confirm the importance of packaging in the marketing mix. The limbic system explains phenomena, which so far could either not be explained, or only with great difficulty. With this brochure, Pro Carton would

like to make knowhow based on the latest research findings available to everyone involved in the packaging supply chain.

Those who use and implement this information are more likely to reach their target groups, establish closer relationships, and persuade them more effectively.



Stéphane Thiollier,
President Pro Carton

“Why do customers buy?” is one of the key questions asked in marketing and sales. As long as market research depended on observation, interviews and statistics, this question could never be properly answered. This is because subconscious, biological processes have a much stronger influence on the brain than was previously thought. The Limbic® model, which is based on the findings of modern brain research, has now made this method available in

order to illustrate emotional and target group structures and to explain and use these for brand strategies. For the first time, Pro Carton has systematically analysed packaging with the Limbic® tool – an absolute innovation. The results provide valuable clues on how to enhance the emotional effect of packaging through form and design and how to differentiate more precisely between different target groups.



Dr. Hans-Georg Häusel,
Managing Director
Gruppe Nymphenburg
Consult AG



A new approach

Using the brain to buy – as this is the home of our emotions



- Branding
- Consumer Targeting
- Cue Management
- Strategic Planning

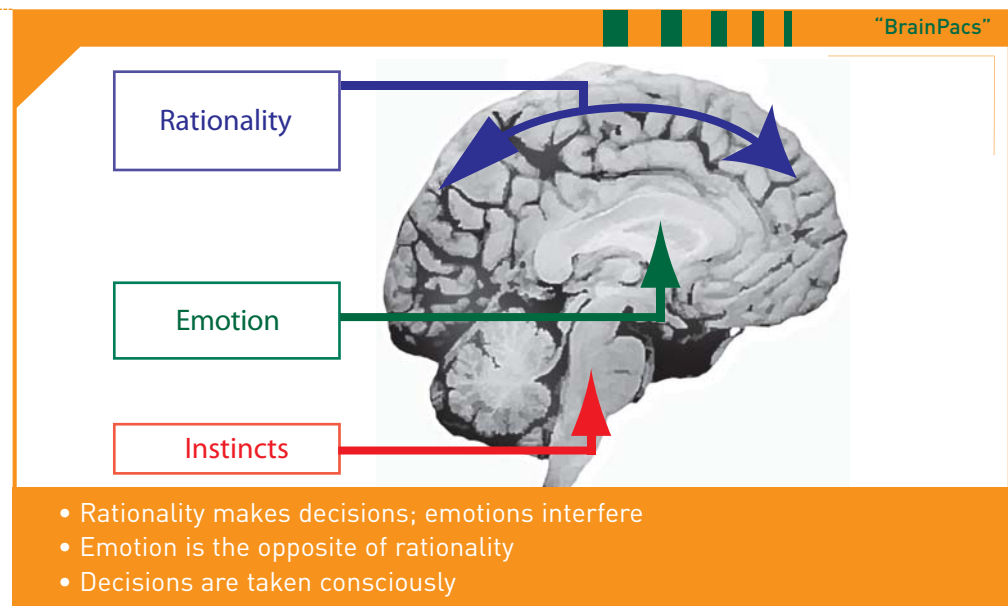
Limbic® is most probably the world's best and scientifically substantiated image and personality system for marketing practice at present. (Source: FAZ Institute Business Bestseller Summaries).

The limbic system (Latin *limbus* = border or belt) is a set of complex brain structures which support a variety of functions including emotions, behaviour, pleasure, sensations, memory, and olfaction (sense of smell), in short the limbic system is the home of our emotions, motivation and the organisation of memories. It is responsible for the emotional evaluation and processing of information, as well as the subconscious control of our behaviour. The limbic system also controls our autonomic nervous system, i.e. blood pressure, heart rate, breathing, digestion, sweating etc. Modern methods in medicine, biology and psychology enable scientists to gain extensive insights into the inner processes and activities of the brain. Limbic® is a novel image and personality system for applied

marketing. It takes an interdisciplinary approach and links the results of different research programmes together into an integral model. The Limbic® system is based on the realisation that it is not reason, but the evolutionarily older emotion based areas of the limbic system in the brain, that regulate decisions and human behaviour. By applying this method, an analysis of packaging enables new and greater insights into how varieties of form, colour and design can best address the specific types of target groups and their needs. Perhaps sensual cosmetics packaging for the harmony oriented consumer or the ideal packaging for a writing instrument for the unconventional type? The study results help to tailor the packaging design precisely to the individual for whom the product was intended and made.

Old thinking in brain research

Until about 10 years ago brain researchers assumed that humans made decisions consciously and based on reason. One therefore believed that the brain was structured as follows: Reason was situated right at the top, then came the emotions and right at the bottom were people's lower instincts.



The research methodology

How shapes, colours and design relate to emotions and personality traits

In the Pro Carton study, 700 respondents were interviewed online on the basis of the Limbic® model, with 100 respondents being assigned to each of the 7 Limbic® typologies (see page 7). Furthermore, these Limbic® types were subdivided according to age and gender.

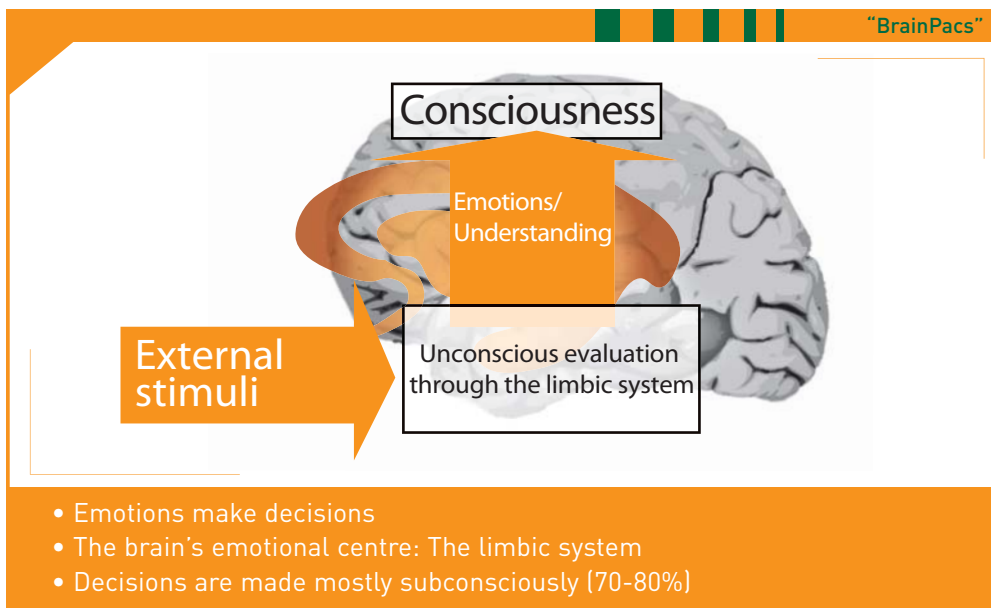
The following aspects were examined:

- how can packaging shapes be differentiated based on their emotional effect
- do target groups have preferences with regard to the shape of packaging and design

- do men and women, or different age groups, have different preferences with regard to packaging.

The study included generic packaging shapes and designs as well as real branded packaging. The results of the interviews were analysed and interpreted in a multi-level evaluation process. The section on examples illustrates the typical results. The study goes on to show what brand manufacturers can learn from brain research.

New thinking in brain research



Advanced brain research clearly demonstrates: There are no decisions that are not emotionally based. No decision can be made without emotion. The actual power centre in the brain is the limbic system, which also includes parts of the frontal cerebrum.



Basics on Limbic®

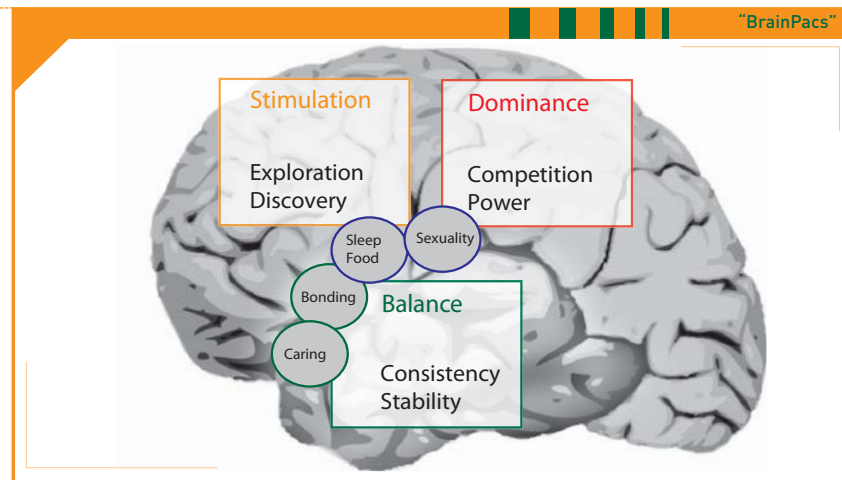
What goes on in the consumer's mind?

Is advertising really the art of aiming at the head and hitting the wallet, as a well-known aphorism states? To answer this question, one must first of all clarify what goes on inside people's minds. It was discovered that advertising directed at reason and logic generally has little effect. And this not only applies to the mental processing of advertising messages.

Well over 70 per cent of our decisions are made subconsciously and the remaining "conscious" 30 per cent are certainly not as free or uninfluenced as we believe them to be, but are part of a successful evolutionary programme. Our emotions are the deciding factors, not rationality or balanced deliberation.

The emotional systems of the human brain are interconnected

Limbic® displays which consumer motives and values exist, and how these emotional systems are linked in the brain as well as to buying behaviour. Stimulation and domination stand for discovery, status and expansion, and are therefore associated with risk. Balance and the related social emotional systems of caring and personal attachment are the driving and maintaining forces behind human motivational dynamics.



Individuality as a combination of impulses

Dominance (status, power, assertion), stimulation (discovery, reward, curiosity), and balance (security, feeling safe, harmony) are the three main motivational worlds that determine our entire life and all our decisions. The basic balance between these three worlds varies from person to person and is part of our personality. Stimulation

motivated people are active and creative, spontaneous and curious. They love diversion. Balance oriented people are far more focused on security and stability; they act more prudently, carefully and hesitantly. Dominant people mainly tend to strive for achievement, recognition, power and autonomy.



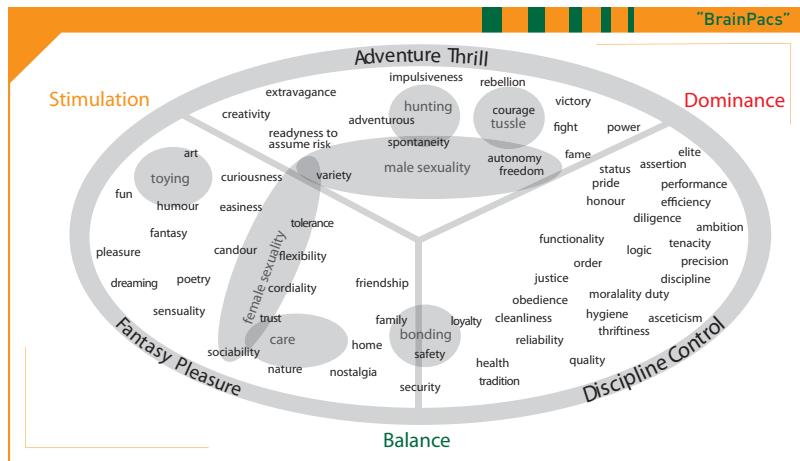
Limbic® fundamentals

Brain research dictates rethinking – also in marketing

The diagram below displays the Limbic® map and provides a comprehensive overview of certain human desires, values and motives and sets them in relation to each other. The rough assignment of these emotional values to certain fields

was undertaken by qualified psychologists. Their distribution and relationship are based on empirical data. By interpreting them we can identify certain Limbic® types: Role models for different types of consumer.

The Limbic® map! Unique knowledge on the relationships between emotional values and their relevance

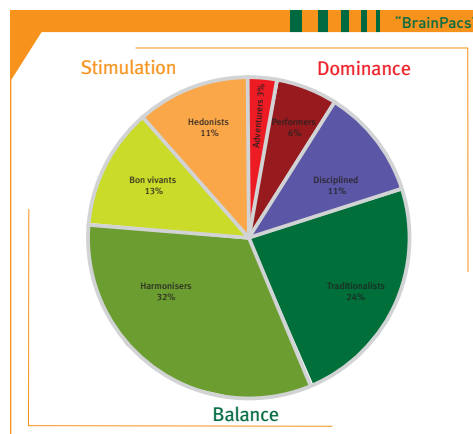


All human motives, desires and values can be displayed on the Limbic® map in relation to each other.

Typical attitudes determine consumer decisions

The seven Limbic® types

Can the packaging for a price-conscious product be extravagant? Which design aspects need to be emphasised to win over “power” people? How should a mass product be packaged to obtain the widest possible consensus? The answers to these questions are provided by the new system of the 7 Limbic® types with realistic, psychological-neurological people portraits. These typologies have the following characteristic traits and behaviour patterns:



A representative survey of the German population with over 19,000 people was carried out in cooperation with “Typology of Wishes” (ToW). (Source: 19.119 GN;TdWI 2005/2006)



Typical attitudes determine consumer decisions

The seven Limbic® types



- **Harmonisers** are very family-oriented. They are emotionally led and tend to avoid risks. They go for brands which signal positive emotions and trustworthiness. This target group appreciates “nice” packaging with a positive friendly appeal and harmonious design.



- **Traditionalists** often lead a modest lifestyle and are sceptical of new things, risks, spontaneity and relaxed attitudes. They have a reserved attitude to product innovations and rarely invest in best quality. They expect brands to be “safe” and trustworthy. In terms of packaging they prefer classical and traditional designs, appreciate ease-of-use and functionality. Brand recognition plays an important role.



- **Bon vivants** are free-spending, money is no object types. They enjoy shopping, follow fashion trends and are generally at home in “in” locations. Spontaneous and creative, they are positive, flexible and solution-oriented. The ideal brands are event and experience oriented. They respond to sensuous packaging combined with quality, for consumers “in the know”.



- The **disciplined** types differ from traditionalists in that they do not necessarily place emphasis on tried and trusted products, but are attracted by the straightforward and uncomplicated. At the same time they are more emotional. They expect brands to offer guaranteed quality and a good price/benefit ratio. In packaging they appreciate clever, no frills designs.



Typical attitudes determine consumer decisions

- **Hedonists** enjoy everything that highlights their body or personality, or places them in the limelight, including flaunting brand labels. They are ambitious, appreciate trends as well as their own creativity. Their shopping behaviour is dominated by impulsive buys with a bent towards expensive and fashionable products. Hedonists are strangers to brand loyalty. Trendy, luxury and fun packaging which reflects both novelty and the brand are ideal for this group.



- **Performers** tend to be assertive, highly ambitious, ready to take on responsibility and more rational than emotional. They value exclusivity and prestigious brands, rejecting cheap brands. In terms of packaging they prefer powerful but orderly design which symbolises "control".



- **Adventurers** stress nonconformity, spontaneity and leadership. They are attracted by risks, novelties, fashion, attractive brands offering added value or performance attributes. They respond positively to unconventional packaging designs to confirm they are "different".



Details and differentiations

Limbic® load: Measuring the emotional impact of packaging

The general statements made by the target groups, and which enabled portraits of the Limbic® types to be created, can be refined in greater detail by using empirical methods. One can conduct concrete tests as to which forms and designs have the greatest impact on which Limbic® types. For this purpose, respondents were asked to assign special dummies (colour-neutral packaging

and neutral designs) to individual Limbic® map attributes (for instance, creative, playful, reliable, see pages 12 and 13) with the help of a scale. Using a special calculation method, the emotional charge (Limbic® load) was determined for each shape and colour design, and the Limbic® types classified. With incredibly interesting results!

Limbic® Load: Feelings associated with shapes

How is packaging perceived and judged by different types, gender and age groups? Our study has

produced some interesting and valuable results:

The curved “vase shape” triggers associations such as “sensual, creative, extravagant and imaginative”.



Shape: “curved vase”

This shape was liked best among all the groups, independent of Limbic® type, age and gender. It was particularly popular with adventurers and harmonisers.

The “spinning top” triggers the highest response in the stimulation area – it does after all have a surprising effect and is very different from all the previously known packaging shapes.



Shape: “spinning top”

In the overall ranking, this shape came second. The unusual, extravagant shape impressed hedonists and performers, whereas the disciplined group rejected it. The “spinning top” was particularly popular with women, and virtually rejected completely by men and the elderly.



Details and differentiations

Shape: “hexagon”

This shape came third in the overall ranking. Performers and the disciplined were particularly impressed by it. The “hexagon” is also a favourite among men and particularly popular with young people.



Due to its very angular shape, the “hexagon” is considered to be very reliable, neat, controlled and efficient.

Shape: “twisted package”

This shape was strongly associated with the idea of caring. It is liked by bon vivants, hedonists, performers and adventurers, although it did not achieve the best ranking. This shape appeals most to younger people.



The “twisted package” also tends towards the stimulation area, but triggers comparatively lower emotional reactions. Through its angular form, the activated emotional area extends into the discipline-control area. By contrast, this packaging doesn’t trigger much of a response in the caring area.

Shape: “sweet”

Hedonists liked this shape best. However, in the average overall ranking, the “sweet” came last. This is a typical example of how one can “filter out” a particular target group.



The “sweet” is described as being lovingly packaged, imaginative and creative. This form of packaging creates surprise.

Shape: “butter dish”

This is a good example of how known or acquired clichés about shapes can influence emotional evaluations. Even though this shape was a favourite among men and the elderly, this conventional shape was less popular in the overall ranking. Hedonists rejected it most vehemently.



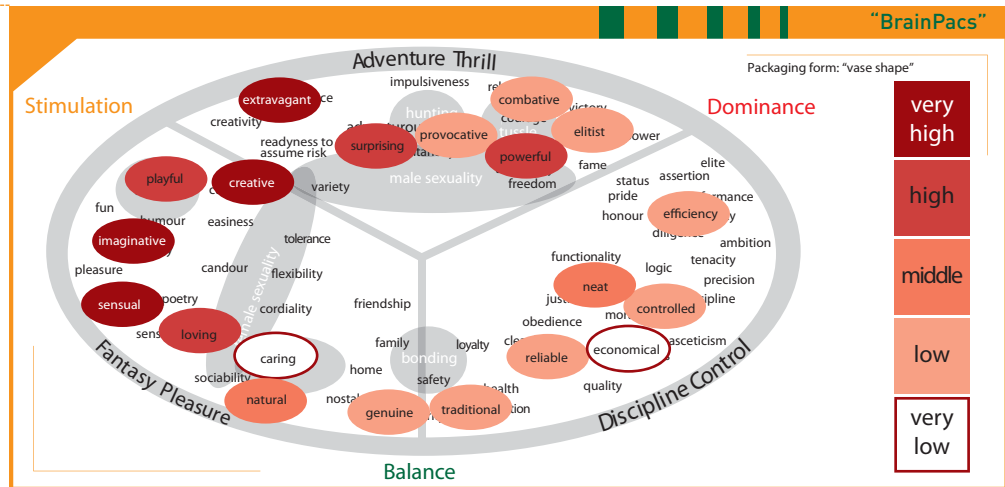
Due to its association with butter, the “butter dish” was often linked with traditional and balance oriented values.



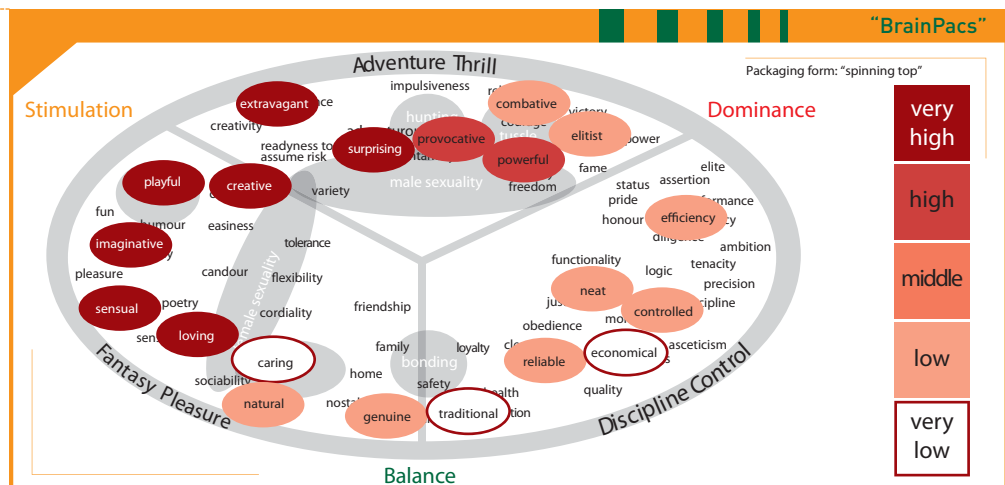
Study results

Limbic® load: Packaging shapes

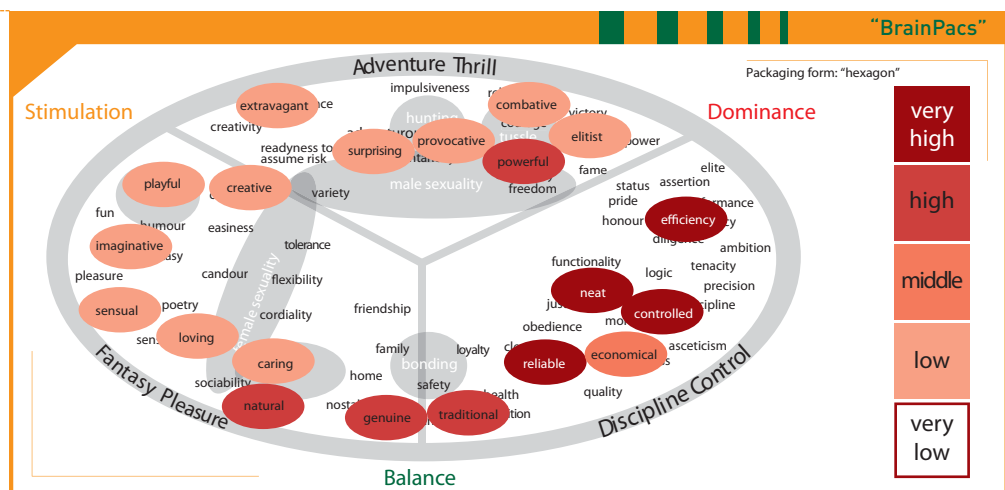
The "vase shape" is strongly associated with sensual, creative, extravagant and imaginative. It particularly triggers strong responses in the emotional enjoyment and stimulation areas.



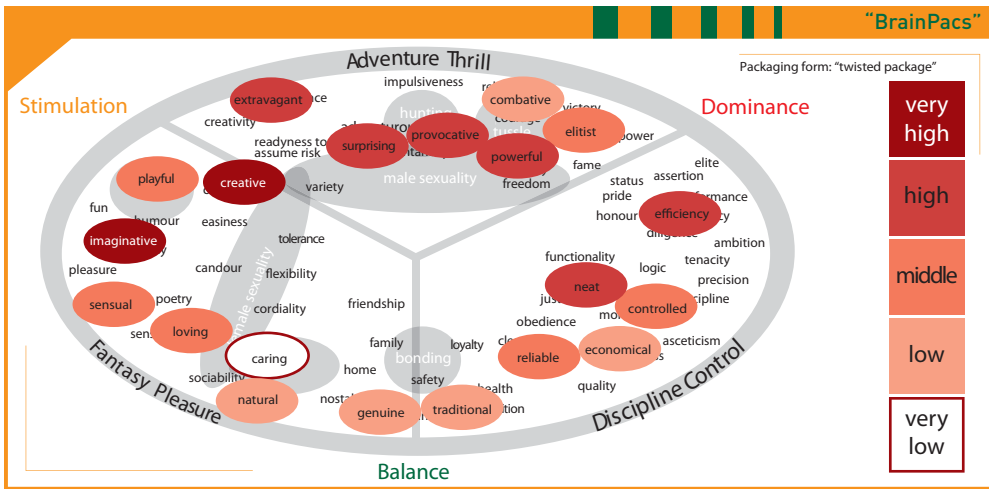
The "spinning top" provokes an even stronger response in the stimulation dimension, since it differs from all previously known packaging.



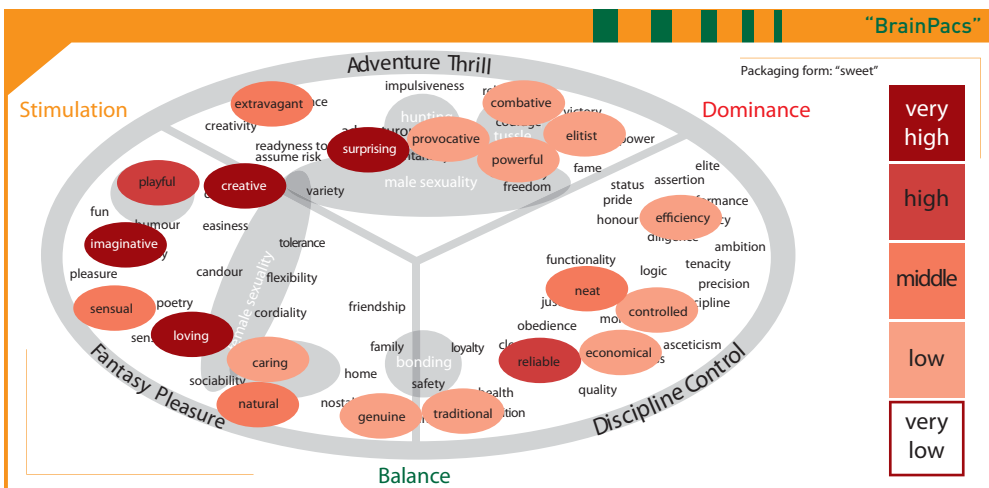
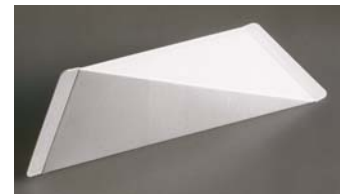
Due to its very angular shape, the "hexagon" is considered to be very reliable, neat, controlled and efficient.



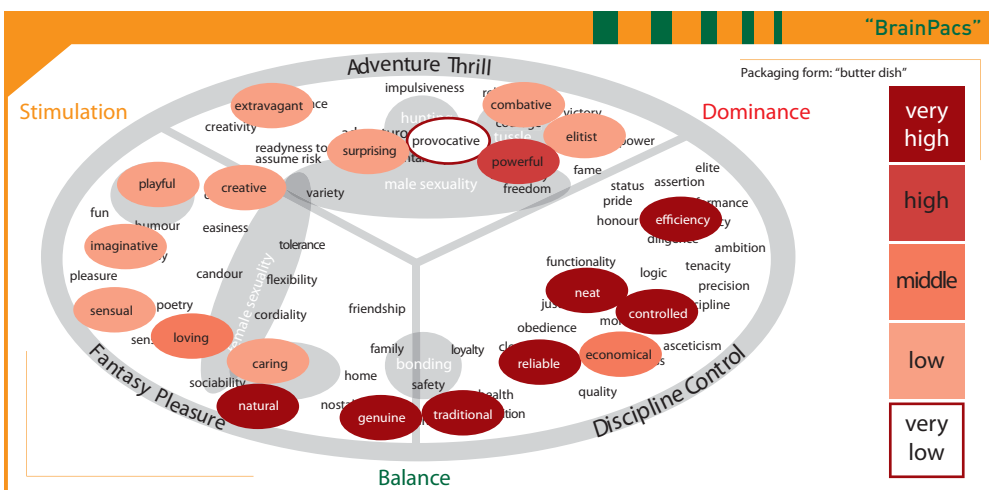
Study results



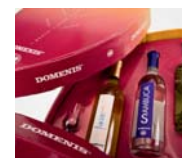
The "twisted package" also tends towards the stimulation area, but triggers comparatively lower emotional reactions. Through its angular form, the activated emotional area extends into the discipline-control area. By contrast, this packaging doesn't trigger much of a response in the caring area.



The "sweet" is described as being lovingly packaged, imaginative and creative. This form of packaging surprises.



Due to its association with butter, the "butter dish" is often linked with traditional and balance oriented values.



Study results

Packaging design and the Limbic® types

Colours, surfaces, lines and patterns are also perceived and evaluated very differently by the various Limbic® types. The following

examples show how precisely one can address the target group with appropriate designs (or exclude undesired groups of customers).

With soft colours and curved lines, the total impression given by this packaging is friendly and pleasing, rather than being conspicuous. This prototype represents typical harmonious packaging.



“Harmoniser” packaging, sky-blue

This packaging had the highest preference values across the different groups and is the women’s favourite. Men did not respond at all and it found little favour with the younger target groups.

Naturally shining sunshine yellow triggers both the stimulation and the balance areas, appearing both creative and imaginative and is associated with sensual pleasures. A good example of packaging designed for the world of bon vivants.



“Bon vivants” packaging, yellow with stripes on the side

Harmonisers, performers and adventurers are very attracted to this packaging. It is also widely accepted by women.

Fluctuating between stimulation (extravagant colour combinations) and domination (strong colour and sharp lines), this design is only appreciated by the defined target groups.



“Hedonists-adventurers” packaging, blue-orange with green

Again a convincing example of how design can be used to select target groups. This packaging was designed to meet the taste preferences of hedonists and adventurers only, and clearly produced the worst reaction of all the packages.



Study results

"Performer" packaging, dark with discrete highlights

An ideal packaging for performers, which also appeals to traditionalists – harmonisers rejected it completely. While the packaging did not meet with approval among women and the elderly, it was the clear favourite among men and also appealed to young people.



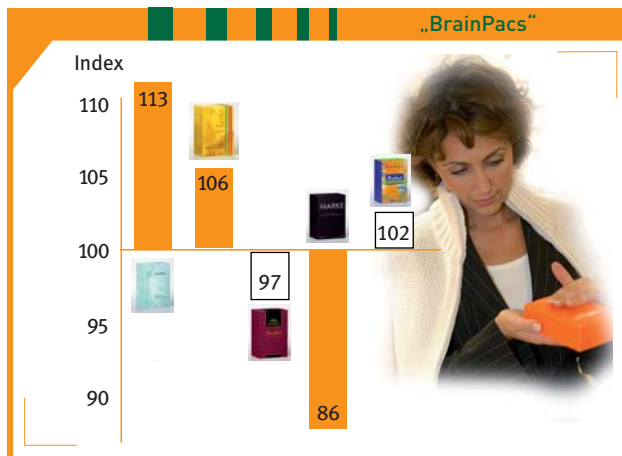
The predominantly dark background colour conveys a sense of dominance to this packaging; the structured, simplified typography symbolises control, the "no frills" style stands for efficiency.

"Traditionalist" packaging purple-gold

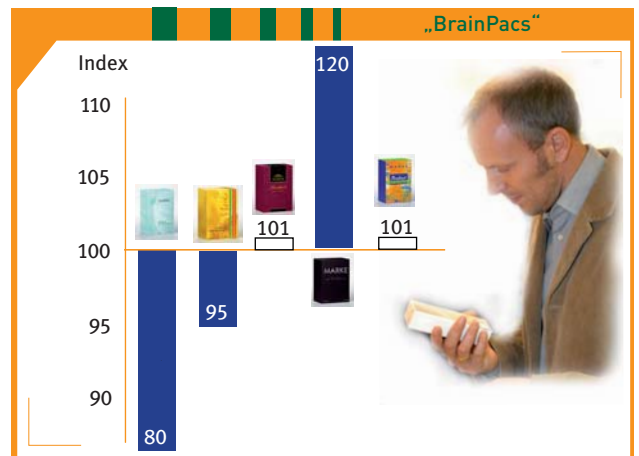
This best reflects the traditionalists' world. And indeed, the packaging only appeals to traditionalists and is a favourite with the elderly.



The clear structure of the layout stands for order, the mimicking of traditional visual examples (symmetry, gold and purple tones, classic typography, italics) relates to tradition.



The softer coloured packaging best meets women's sentiments.



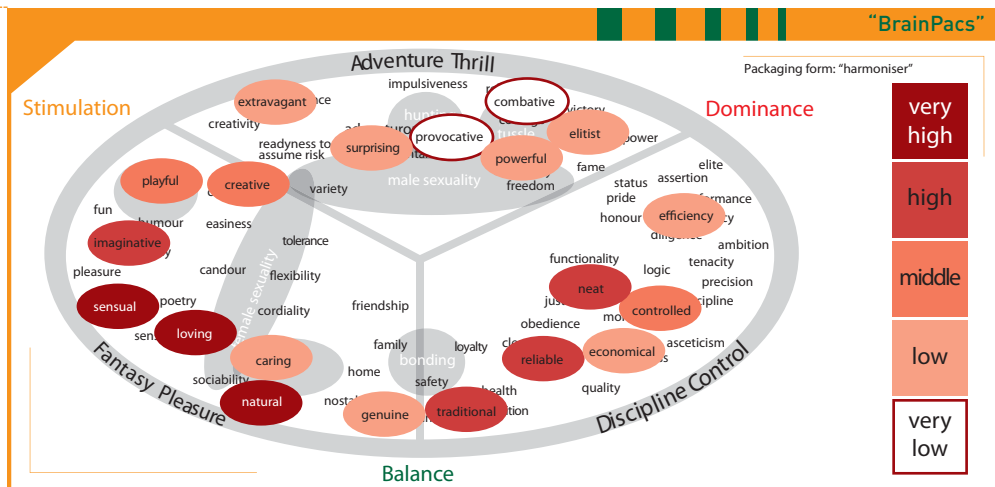
Here again, the study showed that men prefer the colour black, when associated with a masculine design.



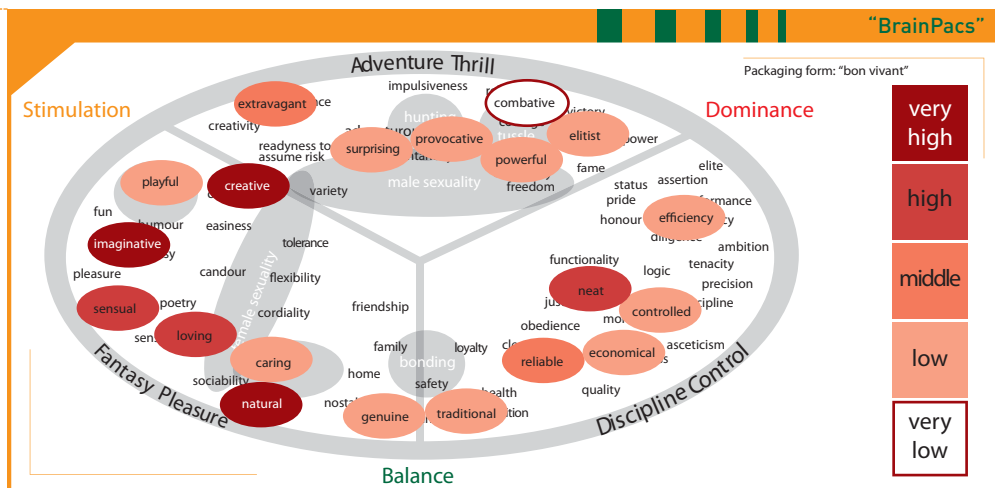
Study results

Limbic® load: Packaging designs

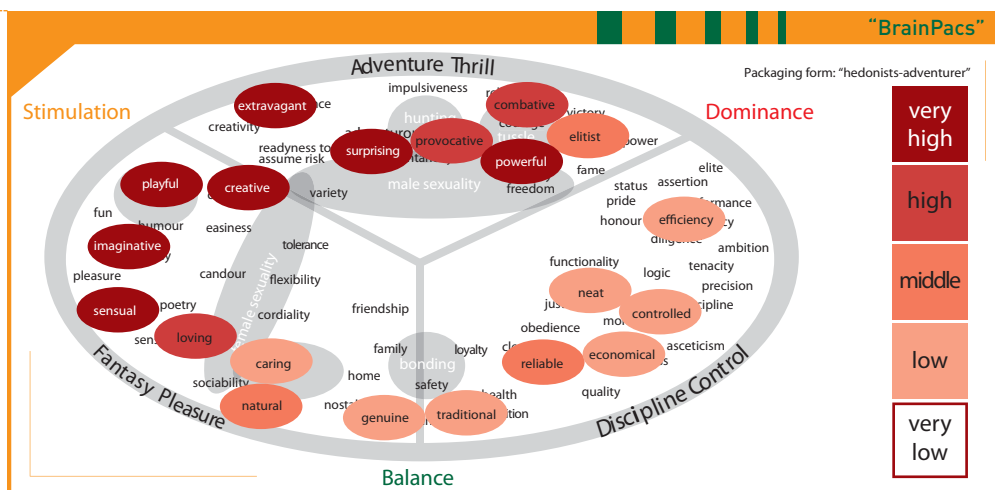
The packaging of the "harmoniser world" has very pronounced "sensual", "natural" and "loving" values. These lie between balance and stimulation in the core emotional area of the major Limbic® types harmonisers and bon vivants.



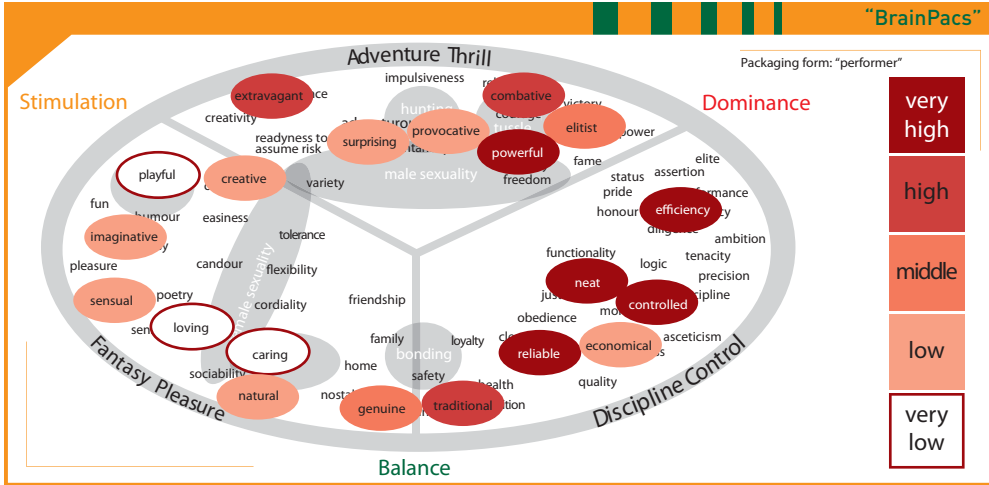
"Bon vivant world" packaging is seen as creative and imaginative and has a natural character. The vertical lines in the package's design also evoke emotions in the balance, discipline and control areas.



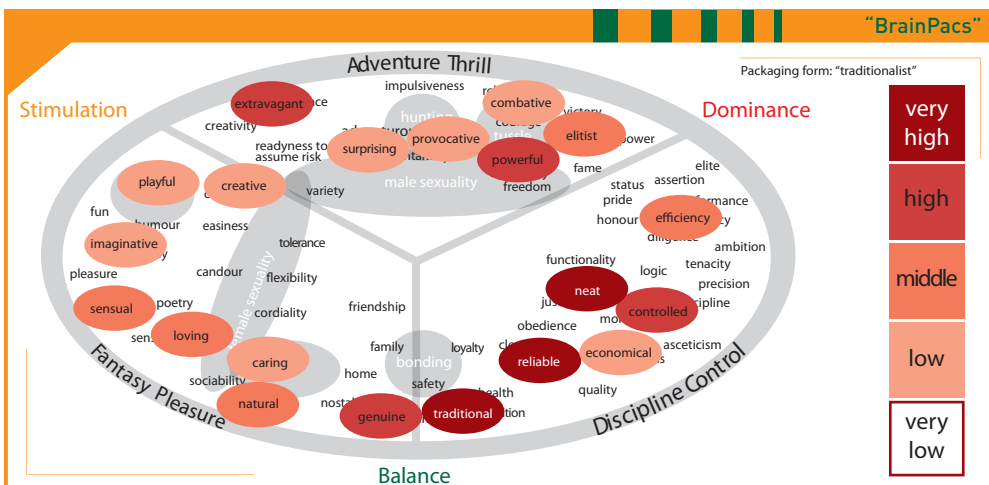
Attributes associated with the "hedonist world" are mainly spread over the stimulation area with a tendency towards domination. Especially the conservative Limbic® types are uncomfortable with this "loud" packaging, as it offends their traditional sense of colour and shape.



Study results



The "performer world" packaging focuses heavily on some domination values as well as on efficiency and control parameters. Performers feel they are especially well represented by this packaging, the disciplined and traditionalists finding it positive too.



The packaging of the "traditionalist world" covers the traditionalists' set of values very well.



Conclusions and possible applications

Limbic® marketing: Optimal mix of “product-based” and “brain-based” marketing

“It is not possible not to communicate” is the first communication axiom: Everything is a message. But the message should not be “everything”! If packaging or any other form of brand communication is conceived to cover as many emotional and motivational areas as possible, it becomes so diluted that it loses credibility and prevents any success on the market. It is therefore important, if only for reasons of profitability and economic success, to create a design that focuses on a few key emotional and motivational fields. The result is positioning, in the best possible sense of the word.

This also makes sense from the customer’s perspective. Each individual defines him or herself by its own inner mix between balance, stimulation and dominance. It is part of our identity and enables us to distinguish ourselves from others, as well as to assert and express ourselves. This fact is often used by brands to support the individual.

Brand products are not just products, but also a form of expression. Brain-based Limbic® packaging enables us to establish the best possible match between the product and “its” target types.

There is hardly a packaging material that offers as many design possibilities as cartonboard – which is why, as a material, it is perfectly suited to precisely addressing people’s motives, desires and values. Its widespread popularity gives it an emotional bonus and its versatility triggers limbic responses. The results of this study show us what to take into consideration when marketing with limbic packaging.



Conclusions

Limbic Power: 10 practical principles for successful sales with cartonboard packaging

1. From the target group’s perspective

In order to orientate the marketing strategy to the limbic system, one must start, not with the product, but with the person for whom the product was made and conceived. The Limbic® types help decide who is to be targeted and for whom the design and packaging is intended. This is followed by fine tuning of the emotional and motivational fields, which are to be addressed by marketing communications.

2. Communicate clearly and precisely

In order to ensure the “limbic success” of products and brands, it is important to clearly convey what dimensions or combinations are to be addressed specifically. This produces a sense of identity and quickly transmits the right signals to the limbic system. The clearer and more distinctive the communication messages, the more effectively the motivational and emotional fields will be stimulated.

3. Reduce and concentrate

“One can’t please everyone” is a saying which needs to be reformulated for the purposes of limbic marketing and packaging: One should not aim to please everyone. The most successful types of packaging are those that only target a few emotional and motivational elements.

4. Making use of the potential of shape

The classic rectangular carton is ideal – for instance, for addressing male target groups, traditional or discipline oriented people and the elderly. Yet for other target groups, other shapes are much more persuasive. The study results encourage making bold use of different shapes. Maximising on cartonboard’s potential for creating different shapes (see examples on pages 10 to 13) one can clearly select the target customers from the masses.



The packaging’s shape can become synonymous with the brand, as exemplified by Toblerone.



Conclusions

Unusual printing effects, the use of colours and high-quality materials draw attention at the point-of-sale (POS).



The choice of cartonboard (in this case, a particularly well-structured material) underlines the product's message.



5. Making creative use of the material properties

Shape and colour aren't everything. Cartonboard also offers the possibility of appealing to the limbic system of its target groups through its material properties. Some examples: The basic attribute of dominance corresponds with firm, high finish, glossy cartonboard qualities. Surprising material effects – such as unusual colours, metallic or mother of pearl, flocking or even extravagant holograms – have a stimulating effect. Striving for balance is reflected in soft, velvety surfaces. The advantages typical of cartonboard, especially its excellent printability and the possibility of adding features such as practical closures, make the material extremely user friendly and easy to handle.

6. Emotions and motives expressed in the material

Cartonboard also offers matching material for individual emotional and motivational fields. “Naturalness” could, for instance, be expressed by largely untreated or even visibly wood containing cartonboard. Using rough cartonboard for a luxury product is unconventional and addresses the desire for “rebellion” intrinsic to the limbic fields of dominance and stimulation. “Hygiene” is a control driven motivation, which is characterised both by the areas of balance and dominance. Here, high gloss or laminated cartonboard, in conjunction with colour expressing purity, can be very persuasive.



Conclusions

Cartonboard can be used to represent any emotional or motivational area, from “sensuality” to “status”, “imagination” to “functionality”, “poetry” to “precision”, and “diversity” to “asceticism”.

7. Generating multi-sensoric signals

The limbic system processes all kinds of external stimuli. It is therefore very useful to communicate on a multi-sensoric level and to work with as many sensory channels as possible. Here too, cartonboard offers a huge spectrum of possibilities. In addition to the visual appearance of shape and colour and the feel of materials, various sensory stimuli and signals can also be transmitted acoustically (such as through snap closing devices) and smell through fragrances. Cartonboard optimises brain based packaging. The ease of handling and use in households also play an important role. If these attributes are missing, the limbic system switches to “discomfort mode” and if customers do not have a “good feeling” about the product, they won’t purchase it in the first place nor buy it again.



Open package – click – close package – click: The click box is primarily used for sweets; the sound draws attention to the closing mechanism.

8. Promoting brand perception

Tests have shown that people’s sympathy for a brand can be so strong that it dominates all other perceptions and even triggers a kind of “automatic purchasing” behaviour. Images provoke emotional responses, while brand familiarity provides for relaxation.



The packaging is the brand communicator on the shelf.



Conclusions

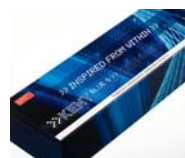
Consumers have a positive impression if a product is depicted realistically and they can see the product directly through a window.



In combination, they trigger a major limbic response and determine the attractiveness of a brand, especially among the traditionalists. The packaging is the most important medium for conveying and strengthening the brand image and familiarity at the POS. It is therefore particularly important for a brand’s presence to be reflected on the packaging.

9. Focus more on age and gender

The study showed that packaging is not only assessed differently, depending on the type of person, but also the person’s age and gender – in some case even revealing extreme differences. Untapped potential sales can be exploited by taking these different preferences into account, and by specifically targeting men or women, the old or the young, with relevant packaging designs. Elderly people have explicit needs with regard to the amount of information printed on the packaging – especially in terms of legibility. The product should be easy to recognise (i.e. visible through a window) instead of being depicted by unrealistic photos. In addition to comfortable handling and ease of use, elderly people look for good brand presentation and want to be able to recognise the brand easily. This incidentally also applies to the various packaging sizes and portioning options, which are also important.



Conclusions

10. Combining various means of communication

"Disciplined" copy could for example strongly limit the effects of "adventurous" packaging design. To give the marketing message its maximum power, it is therefore advisable to coordinate all measures and media – from the design to the copy – all elements should have a uniform look.



Packaging can be integrated as a medium in the marketing mix.

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